MOTT MACDONALD

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

Construction Phase Annual EM&A Report No.5

July 2021

Airport Authority Hong Kong

Mott MacDonald
3/F International Trade Tower
348 Kwun Tong Road
Kowloon
Hong Kong

T +852 2828 5757
F +852 2827 1823
mottmac.hk

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

Construction Phase Annual EM&A Report No.5

July 2021

Airport Authority Hong Kong

This Construction Phase Annual EM&A Report No. 5 has been reviewed and certified by

the Environmental Team Leader (ETL) in accordance with

Section 15.5 of the Updated EM&A Manual

Certified by: 

Terence Kong
Environmental Team Leader (ETL)
Mott MacDonald Hong Kong Limited

Date: 19 July 2021

AECOM
8/F, Grand Central Plaza, Tower 2, 138 Shatin Rural Committee Road, Shatin, Hong Kong
香港新界沙田鄉事會路 138 號新城市中央廣場第 2 座 8 樓
www.aecom.com
+852 3922 9000 tel
+852 2317 7609 fax

Our Ref : 60440482/C/JCHL210719

By Email

Airport Authority Hong Kong
HKIA Tower, 1 Sky Plaza Road
Hong Kong International Airport
Lantau, Hong Kong

Attn: Mr. Lawrence Tsui, Principal Manager, Environmental Compliance

19 July 2021

Dear Sir,

Contract No. 3102
3RS Independent Environmental Checker Consultancy Services

Submission of Construction Phase Annual EM&A Report No.5

Reference is made to the Environmental Team's submission of the Construction Phase Annual EM&A Report No.5 under Condition 15.5 of the Updated EM&A Manual certified by the ET Leader on 19 July 2021.

We would like to inform you that we have no adverse comment on the captioned submission. Therefore we write to verify the captioned submission in accordance with the requirement stipulated in Condition 2.3 of EP-489/2014.

Should you have any query, please feel free to contact the undersigned at 3922 9376.

Yours faithfully,
AECOM Asia Co. Ltd.

Jackel Law
Independent Environmental Checker

Contents

Tables

Figures

Appendices

Abbreviations

3RS	Three-Runway System
AAHK	Airport Authority Hong Kong
AECOM	AECOM Asia Company Limited
AFCD	Agriculture, Fisheries and Conservation Department
AIS	Automatic Information System
ANI	Encounter Rate of Number of Dolphins
APM	Automated People Mover
AW	Airport West
BHS	Baggage Handling System
CAP	Contamination Assessment Plan
CAR	Contamination Assessment Report
CTP	Coral Translocation Plan
CWD	Chinese White Dolphin
DCM	Deep Cement Mixing
DEZ	Dolphin Exclusion Zone
DO	Dissolved Oxygen
DPSE	Number of Dolphins per 100 Units of Survey Effort
EAR	Ecological Acoustic Recorder
EIA	Environmental Impact Assessment
EM&A	Environmental Monitoring & Audit
EP	Environmental Permit
EPD	Environmental Protection Department
ET	Environmental Team
FCZ	Fish Culture Zone
HDD	Horizontal Directional Drilling
HKBCF	Hong Kong-Zhuhai-Macao Bridge Hong Kong Boundary Crossing Facilities
HKIA	Hong Kong International Airport
HSF	High Speed Ferry
IEC	Independent Environmental Checker
LKC	Lung Kwu Chau
MTCC	Marine Traffic Control Centre
MMHK	Mott MacDonald Hong Kong Limited
MMWP	Marine Mammal Watching Plan
MSS	Maritime Surveillance System
MTRMP-CAV	Marine Travel Routes and Management Plan for Construction and Associated Vessel
NEL	Northeast Lantau
NWL	Northwest Lantau
PAM	Passive Acoustic Monitoring
PM	Partial Mortality
PVD	Prefabricated Vertical Drain
SC	Sha Chau

SCLKCMP	Sha Chau and Lung Kwu Chau Marine Park
SPSE	Number of On-effort Sightings per 100 Units of Survey Effort
SS	Suspended Solids
STG	Encounter Rate of Number of Dolphin Sightings
SWL	Southwest Lantau
The Project	The Expansion of Hong Kong International Airport into a Three-Runway System
The SkyPier Plan	Marine Travel Routes and Management Plan for High Speed Ferries of SkyPier
TSP	Total Suspended Particulates
WL	West Lantau
WMP	Waste Management Plan

Executive Summary

The "Expansion of Hong Kong International Airport into a Three-Runway System" (the Project) serves to meet the future air traffic demands at Hong Kong International Airport (HKIA). On 7 November 2014, the Environmental Impact Assessment (EIA) Report (Register No.: AEIAR-185/2014) for the Project was approved and an Environmental Permit (EP) (Permit No.: EP-489/2014) was issued for the construction and operation of the Project.

Airport Authority Hong Kong (AAHK) commissioned Mott MacDonald Hong Kong Limited (MMHK) to undertake the role of Environmental Team (ET) for carrying out the Environmental Monitoring & Audit (EM&A) works during the construction phase of the Project in accordance with the Updated EM&A Manual (the Manual).

This is the 5th Construction Phase Annual EM&A Report for the Project which summarizes the monitoring results and audit findings of the EM&A programme during the reporting period from 1 January 2020 to 31 December 2020.

Key Activities in the Reporting Period

Key activities of the Project carried out in the reporting period were related to the following contracts:

Advanced Works:

Contract P560 (R) Aviation Fuel Pipeline Diversion Works

- Stockpiling of compressed materials

Reclamation Works:

Contract 3205 DCM Works

- Trimming; and
- DCM works.

Contract 3206 Main Reclamation Works

- Land-based ground improvement works;
- Seawall construction;
- Marine filling; and
- Sorting and reuse of inert waste from other 3RS contracts.

Airfield Works:

Contract 3301 North Runway Crossover Taxiway

- Cable ducting works;
- Subgrade compaction and paving works;
- Drainage construction works;
- Operation of aggregate mixing facility; and
- Precast of duct bank and fabrication of steel works.

Contract 3302 Eastern Vehicular Tunnel Advance Works

- Site establishment.

- Cable laying and ducting works;
- Trench excavation works;
- Backfilling and reinstatement works;
- Piling and structure works; and
- King Post construction.

Contract 3303 Third Runway and Associated Works

- Site establishment.
- Plant and equipment mobilisation
- Footing and utilities work**;**
- Preparation works for box culvert construction**;**
- Piling works**;**
- Bored piling for approach light**;** and
- Cable laying and ducting works.

Contract 3307 Fire Training Facility

- Site establishment.
- Excavation; and
- Drainage works.

Third Runway Concourse and Integrated Airport Centres Works:

Contract 3402 New Integrated Airport Centres Enabling Works

- Potable water and seawater works;
- Footing construction;
- Road works; and
- Sewerage and pipe works.

Contract 3403 New Integrated Airport Centres Building and Civil Works

- Site establishment;
- Excavation works;
- Foundation works; and
- Piling works.
- Installation of cable and lightning pit

Contract 3405 Three Runway Concourse Foundation and Substructure Works

- Site establishment;
- Plant mobilisation;
- Piling works; and
- Laying of pipes.

Terminal 2 (T2) Expansion Works:

Contract 3501 Antenna Farm and Sewage Pumping Station

- Site clearance.

Contract 3503 Terminal 2 Foundation and Substructure Works

- T2 demolition;
- Site establishment;

- Excavation works;
- Utilities, drainage, and road works; and
- Piling and structure works.

Contract 3508 Terminal 2 Foundation and Substructure Works

- Excavation and footing construction;
- Piling works;
- Pre-drilling; and
- Builders' works

Automated People Mover (APM) and Baggage Handling System (BHS):

Contract 3601 New Automated People Mover System (TRC Line)

- Construction of site office;
- Plinth construction works; and
- Drilling works and rebar fixing.

Contract 3602 Existing APM System Modification Works

- Modification works at APM depot

Baggage Handling System (BHS) Works:

Contract 3603 3RS Baggage Handling System

- BHS modification work at Terminal 1.

Construction Support (Facilities):

Contract 3721 Construction Support Infrastructure Works

- Site clearance and establishment;
- Construction of utilities and logistic facilities;
- Excavation and backfilling;
- Laying of drainage pipes and dusts; and
- Road works.

Contract 3722 Construction Support Facilities

- Site establishment;
- Site clearance;
- Formboard erecting and concreting;
- Erection of superstructure; and
- Foundation works.

Airport Support Infrastructure:

Contract 3801 APM and BHS Tunnels on Existing Airport Island

- Cofferdam installation for box culvert and shaft;
- Construction of temporary traffic steel deck;
- Construction of box culvert and ventilation building;
- Construction of working platform and ventilation ducts;
- Rising main installation;
- Drilling and grouting works;
- Piling and foundation works;

- King Post installation;
- Backfilling work; and
- Site clearance.

Contract 3802 APM and BHS Tunnels and Related Works

- Site establishment;
- Set up storage area and temporary haul road;
- Pre drilling;
- Piling works;
- Ground investigation
- Installation of storm drain pipes; and
- Foundation works.

Construction Support (Services / Licences):

Contract 3901A Concrete Batching Facility

- Excavation works;
- Foundation works;
- Erection of superstructure; and
- Concreting.

Contract 3901B Concrete Batching Facility

- Foundation works;
- Footing construction;
- Erection of steelwork;
- Erection of superstructure; and
- Operation of concrete batching plant.

EM&A Activities Conducted in the Reporting Period

The EM&A programme was undertaken in accordance with the Manual. Summary of monitoring activities during this reporting period is presented as below:

Monitoring/ Audit Activities	Number of Sessions
Air Quality Monitoring	384
Noise Monitoring	208
Water Quality Monitoring	155
Vessel line-transect surveys for Chinese White Dolphin (CWD) monitoring	24
Land-based theodolite tracking survey effort for CWD monitoring	24

Environmental auditing works, including weekly site inspections of construction works conducted by the ET and bi-weekly site inspections conducted by the Independent Environmental Checker (IEC), audit of SkyPier High Speed Ferries (HSF), audit of construction and associated vessels, and audit of implementation of Marine Mammal Watching Plan (MMWP) and Dolphin Exclusion Zone (DEZ) Plan, were conducted in the reporting period. Based on the information including ET's observations, records of Maritime Surveillance System (MSS), and contractors' site records, it is noted that the environmental pollution control and mitigation measures were properly implemented and the construction operation of the Project in the reporting period did not introduce adverse impact to the environment.

Summary Findings of the EM&A Programme

The monitoring works for construction dust, construction noise, water quality, construction waste, landscape & visual, and CWD were conducted during the reporting period in accordance with the Manual.

Monitoring results of construction dust, construction noise, construction waste, and CWD did not trigger the corresponding Action and Limit Levels in the reporting period.

The water quality monitoring results for turbidity and total alkalinity obtained during the reporting period were within the corresponding Action and Limit Levels stipulated in the EM&A programme. Relevant investigation and follow-up actions will be conducted according to the EM&A programme if the corresponding Action and Limit Levels are triggered. For dissolved oxygen (DO), suspended solids (SS), chromium and nickel, some of the monitoring results triggered the relevant Action or Limit Levels, and the corresponding investigations were conducted accordingly. The investigation findings concluded that all cases were not related to the Project. To conclude, the construction activities in the monitoring period did not introduce adverse impact to all water quality sensitive receivers.

Summary Table

The Key findings of the EM&A programme during the reporting period are summarised as below:

	Yes	No	Details	Analysis / Recommendation / Remedial Actions
Breach of Limit Level^		√	No exceedance of project-related Limit Level was recorded.	Nil
Breach of Action Level^		√	No exceedance of project-related Action Level was recorded.	Nil
Complaints Received	√		Ten complaints were received on 6 Jul, 13 Jul, 28 Aug, 6 Oct, 15 Oct, 20 Oct, 6 Nov, 19 Nov (2 complaints received) and 27 Nov 2020.	The complaint investigations were carried out in accordance with the Complaint Management Plan. Details are presented in S3.2.1.
Notification of any summons and status of prosecutions		√	No notification of summons or prosecution were received.	Nil
Changes that affect the EM&A		√	There was no change to the construction works that may affect the EM&A.	Nil

Remarks: ^ Only triggering of Action or Limit Level found related to Project works is counted as Breach of Action or Limit Level.

1 Introduction

1.1 Background

On 7 November 2014, the Environmental Impact Assessment (EIA) Report (Register No.: AEIAR-185/2014) for the "Expansion of Hong Kong International Airport into a Three-Runway System" (the Project) was approved and an Environmental Permit (EP) (Permit No.: EP-489/2014) was issued for the construction and operation of the Project.

Airport Authority Hong Kong (AAHK) commissioned Mott MacDonald Hong Kong Limited (MMHK) to undertake the role of Environmental Team (ET) for carrying out the Environmental Monitoring & Audit (EM&A) works during the construction phase of the Project in accordance with the Manual submitted under EP Condition 3.1[1]. AECOM Asia Company Limited (AECOM) was employed by AAHK as the Independent Environmental Checker (IEC) for the Project.

The Project covers the expansion of the existing airport into a three-runway system (3RS) with key project components comprising land formation of about 650 hectares and all associated facilities and infrastructure including taxiways, aprons, aircraft stands, a passenger concourse, an expanded Terminal 2, all related airside and landside works and associated ancillary and supporting facilities. The existing submarine aviation fuel pipelines and submarine power cables also require diversion as part of the works.

Construction of the Project is to proceed in the general order of diversion of the submarine aviation fuel pipelines, diversion of the submarine power cables, land formation, and construction of infrastructure, followed by construction of superstructures.

The summary of construction works programme can be referred to the corresponding Monthly EM&A Reports. Description of relevant contracts in the reporting period is presented in **Appendix A**.

1.2 Scope of this Report

This is the 5th Construction Phase Annual EM&A Report for the Project which summarizes the key findings of the EM&A programme during the reporting period from 1 January 2020 to 31 December 2020.

1.3 Project Organization

The Project's organization structure and the contact details of the key personnel are provided in **Appendix B** and **Table 1.1** respectively.

[1] The Manual is available on the Project's dedicated website (accessible at: **http://env.threerunwaysystem.com/en/index.html**).

Table 1.1: Contact Information of Key Personnel

Party	Position	Name	Telephone
Project Manager's Representative (Airport Authority Hong Kong)	Principal Manager, Environmental Compliance, Sustainability	Lawrence Tsui	2183 2734
Environmental Team (ET) (Mott MacDonald Hong Kong Limited)	Environmental Team Leader	Terence Kong	2828 5919
	Deputy Environmental Team Leader	Heidi Yu	2828 5704
	Deputy Environmental Team Leader	Daniel Sum	2585 8495
Independent Environmental Checker (IEC) (AECOM Asia Company Limited)	Independent Environmental Checker	Jackel Law	3922 9376
	Deputy Independent Environmental Checker	Roy Man	3922 9141

Advanced Works:

Party	Position	Name	Telephone
Contract P560(R) Aviation Fuel Pipeline Diversion Works (Langfang Huayuan Mechanical and Electrical Engineering Co., Ltd.)	Project Manager	Wei Shih	2117 0566
	Environmental Officer	Lyn Liu	5172 6543

Reclamation Works:

Party	Position	Name	Telephone
Contract 3205 DCM (Package 5) (Bachy Soletanche - Sambo Joint Venture)	Deputy Project Director	Min Park	9683 0765
	Environmental Officer	Steven Chan	6288 0189
Contract 3206 Main Reclamation Works (ZHEC-CCCC-CDC Joint Venture)	Project Manager	Alan Mong	3763 1352
	Environmental Officer	Kwai Fung Wong	3763 1452

Airfield Works:

Party	Position	Name	Telephone
Contract 3301 North Runway Crossover Taxiway (FJT-CHEC-ZHEC Joint Venture)	Deputy Project Director	Kin Hang Chung	9800 0048
	Environmental Officer	Joe Wong	6182 0351
Contract 3302 Eastern Vehicular Tunnel Advance Works (China Road and Bridge Corporation)	Project Manager	Dickey Yau	5699 4503
	Environmental Officer	Dennis Ho	5645 0563

Party	Position	Name	Telephone
Contract 3303 Third Runway and Associated Works (SAPR Joint Venture)	Project Manager	Andrew Keung	6277 6628
	Environmental Officer	Max Chin	6447 5707
Contract 3307 Fire Training Facility (Paul Y. Construction Company Limited)	Project Manager	Steven Meredith	6109 1813
	Environmental Officer	Albert Chan	9700 1083

Third Runway Concourse and Integrated Airport Centres Works:

Party	Position	Name	Telephone
Contract 3402 New Integrated Airport Centres Enabling Works (Wing Hing Construction Co., Ltd.)	Contract Manager	Michael Kan	9206 0550
	Environmental Officer	Lisa He	5374 3418
Contract 3403 New Integrated Airport Centres Building and Civil Works (Sun Fook Kong Construction Limited)	Project Manager	Alice Leung	9220 3162
	Environmental Officer	Alpha Chia	9626 1114
Contract 3405 Third Runway Concourse Foundation and Substructure Works (China Road and Bridge Corporation – Bachy Soletanche Group Limited – LT Sambo Co., Ltd. Joint Venture)	Project Manager	Francis Choi	9423 3469
	Environmental Officer	Jacky Lai	9028 8975

Terminal 2 (T2) Expansion Works:

Party	Position	Name	Telephone
Contract 3501 Antenna Farm and Sewage Pumping Station (Build King Construction Ltd.)	Contracts Manager	Vincent Kwan	9833 1313
	Environmental Officer	Edward Tam	9287 8270
Contract 3503 Terminal 2 Foundation and Substructure Works (Leighton – Chun Wo Joint Venture)	Project Manager	Eric Wu	3973 1718
	Environmental Officer	Gomez Yuen	9098 7807
Contract 3508 Terminal 2 Expansion Works (Gammon Engineering & Construction Company Limited)	Project Manager	Richard Ellis	6201 5637
	Environmental Officer	Gena Tsang	9511 2283

Automated People Mover (APM) and Baggage Handling System (BHS):

Party	Position	Name	Telephone
Contract 3601 New Automated People Mover System (TRC Line) (CRRC Puzhen Bombardier Transportation Systems Limited and CRRC Nanjing Puzhen Co., Ltd. Joint Venture)	Project Manager	Hongdan Wei	158 6180 9450
	Environmental Officer	P L Wong	9143 2185
Contract 3602 Existing APM System Modification Works (Niigata Transys Co., Ltd.)	Project Manager	Kunihiro Tatecho	9755 0351
	Environmental Officer	Carrie Kwan	9276 0551
Contract 3603 3RS Baggage Handling System (VISH Consortium)	Project Manager	K C Ho	9272 9626
	Environmental Officer	Eric Ha	9215 3432

Construction Support (Facilities):

Party	Position	Name	Telephone
Contract 3721 Construction Support Infrastructure Works (China State Construction Engineering (Hong Kong) Ltd.)	Site Agent	Thomas Lui	9011 5340
	Environmental Officer	Xavier Lam	9493 2944
Contract 3722 Western Support Area – Construction Support Facilities (Tapbo Construction Company Limited and Konwo Modular House Limited Joint Venture)	Deputy Project Director	Philip Kong	9049 3161
	Environmental Officer	Sampson Lo	9752 9118

Airport Support Infrastructure:

Party	Position	Name	Telephone
Contract 3801 APM and BHS Tunnels on Existing Airport Island (China State Construction Engineering (Hong Kong) Ltd.)	Project Manager	Kingsley Chiang	9424 8437
	Environmental Officer	Federick Wong	9842 2703
Contract 3802 APM and BHS Tunnels and Related Works (Gammon Engineering & Construction Company Limited)	Project Manager	John Adams	6111 6989
	Environmental Officer	Phoebe Ng	9869 1105

Construction Support (Services / Licences):

Party	Position	Name	Telephone
Contract 3901A Concrete Batching Facility (K. Wah Concrete Company Limited)	Project Manager	Benedict Wong	9553 2806
	Environmental Officer	C P Fung	9874 2872

Party	Position	Name	Telephone
Contract 3901B Concrete Batching Facility (Gammon Construction Limited)	Project Manager	Gabriel Chan	2435 3260
	Environmental Officer	Rex Wong	2695 6319

1.4 Contact information for the Project

The contact information for the Project is provided in **Table 1.2**. The public can contact us through the following channels if they have any queries and comments on the environmental monitoring data and project related information.

Table 1.2: Contact Information of the Project

Channels	Contact Information
Hotline	3908 0354
Email	env@3rsproject.com
Fax	3747 6050
Postal Address	Airport Authority Hong Kong HKIA Tower 1 Sky Plaza Road Hong Kong International Airport Lantau Hong Kong Attn: Environmental Team Leader Mr Terence Kong c/o Mr Lawrence Tsui (TRD)

1.5 Summary of Construction Works

The key activities of the Project carried out in the reporting period included reclamation works and land-based works. Works in the reclamation areas included DCM works, marine filling, seawall and facilities construction, together with runway and associated works such as bored piling for approach lights. Land-based works on existing airport island involved mainly airfield works, foundation and substructure works for Terminal 2 expansion, modification and tunnel work for APM and BHS, and preparation work for utilities, with activities including site establishment, site office construction, road and drainage works, cable ducting, demolition of existing facilities, piling, and excavation works. Due to the challenges from the impact of COVID-19 pandemic in 2020, the Project programme was affected in 2020 which included the slippage of the reclamation related critical works and the labour deployment due to quarantine requirements. With the implementation of alternative and contingency plans measures which include re-sequencing of works to provide timely access for follow-on contractors to commence works in the critical areas, and optimizing the reclamation design to identify more suitable areas for receiving public fill, the 3RS construction work were anticipated to proceed according to the planning schedule, which would support the project programme to commission the Third Runway in 2022 and 3RS in 2024.

The locations of the works areas are presented in **Figure 1.1.**

1.6 Summary of EM&A Programme Requirements

The status for all environmental aspects is presented in **Table 1.3**.

Table 1.3: Summary of status for all environmental aspects under the Manual

Parameters	EM&A Requirements	Status
Air Quality		
Baseline Monitoring	At least 14 consecutive days before commencement of construction work	The baseline air quality monitoring results were reported in Baseline

Parameters	EM&A Requirements	Status
		Monitoring Report and submitted to EPD under EP Condition 3.4.
Impact Monitoring	At least 3 times every 6 days	On-going
Noise		
Baseline Monitoring	Daily for a period of at least two weeks prior to the commencement of construction works	The baseline noise monitoring results were reported in Baseline Monitoring Report and submitted to EPD under EP Condition 3.4.
Impact Monitoring	Weekly	On-going
Water Quality		
General Baseline Water Quality Monitoring for reclamation, water jetting and field joint works	Three days per week, at mid-flood and mid-ebb tides, for at least four weeks prior to the commencement of marine works.	The baseline water quality monitoring results were reported in Baseline Water Quality Monitoring Report and submitted to EPD under EP Condition 3.4.
General Impact Water Quality Monitoring for reclamation, water jetting and field joint works	Three days per week, at mid-flood and mid-ebb tides.	On-going for reclamation works. General impact water quality monitoring for water jetting works was completed on 23 May 2017.
Initial Intensive Deep Cement Mixing (DCM) Water Quality Monitoring	At least four weeks	The Initial Intensive DCM Monitoring Report was submitted and approved by EPD in accordance with the Detailed Plan on DCM.
Regular DCM Water Quality Monitoring	Three times per week until completion of DCM works.	On-going
Sewerage and Sewage Treatment		
Methodology for carrying out annual sewage flow monitoring for concerned gravity sewer	Methodology to be prepared and submitted to EPD at least one year before commencement of the operation of 3RS	To be prepared and submitted to EPD
Details of the routine H2S monitoring system for the sewerage system of 3RS	Details to be prepared and submitted to EPD at least one year before commencement of the operation of 3RS	To be prepared and submitted to EPD
Waste Management		
Waste Monitoring	At least weekly	On-going
Land Contamination		
Supplementary Contamination Assessment Plan (CAP)	At least 3 months before commencement of any soil remediation works.	The Supplementary CAP was submitted and approved by EPD pursuant to EP condition 2.20.
Contamination Assessment Report (CAR)	CAR to be submitted for golf course	The CAR for Golf Course was submitted and accepted by EPD.
	CAR to be submitted for Terminal 2 Emergency Power Supply Systems	The CARs for Terminal 2 Emergency Power Supply Systems were submitted and accepted by EPD.
Terrestrial Ecology		
Pre-construction Egretry Survey Plan	Once per month in the breeding season between April and July, prior to the commencement of HDD drilling works.	The revised Egretry Survey Plan was submitted and approved by EPD under EP Condition 2.14.
Ecological Monitoring	Monthly monitoring during the HDD construction works period from August to March.	The terrestrial ecological monitoring at Sheung Sha Chau was completed in January 2019.
Marine Ecology		
Pre-Construction Phase Coral Dive Survey	Prior to marine construction works	The Coral Translocation Plan was submitted and approved by EPD under EP Condition 2.12.

Parameters	EM&A Requirements	Status
Coral Translocation	-	The coral translocation was completed on 5 January 2017.
Coral Post-translocation Monitoring	As per an enhanced monitoring programme based on the Coral Translocation Plan	The post-translocation monitoring programme according to the Coral Translocation Plan was completed in April 2018.
Chinese White Dolphins (CWD)		
Baseline Monitoring	6 months of baseline surveys before the commencement of land formation related construction works. Vessel line transect surveys: Two full surveys per month; Land-based theodolite tracking surveys: Two days per month at the Sha Chau station and two days per month at the Lung Kwu Chau station; and Passive Acoustic Monitoring (PAM): For the whole duration of baseline period.	Baseline CWD results were reported in the CWD Baseline Monitoring Report and submitted to EPD in accordance with EP Condition 3.4.
Impact Monitoring	Vessel line transect surveys: Two full surveys per month; Land-based theodolite tracking surveys: One day per month at the Sha Chau station and one day per month at the Lung Kwu Chau station; and PAM: For the whole duration for land formation related construction works.	On-going
Landscape and Visual		
Landscape and Visual Plan	At least 3 months before the commencement of construction works on the formed land of the Project.	The Landscape & Visual Plan was submitted to EPD under EP Condition 2.18.
Baseline Monitoring	One-off survey within the Project site boundary prior to commencement of any construction works	The baseline landscape & visual monitoring result has been reported in Baseline Monitoring Report and submitted to EPD under EP Condition 3.4.
Impact Monitoring	Weekly	On-going
Environmental Auditing		
Regular site inspection	Weekly	On-going
Marine Mammal Watching Plan (MMWP) implementation measures	Monitor and check	On-going
Dolphin Exclusion Zone (DEZ) Plan implementation measures	Monitor and check	On-going
SkyPier High Speed Ferries (HSF) implementation measures	Monitor and check	On-going
Construction and Associated Vessels implementation measures	Monitor and check	On-going
Complaint Hotline and Email channel	Construction phase	On-going
Environmental Log Book	Construction phase	On-going
Silt Curtain Deployment Plan implementation measures	Monitor and check	On-going
Spill Response Plan implementation measures	Monitor and check	On-going

Taking into account the construction works in the reporting period, impact monitoring of air quality, noise, water quality, waste management, landscape and visual, and CWD were carried out in the reporting period.

The EM&A programme also involved weekly site inspections and related auditing conducted by the ET for checking the implementation of the required environmental mitigation measures as recommended in the approved EIA Report. To promote the environmental awareness and enhance the environmental performance of the contractors, environmental briefings, environmental trainings, and regular environmental management meetings were conducted during the reporting period which are summarized as below:

- 24 skipper trainings provided by ET;
- 7 environmental briefings on EP and EM&A requirements of the 3RS provided by ET;
- 165 environmental management meetings for EM&A review with works contracts; and
- 7 dolphin observer training session provided by ET;

The EM&A programme has been undertaken in accordance with the recommendations presented in the approved EIA Report and the Manual. Despite that, the implementation of the EM&A programme was slightly affected by various events in the reporting period. In view of the local COVID-19 pandemic situation, special work arrangement, such as working from home, was implemented among government departments in several periods to reduce the flow of people and social contacts in the community. Sporadic COVID-19 cases were also recorded among some of the contractors and sub-contractors under the Project in 2020. Besides, inclement weather events including tropical cyclones, rainstorms, and thunderstorms have also affected the regular schedules for water quality monitoring and site inspections. A summary of implementation status of the environmental mitigation measures for the construction phase of the Project during the reporting period is provided in **Appendix C**.

2 Environmental Monitoring and Auditing

2.1 Air Quality Monitoring

Impact 1-hour Total Suspended Particulates (TSP) monitoring was conducted three times every six days at two representative monitoring stations during the reporting period. The locations of monitoring stations are described in **Table 2.1** and presented in **Figure 2.1**.

2.1.1 Action and Limit Levels

The Action and Limit Levels of the air quality monitoring stipulated in the EM&A programme for triggering the relevant investigation and follow-up procedures under the programme are provided in **Table 2.1**.

Table 2.1: Impact Air Quality Monitoring Stations

Monitoring Station	Location	Action Level (μg/m^3)	Limit Level (μg/m^3)
AR1A	Man Tung Road Park	306	500
AR2	Village House at Tin Sum	298	

2.1.2 Monitoring Results

The graphical plots of impact air quality monitoring results during the reporting period are presented in **Appendix D**. Percentage of monitoring results within their corresponding Action and Limit Levels in the reporting period are presented in **Table 2.2**.

Table 2.2: Percentage of Air Quality Monitoring Results within Action and Limit Levels

	AR1A	AR2
Jan 2020	100%	100%
Feb 2020	100%	100%
Mar 2020	100%	100%
Apr 2020	100%	100%
May 2020	100%	100%
Jun 2020	100%	100%
Jul 2020	100%	100%
Aug 2020	100%	100%
Sep 2020	100%	100%
Oct 2020	100%	100%
Nov 2020	100%	100%
Dec 2020	100%	100%
Overall	100%	100%

Note: The percentages are calculated by dividing the number of monitoring results within their corresponding Action and Limit Level by the total number of monitoring results.

All monitoring results at AR1A and AR2 were within their corresponding Action and Limit Levels.

General meteorological conditions throughout the impact monitoring period were recorded and summarized in **Table 2.3**.

Table 2.3: General Meteorological Condition during Impact Air Quality Monitoring

	Weather	Wind Direction
Jan – Mar 2020	Sunny to Rainy	North or East
Apr – Jun 2020	Sunny to Cloudy	Southwest or West
Jul – Sep 2020	Sunny to Cloudy	Southwest
Oct – Dec 2020	Sunny to Cloudy	Northeast

2.1.3 Conclusion

No dust emission source was observed at the monitoring stations during the monitoring sessions. As the sensitive receivers were far away from the construction activities, with the implementation of dust control measures, there was no adverse impact at the sensitive receivers attributable to the works of the Project.

2.2 Noise Monitoring

Impact noise monitoring was conducted at four representative monitoring stations once per week during 0700 and 1900 in the reporting period. The locations of monitoring stations are described in **Table 2.4** and presented in **Figure 2.1**.

2.2.1 Action and Limit Levels

The Action and Limit levels of the noise monitoring stipulated in the EM&A programme for triggering the relevant investigation and follow-up procedures under the programme are provided in **Table 2.4**.

Table 2.4: Impact Noise Monitoring Stations

Monitoring Station	Location	Action Level	Limit Level
NM1A	Man Tung Road Park	When one documented complaint is received from any one of the sensitive receivers	75 dB(A)
NM4	Ching Chung Hau Po Woon Primary School		65dB(A) / 70 dB(A) [(i)]
NM5	Village House in Tin Sum		75 dB(A)
NM6	House No. 1, Sha Lo Wan		75 dB(A)

Note:
[(i)] The Limit Level for NM4 is reduced to 70dB(A) for being an educational institution. During school examination period, the Limit Level is further reduced to 65dB(A).

2.2.2 Monitoring Results

The graphical plots of impact noise quality monitoring results during the reporting period are presented in **Appendix D**. Percentage of monitoring results within their corresponding Action and Limit Levels in the reporting period are presented in **Table 2.5**.

Table 2.5: Percentage of Noise Monitoring Results within Action and Limit Levels

	NM1A	NM4	NM5	NM6
Jan 2020	100%	100%	100%	100%
Feb 2020	100%	100%	100%	100%
Mar 2020	100%	100%	100%	100%
Apr 2020	100%	100%	100%	100%
May 2020	100%	100%	100%	100%
Jun 2020	100%	100%	100%	100%
Jul 2020	100%	100%	100%	100%
Aug 2020	100%	100%	100%	100%

	NM1A	NM4	NM5	NM6
Sep 2020	100%	100%	100%	100%
Oct 2020	100%	100%	100%	100%
Nov 2020	100%	100%	100%	100%
Dec 2020	100%	100%	100%	100%
Overall	100%	100%	100%	100%

Note: The percentages are calculated by dividing the number of monitoring results within their corresponding Action and Limit Level by the total number of monitoring results.

No complaints were received from any sensitive receiver that triggered the Action Level. All monitoring results were also within the corresponding Limit Levels at all monitoring stations in the reporting period.

General weather conditions throughout the impact monitoring period were recorded and summarized in **Table 2.6**.

Table 2.6: General Weather Condition during Impact Noise Monitoring

	Weather
Jan – Mar 2020	Sunny to Drizzle
Apr – Jun 2020	Sunny to Cloudy
Jul – Sep 2020	Sunny to Cloudy
Oct – Dec 2020	Sunny to Cloudy

2.2.3 Conclusion

Major sources of noise dominating the monitoring stations observed during the construction noise impact monitoring were road traffic noise near NM1A, school activities at NM4, and aircraft noise near NM5 and NM6 during the reporting period. As the sensitive receivers were far away from the construction activities, with the implementation of noise control measures, there was no adverse impact at the sensitive receivers attributable to the works of the Project.

2.3 Water Quality Monitoring

Impact water quality monitoring of the Project commenced on 4 Aug 2016. During the reporting period, water quality monitoring was conducted three days per week, at mid-ebb and mid-flood tides, at 23 water quality monitoring stations, comprising 12 impact (IM) stations, 8 sensitive receiver (SR) stations, and 3 control (C) stations in the vicinity of the water quality sensitive receivers around the existing airport island in accordance with the Manual. The purpose of water quality monitoring at the IM stations is to promptly capture any potential water quality impacts from the Project before the impacts could become apparent at sensitive receivers (represented by the SR stations). **Table 2.7** describes the details of the monitoring stations. **Figure 2.2** shows the locations of the monitoring stations.

With the completion of all marine-based DCM works in December 2020, regular DCM monitoring was proposed to be ceased at all monitoring stations starting within January 2021 and would be resumed if there are marine-based DCM works in the coming future.

Table 2.7: Monitoring Locations and Parameters for Impact Water Quality Monitoring

Monitoring Stations	Description	Coordinates		Parameters
		Easting	Northing	
C1	Control Station	804247	815620	General Parameters: DO, pH, Temperature,
C2	Control Station	806945	825682	
C3[(3)]	Control Station	817803	822109	
IM1	Impact Station	807132	817949	

Monitoring Stations	Description	Coordinates		Parameters
		Easting	Northing	
IM2	Impact Station	806166	818163	Salinity, Turbidity, SS DCM Parameters Total Alkalinity, Heavy Metals [2]
IM3	Impact Station	805594	818784	
IM4	Impact Station	804607	819725	
IM5	Impact Station	804867	820735	
IM6	Impact Station	805828	821060	
IM9	Impact Station	808811	822094	
IM10	Impact Station	809794	822385	
IM11	Impact Station	811460	822057	
IM12	Impact Station	812046	821459	
SR1A[1]	Hong Kong-Zhuhai-Macao Bridge Hong Kong Boundary Crossing Facilities (HKBCF) Seawater Intake for cooling	812660	819977	General Parameters DO, pH, Temperature, Salinity, Turbidity, SS
SR2 [3]	Planned marine park / hard corals at The Brothers / Tai Mo To	814166	821463	General Parameters DO, pH, Temperature, Salinity, Turbidity, SS DCM Parameters Total Alkalinity, Heavy Metals [2][4]
SR3	Sha Chau and Lung Kwu Chau Marine Park / fishing and spawning grounds in North Lantau	807571	822147	General Parameters DO, pH, Temperature, Salinity, Turbidity, SS
SR4A	Sha Lo Wan	807810	817189	
SR5A	San Tau Beach SSSI	810696	816593	
SR6A[5]	Tai Ho Bay, Near Tai Ho Stream SSSI	814739	817963	
SR7	Ma Wan Fish Culture Zone (FCZ)	823742	823636	
SR8A[6]	Seawater Intake for cooling at Hong Kong International Airport (East)	811623	820390	

Notes:

(1) With the operation of HKBCF, water quality monitoring at SR1A was commenced on 25 October 2018.

(2) Details of selection criteria for the two heavy metals for early regular and regular DCM monitoring refer to the Detailed Plan on Deep Cement Mixing available on the dedicated 3RS website (**http://env.threerunwaysystem.com/en/ep-submissions.html**). DCM specific water quality monitoring parameters (total alkalinity and heavy metals) were only conducted at C1 to C3, SR2, and IM1 to IM12.

(3) According to the baseline water quality monitoring report, C3 station is not adequately representative as a control station of IM / SR stations during the flood tide. The control reference has been changed from C3 to SR2 from 1 September 2016 onwards.

(4) Total alkalinity and heavy metals results are collected at SR2 as a control station for regular DCM monitoring.

(5) As the access to SR6 was obstructed by the construction activities and temporary structures for Tung Chung New Town Extension, the monitoring location was relocated to SR6A starting from 8 August 2019.

(6) The monitoring station for SR8 is subject to future changes due to silt curtain arrangements and the progressive relocation of this seawater intake.

2.3.1 Action and Limit Levels

The Action and Limit Levels for general water quality monitoring and regular DCM monitoring stipulated in the EM&A programme for triggering the relevant investigation and follow-up procedures under the programme are presented in **Table 2.8**. The control and impact stations during flood tide and ebb tide for general water quality monitoring and regular DCM monitoring are presented in **Table 2.9**. The weather and sea conditions during the reporting period are recorded and summarized in **Table 2.10**.

Table 2.8: Action and Limit Levels for General Water Quality Monitoring and Regular DCM Monitoring

Parameters		Action Level (AL)		Limit Level (LL)	
Action and Limit Levels for general water quality monitoring and regular DCM monitoring (excluding SR1A & SR8)					
General Water Quality Monitoring	DO in mg/l (Surface, Middle & Bottom)	Surface and Middle 4.5 mg/l		Surface and Middle 4.1 mg/l 5 mg/l for Fish Culture Zone (SR7) only	
		Bottom 3.4 mg/l		Bottom 2.7 mg/l	
	Suspended Solids (SS) in mg/l	23	or 120% of upstream control station at the same tide of the same day, whichever is higher	37	or 130% of upstream control station at the same tide of the same day, whichever is higher
	Turbidity in NTU	22.6		36.1	
Regular DCM Monitoring[6]	Total Alkalinity in ppm	95		99	
	Representative Heavy Metals for regular DCM monitoring (Chromium)	0.2		0.2	
	Representative Heavy Metals for regular DCM monitoring (Nickel)	3.2		3.6	
Action and Limit Levels SR1A					
SS (mg/l)		33		42	
Action and Limit Levels SR8					
SS (mg/l)		52		60	

Note:

1. For DO measurement, Action or Limit Level is triggered when the monitoring result is lower than the limits.
2. For parameters other than DO, Action or Limit Level of water quality results is triggered when monitoring results is higher than the limits.
3. Depth-averaged results are used unless specified otherwise.
4. Details of selection criteria for the two heavy metals for early regular and regular DCM monitoring refer to the Detailed Plan on Deep Cement Mixing available on the dedicated 3RS website **http://env.threerunwaysystem.com/en/ep-submissions.html**)
5. The Action and Limit Levels for the two representative heavy metals chosen will be the same as that for the intensive DCM monitoring.
6. Due to the completion of all marine-based DCM works within December 2020, regular DCM monitoring was proposed to be ceased at all monitoring stations starting within January 2021 and would be resumed if there are marine-based DCM works in the coming future.

Table 2.9: The Control and Impact Stations during Flood Tide and Ebb Tide for General Water Quality Monitoring and Regular DCM Monitoring

Control Station	Impact Stations
Flood Tide	
C1	IM1, IM2, IM3, IM4, IM5, IM6, IM7, IM8, SR3

Control Station	Impact Stations
SR2 (1)	IM7, IM8, IM9, IM10, IM11, IM12, SR1A, SR3, SR4A, SR5A, SR6A, SR8
Ebb Tide	
C1	SR4A, SR5A, SR6A
C2	IM1, IM2, IM3, IM4, IM5, IM6, IM7, IM8, IM9, IM10, IM11, IM12, SR1A, SR2, SR3, SR7, SR8

Note (1): As per findings of Baseline Water Quality Report, the control reference has been changed from C3 to SR2 from 1 September 2016 onwards.

Table 2.10: General Weather Condition and Sea Condition during Impact Water Quality Monitoring

	Weather	Sea Condition
Jan – Mar 2020	Sunny to Rainy	Calm to Rough
Apr – Jun 2020	Sunny to Rainy	Calm to Rough
Jul – Sep 2020	Sunny to Rainy	Calm to Rough
Oct – Dec 2020	Sunny to Cloudy	Calm to Rough

2.3.2 Monitoring Results

Percentage of monitoring results within their corresponding Action and Limit Levels in the reporting period are presented in **Table 2.11**. It should be noted that Hong Kong was under the effect of tropical cyclones from 12 to 14 June, 31 July to 1 August, 18 to 19 August, 11 to 14 October and 22 to 24 October 2020 respectively, and the water quality monitoring results during the said periods might be affected by the inclement weather.

Table 2.11: Percentage of Water Quality Monitoring Results within Action and Limit Levels

	General Water Quality Monitoring				Regular DCM Monitoring		
	DO (Surface and Middle)	DO (Bottom)	SS	Turbidity	Alkalinity	Chromium	Nickel
Jan 2020	100%	100%	99.6%	100%	100%	100%	99.7%
Feb 2020	100%	100%	98.4%	100%	100%	100%	100%
Mar 2020	100%	100%	99.0%	100%	100%	100%	100%
Apr 2020	100%	100%	100%	100%	100%	100%	100%
May 2020	99.8%	100%	99.8%	100%	100%	100%	100%
Jun 2020	93.4%	91.6%	100%	100%	100%	100%	100%
Jul 2020	97.8%	97.1%	100%	100%	100%	100%	100%
Aug 2020	99.5%	98.8%	100%	100%	100%	100%	100%
Sep 2020	100%	100%	100%	100%	100%	100%	100%
Oct 2020	100%	100%	99.8%	100%	100%	100%	100%
Nov 2020	100%	100%	100%	100%	100%	100%	100%
Dec 2020	100%	100%	96.3%	100%	100%	99.7%	100%
Overall	99.2%	99.0%	99.4%	100%	100%	99.97%	99.97%

Note: The percentages are calculated by dividing the number of depth-averaged results within their corresponding Action and Limit Level by the total number of depth-averaged results.

The monitoring results for turbidity and total alkalinity obtained in the reporting period were within their corresponding Action and Limit Levels.

For DO, SS, chromium and nickel, some of the testing results triggered the corresponding Action or Limit Levels in the reporting period. Investigations were conducted accordingly and the details were presented

in the corresponding Construction Phase Monthly EM&A Reports. The status of each water quality parameter collected in the reporting period are presented graphically in **Appendix D**. Some of these cases were recorded at monitoring stations located upstream of the Project based on dominant tidal flow and were considered not affected by the Project. Based on respective investigation findings, cases triggering Action or Limit Level were found not related to the Project.

2.3.3 Conclusions

During the reporting period, it was noted that the vast majority of monitoring results (from 99.0% for DO (Bottom) to 100% for turbidity and alkalinity as presented in **Table 2.11**) were within their corresponding Action and Limit Levels, while only a minor number of results triggered their corresponding Action or Limit Level, and investigations were conducted. Based on the findings of the investigations presented in the Construction Phase Monthly EM&A Reports for 2020, all results that triggered the corresponding Action or Limit Level were not related to the Project. Therefore, the Project did not cause adverse impact at the water quality sensitive receivers. All required actions under the Event and Action Plan were followed. These cases were considered to be due to natural fluctuation or other sources not related to the Project.

Nevertheless, the non-project related triggers have been attended to and have initiated corresponding actions and measures. As part of the EM&A programme, the construction methods and mitigation measures for water quality will continue to be monitored and opportunities for further enhancement will continue to be explored and implemented where possible, to strive for better protection of water quality and the marine environment.

In the meantime, the contractors were reminded to implement and maintain all mitigation measures during weekly site inspection and regular environmental management meetings. These include maintaining mitigation measures properly for reclamation works including DCM works, marine filling, seawall construction, and bored piling for approach lights as recommended in the Manual.

2.4 Waste Monitoring

In accordance with the Manual, the waste generated from construction activities was audited once per week to determine if waste was being managed in accordance with the Waste Management Plan (WMP) prepared for the Project, contract-specific WMP, and any statutory and contractual requirements. All aspects of waste management including waste generation, storage, transportation, and disposal were reviewed during the audits.

2.4.1 Action and Limit Levels

The Action and Limit Levels of the construction waste are provided in **Table 2.12**.

Table 2.12: Action and Limit Levels for Construction Waste

Monitoring Stations	Action Level	Limit Level
Construction Area	When one valid documented complaint is received	Non-compliance of the WMP, contract-specific WMPs, any statutory and contractual requirements

2.4.2 Summary of Monitoring Results

Weekly monitoring on all works contracts were carried out by the ET in the reporting period to check and monitor the implementation of proper waste management practices.

Recommendations made included provision and maintenance of proper chemical waste storage area, as well as proper handling, segregation, and regular disposal of general refuse. The contractors implemented the recommended measures to improve waste management issues. Waste management audits were

carried out by ET according to the requirement of the Waste Management Plan, the Manual, and the implementation schedule of the waste management mitigation measures in **Appendix B**.

The construction waste generated in the reporting period is summarized in **Table 2.13**.

Table 2.13: Statistics of Construction Waste Generated in the Reporting Period

	C&D[(1)] Material Stockpiled for Reuse or Recycle (m^3)	C&D Material Reused in the Project (m^3)	C&D Material Reused in other Projects (m^3)	C&D Material Transferred to Public Fill (m^3)	Chemical Waste (kg)	Chemical Waste (L)	General Refuse (tonne)
Jan 2020	808	34,525	0	5,341	550	43,504	894
Feb 2020	850	41,994	0	5,074	120	6,400	1,011
Mar 2020	5,861	23,125	0	4,654	1,070	8,400	1,350
Apr 2020	2,809	14,720	0	2,700	0	4,800	998
May 2020	3,424	39,306	15	2,871	60	2,000	1,131
Jun 2020	3,903	32,271	0	3,164	0	0	736
Jul 2020	2,895	43,002	16	3,785	60	8,200	1,035
Aug 2020	6,005	70,022	0	2,735	0	1,400	1,224
Sep 2020	5,822	101,504	1,952	1,842	50	9,000	1,534
Oct 2020	7,679	121,985	1,724	10,267	60	1,800	2,242
Nov 2020	7,611	100,368	31	30,995	1,297	3,600	1,545
Dec 2020	20,497	52,073	4,879	4,027	240	5,980	2,223
Total	68,164	674,895	8,617	77,455	3,507	95,084	15,923

Notes:

1. The excavated materials were temporarily stored at stockpiling area and will be reused in the Project.
2. C&D refers to Construction and Demolition.
3. Figures are rounded off to the nearest tonne.
4. Paper, plastics, and metals were recycled in the reporting period.

There were no complaints, non-compliance of the WMP, contract-specific WMPs, statutory and contractual requirements that triggered Action and Limit Levels in the reporting period.

Along with the design and construction progress, a proposal of further development on the treatment level/details and the re-use mode for marine sediment generated from 3RS Project (hereafter referred to as “Further Development Proposal”) was prepared in accordance with the EIA recommendation and submitted to EPD for agreement. The marine sediment to be generated from the 3RS Project will be treated according to the Further Development Proposal.

2.4.3 Marine Sediment Management

Marine sediment is managed according to the EIA Report, Updated EM&A Manual and Waste Management Plan and Further Development Proposal of the Project. The sampling process, storage conditions of the excavated marine sediment, treatment process, final backfilling location as well as associated records were inspected and checked by ET and verified by IEC to ensure they were in compliance with the requirements as stipulated in the Waste Management Plan and Further Development Proposal.

Sampling works for marine sediment generated from the reclaimed land area was on-going during the reporting period. The details of the marine sediment sampling, treatment and backfilling will be reported in the subsequent EM&A Reports upon completion.

2.5 Chinese White Dolphin Monitoring

According to Sections 10.2.1.2 and 10.2.1.3 of the EM&A Manual, CWD monitoring is required during the baseline, construction, post-construction and operation phases of the project. The aims of CWDs monitoring during construction period are:

- to monitor the effects on the potential shift in the CWD travelling areas and habitat use;
- to monitor the effectiveness of the HSF speed and routing restrictions to the CWDs;
- to provide a dataset that can be compatible with the AFCD long-term monitoring, be stratified in such a way as to allow the calculation of density and abundance for the different phases and to calculate the trends from these estimates; and
- to provide assessment of how the project and cumulative effects may be impacting the CWDs.

This section summarises the results of the CWD construction phase monitoring effort over a 12-month period between January 2020 and December 2020, to gather information on the spatial and temporal distribution patterns as well as calculate density and abundance of the CWD in the western Hong Kong waters. Supplementary information collected focusing on northwestern Lantau waters including the habitat use and behaviours of CWD during the construction phase of the Project has also been reviewed.

This reporting period is effectively the fourth full year of construction phase monitoring of CWDs. The overall monitoring programme commenced in August 2016, although there were no marine construction works in August and September 2016, and only localised sand blanket laying and DCM trial works from October to December 2016. This annual report reviewed the construction phase monitoring data for 2020 and compared with the construction phase monitoring data for the previous years.

CWD monitoring was conducted by undertaking vessel line-transect surveys, supplemented by land-based theodolite tracking survey and Passive Acoustic Monitoring (PAM). The vessel line transects covered Northeast Lantau (NEL), Northwest Lantau (NWL), Airport West (AW), West Lantau (WL) and Southwest Lantau (SWL) areas at a frequency of two full surveys per month as proposed in Section 10.2.3.2 of the Updated EM&A Manual, which are consistent with the AFCD long-term monitoring programme (except AW). The locations of the CWD vessel survey transects are shown in **Figure 2.3**. Additional survey effort was collected on a voluntary basis at the same frequency of two surveys per month from Deep Bay (DB) (refer to **Appendix E** for the location of this additional survey), which is an area that historically had CWD in the outer bay, to establish a full understanding of CWD abundance. All the DB data were considered supplemental and was only used for density and abundance estimation.

Density and abundance analysis made use of both conventional distance sampling (CDS) and a more sophisticated approach – multiple covariate distance sampling (MCDS) to estimate CWD abundance for the waters of Hong Kong. The additional analysis using MCDS is more time-consuming and labour-intensive than DS as it uses information on environmental factors that are likely to affect detection probability (such as variables describing sighting conditions) and generally produces estimates with higher precision (i.e., lower variances and CVs). However, datasets with small sample sizes (such as often occurs in marine mammal studies) can make it difficult or impossible to achieve model “convergence” in some MCDS analyses, and thus it is critical to always start each analysis with CDS methods (this also helps to determine the appropriate truncation distance and overall modelling approach).

Based on the vessel survey data, seasonal differences in dolphin density and use of the study area were examined, using the solar seasons (Winter: December-February, Spring: March-May, Summer: June-August, Autumn: September-November) and/or oceanographic seasons (Dry: October-March, Wet: April-September).

The travelling pattern in different areas were reviewed by using photo-identification of individuals dolphins and their re-sighting locations, depicting the range use and cross-area movement of re-sighted individuals,

where practicable. Travelling of CWDs in the north of Lung Kwu Chau were particularly supplemented with information from land-based theodolite tracking survey findings.

For the land-based theodolite tracking surveys, the monitoring frequency during the construction phase for marine works was one day per month at both the Lung Kwu Chau (LKC) station and Sha Chau (SC) station, as stipulated in Section 10.2.3.4 of the EM&A Manual. PAM was also deployed with a duty cycle of 20% for the construction phase with data supplementing the results of both vessel and land-based surveys. For details on CWD monitoring and data analysis methodologies refer to Section 10.2.4 of the EM&A Manual. The locations of land-based survey stations are described in **Table 2.14** and depicted in **Figure 2.4**. The location of the Passive Acoustic Monitoring device at A5 (with the coordinates of 22° 20.299' N, 113° 53.871' E) is shown in **Figure 2.5**.

Table 2.14: Land-based Survey Station Details

Stations	Location	Geographical Coordinates	Station Height (m)	Approximate Tracking Distance (km)
D	Sha Chau (SC)	22° 20' 43.5" N 113° 53' 24.66" E	45.66	2
E	Lung Kwu Chau (LKC)	22° 22' 44.83" N 113° 53' 0.2" E	70.40	3

2.5.1 Action and Limit Levels

The Action Level and Limit Level for CWD monitoring were formulated by an action response approach using the running quarterly dolphin encounter rates (Encounter Rate by Number of Dolphin Sightings 'STG' and Encounter Rate by Number of Dolphins 'ANI') derived from baseline monitoring data covering six months from mid-December 2015 to June 2016, as presented in the CWD Baseline Monitoring Report. The derived values of Action and Limit Levels for CWD monitoring are shown in **Table 2.15**. Running quarterly encounter rates STG and ANI have been determined for each month since August 2016 to compare with the derived Action/limit levels for construction phase monitoring of CWD. If persisting declines in the CWD running quarterly encounter rate values are determined month on month, an appropriate short-term response is then possible if the decline is shown to be related to 3RS construction activity.

Table 2.15: Derived Values of Action Level and Limit Level for Chinese White Dolphin Monitoring

	NEL, NWL, AW, WL and SWL as a Whole
Action Level(1)	Running quarterly STG < 1.86 & ANI < 9.35
Limit Level(1)	Two consecutive running quarterly (3-month) STG < 1.86 & ANI < 9.35

Notes: (1) Action Level and/or Limit Level will be triggered if both STG and ANI fall below the criteria

2.5.2 Summary of Monitoring Results

2.5.2.1 Summary of Vessel Line-transect Survey Monitoring Results

Survey Effort

During the reporting period from January 2020 to December 2020, surveys were completed in Northeast Lantau (NEL), Northwest Lantau (NWL), Airport West (AW), West Lantau (WL), and Southwest Lantau (SWL) survey areas. Although the frequencies of visiting each survey area per survey month were identical, the survey effort of different areas varied and was generally in proportion to the size of each survey area (i.e. larger survey area having longer distance of survey effort). A total of 5,388.5 km survey effort was collected in this reporting period.

Around 91.3% (4,919.7 km) of the survey effort was collected under favourable weather condition (i.e. Beaufort 0-3 and visibility of approximately 1200 m or beyond), and can be utilized in analyses of encounter rates, density and abundance.

The breakdown of the survey effort by survey areas are tabulated in Table 1 of **Appendix E**. Detailed record of the survey effort data is also provided in **Appendix E**.

Sighting Distribution

During the reporting period, a total of 166 groups consisting of 616 CWDs were sighted in NWL, AW, WL and SWL survey areas. Amongst these 166 groups of CWDs, 158 groups with 590 CWDs were sighted during on-effort surveys under favourable weather condition (Beaufort 0-3 and visibility of approximately 1200 m or beyond). Breakdown of the sightings by survey areas are tabulated in Table 2 of **Appendix E**.

In NWL (including AW transects), CWDs were mostly sighted in the southern part of the survey area, particularly in waters off the west of the existing Hong Kong International Airport. There were only a few scattered sightings around Lung Kwu Chau which used to be a hotspot for CWDs in past years. One sighting was recorded just outside the northern edge of the 3RS temporary works area.

In WL, CWD sightings were distributed quite evenly over the entire survey area between the Hong Kong-Zhuhai-Macao Bridge-Hong Kong Link Road (HZMB-HKLR) and Fan Lau.

In SWL, sightings of CWDs were scattered amongst the survey area, with more sightings particularly recorded around Fan Lau.

No CWDs were recorded in NEL survey area. The sighting locations of CWDs during this reporting period are depicted in Figure 1 of **Appendix E**.

Encounter Rates

Two types of dolphin encounter rates were calculated based on the data collected during the reporting period. They included the number of dolphin sightings per 100 kilometers survey effort (STG) and total number of dolphins per 100 kilometers survey effort (ANI). The dolphin encounter rates were calculated by using survey data collected under favorable weather condition only (Beaufort sea state 3 or below with favorable visibility). Encounter rate provides a short to medium term frequency method for monitoring and responding appropriately to changes in CWD abundance as project works progress (referring to Section 10.5.2.3 of the EM&A Manual). The two types of encounter rates provide an overall indication of changes in CWD numbers over time in western Hong Kong waters.

During the reporting period, the overall combined STG and ANI of CWDs (from NEL, NWL, AW, WL and SWL) in 2020 were 3.21 and 11.99 respectively. Dolphin encounter rates by survey area and a summary of monthly encounter rates are presented in Table 3 and Table 4 of **Appendix E** respectively. Compared by area, WL had the highest encounter rates STG and ANI amongst the survey areas, followed by SWL and then AW.

The temporal trends in 2020 exhibited overall typical seasonal patterns, but with the peak monthly STG and ANI occurring in July and declining in winter and spring from January to April. Both of these two values reached their lowest in September 2020. This is a bit different from most previous years, in which the lowest encounter rates were usually recorded in wintertime. The trends of both monthly STG and ANI are presented in Figure 2 and Figure 3 of **Appendix E**.

Running quarterly encounter rates STG and ANI data were determined for each month for comparison with the Action/Limit levels for construction phase monitoring of CWD. Although the running quarterly ANI has continuously fallen below the Action Level from January to April 2020, the overall Action Level was not triggered in this reporting period because the running quarterly STGs of those months remained above the Action Level. The running quarterly STG and ANI from January to December 2020 are summarized in Table

4 of **Appendix E.** The graphical plots of running quarterly encounter rates of the current reporting year and the past reporting years are presented in Figure 2 and Figure 3 of **Appendix E** respectively.

Density and Abundance Estimation

Line transect analyses to estimate the density and abundance of CWDs in Hong Kong waters during the reporting period were conducted using the same basic methods as in previous analyses. The best estimate of abundance was obtained using Beaufort sea state as a co-variate, and a half-normal model with a cosine adjustment (effective strip width = 300 m). The detection function of 3RS CWD monitoring data of this reporting period is shown in Figure 4 of **Appendix E** and the various parameters of the 2019 estimates are shown in Table 5 of **Appendix E**. The overall abundance estimated for this reporting period (incorporating an entire year of data from all four seasons) was 32 CWDs (CV = 12.8%, indicating a very good level of precision <15%), which shows a notable decrease from last year. For comparison, the 2019 abundance was 40 CWDs (CV = 14.6%). As in analyses of the last reporting year in 2019, the area with the highest abundance and highest density was WL (N=20, this has been consistent over the AFCD long-term records). NWL showed a very large drop in the numbers of dolphins (from 8 in 2019 to 1 in 2020), though SWL showed a slight increase (from 9 to 11). NEL registered an abundance of zero, which has been the case in most of the last 9 years. Overall, while several areas showed similar numbers or even a slight increase from the previous year's estimates, the drop in NWL numbers was very large, indicative that dolphins have moved away from this area in 2020. This suggests that any potential recovery of dolphins in the North Lantau from the recent completion of the Hong-Kong-Zhuhai-Macao Bridge (HZMB) may thus have been interrupted. The HZMB impacts on dolphins would be expected to have been most severe between 2013-2016 (when the brunt of construction was occurring), and in fact, this time period saw a significant drop in numbers of dolphins in Hong Kong (see Jefferson 2018).

It is worth noting, however, that the 3RS EIA predicted significant impacts on CWDs (Mott MacDonald 2014), and a drop in numbers of dolphins in the area during the most intensive part of the 3RS construction phase is thus expected. Reclamation work was intensive in 2020, with much of the 3RS landform completed by the end of the year. There is expected to be some recovery after the main marine filling and reclamation works are completed, however, this issue will need to be examined with more data over several years, and the cumulative impacts due to the 3RS project with other concurrent projects will become clearer as works progress, and our dataset grows.

In addition to estimating year-round abundance for each of the survey areas, a seasonal analysis was also conducted (the pooled dataset from all survey areas was used, as stratifying by both survey area and season would reduce the sample sizes that result in estimates with unacceptably-low levels of precision) (refer to Table 5 of **Appendix E**). The spring estimate was the lowest (N=24 dolphins), which has traditionally been the case for dolphin numbers in Hong Kong. The summer estimate showed the highest numbers (N=59 dolphins), which is expected based on historical records. The seasonal analysis shows that, as in the past, there was a marked influx of dolphins into Hong Kong during the wet season (especially in summer months).

Quantitative Grid Analysis on Habitat Use

Habitat use amongst the survey areas was examined by using quantitative grid analysis, both SPSE (no. of on-effort sightings per 100 units of survey effort) and DPSE (no. of dolphins per 100 units of survey effort) values for each 1 km^2 grid were calculated in all grids amongst all survey areas for the period from January 2020 to December 2020. SPSE and DPSE of the current reporting year and the previous reporting years are depicted in Figure 5 of **Appendix E**.

In 2020, the decline in CWDs usage of waters around SCLKCMP in NWL continued from previous years since 2018.

The important dolphin habitats in WL survey area in 2020 are largely similar to 2019 with increased use of waters around Peaked Hill and Fan Lau; grids with high SPSE and/or DPSE value(s) in WL were near Tai O, Yi O, Peaked Hill and Fan Lau.

In SWL, the coastal waters around Fan Lau and Fan Lau Tung Wan as well as eastern waters off the Soko Islands encountered increase in CWDs usage, while the waters around Lo Kei Wan became less frequently used by CWD in 2020.

Cumulative SPSE and DPSE values were also calculated by using the 3RS CWD monitoring data since mid-Dec 2015 and are depicted in Figure 6 of **Appendix E**. Grids in western waters of Hong Kong with higher dolphin density are restricted to waters off West Lantau, at Tai O, Yi O, Peaked Hill and Fan Lau.

Group Size

During the reporting period from January 2020 to December 2020, group size of CWDs ranged from one to 19 dolphins, with an average of 3.71, taking into account all CWD sightings recorded. The average group sizes of NWL, AW, WL and SWL were 2.86, 3.33, 4.04 and 3.22 respectively. By four solar seasons, the average group size of CWDs was the highest in spring (4.38) but the lowest in winter (2.80). The summaries of the average group size of CWDs by survey area and by season are presented in Table 6 and Table 7 of **Appendix E**.

Medium-sized CWD groups (i.e. 3 to 9 dolphins per group) accounted for around half of the sightings during the reporting period (about 48.2%). Similarly, small-sized CWD groups (i.e. 1 to 2 dolphins per group) accounted for around 46.4%. Nine sightings, which accounted for 5.4% of the sightings, were large CWD groups with 10 or more dolphins per group.

Both small and medium CWD groups were generally sighted throughout the distribution range of dolphins in NWL, WL and SWL waters. Large-sized CWD groups were mainly recorded in WL survey area and also western end of SWL survey area near Fan Lau. No large CWD group was recorded in NWL. This is consistent with the pattern in the last two to three years. The sighting distribution of CWDs with different group sizes is illustrated in Figure 7 of **Appendix E**.

Activities and Association with Fishing Boats

Although vessel surveys do not provide the most unbiased information on the behaviour and activities of dolphins (due to the potentially disturbing presence of the vessel itself, and also the low vantage point of small vessels), nonetheless behaviour and activity data are still useful and are being collected from the vessel surveys.

During the reporting period, a total of 32, 8, 28 and 2 groups of CWDs were observed engaging in feeding, traveling, socialising and resting/milling activities, comprising of 19.3%, 4.8%, 16.9% and 1.2% of all CWD sightings respectively. The sighting locations of CWD groups engaged in different types of activities are depicted in Figure 8 of **Appendix E**.

In NWL, only feeding activities were recorded and they were observed at the western waters of the existing Hong Kong International Airport. In WL, feeding activities of CWD mainly occurred in the waters of Tai O, Peaked Hill and Fan Lau. In SWL, feeding activities mostly occurred at the north and northwest sides of the Soko Islands. Considering the sample size of sighting data of different survey areas, AW had the highest percentage of feeding again in 2020 (however, it should be kept in mind that the sample size in AW was very small), followed by both WL and SWL. Significant declines in feeding activities were observed in NWL (i.e. from 28% of sightings in 2019 to 14% of sightings in 2020) and SWL (i.e. from 29% of sightings in 2019 to 19% of sightings in 2020). The feeding activities recorded in WL remained relatively steady in 2020.

Socialising activities were observed scattering from Tai O in WL to the Soko Islands in SWL with more observations recorded at Fan Lau and Fan Lau Tung Wan. The few travelling and resting/milling activities

records showed no significant pattern. The percentages of different activities for each of the survey areas are shown in Table 8 of **Appendix E**.

A total of six sightings of CWDs were observed associating with operating fishing boats, including gill netters (two groups), purse seiners (three groups) and pair trawler (one group), accounted for 3.6% of all sightings in 2020. CWDs' association with operating fishing boats in 2020 showed a slight rebound compared with previous years' observable declining trend (7.2% in 2016, 6.3% in 2017, 3.7% in 2018 and 2.4% in 2019), which might be attributed by the reduction of fishing activities, particularly purse seiners' operation in waters north off Lung Kwu Chau and in southwest Lantau waters based on our field observation during the CWD monitoring.

Observations of CWD association with operating fishing boats were scattered from the west of the existing Hong Kong International Airport in NWL, to the relatively offshore waters in WL and south to the waters between the Soko Islands and Lantau coast in SWL. Similar to 2019 records, there was no observation of CWD association with operating fishing boats recorded north off Lung Kwu Chau, an area that used to be a favourite fishing ground in past years. Although a trawling ban was implemented in December 2012, illegal trawling activities were still observed near the western and southwestern borders of Hong Kong. One group of CWDs was observed feeding in association with pair trawlers in mainland waters close to the Hong Kong border in WL. The sighting locations of CWD groups associated with operating fishing boats are depicted in Figure 9 of **Appendix E**.

Mother-calf / Mother-unspotted Juvenile Pairs

During the reporting period, a total of 27 sightings were observed having mother-and-unspotted calf (UC) and/or mother-and-unspotted juvenile (UJ) pairs, which accounted for about 16.3% of all sightings of 2020. The percentage was slightly higher than that of 2019 (i.e. 15.0%). For different survey areas, the percentages of sightings with mother-calf pairs in NWL (including AW), WL and SWL were 10%, 21.6% and 7.4% respectively. These percentages were calculated by dividing the number of sightings with mother-calf pairs of a survey area by the total number of sightings of that survey area. In 2020, there is an observable increase in percentage of sightings with mother-calf pairs in NWL (including AW) after the decline in 2019, i.e. from 19% in 2018 to 3.6% in 2019 and then 10% in 2020. However, it should be noted that the sample size of NWL was quite low (n = 7 in 2020) that such rebound in percentage might not represent the actual situation.

The abovementioned 27 sightings included 10 pairs of mother-and-UC and 23 pairs of mother-and-UJ. According to the result of photo-identification, these 27 sightings consisted of one identified mother-and-UC pair and three identified mother-and-UJ pairs.

Most of the sightings with mother-calf pairs were recorded in WL between Tai O and Fan Lau. In NWL, the only sighting with mother-calf pair was recorded in western waters off the HKIA, while the sightings with the presence of mother-calf pairs in SWL occurred at Fan Lau and the western waters of the Soko Islands. The sighting distribution of mother-UC/ mother-UJ pairs is depicted in Figure 10 of **Appendix E**.

Photo Identification – Summary

During the reporting period, a total of 17 newly identified CWD individuals were added to the photo-identification catalogues, including two added to NL catalogue, 14 added to WL catalogue and one added to SL catalogue. Two animals, namely WLMM096 and WLMM137 were confirmed to be duplicates of identified individuals in earlier time, namely WLMM006 and WLMM038 respectively. Therefore, all records under these two duplicates were transferred to the records under WLMM006 and WLMM038, respectively.

The photo-identification database is currently having 350 identified individuals. Amongst these 350 identified individuals, 216 individuals were sighted more than once, which account for about 61.7% of the total number of the identified individuals. In these re-sightings, 21 individuals were sighted 20 times or more, five individuals were sighted 30 times or more, while one individual was sighted more than 40 times. On the other hand, there are 38.3% of the identified individuals only being sighted once.

In 2020, a total of 132 CWD individuals were identified for altogether 390 times from all sightings. Amongst these 132 CWD individuals, 23, 75 and 34 belonged to NL, WL and SL catalogues respectively. There were 80 individuals (around 60.6%) sighted more than once. Twenty-three of these 80 re-sighted individuals were sighted five times or more.

The most frequently re-sighted animal in 2020 was SLMM003 which has been sighted 16 times, followed by SLMM014, SLMM037 and WLMM114 (all being re-sighted 12 times). The most frequently re-sighted animal since the establishment of the photo-identification catalogue is SLMM014 which has been sighted 42 times, followed by SLMM003 (sighted 38 times) and SLMM010 (identified 35 times). There are few more animals including SLMM052, WLMM001 and WLMM007 that have been sighted 30 times or above.

Nine animals that were frequently using Hong Kong waters in previous years (with 10 or more re-sighting records since the commencement the monitoring in 2015) have disappeared from Hong Kong waters in 2020. These animals are NLMM002, NLMM006, NLMM010, NLMM016, NLMM018, SLMM015, SLMM017, WLMM054 and WLMM078. We could not confirmed if these animals were occurring elsewhere in mainland waters or if some of them have already passed away. Information of the photo-identification work of CWDs taking place in mainland waters by South China Sea Fisheries Research Institute (SCSFRI) is not available for our further investigation of these nine animals. On the other hand, AFCD's anatomy information on dolphin carcasses might not be able to provide useful information for our further investigation as many of the dolphin carcasses were seriously decomposed when they were found. Since 2015, only one animal, NLMM033, was found dead with the confirmation from AFCD. It is worth noting that five out of these nine animals are dolphins from NL photo-identification catalogue. This is somehow in line with the drastic decline of CWDs' usage in NWL in 2020. Special attention will be paid on these animals in the future photo-identification analysis to see if there are any updates of the situation.

A summary of the photo-identification of CWDs is presented in Table 9 of **Appendix E**.

Photo Identification – Range Use of Identified CWD individuals

SLMM003, the most frequently re-sighted animal in 2020 and also the second most frequently re-sighted animal since 2015, continued to occur frequently in WL waters. Compared with year 2019, its range use extended a bit to Fan Lau Tung Wan in SWL. The overall range use of SLMM003 since 2015 has covered Tai O to the Soko Islands.

SLMM014, the most frequently re-sighted animal since 2015, used to range from waters near Yi O in WL to the Soko Islands and Lo Kei Wan in SWL. In 2020, SLMM014 extended its range use northward to the waters off the west of the HKIA, which is the first time for it to be recorded in NWL survey area. Compared with 2019, the range use of SLMM014 in 2020 extended slightly northward in WL and eastward in SWL. It had been sighted three times more in 2020 than in 2019.

In 2020, the range use of SLMM010, the third most frequently re-sighted animal since 2015, generally shrank compared with previous reporting years. It appeared extensively from Peaked Hill in WL to Fan Lau in SWL with an exception of sighting record at the south of HKLR alignment in NWL survey area, which is SLMM010's first record in NWL.

The most frequently re-sighted mother-calf pair in 2020 is WLMM079 and its offspring WLMM147. The calf WLMM147 was first identified in 2019. They have been successfully identified together for eight times since 2019. The range use of this mother-calf pair covers Tai O in WL to the western waters of the Soko Islands in SWL.

The particular mother-calf pair with prolonged bonding, NLMM013 and its offspring NLMM006 (a spotted juvenile) in NWL waters which was mentioned in previous years, were not seen together in 2020 after their occasional records in the last few years (2017 to 2019). NLMM006 was not recorded while its mother, NLMM013, was only sighted once in NWL during the entire surveys in 2020.

Special attention has continued to be given to SLMM028 since its severe injury happened in 2018. In 2020, SLMM028 was sighted four times in NWL, WL and SWL and the range use was more or less similar to that before its injury. This shows a good sign of successful recovery from its serious injury.

The sighting locations of SLMM003, SLMM014, SLMM010, WLMM079, WLMM147 and SLMM028 are depicted in location maps under Figure 11 of **Appendix E**, which provide the indicative distribution range use of representative individuals recorded for the 3RS CWD monitoring.

Photo Identification – Cross-area Movement

Amongst the 80 individuals that were re-sighted more than once in 2020, 41 individuals showed cross-area movement between survey areas. This accounted for about 31.1% of all 132 identified animals. Amongst these 41 animals, five animals (12.2%) were re-sighted in both NWL (including AW) and WL, 30 animals (73.2%) were recorded in both WL and SWL, while three animals (7.3%) were recorded in both NWL (including AW) and SWL. Another three animals (7.3%) namely SLMM010, SLMM014 and SLMM028 were recorded occurring in all three main survey areas (WL, SWL and NWL) in 2020.

Despite the fact that a number of identified CWD individuals were re-sighted in different survey areas, 39 (around 48.8%) out of those 80 animals re-sighted at least twice in 2020 were observed in one survey area only but not crossing between survey areas.

Photo Identification – Residency Pattern

The residency patterns of the identified dolphin individuals have been examined for the first time under this monitoring programme. For residency pattern analysis, both seasonal and annual occurrence patterns of identified CWD individuals with 15 or more re-sighting records (since the established of the photo-identification database) were carefully examined. “Residents” are defined as individual dolphins that were regularly sighted in Hong Kong for at least three consecutive years, while “Visitors” are individuals that were intermittently sighted during the past years since the establishment of the photo-id database. Seasonal occurrence patterns were examined to distinguish individuals that occurred year-round (i.e. individual dolphins sighted in all four seasons in at least one of the last two years) or seasonally (i.e. individual dolphins that occurred only in certain seasons of the year).

Photo-identification records of 44 dolphin individuals that have at least 15 re-sightings since the establishment of the database were examined. There are 16 and 27 individuals being identified as year-round residents and seasonal residents respectively. Only one out of these 44 individuals is considered as a visitor to Hong Kong waters. However, it should be noted that the low number of dolphins being classified as visitors at present is mainly because of difficulty for visitor dolphins to meet the minimum requirement of at least 15 re-sightings with their intermittent sighting records. The details of the residency pattern of these 44 animals are shown in **Appendix E**. Note that this analysis is highly preliminary, and although it does indicate that many of the dolphins using HK waters are residents of some sort, more data are needed to get a better picture of the use of the area by visitors.

2.5.2.2 Summary of Land-based Theodolite Tracking Monitoring Results

Survey Effort

In this reporting period, land-based surveys commenced on 8 January 2020, and concluded on 28 December 2020. A total of 24 days and 144 hours of land-based theodolite survey effort were accomplished, including 12 days and 72 hours from LKC and 12 days and 72 hours from SC (Table 10 of **Appendix E** for summary). A total of 21 CWD groups were tracked from land, for a total of 2.55 hours, all from the LKC station (Table 10, Figure 12 **Appendix E**). . While most initial CWD sightings were within 2.4 km of the LKC tracking station, sightings were as far out as 3.4 km, north of the station. The number of CWD groups sighted from LKC per survey hour was 0.29, compared to 0.33 in 2019, both less than one-

half of that observed in 2018 (0.77 groups per survey hour) and 2017 (0.89 groups per survey hour). No CWDs were observed from SC.

After the raw data were filtered, only 6 CWD group tracks off LKC fit criteria for analyses due to the majority of CWD group tracks too short in duration (< 10 minutes) to include. From the tracks that fit criteria, only 10 10-minute short-track segments could be extracted for potential analyses. Based on this information, sample sizes were simply too low for appropriate statistical analyses, and therefore the present data is summarized to show potential trends. Due to low sample size, all data were used to summarize diurnal, annual, and group size patterns and behavioural state activity. Filtered standardized short-track segments were used to summarize movement patterns.

Time of Day

The diurnal pattern of CWDs was calculated by dividing the total tracking time of CWD groups (prior to filtering short-track data) by the total effort per hour block, and depicted in Figure 13 of **Appendix E**. Off LKC, the highest proportion of CWD tracking time per hour of effort was recorded in the morning during the 0900 hour block (11%), whilst the lowest percentages were recorded in the afternoon after the 1200 hour block when almost no CWDs were observed. Indeed, the proportion of CWD tracking time per hour of effort during the 0900 hour block accounted for slightly over one-half of total CWD tracking time.

Time of Year

CWDs were observed from LKC during January, February, April, August, October, November, and December as depicted in Figure 14 of **Appendix E**. No groups were recorded during five months in 2020, including March, May, June, July, and September. Based on solar season in 2020, CWDs were observed most often during the winter (57%), and least often during the summer (9.5%). Similarly in 2019, CWDs were observed more than expected, based on even distribution, during the winter season. In 2020, CWDs were observed most often during the dry season (71%) and least often during the wet season (29%). The same pattern was observed in 2018; however, in 2019 there was not a statistical difference based on oceanographic season.

Group Size

The mean group size of CWD off LKC prior to filtering tracks was 1.8±0.9, ranging from singletons to a maximum group size of four dolphins (Table 11 of **Appendix E**). This finding is similar to group size in 2019 prior to filtering data (1.9±1.2, range 1-6), but less than group size in 2018 prior to filtering data (2.6±1.5, range 1-8). Based on solar season, the mean CWD group size in descending order was 2.0±1.0 in autumn, 2.0±1.4 in spring, 1.7±0.8 in winter, and 1.5±0.7 in summer. Based on oceanographic season, the mean CWD group size was 1.8±1.2 during the wet season and 1.7±0.8 during the dry season.

Based on proximity to the SCLKCMP boundary, the mean CWD group size was 1.8±0.8 inside the marine park, 1.6±0.7 outside the marine park, and 2.5±2.1 when crossing the marine park. The sighting distribution of CWDs relative to group sizes within the SCLKCMP, crossing the SCLKCMP boundary and outside the SCLKCMP are represented in Figure 15, Figure 16 and Figure 17 of **Appendix E** respectively. No vessels were within 500m of CWD focal groups.

Behavioural State

The unknown behavioural category (54%, n = 101) was excluded from the following summary of behavioural states. CWDs were recorded foraging (68%), travelling (29%), and socialising (2%) of theodolite tracking time (Figure 18 of **Appendix E**). Resting behaviour was not recorded off LKC in 2020. This is different from that recorded in 2019 with travelling (50%), foraging (37%), resting (8%) and socializing (6%).

Within the boundary of the SCLKCMP, observed CWD behavioural states included foraging (79%, n = 50) and travelling (21%, n = 13) (Figure 19 of **Appendix E**). Outside of the SCLKCMP, observed CWD behavioural states included travelling only (100%, n = 7). There was a large number of ‘unknown’

classifications (n = 33) for CWD behavioural states outside of the marine park boundary, farther from the theodolite station, which may reflect a sighting bias. CWDs crossing the SCLKCMP boundary were recorded foraging (53%, n = 8), travelling (33%, n = 5), and socialising (13%, n = 2).

Dolphin Movement Patterns and Vessel Activity

Plots of vessels, including high-speed ferries, and CWDs show overlap in habitat off LKC throughout the year (Figure 20 of **Appendix E**).

Off LKC in 2020, 182 vessels were recorded during theodolite tracking surveys. Only eight vessels were recorded during dates and times that overlapped with CWD tracking sessions, none of which were within 500m of dolphins (based on filtered short-track segments).

Summary of findings for 2020:

- Overall, the combination of reduced effort and low CWD sighting rate in 2020 provided few samples and the inability to conduct robust statistical analyses. As stated below, while low numbers in 2020 make most statistical analysis not possible, it is nevertheless obvious that off LKC there was a strong decrease of CWD from earlier years.
- The number of CWD groups sighted from LKC per survey hour was 0.29, compared to 0.33 in 2019, both less than one-half of that observed in 2018 (0.77 groups per survey hour) and 2017 (0.89 groups per survey hour).
- CWDs were observed most often during the 0900 morning hour block and almost no CWDs were observed after noon.
- The highest percentages of CWDs were observed during winter season, similar to 2019. The past two years differ from 2018 when the peak percentage of CWDs were observed during the spring and autumn, with a lower percentage observed in the winter.
- CWDs were recorded most often during the dry season, with a peak in winter (January). No CWDs were observed during 4 of the 6 wet season months.
- Maximum CWD group size in 2020 was 4 individuals, compared to 2019 with a maximum of 6 individuals, and 2018 with a maximum of 8 individuals.
- Overall, waters off Lung Kwu Chau continue to be habitat used primarily for foraging and also for travelling. Socialising was observed infrequently, whilst resting behaviour was not recorded in 2020.
- Most CWD groups were observed within the SCLKCMP; however, this trend may reflect a sighting bias wherein single CWDs may be more difficult to locate farther from the survey platform.
- Foraging and travelling were observed within the SCLKCMP boundary; foraging, travelling and socialising were observed by CWDs crossing the SCLKCMP boundary; and only travelling was observed outside of the SCLKCMP boundary.
- Vessels were not recorded within 500m of CWD groups, which may be due to low sample size or reflect potential CWD avoidance of vessels off LKC.
- There were no sightings of CWDs off Sha Chau during land-based theodolite work in 2020.

2.5.2.3 Summary of Passive Acoustic Monitoring (PAM) Results

Dolphin Detection Rates Per Day

From 8 January 2020 to 14 January 2021, there were eight deployment periods of Ecological Acoustic Recorder (EAR) at position A5 for PAM (with the coordinates of 22° 20.299’ N, 113° 53.871’ E). During this period (Deployments 1 through 8), dolphins were detected at site A5 in a total of 196 of 106,051 files (0.18% of files), as summarized in Table 12 of **Appendix E**. Dolphins were detected on 83 of 370 days (22% of days) with recording effort (Figure 21 of **Appendix E**). On days with dolphins detected, the mean percentage of files with detections per day was 0.8%, and the maximum percentage of files with dolphin

detections was 4.2%, on 09 Jan 2021. On 42 of 83 days with dolphin detections (51%), only one file containing dolphin signals was detected, and on the other 41 days, two or more files containing dolphin signals were detected. Clicks were the predominant type of dolphin signal detected (n = 195 of 196 detections, or 99%). Whistles were only detected once throughout the monitoring period, on 23 Feb 2020.

Dolphin detection rates were greatest in the winter and spring, and decreased in summer, with no dolphin detections for a span of two months from mid-July to mid-September. Detection rates remained relatively low through the autumn (Figure 21 of **Appendix E**). During winter through spring of 2020 (Deployments 1 to 3), dolphins were detected on more than 30% of recording days, and in 0.22–0.33% of files (Table 12 of **Appendix E**). In early summer (Deployment 4), dolphins were detected on 16% of recording days and in 0.06% of files, and in late summer (Deployment 5), no dolphins were detected. In autumn (Deployments 6 and 7), dolphins were detected on 6–7% of recording days and in 0.02–0.03% of files. During early winter 2020–2021 (Deployment 8), dolphin detection rates began to increase again, with detections on 48% of recording days and in 0.57% of files. The overall metrics for dolphin occurrence during this reporting period represent a decrease in detection rates compared to previously reported values from monitoring at site A5 in 2019 (Table 13 of **Appendix E**). However, the increase in detection rates during deployment 8 of 2020 (extending into early 2021) is comparable with the increase in winter occurrence in previous years.

Dolphin Diel Pattern

Dolphin detection rates at A5 from 08 Jan 2020 to 14 Jan 2021 were greater overall at night than during daytime, with a peak in detections in the hour 2300 and remaining high from 0000-0500 (as indicated in Figure 22 of **Appendix E**). The higher night-time detection rate observed during this monitoring period is similar to the diel pattern in dolphin detections observed throughout Hong Kong waters, with higher numbers of detections during night-time and fewest detections at midday (Munger et al. 2016). In winter, peak detection hours were from 2100-0400; there was also a midday peak in detections during the 1200 hour, which has not been observed in previous years (Figure 23 of **Appendix E**). In spring, peak detection hours were 2000 and 0500, and there were few to no detections during the daylight hours of 0800-1700. Dolphin detection rates were low in summer and autumn and no diel trend was observable.

Sound Pressure Levels Per Day

Ambient noise levels (referred to as sound pressure levels or SPL) received at the EAR were calculated for each recording within the full effective frequency bandwidth (~0 to 32 kHz), as well as octave bands of 0-2 kHz, 2-4 kHz, 4-8 kHz, 8-16 kHz, and 16-32 kHz. In 2020, mean daily sound pressure level over the full bandwidth ranged from 109 dB to 120 dB, with a mean of 116 dB rms re 1 µPa (Figure 24 of **Appendix E**). Mean daily sound pressure levels in all frequency bands were lowest during the winter deployments. Mean SPL in the lowest frequency band (0-2 kHz) increased from 112 dB during winter to 116 dB during spring and was slightly lower at 114 dB in summer. The maximum SPL in the low frequency band (0-2 kHz) was 118 dB and was reached in spring (April to May), but was also near this value in early January 2020. There was a temporary drop in SPL by approximately 5 dB in the 0-2 kHz band during the last week of January 2020, with a minimum SPL of 104 dB around 26 January, but mean values resumed by mid-February. In the mid- and high-frequency bands (above 2 kHz), SPL increased steadily throughout the spring and summer and reached a maximum in August 2020 of approximately 8 dB greater than winter and early spring levels. SPL then decreased in all bands from August through December, with the largest decrease of 10-12 dB in the frequency bands above 2 kHz.

Daily mean sound pressure levels in the 16-32 kHz band, in which energy from CWD clicks occurs, ranged from 96 to 105 dB, with the minimum in winter and maximum in late summer (Figure 24 of **Appendix E**). The greater SPL in summer coincided with the low acoustic detection rates of CWD, and it is possible that the higher noise levels reduced the probability of dolphin detection during this period. Indo-Pacific humpback dolphin click and whistle frequencies are above 16 kHz and below 10 kHz, respectively (Sims et al. 2012). However, the extent to which ambient received sound levels influenced detectability of dolphin signals was not quantified for this data set.

Diel Sound Pressure Level

Mean sound pressure levels plotted by hour indicated a daily peak during the hour 2000, which was mainly due to the contribution from the 0-2 kHz frequency band (Figure 25 of **Appendix E**). This daily peak was most pronounced in spring (March-April-May) and gradually subsided through summer, autumn, and winter, and also shifted one hour later each season (1800 in spring, 1900 in autumn, and 2000 in autumn, and 1800 again in winter (Figure 26 of **Appendix E**). The seasonally shifting evening peak is similar to the diel pattern of sound pressure levels reported during previous Hong Kong PAM efforts (Munger et al. 2016), and is hypothesized to be related to a local fish chorus, probably dominated by croakers (family Sciaenidae). Overall, daily noise levels decreased throughout the night-time hours of 0000 to 0600 and were lowest at 0600, and increased by 3-6 dB during the daytime, likely due to the contribution of anthropogenic traffic and activity during daytime as well as the fish chorus in late afternoon hours (Figure 25 of **Appendix E**). Sound pressure levels in the 16-32 kHz band remained relatively flat and constant (within 2 dB) throughout most hours of the day, although SPL in this band increased by 2-4 dB during the evening peak in hours 1800-1900, depending on season.

2.5.3 Discussions on CWD Monitoring Results

CWD monitoring by vessel surveys has been conducted as required during the construction phase. Supplementary surveys including land-based theodolite tracking and underwater acoustic monitoring have provided additional information (such as habitat use of CWD during day and night) for facilitating a review of the effectiveness of mitigation measures proposed and any need for adaptive management measures. In addition to interpreting monitoring data in relation to identifying any project impacts, the interpretation of data from all three monitoring types can also assist in examining the kinds of issues that need to be considered for management and conservation of CWD in Hong Kong.

2.5.3.1 Vessel Line-transect Survey and Photo-identification

From the CWD vessel-based monitoring data, the estimate of overall abundance for 2020 was 32 dolphins, which is significantly lower than the year before, with a CV of 12.8% (which indicates a very good level of precision). It is not surprising to see that the estimate of total dolphin numbers in Hong Kong was lower than the previous year's estimate (40 dolphins in 2019, CV = 14.6%), and a change from one year to the next should never be taken as an indication of long-term trends. Although CWD estimates in Hong Kong increased somewhat from 2016 to 2018 (Jefferson 2018; 3RS Annual EM&A Report 2018), Hong Kong waters have been showing an overall declining trend in dolphin numbers over the last decade (see Jefferson 2018), and the 3RS EIA predicted shifting of dolphins away to waters outside Hong Kong and a significant effect on numbers in Hong Kong during intensive periods of construction (EIA Report Section 13.9.2). There was seawall construction and increased marine filling in the 3RS works area and marine construction work for other concurrent projects, for example reclamation works for the Tung Chung New Town Extension underway during 2020 in North Lantau waters. This is likely to be the phase of construction that has the most impact on dolphins, and works of similar intensity will continue for at least another year. Also, as marine fill activity has progressed, more of the shallow seabed that was once dolphin habitat is converted to land, which is no longer available habitat. This latter fact has been taken into account in the line transect analysis, with the total area of the NWL area being reduced to account for this loss of potential habitat.

Within NWL waters, dolphins have recently been mostly found around the Castle Peak and Lung Kwu Chau areas. However, in 2020 only six dolphin sightings were made (in favourable weather conditions) in NWL, indicating that dolphins have largely moved away from this area in 2020. The seasonal analysis showed that during summer, dolphin numbers are still reasonably high in Hong Kong waters. The 2020 seasonal range is 24 to 59 dolphins. The spring estimate was the lowest (24 dolphins), while the summer estimate was the highest (59 dolphins), and this indicates that, despite the overall reduction in the average number of dolphins using Hong Kong waters in recent years, there are about 60 dolphins still present in Hong Kong in the summer months. The main concern is that dolphin numbers in NWL have decreased quite

significantly in the recent couple of years. Some good news may be that in WL and SWL dolphin numbers have remained similar to those in 2019 or have even increased. Past decreases suggested that construction activities in other area of western Hong Kong waters (which, besides the 3RS works, includes IWMF works at Shek Kwu Chau) and other factors that are affecting dolphins north of Lantau Island may also be affecting their use of the waters south and west of Lantau island. The potential for cumulative and far-ranging impacts from projects in specific areas are not well understood, and should be investigated in future monitoring efforts (including both those in relation to this project, and other studies outside the 3RS monitoring effort). This would be a particularly acute concern for the West Lantau area, which is known to represent the highest-density area for CWDs and although not directly impacted by marine construction in the past few years, the area has nonetheless shown evidence of a decrease in CWD numbers.

In earlier years, concerns had been expressed by some interested stakeholders that dolphin numbers in NWL may have decreased specifically due to potential negative impacts from the re-routing of high-speed ferries (HSFs) to the Speed Control Zone (SCZ) north of Lung Kwu Chau. The analysis covering the entire first year post-SCZ (2016) provided an estimated abundance of 15 dolphins for NWL (refer to the 2016 annual report). The estimate for 2017 for the same area was 14 dolphins. The 2018 estimate was substantially higher at 22 dolphins. Therefore, the drop in 2019 to 8 dolphins is not likely due to the effects of the SCZ, which has been in operation for several years, but is more likely due to relatively more construction works for the 3RS and concurrent activities (such as changes in overall vessel traffic) in NL waters, or due to other unknown reasons. This belief is further bolstered by the fact that daily HSF trips were down substantially to single-digit from late March to December 2020 (refer to Section 2.7 and **Table 2.23**), due to COVID-19 impacts, and yet CWD numbers continued to decrease. Long-term CWD monitoring data that are being collected during the course of this Project will help to identify any specific impacts resulting from overall changes in vessel traffic.

In terms of the concern expressed in the 3RS EIA about the potential impacts on the travel corridor/area between both the project and SCLKCMP, and between CWD hotspots in NWL, NEL and WL, and the recently raised concern on the effectiveness of implementing the SkyPier HSF route diversion in alleviating the impacts on CWD travelling areas, the increased CWD sightings from vessel surveys in NEL area during 2018 indicated that a slight rebound in the use of these travel areas by CWD had occurred, however this increase has not continued in 2019 and 2020. HZMB impacts were likely most severe during the period from 2013 to 2016 when construction works were ongoing (a period which saw an overall decline in CWD numbers in Hong Kong – Jefferson 2018), and the increase in CWD numbers seen in 2018 may have been the initial stages of recovery from that period of more intensive HZMB construction impacts. It is likely that the 3RS construction works and other concurrent activities in NL waters in 2019/2020 may have caused dolphins to again move away from these areas as predicted in the EIA (Section 13.9.2), It is noted that history suggests that when construction is completed, a rebound in numbers can again be expected (Jefferson 2018). Data since 2018 indicates that the traveling areas are still being used, although at a lower level. It should also be kept in mind that dolphins tend to move through these areas relatively quickly and do not generally spend as much time milling as they do in the main feeding/socializing areas, which may further reduce the chance of dolphin sightings.

Regarding the results of photo-identification work, a total number of 132 CWD individuals were identified altogether 390 times from all sightings in 2020, with 80 individuals (around 60.6%) sighted more than once. Forty-one individuals (around 51.3%) of the 80 re-sighted animals showed cross-area movement between different survey areas. Unlike the previous year, three animals were recorded occurring in all three main survey areas (WL, SWL and NWL, including AW) in 2020. Regarding the re-sighted CWDs, the mother-and-spotted juvenile pair NLMM006 and NLMM013 was not observed in 2020, though the mother was seen without the juvenile. SLMM003, which has been a frequently-observed dolphin for several years, was the most commonly sighted individual in 2020, being especially common in WL waters. Despite the overall drop in numbers, several other dolphins were frequently observed in Hong Kong waters in 2020.

2.5.3.2 Land-based Theodolite Tracking

During 12 days and 72 hours of theodolite surveys at the station on LKC in 2020, a total of 21 CWD groups were tracked, and only 6 groups fit criteria for movement pattern summary due to most tracks being less than 10 minutes in duration. Due to low sample sizes, we were unable to conduct robust statistical analyses. While there are not enough data for robust statistical analyses of behaviours of CWD relative to group sizes, presence of vessels, etc., it is clear that habitat use off LKC has decreased in the past two years. We summarize the present data to show the apparent present situation and potential trends. During 12 days and 72 hours of theodolite surveys off SC in 2020, no dolphins were observed or tracked, similar to 2019 and 2018.

The sighting rate off LKC in 2020 was 0.29 per survey hour, similar to 2019 but less than one-half the sighting rate in 2018 and 2017. This survey finding is in line with the vessel surveys over the past several years for this general area and may be due to ongoing 3RS Project and other concurrent project construction activities in NL waters. The observed decline may also have been due to other unknown factors, for example relating to the decline of fishing activity identified by monitoring teams here, or from other marine traffic activities not associated with 3RS construction works. In particular, decreased activity of pair and hang trawlers in Hong Kong since the trawl ban took effect may have resulted in decreased use of Hong Kong waters by CWDs, as a significant number of individual dolphins previously used to be attracted to fishing activities to assist in their foraging (see Jefferson 2000 and Chilvers et al. 2003).

In 2020, dolphins were sighted as far as 3.4 km from the LKC station. Survey data shows that the heaviest use of waters north of the SCLKCMP by CWDs was in the first several hours of morning surveys, with a peak in sightings during the 0900 hour block and almost no sightings after noon. CWDs were tracked primarily during the winter season and the dry season, but were not observed in March, May, June, July, or September in 2020. Maximum CWD group size was 4 dolphins, fewer than that in 2019 with a maximum of 6 dolphins, and 2018 with a maximum of 8 dolphins.

Overall, waters off Lung Kwu Chau continue to be habitat used primarily for foraging, observed within the SCLKCMP boundary and CWDs crossing the boundary, and also for travelling. Socialising was observed infrequently and resting behaviour was not recorded in 2020. Only travelling was recorded outside of the SCLKCMP boundary. Vessels were not recorded within 500m of CWD groups, which may be due to low sample size or reflect potential CWD avoidance of vessels off LKC. Small sample sizes in and outside the speed control zone, with most sightings and tracks within the SCLKCMP, may be due to the animals using NL waters generally avoiding this area perhaps due to disturbance from ongoing marine traffic activities. It is hoped that dolphins will return to this formerly CWD "hotspot" area north of the SCLKCMP as most of the 3RS marine activities wind down in the next several years, and monitoring in this important area will continue for the duration of the land formation related construction works.

2.5.3.3 Passive Acoustic Monitoring

The PAM data continue to provide useful information, especially on patterns of dolphin vocalization at night, which has previously been unavailable to us and could not be recorded during the land-based survey conducted during daytime at south of Sha Chau. The diurnal detection of clicks showed a consistent pattern of higher levels in late evening and at night compared with the day, which may be indicative of increased use of echolocation by dolphins during hours of darkness.

The PAM data provide evidence that dolphins are using the area around south of Sha Chau throughout most of the year. In 2020, dolphins were present with especially high incidence in winter (Jan-Feb), and less so in other seasons, with no acoustic detections from mid-July to mid-September. The per-file detection rates were also highest in winter; taken together, these metrics suggest that dolphins use the area more frequently and intensively in winter than in other seasons. The lack of detections for two months in summer has not been documented before; prior years with monitoring effort resulted in dolphin detections each month. This lack of detections may represent a reduction or absence of dolphin usage, but it could also be

related to high ambient noise levels during summer that reduced the detectability of dolphin signals. The lack of detections during summer and probable reduction of dolphin presence is corroborated by the low observations by land-based theodolite tracking at daytime.

Dolphins were detected more frequently during night-time hours than during the day, and this may be related to increased nocturnal foraging behaviour. This has been a general trend throughout PAM monitoring in most parts of Hong Kong. It is also possible that at least a portion of this diel trend is related to dolphins utilizing this area more intensively at night than in daytime, because of decreased industrial activity at night. There was also a midday peak in dolphin vocalizations (hour 1200), which has not been observed before. These midday detections are probably more of a coincidence and do not represent a general shift in dolphin use patterns, as about half of the detections (5 of 12) were the result of dolphins in the area for one hour during one particular winter day

The PAM in 2020 represents a slight decline in dolphin detection rates since the previous year, which is also reflected by land-based and vessel-based observations that indicate a potential decrease in dolphin habitat use. However, the seasonal and diel detection patterns observed in 2020 suggest that dolphins continue to use the area especially in winter, and then primarily at night and in conditions when visual observation is not feasible. Analysis of the most recent (December 2020 to mid-January 2021) deployment suggests that dolphin acoustic activity began to increase again during early winter, but continued PAM is needed to assess whether this trend will continue and result in comparable dolphin occurrence to that detected in previous years.

Overall, the ambient noise at the PAM station in 2020 was slightly lower than the previous year. This may reflect a reduction in human activity (such as ferry vessel traffic) due to COVID-19.

2.5.4 Conclusions of CWD Monitoring Results

With reference to the aims of construction phase CWD monitoring described in the EM&A Manual, the key findings of CWD monitoring in 2020 are summarised as follows.

Effects on the Potential Shift in CWD Travelling Areas and Habitat Use

The latest monitoring data indicate decreased use of some areas within Hong Kong waters in 2020, as compared to the previous year. The main area of decreased use was Northwest Lantau, which showed a significant reduction. As expected and predicted in the 3RS EIA, dolphins likely shifted their activities away from the 3RS construction activities as well as increasing marine works for the Tung Chung New Town Extension project in 2019 and 2020. Nevertheless, they still used Hong Kong's western waters (primarily SWL and WL) for important ecological activities like feeding and resting, despite the disturbance. The main issue now is how much recovery there will be when the marine construction activities end in this area, and future monitoring efforts beyond the construction phase will help to address this.

Effectiveness of the HSF Speed and Routing Restrictions to the CWDs

As detailed above, we now have five years of data from the period since the SCZ was implemented, and the information available from both the vessel-based and land-based monitoring indicates that dolphin use of the NWL area has fluctuated from year to year (ranging from 1 to 22 dolphins), with a period of initial increase after the SCZ was put into effect. Due to COVID-19 effects, 2020 was a year of significantly decreased ferry activity in general, including in the SCZ area, and yet there was still a reduction in the use of NWL this year. Therefore, the evidence suggests that the SCZ is not impacting dolphin use of this area, and at the same time, is likely reducing the chances of dolphins being hit by vessels traveling at high speed.

Waters around Lung Kwu Chau have traditionally been a significant year-round habitat, especially for foraging, though 2020 saw a very large decline in use of this area by CWD. There is no evidence that the observed decline in dolphin use of the HSF SCZ around Lung Kwu Chau is due to ferries being re-routed

to that area with slower speeds at the end of 2015. The recent (2019-2020) decline in numbers of dolphins in NWL area is not considered to be linked to ferry re-routings and the SCZ.

Trends in Long Term Monitoring Data

From vessel surveys conducted in 2020, CWD use of Hong Kong waters appears to be down significantly from 2019. West Lantau waters are still being used as the most important habitat in Hong Kong as has been the case since CWD monitoring in Hong Kong first started in 1995/1996. It is estimated that 32 dolphins (on average) were found within Hong Kong waters in 2020, which is down from 40 dolphins last year (2019). Seasonally, the CWD number within Hong Kong ranged from about 24 to 59 in 2020. There continues to be no evidence that the implementation of the SkyPier SCZ is having any negative impacts on dolphin use of the NWL area. In fact, daily SkyPier HSF trips at were down substantially in 2020 due to COVID-19 (refer to Section 2.7 and **Table 2.23**), thus there was no substantive new data on CWDs tracked near HSFs over the monitoring period. Diverted SkyPier HSFs with speed control measures in place appear to be reducing risks to CWDs using the narrowing waters between south of SCLKCMP and the airport north, and at the same time do not appear to be resulting in apparent negative impacts on CWDs along the diverted route.

While land-based observations and theodolite tracking do not present overall estimates of numbers of dolphins, the 2020 data from LKC are similar to 2019 data, which shows a reduction in CWD groups sighted and tracked compared to 2018 and 2017. This indicates a lower use of this area by CWDs, perhaps indicative of the increasing construction and other marine traffic activities in the NL waters as discussed earlier. It is possible, as mentioned in Section 2.5.3, that the data from the past three years (before 2019) represent a partial rebound of dolphin use of waters north of Lantau Island due to cessation of the intensive HZMB construction activities of 2013-2016 (see also Jefferson 2018). In 2020, continuing from 2019, the ongoing 3RS Project marine construction activities reduced dolphin use in North Lantau waters in the way that was predicted in the 3RS EIA (Section 13.9.2).

It is important to remember that dolphins shift around within their habitat from year to year, due to both natural and anthropogenic factors. Thus, evidence of a decrease or increase in numbers from one year to the next should not necessarily be taken as indication of an overall population decline or recovery. Dolphins live for many decades and thus long-term monitoring using consistent methods is needed over an extended period of time in order to evaluate the true conservation status of the CWD population and how its use of Hong Kong waters is being affected.

The CWD construction phase monitoring data so far appear to be generally consistent with findings of the ecological assessments completed during the 3RS EIA, which predicted significant negative impacts during construction, including from the physical loss of habitat due to the reclamation (EIA Report Section 13.9.1). No unexpected ecological impacts on CWDs have been identified, though the reduction in the number of dolphins using NWL in 2020 was marked. Construction practices have been modified to avoid negative impacts on dolphins, as much as is feasible. However, it should be noted that dolphins shifting away from NL and nearby waters is to be expected during 3RS construction works, such as increasingly intensive seawall construction and marine filling activities, as has occurred in 2020, and this is broadly in line with EIA predictions.

In the 3RS EIA and as reported in the last two Annual EM&A Reports, it was predicted that dolphins would shift away from portions of their home range that are experiencing intense human activities and that appears to have been the case in 2020 as seawall works and marine filling activities have intensified. These impacts are anthropogenic disturbances and therefore are of conservation concern; however, they are temporary and reversible and previous studies have supported that dolphin numbers can be expected to recover over the long-term, after completion of works (assuming that the habitat is properly protected and still of adequate quality). Monitoring for the 3RS will continue during 2021 and beyond, with the goal being to determine the extent of remaining project impacts, to facilitate a review of the effectiveness of proposed

mitigation measures and to determine any need for adaptive management measures. Future monitoring will also evaluate any recovery that occurs in the future.

With the physical loss of some habitats through 3RS reclamation, it is unknown if we can expect a full recovery in CWD numbers to those found in the past, but at least stabilization of the abundance of Hong Kong CWDs is desirable for the long-term health of this population. As dolphin numbers in Hong Kong appear to be going down in 2020, diligent monitoring should continue. At this stage of 3RS construction, all recommended mitigations have been implemented and although impacts are occurring, these are likely to be temporary and within previously predicted patterns. Once marine construction is completed, and the proposed marine park in North Lantau comes into effect, the situation should improve. The effectiveness of the mitigation measures will be kept under review over the next few years as CWD monitoring continues.

Long Term Conservation and Management Suggestions

In terms of the long-term conservation and management of the CWD population and specifically that portion that uses Hong Kong waters, it is very desirable for numbers to stabilise once marine construction completes, as the evidence suggests both that dolphins are using Hong Kong waters less intensively and that the overall population is declining (see Huang et al. 2012; Jefferson 2018). A major goal for management authorities should be to establish effective measures including, but not limited to, protection of critical feeding and breeding habitat, as well as important travel routes. Most importantly, the area along the entire west coast of Lantau Island has consistently been used as prime habitat by CWDs for the past several decades, but unfortunately numbers there have declined recently. This region has been confirmed by the current 3RS Project monitoring effort to remain as the most important habitat for dolphins in Hong Kong, based on densities of CWD use. The formation of protected habitat for the CWD in this area should be seen as a high priority for the future of CWD in Hong Kong. If it is used properly, the knowledge learned from the 3RS project, as well as the funding support and attention given the CWD from this project, can be very helpful for management authorities in achieving the important long-term goal of stabilizing the CWD population, and ensuring its long-term survival.

2.5.5 Site Audit for CWD-related Mitigation Measures

During the reporting period, silt curtains were in place by the contractors for marine filling works, and dolphin observers were deployed by contractors in accordance with the Marine Mammal Watching Plan. Teams of at least two dolphin observers were deployed by contractors for continuous monitoring of the Dolphin Exclusion Zone (DEZ) for DCM works, seawall construction and bored piling for approach lights in accordance with the DEZ Plan. Training for the dolphin observers on the implementation of MMWP and DEZ monitoring was provided by the ET prior to the aforementioned works, with the training records kept by the ET. From the contractors' MMWP observation records, no dolphin or other marine mammals were observed within or around the silt curtains during the reporting period. As for DEZ monitoring records, no dolphin or other marine mammals were observed within the DEZs in this reporting period. These contractors' records were audited by the ET during site inspection.

Audits of acoustic decoupling for construction vessels were carried out during weekly site inspection and summarised in Section 2.6. Summary of audits of SkyPier High Speed Ferries route diversion and speed control and construction vessel management are presented in Section 2.8 and Section 2.9 respectively.

2.6 Environmental Site Inspection

Site inspections of the construction works were carried out on a weekly basis to monitor the implementation of proper environmental pollution control and mitigation measures for the Project. Bi-weekly site inspections were also conducted by the IEC. Besides, *ad-hoc* site inspections were conducted by ET and IEC if environmental problems were identified, or subsequent to receipt of an environmental complaint, or as part of the investigation work. These site inspections provided a direct means to reinforce the specified environmental protection requirements and pollution control measures in construction sites.

During site inspections, environmental situation, status of implementation of pollution control and mitigation measures were observed both within the site area as well as outside the project sites which was likely to be affected, directly or indirectly, by the site activities. Environmental documents and site records, including waste disposal record, maintenance record of environmental equipment, and relevant environmental permit and licences, were also checked on site. Observations were recorded in the site inspection checklist and passed to the contractor together with the appropriate recommended mitigation measures where necessary in order to advise contractors on environmental improvement, awareness and on-site enhancement measures. The observations were made with reference to the following information during the site inspections:

- The EIA and EM&A requirements;
- Relevant environmental protection laws, guidelines, and practice notes;
- The EP conditions and other submissions under the EP;
- Monitoring results of EM&A programme;
- Works progress and programme;
- Proposal of individual works;
- Contract specifications on environmental protection; and
- Previous site inspection results.

Good site practices were observed in site inspections during the reporting period. The ET participated in environmental drills organized by the contractor as observer, including chemical spill drills and silt curtain deployment drills. Advices were given when necessary to ensure the construction workforce were familiar with relevant procedures, and to maintain good environmental performance on site. After each spill response drills, the spill response procedures stated in the Project's Spill Response Plan were reviewed and no update of relevant procedures and measures was required. No report of spill incident was recorded by the contractors in the reporting period.

Environmental briefings on EP and EM&A requirements were also provided to the new contracts by ET. Regular toolbox talks on environmental issues were organized for the construction workforce by the contractors to ensure understanding and proper implementation of environmental protection and pollution control mitigation measures.

Summary of implementation status of the environmental mitigation measures for the construction phase of the Project during the reporting period is provided in **Appendix C**.

2.6.1 Landscape and Visual Mitigation Measures

Implementation of applicable landscape and visual mitigation measures (reference to the environmental protection measures CM1 – CM10 in **Appendix C**) was monitored in accordance with the Manual. All measures undertaken by both the contractor and the landscape contractor during the construction phase and first year of the operation phase are audited by a landscape architect, as a member of the ET, on a regular basis to ensure compliance with the intended aims of the measures.

Site inspection and audit are undertaken as necessary in the construction and operation phase in accordance with the Monitoring Programme for Landscape and Visual as shown in **Table 2.16**. In case of non-conformity, specific recommendations will be made and actions will be proposed in accordance with

the Event and Action Plan as shown in **Table 2.17**. No non-conformity was recorded during the reporting period.

Table 2.16: Monitoring Programme for Landscape and Visual

Stage	Monitoring Task	Monitoring Report	Form of Approval	Frequency
Detailed Design	Checking of design works against the recommendations of the landscape and visual impact assessments within the EIA shall be undertaken during detailed design and tender stage, to ensure that they fulfil the intention of the mitigation measures. Any changes to the design, including design changes on site shall also be checked.	Report by AAHK / PM confirming that the design conforms to requirements of EP.	Approved by Client	At the end of the Detailed Design Phase
Construction	Checking of the contractor's operations during the construction period.	Report on Contractor's compliance, by ET	Counter signature of report by IEC	Weekly
Establishment Works	Checking of the planting works during the twelve-month Establishment Period after completion of each batch of transplanting works.	Report on Contractor's compliance, by ET	Counter signature of report by IEC	Every two months
Long Term Management (10 year)	Monitoring of the long-term management of the planting works in the period up to 10 years after completion of each batch of transplanting works.	Report on Compliance by ET or Maintenance Agency as appropriate	Counter signature of report by Management Agency	Annually

Table 2.17: Event and Action Plan for Landscape and Visual

Event Action Level	Action			
	ET	IEC	AAHK / PM	Contractor
Design Check	Check final design conforms to the requirements of EP and prepare report.	Check report. Recommend remedial design if necessary.	Undertake remedial design if necessary.	
Non-conformity on one occasion	Identify source. Inform IEC and AAHK / PM. Discuss remedial actions with IEC, AAHK / PM and Contractor. Monitor remedial actions until rectification has been completed.	Check report. Check Contractor's working method. Discuss with ET and Contractor on possible remedial measures. Advise AAHK / PM on effectiveness of proposed remedial measures. Check implementation of remedial measures.	Notify Contractor. Ensure remedial measures are properly implemented.	Amend working methods to prevent recurrence of non-conformity. Rectify damage and undertake additional action necessary.
Repeated Non-conformity	Identify source. Inform IEC and AAHK / PM. Increase monitoring frequency. Discuss remedial actions with IEC, AAHK / PM and Contractor. Monitor remedial actions until rectification has been completed.	Check monitoring report. Check Contractor's working method. Discuss with ET and Contractor on possible remedial measures.	Notify Contractor. Ensure remedial measures area properly implemented.	Amend working methods to prevent recurrence of non-conformity. Rectify damage and undertake additional action necessary.

Event Action Level	Action			
	ET	IEC	AAHK / PM	Contractor
	If non-conformity stops, cease additional monitoring.	Advise AAHK / PM on effectiveness of proposed remedial measures. Supervise implementation of remedial measures.		

The implementation status of the environmental protection measures is summarised below in **Table 2.18**. For trees which were managed by the Project during the reporting period, relevant measures have been implemented by Contracts 3302, 3503, 3602 and 3801. Contracts 3508 and 3802 would begin to undertake tree management measures subject to the handover of site area (Contract 3508: Q2 2021 (tentative); Contract 3802: to be confirmed). Those trees which were within the Project boundary yet to be taken care by existing 3RS Contractors during the reporting period were managed by AAHK.

Table 2.18: Landscape and Visual – Construction Phase Audit Summary

Landscape and Visual Mitigation Measures during Construction Implementation Status	Implementation Status	Relevant Contract(s) in the Reporting Period
CM1- The construction area and contractor's temporary works areas shall be minimised to avoid impacts on adjacent landscape.	The implementation of mitigation measures were checked by ET during weekly site inspection and clarified by the Contractors during the monthly Environmental Management Meetings. Implementation of the measures CM5, CM6 and CM7 by Contractors was observed.	3RS Project contracts
CM2 – Reduction of construction period to practical minimum.		
CM3 – Phasing of the construction stage to reduce visual impacts during the construction phase.		
CM4 – Construction traffic (land and sea) including construction plants, construction vessels and barges shall be kept to a practical minimum.		
CM5 – Erection of decorative mesh screens or construction hoardings around works areas in visually unobtrusive colours.		
CM6 – Avoidance of excessive height and bulk of site buildings and structures		
CM7 – Control of night-time lighting by hooding all lights and through minimisation of night working periods		
CM8 – All existing trees shall be carefully protected during construction. Detailed Tree Protection Specification shall be provided in the Contract Specification. Under this specification, the Contractor shall be required to submit, for approval, a detailed working method statement for the protection of trees prior to undertaking any works adjacent to all retained trees, including trees in contractor's works areas	Tree Protection Specifications have been provided in the relevant Contract Specifications respectively for implementation by the Contractors under the Project. The Contractors' performance on the implementation of the trees maintenance and protection measures were observed and checked by the ET weekly during construction period.	3302, 3503, 3602, 3801 3508, 3802 (To be implemented)
CM9 – Trees unavoidably affected by the works shall be transplanted where practical. A detailed Tree Transplanting Specification shall be provided in the Contract Specification, if applicable. Sufficient time for necessary tree root and crown preparation periods shall be allowed in the project programme	Tree Transplanting Specifications have been provided in the relevant Contract Specifications respectively for implementation by the Contractors under the Project where trees will unavoidably be affected by the construction works.	3503, 3801 3508, 3802 (To be implemented)

Landscape and Visual Mitigation Measures during Construction Implementation Status	Implementation Status	Relevant Contract(s) in the Reporting Period
	The Contractors were required to submit Method Statements for tree transplanting prior to the transplanting works. Tree inspections were conducted by ET to check the tree transplanting works implemented by the Contractors on site. The Contractors' performance on the implementation of trees maintenance and protection measures on transplanted trees were observed and checked by the ET bi-monthly during the 12-month establishment period after the completion of each batch of transplanting works. Long term management of the transplanted trees were currently monitored by ET annually.	
CM 10 – Land formation works shall be followed with advanced hydroseeding around taxiways and runways as soon as practical	To be implemented around taxiways and runways as soon as practicable.	To be implemented

The 3RS Project is a mega project covering a number of detailed design contracts and many construction works contracts in different design and construction stages. Works areas would be taken up by different 3RS works contracts in stages with the commencement of construction, and the landscape and visual elements of these contract of the 3RS Project also designed and implemented at various stages of the Project.

Broad-brush tree survey and assessment were undertaken for the entire 3RS Project during EIA stage. After that, detailed design consultants had conducted more detailed tree surveys and assessments so that the landscape and visual elements were refined and aligned with their respective design areas. With the award of specific 3RS construction works contracts, the respective contractors would conduct their own detailed tree survey and assessment as necessary, to confirm the tree status at the time of their possession of the site. The tree survey and assessment from the respective contractors were taken as the baseline of that particular piece of works area before being affected by 3RS Project. Some of the tree group areas as identified in approved EIA report were affected by 3RS construction works as of 2020. Environmental monitoring and audit work which included the auditing of contractor's work in landscape and visual aspects such as tree preservation, protection and transplantation was implemented in accordance with the updated construction programme and the relevant requirements of the EP and the Updated EM&A Manual.

Based on the findings from the detailed tree survey and assessment by respective contractors, the details of trees to be affected within the respective contract areas were incorporated in the approved Landscape and Visual Plan (LVP) in which the tree inventory are based on August 2020 tree records. The total number of retained trees, transplanted trees and to-be-transplanted trees under the management of Project are summarized in **Table 2.19**. The tree schedule updated as of end 2020 is shown in **Appendix G**.

Table 2.19: Summary of the Number of Retained, Transplanted and To-be-transplanted Trees as of December 2020

Existing				
Contract	Retain (nos.)	Transplanted (nos.)		To-be-transplanted (nos.)
		Establishment Period	Long Term Management Period	
3302	9	0	0	0
3503	19	9	0	0
3602	2	0	0	0
3801	88	0	5	0
Sub-total	118	9	5	0
Provisional				
Contract	**Retain (nos.)**	**Transplanted (nos.)**		**To-be-transplanted (nos.)**
3508[(1)]	155	0		22
Sub-total	155	0		22
Grand Total	**273**	**14**		**22**

Note:

Actual tree number is subject to confirmation after the completion of initial tree survey conducted by the Contractor.

Table 2.20 lists the affected tree ID together with the reasons for change of tree status between the approved LVP and the tree schedule as of end 2020.

The total number of retained trees of the Project as of end 2020 was 118. Compared to 165 nos. of retained trees for existing works contracts reported in Annex G of the approved LVP, the change in number was due to the following reasons:

- 1 no. of tree in 3801/13 was damaged and removed due to adverse weather from typhoon Higos in August 2020 (-1 no.);
- 1 no. of tree near North Airport Interchange was damaged due to adverse weather from typhoon Sinlaku in August 2020, and subsequently removed by the Contractor (-1 no.);
- 4 nos. of trees near North Airport Interchange were collapsed due to damage by typhoon Mangkhut in September 2018, and subsequently removed by the Contractor (-4 nos.);
- A land parcel with 14 nos of retained trees was acquired by the government for construction of emergency hospital to handle COVID19 pandemic at Asia World-Expo, and was no longer managed by the Project (-14 nos);
- Contractor's initial tree survey covered some areas which recently confirmed not to be works areas and therefore excluded from the Project area. Trees located in those areas were removed from the retained tree list under the Project (-30 nos.); and
- ET and contractor's recent on-site inspections confirmed that the status of 3 nos. of trees near the Airport North Interchange should be retained trees (+3 nos.).

A total of eight trees under Contractor 3503 (i.e. T812, T814, T815, T829, T830, T831, T835 and T838) were transplanted during the reporting period. Therefore, the cumulative total number of transplanted trees of the Project has been increased from 6 from the previous reporting period to 14.

Table 2.20: Summary of the Tree Status Changes between the LVP and end 2020

Tree ID(s)	Contract	Recommendations in LVP	Status as of end 2020	Remarks	Impacts to Total Tree Number
CT1385, CT1386, CT1412, CT1466	3801	Retain	Removed	4 nos. trees were uprooted by typhoon Mangkhut in Sep 2018. As the health conditions were deteriorated and would cause adverse impacts to the retained trees in close vicinity, they were removed in late 2020.	**Retain:** -4 nos.
CT1410	3801	Retain	Removed	1 no. tree was removed in Sep 2020 due to damage by typhoon Sinlaku in Aug 2020.	**Retain:** -1 no.
CT1863	3801	Retain	Removed	1 no. tree was removed due to damage by typhoon Higos in Aug 2020.	**Retain:** -1 no.
CT1, CT3, CT4, CT5, CT6, CT7, CT8, CT10, CT25, CT26, CT1792, CT1793, CT1797, CT1802	3801	Retain	Not within 3RS works area	14 nos. trees were confirmed not locate within 3RS works area. Those trees were removed as the land was acquired by the government for construction of temporary emergency hospital to handle COVID-19 pandemic in early Sep 2020.	**Retain:** -14 nos.
CT1889, CT1890, CT1892, CT1894, CT1897, CT1898, CT1899, CT1900, CT1901, CT1902, CT1904, CT1905, CT1906, CT1907, CT1908, CT1909, CT1910, CT1911, CT1912, CT1913, CT1914, CT1936, CT1937, CT1939, CT1940, CT1941, CT1942, CT1945, CT1946, CT1947	3801	Retain	Not within 3RS works area	30 nos. trees were confirmed not locate within 3RS works area.	**Retain:** -30 nos.
CT1384	3801	Removed	Retain	The status of 1 no. tree was updated to retain during site inspection in Sep 2020.	**Retain:** +1 no.
CT1407	3801	Fell	Retain	The status of 1 no. tree was updated to retain during site inspection in Dec 2020.	**Retain:** +1 no.
CT1462	3801	Fell	Retain	The status of 1 no. tree was updated to retain during site inspection in Sep 2020.	**Retain:** +1 no.

The summary of transplanted trees updated in the reporting period is shown in **Table 2.21**. Photos of the transplanted trees are presented in **Table 2.22** and the locations of newly transplanted trees during the reporting period are presented in **Figure 2.6**.

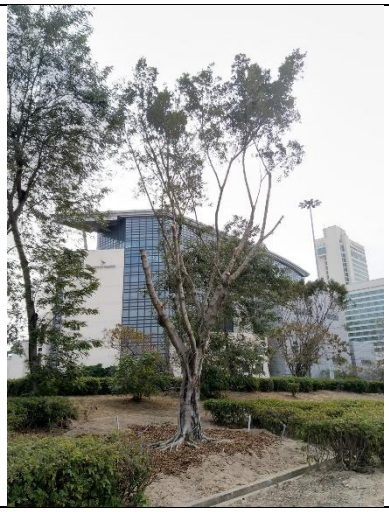
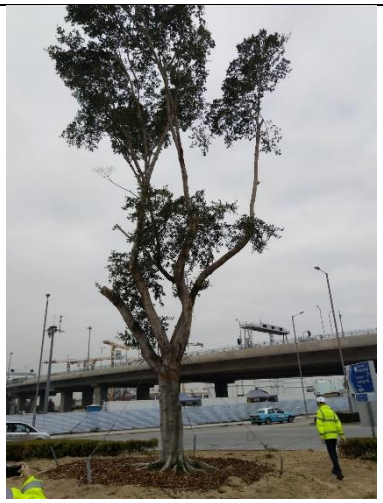
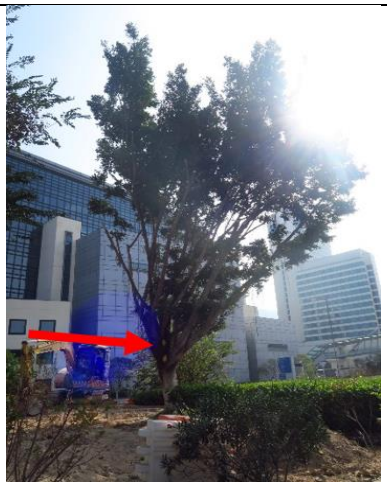
Table 2.21: Summary of the Transplanted Trees in the Reporting Period

Tree ID	Transplant Date	Management Stage	Management Agency	Remarks
CT276	3 May 2018	Establishment period 4 May 2018 – May 2019	Contract 3801	NA

Tree ID	Transplant Date	Management Stage	Management Agency	Remarks
		Long Term Management period Jun 2019 – May 2028	Southern Landside Petrol Filling Station	
CT1253	4 May 2018	Establishment period 5 May 2018 – May 2019	Contract 3801	
		Long Term Management period Jun 2019 – May 2028	Southern Landside Petrol Filling Station	
T836	13 Dec 2019	Establishment period 14 Dec 2019 – Jan 2021	Contract 3503	NA
CT1194	4 May 2018	Establishment period 5 May 2018 – May 2019	Contract 3801	NA
		Long Term Management period Jun 2019 – May 2028	Southern Landside Petrol Filling Station	Uprooted and collapsed due to Typhoon Higos on 18 August 2020. Tree removal was conducted as recommended by tree specialist of the contractor of Southern Landside Petrol Filing Station.
CT1794	3 May 2018	Establishment period 4 May 2018 – May 2019	Contract 3801	NA
		Long Term Management period Jun 2019 – May 2028	AsiaWorld-Expo	The tree within the land parcel was acquired by the government for construction of emergency hospital to handle COVID19 pandemic at AsiaWorld-Expo. The tree was felled in late 2020.
CT1795	3 May 2018	Establishment period 4 May 2018 – May 2019	Contract 3801	NA
		Long Term Management period Jun 2019 – May 2028	AsiaWorld-Expo	The tree within the land parcel was acquired by the government for construction of emergency hospital to handle COVID19 pandemic at AsiaWorld-Expo. The tree was felled in late 2020.
Newly Transplanted Trees during the Reporting Period				
T812	21 Dec 2020	Establishment period 22 Dec 2020 – Dec 2021	Contract 3503	Original Location: Airport South Interchange Recipient Site: Chun Wan Road Interchange (Scenic Road)
T814	20 Dec 2020	Establishment period 21 Dec 2020 – Dec 2021	Contract 3503	Original Location: Airport South Interchange Recipient Site: Chek Lap Kok South Road (Scenic Road) Interchange
T815	15 Dec 2020	Establishment period 16 Dec 2020 – Dec 2021	Contract 3503	Original Location: Airport South Interchange
T829	18 Dec 2020	Establishment period 19 Dec 2020 – Dec 2021	Contract 3503	Recipient Site: Chun Wan Road Interchange (Scenic Road)
T830	14 Dec 2020	Establishment period 15 Dec 2020 – Dec 2021	Contract 3503	Original Location: Airport South Interchange Recipient Site: Chun Yue Road Interchange
T831	19 Dec 2020	Establishment period 20 Dec 2020 – Dec 2021	Contract 3503	Original Location: Airport South Interchange Recipient Site:

Tree ID	Transplant Date	Management Stage	Management Agency	Remarks
				Chun Wan Road Interchange (Scenic Road)
T835, T838	22 Jan 2020	Establishment period 23 Jan 2020 – Jan 2021	Contract 3503	Original Location: Airport South Interchange Recipient Site: Chun Wan Road Interchange (Scenic Road)

Table 2.22: Photos of the Existing Transplanted Trees in the Reporting Period

Under 12-month Establishment Period:		
		
	T836	
Newly Transplanted Trees during the Reporting Period		
		
T812	T814	T815
		
T829	T830	T831

	
T835	T838

Under 10-year Long-term Management:	
	
CT276	CT1253

2.7 Audit of the SkyPier High Speed Ferries

The Marine Travel Routes and Management Plan for High Speed Ferries of SkyPier (the SkyPier Plan) was submitted to the Advisory Council on the Environment (ACE) for comment and subsequently submitted to and approved by EPD in November 2015 under EP Condition 2.10. The approved SkyPier Plan is available on the dedicated website of the Project. In the SkyPier Plan, AAHK has committed to implementing the mitigation measure of requiring HSFs of SkyPier travelling between HKIA and Zhuhai / Macau to start diverting the route with associated speed control across the area, i.e. SCZ, with high CWD abundance. The route diversion and speed restriction at the SCZ have been implemented since 28 December 2015. The IEC has also performed audit on the compliance of the requirements as part of the EM&A programme. The latest summary of key audit findings in the reporting period is presented in **Table 2.23**.

According to the approved SkyPier Plan, dolphin habitat index has been reviewed in the reporting period based on findings of the AFCD's marine mammals monitoring report 2018-19 and historical dolphin density

records. Grids for dolphin hotspot remained largely unchanged, thus the HSF route diversion arrangement remained unchanged.

Due to the COVID-19 pandemic, SkyPier HSF services between Macau and HKIA SkyPier was suspended from 4 February 2020 and all other SkyPier HSF services was subsequently suspended from 25 March 2020 until further notice. Limited special ferry services between Macau and HKIA SkyPier were arranged from 17 June 2020 to 16 July 2020 as well as in late November 2020 and were audited in the reporting period. Besides, limited HSF services from another destination, which does not require the use of the diverted route, were also provided starting from 28 October 2020.

In total, 826 ferry movements between HKIA SkyPier and Zhuhai / Macau were audited in the reporting period. The daily movements of all SkyPier HSFs in the reporting period, including those not using the diverted route, ranged between 0 and 94, which falls within the maximum daily cap number of 125. The annual daily average of all SkyPier HSF movements in the reporting period was 13, which falls within the annual daily average cap of 99 SkyPier HSF movements.

All 826 audited ferry movements travelled through the SCZ with average speeds at or below 15 knots, which complied with the SkyPier Plan. No route deviation case was recorded for all audited ferry movements in the reporting period.

Insufficient AIS data were received from some HSFs during the reporting period. After investigation, it was found that the data were missing due to interference effect of AIS signal as reported by the ferry operators after checking the condition of the AIS transponders. In such cases, vessel captains were requested to provide radar track photos to indicate that the vessels entered the SCZ through the gate access points and without speeding in the SCZ. The ferry operators' explanations were accepted.

Table 2.23: Summary of Key Audit Findings against the SkyPier Plan

Requirements in the SkyPier Plan	Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20
Total number of ferry movements recorded and audited for HSF to/from Zhuhai and Macau	511	149	44	0	0	56	64	0	0	0	2	0
Use diverted route and enter / leave SCZ through Gate Access Points	511	149	44	0	0	56	64	0	0	0	2	0
No. of SkyPier HSFs in compliance with Average Speed within 15 knots in SCZ	511	149	44	0	0	56	64	0	0	0	2	0
Range of Daily Movement (including all SkyPier HSFs)	74-94	30-65	8-20	0	0-2	0-4	0-5	0	0	0-2	1-3	1-3

Source: Excerpted from Monthly and Quarterly EM&A Reports

2.8 Audit of the Construction and Associated Vessels

The audit of construction and associated vessels in accordance with the Marine Travel Route and Management Plan for Construction and Associated Vessel (MTRMP-CAV) has started since August 2016. ET has audited relevant information including AIS data, vessel tracks and other relevant records provided by the contractors to ensure that the contractors were fully complied with the requirements of the MTRMP-CAV. The Maritime Surveillance System (MSS) was launched in March 2017. The MSS automatically recorded deviation cases such as speeding, entering no entry zone, and not travelling through designated gates. ET conducted checking to ensure the MSS records all deviation cases accurately. The 3-month rolling programme submitted by contractors for construction vessel activities were also checked every month to ensure the logistic of construction vessels were well planned to achieve a practicable minimum. The IEC has also performed audit on the compliance of the requirements as part of the EM&A programme.

Deviations including speeding in the works area, entry from non-designated gates, and entering no-entry zones were identified. After investigation by the contractor's Marine Traffic Control Centre (MTCC)

representatives, all the concerned captains were reminded to comply with the requirements of the MTRMP-CAV.

A total of 24 skipper training workshops were held by ET during the reporting period with 110 concerned captains of construction vessels associated with the 3RS contracts to familiarise them with the predefined routes, general education on local cetaceans, guidelines for avoiding adverse water quality impact, the required environmental practices / measures while operating construction and associated vessels under the Project, and guidelines for operating vessels safely in the presence of CWDs. Another 80 skipper training workshops were held with 272 captains by contractors' Environmental Officers and competency tests were conducted subsequently with the trained captains by ET. In addition, ET participated Marine Management Liaison Group meetings to assist and resolve any marine issues which might be encountered under the Project.

2.9 External Stakeholder Engagement

In accordance with the EP's requirements of setting up Community and Professional Liaison Groups, the AAHK has been continuing to proactively reach out to a wide spectrum of external stakeholders to update them on the environmental aspects of the Project and to seek their insights and views. There were continuous exchanges with the local communities, relevant professionals, experts, and other stakeholders. Due to the COVID-19 pandemic, liaison meetings with the local community, relevant professional and green groups were not arranged during the reporting period.

2.9.1 Community Liaison Groups

In order to enhance communication with the community in a proactive way, five Community Liaison Groups (CLGs) were set up in 2012 in the neighbouring districts of HKIA, namely Islands, Kwai Tsing, Shatin, Tsuen Wan and Tuen Mun. The CLGs are comprehensive platforms for the AAHK to update the community leaders about the detailed design, progress of construction and operation, and environmental monitoring and audit results of the Project, and listen to their views on various topics related to HKIA and the Project, including environmental matters. The AAHK also leverages on the CLGs to exchange views with the community on the latest airport developments, hence enhancing airport services and helping to contribute to the betterment of these districts. The CLGs have a total of about 130 members involving district councillors and community leaders. Due to the COVID-19 pandemic, no meeting was arranged during the reporting period.

2.9.2 Professional Liaison Group and Green Non-Governmental Organizations

The Professional Liaison Group, comprising 20 members of relevant professionals and experts, was set up to enhance transparency and communication, as well as enquiries and complaints-handling on all environmental issues related to the Project; and to promote community cooperation and participation and implementation of suitable local environmental enhancement works that are included in the Environmental Permit. Due to the COVID-19 pandemic, no meeting was arranged during the reporting period.

Roundtable meetings with Green Non-Governmental Organizations (NGOs) were proactively arranged to facilitate exchanges on environmental issues related to the Project. Updates of the Project, including environmental monitoring and audit results and details on the implementation of environmental enhancement measures were shared with the participants. Due to the COVID-19 pandemic, no meeting was arranged during the reporting period.

2.9.3 Other Stakeholders

To encourage two-way communications with stakeholders and the community, a dedicated telephone hotline and email has been set up since December 2015. One enquiry was received via the hotline, and

four enquiries were received via the dedicated email during the reporting period. The enquiries were followed up and responded by AAHK.

2.10 Review of the Key Assumptions Adopted in the EIA Report

With reference to Appendix E of the Manual, it is noted that the key assumptions adopted in approved EIA report for the construction phase are still valid and no major changes are involved. The environmental mitigation measures recommended in the approved EIA Report remain applicable and shall be implemented in undertaking construction works for the Project.

2.11 Key Environmental Issues for the Coming Reporting Period

The key environmental issues for the Project in the coming reporting period are expected to be associated with construction activities including:

- Generation of dust from construction works and stockpiles;
- Noise from operating equipment and machinery on-site;
- Generation of site surface runoffs and wastewater from activities on-site;
- Water quality from DCM works and marine filling;
- DEZ monitoring for ground improvement works (DCM works), seawall construction and bored piling for approach lights;
- Implementation of MMWP for silt curtain deployment;
- Sorting, recycling, storage and disposal of general refuse and construction waste;
- Reuse of treated marine sediments from piling and excavation works;
- Management of chemicals and avoidance of oil spillage on-site; and
- Acoustic decoupling measures for equipment on marine vessels.

The implementation of required mitigation measures by the contractors will be monitored by the ET.

3 Report on Non-compliance, Complaints, Notifications of Summons and Prosecutions

3.1 Compliance with Other Statutory Environmental Requirements

During the reporting period, environmental related licenses and permits required for the construction activities were checked. No non-compliance with environmental statutory requirements was recorded.

3.2 Analysis and Interpretation of Complaints, Notification of Summons and Status of Prosecutions

3.2.1 Complaints

Ten environmental complaints were received in the reporting period. The environmental complaints were attended to and investigations were conducted by the ET in accordance with the Manual and the Complaint Management Plan. The summary of the complaints and analysis is presented in **Appendix F**.

3.2.2 Notifications of Summons or Status of Prosecution

No notification of summons or prosecution were received in the reporting period.

3.3 Cumulative Statistics

Cumulative statistics on exceedance, non-compliance, complaints, notifications of summons and status of prosecutions are summarized in **Appendix F**.

4 Conclusion and Recommendation

In the reporting period from 1 January 2020 to 31 December 2020, the EM&A programme has been implemented in accordance with the Manual of the Project. The EM&A works carried out during the reporting period include construction dust and noise measurements, water quality monitoring, vessel line-transect surveys, land-based theodolite tracking surveys supplemented with passive acoustic monitoring for CWD monitoring, waste monitoring, as well as environmental site inspections and landscape and visual monitoring for the Project's construction works.

For water quality, the monitoring results for turbidity and total alkalinity obtained in the reporting period complied with the corresponding Action and Limit Levels stipulated in the EM&A programme. Relevant investigation and follow-up procedures were conducted according to the EM&A programme if the corresponding Action and Limit Levels were triggered. For DO, SS, chromium and nickel, some of the monitoring results triggered the relevant Action or Limit Level in the reporting period, and the corresponding investigations were conducted accordingly. The investigation findings concluded that the cases were not related to the Project. To conclude, the construction operation in the reporting period did not introduce adverse impact to all water quality sensitive receivers.

The monitoring results in relation to the construction dust, construction noise, waste, and CWD did not trigger their corresponding Action or Limit Levels during the reporting period.

A total of 5,388.5 km survey effort was conducted for the vessel line-transect monitoring for CWD during the 12-month monitoring period. A total of 166 groups of 616 CWDs were sighted in NWL, AW, WL and SWL survey areas. No CWDs were recorded in NEL survey area. The combined encounter rates by number of dolphin sightings and by number of dolphins were 3.21 and 11.99 respectively. No triggering of Action and Limit Levels for encounter rates were recorded during the construction phase during 2020. Overall abundance of CWD in Hong Kong western waters was estimated at 32 dolphins in 2020 from line-transect analysis. CWD relative occurrence from land-based surveys around Lung Kwu Chau peaked in January, with fewer sightings during summer. Waters off Lung Kwu Chau continue to be habitat used primarily for foraging and also for travelling. Passive acoustic monitoring provides evidence that dolphins continue using the area around south of Sha Chau throughout the year, with especially high incidence in winter than in other seasons in 2020. The acoustic data also showed consistently higher levels of dolphin clicking activity at night compared with daytime, which may be indicative of increased foraging and concomitant use of echolocation by dolphins during hours of darkness.

A total of 826 ferry movements between HKIA SkyPier and Zhuhai / Macau were audited in the reporting period in accordance with the SkyPier Plan. The daily movements of all SkyPier HSFs in the reporting period, including those not using the diverted route across the SCZ, ranged between 0 and 94, which falls within the maximum daily cap number of 125. The annual daily average of all SkyPier HSFs in the reporting period was 13 movements, which falls within the annual daily average cap of 99 SkyPier HSF movements. All 826 audited ferry movements were found travelling through the SCZ with average speeds at or below 15 knots. No route deviation case was recorded for all audited ferry movements in the reporting period.

The audit of construction and associated vessels has started since August 2016. ET has conducted audit to ensure that the contractors were fully complied with the requirements of the MTRMP-CAV. The MSS was launched in March 2017. The MSS automatically recorded the deviation case such as speeding, entering no entry zone, not travelling through the designated gate. ET conducted checking to ensure the MSS records all deviation cases accurately. A total of 24 skipper training workshops were conducted by

the ET during the reporting period with captains of construction vessels associated with 3RS contracts. Another 80 skipper training workshops were held by contractors' Environmental Officers and competency tests were conducted subsequently with the trained captains by ET.

On the implementation of MMWP, silt curtains were in place by the contractors for sand blanket laying and marine filling works and marine bored piling for approach lights, and dolphin observers were deployed in accordance with the MMWP. On the implementation of DEZ Plan, dolphin observers were deployed by the contractors for continuous monitoring of the DEZ for DCM works, seawall construction and marine bored piling for approach lights in accordance with the DEZ Plan. Trainings for the dolphin observers on the implementation of MMWP and DEZ monitoring were provided by the ET prior to the aforementioned works. From the contractors' MMWP observation records, no dolphin or other marine mammals were observed within or around the silt curtains during the reporting period. As for DEZ monitoring records, no dolphin or other marine mammals were observed within the DEZs in this reporting period. Audits of acoustic decoupling for construction vessels were also carried out by the ET during weekly site inspections.

External stakeholder engagement activities including setting up of a dedicated project website for the general public, organising of media workshop, and visit to the marine work site and MTCC etc., were carried out to update them on the environmental aspects of the Project and ensure transparent and engaging communication. Due to the COVID-19 pandemic, liaison meetings with the local community, relevant professional and green groups were not arranged during the reporting period.

Overall, the recommended environmental mitigation measures, as included in the EM&A programme, have been effectively implemented during the reporting period. Also, the EM&A programme implemented by the ET has effectively monitored the construction activities and ensure the proper implementation of mitigation measures.

Figures

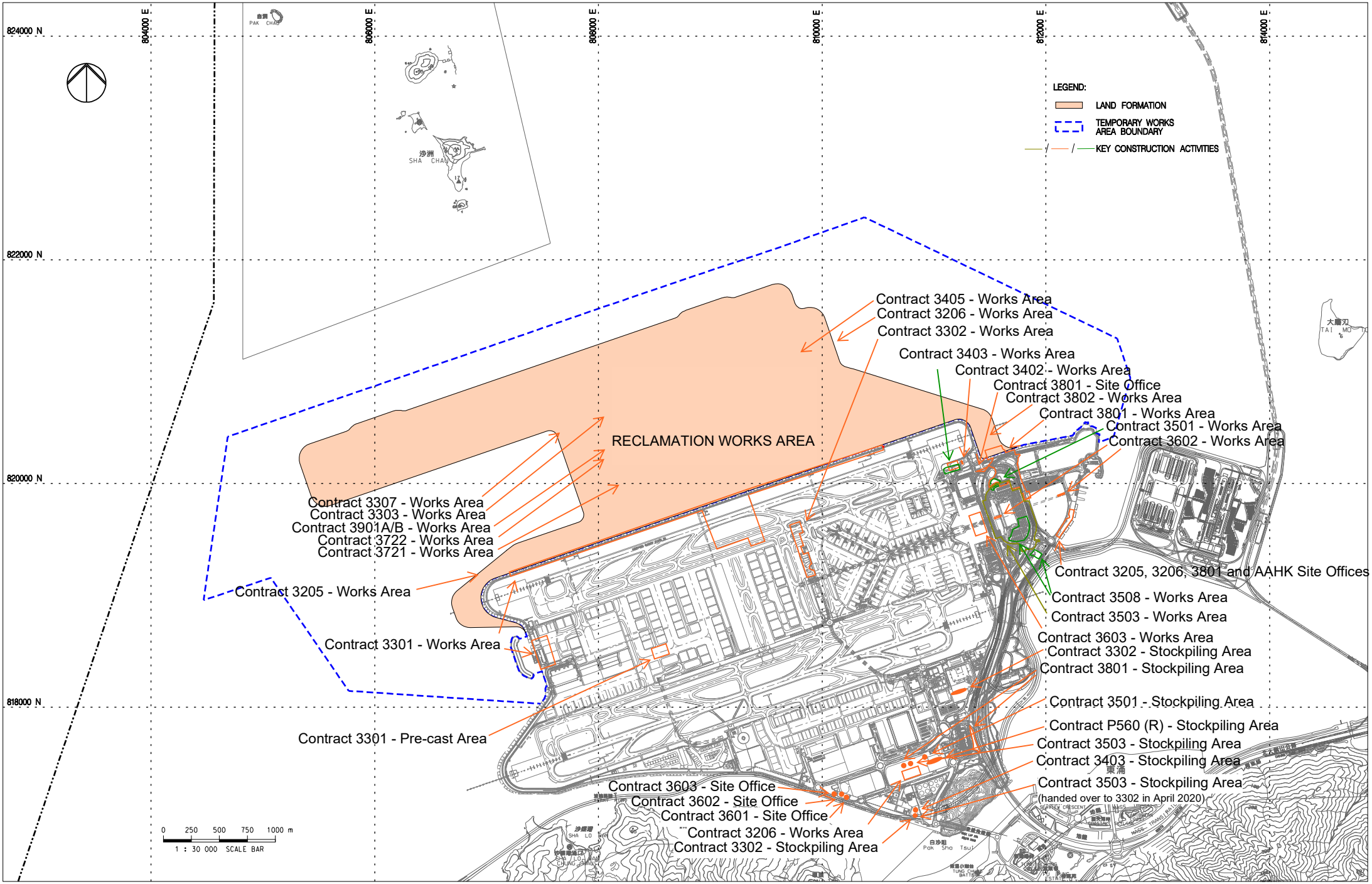
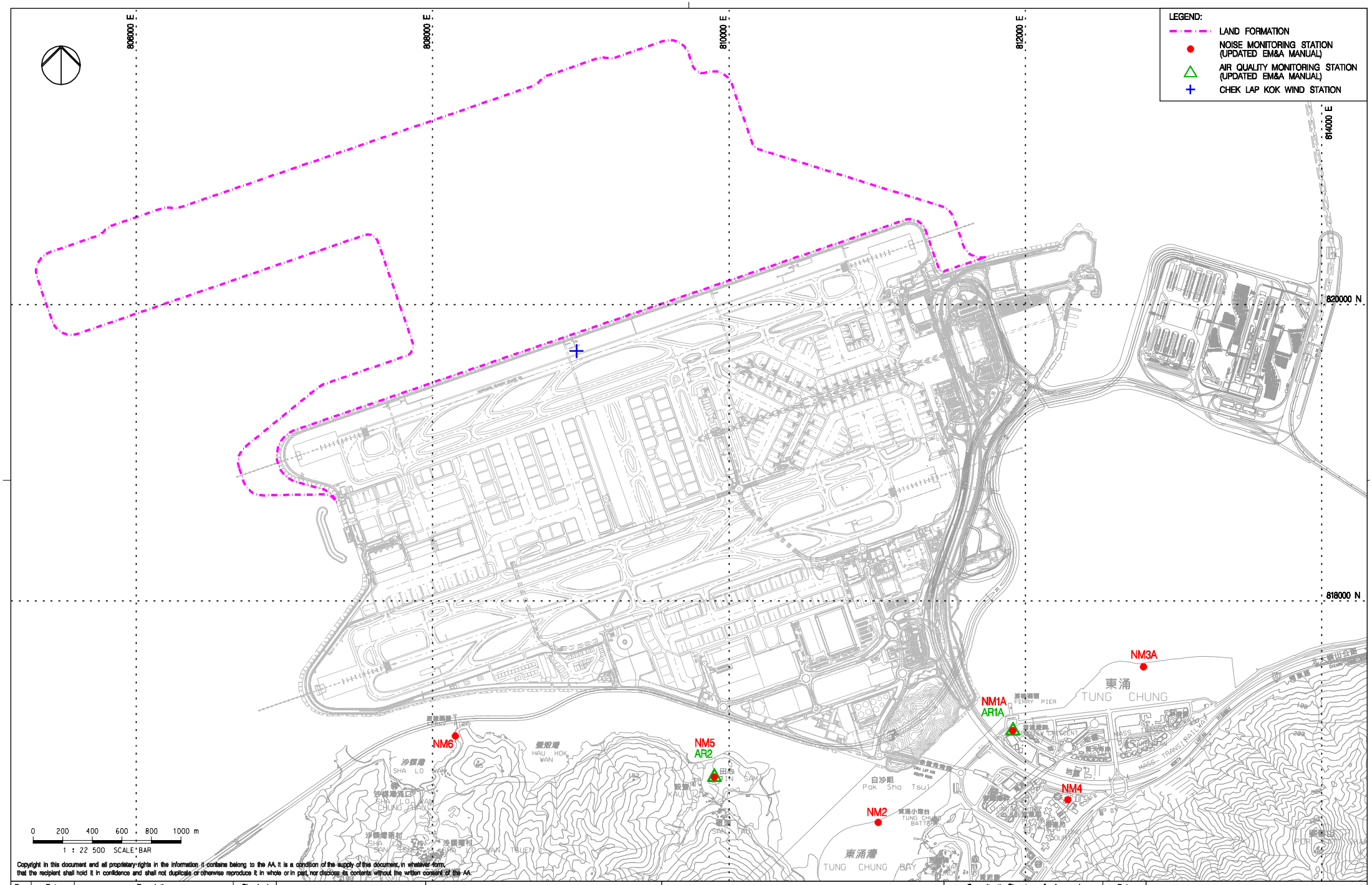


FIGURE 1.1 LOCATIONS OF KEY CONSTRUCTION ACTIVITIES

Note: The locations are for indicative purpose. The actual construction work locations are in accordnace with the construction work programme.



Rev.	Date	Description	Checked
A	06JAN16	FIRST ISSUE	RO
B	29JAN16	GENERAL REVISION	RO
C	11FEB16	GENERAL REVISION	RO
D	29OCT18	GENERAL REVISION	SH

香港國際機場 HONG KONG INTERNATIONAL AIRPORT

MOTT MACDONALD

Title

LOCATIONS OF AIR AND NOISE MONITORING STATIONS AND CHEK LAP KOK WIND STATION

Consultant's Signatures for Approval		Date
Design	TK	29OCT18
Checkers	TK	29OCT18
Approver	EC	29OCT18

EXPANSION OF HONG KONG INTERNATIONAL AIRPORT INTO A THREE-RUNWAY SYSTEM

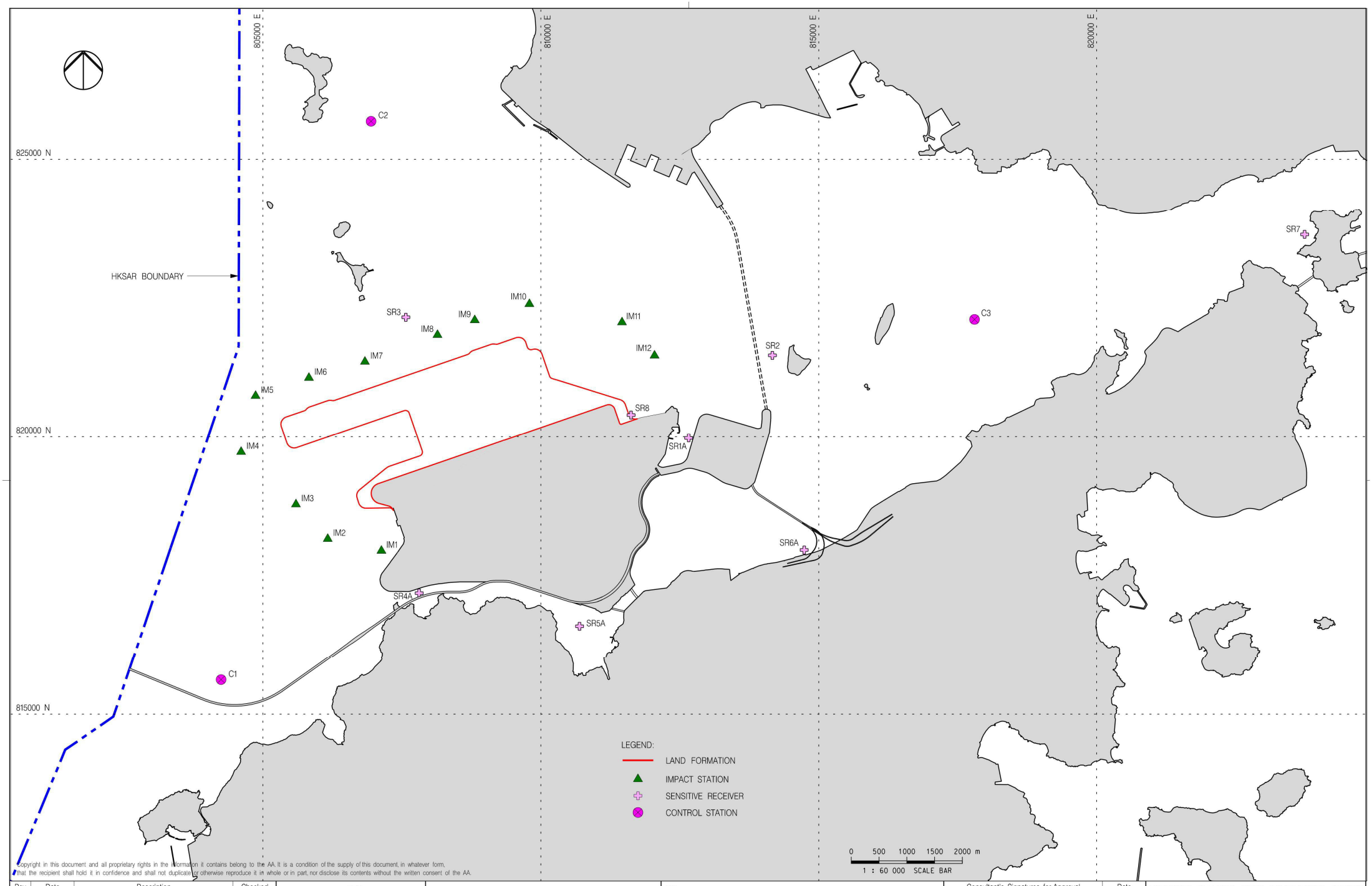
Drawing No.

FIGURE 2.1

Scale at A3 1 : 22500

Rev. D

Filename: J:\355482\REPORT\ENV\EMA\181029\FIG 2.1.dgn



Rev.	Date	Description	Checked
A	21AUG19	FIRST ISSUE	VL

香港國際機場 HONG KONG INTERNATIONAL AIRPORT

Airport Authority Hong Kong, Tower 1 Sky Plaza Road, Hong Kong International Airport, Lantau, Hong Kong
Tel: (852) 2188 7111 Fax: (852) 2824 0711

MOTT MACDONALD

Title

WATER QUALITY MONITORING STATIONS

Consultant's Signatures for Approval		Date
Design	DC	21AUG19
Checkers	DC / TK	21AUG19
Approver	EC	21AUG19

EXPANSION OF HONG KONG INTERNATIONAL AIRPORT INTO A THREE-RUNWAY SYSTEM

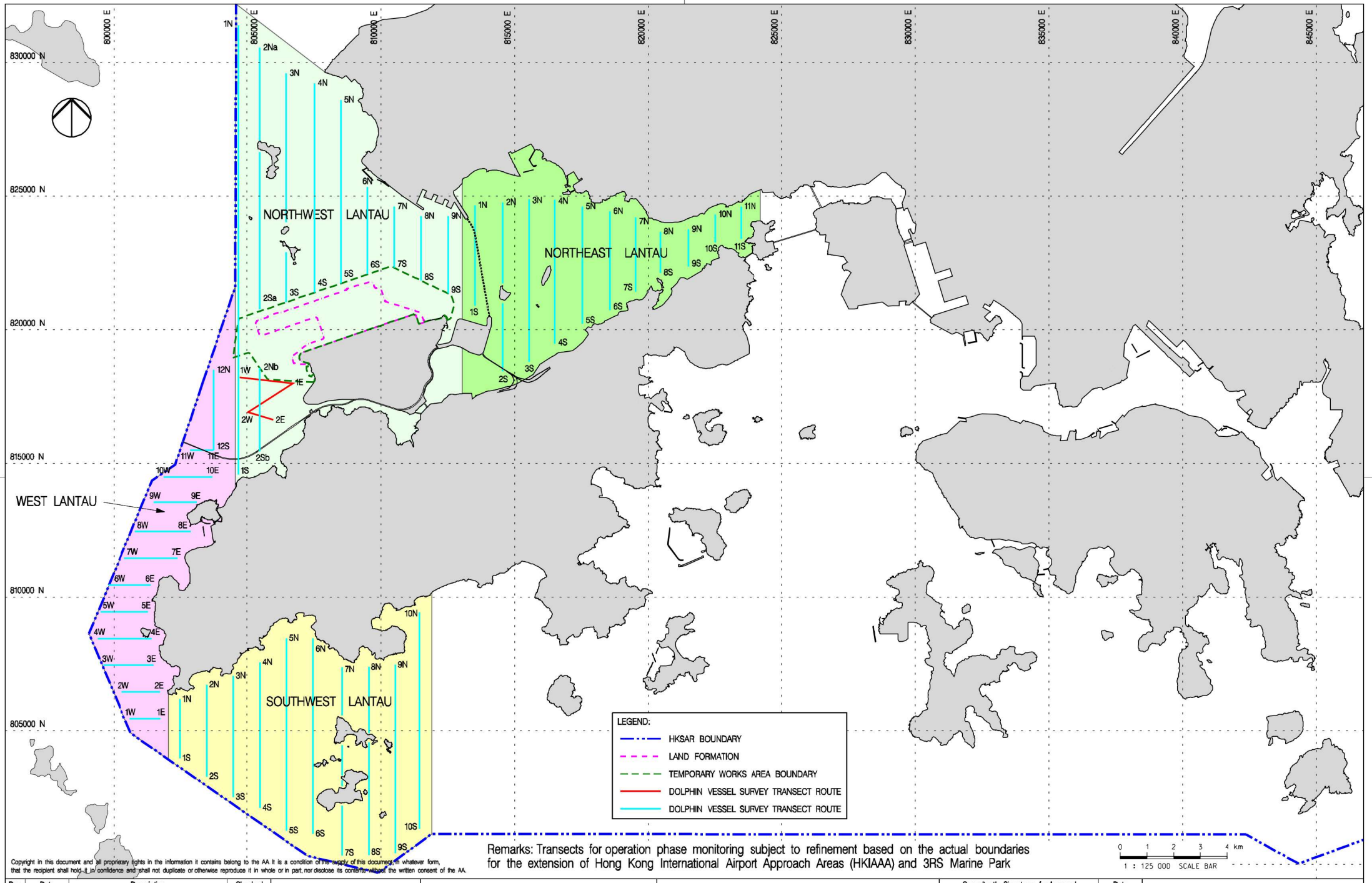
Drawing No.

FIGURE 2.2

Scale at A3 1 : 60000

Rev. A

Filename: J:\355482\REPORT\ENV\EMA\190821\FIG 4.1.dgn



Remarks: Transects for operation phase monitoring subject to refinement based on the actual boundaries for the extension of Hong Kong International Airport Approach Areas (HKIAAA) and 3RS Marine Park

0 1 2 3 4 km
1 : 125 000 SCALE BAR

Rev.	Date	Description	Checked
B	27JUL16	GENERAL REVISION	JT
C	06FEB17	GENERAL REVISION	JT
D	01MAR17	GENERAL REVISION	JT
E	29OCT18	GENERAL REVISION	SH
F	04APR19	GENERAL REVISION	SH

香港國際機場 HONG KONG INTERNATIONAL AIRPORT

MOTT MACDONALD

Title

VESSEL BASED DOLPHIN MONITORING TRANSECTS IN CONSTRUCTION, POST-CONSTRUCTION AND OPERATION PHASES

Consultant's Signatures for Approval		Date
Design	JC	04APR19
Checkers	JC / TK	04APR19
Approver	EC	04APR19

EXPANSION OF HONG KONG INTERNATIONAL AIRPORT INTO A THREE-RUNWAY SYSTEM

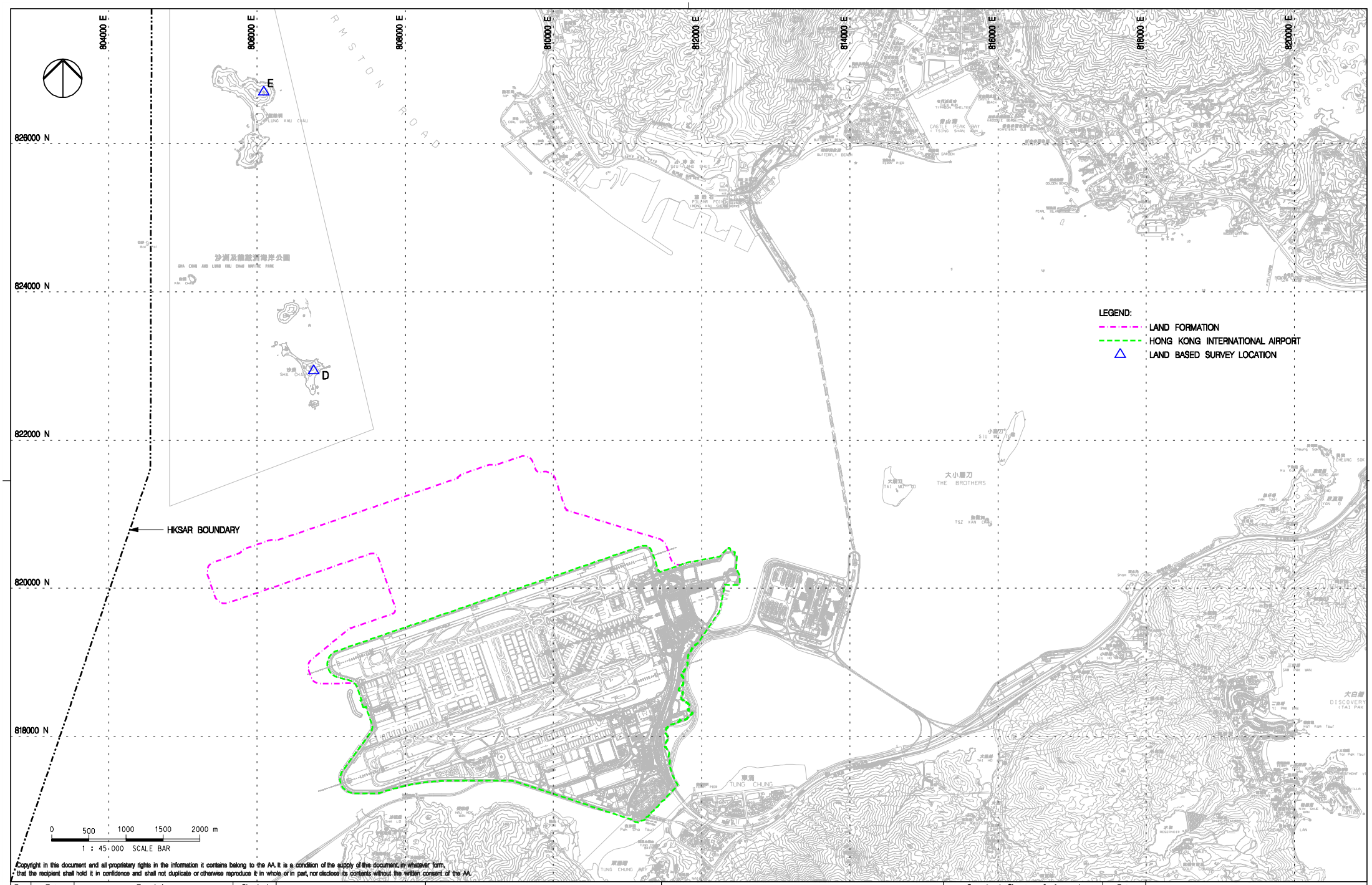
Drawing No.

FIGURE 2.3

Scale at A3
1 : 125000

Rev. F

Filename: J:\355482\REPORT\ENV\EMA\190404\FIG 6.1.dgn



Rev.	Date	Description	Checked
A	02DEC15	FIRST ISSUE	JC
B	06FEB17	GENERAL REVISION	JC
C	29OCT18	GENERAL REVISION	SH

香港國際機場 HONG KONG INTERNATIONAL AIRPORT

MOTT MACDONALD

Title

LAND BASED DOLPHIN MONITORING IN BASELINE AND CONSTRUCTION PHASES

Consultant's Signatures for Approval		Date
Design	JC	29OCT18
Checkers	JC / TK	29OCT18
Approver	EC	29OCT18

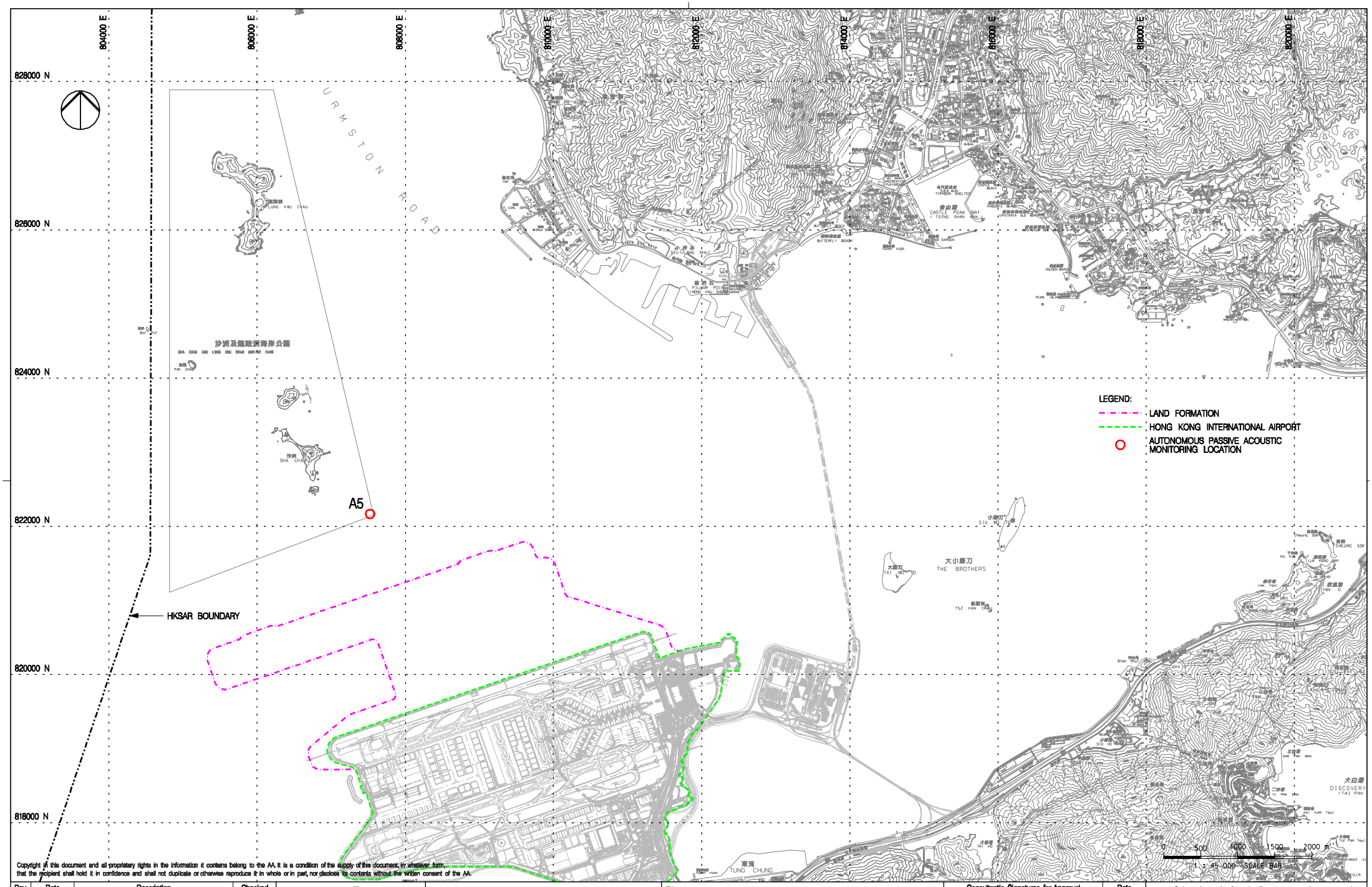
EXPANSION OF HONG KONG INTERNATIONAL AIRPORT INTO A THREE-RUNWAY SYSTEM

Drawing No. FIGURE 2.4

Scale at A3 1 : 45000

Rev. C

Filename: J:\355482\REPORT\ENV\EMA\181029\FIG 2.5.dgn



Rev.	Date	Description	Checked
A	29AUG17	FIRST ISSUE	JT
B	10OCT17	GENERAL REVISION	PL
C	29OCT18	GENERAL REVISION	SH

香港國際機場 HONG KONG INTERNATIONAL AIRPORT

MOTT MACDONALD

Title

LOCATION FOR AUTONOMOUS PASSIVE ACOUSTIC MONITORING

Consultant's Signatures for Approval		Date
Design	JC	29OCT18
Checkers	JC / TK	29OCT18
Approver	EC	29OCT18

EXPANSION OF HONG KONG INTERNATIONAL AIRPORT INTO A THREE-RUNWAY SYSTEM

Drawing No.

FIGURE 2.5

Scale at A3 1 : 45000

Rev. C

Filename: J:\355482\REPORT\ENV\EMA\181029\FIG 2.11.dgn

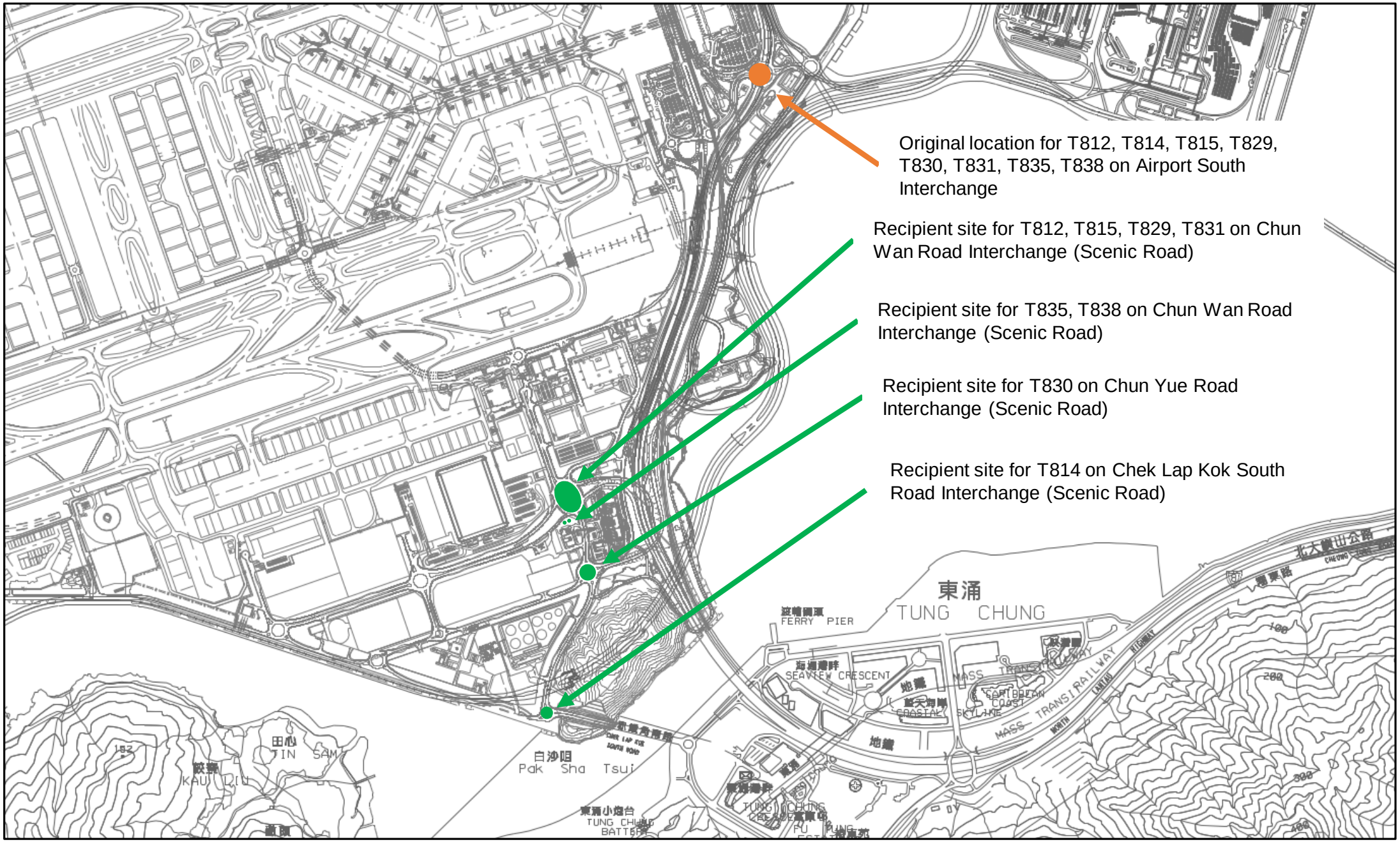


FIGURE 2.6 LOCATIONS OF NEWLY TRANSPLANTED TREES DURING THE REPORTING PERIOD

Appendix A. Contract Description

Contract Description

Contract No.	Contract Title	Contractor	Key Construction Activities
P560 (R)	Aviation Fuel Pipeline Diversion Works	Langfang Huayuan Mechanical and Electrical Engineering Co., Ltd.	Diversion of the existing submarine aviation fuel pipelines will use a horizontal directional drilling (HDD) method forming two rock drill holes by drilling through bedrock from a launching site located at the west of the airport island to a daylighting point adjacent to the offshore receiving platform at Sha Chau. Two new pipelines will be installed through the drilled tunnels. The total length is approximately 5 km. Drilling works will proceed from the HDD launching site at the airport island.
3205	Deep Cement Mixing (Package 5)	Bachy Soletanche- Sambo Joint Venture	The works covered by the Contract 3205 comprise ground improvement of seabed using Deep Cement Mixing (DCM) method, the major construction activities including without limitation the following • Geophysical surveys; • Supply and placing of geotextile and sand blanket under seawalls; • Supply, maintenance, installation and removal of silt curtain systems; • Preliminary construction trails; • Supply and installation of DCM clusters within the works areas; and • Coring, sampling and testing of DCM treated soils and reporting works.
3206	Reclamation Contract	ZHEC-CCCC-CDC Joint Venture	The works covered by the Contract 3206 comprise the formation of approximately 650 hectares of land north of the existing airport island for the project, the major construction activities including without limitation the following • Site clearance and demolition; • Geotechnical and ground improvement works; • Seawall construction; • Marine and land filling works; and • Civil works.
3301	North Runway Crossover Taxiway	FJT-CHEC-ZHEC Joint Venture	The works covered by the Contract 3301 comprise the construction of a new dual taxiway across the existing north runway and utility services and cable

Contract No.	Contract Title	Contractor	Key Construction Activities
			ducting systems. The major construction activities include without limitation the following: • Construction of a new dual taxiway; • Cable ducting works; • Extension of existing portable water supply system; and • All associated works.
3302	Eastern Vehicular Tunnel Advance Works	China Road and Bridge Corporation	The works covered by the Contract 3302 comprise the design and construction of the first section of the new Eastern Vehicular Tunnel and a Road Tunnel Plant Building. The major construction activities include without limitation the following: • Foundation and structural works; • Cast-in / Underground electrical & mechanical works and utility services; and • All associated testing and commissioning works.
3303	Third Runway and Associated Works	SAPR Joint Venture	The works covered by the Contract 3303 comprise all elements of permanent works and temporary works required for the completion, commissioning and operation of the new North Runway and existing South Runway following the closure of the existing North Runway. The major construction activities include without limitation the following: • New runway, taxiways, and associated works; • Infrastructure works; • Construction of ancillary buildings and facilities; • Set up of various airport systems; and • All associated testing and commissioning works.
3307	Fire Training Facility	Paul Y. Construction Company Limited	The works covered by the Contract 3307 comprise the construction of a Fire Training Facility on the new reclamation area to replace the existing facility at the Airport Island. The major construction activities include without limitation the following: • Building services works; • Civil works; and • All associated testing and temporary works.

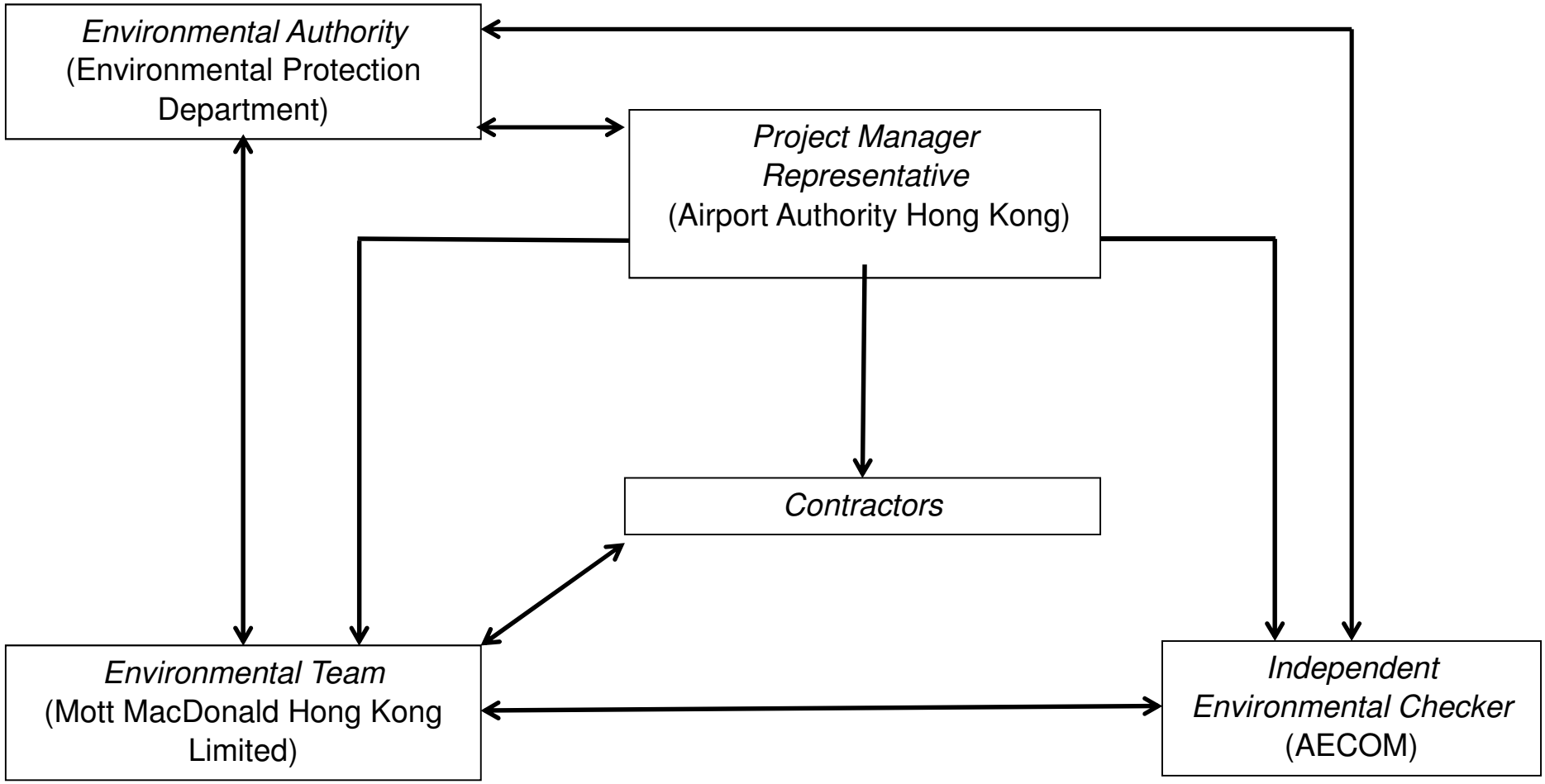
Contract No.	Contract Title	Contractor	Key Construction Activities
3402	New Integrated Airport Centers Enabling Works	Wing Hing Construction Co., Ltd.	The works covered by the Contract 3402 comprise the enabling works for the new Integrated Airport Centers. The major construction activities include without limitation the following: • Site clearance and demolition; • Building services works; • Utilities diversion and installation works; • Roadworks including associated facilities; and • All associated testing and commissioning works.
3403	New Integrated Airport Centres – Building and Civil Works	Sun Fook Kong Construction Limited	The works covered by the Contract 3403 comprise the construction of a new Integrated Airport Centre (IAC) and a number of ancillary facilities and Additions and Alteration (A&A) works for converting the existing IAC into a back-up IAC, including without limitation the following: • Site clearance and demolition; • Building structure and envelope; • Building Services and Airport Systems; and • Utilities division and installations.
3405	Three Runway Concourse Foundation and Substructure Works	China Road and Bridge Corporation - Bachy Soletanche Group Limited - LT Sambo Co., Ltd. Joint Venture	The works covered by the Contract 3405 comprise without limitation the following: • Piled foundation works; • Basement and tunnel structure works; • Associated internal reinforced concrete structures; • Backfilling and compaction of works area; • Handling, treatment, and re-use of marine deposit, contaminated mud and DCM treated soil generated from the excavations; and • Associated testing and temporary works.
3501	Antenna Farm and Sewage Pumping Station	Build King Construction Limited	The works covered by the Contract 3501 comprise the construction of antenna farm and sewage pumping station. The major construction activities include without limitation the following: • Civil and structural engineering works; • Building services works; • Architectural builder's works and finishes; • Trenchless excavation for sewage rising mains; and

Contract No.	Contract Title	Contractor	Key Construction Activities
			• All associated works.
3503	Terminal 2 Foundation and Substructure Works	Leighton - Chun Wo Joint Venture	The works covered by the Contract 3503 comprise the foundations for the new T2 terminal, two annex buildings and associated viaducts, construction of the new T2 basement and south annex building structures, diaphragm walls, utility services and other advance works. The major construction activities include without limitation the following: • Re-configuration and demolition of existing utilities and structures; • Pile foundations for the expanded T2 Terminal Building, South Annex Building, and North Annex Building; • Construction of new South Annex Building; • Diversion and provisions of utilities; and • All associated testing and commissioning works.
3508	Terminal 2 Expansion Works	Gammon Engineering and Construction Co., Ltd	The works covered by the Contract 3508 comprise the construction of T2, North Annex Building (NAB) and South Annex Building (SAB) with interconnecting bridges, landside transport infrastructure including viaducts and at grade roads, underground utility services, one sewage pumping station with the associated electrical building, footbridges, external works and modification works to existing facilities. The major construction activities include without limitation the following: • Superstructure, interior landscaping, building services and airport system of T2, NAB, SAB and associated footbridges; • Additions and Alteration (A&A) works of the existing Airport World Trade Centre (AWTC); • Modification of the existing APM and BHS tunnels; • External works and road networks around T2; and • Utilities.
3601	New Automated People Mover System (TRC Line)	CRRC Puzhen Bombardier Transportation Systems Limited and CRRC Nanjing Puzhen Co., Ltd. Joint Venture	The works covered by the Contract 3601 comprise the initial phase of the APM system connecting the Third Runway Concourse (TRC) and the APM Interchange Station in the modified T2, and extension of the new APM system into the new APM Depot east of T2. The major construction activities include without limitation the following: • New 3-guideway APM system between TRC and T2;

Contract No.	Contract Title	Contractor	Key Construction Activities
			• Extension of the TRC Line into the new APM Depot; • APM associated sub-systems (communications, signalling, etc.) • Associated civil works; and • All associated testing, commissioning works.
3602	Existing APM System Modification Works	Niigata Transys Co., Ltd.	The works covered by the Contract 3602 comprise the detailed design, supply, manufacture, fabrication, implementation, testing and commissioning of the following modification works of the existing APM systems: • Modification of existing APM depot and APM cars; • Modification of existing T1 & T2 tunnels; and • Preparation of new APM depot.
3603	3RS Baggage Handling System	VISH Consortium	The works covered by the Contract 3603 comprise the design, supply, manufacture, delivery, installation, testing and commissioning of the high-speed baggage handling system.
3721	Construction Support Infrastructure Works	China State Construction Engineering (Hong Kong) Limited	The works covered by the Contract 3721 comprise the construction of the infrastructure works and building facilities on the reclaimed land formation. The major construction activities include without limitation the following: • Project site road; • Utilities; • Cargo loading quays; and • Security fencing and hoarding.
3722	Western Support Area – Construction Support Facilities	Tapbo Construction Company Limited and Konwo Modular House Limited Joint Venture	The works covered by the Contract 3722 comprise the design and construction of support facilities, including site office, Canteen, Safety Induction Centre and Medical Centre, Material Testing Laboratories and Typhoon Shelter, Vehicle Maintenance Facility and Fuel Storage Facility. The major construction activities include without limitation the following: • Construction of support facilities; • Foundation and structural works; and • Building services works.
3801	APM and BHS Tunnels on Existing Airport Island	China State Construction Engineering (Hong Kong) Limited	The works covered by the Contract 3801 comprise the construction of the APM and Baggage Handling System (BHS) tunnels on existing airport island. The major construction activities include without limitation the following: • Construction of APM and BHS tunnels; • Construction of ventilation building and associated infrastructure; and

Contract No.	Contract Title	Contractor	Key Construction Activities
			• Construction, testing and commissioning of sewerage pumping station; and • Civil and structural engineering works.
3802	APM and BHS Tunnels and Related Works	Gammon Construction Limited	The works covered by the Contract 3802 comprise the construction of the APM and BHS tunnels on existing airport island. The major construction activities include without limitation the following: • Construction of APM/ BHS Tunnels; • Construction of ancillary buildings/ facilities; • Building services and airport systems; • Infrastructure Works; • Underground utilities and services; and • All associated testing and commissioning works.
3901A	Concrete Batching Facility	K. Wah Concrete Company Limited	The works covered by the Contract 3901A comprise the establishment, operation and maintenance of a concrete batching facility at the Project Site and the supply of concrete products. The major construction activities include without limitation the following: • Supply of all equipment for the installation of the Facility to the Site; and • Supply of all raw materials required for the production of ready mixed concrete products and the continual operation of the Facility.
3901B	Concrete Batching Facility	Gammon Construction Limited	The works covered by the Contract 3901B comprise the establishment, operation and maintenance of a concrete batching facility at the Project Site and the supply of concrete products. The major construction activities include without limitation the following: • Supply of all equipment for the installation of the Facility to the Site; and • Supply of all raw materials required for the production of ready mixed concrete products and the continual operation of the Facility.

Appendix B. Project Organization Chart


Environmental Authority
(Environmental Protection Department)
Project Manager Representative
(Airport Authority Hong Kong)
Contractors
Environmental Team
(Mott MacDonald Hong Kong Limited)
Independent Environmental Checker
(AECOM)

Appendix C. Environmental Mitigation Implementation Schedule (EMIS) for Construction Phase

Environmental Mitigation Implementation Schedule (EMIS) for Construction Phase

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			Air Quality Impact – Construction Phase		
5.2.6.2	2.1	-	**Dust Control Measures** ▪ Water spraying for 12 times a day or once every two hours for 24-hour working at all active works area.	Within construction site / Duration of the construction phase	I
5.2.6.3	2.1	-	▪ Covering of at least 80% of the stockpiling area by impervious sheets. Water spraying of all dusty materials immediately prior to any loading transfer operation so as to keep the dusty material wet during material handling.	Within construction site / Duration of the construction phase	I
5.2.6.4	2.1	-	Dust control practices as stipulated in the Air Pollution Control (Construction Dust) Regulation should be adopted. These practices include: Good Site Management ▪ Good site management is important to help reducing potential air quality impact down to an acceptable level. As a general guide, the Contractor should maintain high standard of housekeeping to prevent emission of fugitive dust. Loading, unloading, handling and storage of raw materials, wastes or by-products should be carried out in a manner so as to minimise the release of visible dust emission. Any piles of materials accumulated on or around the work areas should be cleaned up regularly. Cleaning, repair and maintenance of all plant facilities within the work areas should be carried out in a manner minimising generation of fugitive dust emissions. The material should be handled properly to prevent fugitive dust emission before cleaning.	Within construction site / Duration of the construction phase	I
			Disturbed Parts of the Roads ▪ Each and every main temporary access should be paved with concrete, bituminous hardcore materials or metal plates and kept clear of dusty materials; or ▪ Unpaved parts of the road should be sprayed with water or a dust suppression chemical so as to keep the entire road surface wet.	Within construction site / Duration of the construction phase	I
			Exposed Earth ▪ Exposed earth should be properly treated by compaction, hydroseeding, vegetation planting or seating with latex, vinyl, bitumen within six months after the last construction activity on the site or part of the site where the exposed earth lies.	Within construction site / Duration of the construction phase	I

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			Loading, Unloading or Transfer of Dusty Materials ▪ All dusty materials should be sprayed with water immediately prior to any loading or transfer operation so as to keep the dusty material wet.	Within construction site / Duration of the construction phase	I
			Debris Handling ▪ Any debris should be covered entirely by impervious sheeting or stored in a debris collection area sheltered on the top and the three sides; and ▪ Before debris is dumped into a chute, water should be sprayed so that it remains wet when it is dumped.	Within construction site / Duration of the construction phase	I
			Transport of Dusty Materials ▪ Vehicle used for transporting dusty materials/spoils should be covered with tarpaulin or similar material. The cover should extend over the edges of the sides and tailboards.	Within construction site / Duration of the construction phase	I
			Wheel washing ▪ Vehicle wheel washing facilities should be provided at each construction site exit. Immediately before leaving the construction site, every vehicle should be washed to remove any dusty materials from its body and wheels.	Within construction site / Duration of the construction phase	I
			Use of vehicles ▪ The speed of the trucks within the site should be controlled to about 10km/hour in order to reduce adverse dust impacts and secure the safe movement around the site; ▪ Immediately before leaving the construction site, every vehicle should be washed to remove any dusty materials from its body and wheels; and ▪ Where a vehicle leaving the construction site is carrying a load of dusty materials, the load should be covered entirely by clean impervious sheeting to ensure that the dusty materials do not leak from the vehicle.	Within construction site / Duration of the construction phase	I
			Site hoarding ▪ Where a site boundary adjoins a road, street, service lane or other area accessible to the public, hoarding of not less than 2.4m high from ground level should be provided along the entire length of that portion of the site boundary except for a site entrance or exit.	Within construction site / Duration of the construction phase	I
5.2.6.5	2.1	-	**Best Practices for Concrete Batching Plant** The relevant best practices for dust control as stipulated in the Guidance Note on the Best Practicable Means for Cement Works (Concrete Batching Plant) BPM 3/2 as well as in the future Specified Process licence should be adopted. The best practices are recommended to be applied to both the land based and floating concrete batching plants. Best practices include: Cement and other dusty materials	Within Concrete Batching Plant / Duration of the construction phase	I

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			▪ The loading, unloading, handling, transfer or storage of cement, pulverised fuel ash (PFA) and/or other equally dusty materials shall be carried in a totally enclosed system acceptable to EPD. All dust-laden air or waste gas generated by the process operations shall be properly extracted and vented to fabric filtering system to meet the required emission limit; ▪ Cement, PFA and/or other equally dusty materials shall be stored in storage silo fitted with audible high level alarms to warn of over-filling. The high-level alarm indicators shall be interlocked with the material filling line such that in the event of the silo approaching an overfilling condition, an audible alarm will operate, and after 1 minute or less the material filling line will be closed; ▪ Vents of all silos shall be fitted with fabric filtering system to meet the required emission limit; ▪ Vents of cement/PFA weighing scale shall be fitted with fabric filtering system to meet the required emission limit; and ▪ Seating of pressure relief valves of all silos shall be checked, and the valves re-seated if necessary, before each delivery.		
			Other raw materials ▪ The loading, unloading, handling, transfer or storage of other raw materials which may generate airborne dust emissions such as crushed rock, sand, stone aggregate, shall be carried out in such a manner to prevent or minimize dust emissions; ▪ The materials shall be adequately wetted prior to and during the loading, unloading and handling operations. Manual or automatic water spraying system shall be provided at all unloading areas, stock piles and material discharge points; ▪ All receiving hoppers for unloading relevant materials shall be enclosed on three sides up to 3 m above the unloading point. In no case shall these hoppers be used as the material storage devices; ▪ The belt conveyor for handling materials shall be enclosed on top and two sides with a metal board at the bottom to eliminate any dust emission due to wind-whipping effect. Other type of enclosure will also be accepted by EPD if it can be demonstrated that the proposed enclosure can achieve same performance; ▪ All conveyor transfer points shall be totally enclosed. Openings for the passage of conveyors shall be fitted with adequate flexible seals; ▪ Scrapers shall be provided at the turning points of all conveyors to remove dust adhered to the belt surface; ▪ Conveyors discharged to stockpiles of relevant materials shall be arranged to minimize free fall as far as practicable. All free falling transfer points from conveyors to stockpiles shall be enclosed with chute(s) and water sprayed; ▪ Aggregates with a nominal size less than or equal to 5 mm should be stored in totally enclosed structure such as storage bin and should not be handled in open area. Where there is sufficient buffer area surrounding the concrete batching plant, ground stockpiling may be used;	Within Concrete Batching Plant / Duration of the construction phase	I

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			▪ The stockpile shall be enclosed at least on top and three sides and with flexible curtain to cover the entrance side; ▪ Aggregates with a nominal size greater than 5 mm should preferably be stored in a totally enclosed structure. If open stockpiling is used, the stockpile shall be enclosed on three sides with the enclosure wall sufficiently higher than the top of the stockpile to prevent wind whipping; and ▪ The opening between the storage bin and weighing scale of the materials shall be fully enclosed.		
			Loading of materials for batching ▪ Concrete truck shall be loaded in such a way as to minimise airborne dust emissions. The following control measures shall be implemented: (a) Pre-mixing the materials in a totally enclosed concrete mixer before loading the materials into the concrete truck is recommended. All dust-laden air generated by the pre-mixing process as well as the loading process shall be totally vented to fabric filtering system to meet the required emission limit; and (b) If truck mixing batching or other types of batching method is used, effective dust control measures acceptable to EPD shall be adopted. The dust control measures must have been demonstrated to EPD that they are capable to collect and vent all dust-laden air generated by the material loading/mixing to dust arrestment plant to meet the required emission limit. ▪ The loading bay shall be totally enclosed during the loading process.	Within Concrete Batching Plant / Duration of the construction phase	I
			Vehicles ▪ All practicable measures shall be taken to prevent or minimize the dust emission caused by vehicle movement; and ▪ All access and route roads within the premises shall be paved and adequately wetted.	Within Concrete Batching Plant / Duration of the construction phase	I
			Housekeeping ▪ A high standard of housekeeping shall be maintained. All spillages or deposits of materials on ground, support structures or roofs shall be cleaned up promptly by a cleaning method acceptable to EPD. Any dumping of materials at open area shall be prohibited.	Within Concrete Batching Plant / Duration of the construction phase	I
5.2.6.6	2.1	-	**Best Practices for Asphaltic Concrete Plant** The relevant best practices for dust control as stipulated in the Guidance Note on the Best Practicable Means for Tar and Bitumen Works (Asphaltic Concrete Plant) BPM 15 (94) as well as in the future Specified Process licence should be adopted. These include: Design of Chimney ▪ The chimney shall not be less than 3 metres plus the building height or 8 metres above ground level, whichever is the greater; ▪ The efflux velocity of gases from the main chimney shall not be less than 12 m/s at full load condition;	Within Concrete Batching Plant / Duration of the construction phase	N/A

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			▪ The flue gas exit temperature shall not be less than the acid dew point; and ▪ Release of the chimney shall be directed vertically upwards and not be restricted or deflected.		
			Cold feed side ▪ The aggregates with a nominal size less than or equal to 5 mm shall be stored in totally enclosed structure such as storage bin and shall not be handled in open area; ▪ Where there is sufficient buffer area surrounding the plant, ground stockpiling may be used. The stockpile shall be enclosed at least on top and three sides and with flexible curtain to cover the entrance side. If these aggregates are stored above the feeding hopper, they shall be enclosed at least on top and three sides and be wetted on the surface to prevent wind-whipping; ▪ The aggregates with a nominal size greater than 5 mm should preferably be stored in totally enclosed structure. Aggregates stockpile that is above the feeding hopper shall be enclosed at least on top and three sides. If open stockpiling is used, the stockpiles shall be enclosed on three sides with the enclosure wall sufficiently higher than the top of the stockpile to prevent wind whipping; ▪ Belt conveyors shall be enclosed on top and two sides and provided with a metal board at the bottom to eliminate any dust emission due to the wind-whipping effect. Other type of enclosure will also be accepted by EPD if it can be demonstrated that the proposed enclosure can be achieve the same performance; ▪ Scrapers shall be provided at the turning points of all belt conveyors inside the chute of the transfer points to remove dust adhered to the belt surface; ▪ All conveyor transfer points shall be totally enclosed. Openings for the passages of conveyors shall be fitted with adequate flexible seals; and ▪ All materials returned from dust collection system shall be transferred in enclosed system and shall be stored inside bins or enclosures.	Within Concrete Batching Plant / Duration of the construction phase	N/A
			Hot feed side ▪ The inlet and outlet of the rotary dryer shall be enclosed and ducted to a dust extraction and collection system such as a fabric filter. The particulate and gaseous concentration at the exhaust outlet of the dust collector shall not exceed the required limiting values; ▪ The bucket elevator shall be totally enclosed and the air be extracted and ducted to a dust collection system to meet the required particulates limiting value; ▪ All vibratory screens shall be totally enclosed and dust tight with close-fitted access inspection opening. Gaskets shall be installed to seal off any cracks and edges of any inspection openings; ▪ Chutes for carrying hot material shall be rigid and preferably fitted with abrasion resistant plate inside. They shall be inspected daily for leakages;	Within Concrete Batching Plant / Duration of the construction phase	N/A

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			▪ All hot bins shall be totally enclosed and dust tight with close-fitted access inspection opening. Gaskets shall be installed to seal off any cracks and edges of any inspection openings. The air shall be extracted and ducted to a dust collection system to meet the required particulates limiting value; and ▪ Appropriate control measures shall be adopted in order to meet the required bitumen emission limit as well as the ambient odour level (2 odour units).		
			Material transportation ▪ The loading, unloading, handling, transfer or storage of other raw materials which may generate airborne dust emissions such as crushed rocks, sands, stone aggregates, reject fines, shall be carried out in such a manner as to minimize dust emissions; ▪ Roadways from the entrance of the plant to the product loading points and/or any other working areas where there are regular movements of vehicles shall be paved or hard surfaced; and ▪ Haul roads inside the Works shall be adequately wetted with water and/or chemical suppressants by water trucks or water sprayers.	Within Concrete Batching Plant / Duration of the construction phase	N/A
			Control of emissions from bitumen decanting ▪ The heating temperature of the particular bitumen type and grade shall not exceed the corresponding temperature limit of the same type listed in Appendix 1 of the Guidance Note; ▪ Tamper-free high temperature cut-off device shall be provided to shut off the fuel supply or electricity in case the upper limit for bitumen temperature is reached; ▪ Proper chimney for the discharge of bitumen fumes shall be provided at high level; ▪ The emission of bitumen fumes shall not exceed the required emission limit; and The air-to-fuel ratio shall be properly controlled to allow complete combustion of the fuel. The fuel burners, if any, shall be maintained properly and free from carbon deposits in the burner nozzles.	Within Concrete Batching Plant / Duration of the construction phase	N/A
			Liquid fuel ▪ The receipt, handling and storage of liquid fuel shall be carried out so as to prevent the release of emissions of organic vapours and/or other noxious and offensive emissions to the air.	Within Concrete Batching Plant / Duration of the construction phase	N/A
			Housekeeping ▪ A high standard of housekeeping shall be maintained. Waste material, spillage and scattered piles gathered beneath belt conveyors, inside and around enclosures shall be cleared frequently. The minimum clearing frequency is on a weekly basis.	Within Concrete Batching Plant / Duration of the construction phase	N/A
5.2.6.7	2.1	-	**Best Practices for Rock Crushing Plants** The relevant best practices for dust control as stipulated in the Guidance Note on the Best Practicable Means for Mineral Works (Stone Crushing Plant) BPM 11/1 (95) as well as in the future Specified Process licence should be adopted. These include:	Within Concrete Batching Plant / Duration of the construction phase	N/A

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			Crushers ▪ The outlet of all primary crushers, and both inlet and outlet of all secondary and tertiary crushers, if not installed inside a reasonably dust tight housing, shall be enclosed and ducted to a dust extraction and collection system such as a fabric filter; ▪ The inlet hopper of the primary crushers shall be enclosed on top and 3 sides to contain the emissions during dumping of rocks from trucks. The rock while still on the trucks shall be wetted before dumping; ▪ Water sprayers shall be installed and operated in strategic locations at the feeding inlet of crushers; and ▪ Crusher enclosures shall be rigid and be fitted with self-closing doors and close-fitting entrances and exits. Where conveyors pass through the crusher enclosures, flexible covers shall be installed at entries and exits of the conveyors to the enclosure.		
			Vibratory screens and grizzlies ▪ All vibratory screens shall be totally enclosed in a housing. Screenhouses shall be rigid and reasonably dust tight with self-closing doors or close-fitted entrances and exits for access. Where conveyors pass through the screenhouse, flexible covers shall be installed at entries and exits of the conveyors to the housing. Where containment of dust within the screenhouse structure is not successful then a dust extraction and collection system shall be provided; and ▪ All grizzlies shall be enclosed on top and 3 sides and sufficient water sprayers shall be installed at their feeding and outlet areas.	Within Concrete Batching Plant / Duration of the construction phase	N/A
			Belt conveyors ▪ Except for those conveyors which are placed within a totally enclosed structure such as a screenhouse or those erected at the ground level, all conveyors shall be totally enclosed with windshield on top and 2 sides; ▪ Effective belt scraper such as the pre-cleaner blades made by hard wearing materials and provided with pneumatic tensioner, or equivalent device, shall be installed at the head pulley of designated conveyor as required to dislodge fine dust particles that may adhere to the belt surface and to reduce carry-back of fine materials on the return belt. Bottom plates shall also be provided for the conveyor unless it has been demonstrated that the corresponding belt scraper is effective and well maintained to prevent falling material from the return belt; and ▪ Except for those transfer points which are placed within a totally enclosed structure such as a screenhouse, all transfer points to and from conveyors shall be enclosed. Where containment of dust within the enclosure is not successful, then water sprayers shall be provided. Openings for any enclosed structure for the passage of conveyors shall be fitted with flexible seals.	Within Concrete Batching Plant / Duration of the construction phase	N/A

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			Storage piles and bins ▪ Where practicable, free falling transfer points from conveyors to stockpiles shall be fitted with flexible curtains or be enclosed with chutes designed to minimize the drop height. Water sprays shall also be used where required. ▪ The surface of all surge piles and stockpiles of blasted rocks or aggregates shall be kept sufficiently wet by water spraying wherever practicable; ▪ All open stockpiles for aggregates of size in excess of 5 mm shall be kept sufficiently wet by water spraying where practicable; or ▪ The stockpiles of aggregates 5 mm in size or less shall be enclosed on 3 sides or suitably located to minimize wind-whipping. Save for fluctuations in stock or production, the average stockpile shall stay within the enclosure walls and in no case the height of the stockpile shall exceed twice the height of the enclosure walls. ▪ Scattered piles gathered beneath belt conveyors, inside and around enclosures shall be cleared regularly.	Within Concrete Batching Plant / Duration of the construction phase	N/A
			Rock drilling equipment ▪ Appropriate dust control equipment such as a dust extraction and collection system shall be used during rock drilling activities.	Within Concrete Batching Plant / Duration of the construction phase	N/A
			Hazard to Human Life – Construction Phase		
Table 6.40	3.2	-	▪ Precautionary measures should be established to request barges to move away during typhoons.	Construction Site / Construction Period	I
Table 6.40	3.2	-	▪ An appropriate marine traffic management system should be established to minimize risk of ship collision.	Construction Site / Construction Period	I
Table 6.40	3.2	-	▪ Location of all existing hydrant networks should be clearly identified prior to any construction works.	Construction Site / Construction Period	I
			Noise Impact – Construction Phase		
7.5.6	4.3	-	**Good Site Practice** Good site practice and noise management can significantly reduce the impact of construction site activities on nearby NSRs. The following package of measures should be followed during each phase of construction: ▪ only well-maintained plant to be operated on-site and plant should be serviced regularly during the construction works; ▪ machines and plant that may be in intermittent use to be shut down between work periods or should be throttled down to a minimum;	Within the Project site / During construction phase / Prior to commencement of operation	I

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			▪ plant known to emit noise strongly in one direction, should, where possible, be orientated to direct noise away from the NSRs; ▪ mobile plant should be sited as far away from NSRs as possible; and ▪ material stockpiles and other structures to be effectively utilised, where practicable, to screen noise from on-site construction activities.		
7.5.6	4.3	-	**Adoption of QPME** ▪ QPME should be adopted as far as applicable.	Within the Project site / During construction phase / Prior to commencement of operation	I
7.5.6	4.3	-	**Use of Movable Noise Barriers** ▪ Movable noise barriers should be placed along the active works area and mobile plants to block the direct line of sight between PME and the NSRs.	Within the Project site / During construction phase / Prior to commencement of operation	I
7.5.6	4.3	-	**Use of Noise Enclosure/ Acoustic Shed** ▪ Noise enclosure or acoustic shed should be used to cover stationary PME such as air compressor and generator.	Within the Project site / During construction phase / Prior to commencement of operation	I
			Water Quality Impact – Construction Phase		

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
8.8.1.2 and 8.8.1.3	5.1	2.26	**Marine Construction Activities** <u>General Measures to be Applied to All Works Areas</u> ▪ Barges or hoppers shall not be filled to a level which will cause overflow of materials or pollution of water during loading or transportation; ▪ Use of Lean Material Overboard (LMOB) systems shall be prohibited; ▪ Excess materials shall be cleaned from the decks and exposed fittings of barges and hopper dredgers before the vessels are moved; ▪ Plants should not be operated with leaking pipes and any pipe leakages shall be repaired quickly; ▪ Adequate freeboard shall be maintained on barges to reduce the likelihood of decks being washed by wave action; ▪ All vessels shall be sized such that adequate clearance is maintained between vessels and the sea bed at all states of the tide to ensure that undue turbidity is not generated by turbulence from vessel movement or propeller wash; ▪ The works shall not cause foam, oil, grease, litter or other objectionable matter to be present in the water within and adjacent to the works site; and ▪ For ground improvement activities including DCM, the wash water from cleaning of the drilling shaft should be appropriately treated before discharge. The Contractor should ensure the waste water meets the WPCO/TM requirements before discharge. No direct discharge of contaminated water is permitted.	Within construction site / Duration of the construction phase	I
			<u>Specific Measures to be Applied to All Works Areas</u> ▪ The daily maximum production rates shall not exceed those assumed in the water quality assessment in the EIA report; ▪ A maximum of 10 % fines content to be adopted for sand blanket and 20 % fines content for marine filling below +2.5 mPD prior to substantial completion of seawall (until end of Year 2017) shall be specified in the works contract document;	Within construction site / Duration of the construction phase	I
			▪ An advance seawall of at least 200m to be constructed (comprising either rows of contiguous permanent steel cells completed above high tide mark or partially completed seawalls with rock core to high tide mark and filter layer on the inner side) prior to commencement of marine filling activities;		I
			▪ Closed grab dredger shall be used to excavate marine sediment; ▪ Silt curtains surrounding the closed grab dredger shall be deployed in accordance with the Silt Curtain Deployment Plan; and		N/A *(The arrangement of silt curtain has been modified. The details can be referred to Silt Curtain Deployment Plan)
			▪ The Silt Curtain Deployment Plan shall be implemented.		I

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			<u>Specific Measures to be Applied to Land Formation Activities prior to Commencement of Marine Filling Works</u> ▪ Double layer 'Type III' silt curtains to be applied around the active eastern works areas prior to commencement of sand blanket laying activities. The silt curtains shall be configured to minimise SS release during ebb tides. A silt curtain efficiency test shall be conducted to validate the performance of the silt curtains;	Within construction site / Duration of the construction phase	N/A *(The arrangement of silt curtain has been modified. The details can be referred to Silt Curtain Deployment Plan)
			▪ Double layer silt curtains to enclose WSRs C7a and silt screens installed at the intake points for both WSR C7a and C8 prior to commencement of construction; and		For C7a, I For C8, I *(The requirement of silt curtain / screen has been modified. The details can be referred to Silt Curtain Deployment Plan)
			▪ The silt curtains and silt screens should be regularly checked and maintained.		I
			<u>Specific Measures to be Applied to Land Formation Activities during Marine Filling Works</u> ▪ Double layer 'Type II' or 'Type III' silt curtains to be applied around the eastern openings between partially completed seawalls prior to commencement of marine filling activities. The silt curtains shall be configured to minimise SS release during ebb tides;	Within construction site / Duration of the construction phase	I *(The arrangement of silt curtain has been modified. The details can be referred to Silt Curtain Deployment Plan)
			▪ Double layer silt curtains to be applied at the south-western opening prior to commencement of marine filling activities;		N/A *(The arrangement of silt curtain has been modified. The details can be referred to Silt Curtain Deployment Plan)
			▪ Double layer silt curtain to enclose WSR C7a and silt screens installed at the intake points for both WSR C7a and C8 prior to commencement of marine filling activities; and		N/A *(The requirement of silt curtain / screen has been modified. The details can be referred to Silt Curtain Deployment Plan)
			▪ The silt curtains and silt screens should be regularly checked and maintained.		I

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			Specific Measures to be Applied to the Field Joint Excavation Works for the Submarine Cable Diversion ▪ Only closed grabs designed and maintained to avoid spillage shall be used and should seal tightly when operated. Excavated materials shall be disposed at designated marine disposal area in accordance with the Dumping at Sea Ordinance (DASO) permit conditions; and ▪ Silt curtains surrounding the closed grab dredger to be deployed as a precautionary measure.	Within construction site / Duration of the construction phase	N/A
8.8.1.4	5.1	-	**Modification of the Existing Seawall** ▪ Silt curtains shall be deployed around the seawall modification activities to completely enclose the active works areas, and care should be taken to avoid splashing of rockfill / rock armour into the surrounding marine environment. For the connecting sections with the existing outfalls, works for these connection areas should be undertaken during the dry season in order that individual drainage culvert cells may be isolated for interconnection works.	At the existing northern seawall / Duration of the construction phase	N/A
8.8.1.5	5.1	-	**Construction of New Stormwater Outfalls and Modifications to Existing Outfalls** ▪ During operation of the temporary drainage channel, runoff control measures such as bunding or silt fence shall be provided on both sides of the channel to prevent accumulation and release of SS via the temporary channel. Measures should also be taken to minimise the ingress of site drainage into the culvert excavations.	Within construction site / Duration of the construction phase	N/A
8.8.1.6 8.8.1.7	5.1	2.27	**Piling Activities for Construction of New Runway Approach Lights and HKIAAA Marker Beacons** Silt curtains shall be deployed around the piling activities to completely enclose the piling works and care should be taken to avoid spillage of excavated materials into the surrounding marine environment.	Within construction site / Duration of the construction phase	I
			For construction of the eastern approach lights at the CMPs ▪ Ground improvement via DCM using a close-spaced layout shall be completed prior to commencement of piling works; ▪ Steel casings shall be installed to enclose the excavation area prior to commencement of excavation; ▪ The excavated materials shall be removed using a closed grab within the steel casings; ▪ No discharge of the cement mixed materials into the marine environment will be allowed; and ▪ Excavated materials shall be treated and reused on-site.		I
8.8.1.8	5.1	-	**Construction of Site Runoff and Drainage** The site practices outlined in ProPECC Note PN 1/94 should be followed as far as practicable in order to minimise surface runoff and the chance of erosion. The following measures are recommended:	Within construction site / Duration of the construction phase	
			▪ Install perimeter cut-off drains to direct off-site water around the site and implement internal drainage, erosion and sedimentation control facilities. Channels, earth bunds or sand bag barriers should be provided on site to direct storm water to silt removal facilities. The design of the temporary on-site		I

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			drainage system should be undertaken by the Contractors prior to the commencement of construction (for works areas located on the existing Airport island) or as soon as the new land is completed (for works areas located on the new landform);		
			▪ Sand/silt removal facilities such as sand/silt traps and sediment basins should be provided to remove sand/silt particles from runoff to meet the requirements of the TM-DSS standards under the WPCO. The design of efficient silt removal facilities should make reference to the guidelines in Appendix A1 of ProPECC Note PN 1/94. Sizes may vary depending upon the flow rate. The detailed design of the sand/silt traps should be undertaken by the Contractors prior to the commencement of construction;		I
			▪ All drainage facilities and erosion and sediment control structures should be regularly inspected and maintained to ensure proper and efficient operation at all times and particularly during rainstorms. Deposited silt and grit should be regularly removed, at the onset of and after each rainstorm to ensure that these facilities are functioning properly;		I
			▪ Measures should be taken to minimize the ingress of site drainage into excavations. If excavation of trenches in wet periods is necessary, they should be dug and backfilled in short sections wherever practicable. Water pumped out from foundation excavations should be discharged into storm drains via silt removal facilities;		I
			▪ In the event that contaminated groundwater is identified at excavation areas, this should be treated on-site using a suitable wastewater treatment process. The effluent should be treated according to the requirements of the TM-DSS standards under the WPCO prior to discharge to foul sewers or collected for proper disposal off-site. No direct discharge of contaminated groundwater is permitted; and		I
			▪ All vehicles and plant should be cleaned before leaving a construction site to ensure no earth, mud, debris and the like is deposited by them on roads. An adequately designed and sited wheel washing facility should be provided at construction site exits. Wash-water should have sand and silt settled out and removed regularly to ensure the continued efficiency of the process. The section of access road leading to, and exiting from, the wheel-wash bay to the public road should be paved with sufficient backfall toward the wheel-wash bay to prevent vehicle tracking of soil and silty water to public roads and drains. All washwater should be treated according to the requirements of the TM-DSS standards under the WPCO prior to discharge.		I
8.8.1.9	5.1	-	**Sewage Effluent from Construction Workforce** ▪ Temporary sanitary facilities, such as portable chemical toilets, should be employed on-site where necessary to handle sewage from the workforce. A licensed contractor should be employed to provide appropriate and adequate portable toilets and be responsible for appropriate disposal and maintenance.	Within construction site / During construction phase	I
8.8.1.10 8.8.1.11	5.1		**General Construction Activities** ▪ Construction solid waste, debris and refuse generated on-site should be collected, handled and disposed of properly to avoid entering any nearby storm water drain. Stockpiles of cement and other construction materials should be kept covered when not being used; and	Within construction site / During construction phase	I

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			▪ Oils and fuels should only be stored in designated areas which have pollution prevention facilities. To prevent spillage of fuels and solvents to any nearby storm water drain, all fuel tanks and storage areas should be provided with locks and be sited on sealed areas, within bunds of a capacity equal to 110% of the storage capacity of the largest tank. The bund should be drained of rainwater after a rain event.		
8.8.1.12 8.8.1.13	5.1	2.28	**Drilling Activities for the Submarine Aviation Fuel Pipelines** To prevent potential water quality impacts at Sha Chau, the following measures shall be applied: ▪ A 'zero-discharge' policy shall be applied for all activities to be conducted at Sha Chau; ▪ No bulk storage of chemicals shall be permitted; and ▪ A containment pit shall be constructed around the drill holes. This containment pit shall be lined with impermeable lining and bunded on the outside to prevent inflow from off-site areas.	Within construction site / During construction phase	I
			At the airport island side of the drilling works, the following measures shall be applied for treatment of wastewater: ▪ During pipe cleaning, appropriate desilting or sedimentation device should be provided on site for treatment before discharge. The Contractor should ensure discharge water from the sedimentation tank meet the WPCO/TM requirements before discharge; and ▪ Drilling fluid used in drilling activities should be reconditioned and reused as far as possible. Temporary enclosed storage locations should be provided on-site for any unused chemicals that needs to be transported away after all the related construction activities are completed. The requirements in ProPECC Note PN 1/94 should be adhered to in the handling and disposal of bentonite slurries.	Within construction site / During construction phase	I
			Waste Management Implication – Construction Phase		
10.5.1.1	7.1	-	Opportunities to minimise waste generation and maximise the reuse of waste materials generated by the project have been incorporated where possible into the planning, design and construction stages, and the following measures have been recommended: ▪ The relevant construction methods (particularly for the tunnel works) and construction programme have been carefully planned and developed to minimise the extent of excavation and to maximise the on-site reuse of inert C&D materials generated by the project as far as practicable. Temporary stockpiling areas will also be provided to facilitate on-site reuse of inert C&D materials;	Project Site Area / During design and construction phase	I
			▪ Priority should be given to collect and reuse suitable inert C&D materials generated from other concurrent projects and the Government's PFRF as fill materials for the proposed land formation works;		I
			▪ Only non-dredged ground improvement methods should be adopted in order to completely avoid the need for dredging and disposal of marine sediment for the proposed land formation work;		I
			▪ Excavation work for constructing the APM tunnels, BHS tunnels and airside tunnels will not be down to the CMPs beneath the fill materials in order to avoid excavating any sediments; and		I

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			▪ For the marine sediments expected to be excavated from the piling works of TRC, APM & BHS tunnels, airside tunnels and other facilities on the proposed land formation area, piling work of marine sections of the approach lights and HKIAAA beacons, basement works for some of T2 expansion area and excavation works for the proposed APM depot should be treated and reused on-site as backfilling materials, although required treatment level / detail and the specific re-use mode are under development.		I
10.5.1.1	7.1	-	The following good site practices should be performed during the construction activities include: ▪ Nomination of an approved person, such as a site manager, to be responsible for good site practices, arrangements for collection and effective disposal to an appropriate facility, of all wastes generated at the site; ▪ Training of site personnel in proper waste management and chemical waste handling procedures; ▪ Provision of sufficient waste disposal points and regular collection for disposal; ▪ Appropriate measures to minimise windblown litter and dust during transportation of waste by either covering trucks by tarpaulin/ similar material or by transporting wastes in enclosed containers. The cover should be extended over the edges of the sides and tailboards; ▪ Stockpiles of C&D materials should be kept wet or covered by impervious sheets to avoid wind-blown dust; ▪ All dusty materials including C&D materials should be sprayed with water immediately prior to any loading transfer operation so as to keep the dusty material wet during material handling at the barging points/ stockpile areas; ▪ C&D materials to be delivered to and from the project site by barges or by trucks should be kept wet or covered to avoid wind-blown dust; ▪ The speed of the trucks including dump trucks carrying C&D or waste materials within the site should be controlled to about 10 km/hour in order to reduce the adverse dust impact and secure the safe movement around the site; and ▪ To avoid or minimise dust emission during transport of C&D or waste materials within the site, each and every main temporary access should be paved with concrete, bituminous hardcore materials or metal plates and kept clear of dusty materials. Unpaved parts of the road should be sprayed with water or a dust suppression chemical so as to keep the entire road surface wet.	Project Site Area / Construction Phase	I
10.5.1.3	7.1	-	The following practices should be performed to achieve waste reduction include: ▪ Use of steel or aluminium formworks and falseworks for temporary works as far as practicable; ▪ Adoption of repetitive design to allow reuse of formworks as far as practicable; ▪ Segregation and storage of different types of waste in different containers, skips or stockpiles to enhance reuse or recycling of materials and their proper disposal;	Project Site Area / Construction Phase	I

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			▪ Encourage collection of aluminium cans, PET bottles and paper by providing separate labelled bins to enable these wastes to be segregated from other general refuse generated by the work force; ▪ Any unused chemicals or those with remaining functional capacity should be collected for reused as far as practicable; ▪ Proper storage and site practices to minimise the potential for damage or contamination of construction materials; and ▪ Plan and stock construction materials carefully to minimise amount of waste generated and avoid unnecessary generation of waste.		
10.5.1.5	7.1		▪ Inert and non-inert C&D materials should be handled and stored separately to avoid mixing the two types of materials.	Project Site Area / Construction Phase	I
10.5.1.5	7.1	-	▪ Any recyclable materials should be segregated from the non-inert C&D materials for collection by reputable licensed recyclers whereas the non-recyclable waste materials should be disposed of at the designated landfill site by a reputable licensed waste collector.	Project Site Area / Construction Phase	I
10.5.1.6	7.1	-	▪ A trip-ticket system promulgated shall be developed in order to monitor the off-site delivery of surplus inert C&D materials that could not be reused on-site for the proposed land formation work at the PFRF and to control fly tipping.	Project Site Area / Construction Phase	I
10.5.1.6	7.1	2.32	▪ The Contractor should prepare and implement a Waste Management Plan detailing various waste arising and waste management practices.	Construction Phase	I
10.5.1.16	7.1	-	The following mitigation measures are recommended during excavation and treatment of the sediments: ▪ On-site remediation should be carried out in an enclosed area in order to minimise odour/dust emissions;	Project Site Area / Construction Phase	I
			▪ The loading, unloading, handling, transfer or storage of treated and untreated sediment should be carried out in such a manner to prevent or minimise dust emissions;		I
			▪ All practical measures, including but not limited to speed control for vehicles, should be taken to minimise dust emission;		I
			▪ Good housekeeping should be maintained at all times at the sediment treatment facility and storage area;		I
			▪ Treated and untreated sediment should be clearly separated and stored separately; and		I
			▪ Surface runoff from the enclosed area should be properly collected and stored separately, and then properly treated to levels in compliance with the relevant effluent standards as required by the Water Pollution Control Ordinance before final discharge.		I
10.5.1.18	7.1	-	The marine sediments to be removed from the cable field joint area would be disposed of at the designated disposal sites to be allocated by the MFC. The following mitigation measures should be strictly	Project Site Area / Construction Phase	N/A

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			followed to minimise potential impacts on water quality during transportation of the sediments requiring Type 1 disposal: ▪ Bottom opening of barges shall be fitted with tight fitting seals to prevent leakage of material; ▪ Monitoring of the barge loading shall be conducted to ensure that loss of material does not take place during transportation. Transport barges or vessels shall be equipped with automatic self-monitoring devices as specified by EPD; and ▪ Barges or hopper barges shall not be filled to a level that would cause the overflow of materials or sediment laden water during loading or transportation.		
10.5.1.19	7.1	-	Contractor should register with the EPD as a chemical waste producer and to follow the relevant guidelines. The following measures should be implemented: ▪ Good quality containers compatible with the chemical wastes should be used; ▪ Incompatible chemicals should be stored separately; ▪ Appropriate labels must be securely attached on each chemical waste container indicating the corresponding chemical characteristics of the chemical waste, such as explosive, flammable, oxidizing, irritant, toxic, harmful, corrosive, etc.; and ▪ The contractor will use a licensed collector to transport and dispose of the chemical wastes at the approved Chemical Waste Treatment Centre or other licensed recycling facilities, in accordance with the Waste Disposal (Chemical Waste) (General) Regulation.	Project Site Area / Construction Phase	I
10.5.1.20	7.1	-	▪ General refuse should be stored in enclosed bins or compaction units separated from inert C&D material. A reputable waste collector should be employed by the contractor to remove general refuse from the site for disposal at designated landfill sites. An enclosed and covered area should be provided to reduce the occurrence of 'wind blown' light material.	Project Site Area / Construction Phase	I
10.5.1.21	7.1	-	▪ The construction contractors will be required to regularly check and clean any refuse trapped or accumulated along the newly constructed seawall. Such refuse will then be stored and disposed of together with the general refuse.	Project Site Area / Construction Phase	I
			Land Contamination – Construction Phase		
11.10.1.2 to 11.10.1.3	8.1	2.32	For areas inaccessible during site reconnaissance survey ▪ Further site reconnaissance would be conducted once the areas are accessible in order to identify any land contamination concern for the areas.	Project Site Area inaccessible during site reconnaissance / Prior to Construction Phase	I
			▪ Subject to further site reconnaissance findings, a supplementary Contamination Assessment Plan (CAP) for additional site investigation (SI) (if necessary) may be prepared and submitted to EPD for endorsement prior to the commencement of SI at these areas.		I

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			▪ After completion of SI, the Contamination Assessment Report (CAR) will be prepared and submitted to EPD for approval prior to start of the proposed construction works at the golf course, the underground and above-ground fuel storage tank areas, emergency power generation units, airside petrol filling station and fuel tank room.		I *(CAR for golf course and Terminal 2 Emergency Power Supply System Nos.1, 2, 3, 4 and 5)
			▪ Should remediation be required, Remediation Action Plan (RAP) and Remediation Report (RR) will be prepared for EPD's approval prior to commencement of the proposed remediation and any construction works respectively.		N/A
11.8.1.2	8.1	-	If contaminated soil is identified, the following mitigation measures are for the excavation and transportation of contaminated materials (if any): ▪ To minimize the incidents of construction workers coming in contact with any contaminated materials, bulk earth-moving excavation equipment should be employed; ▪ Contact with contaminated materials can be minimised by wearing appropriate clothing and personal protective equipment such as gloves and masks (especially when working directly with contaminated material), provision of washing facilities and prohibition of smoking and eating on site; ▪ Stockpiling of contaminated excavated materials on site should be avoided as far as possible; ▪ The use of any contaminated soil for landscaping purpose should be avoided unless pre-treatment was carried out; ▪ Vehicles containing any excavated materials should be suitably covered to reduce dust emissions and/or release of contaminated wastewater; ▪ Truck bodies and tailgates should be sealed to prevent any discharge; ▪ Only licensed waste haulers should be used to collect and transport contaminated material to treatment/disposal site and should be equipped with tracking system to avoid fly tipping; ▪ Speed control for trucks carrying contaminated materials should be exercised. 8km/h is the recommended speed limit; ▪ Strictly observe all relevant regulations in relation to waste handling, such as Waste Disposal Ordinance (Cap 354), Waste Disposal (Chemical Waste) (General) Regulation (Cap 354) and obtain all necessary permits where required; and ▪ Maintain records of waste generation and disposal quantities and disposal arrangements.	Project Site Area / Construction Phase	N/A
			Terrestrial Ecological – Construction Phase		
12.10.1.1	9.2	2.14	**Pre-construction Egretry Survey** ▪ Conduct ecological survey for Sha Chau egretry to update the latest boundary of the egretry.	Breeding season (April - July) prior to commencement of	I

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
				HDD drilling works at HKIA	
12.7.2.3 and 12.7.2.6	9.1	2.30	**Avoidance and Minimisation of Direct Impact to Egretry** ▪ The daylighting location will avoid direct encroachment to the Sheung Sha Chau egretry. The daylighting location and mooring of flat top barge, if required, will be kept away from the egretry; ▪ In any event, controls such as demarcation of construction site boundary and confining the lighting within the site will be practised to minimise disturbance to off-site habitat at Sheung Sha Chau Island; and ▪ The containment pit at the daylighting location shall be covered or camouflaged.	During construction phase at Sheung Sha Chau Island	I
12.7.2.5	9.1	2.30	**Preservation of Nesting Vegetation** ▪ The proposed daylighting location and the arrangement of connecting pipeline will avoid the need of tree cutting, therefore the trees that are used by ardeids for nesting will be preserved.	During construction phase at Sheung Sha Chau Island	I
12.7.2.4 and 12.7.2.6	9.1	2.30	**Timing the Pipe Connection Works outside Ardeid's Breeding Season** ▪ All HDD and related construction works on Sheung Sha Chau Island will be scheduled outside the ardeids' breeding season (between April and July). No night-time construction work will be allowed on Sheung Sha Chau Island during all seasons.	During construction phase at Sheung Sha Chau Island	I
12.10.1.1	9.3	-	**Ecological Monitoring** ▪ During the HDD construction works period from August to March, ecological monitoring will be undertaken monthly at the HDD daylighting location on Sheung Sha Chau Island to identify and evaluate any impacts with appropriate actions taken as required to address and minimise any adverse impact found.	at Sheung Sha Chau Island	I
			Marine Ecological Impact – Pre-construction Phase		
13.11.4.1	10.2.2	-	▪ Pre-construction phase Coral Dive Survey.	HKIAAA artificial seawall	I
			Marine Ecological Impact – Construction Phase		
13.11.1.3 to 13.11.1.6	-	-	**Minimisation of Land Formation Area** ▪ Minimise the overall size of the land formation needed for the additional facilities to minimise the overall loss of habitat for marine resources, especially the CWD population.	Land formation footprint / during detailed design phase to completion of construction	I
13.11.1.7 to 13.11.1.10	-	2.31	**Use of Construction Methods with Minimal Risk/Disturbance** ▪ Use of non-dredge method for the main land formation and ancillary works including the diversion of the aviation fuel pipeline to the AFRF;	During construction phase at marine works area	I

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			▪ Use of Deep Cement Mixing (DCM) method instead of conventional seabed dredging for the land formation works to reduce the risk of negative impacts through the elevation of suspended solids and contaminants on CWDs, fisheries and the marine environment;		I
			▪ Use of bored piling in short duration to form the new approach lights and marker beacons for the new runway;		I
			▪ Avoid bored piling during CWD peak calving season (Mar to Jun);		I
			▪ Prohibition of underwater percussive piling; and		I
			▪ Use of horizontal directional drilling (HDD) method and water jetting methods for placement of submarine cables and pipelines to minimise the disturbance to the CWDs and other marine ecological resources.		I
13.11.2.1 to 13.11.2.7	-	-	**Mitigation for Indirect Disturbance due to Deterioration of Water Quality** ▪ Water quality mitigation measures during construction phases include consideration of alternative construction methods, deployment of silt curtain and good site practices;	All works area during the construction phase	I
			▪ Alternative construction methods including use of non-dredge methods for ground improvement (e.g. Deep Cement Mixing (DCM), prefabricated vertical drains (PVD), sand compaction piles, steel cells, stone columns and vertical sand drains);		I
			▪ Use of bored piling in short duration to form the new approach lights and marker beacons for the new runway; and		I
			Use of horizontal directional drilling (HDD) method and water jetting methods for placement of undersea cables and pipelines to minimise the disturbance to the CWDs and other marine ecological resources.		I
13.11.1.12	-	-	**Strict Enforcement of No-Dumping Policy** ▪ A policy prohibiting dumping of wastes, chemicals, oil, trash, plastic, or any other substance that would potentially be harmful to dolphins and/or their habitat in the work area; ▪ Mandatory educational programme of the no-dumpling policy be made available to all construction site personnel for all project-related works; ▪ Fines for infractions should be implemented; and ▪ Unscheduled, on-site audits shall be implemented.	All works area during the construction phase	I
13.11.1.13	-	-	**Good Construction Site Practices** ▪ Regular inspection of the integrity and effectiveness of all silt curtains and monitoring of effluents to ensure that any discharge meets effluent discharge guidelines; ▪ Keep the number of working or stationary vessels present on-site to the minimum anytime; and ▪ Unscheduled, on-site audits for all good site practice restrictions should be conducted, and fines or penalties sufficient to be an effective deterrent need to be levied against violators.	All works area during the construction phase	I

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
13.11.1.3 to 13.11.1.6	-	-	**Minimisation of Land Formation Area** ▪ Minimise the overall size of the land formation needed for the additional facilities to minimise the overall loss of habitat for marine resources, especially the CWD population.	Land formation footprint / during detailed design phase to completion of construction	I
13.11.5.4 to 13.11.5.13	10.3.1	-	**SkyPier High Speed Ferries' Speed Restrictions and Route Diversions** ▪ SkyPier HSFs operating to / from Zhuhai and Macau would divert north of SCLKC Marine Park with a 15 knot speed limit to apply for the part-journeys that cross high CWD abundance grid squares as indicatively shown in **Drawing No. MCL/P132/EIA/13-023** of the EIA Report. Both the alignment of the northerly route and the portion of routings to be subject to the speed limit of 15 knots shall be finalised prior to commencement of construction based on the future review of up-to-date CWD abundance and EM&A data and taking reference to changes in total SkyPier HSF numbers; and ▪ A maximum of 10 knots will be enforced through the designated SCLKC Marine Park area at all times.	Area between the footprint and SCLKC Marine Park during construction phase	I
			Other mitigation measures ▪ The ET will audit various parameters including actual daily numbers of HSFs, compliance with the 15-knot speed limit in the speed control zone and diversion compliance for SkyPier HSFs operating to / from Zhuhai and Macau; and ▪ The effectiveness of the CWD mitigation measures after implementation of initial six month SkyPier HSF diversion and speed restriction will be reviewed.	Area between the footprint and SCLKC Marine Park during construction phase	I
13.11.5.14 to 13.11.5.18	10.3.1	2.31	**Dolphin Exclusion Zone** ▪ Establishment of a 24 hr Dolphin Exclusion Zone (DEZ) with a 250 m radius around the land formation works areas;	Marine waters around land formation works area during construction phase	I
			▪ A DEZ would also be implemented during ground improvement works (e.g. DCM), water jetting works for submarine cables diversion, open trench dredging at the field joint locations and seawall construction; and		I
			▪ A DEZ would also be implemented during bored piling work but as a precautionary measure only.		I
13.11.5.19	10.4	2.31	**Acoustic Decoupling of Construction Equipment** ▪ Air compressors and other noisy equipment that must be mounted on steel barges should be acoustically-decoupled to the greatest extent feasible, for instance by using rubber or air-filled tyres; and ▪ Specific acoustic decoupling measures shall be specified during the detailed design of the project for use during the land formation works.	Around coastal works area during construction phase	I
13.11.5.20	10.6.1	2.29	**Spill Response Plan**	Construction phase	I

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			▪ An oil and hazardous chemical spill response plan is proposed to be established during the construction phase as a precautionary measure so that appropriate actions to prevent or reduce risks to CWDs can be undertaken in the event of an accidental spillage.		
13.11.5.21 to 13.11.5.23	10.6.1	-	**Construction Vessel Speed Limits and Skipper Training** ▪ A speed limit of 10 knots should be strictly observed for construction vessels at areas with the highest CWD densities; and ▪ Vessels traversing through the work areas should be required to use predefined and regular routes (which would presumably become known to resident dolphins) to reduce disturbance to cetaceans due to vessel movements. Specific marine routes shall be specified by the Contractor prior to construction commencing.	All areas north and west of Lantau Island during construction phase	I
			Fisheries Impact – Construction Phase		
14.9.1.2 to 14.9.1.5	-		**Minimisation of Land Formation Area** ▪ Minimise the overall size of the land formation needed for the additional facilities to minimise the overall loss of habitat for fisheries resources.	Land formation footprint / during detailed design phase to completion of construction	I
14.9.1.6	-	-	**Use of Construction Methods with Minimal Risk/Disturbance** ▪ Use of non-dredge method for the main land formation and ancillary works including the diversion of the aviation fuel pipeline to the AFRF;	During construction phase at marine works area	I
			▪ Use of Deep Cement Mixing (DCM) method instead of conventional seabed dredging for the land formation works to reduce the risk of negative impacts through the elevation of suspended solids and contaminants on fisheries and the marine environment;		I
			▪ Use of bored piling in short duration to form the new approach lights and marker beacons for the new runway; and		I
			▪ Use of horizontal directional drilling (HDD) method and water jetting methods for placement of undersea cables and pipelines to minimise the disturbance to fisheries resources.		I
14.9.1.11	-		**Strict Enforcement of No-Dumping Policy** ▪ A policy prohibiting dumping of wastes, chemicals, oil, trash, plastic, or any other substance that would potentially be harmful to dolphins and/or their habitat in the work area; ▪ Mandatory educational programme of the no-dumpling policy be made available to all construction site personnel for all project-related works; ▪ Fines for infractions should be implemented; and ▪ Unscheduled, on-site audits shall be implemented.	All works area during the construction phase	I

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
14.9.1.12	-		**Good Construction Site Practices** ▪ Regular inspection of the integrity and effectiveness of all silt curtains and monitoring of effluents to ensure that any discharge meets effluent discharge guidelines; ▪ Keep the number of working or stationary vessels present on-site to the minimum anytime; and ▪ Unscheduled, on-site audits for all good site practice restrictions should be conducted, and fines or penalties sufficient to be an effective deterrent need to be levied against violators.	All works area during the construction phase	I
14.9.1.13 to 14.9.1.18	-		**Mitigation for Indirect Disturbance due to Deterioration of Water Quality** ▪ Water quality mitigation measures during construction phases include consideration of alternative construction methods, deployment of silt curtain and good site practices;	All works area during the construction phase	I
			▪ Alternative construction methods including use of non-dredge methods for ground improvement (e.g. Deep Cement Mixing (DCM), prefabricated vertical drains (PVD), sand compaction piles, steel cells, stone columns and vertical sand drains);		I
			▪ Use of bored piling in short duration to form the new approach lights and marker beacons for the new runway; and		I
			▪ Use of horizontal directional drilling (HDD) method and water jetting methods for placement of undersea cables and pipelines to minimise the disturbance to fisheries resources.		I
			Landscape and Visual Impact – Construction Phase		
Table 15.6	12.3	-	**CM1 -** The construction area and contractor's temporary works areas should be minimised to avoid impacts on adjacent landscape.	All works areas for duration of works; Upon handover and completion of works.	I
Table 15.6	12.3	-	**CM2 -** Reduction of construction period to practical minimum.	All works areas for duration of works; Upon handover and completion of works.	I
Table 15.6	12.3	-	**CM3 -** Phasing of the construction stage to reduce visual impacts during the construction phase.	All works areas for duration of works; Upon handover and completion of works.	I
Table 15.6	12.3	-	**CM4 -** Construction traffic (land and sea) including construction plants, construction vessels and barges should be kept to a practical minimum.	All works areas for duration of works; Upon handover and completion of works.	I

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
Table 15.6	12.3	-	**CM5 -** Erection of decorative mesh screens or construction hoardings around works areas in visually unobtrusive colours.	All works areas for duration of works; Upon handover and completion of works. – may be disassembled in phases	I
Table 15.6	12.3	-	**CM6 -** Avoidance of excessive height and bulk of site buildings and structures.	New passenger concourse, terminal 2 expansion and other proposed airport related buildings and structures under the project; Upon handover and completion of works.	I
Table 15.6	12.3	-	**CM7** - Control of night-time lighting by hooding all lights and through minimisation of night working periods.	All works areas for duration of works; Upon handover and completion of works. – may be disassembled in phases	I
Table 15.6	12.3	-	**CM8 -** All existing trees shall be carefully protected during construction. Detailed Tree Protection Specification shall be provided in the Contract Specification. Under this specification, the Contractor shall be required to submit, for approval, a detailed working method statement for the protection of trees prior to undertaking any works adjacent to all retained trees, including trees in contractor's works areas.	All existing trees to be retained; Upon handover and completion of works.	I
Table 15.6	12.3	-	**CM9 -** Trees unavoidably affected by the works shall be transplanted where practical. A detailed Tree Transplanting Specification shall be provided in the Contract Specification, if applicable. Sufficient time for necessary tree root and crown preparation periods shall be allowed in the project programme.	All existing trees to be affected by the works; Upon handover and completion of works.	I
Table 15.6	12.3	-	**CM10 -** Land formation works shall be followed with advanced hydroseeding around taxiways and runways as soon as practical.	All affected existing grass areas around runways and verges/Duration of works;	N/A

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
				Upon handover and completion of works.	
			Cultural Heritage Impact – Construction Phase		
			Not applicable.		
			Health Impact – Aircraft Emissions		
			Not applicable.		
			Health Impact – Aircraft Noise		
			Not applicable.		

Notes:

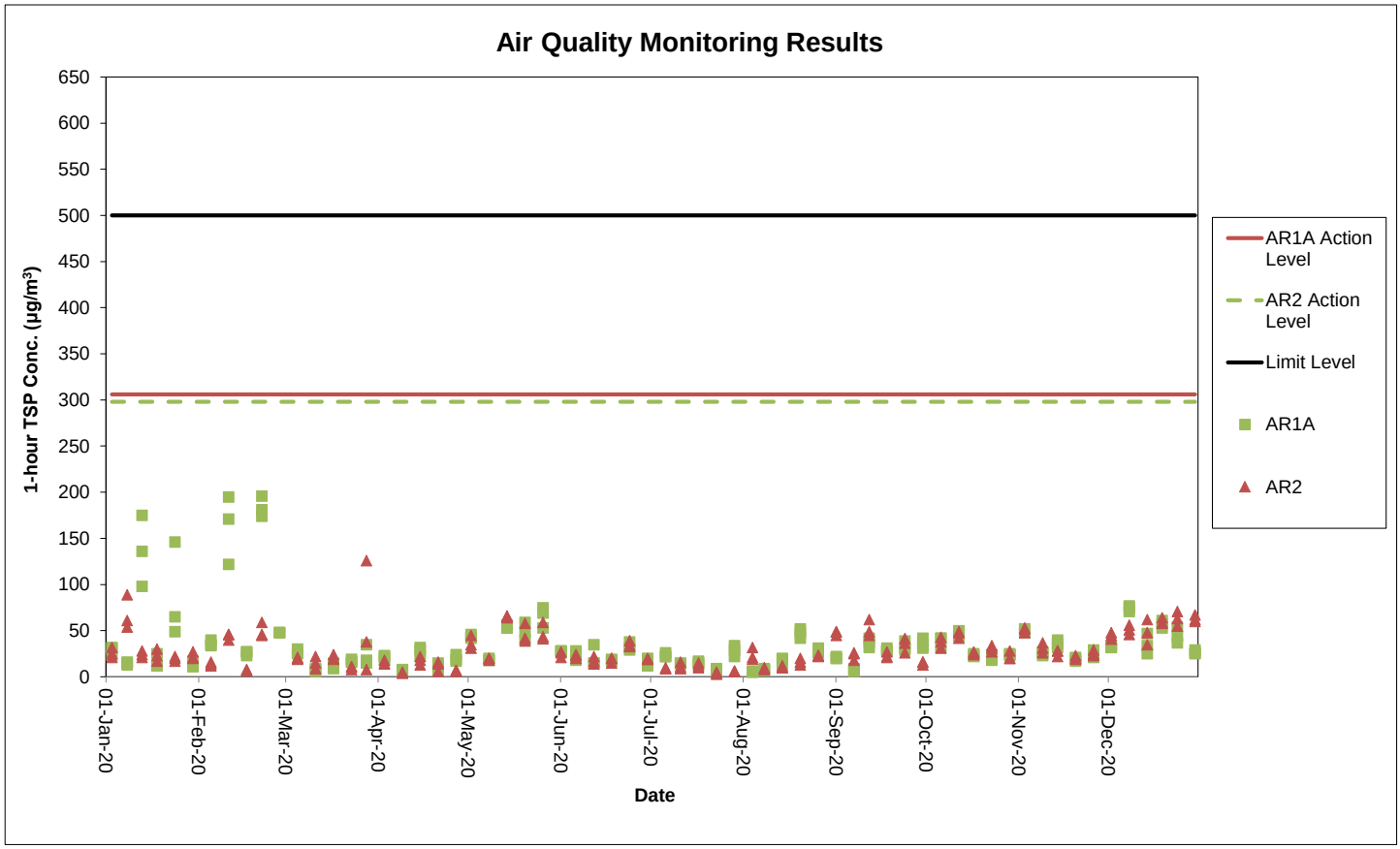
I= implemented where applicable;

N/A= not applicable to the construction works implemented during the reporting period.

^ Checked by ET through site inspection and record provided by the Contractor.

Appendix D. Monitoring Results

Air Quality Monitoring Results



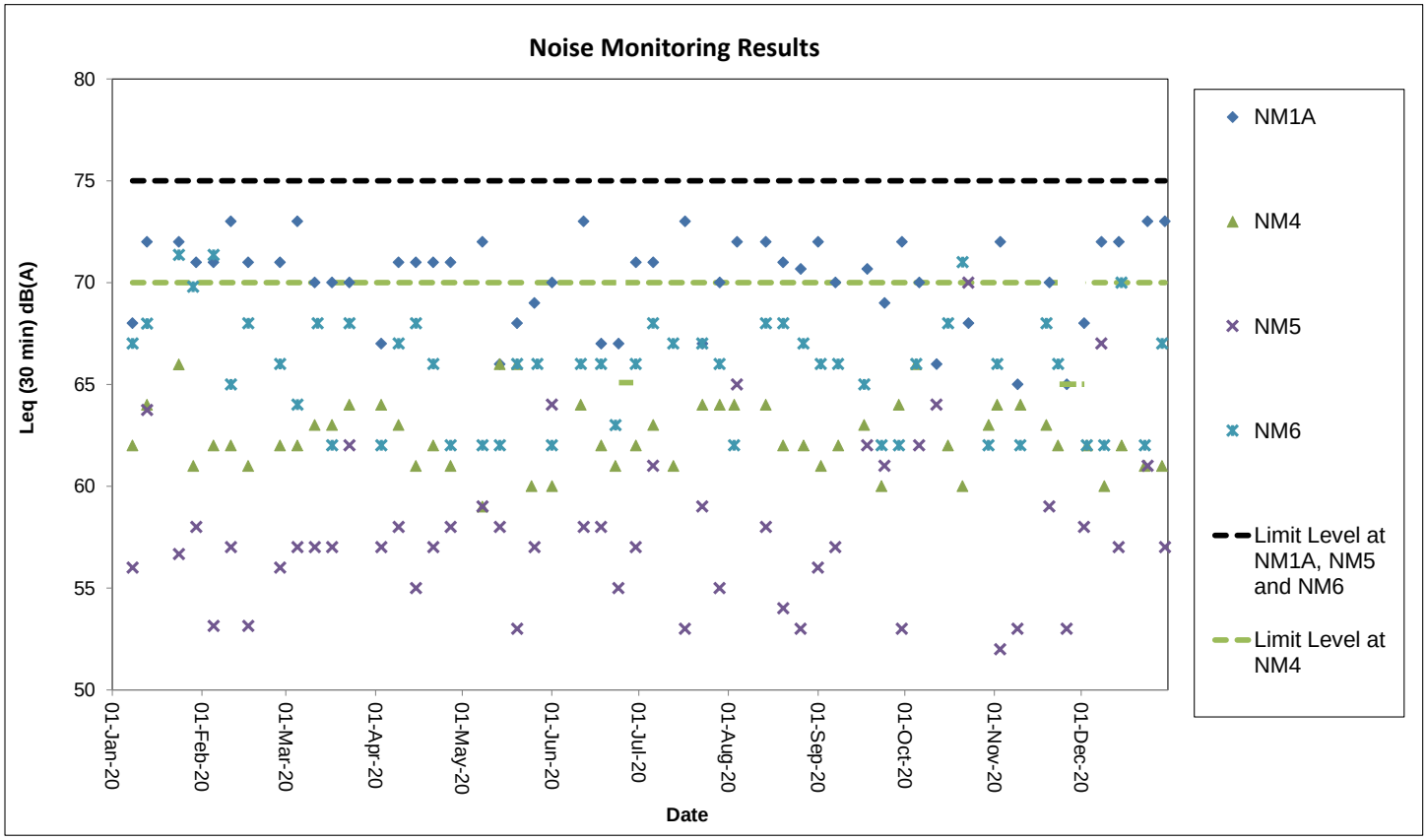
Notes

1. The key activities of the Project carried out in the reporting period included reclamation works and land-based works. Works in the reclamation areas included DCM works, marine filling, seawall and facilities construction, together with runway and associated works such as bored piling for approach lights. Land-based works on existing airport island involved mainly airfield works, foundation and substructure works for Terminal 2 expansion, modification and tunnel work for APM and BHS, and preparation work for utilities, with activities including site establishment, site office construction, road and drainage works, cable ducting, demolition of existing facilities, piling, and excavation works.

2. General weather condition during monitoring ranged from sunny to rainy. Detailed meteorological conditions should be referred to Table 2.3 of this Report and correspsonding Monthly EM&A Repors.

3. QA/ QC requirements as stipulated in the EM&A Manual was carried out during measurement.

Noise Monitoring Results



Notes

1. The Limit Level is reduced to 70dB(A) for school and 65db(A) during school examination period at NM4. School examination took place from 22 to 23 June and 23 to 27 November during this reporting period.

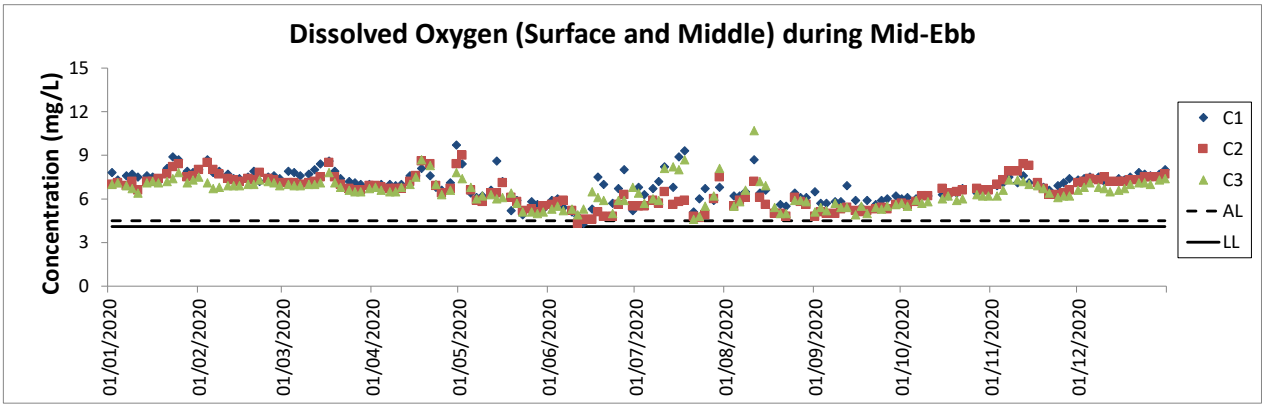
2. Noise monitoring at NM3A was temporarily suspended starting from 1 Sep 2018 and would be resumed with the completion of the Tung Chung East Development.

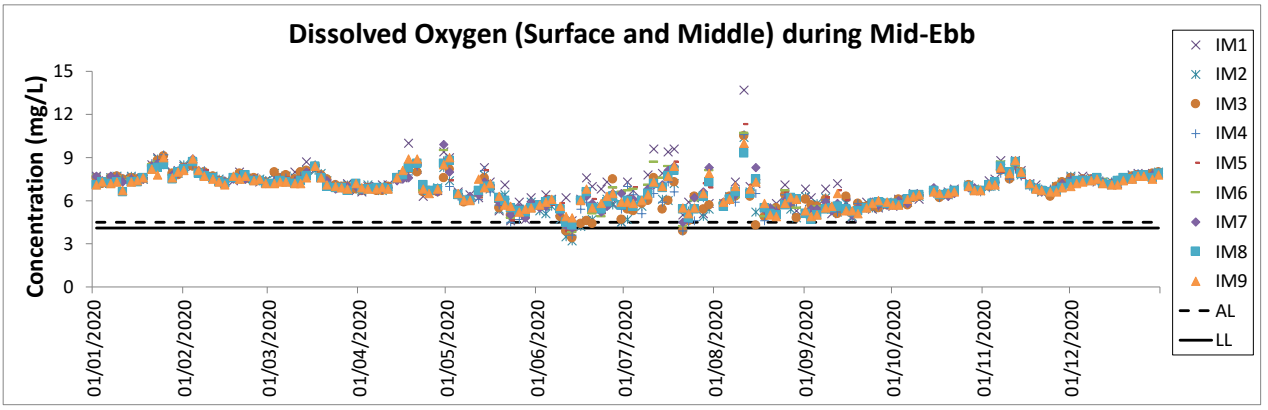
3. The key activities of the Project carried out in the reporting period included reclamation works and land-based works. Works in the reclamation areas included DCM works, marine filling, seawall and facilities construction, together with runway and associated works such as bored piling for approach lights. Land-based works on existing airport island involved mainly airfield works, foundation and substructure works for Terminal 2 expansion, modification and tunnel work for APM and BHS, and preparation work for utilities, with activities including site establishment, site office construction, road and drainage works, cable ducting, demolition of existing facilities, piling, and excavation works.

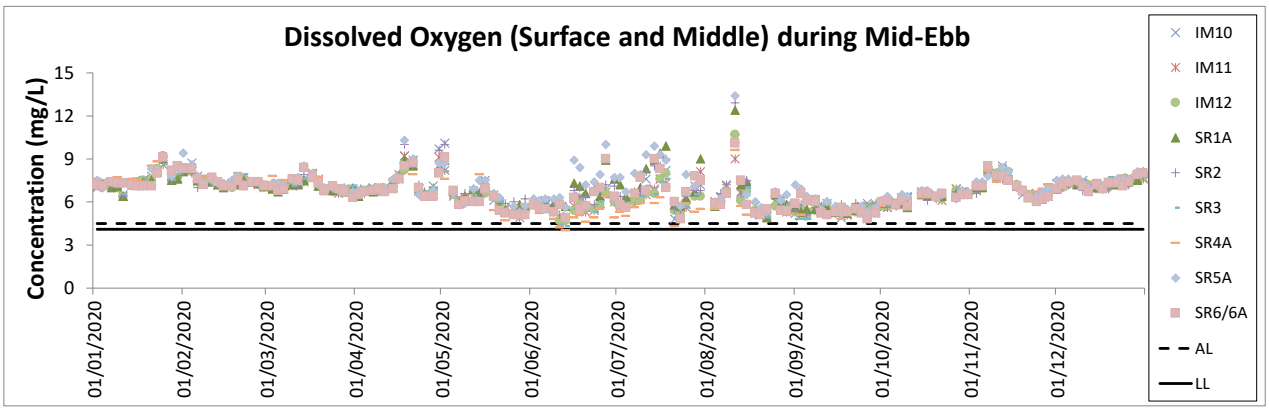
4. General weather condition during monitoring ranged from sunny to drizzle. Detailed meteorological conditions should be referred to Table 2.6 of this Report and corresponding Monthly EM&A Reports.

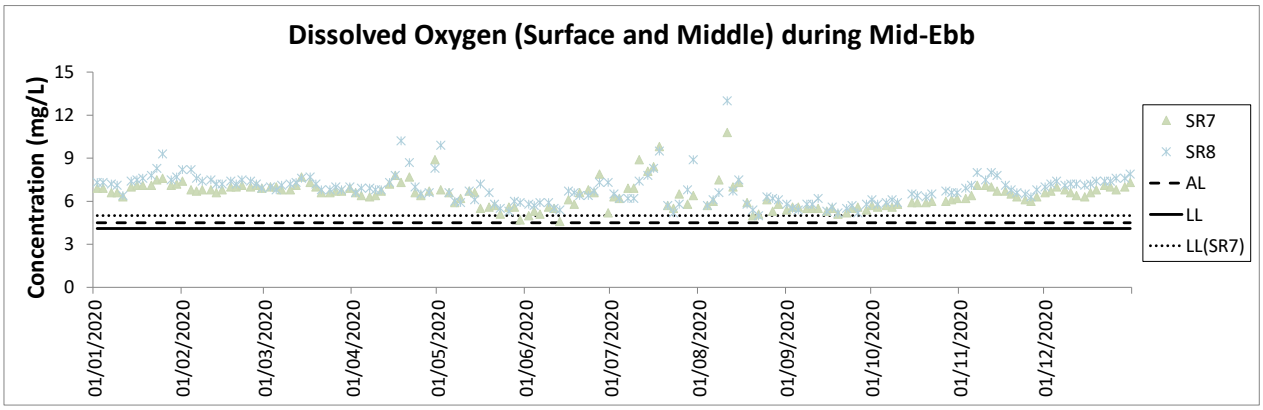
5. QA/ QC requirements as stipulated in the EM&A Manual was carried out during measurement.

Water Quality Monitoring Results



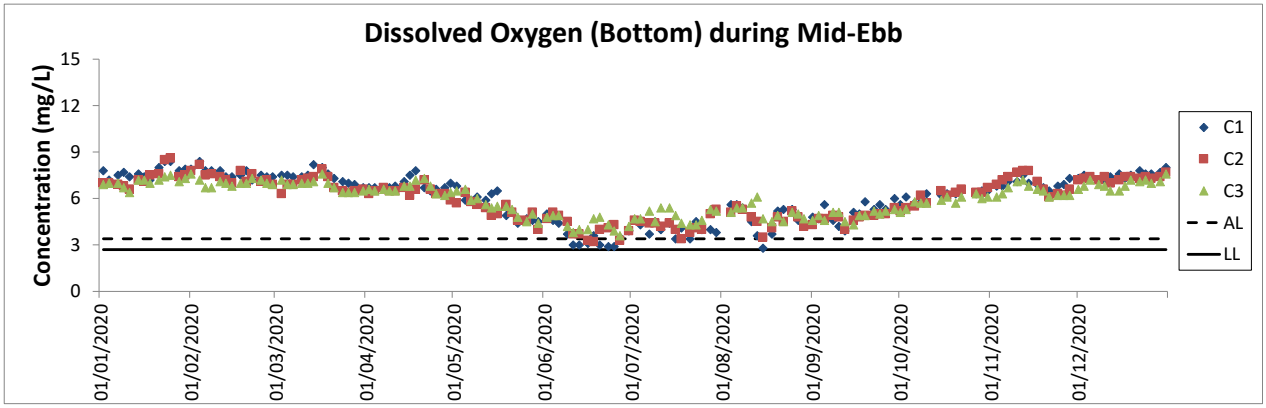


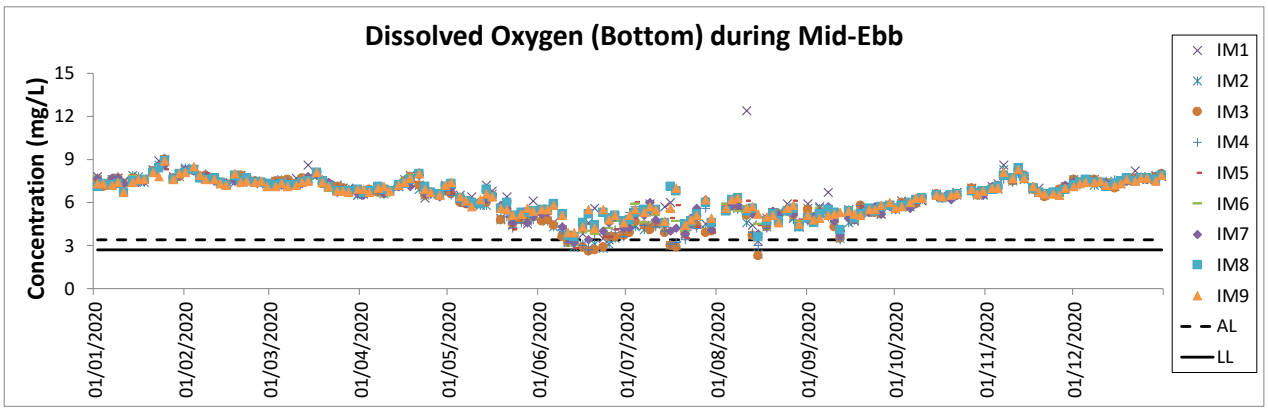


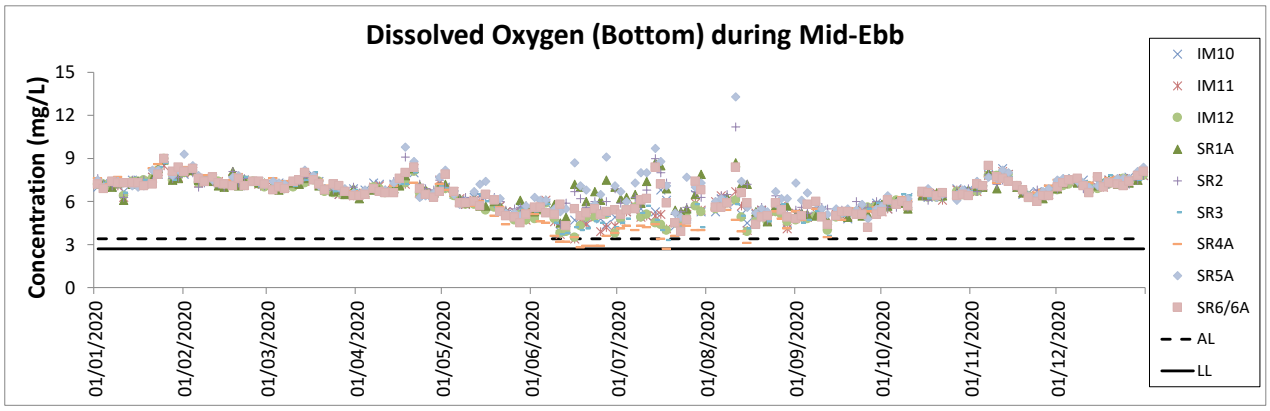


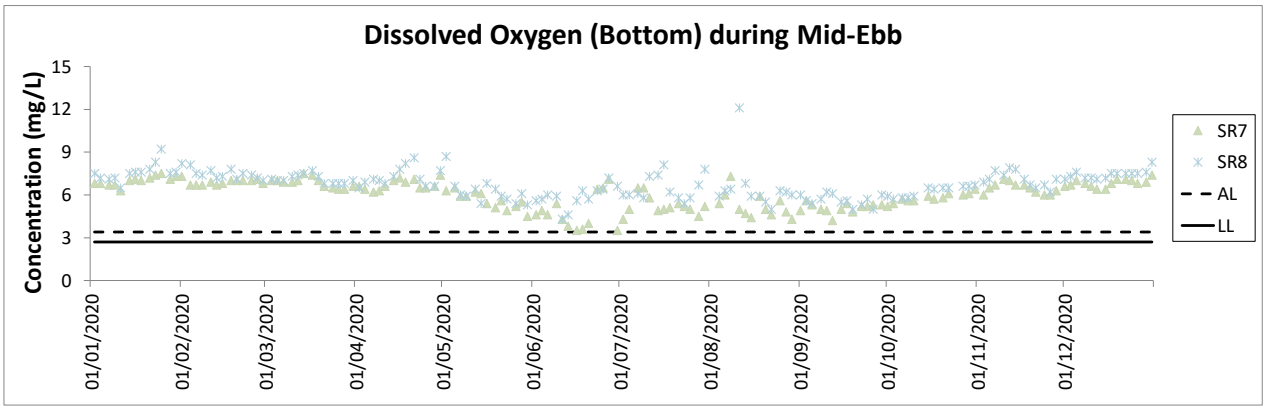
Notes:

1. The key marine works activities of the Project during monitoring included DCM works, marine filling, seawall and facilities construction, together with runway and associated works such as bored piling for approach lights.
2. General weather condition during monitoring ranged from sunny to rainy, with sea condition ranged from calm to rough. Detailed meteorological conditions should be referred to Table 2.10 of this Report and corresponding Monthly EM&A Reports.
3. QA/ QC requirements as stipulated in the EM&A Manual was carried out during measurement.



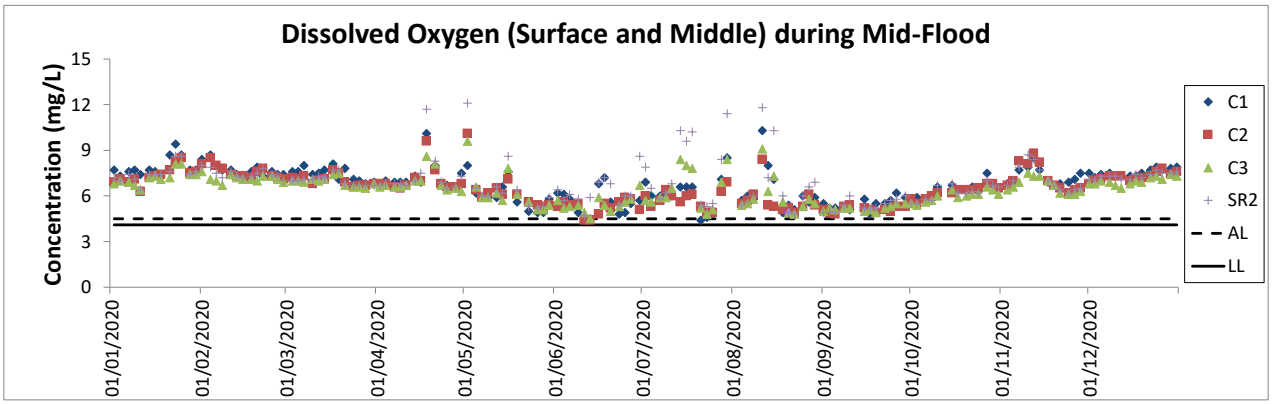


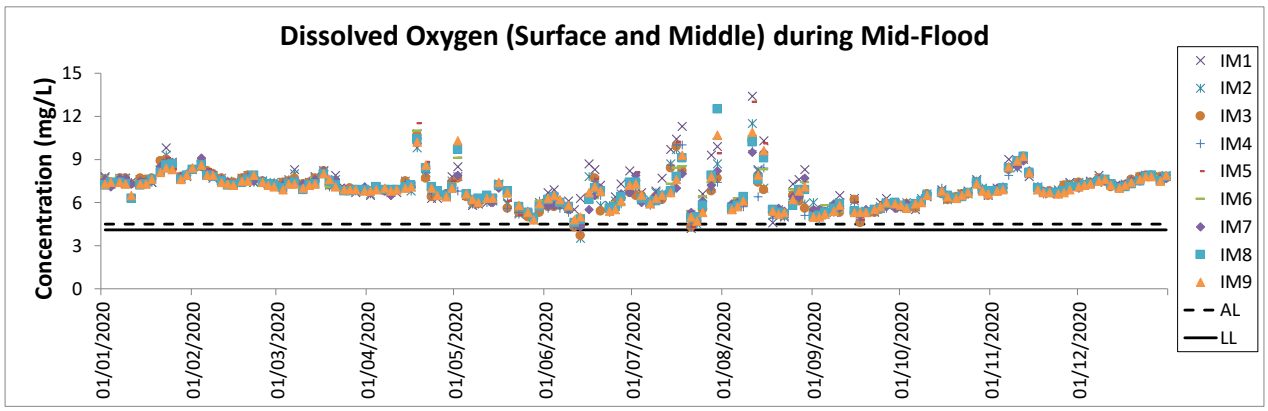


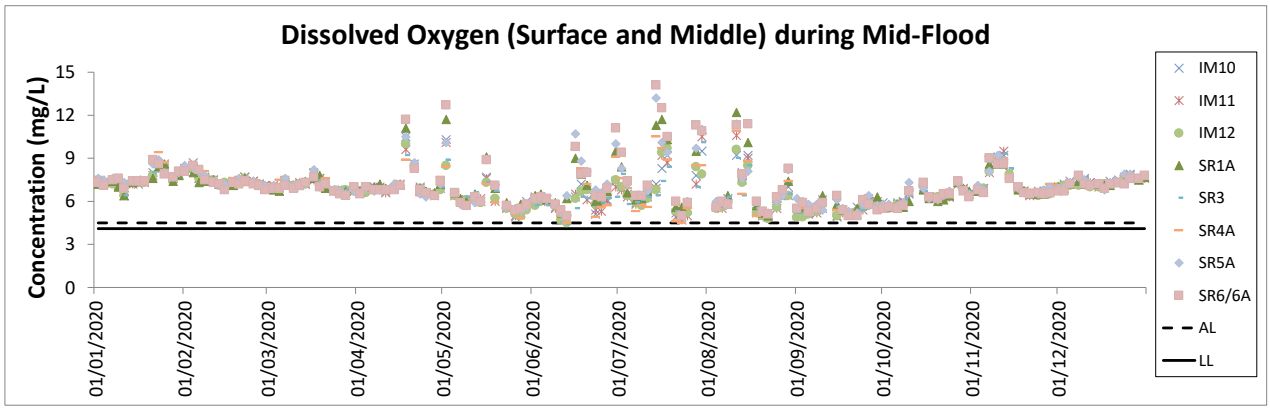


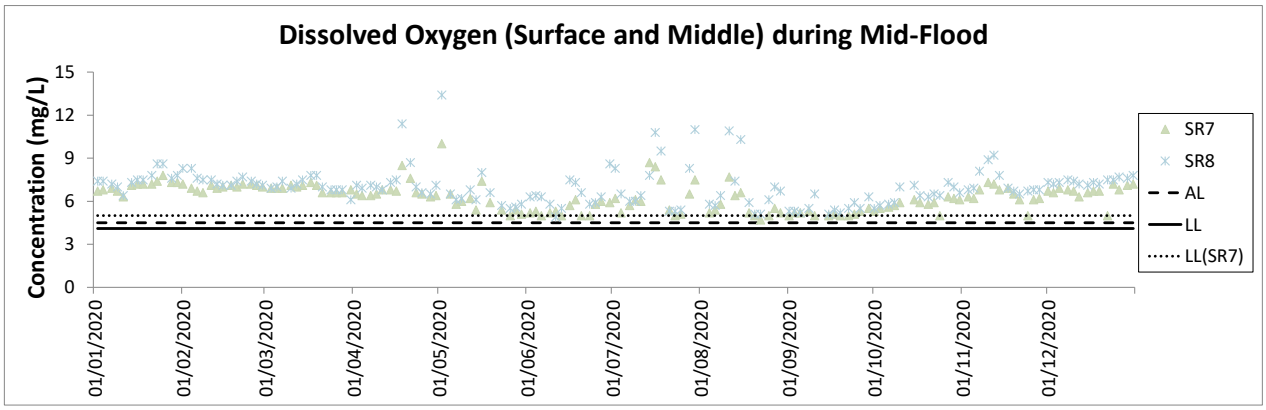
Notes:

1. The key marine works activities of the Project during monitoring included DCM works, marine filling, seawall and facilities construction, together with runway and associated works such as bored piling for approach lights.
2. General weather condition during monitoring ranged from sunny to rainy, with sea condition ranged from calm to rough. Detailed meteorological conditions should be referred to Table 2.10 of this Report and corresponding Monthly EM&A Reports.
3. QA/ QC requirements as stipulated in the EM&A Manual was carried out during measurement.



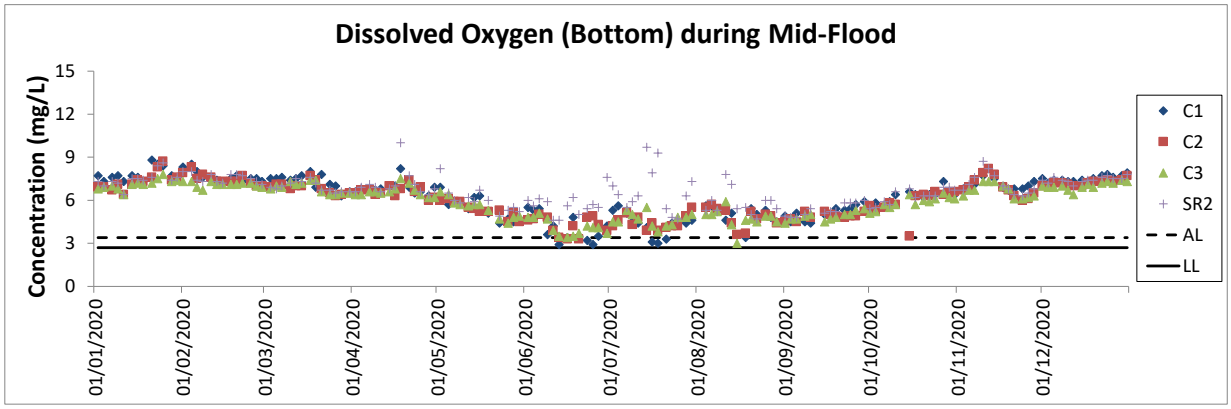


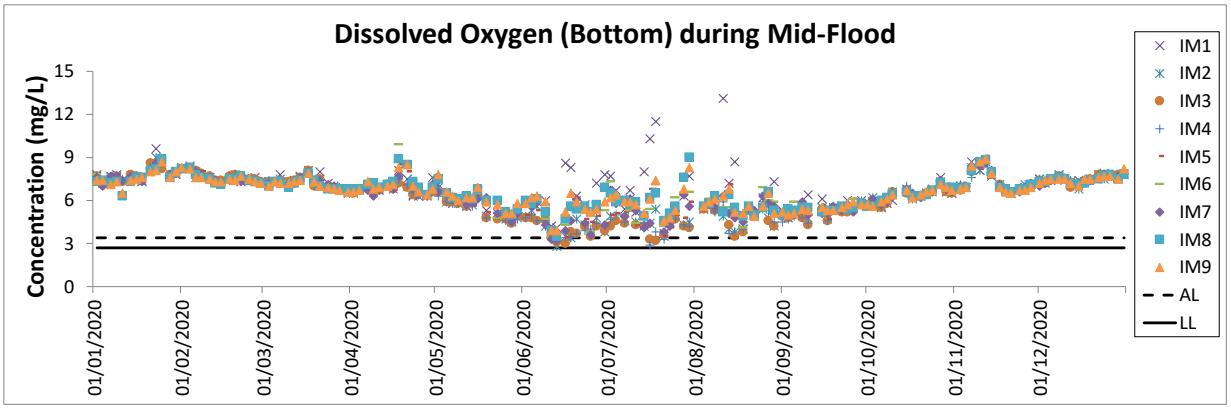


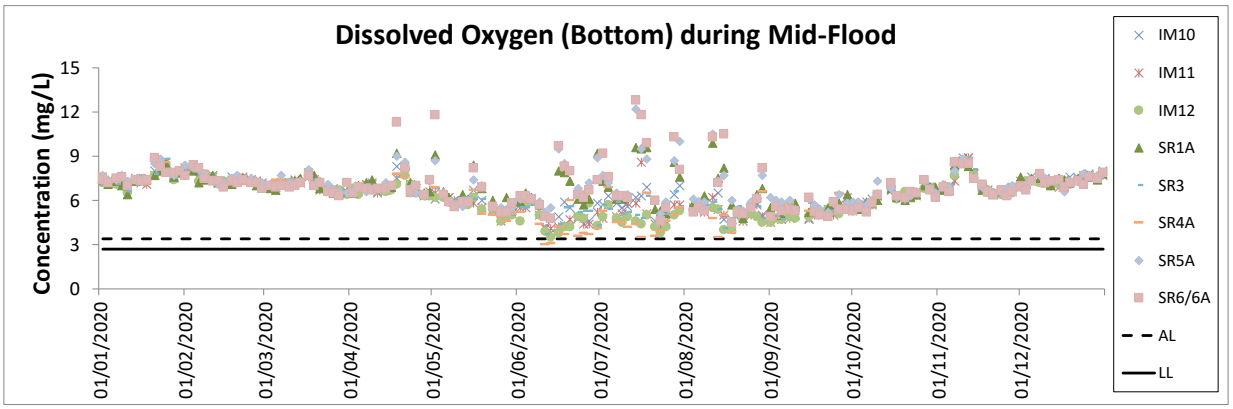


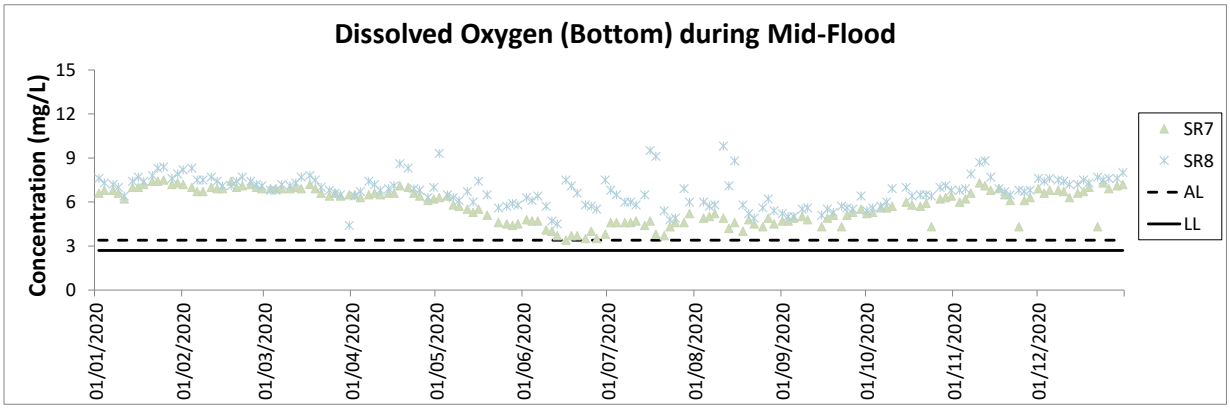
Notes:

1. The key marine works activities of the Project during monitoring included DCM works, marine filling, seawall and facilities construction, together with runway and associated works such as bored piling for approach lights.
2. General weather condition during monitoring ranged from sunny to rainy, with sea condition ranged from calm to rough. Detailed meteorological conditions should be referred to Table 2.10 of this Report and corresponding Monthly EM&A Reports.
3. QA/ QC requirements as stipulated in the EM&A Manual was carried out during measurement.



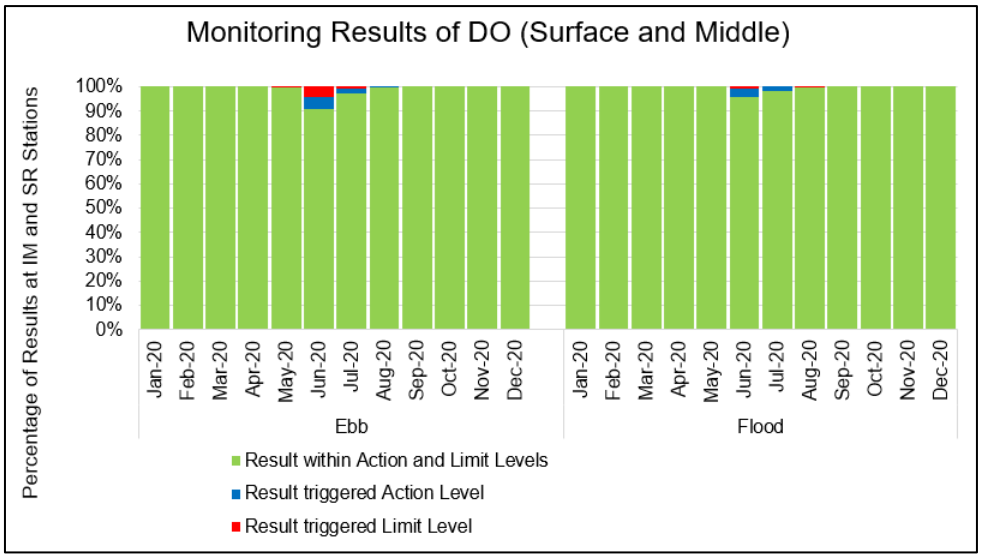


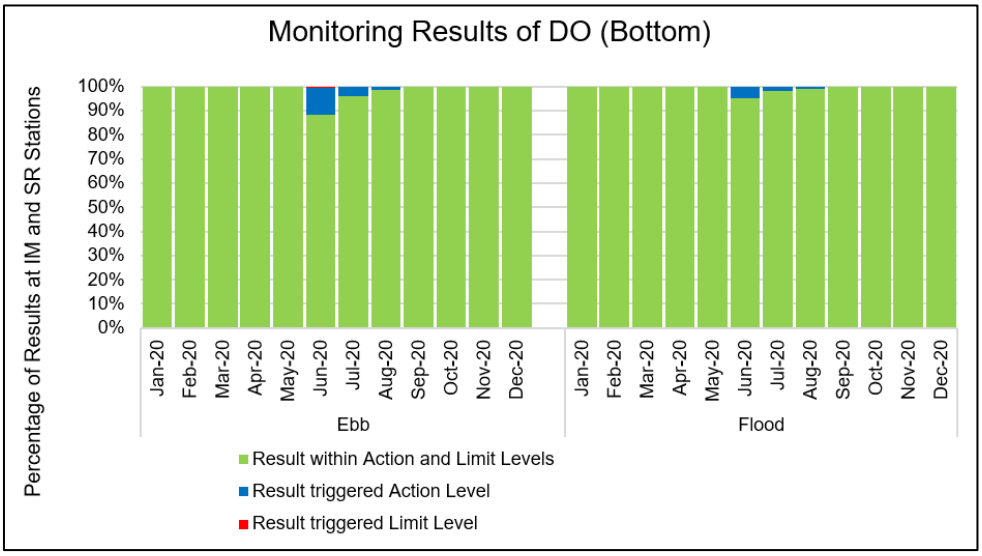




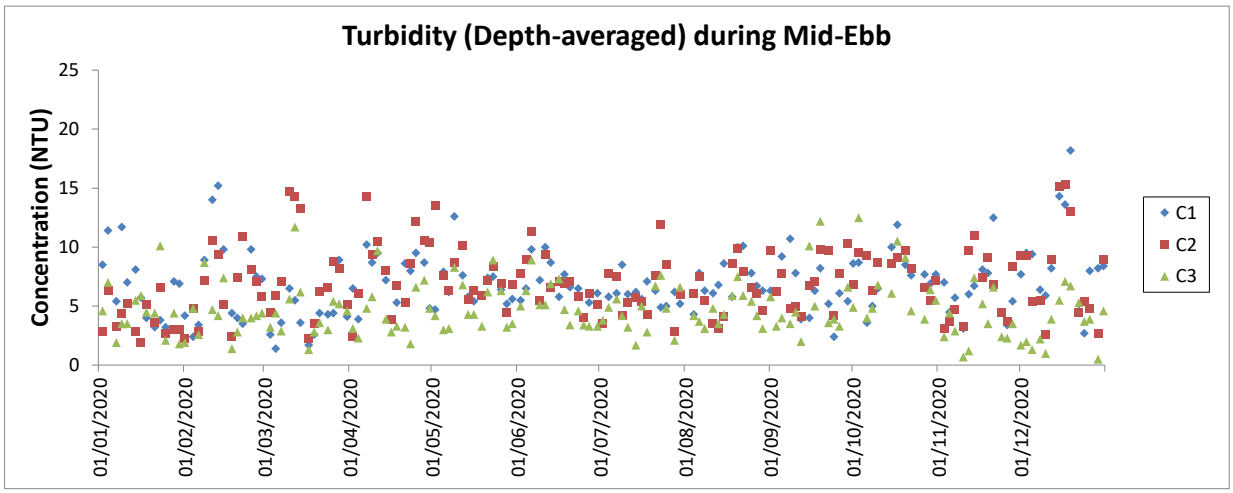
Notes:

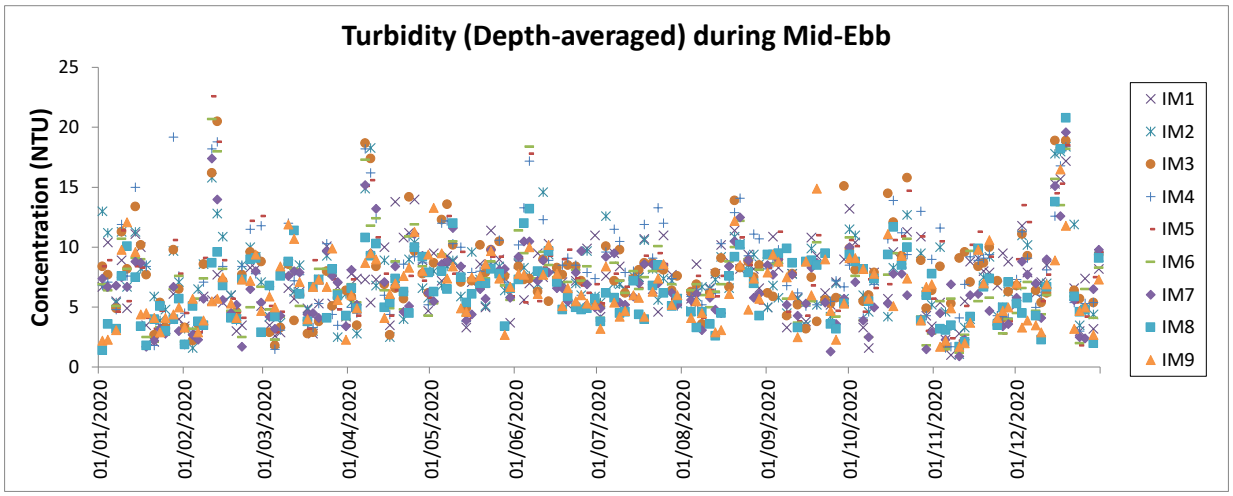
1. The key marine works activities of the Project during monitoring included DCM works, marine filling, seawall and facilities construction, together with runway and associated works such as bored piling for approach lights.
2. General weather condition during monitoring ranged from sunny to rainy, with sea condition ranged from calm to rough. Detailed meteorological conditions should be referred to Table 2.10 of this Report and corresponding Monthly EM&A Reports.
3. QA/ QC requirements as stipulated in the EM&A Manual was carried out during measurement.

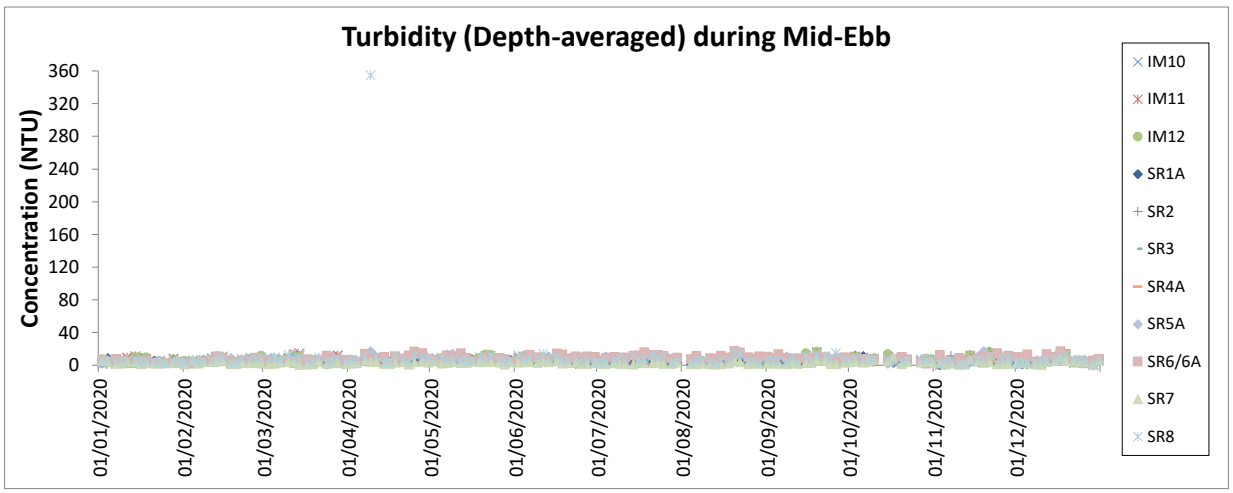




During the reporting period, 0.8% of the DO monitoring results at surface and middle water level and 1% of the DO monitoring results at bottom water level triggered the corresponding Action or Limit Level. All results triggering the corresponding Action or Limit level were collected during the wet season (April to October), particularly in May to August, which suggest the observation of seasonal effect on the DO monitoring results. Based on above observations, as well as the relevant investigation findings presented in the Construction Phase Monthly EM&A Reports, it is considered that the Project did not cause adverse impact on DO level at all water quality sensitive receivers.

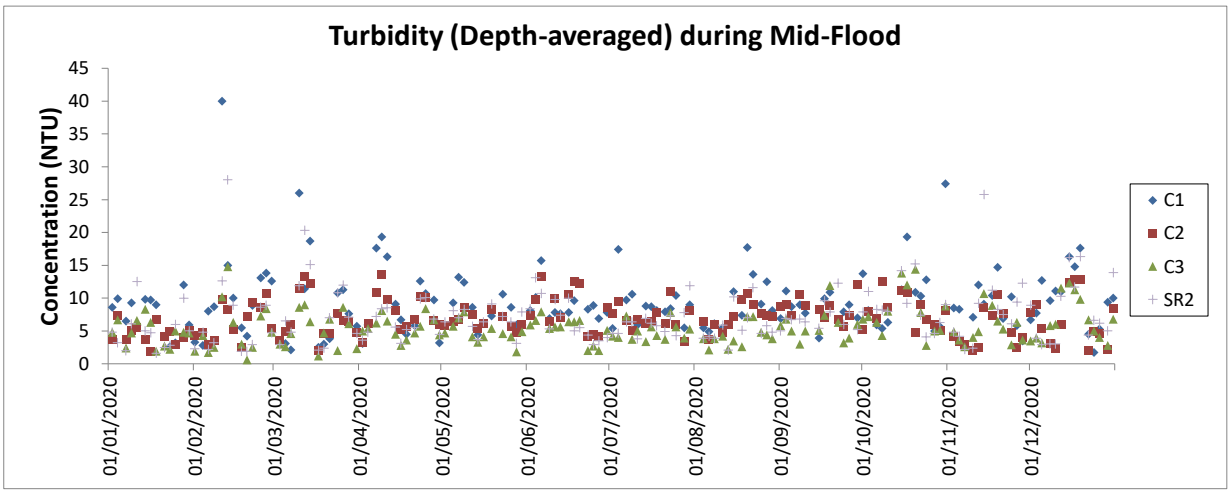


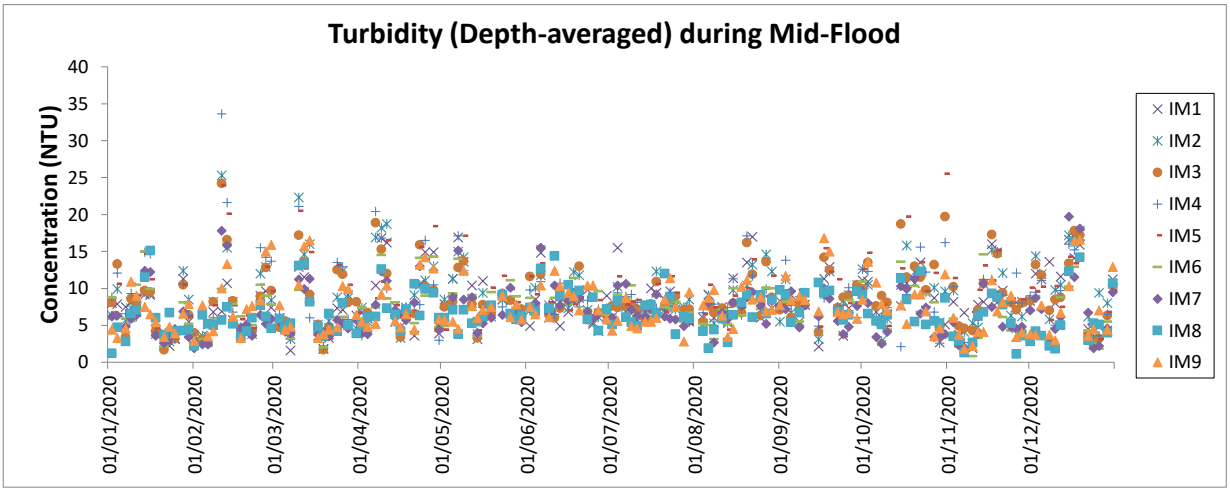


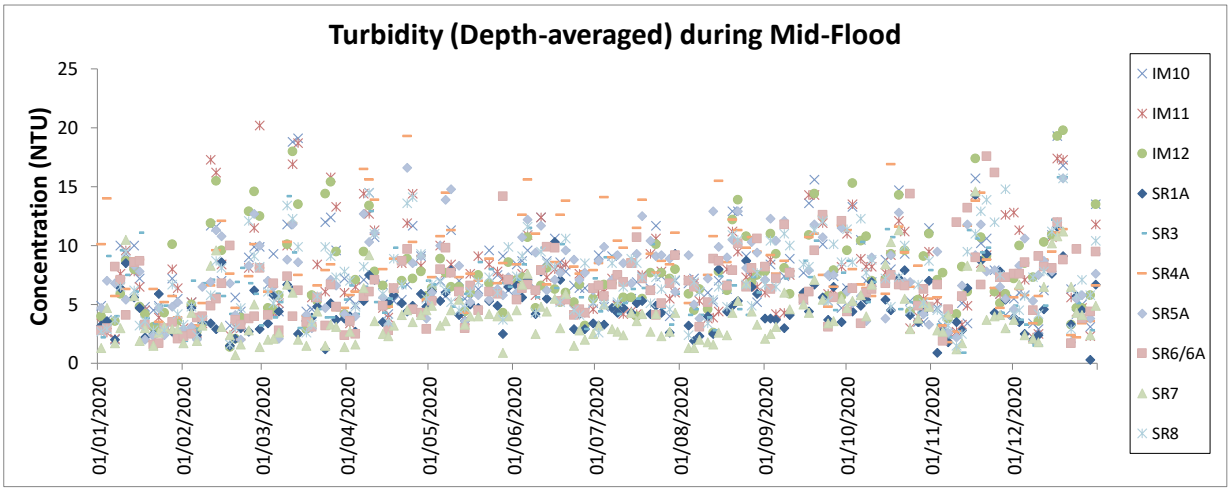


Notes:

1. The Action and Limit Levels can be referred to Table 2.8 of the Annual EM&A Report.
2. The key marine works activities of the Project during monitoring included DCM works, marine filling, seawall and facilities construction, together with runway and associated works such as bored piling for approach lights.
3. General weather condition during monitoring ranged from sunny to rainy, with sea condition ranged from calm to rough. Detailed meteorological conditions should be referred to Table 2.10 of this Report and corresponding Monthly EM&A Reports.
4. QA/ QC requirements as stipulated in the EM&A Manual was carried out during measurement.

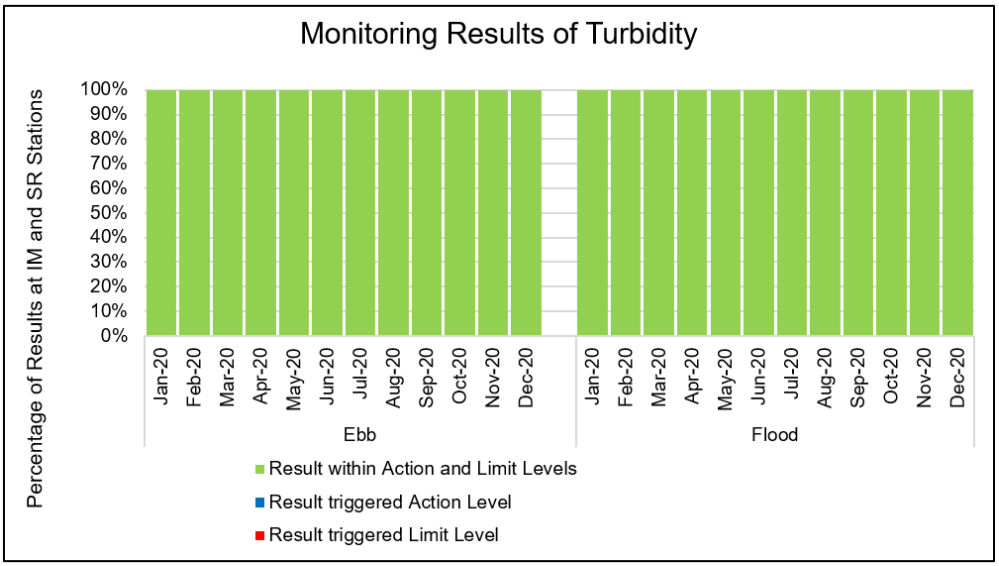




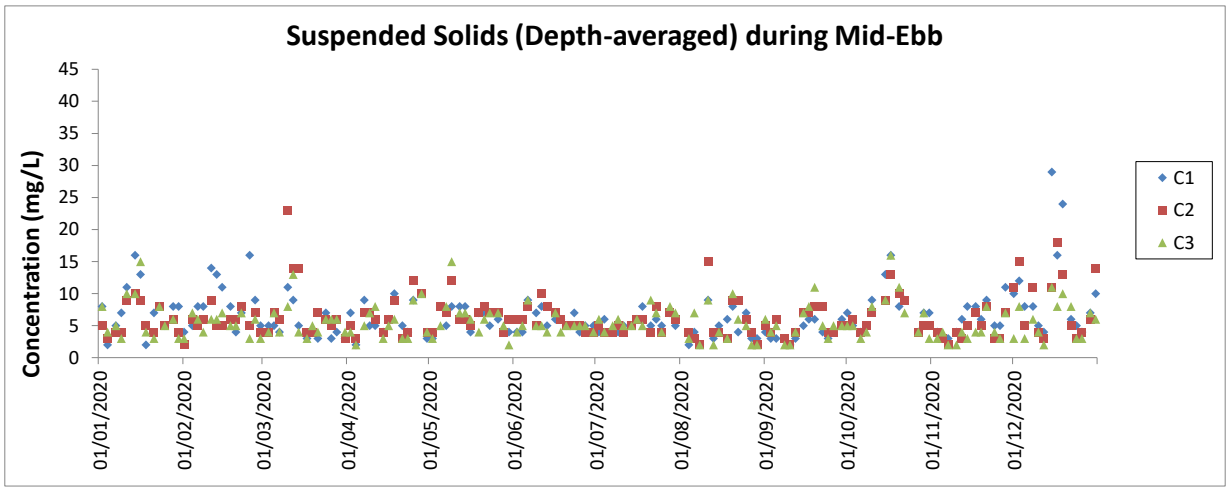


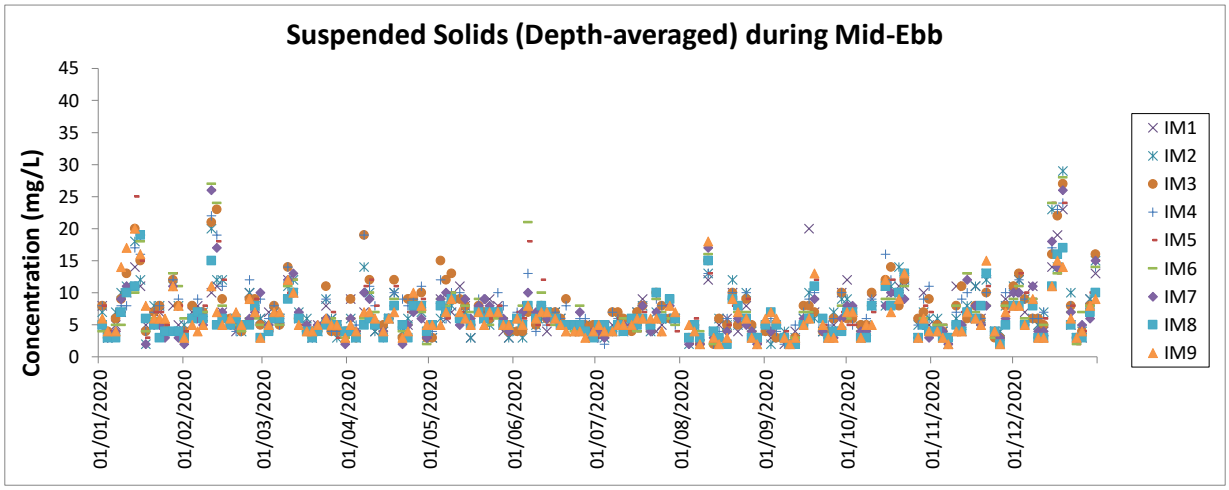
Notes:

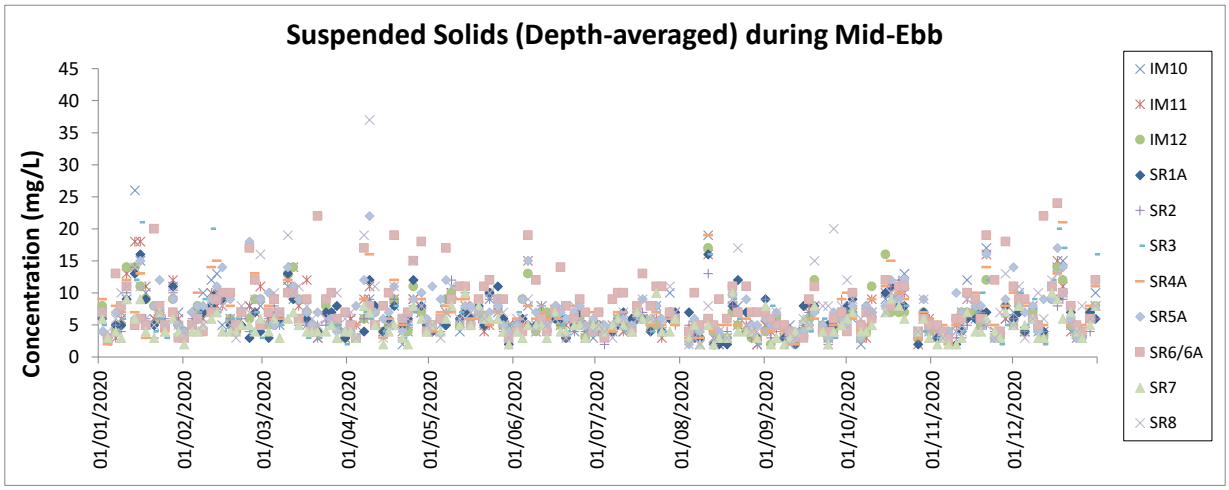
1. The Action and Limit Levels can be referred to Table 2.8 of the Annual EM&A Report.
2. The key marine works activities of the Project during monitoring included DCM works, marine filling, seawall and facilities construction, together with runway and associated works such as bored piling for approach lights.
3. General weather condition during monitoring ranged from sunny to rainy, with sea condition ranged from calm to rough. Detailed meteorological conditions should be referred to Table 2.10 of this Report and corresponding Monthly EM&A Reports.
4. QA/ QC requirements as stipulated in the EM&A Manual was carried out during measurement.



All turbidity monitoring results in the reporting period were within the corresponding Action and Limit Levels.

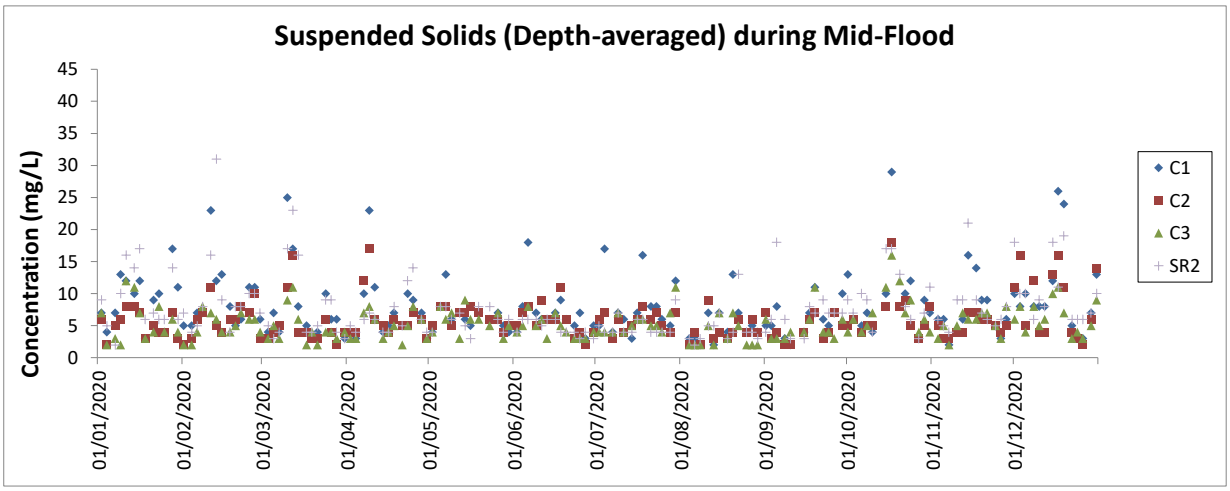


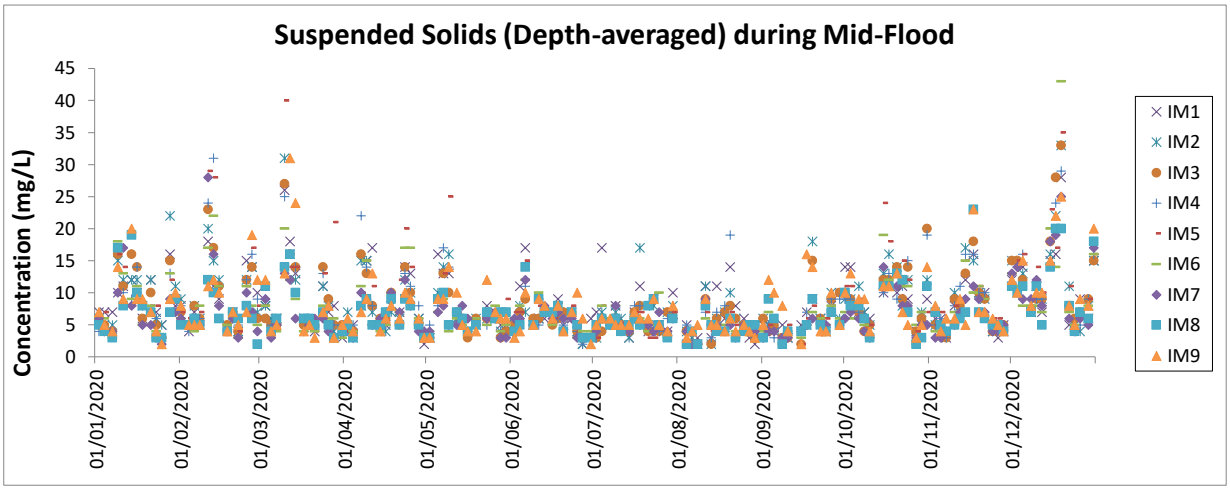


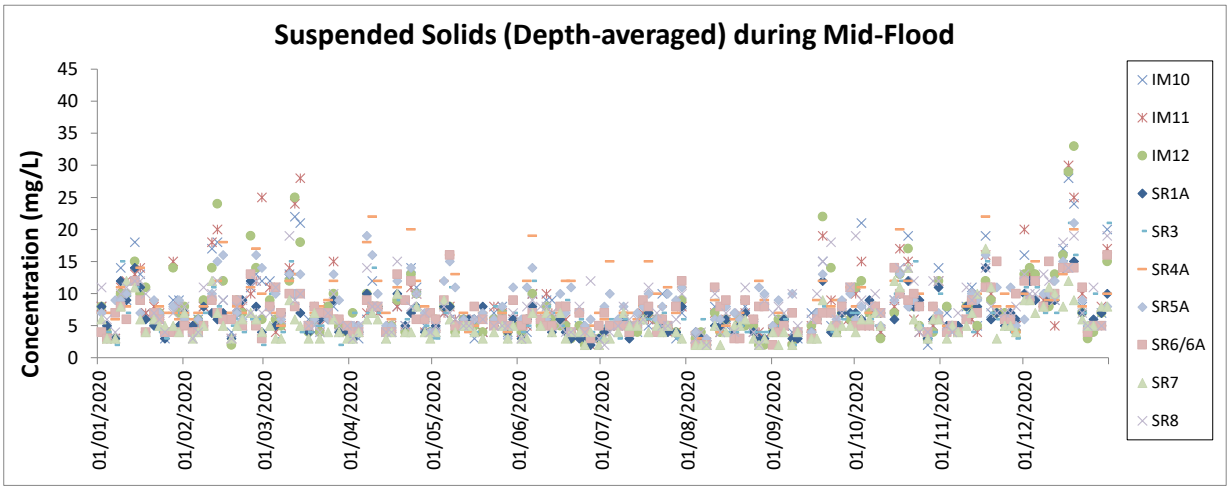


Notes:

1. The Action and Limit Levels can be referred to Table 2.8 of the Annual EM&A Report.
2. The key marine works activities of the Project during monitoring included DCM works, marine filling, seawall and facilities construction, together with runway and associated works such as bored piling for approach lights.
3. General weather condition during monitoring ranged from sunny to rainy, with sea condition ranged from calm to rough. Detailed meteorological conditions should be referred to Table 2.10 of this Report and corresponding Monthly EM&A Reports.
4. QA/ QC requirements as stipulated in the EM&A Manual was carried out during measurement.

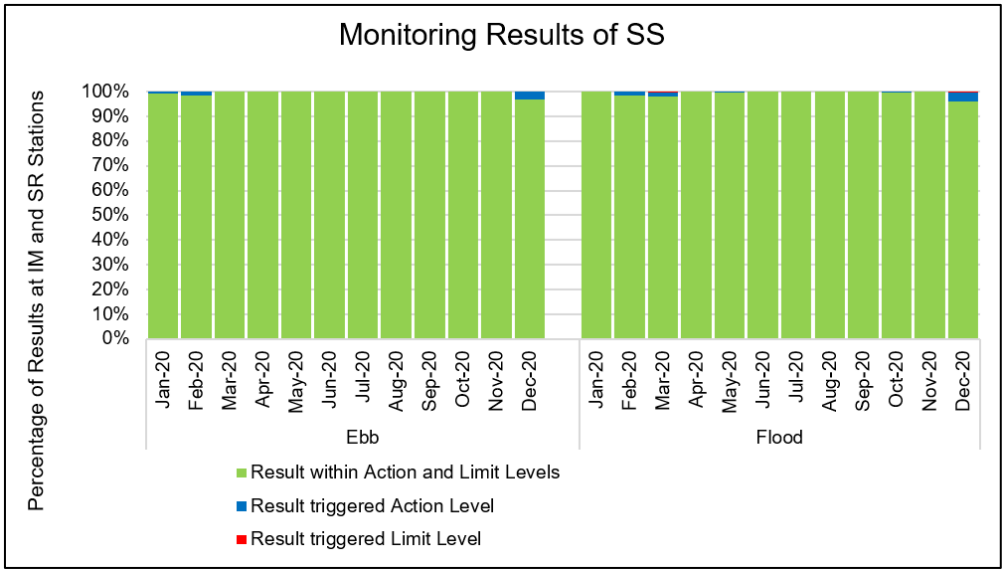




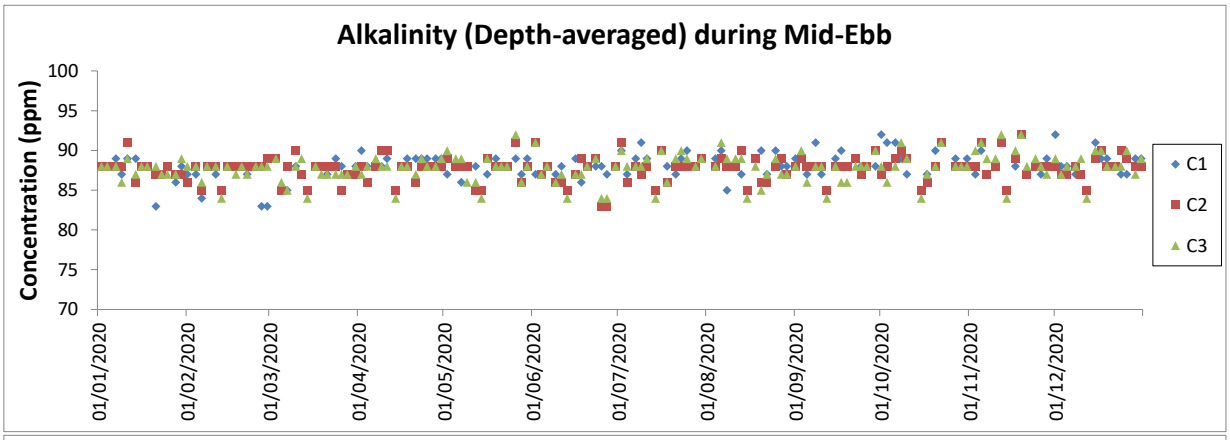


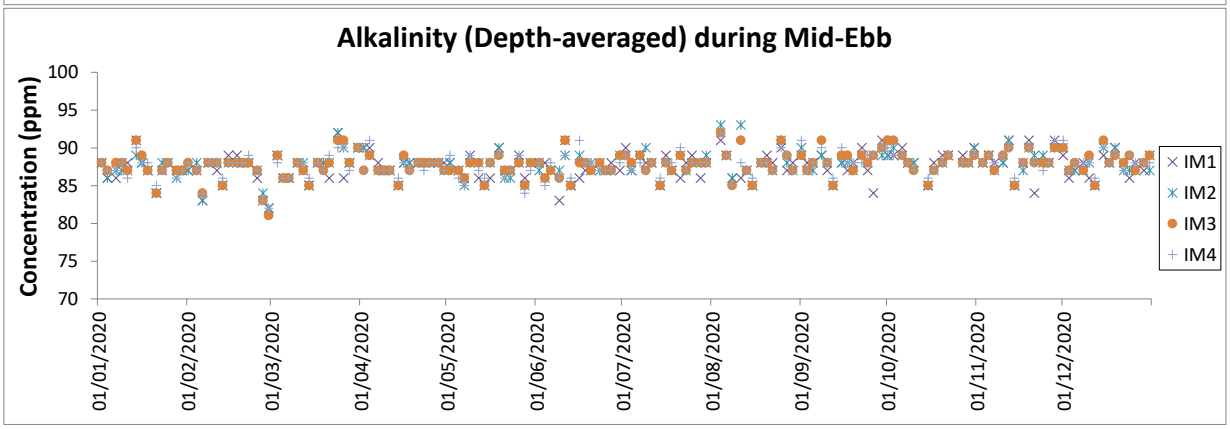
Notes:

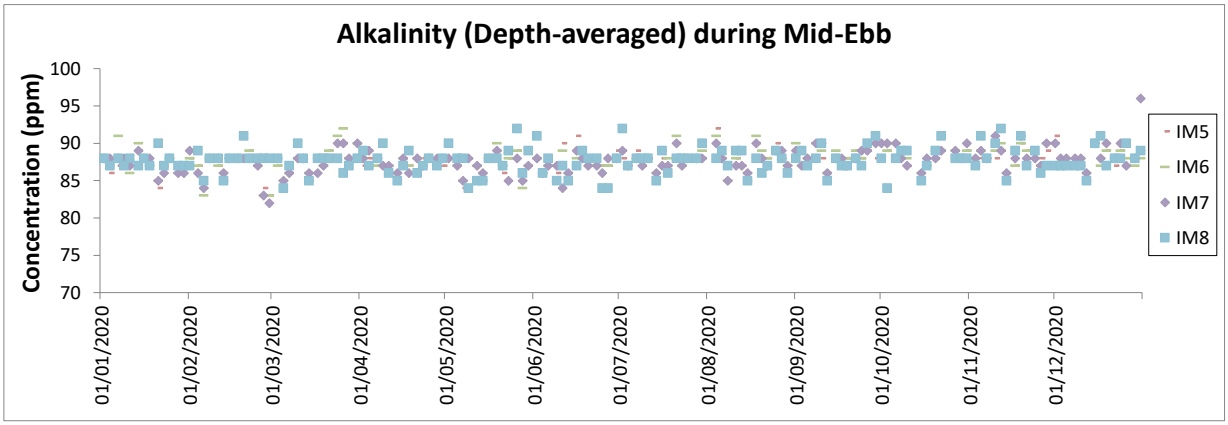
1. The Action and Limit Levels can be referred to Table 2.8 of the Annual EM&A Report.
2. The key marine works activities of the Project during monitoring included DCM works, marine filling, seawall and facilities construction, together with runway and associated works such as bored piling for approach lights.
3. General weather condition during monitoring ranged from sunny to rainy, with sea condition ranged from calm to rough. Detailed meteorological conditions should be referred to Table 2.10 of this Report and corresponding Monthly EM&A Reports.
4. QA/ QC requirements as stipulated in the EM&A Manual was carried out during measurement.

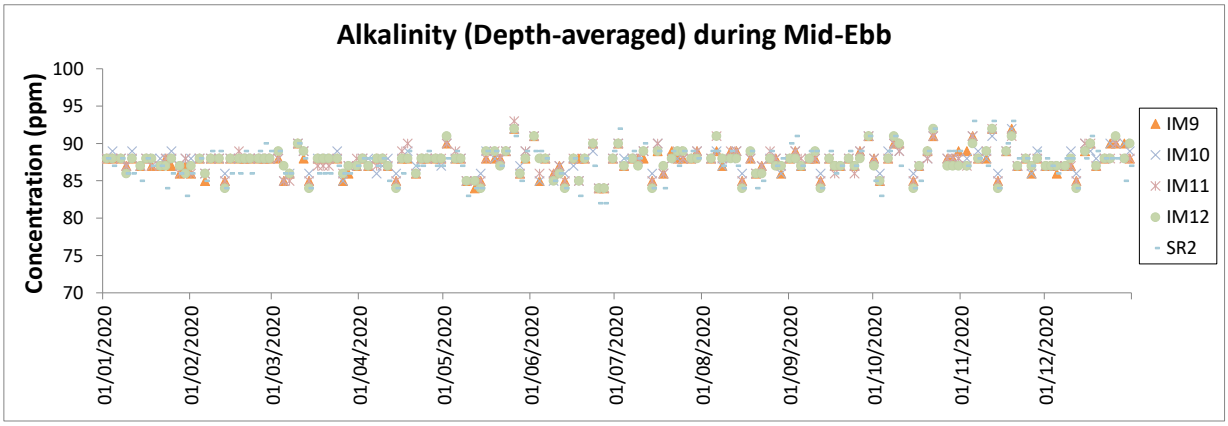


During the reporting period, 0.6% of the SS monitoring results triggered the corresponding Action or Limit Levels. Due to the small number of results triggering the Action or Limit Levels, and the relevant investigation findings presented in the Construction Phase Monthly EM&A Reports, it is considered that the Project did not cause adverse impact on SS level at all water quality sensitive receivers.



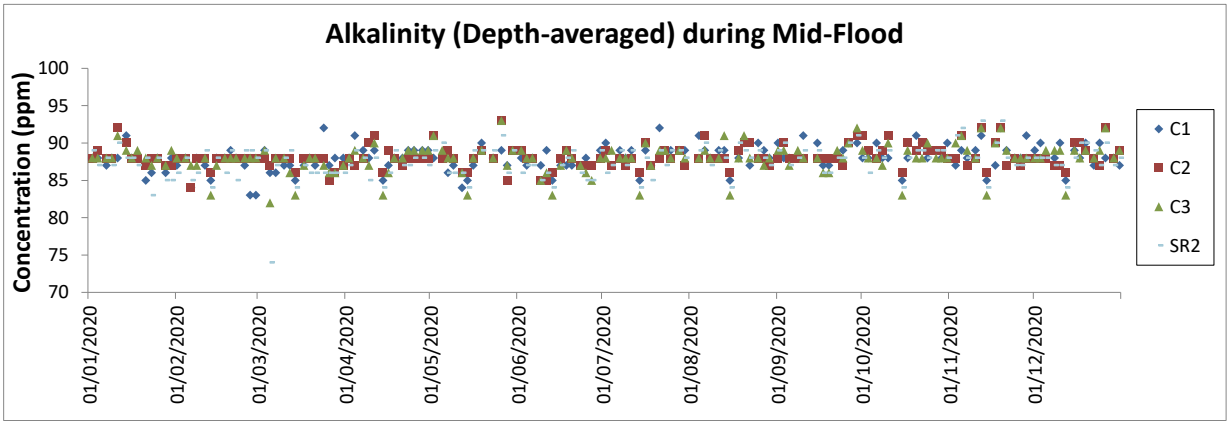


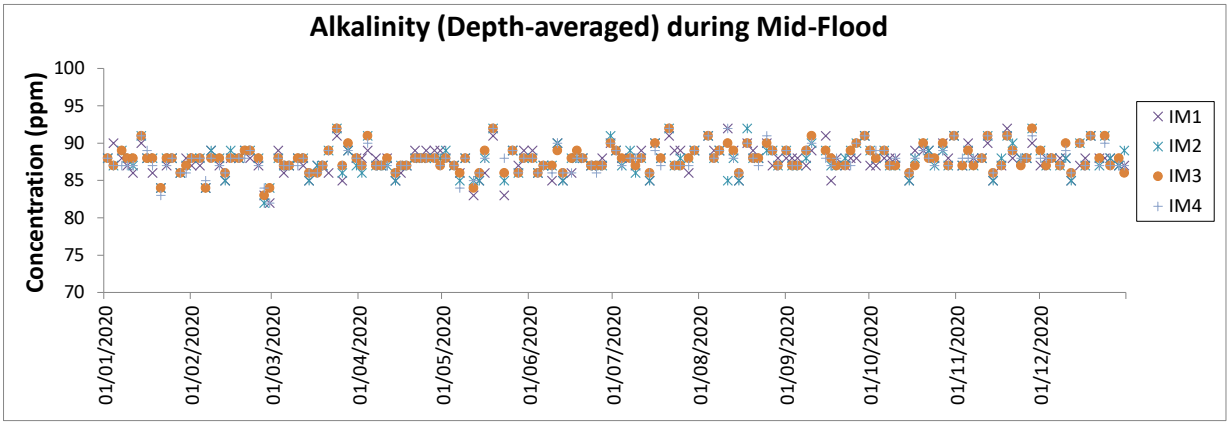


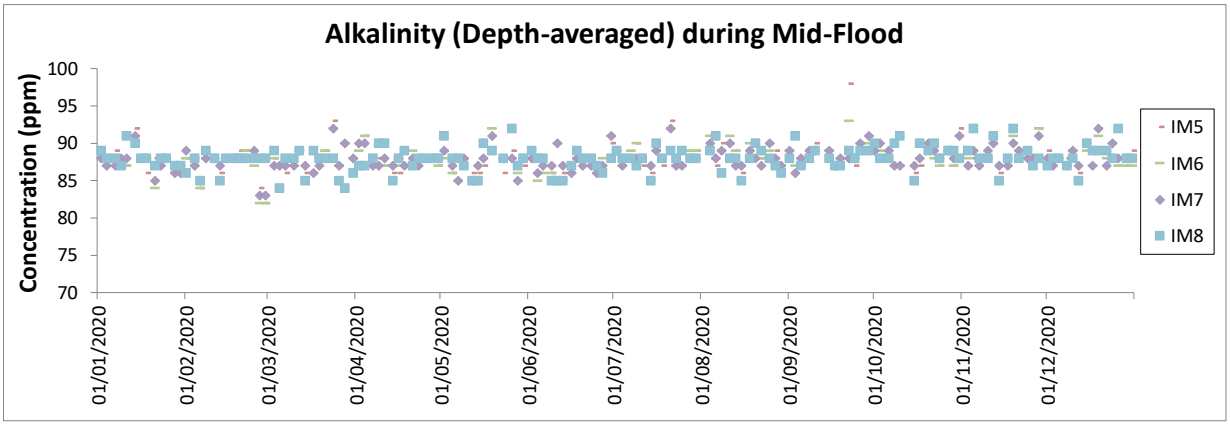


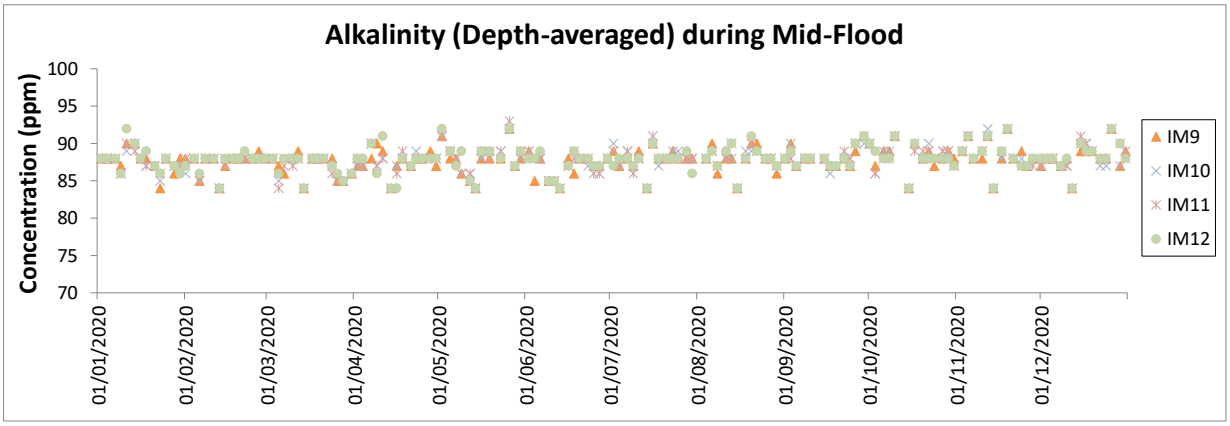
Notes:

1. The Action and Limit Levels can be referred to Table 2.8 of the Annual EM&A Report.
2. The key marine works activities of the Project during monitoring included DCM works, marine filling, seawall and facilities construction, together with runway and associated works such as bored piling for approach lights.
3. General weather condition during monitoring ranged from sunny to rainy, with sea condition ranged from calm to rough. Detailed meteorological conditions should be referred to Table 2.10 of this Report and corresponding Monthly EM&A Reports.
4. QA/ QC requirements as stipulated in the EM&A Manual was carried out during measurement.



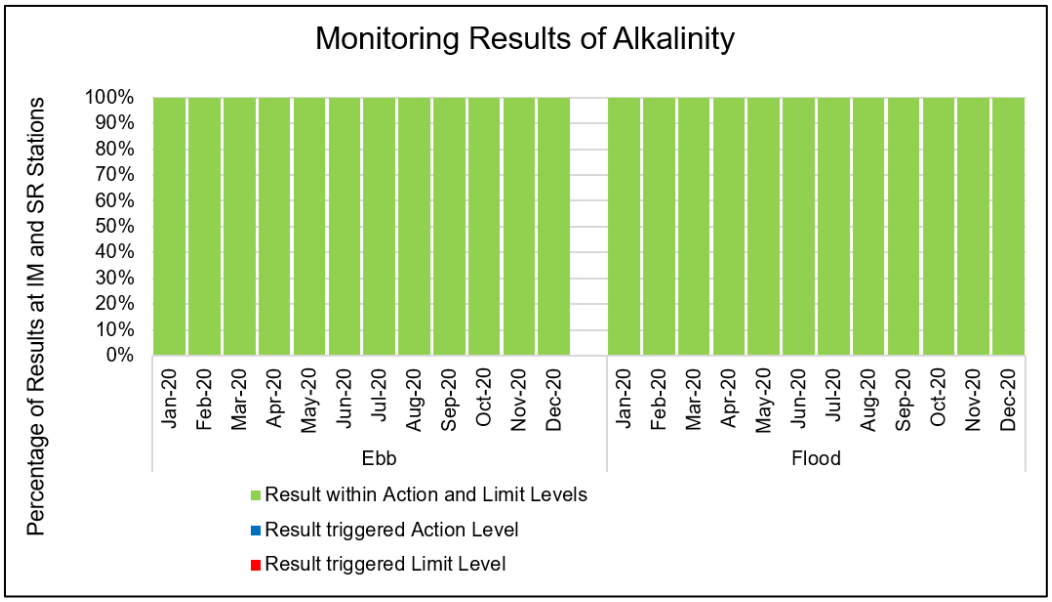




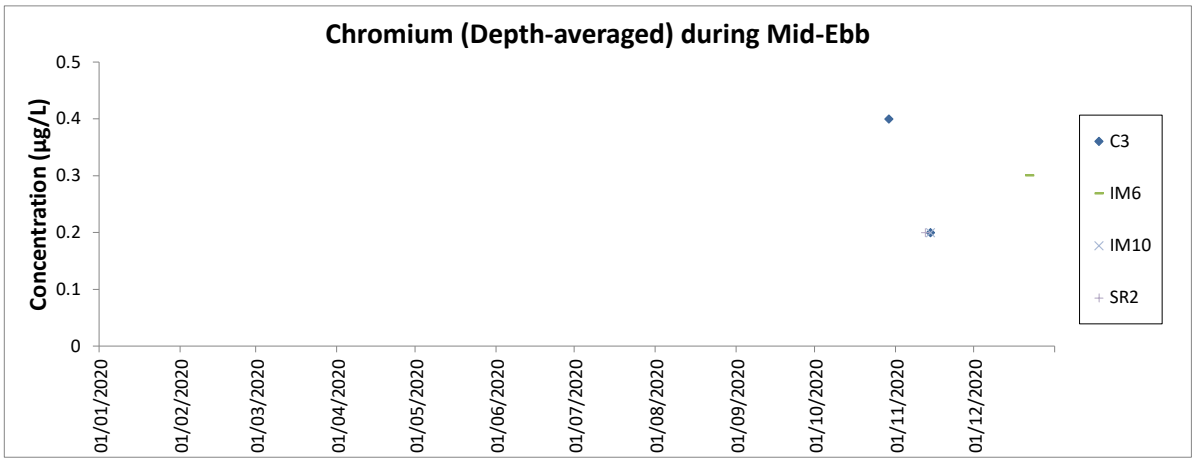


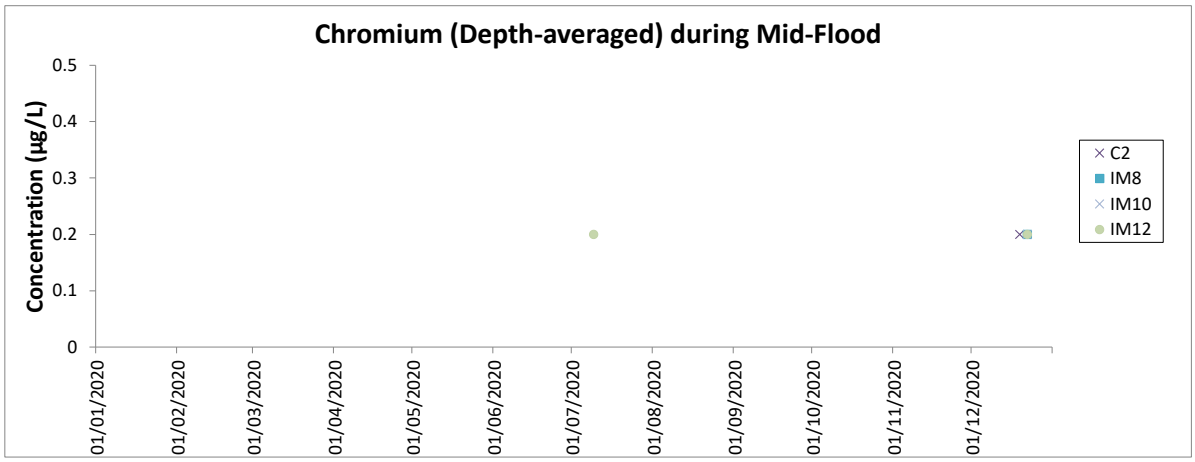
Notes:

1. The Action and Limit Levels can be referred to Table 2.8 of the Annual EM&A Report.
2. The key marine works activities of the Project during monitoring included DCM works, marine filling, seawall and facilities construction, together with runway and associated works such as bored piling for approach lights.
3. General weather condition during monitoring ranged from sunny to rainy, with sea condition ranged from calm to rough. Detailed meteorological conditions should be referred to Table 2.10 of this Report and corresponding Monthly EM&A Reports.
4. QA/ QC requirements as stipulated in the EM&A Manual was carried out during measurement.



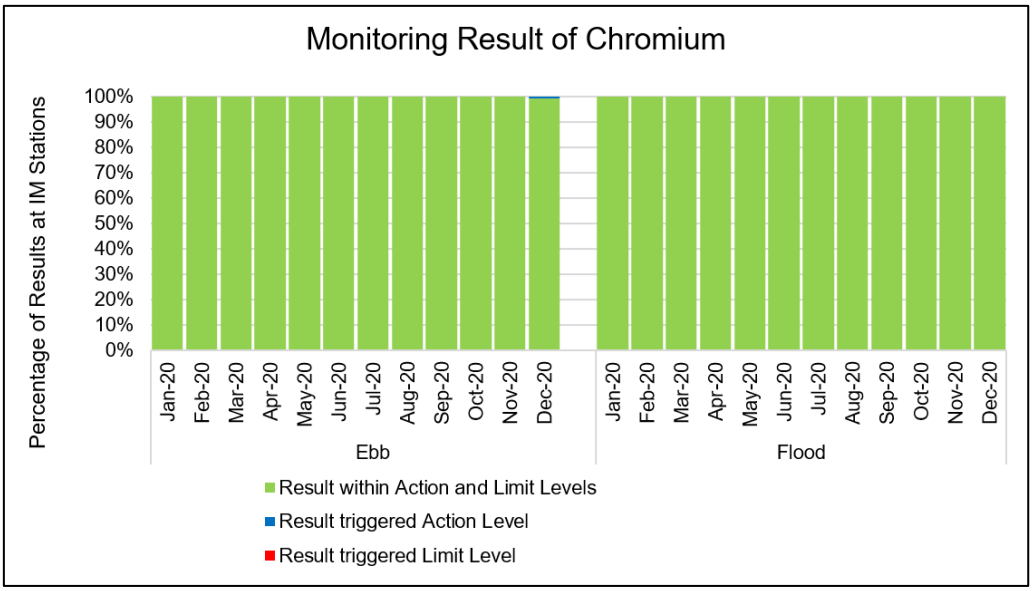
All alkalinity monitoring results in the reporting period were within the corresponding Action and Limit Levels.



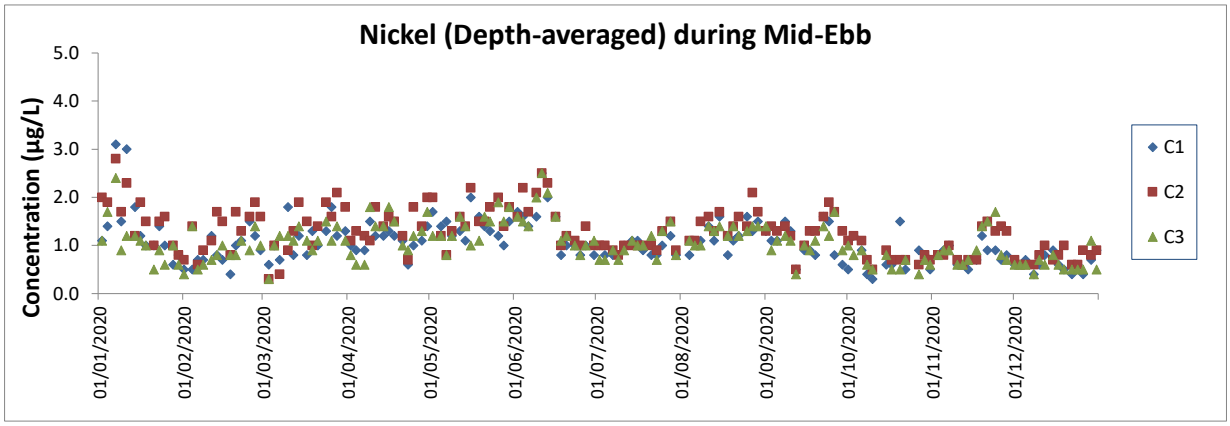


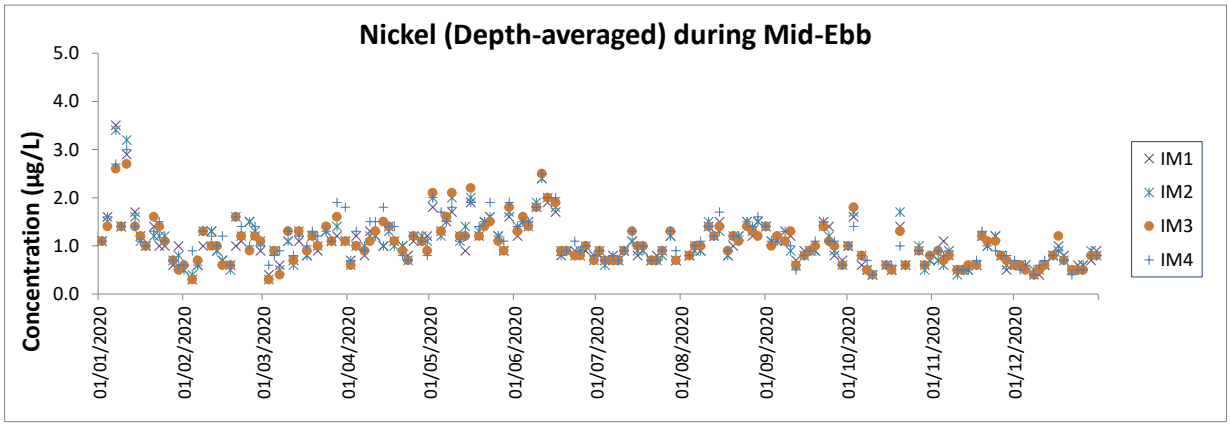
Notes:

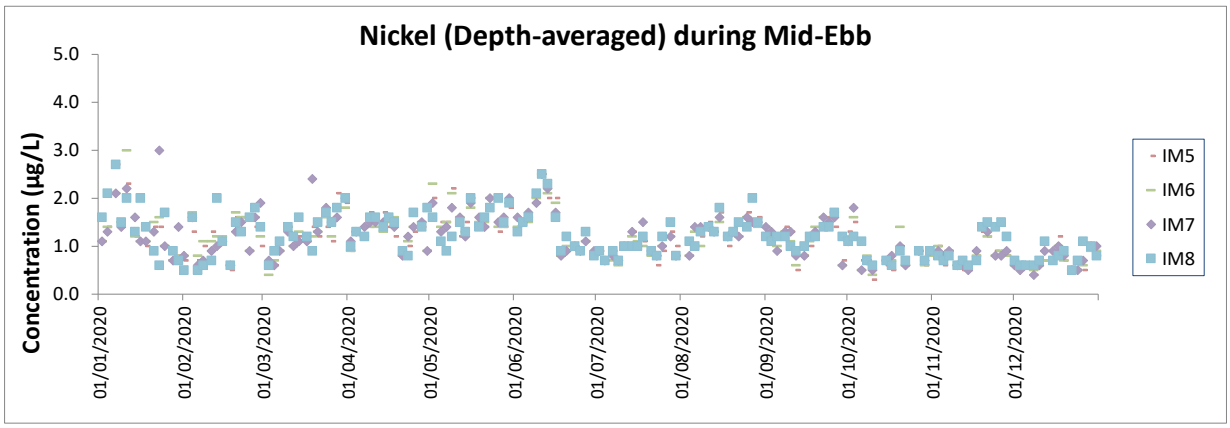
1. The Action and Limit Levels can be referred to Table 2.8 of the Annual EM&A Report.
2. The monitoring results of chromium at all other monitoring stations were below the reporting limit of 0.2 µg/L.
3. The key marine works activities of the Project during monitoring included DCM works, marine filling, seawall and facilities construction, together with runway and associated works such as bored piling for approach lights.
4. General weather condition during monitoring ranged from sunny to rainy, with sea condition ranged from calm to rough. Detailed meteorological conditions should be referred to Table 2.10 of this Report and corresponding Monthly EM&A Reports.
5. QA/ QC requirements as stipulated in the EM&A Manual was carried out during measurement.

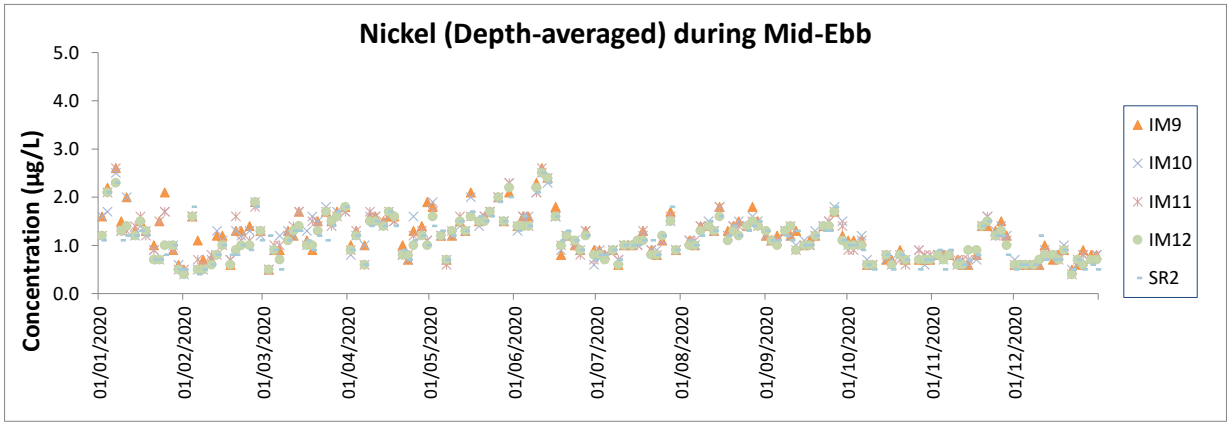


During the reporting period, 0.03% of the chromium monitoring results triggered the corresponding Action Level. It appeared that the case was isolated with no observable temporal and spatial trend that might be related to Project activities.



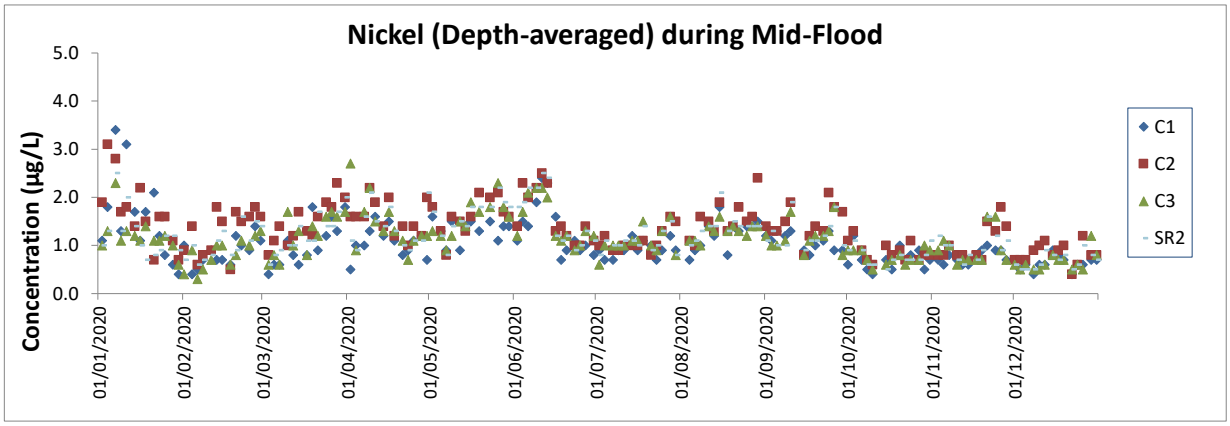


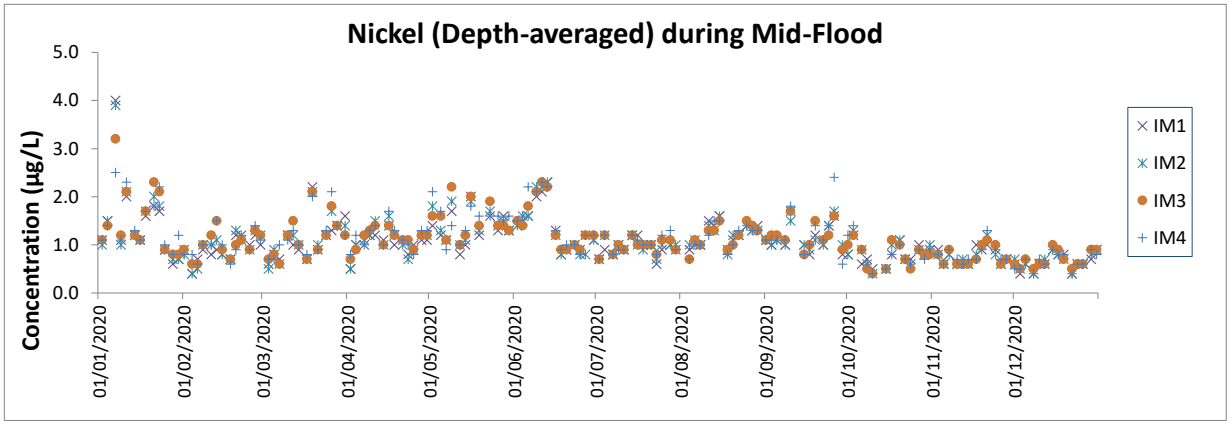


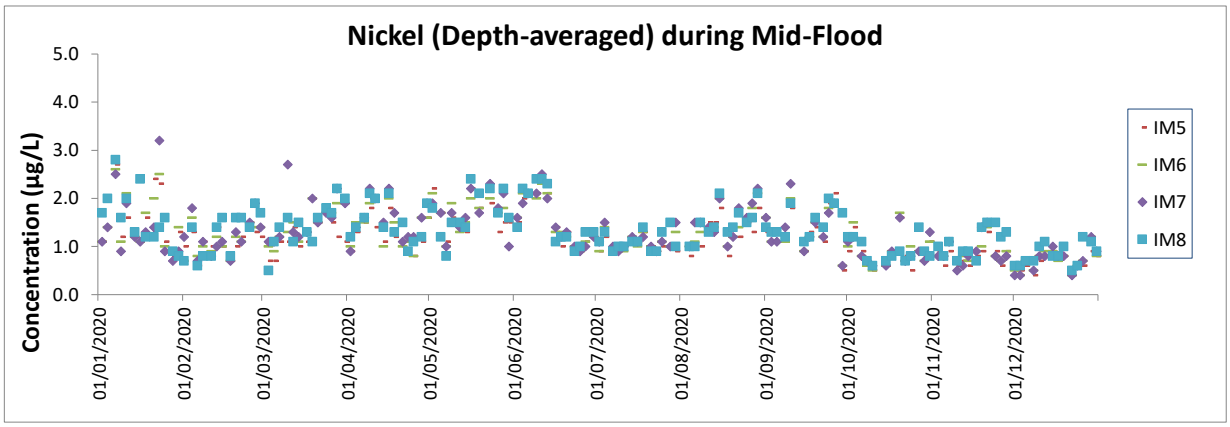


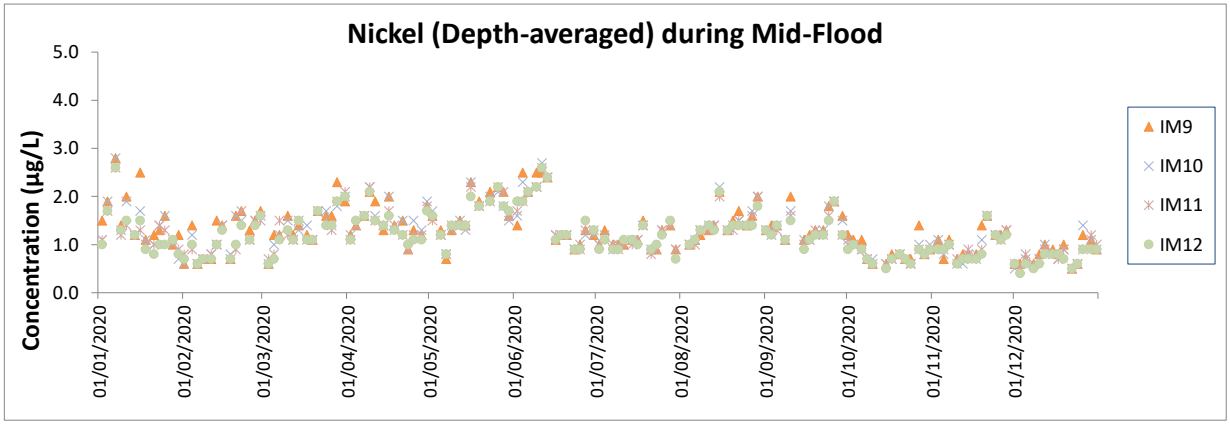
Notes:

1. The Action and Limit Levels can be referred to Table 2.8 of the Annual EM&A Report.
2. The key marine works activities of the Project during monitoring included DCM works, marine filling, seawall and facilities construction, together with runway and associated works such as bored piling for approach lights.
3. General weather condition during monitoring ranged from sunny to rainy, with sea condition ranged from calm to rough. Detailed meteorological conditions should be referred to Table 2.10 of this Report and corresponding Monthly EM&A Reports.
4. QA/ QC requirements as stipulated in the EM&A Manual was carried out during measurement.



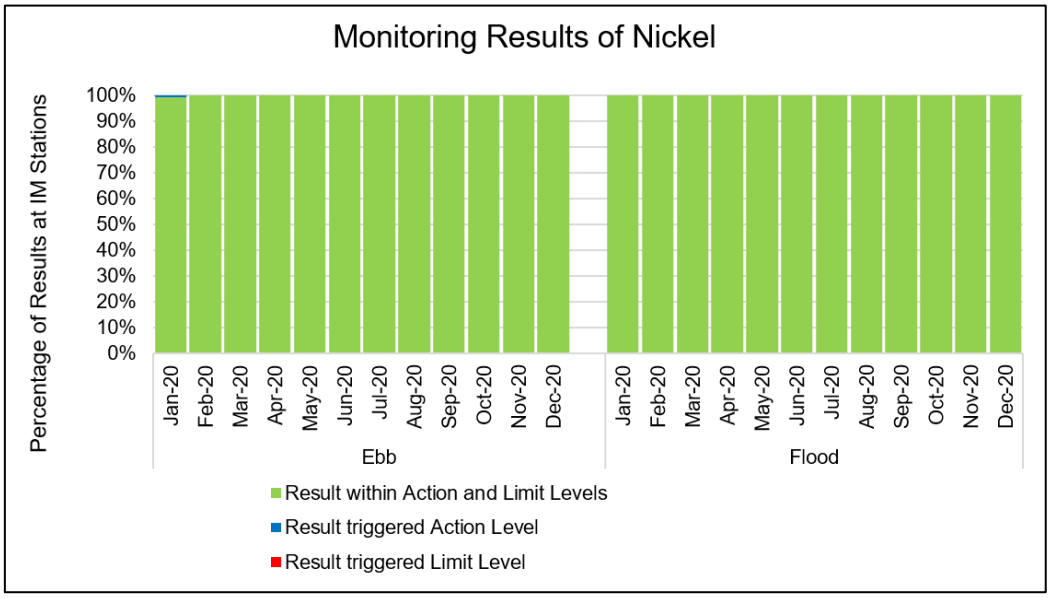






Notes:

1. The Action and Limit Levels can be referred to Table 2.8 of the Annual EM&A Report.
2. The key marine works activities of the Project during monitoring included DCM works, marine filling, seawall and facilities construction, together with runway and associated works such as bored piling for approach lights.
3. General weather condition during monitoring ranged from sunny to rainy, with sea condition ranged from calm to rough. Detailed meteorological conditions should be referred to Table 2.10 of this Report and corresponding Monthly EM&A Reports.
4. QA/ QC requirements as stipulated in the EM&A Manual was carried out during measurement.



During the reporting period, 0.03% of the nickel monitoring results triggered the corresponding Action Level, which was lower than that recorded in the previous reporting period. It appeared that the case was isolated with no observable temporal and spatial trend that might be related to Project activities.

Combining the observations from the monitoring results of the two representative heavy metals for DCM works (chromium and nickel), the low percentage of results triggering corresponding Action Levels together with the investigation findings concluded that these cases were not related to the Project, indicating that DCM activities during the reporting period did not cause adverse water quality impact.

Appendix E. Chinese White Dolphin Monitoring Results

Figure 1: Sightings Distribution of Chinese White Dolphins

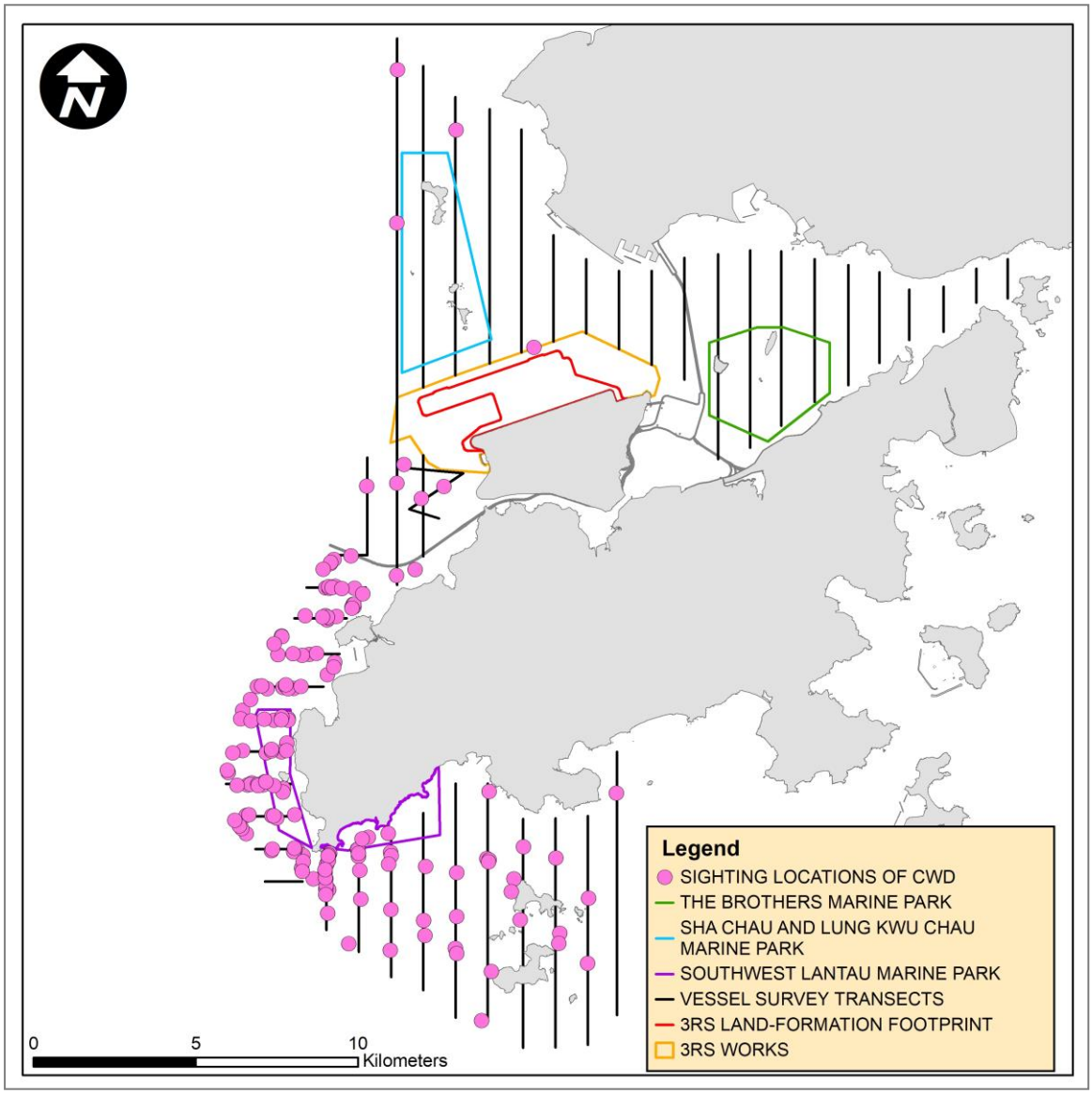
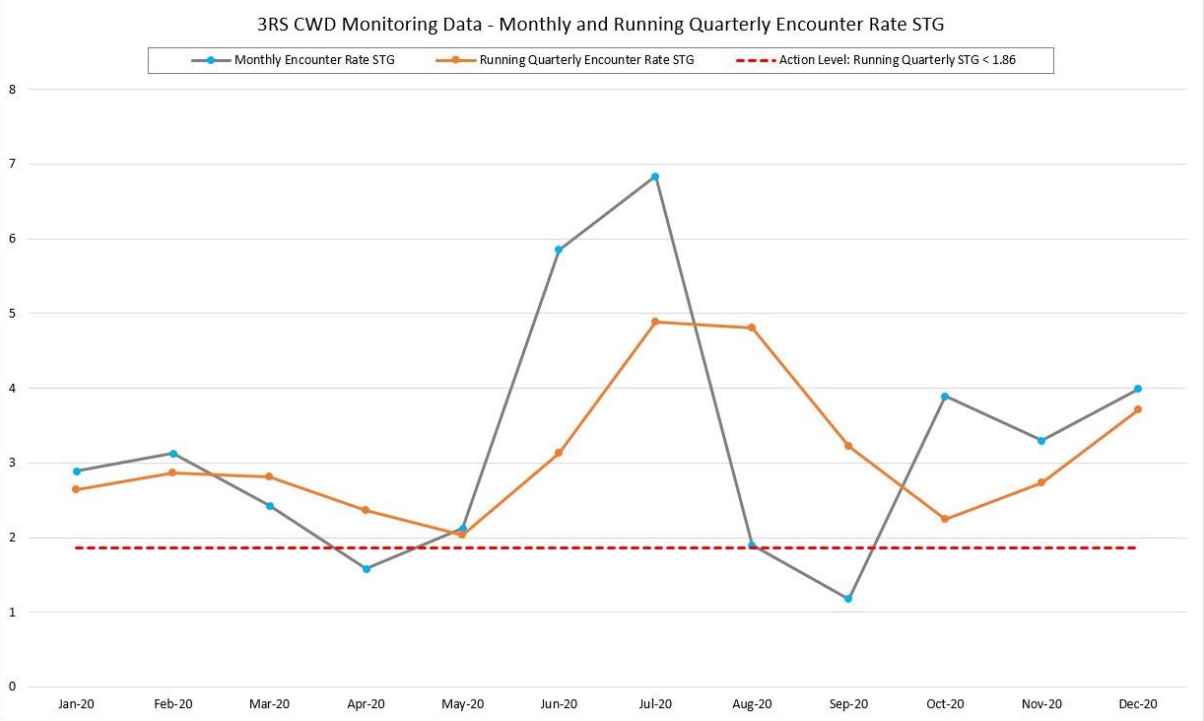


Figure 2: Graphical Presentation of Monthly and Running Quarterly Encounter Rates in the Reporting Period (January to December 2020)

(a) Encounter Rate STG



(b) Encounter Rate ANI

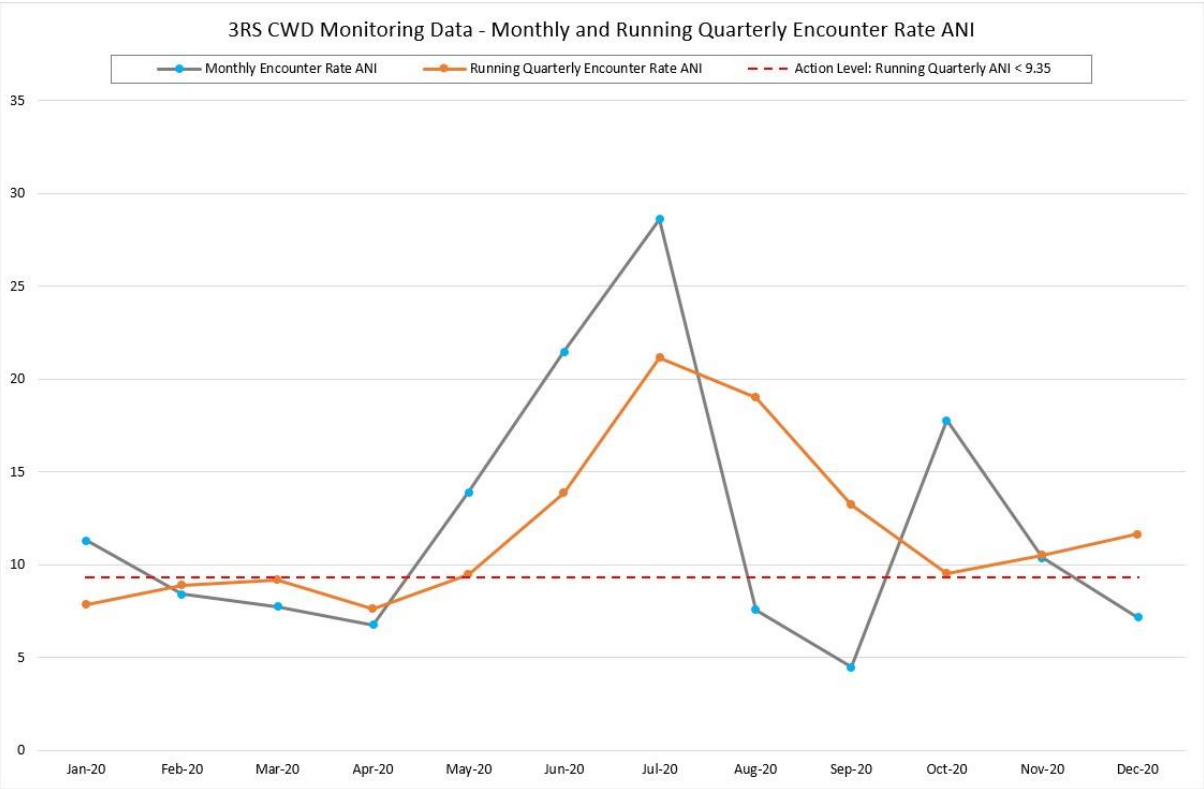
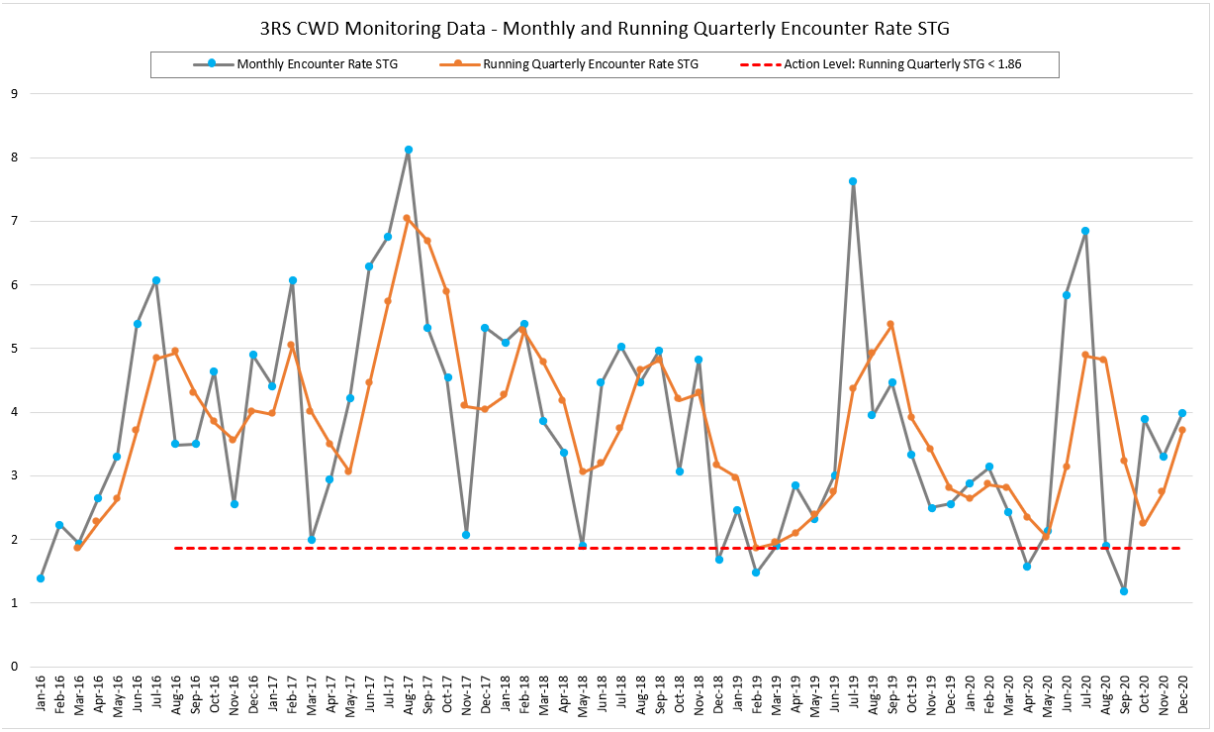


Figure 3: Graphical Presentation of Monthly and Running Quarterly Encounter Rates from January 2016 to December 2020

(a) Encounter Rate STG



(b) Encounter Rate ANI

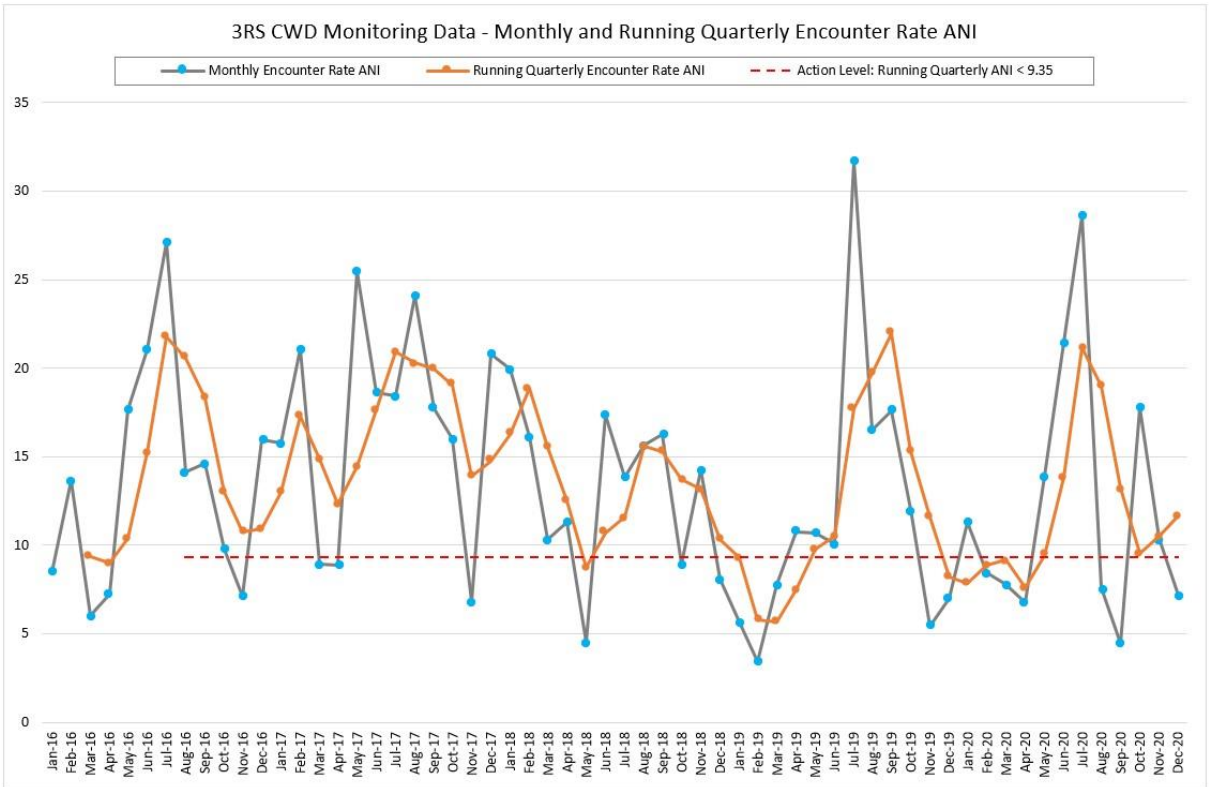
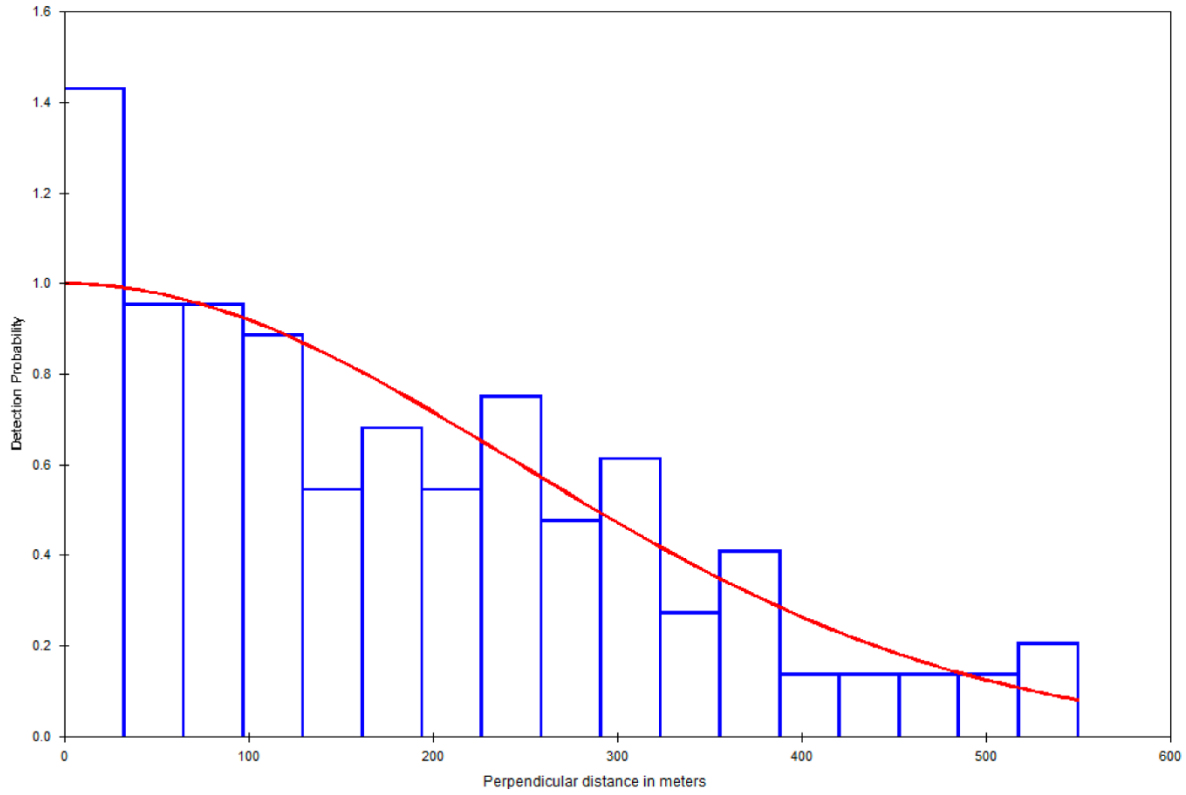


Figure 4: Fitted Detection Function of the 2020 CWD Sightings, Pooled from All Western Hong Kong Survey Areas (truncation distance = 600 m)



Note: Detection function used a Half-Normal model with a cosine adjustment.

Figure 5: Quantitative Grid Analysis – SPSE and DPSE of CWDs with Corrected Survey Effort per km² of Year 2019 and Year 2020

[SPSE = no. of on-effort dolphin sightings per 100 units of survey effort, DPSE = no. of dolphins per 100 units of survey effort]

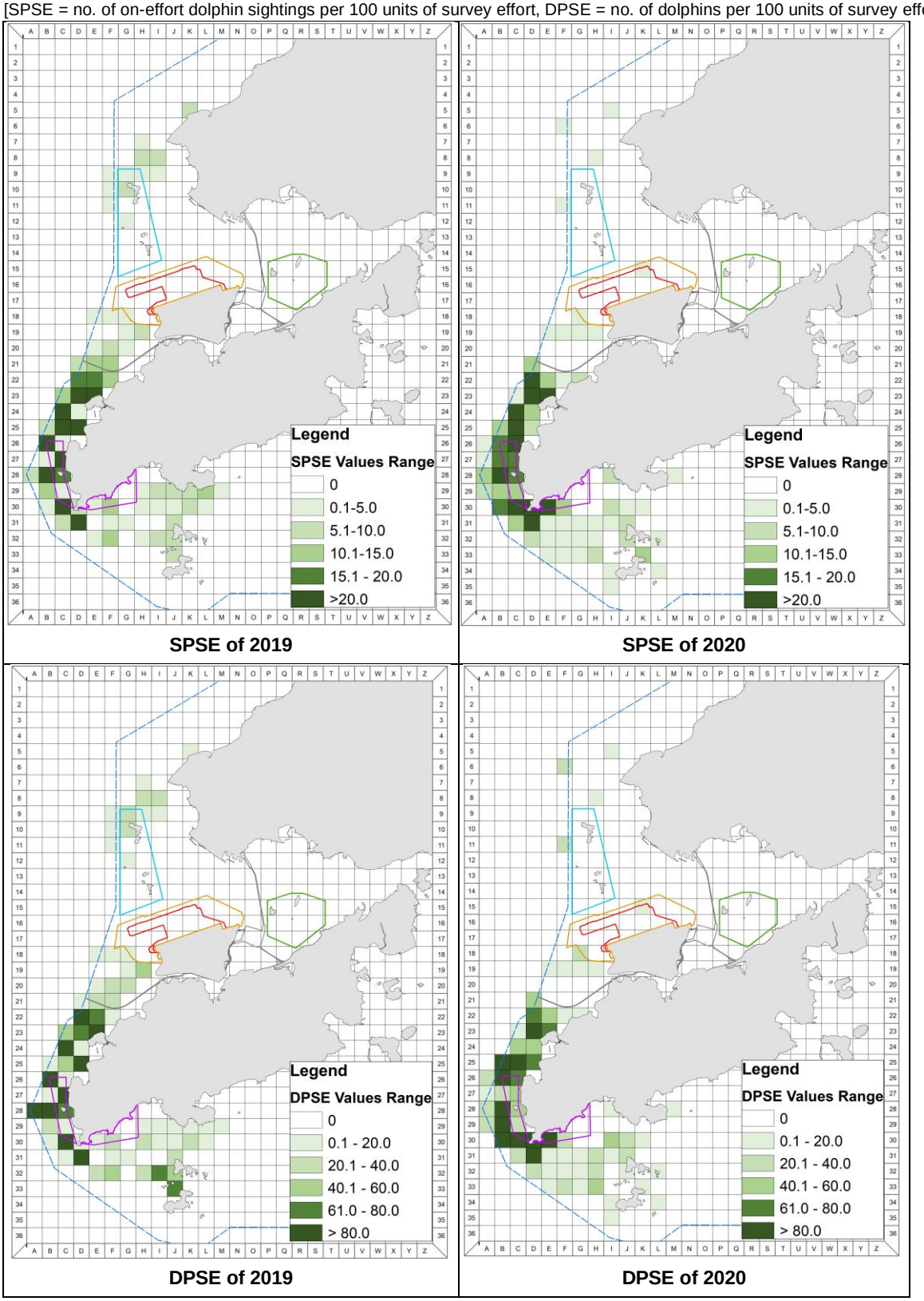
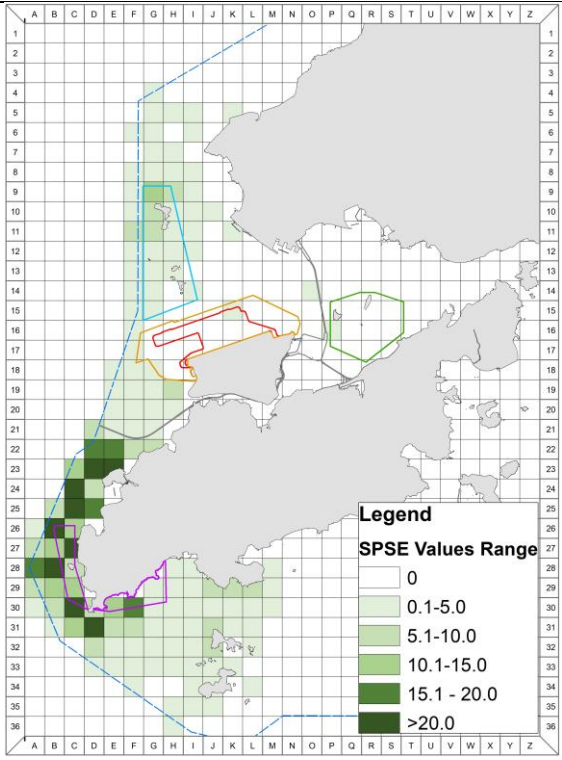
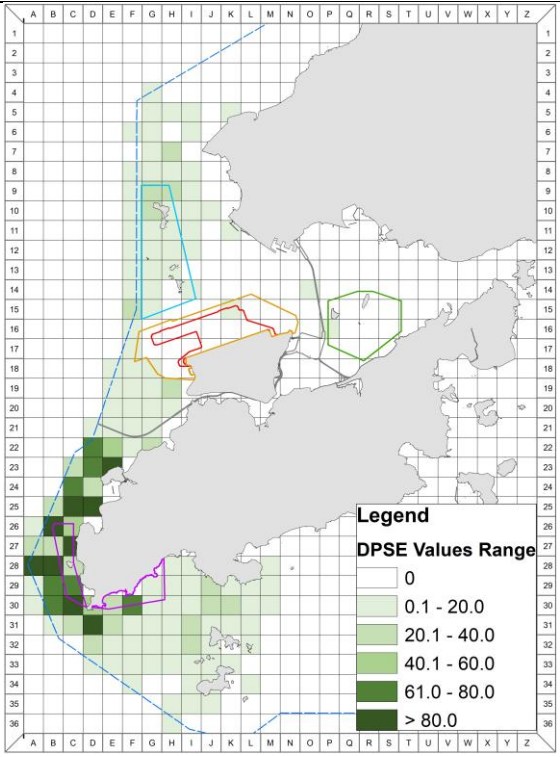


Figure 6: Cumulative SPSE and DPSE of CWDs with Corrected Survey Effort per km² from Dec 2015 to Dec 2020

[SPSE = no. of on-effort dolphin sightings per 100 units of survey effort, DPSE = no. of dolphins per 100 units of survey effort]

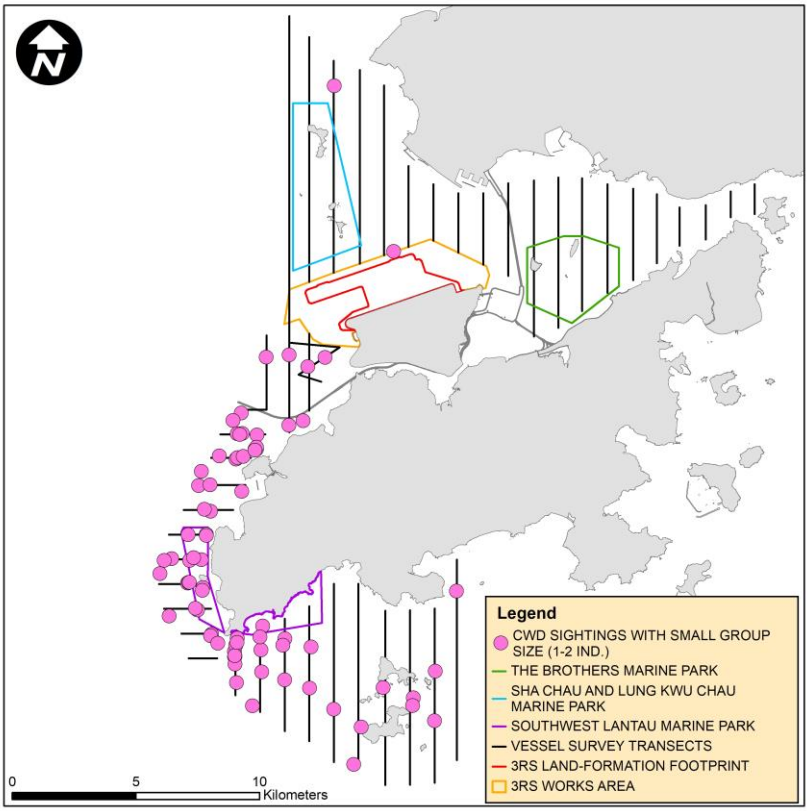


Cumulative SPSE from Mid-Dec 2015 to Dec 2020



Cumulative DPSE from Mid-Dec 2015 to Dec 2020

Figure 7: Sightings Distribution of Chinese White Dolphins with Different Group Sizes
(a) Small Group Size (1 to 2 dolphins)



(b) Medium Group Size (3 to 9 dolphins) and Large Group Size (10 or more dolphins)

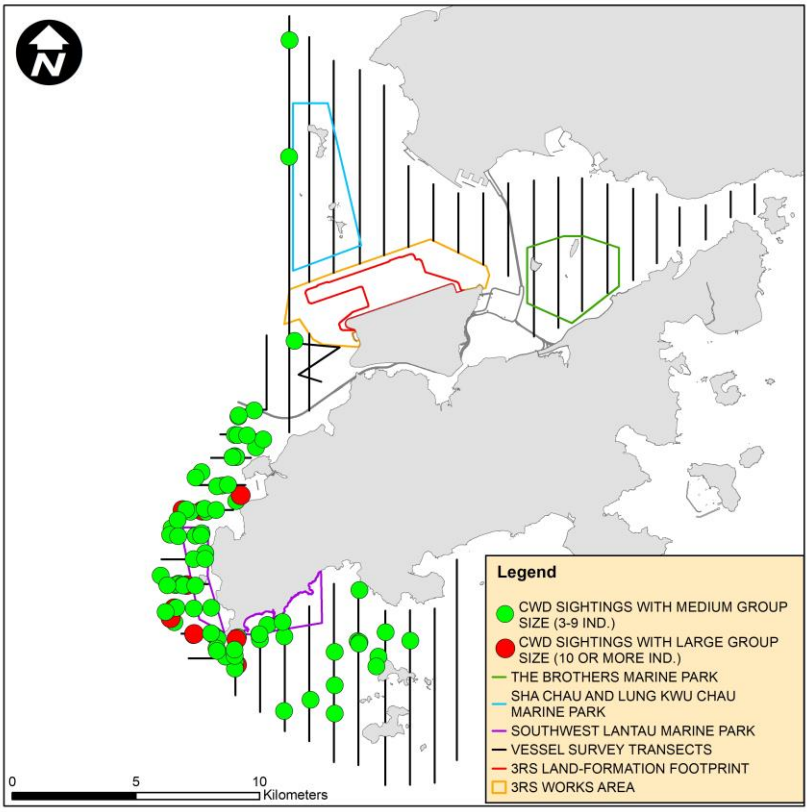


Figure 8: Sighting Locations of CWD Groups Engaged in Different Activities

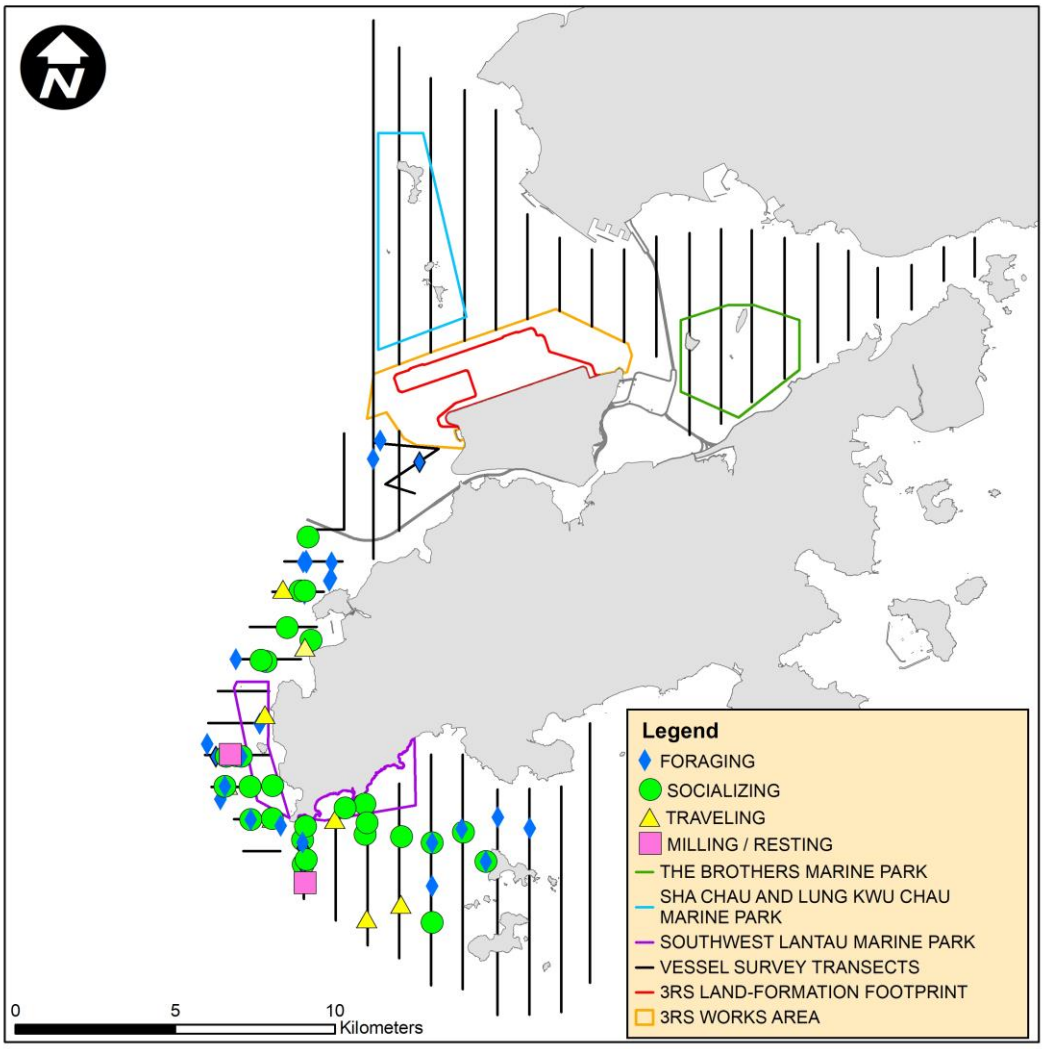


Figure 9: Sighting Locations of CWD Groups in Association with Fishing Boat

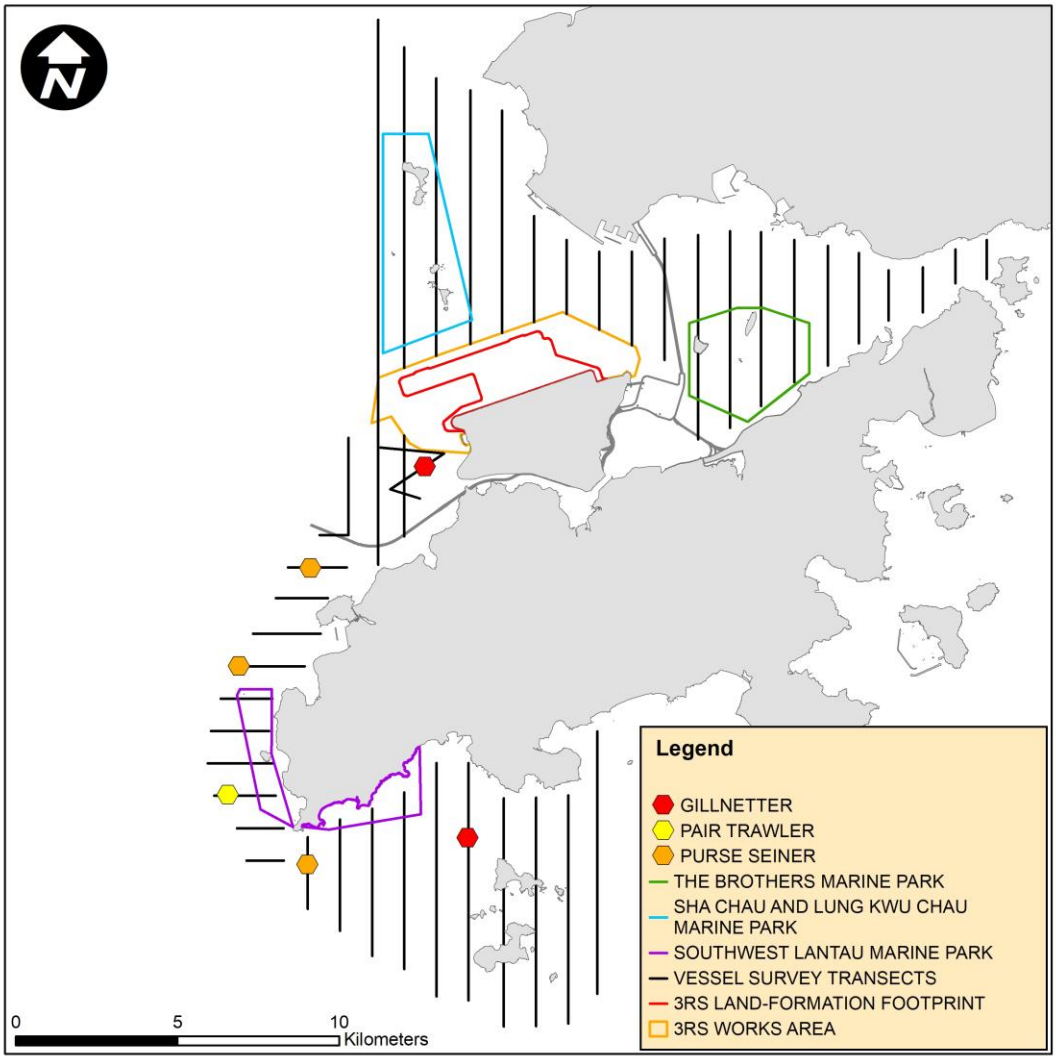


Figure 10: Sighting Locations of Mother-Calf Pairs

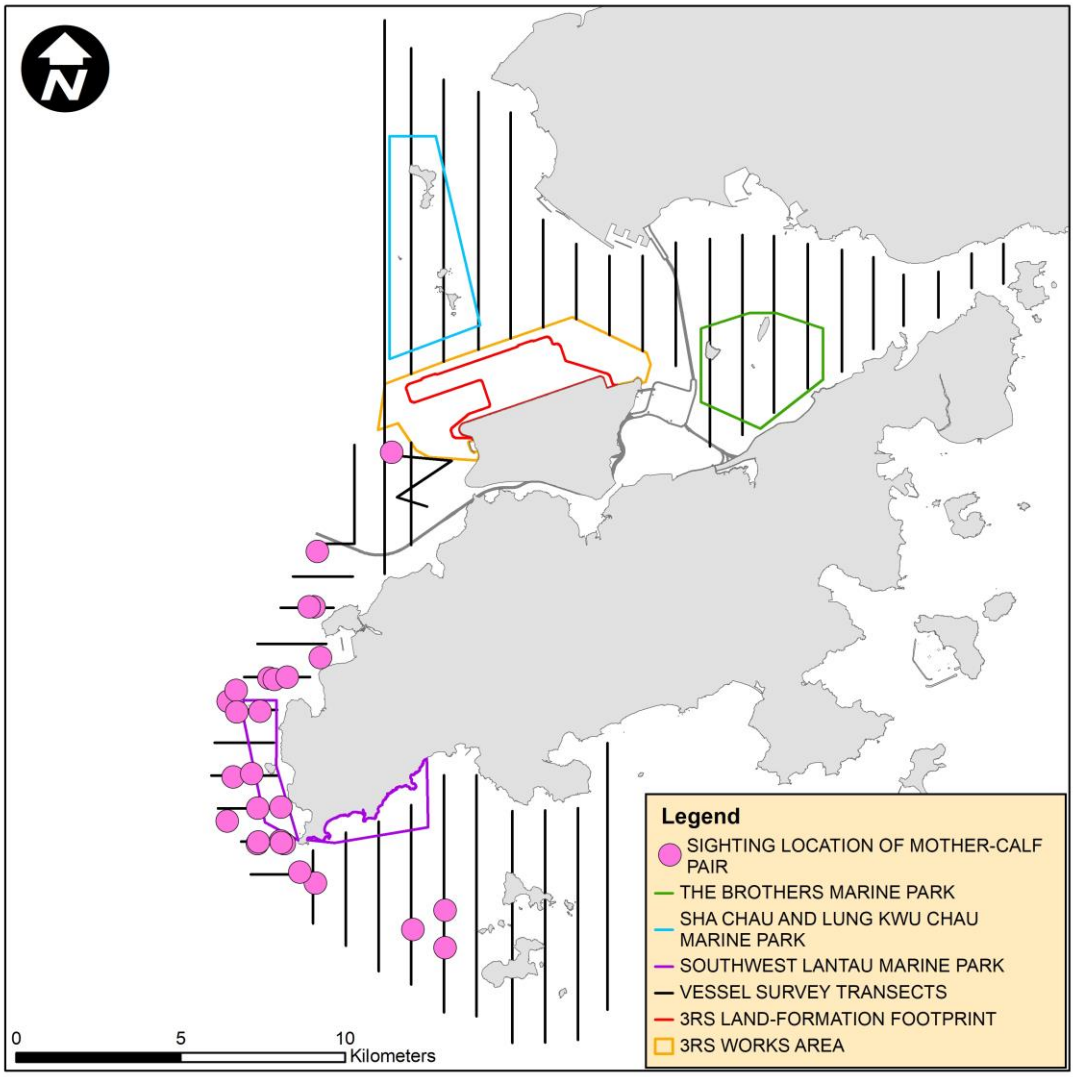
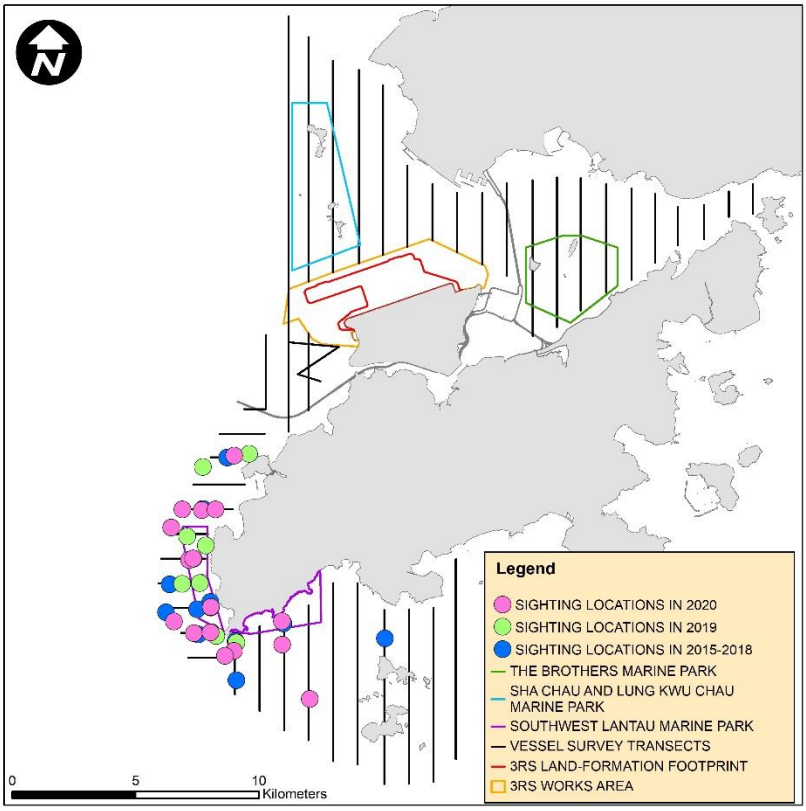
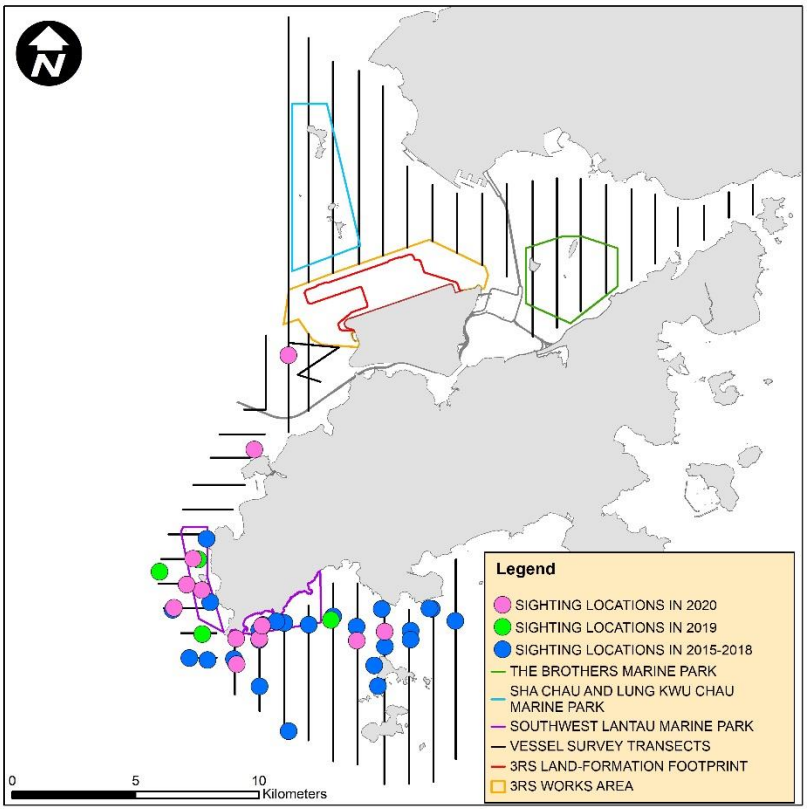


Figure 11 (batch): Photo Identification – Re-sighting Locations

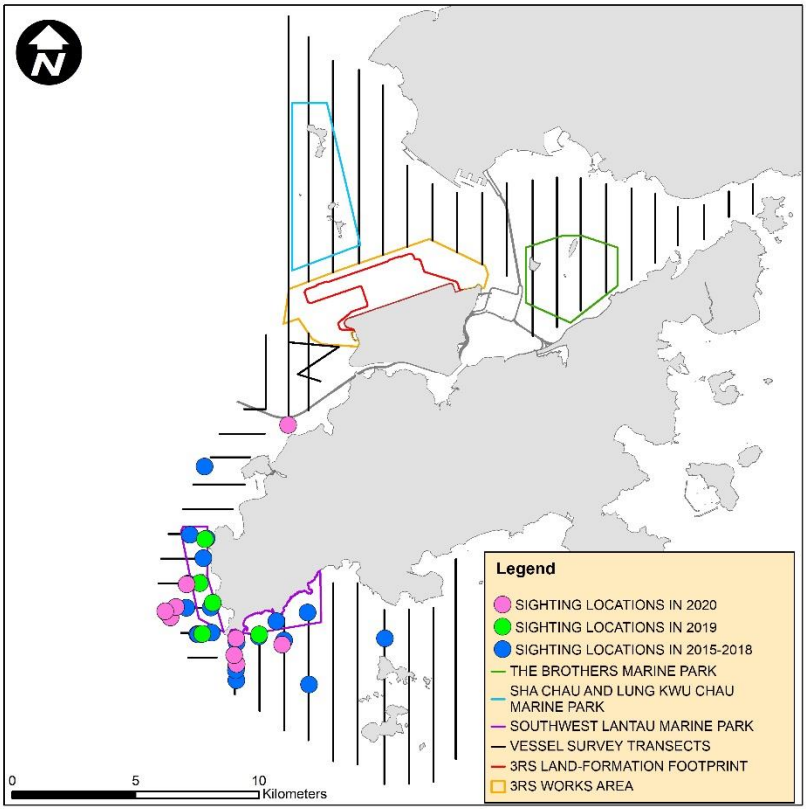
SLMM003 – the most frequently re-sighted animal in 2020 (the second most frequently re-sighted since 2015)



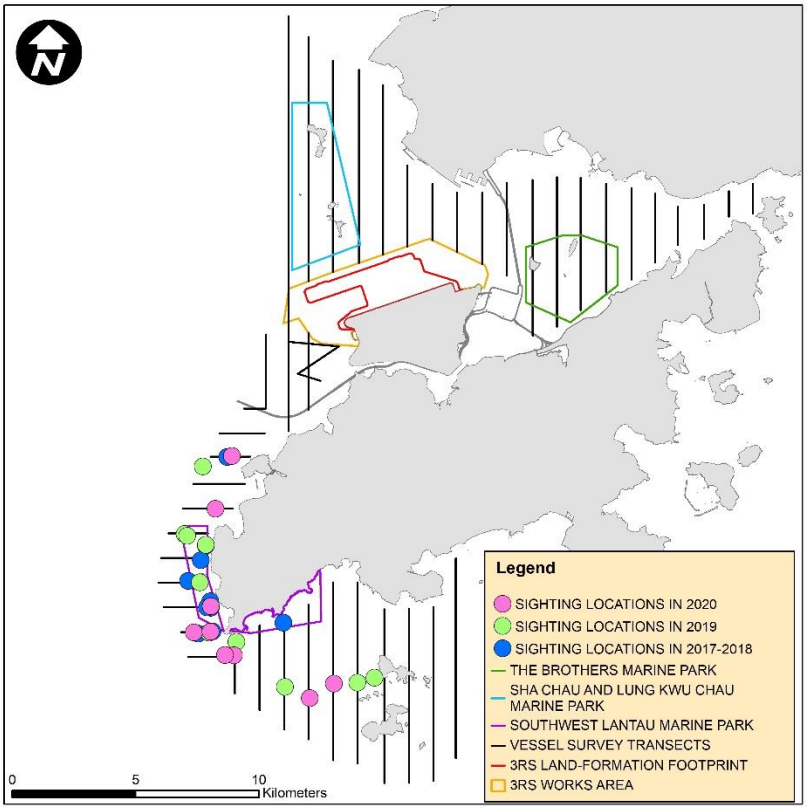
SLMM014 – the most frequently re-sighted animal since 2015



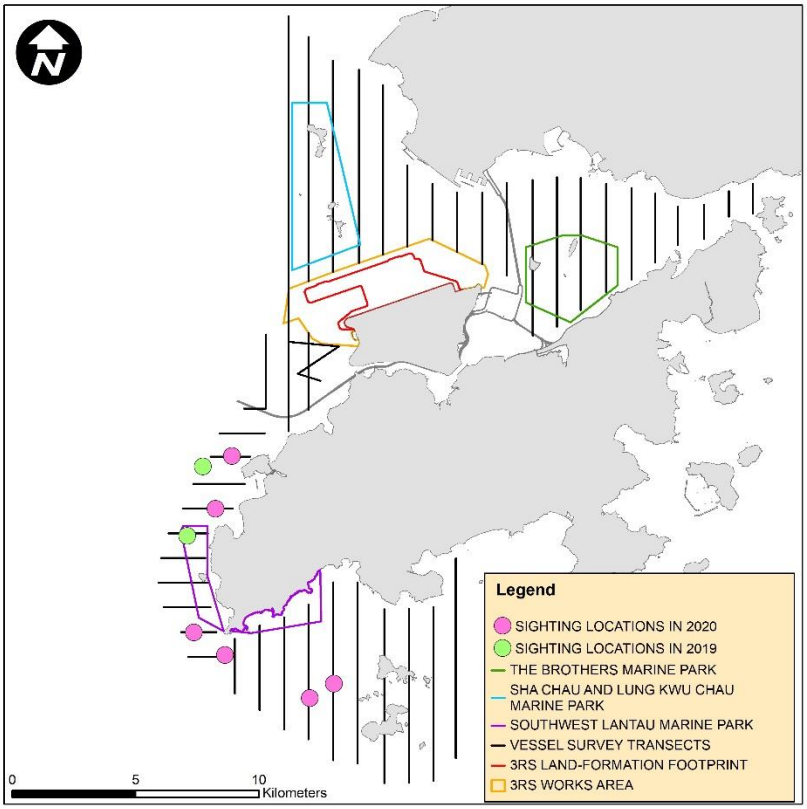
SLMM010 – the third most frequently re-sighted animal since 2015



WLMM079 – the mother of the most frequently re-sighted mother-calf pair in 2020



WLMM147 – the calf of WLMM079 (the most frequently re-sighted mother-calf pair in 2020)



SLMM028 – the dolphin with well recovery from serious injury

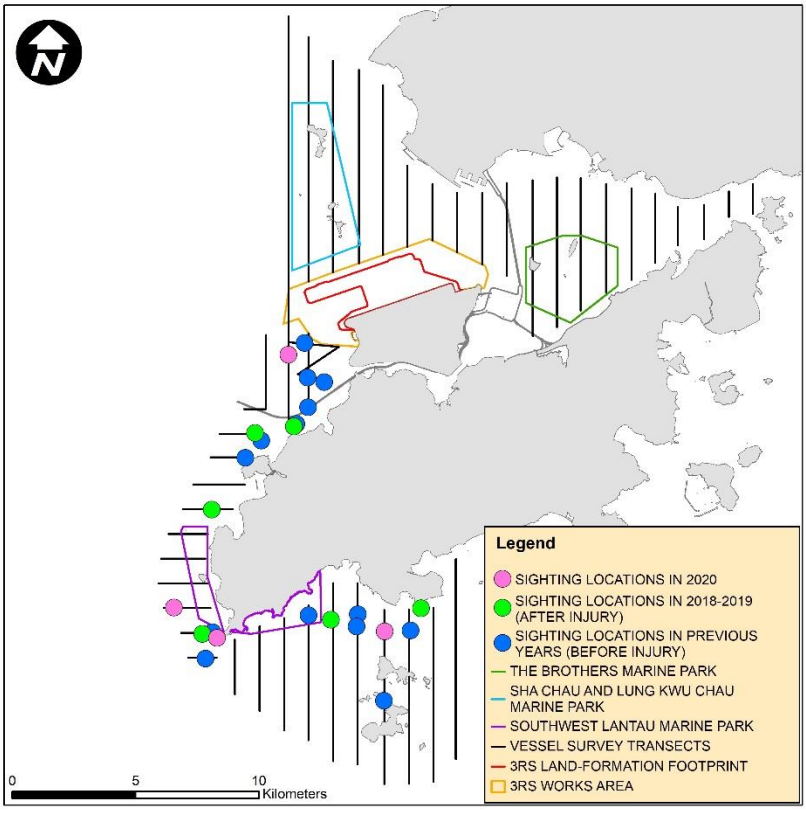


Figure 12: Plots of First Sightings of All CWD Groups (prior to filtering out short-track data) Obtained from Land-based Station at Lung Kwu Chau in 2020

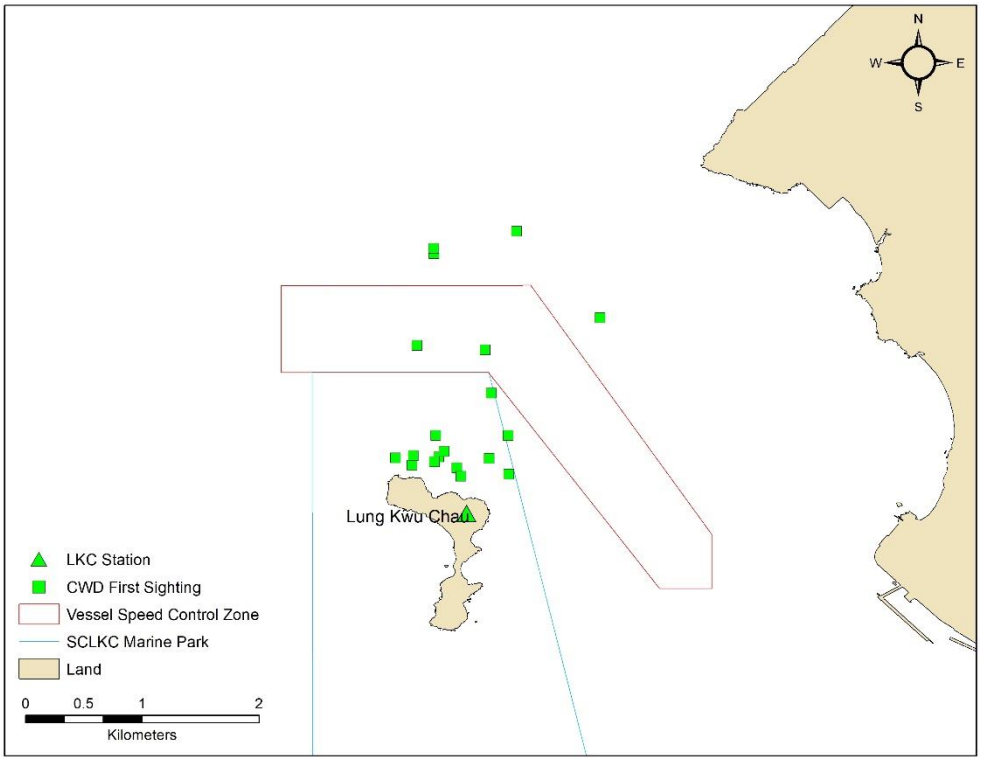


Figure 13: Proportion of CWD Total Track Time, per Total Effort Time, from Lung Kwu Chau (prior to filtering short-track data) Based on Time of Day in 2020

[The x-axis represents the hour block during which theodolite tracking surveys were conducted. The "n" in parentheses represents the number of days that survey effort was carried out during the associated hour block.]

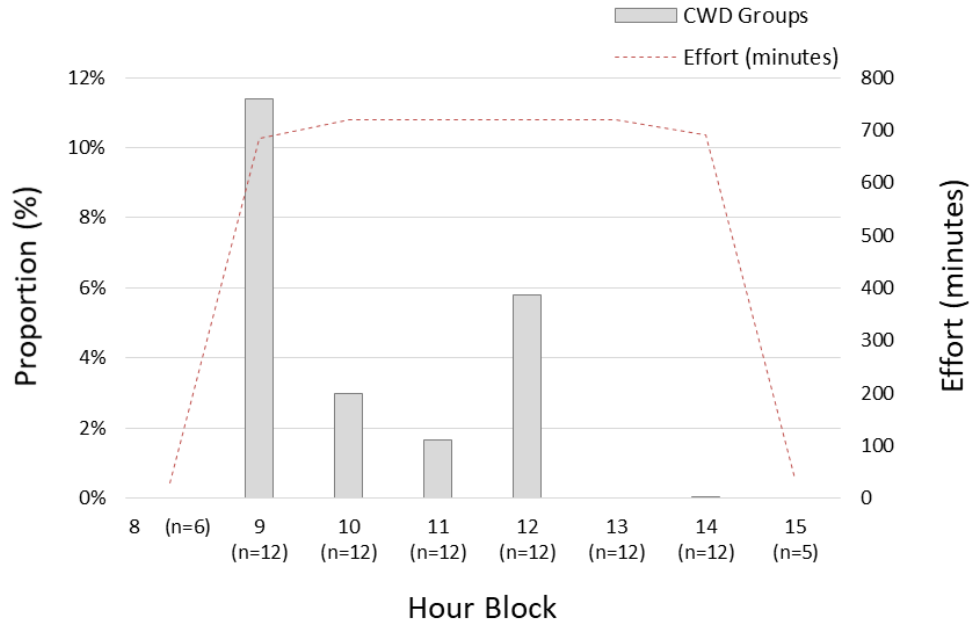


Figure 14: Total Number of CWD Groups Sighted and Tracked from Lung Kwu Chau Based on Month of the Year in 2020

[The grey bars represent the percentage of number of groups tracked per month, while the numbers above the bars indicate the total number of CWD groups tracked per study period (prior to filtering data). The orange line represents the percentage of total time spent tracking dolphins per month.]

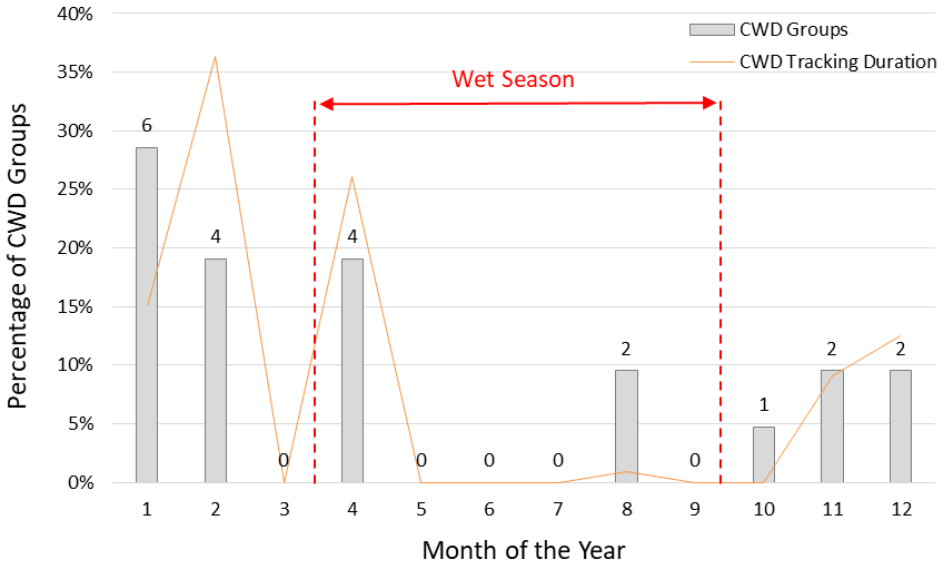


Figure 15: Plots of CWD Positions (Prior to Filtering Data) relative to Group Size tracked within Sha Chau and Lung Kwu Chau Marine Park in 2020

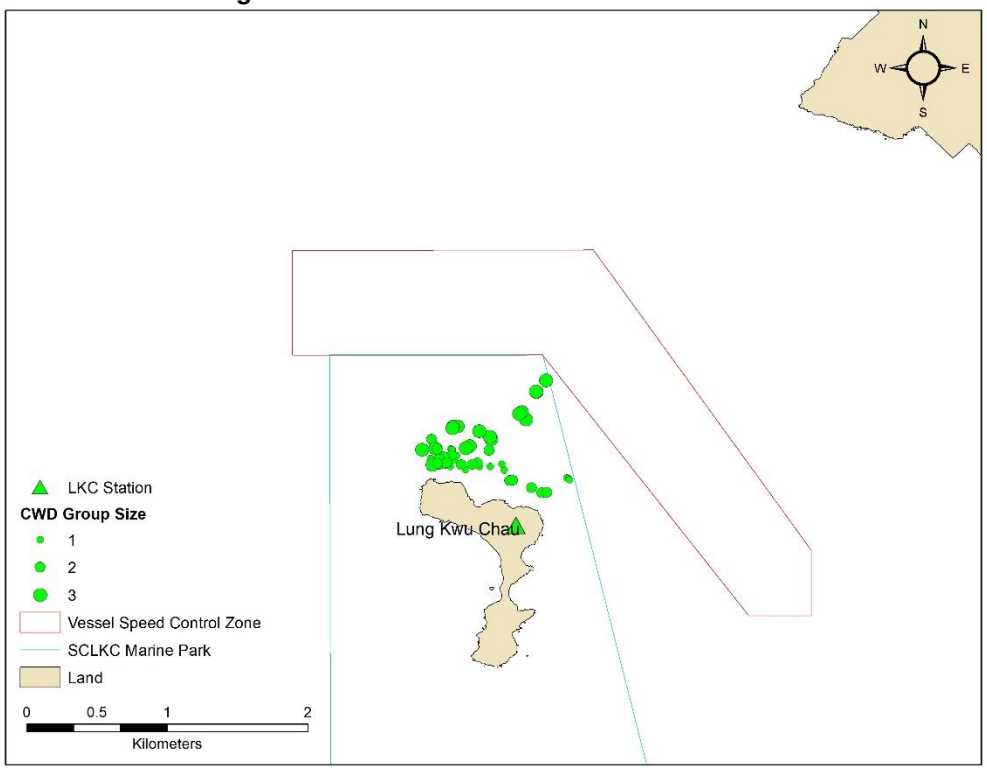


Figure 16: Plots of CWD Positions (Prior to Filtering Data) relative to Group Size crossing the boundary of Sha Chau and Lung Kwu Chau Marine Park in 2020

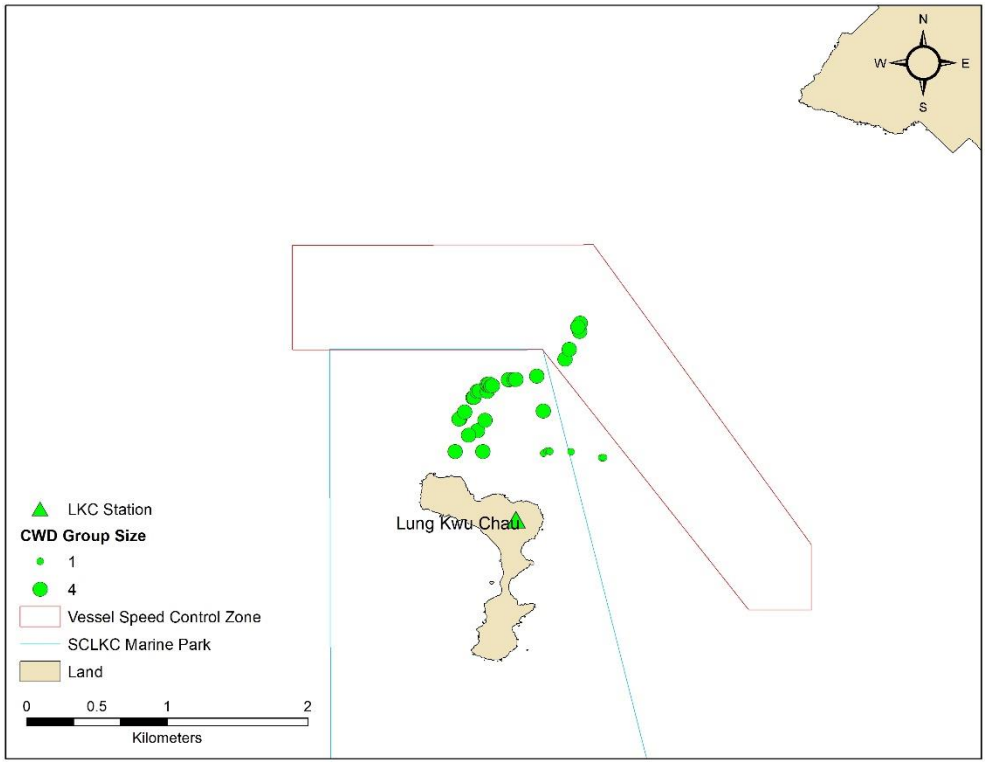


Figure 17: Plots of CWD Positions (Prior to Filtering Data) relative to Group Size tracked outside Sha Chau and Lung Kwu Chau Marine Park in 2020

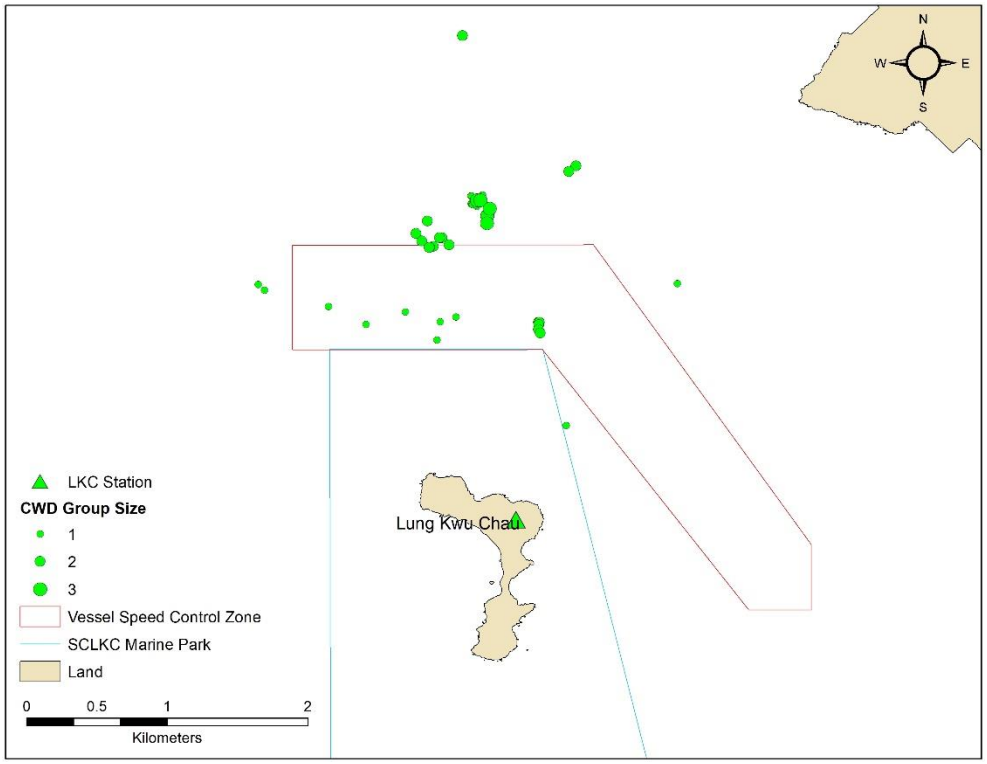


Figure 18: Percentages of CWD Behavioural States, excluding Unknown Category, recorded from Lung Kwu Chau in 2020

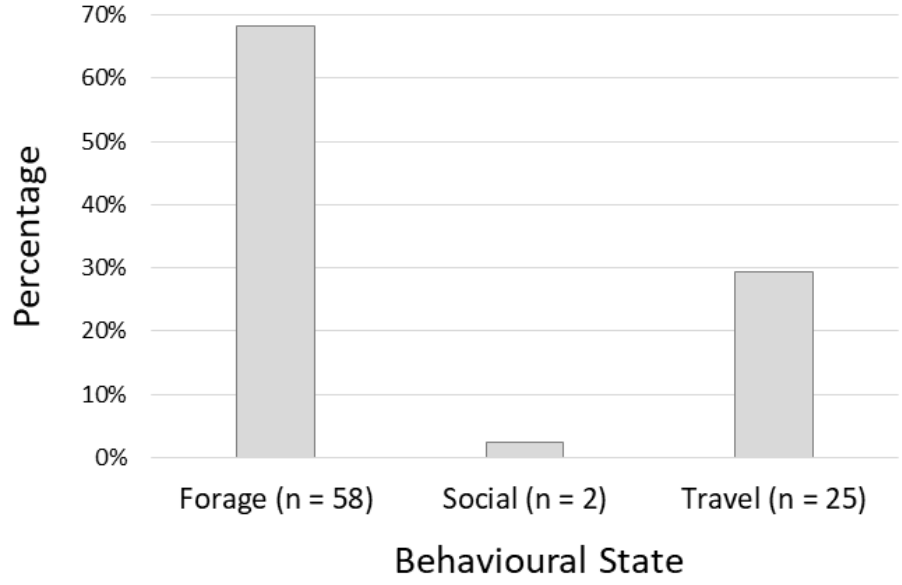


Figure 19: Stacked Bar Graph showing percentages of CWD Behavioural States, excluding Unknown Category, relative to the Sha Chau and Lung Kwu Chau Marine Park Location, recorded from Lung Kwu Chau in 2020

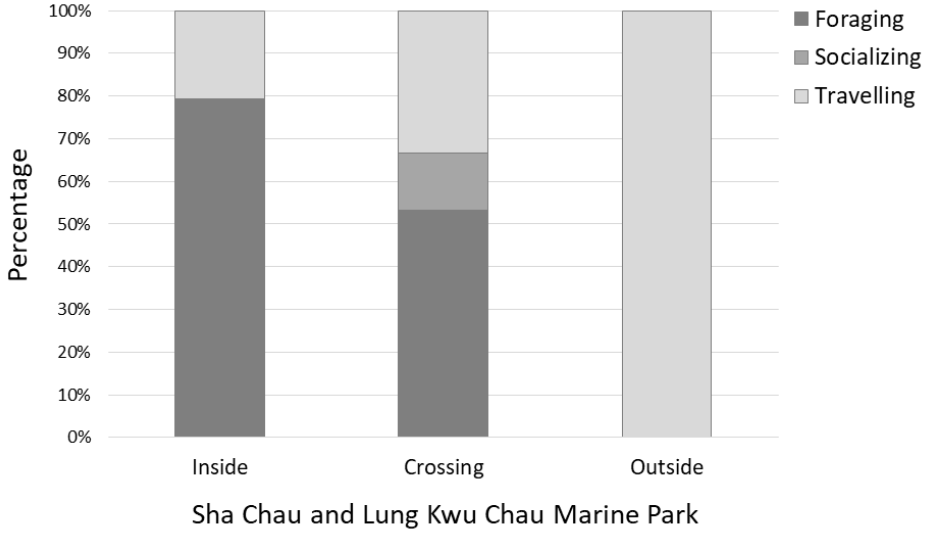


Figure 20: Plots of All Vessel Positions and All CWD Positions obtained from Lung Kwu Chau in 2020

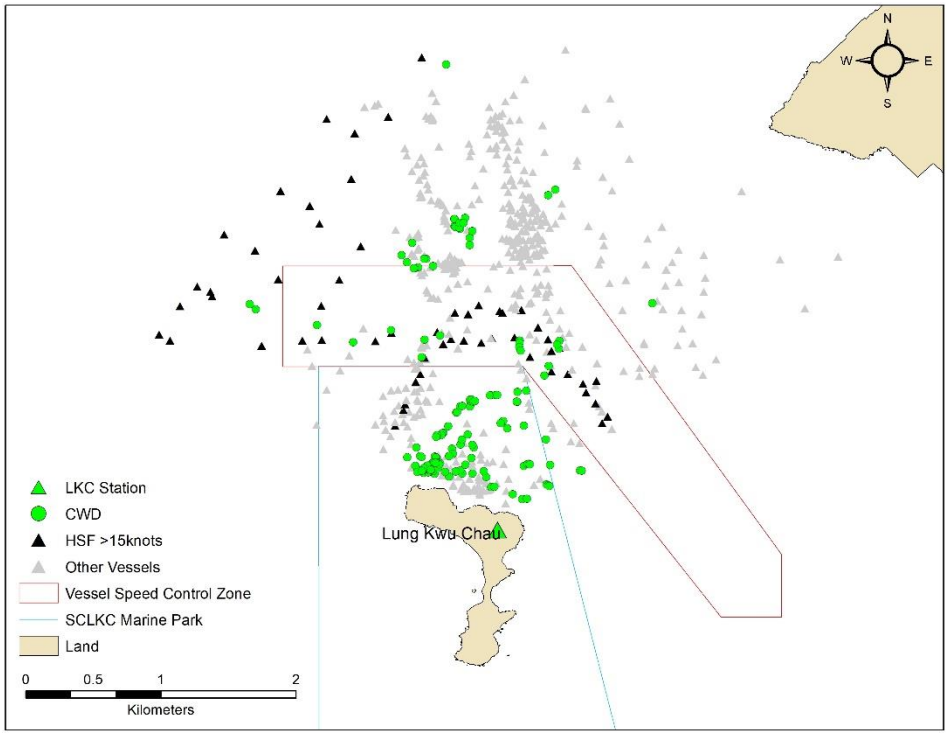
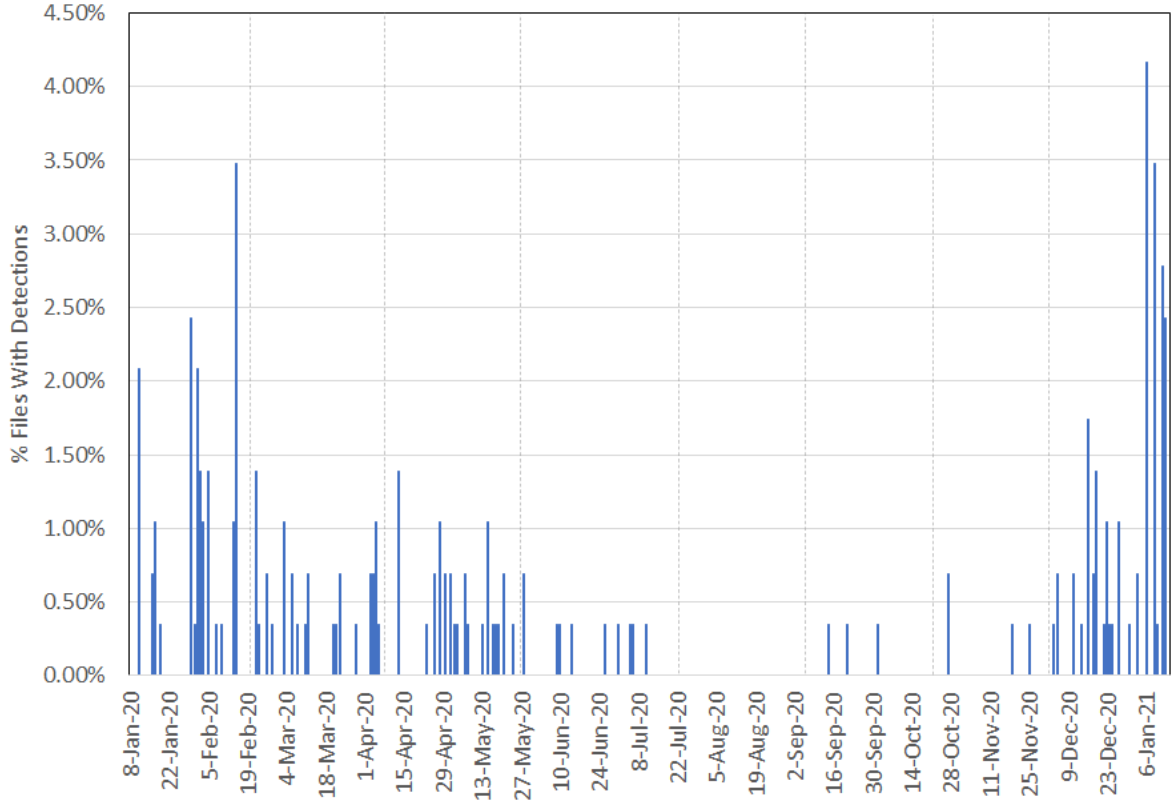


Figure 21: Dolphin Detections as Percentage of Files per day in 2020



[Grey dotted lines indicate retrieval/redeployment of EAR]

Figure 22: Dolphin Detections by Hour of Day in 2020

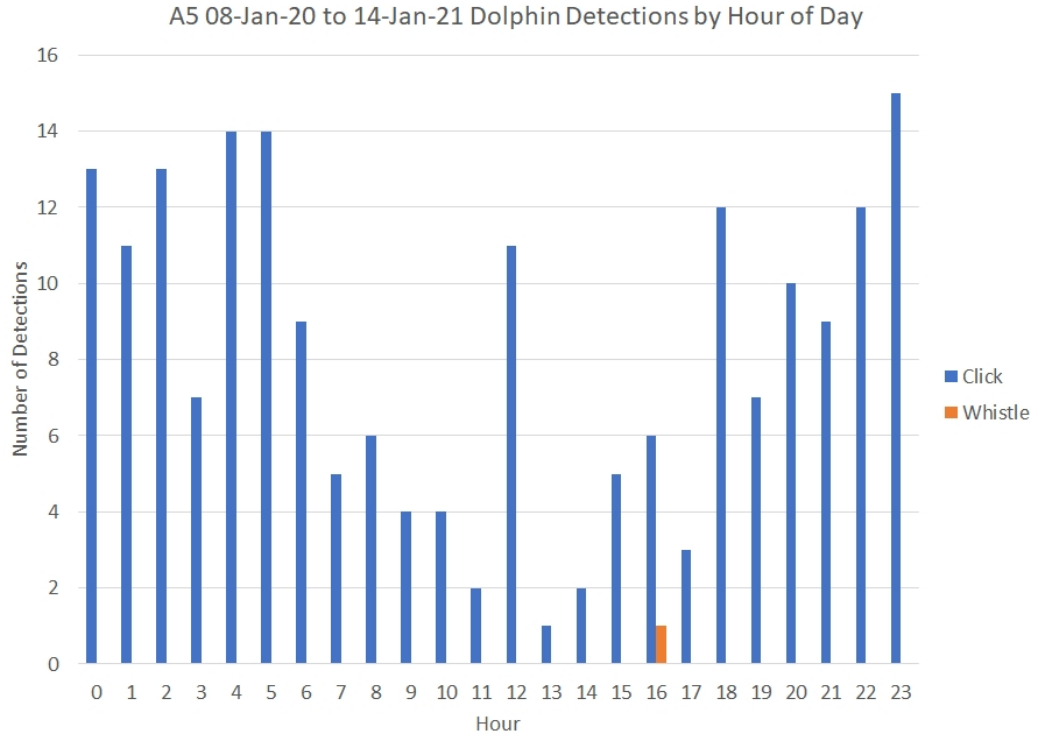
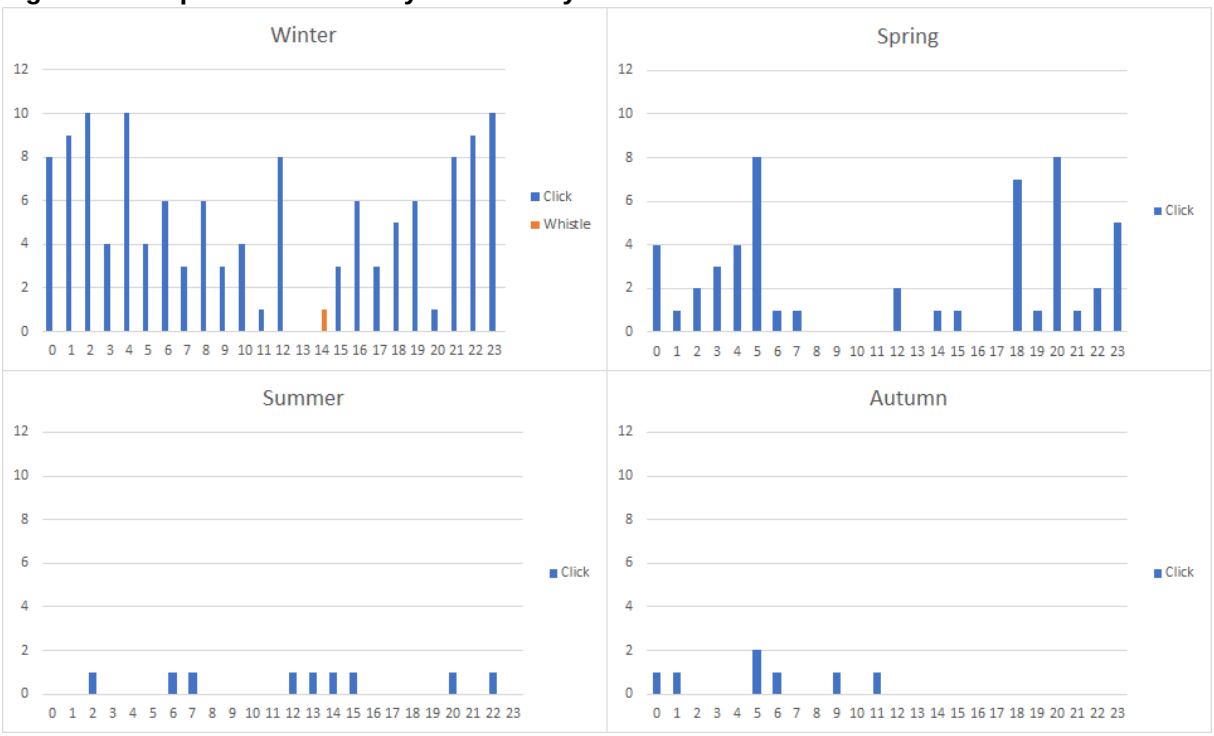


Figure 23: Dolphin Detections by Hour of Day and Solar Season in 2020



[Winter = Dec-Jan-Feb, Spring = Mar-Apr-May, Summer = Jun-Jul-Aug, Autumn = Sep-Oct-Nov]

Figure 24: Daily Mean Sound Pressure Level (SPL) in 2020

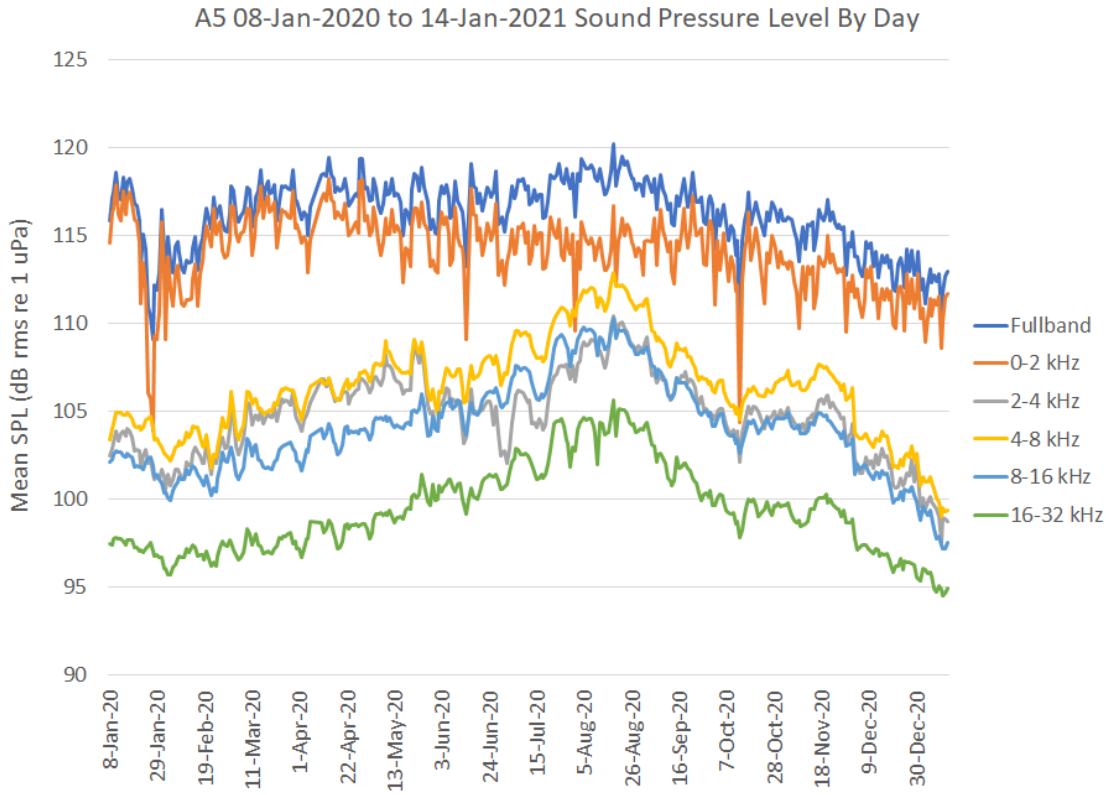


Figure 25: Sound Pressure Level (SPL) by Hour of Day recorded in 2020

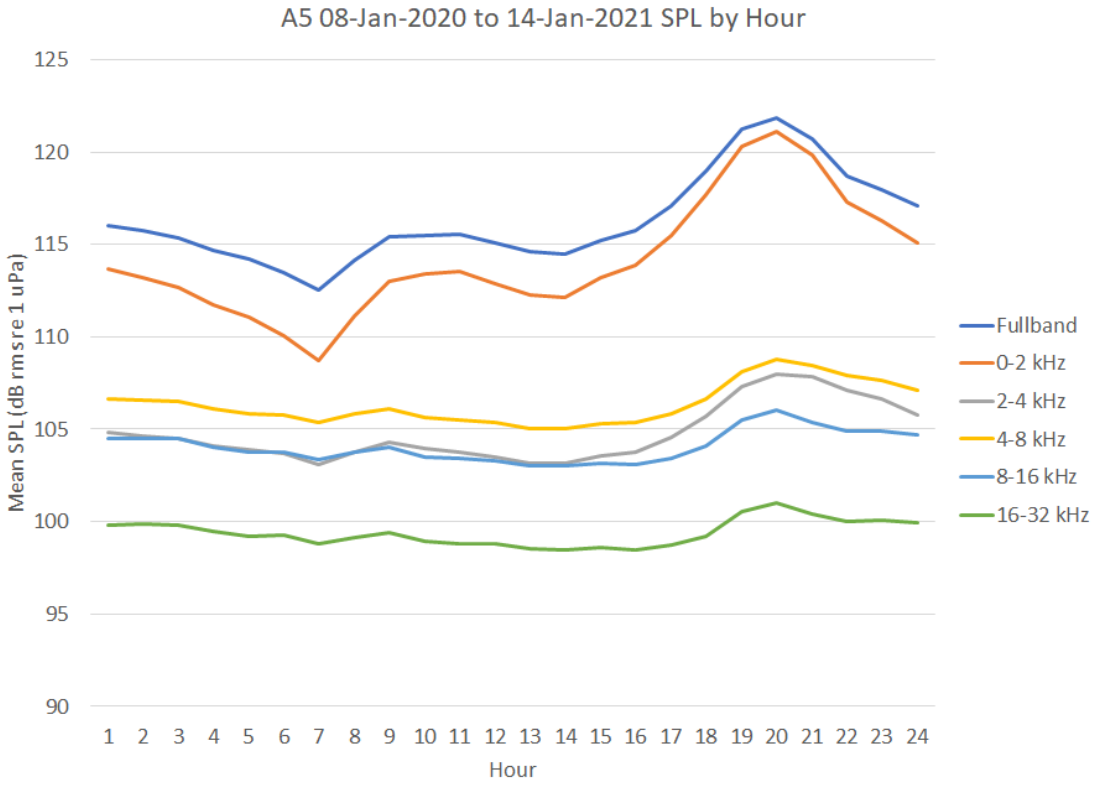
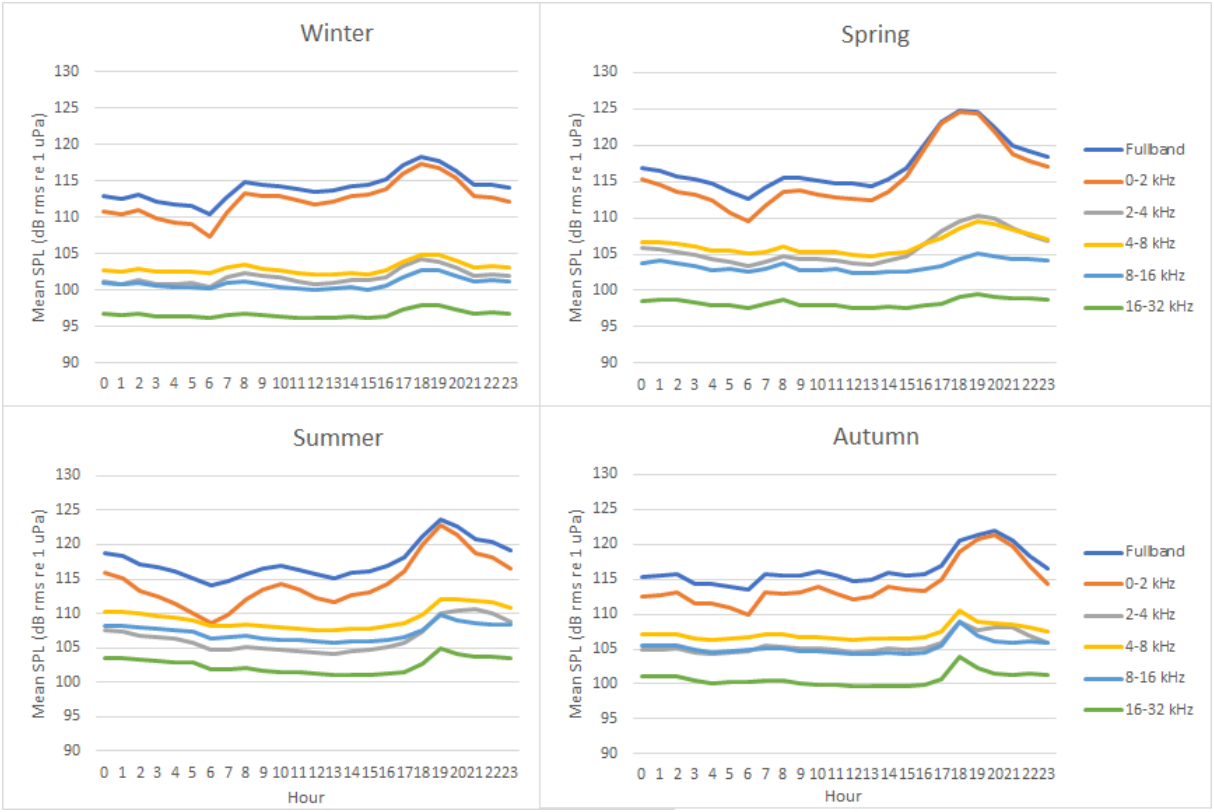


Figure 26: Sound Pressure Level (SPL) by Hour of Day and Solar Season recorded in 2019



[Winter = Dec-Jan-Feb, Spring = Mar-Apr-May, Summer = Jun-Jul-Aug, Autumn = Sep-Oct-Nov]

Table 1: CWD Vessel Survey Effort by Survey Areas

Survey Area	Survey Effort (km)	Survey Effort under Favourable Weather Condition (km)
NEL	1,137.8	1,052.7
NWL	1,801.7	1,609.5
AW	116.5	104.6
WL	684.8	609.1
SWL	1,647.7	1,543.8
Combined	**5,388.5**	**4,919.7**

Table 2: CWD Sightings by Survey Areas

Survey Area	No. of Sighting	No. of Dolphin	No. of Sighting under Favourable Weather Condition	No. of Dolphin under Favourable Weather Condition
NEL	0	0	0	0
NWL	7	20	6	19
AW	3	10	3	10
WL	102	412	96	388
SWL	54	174	53	173
Combined	**166**	**616**	**158**	**590**

Table 3: CWD Encounter Rates by Survey Areas

Survey Area	Encounter Rate (STG)		Encounter Rate (ANI)	
	2019	2020	2019	2020
NEL	0	0	0	0
NWL	1.47	0.37	3.17	1.18
AW	2.74	2.87	15.51	9.56
WL	14.31	15.76	57.52	63.70
SWL	2.53	3.43	8.50	11.20
Combined	3.22	3.21	11.63	11.99

Table 4: Summary of Monthly and Running Quarterly Encounter Rates STG and ANI

Encounter Rate	Winter		Spring			Summer			Autumn			Winter
	Jan 20	Feb 20	Mar 20	Apr 20	May 20	Jun 20	Jul 20	Aug 20	Sep 20	Oct 20	Nov 20	Dec 20
Monthly STG	2.89	3.13	2.42	1.58	2.12	5.86	6.84	1.90	1.18	3.89	3.30	3.99
Monthly ANI	11.32	8.43	7.76	6.77	13.91	21.47	28.62	7.59	4.48	17.80	10.37	7.19
Running Quarterly STG	2.65	2.86	2.82	2.36	2.03	3.13	4.88	4.81	3.23	2.24	2.73	3.71
Running Quarterly ANI	7.86	8.89	9.17	7.63	9.45	13.86	21.16	19.01	13.23	9.54	10.52	11.64

Table 5: CWD Line Transects Parameters and Estimates of Density and Abundance for Western Hong Kong, 2019

Time Period	Stratum	No. of Sight-ings*	Average Group Size	Trackline Detection Prob. - g(0)	Individual Density (no./100km^2)	Abundance	95% CI (Abund.)	%CV
Jan-Dec 2020	AW	3	3.2	1.0	15.52	1	0-2	54.2
Jan-Dec 2020	DB	1	3.2	1.0	2.09	1	0-4	112.4
Jan-Dec 2020	NEL	0	3.2	1.0	0.00	0	N/A	N/A
Jan-Dec 2020	NWL	4	3.2	1.0	1.34	1	0-3	50.7
Jan-Dec 2020	SWL	46	3.2	1.0	16.12	11	7-15	18.8
Jan-Dec 2020	WL	82	3.2	1.0	72.80	20	15-26	13.6
Jan-Dec 2020	**Pooled^**	**136**	3.2	**1.0**	**15.73**	**32**	**25-41**	**12.8**
Jan-Dec 2020	Winter#	30	3.2	1.0	17.77	36	22-59	41.9
Jan-Dec 2020	Spring#	22	3.2	1.0	11.88	24	13-42	18.7
Jan-Dec 2020	Summer#	50	3.2	1.0	28.65	59	40-86	19.0
Jan-Dec 2020	Autumn#	25	3.2	1.0	14.13	29	19-42	18.7

* After truncation

^ Pooled abundance not including Airport West (AW). Note that the pooled estimates do not necessarily add up to the sum of the individual stratum estimates, as these are computed separately.

The seasonal estimates do not include AW.

Table 6: Average Group Sizes of CWDs by Survey Areas

Survey Area	Average Group Size of CWDs
NEL	0.00
NWL	2.86
AW	3.33
WL	4.04
SWL	3.22
Overall	3.71 ± 3.01

Table 7: Average Group Sizes of CWDs by Seasons

Solar Season	Average Group Size of CWDs
Spring	4.38
Summer	4.02
Autumn	3.69
Winter	2.80

Table 8: Percentage of CWD Groups recorded as Exhibiting Various Behaviours/Activities, and recorded as having Association with Fishing Boat

		Activity				
Survey Area	Year	Feeding	Travelling	Socialising	Resting/Milling	Fishing Boat Association
AW	2019	100%	-	-	-	-
	2020	67%	-	-	-	33%
NEL	2019	-	-	-	-	-
	2020	-	-	-	-	-
NWL	2019	28%	8%	8%	-	-
	2020	14%	-	-	-	-
WL	2019	19%	8%	14%	1%	11%
	2020	19%	5%	15%	1%	3%
SWL	2019	29%	10%	7%	-	17%
	2020	19%	6%	24%	2%	4%
Overall	2019	25%	8%	13%	1%	2%
	2020	19%	5%	17%	1%	4%

Table 9: Summary of Photo Identification

Individual ID	Date of sighting (dd-mmm-yy)	Sighting No.	Area
NLMM004	16-Jan-20	1	NWL
	20-Feb-20	1	WL
NLMM011	11-Jun-20	1	WL
NLMM012	13-Jul-20	4	WL
NLMM013	13-Jul-20	5	WL
NLMM015	22-Jun-20	1	SWL
		2	SWL
	15-Sep-20	2	WL
NLMM019	20-Jul-20	4	SWL
NLMM020	06-Jul-20	4	WL
NLMM023	09-Sep-20	1	WL
	15-Sep-20	1	WL
NLMM027	20-Jul-20	3	SWL
NLMM034	13-Jul-20	1	WL
NLMM037	20-Jul-20	8	SWL
		9	SWL
NLMM039	07-Aug-20	2	WL
NLMM042	11-Mar-20	1	NWL
NLMM043	16-Jun-20	1	WL
	09-Sep-20	1	WL
NLMM052	13-Jul-20	5	WL
	21-Jul-20	5	SWL
NLMM055	11-Jun-20	5	WL
NLMM057	09-Apr-20	1	WL
		3	WL
NLMM060	06-Jul-20	2	WL
	17-Aug-20	1	WL
NLMM063	22-Jun-20	1	SWL
		2	SWL
	22-Jul-20	1	NWL
NLMM070	09-Apr-20	3	WL
NLMM071	10-Feb-20	1	NWL
NLMM073	10-Feb-20	1	NWL
NLMM074	10-Feb-20	1	NWL
SLMM002	09-Apr-20	6	WL
	12-May-20	5	SWL
	13-May-20	1	WL
		3	WL
	21-Oct-20	4	SWL
SLMM003	10-Jan-20	3	WL
	22-Jan-20	6	SWL
	12-Feb-20	6	WL
	20-Feb-20	3	WL
		4	WL
	12-Mar-20	4	WL
	07-May-20	3	WL
	13-May-20	3	WL
	13-Jul-20	7	WL
	21-Jul-20	4	SWL
	09-Sep-20	2	WL
	15-Sep-20	3	WL
	27-Oct-20	9	WL
	06-Nov-20	3	WL
	09-Dec-20	7	SWL
	10-Dec-20	4	SWL
SLMM007	15-Jan-20	1	WL
		2	WL
	12-Feb-20	7	WL
	09-Apr-20	6	WL
	07-May-20	3	WL

Individual ID	Date of sighting (dd-mmm-yy)	Sighting No.	Area
	13-Jul-20	6	WL
		7	WL
	27-Oct-20	6	WL
	16-Nov-20	4	WL
SLMM010	11-May-20	4	SWL
	13-Jul-20	6	WL
	07-Aug-20	4	WL
	21-Oct-20	4	SWL
	27-Oct-20	7	WL
	06-Nov-20	6	WL
	17-Nov-20	1	NWL
	19-Nov-20	2	SWL
	10-Dec-20	4	SWL
SLMM011	23-Mar-20	17	SWL
		18	SWL
SLMM012	22-Jan-20	5	SWL
	12-Feb-20	2	WL
	20-Feb-20	3	WL
	12-Mar-20	4	WL
	11-May-20	4	SWL
	21-Jul-20	2	SWL
	09-Sep-20	2	WL
	21-Oct-20	4	SWL
	19-Nov-20	2	SWL
SLMM014	07-Jan-20	3	SWL
	20-Feb-20	3	WL
	11-Mar-20	2	NWL
	12-Mar-20	3	WL
	09-Apr-20	6	WL
	11-May-20	4	SWL
	18-Jun-20	1	SWL
		2	SWL
	06-Jul-20	3	WL
	07-Aug-20	4	WL
	21-Oct-20	4	SWL
	10-Dec-20	5	SWL
SLMM019	26-Feb-20	15	SWL
SLMM022	15-Jan-20	1	WL
		2	WL
	27-Oct-20	7	WL
SLMM023	15-Jan-20	4	WL
	12-Feb-20	2	WL
	11-May-20	4	SWL
	13-May-20	1	WL
		3	WL
	21-Oct-20	3	SWL
		4	SWL
	16-Nov-20	3	WL
SLMM025	11-May-20	4	SWL
	16-Jun-20	5	WL
	18-Jun-20	1	SWL
	13-Jul-20	7	WL
	20-Jul-20	3	SWL
	21-Oct-20	3	SWL
		4	SWL
SLMM027	10-Jan-20	3	WL
	21-Jul-20	5	SWL
SLMM028	11-Mar-20	2	NWL
	09-Apr-20	6	WL
	16-Jun-20	5	WL
	18-Jun-20	1	SWL
SLMM030	07-May-20	3	WL

Individual ID	Date of sighting (dd-mmm-yy)	Sighting No.	Area
	13-May-20	4	WL
SLMM031	20-Feb-20	3	WL
	26-Feb-20	15	SWL
	23-Mar-20	17	SWL
		18	SWL
	09-Apr-20	6	WL
	12-May-20	5	SWL
	21-Oct-20	2	SWL
SLMM034	23-Mar-20	17	SWL
		18	SWL
	11-May-20	4	SWL
	13-May-20	1	WL
		3	WL
SLMM035	09-Dec-20	1	SWL
		5	SWL
SLMM036	11-Jun-20	1	WL
SLMM037	07-Jan-20	2	SWL
	12-Feb-20	7	WL
	20-Feb-20	3	WL
		4	WL
	12-Mar-20	4	WL
	09-Apr-20	1	WL
	20-Jul-20	5	SWL
	09-Sep-20	2	WL
	16-Nov-20	6	WL
	19-Nov-20	2	SWL
	09-Dec-20	5	SWL
		7	SWL
SLMM044	18-Mar-20	3	WL
	13-May-20	1	WL
SLMM045	09-Apr-20	4	WL
	15-Sep-20	2	WL
SLMM049	07-Jan-20	3	SWL
	13-May-20	3	WL
	18-Jun-20	2	SWL
	13-Jul-20	7	WL
	20-Jul-20	5	SWL
	07-Aug-20	4	WL
	27-Oct-20	6	WL
	19-Nov-20	2	SWL
SLMM050	15-Jan-20	4	WL
	09-Apr-20	6	WL
	21-Oct-20	4	SWL
SLMM052	10-Jan-20	3	WL
	15-Jan-20	2	WL
	12-Mar-20	4	WL
	11-May-20	4	SWL
	13-May-20	3	WL
	13-Jul-20	7	WL
	07-Aug-20	4	WL
	27-Oct-20	6	WL
	16-Nov-20	3	WL
SLMM053	07-Jan-20	3	SWL
SLMM058	15-Jan-20	1	WL
	12-Feb-20	1	AW
	09-Apr-20	6	WL
SLMM059	18-Mar-20	2	WL
	12-May-20	5	SWL
	21-Oct-20	4	SWL
SLMM060	20-Jul-20	1	SWL
	21-Jul-20	7	SWL
SLMM062	20-Jul-20	3	SWL

Individual ID	Date of sighting (dd-mmm-yy)	Sighting No.	Area
	21-Jul-20	2	SWL
SLMM064	06-Nov-20	1	WL
SLMM068	12-May-20	5	SWL
SLMM070	11-May-20	4	SWL
	22-Jun-20	3	SWL
	21-Jul-20	2	SWL
SLMM072	12-May-20	6	SWL
	13-May-20	3	WL
	09-Sep-20	2	WL
SLMM073	16-Nov-20	4	WL
WLMM001	10-Jan-20	1	WL
		3	WL
	15-Jan-20	1	WL
	22-Jan-20	6	SWL
	07-May-20	3	WL
	13-Jul-20	6	WL
		7	WL
WLMM003	10-Jan-20	1	WL
	15-Jan-20	3	WL
	20-Feb-20	1	WL
	11-Jun-20	7	WL
WLMM004	12-Feb-20	1	AW
	16-Jun-20	5	WL
WLMM005	15-Jan-20	3	WL
	07-May-20	3	WL
WLMM006	15-Jan-20	3	WL
	09-Apr-20	6	WL
	07-May-20	3	WL
WLMM007	12-Feb-20	3	WL
	09-Apr-20	6	WL
	07-May-20	3	WL
	13-May-20	3	WL
	07-Aug-20	4	WL
	21-Oct-20	4	SWL
	27-Oct-20	6	WL
	06-Nov-20	5	WL
		6	WL
WLMM008	21-Jul-20	5	SWL
	07-Aug-20	4	WL
	21-Oct-20	4	SWL
WLMM009	15-Jan-20	3	WL
	07-May-20	2	WL
	13-Jul-20	6	WL
	20-Jul-20	4	SWL
WLMM011	22-Jun-20	2	SWL
WLMM013	09-Apr-20	6	WL
	16-Jun-20	2	WL
	15-Sep-20	1	WL
WLMM015	16-Jun-20	4	WL
WLMM018	15-Jan-20	4	WL
	13-May-20	3	WL
	22-Jun-20	4	SWL
	21-Oct-20	3	SWL
WLMM019	22-Jul-20	1	NWL
WLMM027	07-May-20	1	WL
	13-May-20	3	WL
WLMM028	15-Jan-20	1	WL
		2	WL
	09-Apr-20	6	WL
	07-May-20	3	WL
	20-Jul-20	4	SWL
	27-Oct-20	7	WL

Individual ID	Date of sighting (dd-mmm-yy)	Sighting No.	Area
	10-Dec-20	7	SWL
WLMM029	09-Apr-20	6	WL
	07-May-20	3	WL
	20-Jul-20	4	SWL
	10-Dec-20	7	SWL
WLMM030	16-Jun-20	2	WL
	06-Jul-20	2	WL
	13-Jul-20	2	WL
WLMM038	13-Jul-20	1	WL
WLMM040	20-Feb-20	2	WL
	18-Mar-20	3	WL
WLMM043	11-Jun-20	4	WL
		7	WL
	13-Jul-20	5	WL
WLMM047	13-Jul-20	7	WL
WLMM056	07-Jan-20	2	SWL
		3	SWL
	09-Apr-20	1	WL
	09-Sep-20	2	WL
	27-Oct-20	6	WL
WLMM060	09-Apr-20	1	WL
	13-Jul-20	6	WL
	27-Oct-20	1	WL
		2	WL
WLMM062	16-Jun-20	2	WL
	17-Aug-20	1	WL
WLMM063	21-Jul-20	3	SWL
	16-Dec-20	1	AW
WLMM064	16-Dec-20	2	WL
WLMM065	15-Jan-20	3	WL
	19-Oct-20	1	WL
WLMM068	17-Aug-20	1	WL
WLMM070	11-May-20	4	SWL
	21-Oct-20	4	SWL
	27-Oct-20	1	WL
WLMM071	12-Feb-20	1	AW
	06-Jul-20	2	WL
	27-Oct-20	1	WL
		2	WL
WLMM073	11-May-20	4	SWL
	13-May-20	3	WL
	22-Jun-20	4	SWL
	07-Aug-20	4	WL
	21-Oct-20	3	SWL
		4	SWL
	16-Nov-20	5	WL
WLMM075	09-Apr-20	1	WL
		3	WL
WLMM076	27-Oct-20	4	WL
WLMM079	07-Jan-20	4	SWL
	13-Jul-20	7	WL
	20-Jul-20	5	SWL
	21-Jul-20	4	SWL
	09-Sep-20	2	WL
	15-Sep-20	3	WL
	27-Oct-20	9	WL
	06-Nov-20	3	WL
	16-Nov-20	3	WL
WLMM080	13-Jul-20	6	WL
	16-Nov-20	1	AW
WLMM081	07-May-20	3	WL
	16-Jun-20	4	WL

Individual ID	Date of sighting (dd-mmm-yy)	Sighting No.	Area
WLMM082	07-May-20	3	WL
	16-Jun-20	4	WL
WLMM085	13-Jul-20	6	WL
		7	WL
	27-Oct-20	8	WL
WLMM086	13-Jul-20	2	WL
WLMM089	13-Jul-20	5	WL
WLMM090	11-Jun-20	7	WL
	16-Jun-20	5	WL
WLMM091	13-Jul-20	2	WL
		3	WL
WLMM092	13-Jul-20	2	WL
		3	WL
WLMM095	17-Aug-20	1	WL
WLMM098	13-Jul-20	1	WL
WLMM102	06-Jul-20	1	WL
WLMM103	17-Aug-20	1	WL
WLMM107	11-Jun-20	5	WL
		6	WL
	06-Jul-20	2	WL
	06-Nov-20	1	WL
WLMM109	10-Jan-20	3	WL
	11-Jun-20	4	WL
	07-Aug-20	4	WL
WLMM112	13-Jul-20	6	WL
WLMM114	07-Jan-20	3	SWL
	10-Jan-20	2	WL
	12-Feb-20	5	WL
	09-Apr-20	1	WL
		2	WL
	11-May-20	4	SWL
	13-May-20	1	WL
	18-Jun-20	2	SWL
	22-Jun-20	6	SWL
	21-Oct-20	4	SWL
	06-Nov-20	3	WL
	16-Nov-20	6	WL
WLMM122	10-Feb-20	1	NWL
	21-Jul-20	7	SWL
WLMM131	20-Feb-20	4	WL
	15-Apr-20	1	WL
	13-May-20	3	WL
	18-Jun-20	2	SWL
	07-Aug-20	3	WL
	10-Aug-20	2	SWL
		3	SWL
	27-Oct-20	4	WL
WLMM133	17-Aug-20	1	WL
WLMM135	06-Nov-20	1	WL
WLMM136	06-Jul-20	2	WL
WLMM138	07-May-20	3	WL
WLMM141	11-Jun-20	5	WL
WLMM142	11-Jun-20	4	WL
WLMM147	13-Jul-20	7	WL
	20-Jul-20	5	SWL
	21-Jul-20	4	SWL
	27-Oct-20	9	WL
	06-Nov-20	3	WL
	16-Nov-20	3	WL
WLMM149	11-Jun-20	5	WL
	06-Jul-20	2	WL
	06-Nov-20	1	WL

Individual ID	Date of sighting (dd-mmm-yy)	Sighting No.	Area
WLMM150	15-Jan-20	1	WL
	07-May-20	3	WL
	13-May-20	3	WL
	27-Oct-20	7	WL
	06-Nov-20	5	WL
WLMM151	18-Mar-20	2	WL
WLMM152	18-Mar-20	2	WL
WLMM153	16-Jun-20	2	WL
WLMM154	06-Jul-20	2	WL
WLMM155	13-Jul-20	1	WL
WLMM156	13-Jul-20	1	WL
WLMM157	13-Jul-20	7	WL
WLMM158	13-Jul-20	7	WL
	27-Oct-20	3	WL
WLMM159	13-Jul-20	7	WL
WLMM160	07-Aug-20	4	WL
	06-Nov-20	5	WL
WLMM161	17-Aug-20	1	WL
WLMM162	17-Aug-20	1	WL
WLMM163	06-Nov-20	5	WL

Table 10: Land-based Survey, Theodolite Effort and CWD Group Summary in 2020

Land-based Station	# of Survey Sessions	Survey Effort (hh:mm)	# CWD Groups Sighted	CWD Group Sighting per Survey Hr	# Groups After Filtering	# of 10-minutes segments
Sha Chau	12	72:00	0	0	0	0
Lung Kwu Chau	12	72:00	21	0.29	6	10
TOTAL	**24**	**144:00**	**21**	**0.15**	**6**	**10**

Table 11: Land-based CWD Focal Group Size Summary in 2020

Category	n (sample size)	Minimum # Individuals	Maximum # Individuals	Mean Grp Size	Standard Deviation
Lung Kwu Chau Station Total	21	1	4	1.76	0.89
Winter	12	1	3	1.67	0.8
Spring	4	1	4	2	1.4
Summer	2	1	2	1.5	0.71
Autumn	3	1	3	2	1
Dry	15	1	3	1.73	0.8
Wet	6	1	4	1.83	1.2
Inside SCLKCMP boundary	10	1	3	1.8	0.8
Crossing SCLKCMP boundary	2	1	4	2.5	2.1
Outside SCLKCMP boundary	9	1	3	1.56	0.7

Table 12: Summary of PAM Deployments and Dolphin Detections, 08 Jan 2020 to 14 Jan 2021

Site	Dep #	Data start (dd/mm/yyyy)	Data end (dd/mm/yyyy)	# recording days	# files	Days with dolphins (%)	Files with dolphins (%)
A5	1	08/01/2020	21/02/2020	45	12879	14 (31%)	43 (0.33%)
A5	2	22/02/2020	07/04/2020	46	13662	17 (37%)	39 (0.29%)
A5	3	11/04/2020	27/05/2020	47	13473	17 (36%)	29 (0.22%)
A5	4	28/05/2020	22/07/2020	56	16083	9 (16%)	10 (0.06%)
A5	5	23/07/2020	03/09/2020	43	12276	0 (0%)	0 (0%)
A5	6	04/09/2020	22/10/2020	49	13963	3 (6%)	3 (0.02%)
A5	7	24/10/2020	04/12/2020	42	11700	3 (7%)	4 (0.03%)
A5	8	04/12/2020	14/01/2021	42	12015	20 (48%)	68 (0.57%)
A5	Total	08/01/2020	14/01/2021	370	106051	83 (22%)	196 (0.18%)

Table 13: Summary of PAM Deployments and Dolphin Detections in the Previous Year (10 Jan 2019 to 07 Jan 2020)

Site	Dep #	Data start (dd/mm/yyyy)	Data end (dd/mm/yyyy)	# recording days	# files	Days with dolphins (%)	Files with dolphins (%)
A5	1	10/01/2019	21/02/2019	43	12232	23 (53%)	105 (0.86%)
A5	2	22/02/2019	12/04/2019	50	14166	28 (56%)	79 (0.56%)
A5	3	13/04/2019	24/05/2019	42	11954	26 (62%)	62 (0.52%)
A5	4	25/05/2019	16/07/2019	53	15113	14 (26%)	24 (0.16%)
A5	5	17/07/2019	10/09/2019	56	16128	19 (34%)	59 (0.37%)
A5	6	12/09/2019	22/10/2019	41	11808	8 (20%)	19 (0.16%)
A5	7	24/10/2019	06/12/2019	44	12384	6 (14%)	7 (0.06%)
A5	8	06/12/2019	07/01/2020	33	9729	13 (39%)	23 (0.24%)
A5	Total	10/01/2019	07/01/2020	362	103514	137 (38%)	378 (0.37%)

CWD Small Vessel Line-transect Survey — Survey Effort Data

DATE	AREA	BEAU	KM SEARCHED	SEASON	VESSEL	TYPE	P/S
6-Jan-20	DB	2	6.450	WINTER	32166	3RS ET	P
6-Jan-20	DB	3	2.190	WINTER	32166	3RS ET	P
6-Jan-20	DB	2	4.760	WINTER	32166	3RS ET	S
6-Jan-20	NEL	2	17.100	WINTER	32166	3RS ET	P
6-Jan-20	NEL	3	20.610	WINTER	32166	3RS ET	P
6-Jan-20	NEL	2	6.200	WINTER	32166	3RS ET	S
6-Jan-20	NEL	3	3.790	WINTER	32166	3RS ET	S
7-Jan-20	SWL	1	3.200	WINTER	32166	3RS ET	P
7-Jan-20	SWL	2	49.770	WINTER	32166	3RS ET	P
7-Jan-20	SWL	2	15.800	WINTER	32166	3RS ET	S
10-Jan-20	AW	3	4.860	WINTER	32166	3RS ET	P
10-Jan-20	WL	2	10.760	WINTER	32166	3RS ET	P
10-Jan-20	WL	3	5.190	WINTER	32166	3RS ET	P
10-Jan-20	WL	4	5.890	WINTER	32166	3RS ET	P
10-Jan-20	WL	2	4.910	WINTER	32166	3RS ET	S
10-Jan-20	WL	3	0.860	WINTER	32166	3RS ET	S
10-Jan-20	WL	4	2.340	WINTER	32166	3RS ET	S
13-Jan-20	DB	2	1.580	WINTER	32166	3RS ET	P
13-Jan-20	DB	3	7.420	WINTER	32166	3RS ET	P
13-Jan-20	DB	2	1.650	WINTER	32166	3RS ET	S
13-Jan-20	DB	3	2.950	WINTER	32166	3RS ET	S
13-Jan-20	NEL	2	15.540	WINTER	32166	3RS ET	P
13-Jan-20	NEL	3	21.900	WINTER	32166	3RS ET	P
13-Jan-20	NEL	2	4.160	WINTER	32166	3RS ET	S
13-Jan-20	NEL	3	6.200	WINTER	32166	3RS ET	S
15-Jan-20	AW	3	1.170	WINTER	32166	3RS ET	P
15-Jan-20	AW	4	4.000	WINTER	32166	3RS ET	P
15-Jan-20	WL	3	7.366	WINTER	32166	3RS ET	P
15-Jan-20	WL	4	8.390	WINTER	32166	3RS ET	P
15-Jan-20	WL	5	1.550	WINTER	32166	3RS ET	P
15-Jan-20	WL	3	8.514	WINTER	32166	3RS ET	S
15-Jan-20	WL	4	2.110	WINTER	32166	3RS ET	S
16-Jan-20	NWL	2	25.710	WINTER	32166	3RS ET	P
16-Jan-20	NWL	3	36.900	WINTER	32166	3RS ET	P
16-Jan-20	NWL	4	0.300	WINTER	32166	3RS ET	P
16-Jan-20	NWL	2	5.570	WINTER	32166	3RS ET	S
16-Jan-20	NWL	3	5.220	WINTER	32166	3RS ET	S
16-Jan-20	NWL	4	0.200	WINTER	32166	3RS ET	S
17-Jan-20	NWL	2	4.600	WINTER	32166	3RS ET	P
17-Jan-20	NWL	3	49.000	WINTER	32166	3RS ET	P
17-Jan-20	NWL	4	9.300	WINTER	32166	3RS ET	P
17-Jan-20	NWL	2	1.000	WINTER	32166	3RS ET	S
17-Jan-20	NWL	3	9.500	WINTER	32166	3RS ET	S
17-Jan-20	NWL	4	2.100	WINTER	32166	3RS ET	S
22-Jan-20	SWL	1	2.200	WINTER	32166	3RS ET	P
22-Jan-20	SWL	2	47.923	WINTER	32166	3RS ET	P
22-Jan-20	SWL	3	4.200	WINTER	32166	3RS ET	P
22-Jan-20	SWL	2	14.227	WINTER	32166	3RS ET	S

DATE	AREA	BEAU	KM SEARCHED	SEASON	VESSEL	TYPE	P/S
22-Jan-20	SWL	3	1.200	WINTER	32166	3RS ET	S
10-Feb-20	NWL	2	58.000	WINTER	32166	3RS ET	P
10-Feb-20	NWL	3	5.360	WINTER	32166	3RS ET	P
10-Feb-20	NWL	2	11.700	WINTER	32166	3RS ET	S
11-Feb-20	NWL	2	30.200	WINTER	32166	3RS ET	P
11-Feb-20	NWL	3	33.800	WINTER	32166	3RS ET	P
11-Feb-20	NWL	2	4.600	WINTER	32166	3RS ET	S
11-Feb-20	NWL	3	6.900	WINTER	32166	3RS ET	S
12-Feb-20	AW	2	4.552	WINTER	32166	3RS ET	P
12-Feb-20	WL	2	18.710	WINTER	32166	3RS ET	P
12-Feb-20	WL	3	0.959	WINTER	32166	3RS ET	P
12-Feb-20	WL	2	8.676	WINTER	32166	3RS ET	S
12-Feb-20	WL	3	1.631	WINTER	32166	3RS ET	S
17-Feb-20	DB	3	5.630	WINTER	32166	3RS ET	P
17-Feb-20	DB	4	3.190	WINTER	32166	3RS ET	P
17-Feb-20	DB	3	3.600	WINTER	32166	3RS ET	S
17-Feb-20	DB	4	0.980	WINTER	32166	3RS ET	S
17-Feb-20	NEL	2	7.100	WINTER	32166	3RS ET	P
17-Feb-20	NEL	3	29.780	WINTER	32166	3RS ET	P
17-Feb-20	NEL	2	3.900	WINTER	32166	3RS ET	S
17-Feb-20	NEL	3	6.420	WINTER	32166	3RS ET	S
18-Feb-20	DB	3	4.640	WINTER	32166	3RS ET	P
18-Feb-20	DB	4	3.960	WINTER	32166	3RS ET	P
18-Feb-20	DB	3	3.580	WINTER	32166	3RS ET	S
18-Feb-20	DB	4	0.920	WINTER	32166	3RS ET	S
18-Feb-20	NEL	2	15.530	WINTER	32166	3RS ET	P
18-Feb-20	NEL	3	21.650	WINTER	32166	3RS ET	P
18-Feb-20	NEL	2	5.120	WINTER	32166	3RS ET	S
18-Feb-20	NEL	3	5.000	WINTER	32166	3RS ET	S
20-Feb-20	AW	3	4.920	WINTER	32166	3RS ET	P
20-Feb-20	WL	2	13.391	WINTER	32166	3RS ET	P
20-Feb-20	WL	3	5.057	WINTER	32166	3RS ET	P
20-Feb-20	WL	2	9.593	WINTER	32166	3RS ET	S
20-Feb-20	WL	4	1.013	WINTER	32166	3RS ET	S
21-Feb-20	SWL	3	26.930	WINTER	32166	3RS ET	P
21-Feb-20	SWL	4	18.000	WINTER	32166	3RS ET	P
21-Feb-20	SWL	5	9.200	WINTER	32166	3RS ET	P
21-Feb-20	SWL	3	7.600	WINTER	32166	3RS ET	S
21-Feb-20	SWL	4	7.700	WINTER	32166	3RS ET	S
21-Feb-20	SWL	5	1.270	WINTER	32166	3RS ET	S
26-Feb-20	SWL	1	1.800	WINTER	32166	3RS ET	P
26-Feb-20	SWL	2	49.708	WINTER	32166	3RS ET	P
26-Feb-20	SWL	3	0.840	WINTER	32166	3RS ET	P
26-Feb-20	SWL	2	13.918	WINTER	32166	3RS ET	S
26-Feb-20	SWL	3	1.970	WINTER	32166	3RS ET	S
2-Mar-20	DB	2	5.630	SPRING	32166	3RS ET	P
2-Mar-20	DB	3	3.340	SPRING	32166	3RS ET	P
2-Mar-20	DB	2	2.840	SPRING	32166	3RS ET	S
2-Mar-20	DB	3	1.790	SPRING	32166	3RS ET	S

DATE	AREA	BEAU	KM SEARCHED	SEASON	VESSEL	TYPE	P/S
2-Mar-20	NEL	2	2.500	SPRING	32166	3RS ET	P
2-Mar-20	NEL	3	32.140	SPRING	32166	3RS ET	P
2-Mar-20	NEL	4	2.600	SPRING	32166	3RS ET	P
2-Mar-20	NEL	2	1.200	SPRING	32166	3RS ET	S
2-Mar-20	NEL	3	8.160	SPRING	32166	3RS ET	S
2-Mar-20	NEL	4	1.000	SPRING	32166	3RS ET	S
6-Mar-20	DB	2	5.790	SPRING	32166	3RS ET	P
6-Mar-20	DB	3	2.980	SPRING	32166	3RS ET	P
6-Mar-20	DB	1	0.880	SPRING	32166	3RS ET	S
6-Mar-20	DB	2	2.450	SPRING	32166	3RS ET	S
6-Mar-20	DB	3	1.200	SPRING	32166	3RS ET	S
6-Mar-20	NEL	2	3.460	SPRING	32166	3RS ET	P
6-Mar-20	NEL	3	33.340	SPRING	32166	3RS ET	P
6-Mar-20	NEL	2	1.200	SPRING	32166	3RS ET	S
6-Mar-20	NEL	3	9.900	SPRING	32166	3RS ET	S
11-Mar-20	NWL	2	4.786	SPRING	32166	3RS ET	P
11-Mar-20	NWL	3	53.890	SPRING	32166	3RS ET	P
11-Mar-20	NWL	4	1.400	SPRING	32166	3RS ET	P
11-Mar-20	NWL	3	12.430	SPRING	32166	3RS ET	S
12-Mar-20	AW	4	4.920	SPRING	32166	3RS ET	P
12-Mar-20	WL	3	1.675	SPRING	32166	3RS ET	P
12-Mar-20	WL	4	15.140	SPRING	32166	3RS ET	P
12-Mar-20	WL	5	2.008	SPRING	32166	3RS ET	P
12-Mar-20	WL	3	0.480	SPRING	32166	3RS ET	S
12-Mar-20	WL	4	7.380	SPRING	32166	3RS ET	S
12-Mar-20	WL	5	1.762	SPRING	32166	3RS ET	S
17-Mar-20	NWL	2	39.340	SPRING	32166	3RS ET	P
17-Mar-20	NWL	3	23.260	SPRING	32166	3RS ET	P
17-Mar-20	NWL	4	1.000	SPRING	32166	3RS ET	P
17-Mar-20	NWL	2	6.700	SPRING	32166	3RS ET	S
17-Mar-20	NWL	3	4.900	SPRING	32166	3RS ET	S
18-Mar-20	AW	2	5.000	SPRING	32166	3RS ET	P
18-Mar-20	WL	2	9.543	SPRING	32166	3RS ET	P
18-Mar-20	WL	3	9.425	SPRING	32166	3RS ET	P
18-Mar-20	WL	2	7.497	SPRING	32166	3RS ET	S
18-Mar-20	WL	3	2.691	SPRING	32166	3RS ET	S
19-Mar-20	SWL	1	6.940	SPRING	32166	3RS ET	P
19-Mar-20	SWL	2	38.570	SPRING	32166	3RS ET	P
19-Mar-20	SWL	3	8.050	SPRING	32166	3RS ET	P
19-Mar-20	SWL	2	14.355	SPRING	32166	3RS ET	S
19-Mar-20	SWL	3	2.200	SPRING	32166	3RS ET	S
23-Mar-20	SWL	1	6.890	SPRING	32166	3RS ET	P
23-Mar-20	SWL	2	45.972	SPRING	32166	3RS ET	P
23-Mar-20	SWL	1	1.350	SPRING	32166	3RS ET	S
23-Mar-20	SWL	2	14.535	SPRING	32166	3RS ET	S
3-Apr-20	NEL	2	1.270	SPRING	32166	3RS ET	P
3-Apr-20	NEL	3	26.900	SPRING	32166	3RS ET	P
3-Apr-20	NEL	4	8.700	SPRING	32166	3RS ET	P
3-Apr-20	NEL	3	9.830	SPRING	32166	3RS ET	S

DATE	AREA	BEAU	KM SEARCHED	SEASON	VESSEL	TYPE	P/S
3-Apr-20	NEL	4	1.000	SPRING	32166	3RS ET	S
3-Apr-20	DB	2	2.250	SPRING	32166	3RS ET	P
3-Apr-20	DB	3	6.560	SPRING	32166	3RS ET	P
3-Apr-20	DB	3	4.490	SPRING	32166	3RS ET	S
7-Apr-20	DB	3	8.820	SPRING	32166	3RS ET	P
7-Apr-20	DB	3	4.180	SPRING	32166	3RS ET	S
7-Apr-20	NEL	1	10.100	SPRING	32166	3RS ET	P
7-Apr-20	NEL	2	27.170	SPRING	32166	3RS ET	P
7-Apr-20	NEL	1	1.000	SPRING	32166	3RS ET	S
7-Apr-20	NEL	2	9.330	SPRING	32166	3RS ET	S
9-Apr-20	AW	2	5.030	SPRING	32166	3RS ET	P
9-Apr-20	WL	2	10.238	SPRING	32166	3RS ET	P
9-Apr-20	WL	3	6.538	SPRING	32166	3RS ET	P
9-Apr-20	WL	4	1.390	SPRING	32166	3RS ET	P
9-Apr-20	WL	2	6.432	SPRING	32166	3RS ET	S
9-Apr-20	WL	3	2.932	SPRING	32166	3RS ET	S
9-Apr-20	WL	4	0.910	SPRING	32166	3RS ET	S
15-Apr-20	AW	2	5.040	SPRING	32166	3RS ET	P
15-Apr-20	WL	2	20.680	SPRING	32166	3RS ET	P
15-Apr-20	WL	2	10.420	SPRING	32166	3RS ET	S
16-Apr-20	SWL	2	52.486	SPRING	32166	3RS ET	P
16-Apr-20	SWL	2	15.854	SPRING	32166	3RS ET	S
17-Apr-20	SWL	2	26.394	SPRING	32166	3RS ET	P
17-Apr-20	SWL	3	27.056	SPRING	32166	3RS ET	P
17-Apr-20	SWL	2	9.230	SPRING	32166	3RS ET	S
17-Apr-20	SWL	3	8.050	SPRING	32166	3RS ET	S
20-Apr-20	NWL	2	41.800	SPRING	32166	3RS ET	P
20-Apr-20	NWL	3	22.200	SPRING	32166	3RS ET	P
20-Apr-20	NWL	2	7.600	SPRING	32166	3RS ET	S
20-Apr-20	NWL	3	4.200	SPRING	32166	3RS ET	S
21-Apr-20	NWL	2	26.840	SPRING	32166	3RS ET	P
21-Apr-20	NWL	3	36.760	SPRING	32166	3RS ET	P
21-Apr-20	NWL	2	4.300	SPRING	32166	3RS ET	S
21-Apr-20	NWL	3	7.600	SPRING	32166	3RS ET	S
4-May-20	DB	2	8.950	SPRING	32166	3RS ET	P
4-May-20	DB	2	4.250	SPRING	32166	3RS ET	S
4-May-20	NEL	2	32.350	SPRING	32166	3RS ET	P
4-May-20	NEL	3	4.500	SPRING	32166	3RS ET	P
4-May-20	NEL	2	8.050	SPRING	32166	3RS ET	S
4-May-20	NEL	3	1.800	SPRING	32166	3RS ET	S
6-May-20	NWL	2	17.400	SPRING	32166	3RS ET	P
6-May-20	NWL	3	45.000	SPRING	32166	3RS ET	P
6-May-20	NWL	3	13.400	SPRING	32166	3RS ET	S
7-May-20	AW	3	4.890	SPRING	32166	3RS ET	P
7-May-20	WL	3	19.292	SPRING	32166	3RS ET	P
7-May-20	WL	3	11.318	SPRING	32166	3RS ET	S
11-May-20	SWL	1	2.700	SPRING	32166	3RS ET	P
11-May-20	SWL	2	51.714	SPRING	32166	3RS ET	P
11-May-20	SWL	1	1.300	SPRING	32166	3RS ET	S

DATE	AREA	BEAU	KM SEARCHED	SEASON	VESSEL	TYPE	P/S
11-May-20	SWL	2	14.740	SPRING	32166	3RS ET	S
12-May-20	SWL	2	42.776	SPRING	32166	3RS ET	P
12-May-20	SWL	3	11.880	SPRING	32166	3RS ET	P
12-May-20	SWL	2	13.052	SPRING	32166	3RS ET	S
12-May-20	SWL	3	2.150	SPRING	32166	3RS ET	S
13-May-20	AW	1	5.060	SPRING	32166	3RS ET	P
13-May-20	WL	1	1.220	SPRING	32166	3RS ET	P
13-May-20	WL	2	9.124	SPRING	32166	3RS ET	P
13-May-20	WL	3	2.062	SPRING	32166	3RS ET	P
13-May-20	WL	4	6.239	SPRING	32166	3RS ET	P
13-May-20	WL	2	4.441	SPRING	32166	3RS ET	S
13-May-20	WL	3	1.748	SPRING	32166	3RS ET	S
13-May-20	WL	4	3.271	SPRING	32166	3RS ET	S
18-May-20	DB	3	6.360	SPRING	32166	3RS ET	P
18-May-20	DB	4	2.830	SPRING	32166	3RS ET	P
18-May-20	DB	3	1.720	SPRING	32166	3RS ET	S
18-May-20	DB	4	2.590	SPRING	32166	3RS ET	S
18-May-20	NEL	2	24.600	SPRING	32166	3RS ET	P
18-May-20	NEL	3	12.500	SPRING	32166	3RS ET	P
18-May-20	NEL	2	6.200	SPRING	32166	3RS ET	S
18-May-20	NEL	3	3.900	SPRING	32166	3RS ET	S
20-May-20	NWL	2	2.300	SPRING	32166	3RS ET	P
20-May-20	NWL	3	43.690	SPRING	32166	3RS ET	P
20-May-20	NWL	4	17.310	SPRING	32166	3RS ET	P
20-May-20	NWL	3	9.100	SPRING	32166	3RS ET	S
20-May-20	NWL	4	2.600	SPRING	32166	3RS ET	S
9-Jun-20	NWL	2	2.300	SUMMER	32166	3RS ET	P
9-Jun-20	NWL	3	61.400	SUMMER	32166	3RS ET	P
9-Jun-20	NWL	2	1.500	SUMMER	32166	3RS ET	S
9-Jun-20	NWL	3	10.200	SUMMER	32166	3RS ET	S
11-Jun-20	AW	2	4.760	SUMMER	32166	3RS ET	P
11-Jun-20	WL	2	1.520	SUMMER	32166	3RS ET	P
11-Jun-20	WL	3	16.937	SUMMER	32166	3RS ET	P
11-Jun-20	WL	2	1.060	SUMMER	32166	3RS ET	S
11-Jun-20	WL	3	7.545	SUMMER	32166	3RS ET	S
16-Jun-20	AW	3	4.970	SUMMER	32166	3RS ET	P
16-Jun-20	WL	2	3.459	SUMMER	32166	3RS ET	P
16-Jun-20	WL	3	15.008	SUMMER	32166	3RS ET	P
16-Jun-20	WL	4	1.050	SUMMER	32166	3RS ET	P
16-Jun-20	WL	2	1.080	SUMMER	32166	3RS ET	S
16-Jun-20	WL	3	8.877	SUMMER	32166	3RS ET	S
17-Jun-20	NWL	2	3.700	SUMMER	32166	3RS ET	P
17-Jun-20	NWL	3	52.050	SUMMER	32166	3RS ET	P
17-Jun-20	NWL	4	7.600	SUMMER	32166	3RS ET	P
17-Jun-20	NWL	2	1.200	SUMMER	32166	3RS ET	S
17-Jun-20	NWL	3	8.000	SUMMER	32166	3RS ET	S
17-Jun-20	NWL	4	3.200	SUMMER	32166	3RS ET	S
18-Jun-20	SWL	2	5.388	SUMMER	32166	3RS ET	P
18-Jun-20	SWL	3	34.630	SUMMER	32166	3RS ET	P

DATE	AREA	BEAU	KM SEARCHED	SEASON	VESSEL	TYPE	P/S
18-Jun-20	SWL	4	12.720	SUMMER	32166	3RS ET	P
18-Jun-20	SWL	2	3.312	SUMMER	32166	3RS ET	S
18-Jun-20	SWL	3	11.120	SUMMER	32166	3RS ET	S
18-Jun-20	SWL	4	1.870	SUMMER	32166	3RS ET	S
22-Jun-20	SWL	2	9.376	SUMMER	32166	3RS ET	P
22-Jun-20	SWL	3	31.756	SUMMER	32166	3RS ET	P
22-Jun-20	SWL	4	3.650	SUMMER	32166	3RS ET	P
22-Jun-20	SWL	2	3.471	SUMMER	32166	3RS ET	S
22-Jun-20	SWL	3	10.290	SUMMER	32166	3RS ET	S
23-Jun-20	DB	3	8.470	SUMMER	32166	3RS ET	P
23-Jun-20	DB	3	4.130	SUMMER	32166	3RS ET	S
23-Jun-20	NEL	2	21.700	SUMMER	32166	3RS ET	P
23-Jun-20	NEL	3	15.280	SUMMER	32166	3RS ET	P
23-Jun-20	NEL	2	6.500	SUMMER	32166	3RS ET	S
23-Jun-20	NEL	3	3.820	SUMMER	32166	3RS ET	S
24-Jun-20	DB	3	8.690	SUMMER	32166	3RS ET	P
24-Jun-20	DB	3	4.310	SUMMER	32166	3RS ET	S
24-Jun-20	NEL	2	31.670	SUMMER	32166	3RS ET	P
24-Jun-20	NEL	3	5.950	SUMMER	32166	3RS ET	P
24-Jun-20	NEL	2	6.880	SUMMER	32166	3RS ET	S
24-Jun-20	NEL	3	3.100	SUMMER	32166	3RS ET	S
6-Jul-20	AW	3	4.900	SUMMER	32166	3RS ET	P
6-Jul-20	WL	3	14.052	SUMMER	32166	3RS ET	P
6-Jul-20	WL	4	4.029	SUMMER	32166	3RS ET	P
6-Jul-20	WL	3	5.088	SUMMER	32166	3RS ET	S
6-Jul-20	WL	4	3.731	SUMMER	32166	3RS ET	S
8-Jul-20	DB	3	8.400	SUMMER	32166	3RS ET	P
8-Jul-20	DB	4	0.260	SUMMER	32166	3RS ET	P
8-Jul-20	DB	3	4.340	SUMMER	32166	3RS ET	S
8-Jul-20	NEL	2	0.500	SUMMER	32166	3RS ET	P
8-Jul-20	NEL	3	33.650	SUMMER	32166	3RS ET	P
8-Jul-20	NEL	4	3.230	SUMMER	32166	3RS ET	P
8-Jul-20	NEL	2	2.000	SUMMER	32166	3RS ET	S
8-Jul-20	NEL	3	7.720	SUMMER	32166	3RS ET	S
9-Jul-20	DB	4	8.720	SUMMER	32166	3RS ET	P
9-Jul-20	DB	4	4.280	SUMMER	32166	3RS ET	S
9-Jul-20	NEL	2	1.300	SUMMER	32166	3RS ET	P
9-Jul-20	NEL	3	25.670	SUMMER	32166	3RS ET	P
9-Jul-20	NEL	4	9.820	SUMMER	32166	3RS ET	P
9-Jul-20	NEL	2	1.000	SUMMER	32166	3RS ET	S
9-Jul-20	NEL	3	9.910	SUMMER	32166	3RS ET	S
10-Jul-20	NWL	3	49.090	SUMMER	32166	3RS ET	P
10-Jul-20	NWL	4	14.710	SUMMER	32166	3RS ET	P
10-Jul-20	NWL	2	2.100	SUMMER	32166	3RS ET	S
10-Jul-20	NWL	3	10.000	SUMMER	32166	3RS ET	S
13-Jul-20	AW	2	0.980	SUMMER	32166	3RS ET	P
13-Jul-20	AW	3	3.950	SUMMER	32166	3RS ET	S
13-Jul-20	WL	2	7.997	SUMMER	32166	3RS ET	P
13-Jul-20	WL	3	6.388	SUMMER	32166	3RS ET	P

DATE	AREA	BEAU	KM SEARCHED	SEASON	VESSEL	TYPE	P/S
13-Jul-20	WL	2	2.175	SUMMER	32166	3RS ET	S
13-Jul-20	WL	3	5.392	SUMMER	32166	3RS ET	S
20-Jul-20	SWL	2	44.018	SUMMER	32166	3RS ET	P
20-Jul-20	SWL	3	3.890	SUMMER	32166	3RS ET	P
20-Jul-20	SWL	2	12.803	SUMMER	32166	3RS ET	S
20-Jul-20	SWL	3	1.000	SUMMER	32166	3RS ET	S
21-Jul-20	SWL	1	8.130	SUMMER	32166	3RS ET	P
21-Jul-20	SWL	2	26.735	SUMMER	32166	3RS ET	P
21-Jul-20	SWL	3	15.310	SUMMER	32166	3RS ET	P
21-Jul-20	SWL	1	1.034	SUMMER	32166	3RS ET	S
21-Jul-20	SWL	2	12.790	SUMMER	32166	3RS ET	S
21-Jul-20	SWL	3	0.920	SUMMER	32166	3RS ET	S
22-Jul-20	NWL	1	14.280	SUMMER	32166	3RS ET	P
22-Jul-20	NWL	2	35.930	SUMMER	32166	3RS ET	P
22-Jul-20	NWL	3	12.500	SUMMER	32166	3RS ET	P
22-Jul-20	NWL	1	1.300	SUMMER	32166	3RS ET	S
22-Jul-20	NWL	2	9.190	SUMMER	32166	3RS ET	S
22-Jul-20	NWL	3	1.100	SUMMER	32166	3RS ET	S
7-Aug-20	AW	2	4.830	SUMMER	32166	3RS ET	P
7-Aug-20	WL	2	11.333	SUMMER	32166	3RS ET	P
7-Aug-20	WL	3	8.330	SUMMER	32166	3RS ET	P
7-Aug-20	WL	2	2.260	SUMMER	32166	3RS ET	S
7-Aug-20	WL	3	4.810	SUMMER	32166	3RS ET	S
10-Aug-20	SWL	2	36.803	SUMMER	32166	3RS ET	P
10-Aug-20	SWL	3	14.500	SUMMER	32166	3RS ET	P
10-Aug-20	SWL	2	13.697	SUMMER	32166	3RS ET	S
10-Aug-20	SWL	3	3.100	SUMMER	32166	3RS ET	S
11-Aug-20	NWL	2	18.930	SUMMER	32166	3RS ET	P
11-Aug-20	NWL	3	41.090	SUMMER	32166	3RS ET	P
11-Aug-20	NWL	4	3.780	SUMMER	32166	3RS ET	P
11-Aug-20	NWL	2	5.600	SUMMER	32166	3RS ET	S
11-Aug-20	NWL	3	6.200	SUMMER	32166	3RS ET	S
12-Aug-20	DB	2	8.010	SUMMER	32166	3RS ET	P
12-Aug-20	DB	3	1.000	SUMMER	32166	3RS ET	P
12-Aug-20	DB	2	3.740	SUMMER	32166	3RS ET	S
12-Aug-20	DB	3	0.450	SUMMER	32166	3RS ET	S
12-Aug-20	NEL	2	16.500	SUMMER	32166	3RS ET	P
12-Aug-20	NEL	3	19.360	SUMMER	32166	3RS ET	P
12-Aug-20	NEL	4	1.500	SUMMER	32166	3RS ET	P
12-Aug-20	NEL	2	5.270	SUMMER	32166	3RS ET	S
12-Aug-20	NEL	3	4.770	SUMMER	32166	3RS ET	S
17-Aug-20	AW	2	1.860	SUMMER	32166	3RS ET	P
17-Aug-20	AW	3	3.020	SUMMER	32166	3RS ET	P
17-Aug-20	WL	2	0.520	SUMMER	32166	3RS ET	P
17-Aug-20	WL	3	17.310	SUMMER	32166	3RS ET	P
17-Aug-20	WL	4	1.510	SUMMER	32166	3RS ET	P
17-Aug-20	WL	2	4.080	SUMMER	32166	3RS ET	S
17-Aug-20	WL	3	4.590	SUMMER	32166	3RS ET	S
17-Aug-20	WL	4	0.717	SUMMER	32166	3RS ET	S

DATE	AREA	BEAU	KM SEARCHED	SEASON	VESSEL	TYPE	P/S
18-Aug-20	DB	2	8.790	SUMMER	32166	3RS ET	P
18-Aug-20	DB	2	4.310	SUMMER	32166	3RS ET	S
18-Aug-20	NEL	2	29.590	SUMMER	32166	3RS ET	P
18-Aug-20	NEL	3	7.650	SUMMER	32166	3RS ET	P
18-Aug-20	NEL	2	9.100	SUMMER	32166	3RS ET	S
18-Aug-20	NEL	3	0.860	SUMMER	32166	3RS ET	S
24-Aug-20	SWL	2	35.344	SUMMER	32166	3RS ET	P
24-Aug-20	SWL	3	19.010	SUMMER	32166	3RS ET	P
24-Aug-20	SWL	2	11.416	SUMMER	32166	3RS ET	S
24-Aug-20	SWL	3	4.500	SUMMER	32166	3RS ET	S
26-Aug-20	NWL	2	13.100	SUMMER	32166	3RS ET	P
26-Aug-20	NWL	3	31.500	SUMMER	32166	3RS ET	P
26-Aug-20	NWL	4	16.400	SUMMER	32166	3RS ET	P
26-Aug-20	NWL	5	2.300	SUMMER	32166	3RS ET	P
26-Aug-20	NWL	2	4.200	SUMMER	32166	3RS ET	S
26-Aug-20	NWL	3	6.300	SUMMER	32166	3RS ET	S
26-Aug-20	NWL	4	1.000	SUMMER	32166	3RS ET	S
4-Sep-20	SWL	2	25.320	AUTUMN	32166	3RS ET	P
4-Sep-20	SWL	3	29.549	AUTUMN	32166	3RS ET	P
4-Sep-20	SWL	2	8.590	AUTUMN	32166	3RS ET	S
4-Sep-20	SWL	3	6.451	AUTUMN	32166	3RS ET	S
7-Sep-20	SWL	2	25.950	AUTUMN	32166	3RS ET	P
7-Sep-20	SWL	3	28.860	AUTUMN	32166	3RS ET	P
7-Sep-20	SWL	2	12.590	AUTUMN	32166	3RS ET	S
7-Sep-20	SWL	3	3.400	AUTUMN	32166	3RS ET	S
8-Sep-20	NWL	2	41.020	AUTUMN	32166	3RS ET	P
8-Sep-20	NWL	3	21.980	AUTUMN	32166	3RS ET	P
8-Sep-20	NWL	2	7.700	AUTUMN	32166	3RS ET	S
8-Sep-20	NWL	3	4.200	AUTUMN	32166	3RS ET	S
9-Sep-20	AW	2	4.940	AUTUMN	32166	3RS ET	P
9-Sep-20	WL	1	1.240	AUTUMN	32166	3RS ET	P
9-Sep-20	WL	2	12.810	AUTUMN	32166	3RS ET	P
9-Sep-20	WL	3	5.833	AUTUMN	32166	3RS ET	P
9-Sep-20	WL	2	7.540	AUTUMN	32166	3RS ET	S
9-Sep-20	WL	3	3.077	AUTUMN	32166	3RS ET	S
14-Sep-20	NWL	1	0.600	AUTUMN	32166	3RS ET	P
14-Sep-20	NWL	2	20.910	AUTUMN	32166	3RS ET	P
14-Sep-20	NWL	3	29.290	AUTUMN	32166	3RS ET	P
14-Sep-20	NWL	4	12.600	AUTUMN	32166	3RS ET	P
14-Sep-20	NWL	2	4.100	AUTUMN	32166	3RS ET	S
14-Sep-20	NWL	3	5.700	AUTUMN	32166	3RS ET	S
14-Sep-20	NWL	4	1.900	AUTUMN	32166	3RS ET	S
15-Sep-20	AW	2	3.010	AUTUMN	32166	3RS ET	P
15-Sep-20	AW	3	1.940	AUTUMN	32166	3RS ET	P
15-Sep-20	WL	2	9.663	AUTUMN	32166	3RS ET	P
15-Sep-20	WL	3	9.010	AUTUMN	32166	3RS ET	P
15-Sep-20	WL	4	0.900	AUTUMN	32166	3RS ET	P
15-Sep-20	WL	2	5.657	AUTUMN	32166	3RS ET	S
15-Sep-20	WL	3	5.440	AUTUMN	32166	3RS ET	S

DATE	AREA	BEAU	KM SEARCHED	SEASON	VESSEL	TYPE	P/S
17-Sep-20	DB	2	1.810	AUTUMN	32166	3RS ET	P
17-Sep-20	DB	3	6.720	AUTUMN	32166	3RS ET	P
17-Sep-20	DB	2	1.060	AUTUMN	32166	3RS ET	S
17-Sep-20	DB	3	3.110	AUTUMN	32166	3RS ET	S
17-Sep-20	NEL	2	7.670	AUTUMN	32166	3RS ET	P
17-Sep-20	NEL	3	19.980	AUTUMN	32166	3RS ET	P
17-Sep-20	NEL	4	9.600	AUTUMN	32166	3RS ET	P
17-Sep-20	NEL	2	2.050	AUTUMN	32166	3RS ET	S
17-Sep-20	NEL	3	5.500	AUTUMN	32166	3RS ET	S
17-Sep-20	NEL	4	3.100	AUTUMN	32166	3RS ET	S
22-Sep-20	DB	2	8.770	AUTUMN	32166	3RS ET	P
22-Sep-20	DB	2	4.330	AUTUMN	32166	3RS ET	S
22-Sep-20	NEL	2	4.100	AUTUMN	32166	3RS ET	P
22-Sep-20	NEL	3	28.500	AUTUMN	32166	3RS ET	P
22-Sep-20	NEL	4	5.000	AUTUMN	32166	3RS ET	P
22-Sep-20	NEL	2	2.800	AUTUMN	32166	3RS ET	S
22-Sep-20	NEL	3	6.900	AUTUMN	32166	3RS ET	S
22-Sep-20	NEL	4	0.300	AUTUMN	32166	3RS ET	S
12-Oct-20	DB	2	0.630	AUTUMN	32166	3RS ET	P
12-Oct-20	DB	3	6.392	AUTUMN	32166	3RS ET	P
12-Oct-20	DB	2	2.450	AUTUMN	32166	3RS ET	S
12-Oct-20	DB	3	0.960	AUTUMN	32166	3RS ET	S
12-Oct-20	DB	4	0.958	AUTUMN	32166	3RS ET	S
12-Oct-20	NEL	2	25.180	AUTUMN	32166	3RS ET	P
12-Oct-20	NEL	3	11.540	AUTUMN	32166	3RS ET	P
12-Oct-20	NEL	2	7.680	AUTUMN	32166	3RS ET	S
12-Oct-20	NEL	3	3.000	AUTUMN	32166	3RS ET	S
14-Oct-20	DB	3	0.700	AUTUMN	32166	3RS ET	P
14-Oct-20	DB	4	7.510	AUTUMN	32166	3RS ET	P
14-Oct-20	DB	3	2.020	AUTUMN	32166	3RS ET	S
14-Oct-20	DB	4	2.370	AUTUMN	32166	3RS ET	S
14-Oct-20	NEL	2	1.400	AUTUMN	32166	3RS ET	P
14-Oct-20	NEL	3	8.600	AUTUMN	32166	3RS ET	P
14-Oct-20	NEL	4	20.650	AUTUMN	32166	3RS ET	P
14-Oct-20	NEL	5	6.550	AUTUMN	32166	3RS ET	P
14-Oct-20	NEL	3	4.100	AUTUMN	32166	3RS ET	S
14-Oct-20	NEL	4	6.000	AUTUMN	32166	3RS ET	S
16-Oct-20	NWL	2	9.200	AUTUMN	32166	3RS ET	P
16-Oct-20	NWL	3	47.000	AUTUMN	32166	3RS ET	P
16-Oct-20	NWL	4	6.800	AUTUMN	32166	3RS ET	P
16-Oct-20	NWL	2	3.100	AUTUMN	32166	3RS ET	S
16-Oct-20	NWL	3	9.200	AUTUMN	32166	3RS ET	S
19-Oct-20	AW	3	1.970	AUTUMN	32166	3RS ET	P
19-Oct-20	AW	4	3.000	AUTUMN	32166	3RS ET	P
19-Oct-20	WL	3	19.136	AUTUMN	32166	3RS ET	P
19-Oct-20	WL	4	0.760	AUTUMN	32166	3RS ET	P
19-Oct-20	WL	2	1.200	AUTUMN	32166	3RS ET	S
19-Oct-20	WL	3	9.374	AUTUMN	32166	3RS ET	S
21-Oct-20	SWL	3	21.246	AUTUMN	32166	3RS ET	P

DATE	AREA	BEAU	KM SEARCHED	SEASON	VESSEL	TYPE	P/S
21-Oct-20	SWL	4	14.620	AUTUMN	32166	3RS ET	P
21-Oct-20	SWL	5	16.990	AUTUMN	32166	3RS ET	P
21-Oct-20	SWL	3	4.817	AUTUMN	32166	3RS ET	S
21-Oct-20	SWL	4	10.860	AUTUMN	32166	3RS ET	S
21-Oct-20	SWL	5	1.000	AUTUMN	32166	3RS ET	S
27-Oct-20	AW	2	4.820	AUTUMN	32166	3RS ET	P
27-Oct-20	WL	2	5.659	AUTUMN	32166	3RS ET	P
27-Oct-20	WL	3	12.127	AUTUMN	32166	3RS ET	P
27-Oct-20	WL	2	2.431	AUTUMN	32166	3RS ET	S
27-Oct-20	WL	3	7.380	AUTUMN	32166	3RS ET	S
28-Oct-20	SWL	2	0.500	AUTUMN	32166	3RS ET	P
28-Oct-20	SWL	3	49.653	AUTUMN	32166	3RS ET	P
28-Oct-20	SWL	4	3.790	AUTUMN	32166	3RS ET	P
28-Oct-20	SWL	2	0.800	AUTUMN	32166	3RS ET	S
28-Oct-20	SWL	3	13.537	AUTUMN	32166	3RS ET	S
28-Oct-20	SWL	4	2.220	AUTUMN	32166	3RS ET	S
29-Oct-20	NWL	2	17.120	AUTUMN	32166	3RS ET	P
29-Oct-20	NWL	3	46.080	AUTUMN	32166	3RS ET	P
29-Oct-20	NWL	2	1.200	AUTUMN	32166	3RS ET	S
29-Oct-20	NWL	3	10.600	AUTUMN	32166	3RS ET	S
5-Nov-20	NWL	2	6.540	AUTUMN	32166	3RS ET	P
5-Nov-20	NWL	3	53.550	AUTUMN	32166	3RS ET	P
5-Nov-20	NWL	4	3.300	AUTUMN	32166	3RS ET	P
5-Nov-20	NWL	2	3.910	AUTUMN	32166	3RS ET	S
5-Nov-20	NWL	3	7.300	AUTUMN	32166	3RS ET	S
6-Nov-20	AW	2	4.960	AUTUMN	32166	3RS ET	P
6-Nov-20	WL	2	9.750	AUTUMN	32166	3RS ET	P
6-Nov-20	WL	3	7.819	AUTUMN	32166	3RS ET	P
6-Nov-20	WL	2	3.905	AUTUMN	32166	3RS ET	S
6-Nov-20	WL	3	3.314	AUTUMN	32166	3RS ET	S
9-Nov-20	DB	3	8.710	AUTUMN	32166	3RS ET	P
9-Nov-20	DB	2	1.090	AUTUMN	32166	3RS ET	S
9-Nov-20	DB	3	3.300	AUTUMN	32166	3RS ET	S
9-Nov-20	NEL	2	34.800	AUTUMN	32166	3RS ET	P
9-Nov-20	NEL	3	1.900	AUTUMN	32166	3RS ET	P
9-Nov-20	NEL	2	9.700	AUTUMN	32166	3RS ET	S
9-Nov-20	NEL	3	0.900	AUTUMN	32166	3RS ET	S
10-Nov-20	DB	2	0.700	AUTUMN	32166	3RS ET	P
10-Nov-20	DB	3	7.740	AUTUMN	32166	3RS ET	P
10-Nov-20	DB	2	2.560	AUTUMN	32166	3RS ET	S
10-Nov-20	DB	3	1.050	AUTUMN	32166	3RS ET	S
10-Nov-20	DB	4	0.850	AUTUMN	32166	3RS ET	S
10-Nov-20	NEL	2	36.140	AUTUMN	32166	3RS ET	P
10-Nov-20	NEL	2	11.160	AUTUMN	32166	3RS ET	S
16-Nov-20	AW	2	2.550	AUTUMN	32166	3RS ET	P
16-Nov-20	AW	3	1.170	AUTUMN	32166	3RS ET	P
16-Nov-20	WL	2	5.427	AUTUMN	32166	3RS ET	P
16-Nov-20	WL	3	13.386	AUTUMN	32166	3RS ET	P
16-Nov-20	WL	2	3.583	AUTUMN	32166	3RS ET	S

DATE	AREA	BEAU	KM SEARCHED	SEASON	VESSEL	TYPE	P/S
16-Nov-20	WL	3	5.244	AUTUMN	32166	3RS ET	S
17-Nov-20	NWL	2	2.430	AUTUMN	32166	3RS ET	P
17-Nov-20	NWL	3	45.790	AUTUMN	32166	3RS ET	P
17-Nov-20	NWL	4	12.370	AUTUMN	32166	3RS ET	P
17-Nov-20	NWL	5	2.900	AUTUMN	32166	3RS ET	P
17-Nov-20	NWL	3	8.480	AUTUMN	32166	3RS ET	S
17-Nov-20	NWL	4	3.130	AUTUMN	32166	3RS ET	S
18-Nov-20	SWL	2	19.300	AUTUMN	32166	3RS ET	P
18-Nov-20	SWL	3	35.530	AUTUMN	32166	3RS ET	P
18-Nov-20	SWL	2	6.800	AUTUMN	32166	3RS ET	S
18-Nov-20	SWL	3	9.070	AUTUMN	32166	3RS ET	S
19-Nov-20	SWL	1	1.480	AUTUMN	32166	3RS ET	P
19-Nov-20	SWL	2	52.830	AUTUMN	32166	3RS ET	P
19-Nov-20	SWL	2	15.390	AUTUMN	32166	3RS ET	S
4-Dec-20	DB	3	0.700	WINTER	32166	3RS ET	P
4-Dec-20	DB	4	6.320	WINTER	32166	3RS ET	P
4-Dec-20	DB	5	1.700	WINTER	32166	3RS ET	P
4-Dec-20	DB	3	1.030	WINTER	32166	3RS ET	S
4-Dec-20	DB	4	2.440	WINTER	32166	3RS ET	S
4-Dec-20	DB	5	0.810	WINTER	32166	3RS ET	S
4-Dec-20	NEL	2	1.000	WINTER	32166	3RS ET	P
4-Dec-20	NEL	3	30.450	WINTER	32166	3RS ET	P
4-Dec-20	NEL	4	6.100	WINTER	32166	3RS ET	P
4-Dec-20	NEL	2	1.000	WINTER	32166	3RS ET	S
4-Dec-20	NEL	3	8.450	WINTER	32166	3RS ET	S
9-Dec-20	SWL	2	22.072	WINTER	32166	3RS ET	P
9-Dec-20	SWL	3	32.643	WINTER	32166	3RS ET	P
9-Dec-20	SWL	2	8.280	WINTER	32166	3RS ET	S
9-Dec-20	SWL	3	6.717	WINTER	32166	3RS ET	S
10-Dec-20	SWL	2	40.788	WINTER	32166	3RS ET	P
10-Dec-20	SWL	3	11.922	WINTER	32166	3RS ET	P
10-Dec-20	SWL	2	13.112	WINTER	32166	3RS ET	S
10-Dec-20	SWL	3	2.693	WINTER	32166	3RS ET	S
11-Dec-20	AW	1	4.850	WINTER	32166	3RS ET	P
11-Dec-20	WL	1	4.680	WINTER	32166	3RS ET	P
11-Dec-20	WL	2	10.655	WINTER	32166	3RS ET	P
11-Dec-20	WL	3	4.566	WINTER	32166	3RS ET	P
11-Dec-20	WL	1	1.310	WINTER	32166	3RS ET	S
11-Dec-20	WL	2	6.879	WINTER	32166	3RS ET	S
11-Dec-20	WL	3	2.210	WINTER	32166	3RS ET	S
15-Dec-20	DB	3	8.840	WINTER	32166	3RS ET	P
15-Dec-20	DB	3	3.960	WINTER	32166	3RS ET	S
15-Dec-20	NEL	2	8.700	WINTER	32166	3RS ET	P
15-Dec-20	NEL	3	28.460	WINTER	32166	3RS ET	P
15-Dec-20	NEL	2	3.900	WINTER	32166	3RS ET	S
15-Dec-20	NEL	3	5.940	WINTER	32166	3RS ET	S
16-Dec-20	AW	3	4.550	WINTER	32166	3RS ET	P
16-Dec-20	WL	3	13.920	WINTER	32166	3RS ET	P
16-Dec-20	WL	4	2.060	WINTER	32166	3RS ET	P

DATE	AREA	BEAU	KM SEARCHED	SEASON	VESSEL	TYPE	P/S
16-Dec-20	WL	5	0.400	WINTER	32166	3RS ET	P
16-Dec-20	WL	3	11.710	WINTER	32166	3RS ET	S
16-Dec-20	WL	4	1.180	WINTER	32166	3RS ET	S
18-Dec-20	NWL	2	3.100	WINTER	32166	3RS ET	P
18-Dec-20	NWL	3	39.720	WINTER	32166	3RS ET	P
18-Dec-20	NWL	4	19.680	WINTER	32166	3RS ET	P
18-Dec-20	NWL	2	0.200	WINTER	32166	3RS ET	S
18-Dec-20	NWL	3	10.900	WINTER	32166	3RS ET	S
18-Dec-20	NWL	4	1.600	WINTER	32166	3RS ET	S
21-Dec-20	NWL	3	23.100	WINTER	32166	3RS ET	P
21-Dec-20	NWL	4	40.400	WINTER	32166	3RS ET	P
21-Dec-20	NWL	2	1.000	WINTER	32166	3RS ET	S
21-Dec-20	NWL	3	6.200	WINTER	32166	3RS ET	S
21-Dec-20	NWL	4	4.300	WINTER	32166	3RS ET	S

CWD Small Vessel Line-transect Survey — Sighting Data

DATE	STG #	TIME	CWD/FP	GP SZ	AREA	BEAU	PSD	EFFORT	TYPE	DEC LAT	DEC LON	SEASON	BOAT ASSOC.	P/S
7-Jan-20	1	1033	FP	1	SWL	2	N/A	OFF	3RS ET	22.2218	113.9359	WINTER	NONE	P
7-Jan-20	2	1123	CWD	2	SWL	2	849	ON	3RS ET	22.1646	113.9274	WINTER	NONE	P
7-Jan-20	3	1501	CWD	7	SWL	2	715	ON	3RS ET	22.1943	113.8589	WINTER	NONE	P
7-Jan-20	4	1543	CWD	2	SWL	2	26	ON	3RS ET	22.1879	113.8490	WINTER	NONE	P
10-Jan-20	1	1023	CWD	5	WL	2	16	ON	3RS ET	22.2756	113.8503	WINTER	NONE	S
10-Jan-20	2	1052	CWD	3	WL	2	140	ON	3RS ET	22.2643	113.8572	WINTER	NONE	S
10-Jan-20	3	1153	CWD	8	WL	2	579	ON	3RS ET	22.2347	113.8242	WINTER	NONE	S
15-Jan-20	1	1041	CWD	7	WL	3	304	ON	3RS ET	22.2688	113.8490	WINTER	NONE	P
15-Jan-20	2	1109	CWD	5	WL	3	456	ON	3RS ET	22.2607	113.8495	WINTER	NONE	P
15-Jan-20	3	1132	CWD	6	WL	4	12	ON	3RS ET	22.2503	113.8441	WINTER	NONE	P
15-Jan-20	4	1209	CWD	3	WL	3	1864	ON	3RS ET	22.2257	113.8374	WINTER	NONE	S
16-Jan-20	1	1339	CWD	1	NWL	2	861	ON	3RS ET	22.3359	113.9111	WINTER	NONE	S
22-Jan-20	1	1101	FP	1	SWL	2	69	ON	3RS ET	22.1433	113.9273	WINTER	NONE	S
22-Jan-20	2	1115	FP	2	SWL	2	149	ON	3RS ET	22.1671	113.9278	WINTER	NONE	P
22-Jan-20	3	1159	FP	6	SWL	2	39	ON	3RS ET	22.1591	113.9176	WINTER	NONE	P
22-Jan-20	4	1319	FP	1	SWL	2	35	ON	3RS ET	22.1582	113.8978	WINTER	NONE	P
22-Jan-20	5	1517	CWD	2	SWL	2	362	ON	3RS ET	22.1881	113.8492	WINTER	NONE	P
22-Jan-20	6	1531	CWD	2	SWL	2	82	ON	3RS ET	22.1898	113.8490	WINTER	NONE	P
10-Feb-20	1	0953	CWD	5	NWL	2	31	ON	3RS ET	22.3704	113.8700	WINTER	NONE	P
12-Feb-20	1	0936	CWD	6	AW	2	11	ON	3RS ET	22.3032	113.8723	WINTER	NONE	P
12-Feb-20	2	1103	CWD	2	WL	2	22	ON	3RS ET	22.2688	113.8576	WINTER	NONE	P
12-Feb-20	3	1129	CWD	1	WL	2	365	ON	3RS ET	22.2554	113.8358	WINTER	NONE	S
12-Feb-20	4	1143	CWD	1	WL	2	80	ON	3RS ET	22.2502	113.8347	WINTER	NONE	P
12-Feb-20	5	1231	CWD	1	WL	2	317	ON	3RS ET	22.2232	113.8359	WINTER	NONE	P
12-Feb-20	6	1249	CWD	1	WL	2	38	ON	3RS ET	22.2229	113.8313	WINTER	NONE	P
12-Feb-20	7	1304	CWD	3	WL	2	43	ON	3RS ET	22.2145	113.8270	WINTER	NONE	P
20-Feb-20	1	1048	CWD	2	WL	2	45	ON	3RS ET	22.2599	113.8494	WINTER	NONE	P
20-Feb-20	2	1054	CWD	2	WL	2	175	ON	3RS ET	22.2611	113.8428	WINTER	NONE	P
20-Feb-20	3	1148	CWD	6	WL	2	305	ON	3RS ET	22.2235	113.8328	WINTER	NONE	P
20-Feb-20	4	1238	CWD	3	WL	2	282	ON	3RS ET	22.2005	113.8254	WINTER	NONE	S
26-Feb-20	1	1049	FP	2	SWL	2	294	ON	3RS ET	22.1800	113.9361	WINTER	NONE	P

DATE	STG #	TIME	CWD/FP	GP SZ	AREA	BEAU	PSD	EFFORT	TYPE	DEC LAT	DEC LON	SEASON	BOAT ASSOC.	P/S
26-Feb-20	2	1058	FP	1	SWL	2	69	ON	3RS ET	22.1669	113.9362	WINTER	NONE	P
26-Feb-20	3	1102	FP	2	SWL	2	604	ON	3RS ET	22.1632	113.9361	WINTER	NONE	P
26-Feb-20	4	1110	FP	2	SWL	2	1	ON	3RS ET	22.1489	113.9347	WINTER	NONE	S
26-Feb-20	5	1113	FP	2	SWL	2	11	ON	3RS ET	22.1473	113.9332	WINTER	NONE	S
26-Feb-20	6	1118	FP	1	SWL	2	246	ON	3RS ET	22.1437	113.9283	WINTER	NONE	S
26-Feb-20	7	1122	FP	3	SWL	2	89	ON	3RS ET	22.1484	113.9275	WINTER	NONE	S
26-Feb-20	8	1149	FP	2	SWL	2	179	ON	3RS ET	22.2012	113.9271	WINTER	NONE	P
26-Feb-20	9	1222	FP	1	SWL	2	137	ON	3RS ET	22.1533	113.9178	WINTER	NONE	P
26-Feb-20	10	1226	FP	1	SWL	2	124	ON	3RS ET	22.1489	113.9177	WINTER	NONE	P
26-Feb-20	11	1229	FP	1	SWL	2	32	ON	3RS ET	22.1468	113.9181	WINTER	NONE	P
26-Feb-20	12	1242	FP	1	SWL	3	293	ON	3RS ET	22.1493	113.9085	WINTER	NONE	P
26-Feb-20	13	1249	FP	1	SWL	2	3	ON	3RS ET	22.1549	113.9062	WINTER	NONE	S
26-Feb-20	14	1352	FP	1	SWL	2	171	ON	3RS ET	22.1555	113.8976	WINTER	NONE	P
26-Feb-20	15	1544	CWD	2	SWL	2	745	ON	3RS ET	22.1784	113.8498	WINTER	NONE	P
11-Mar-20	1	0938	CWD	8	NWL	2	712	ON	3RS ET	22.4130	113.8701	SPRING	NONE	P
11-Mar-20	2	1055	CWD	2	NWL	3	118	ON	3RS ET	22.2980	113.8701	SPRING	NONE	P
12-Mar-20	1	1030	CWD	4	WL	4	N/A	OFF	3RS ET	22.2778	113.8565	SPRING	NONE	P
12-Mar-20	2	1046	CWD	1	WL	5	36	ON	3RS ET	22.2693	113.8518	SPRING	NONE	P
12-Mar-20	3	1056	CWD	1	WL	3	192	ON	3RS ET	22.2635	113.8568	SPRING	NONE	S
12-Mar-20	4	1108	CWD	4	WL	3	440	ON	3RS ET	22.2611	113.8489	SPRING	NONE	P
12-Mar-20	5	1136	CWD	2	WL	3	751	ON	3RS ET	22.2482	113.8517	SPRING	NONE	S
18-Mar-20	1	1052	CWD	1	WL	3	102	ON	3RS ET	22.2605	113.8500	SPRING	NONE	P
18-Mar-20	2	1201	CWD	5	WL	2	147	ON	3RS ET	22.2324	113.8236	SPRING	NONE	S
18-Mar-20	3	1246	CWD	2	WL	3	29	ON	3RS ET	22.2130	113.8365	SPRING	NONE	S
19-Mar-20	1	1035	FP	3	SWL	1	38	ON	3RS ET	22.2111	113.9360	SPRING	NONE	P
19-Mar-20	2	1042	FP	1	SWL	2	79	ON	3RS ET	22.1984	113.9363	SPRING	NONE	P
19-Mar-20	3	1046	FP	2	SWL	2	230	ON	3RS ET	22.1951	113.9362	SPRING	NONE	P
19-Mar-20	4	1050	FP	11	SWL	2	162	ON	3RS ET	22.1909	113.9357	SPRING	NONE	P
19-Mar-20	5	1106	FP	2	SWL	2	8	ON	3RS ET	22.1708	113.9359	SPRING	NONE	P
19-Mar-20	6	1216	FP	2	SWL	2	352	ON	3RS ET	22.1552	113.9177	SPRING	NONE	P
19-Mar-20	7	1221	FP	1	SWL	2	62	ON	3RS ET	22.1487	113.9176	SPRING	NONE	P
19-Mar-20	8	1259	FP	3	SWL	2	452	ON	3RS ET	22.1924	113.9078	SPRING	NONE	P
19-Mar-20	9	1408	FP	2	SWL	2	146	ON	3RS ET	22.1909	113.8878	SPRING	NONE	P

DATE	STG #	TIME	CWD/FP	GP SZ	AREA	BEAU	PSD	EFFORT	TYPE	DEC LAT	DEC LON	SEASON	BOAT ASSOC.	P/S
23-Mar-20	1	1047	FP	3	SWL	2	128	ON	3RS ET	22.1813	113.9359	SPRING	NONE	P
23-Mar-20	2	1050	FP	6	SWL	2	37	ON	3RS ET	22.1788	113.9358	SPRING	NONE	P
23-Mar-20	3	1056	FP	1	SWL	2	179	ON	3RS ET	22.1704	113.9365	SPRING	NONE	P
23-Mar-20	4	1101	FP	1	SWL	2	228	ON	3RS ET	22.1633	113.9357	SPRING	NONE	P
23-Mar-20	5	1118	FP	2	SWL	2	36	ON	3RS ET	22.1532	113.9275	SPRING	NONE	P
23-Mar-20	6	1127	FP	1	SWL	2	267	ON	3RS ET	22.1710	113.9278	SPRING	NONE	P
23-Mar-20	7	1207	FP	4	SWL	2	139	ON	3RS ET	22.1632	113.9183	SPRING	NONE	P
23-Mar-20	8	1224	FP	4	SWL	2	245	ON	3RS ET	22.1449	113.9080	SPRING	NONE	P
23-Mar-20	9	1231	FP	2	SWL	2	165	ON	3RS ET	22.1549	113.9047	SPRING	NONE	S
23-Mar-20	10	1332	FP	5	SWL	2	424	ON	3RS ET	22.1535	113.8977	SPRING	NONE	P
23-Mar-20	11	1338	FP	1	SWL	2	237	ON	3RS ET	22.1488	113.8931	SPRING	NONE	S
23-Mar-20	12	1346	FP	1	SWL	2	3	ON	3RS ET	22.1578	113.8879	SPRING	NONE	P
23-Mar-20	13	1355	FP	2	SWL	2	431	ON	3RS ET	22.1743	113.8880	SPRING	NONE	P
23-Mar-20	14	1359	FP	1	SWL	2	274	ON	3RS ET	22.1816	113.8878	SPRING	NONE	P
23-Mar-20	15	1426	FP	1	SWL	2	572	ON	3RS ET	22.1932	113.8780	SPRING	NONE	P
23-Mar-20	16	1455	FP	4	SWL	2	351	ON	3RS ET	22.1597	113.8721	SPRING	NONE	S
23-Mar-20	17	1519	CWD	4	SWL	2	535	ON	3RS ET	22.1996	113.8618	SPRING	NONE	P
23-Mar-20	18	1607	CWD	3	SWL	2	299	ON	3RS ET	22.1951	113.8503	SPRING	NONE	P
9-Apr-20	1	1031	CWD	7	WL	2	264	ON	3RS ET	22.2687	113.8500	SPRING	PURSE SEINER	P
9-Apr-20	2	1053	CWD	2	WL	2	73	ON	3RS ET	22.2636	113.8569	SPRING	NONE	S
9-Apr-20	3	1124	CWD	4	WL	2	58	ON	3RS ET	22.2501	113.8420	SPRING	NONE	P
9-Apr-20	4	1156	CWD	1	WL	3	7	ON	3RS ET	22.2325	113.8378	SPRING	NONE	P
9-Apr-20	5	1226	CWD	1	WL	3	129	ON	3RS ET	22.2146	113.8305	SPRING	NONE	P
9-Apr-20	6	1246	CWD	14	WL	3	148	ON	3RS ET	22.2056	113.8254	SPRING	PAIR TRAWLER	P
15-Apr-20	1	1047	CWD	1	WL	2	240	ON	3RS ET	22.2505	113.8392	SPRING	NONE	P
16-Apr-20	1	1023	FP	1	SWL	2	43	ON	3RS ET	22.2087	113.9356	SPRING	NONE	P
16-Apr-20	2	1032	FP	2	SWL	2	187	ON	3RS ET	22.1955	113.9360	SPRING	NONE	P
16-Apr-20	3	1036	FP	1	SWL	2	341	ON	3RS ET	22.1888	113.9363	SPRING	NONE	P
16-Apr-20	4	1038	FP	2	SWL	2	22	ON	3RS ET	22.1864	113.9363	SPRING	NONE	P
16-Apr-20	5	1042	FP	2	SWL	2	199	ON	3RS ET	22.1832	113.9363	SPRING	NONE	P
16-Apr-20	6	1054	FP	3	SWL	2	257	ON	3RS ET	22.1604	113.9361	SPRING	NONE	P
16-Apr-20	7	1112	FP	3	SWL	2	4	ON	3RS ET	22.1582	113.9274	SPRING	NONE	P
16-Apr-20	8	1116	FP	5	SWL	2	1108	ON	3RS ET	22.1626	113.9276	SPRING	NONE	P

DATE	STG #	TIME	CWD/FP	GP SZ	AREA	BEAU	PSD	EFFORT	TYPE	DEC LAT	DEC LON	SEASON	BOAT ASSOC.	P/S
16-Apr-20	9	1121	FP	2	SWL	2	46	ON	3RS ET	22.1687	113.9278	SPRING	NONE	P
16-Apr-20	10	1131	FP	2	SWL	2	444	ON	3RS ET	22.1871	113.9276	SPRING	NONE	P
16-Apr-20	11	1135	FP	1	SWL	2	6	ON	3RS ET	22.1909	113.9275	SPRING	NONE	P
16-Apr-20	12	1209	FP	4	SWL	2	99	ON	3RS ET	22.1597	113.9176	SPRING	NONE	P
16-Apr-20	13	1215	FP	1	SWL	2	46	ON	3RS ET	22.1494	113.9177	SPRING	NONE	P
16-Apr-20	14	1228	FP	2	SWL	2	146	ON	3RS ET	22.1460	113.9083	SPRING	NONE	P
16-Apr-20	15	1233	FP	1	SWL	2	70	ON	3RS ET	22.1511	113.9083	SPRING	NONE	P
16-Apr-20	16	1335	FP	3	SWL	2	18	ON	3RS ET	22.1562	113.8980	SPRING	NONE	P
16-Apr-20	17	1338	FP	4	SWL	2	251	ON	3RS ET	22.1523	113.8974	SPRING	NONE	P
17-Apr-20	1	1304	FP	3	SWL	2	70	ON	3RS ET	22.1701	113.8964	SPRING	NONE	P
17-Apr-20	2	1311	FP	1	SWL	2	747	ON	3RS ET	22.1594	113.8973	SPRING	NONE	P
17-Apr-20	3	1327	FP	1	SWL	3	68	ON	3RS ET	22.1608	113.8872	SPRING	NONE	P
7-May-20	1	1032	CWD	1	WL	3	177	ON	3RS ET	22.2692	113.8499	SPRING	NONE	P
7-May-20	2	1115	CWD	1	WL	3	19	ON	3RS ET	22.2409	113.8395	SPRING	NONE	P
7-May-20	3	1121	CWD	15	WL	3	257	ON	3RS ET	22.2411	113.8362	SPRING	NONE	P
11-May-20	1	1052	FP	1	SWL	2	421	ON	3RS ET	22.1620	113.9362	SPRING	NONE	P
11-May-20	2	1055	FP	4	SWL	2	22	ON	3RS ET	22.1606	113.9360	SPRING	NONE	P
11-May-20	3	1058	FP	2	SWL	2	181	ON	3RS ET	22.1554	113.9361	SPRING	NONE	P
11-May-20	4	1513	CWD	13	SWL	2	191	ON	3RS ET	22.1850	113.8500	SPRING	NONE	P
12-May-20	1	1051	FP	4	SWL	2	14	ON	3RS ET	22.1543	113.9363	SPRING	NONE	P
12-May-20	2	1057	FP	3	SWL	2	120	ON	3RS ET	22.1474	113.9330	SPRING	NONE	S
12-May-20	3	1101	FP	2	SWL	2	188	ON	3RS ET	22.1451	113.9301	SPRING	NONE	S
12-May-20	4	1215	FP	2	SWL	2	17	ON	3RS ET	22.1550	113.9057	SPRING	NONE	S
12-May-20	5	1441	CWD	5	SWL	2	170	ON	3RS ET	22.1954	113.8685	SPRING	NONE	P
12-May-20	6	1546	CWD	1	SWL	3	279	ON	3RS ET	22.1946	113.8500	SPRING	NONE	P
13-May-20	1	1056	CWD	6	WL	2	331	ON	3RS ET	22.2447	113.8495	SPRING	NONE	S
13-May-20	2	1127	CWD	1	WL	2	179	ON	3RS ET	22.2416	113.8370	SPRING	NONE	P
13-May-20	3	1140	CWD	16	WL	3	78	ON	3RS ET	22.2414	113.8286	SPRING	PURSE SEINER	P
13-May-20	4	1231	CWD	1	WL	4	60	ON	3RS ET	22.2149	113.8309	SPRING	NONE	P
11-Jun-20	1	1028	CWD	2	WL	3	396	ON	3RS ET	22.2636	113.8574	SUMMER	NONE	S
11-Jun-20	2	1050	CWD	3	WL	3	6	ON	3RS ET	22.2552	113.8359	SUMMER	NONE	S
11-Jun-20	3	1121	CWD	5	WL	3	323	ON	3RS ET	22.2408	113.8315	SUMMER	NONE	P
11-Jun-20	4	1213	CWD	5	WL	3	689	ON	3RS ET	22.2140	113.8257	SUMMER	NONE	P

DATE	STG #	TIME	CWD/FP	GP SZ	AREA	BEAU	PSD	EFFORT	TYPE	DEC LAT	DEC LON	SEASON	BOAT ASSOC.	P/S
11-Jun-20	5	1243	CWD	7	WL	3	1028	ON	3RS ET	22.2055	113.8330	SUMMER	NONE	P
11-Jun-20	6	1311	CWD	3	WL	3	86	ON	3RS ET	22.1958	113.8329	SUMMER	NONE	P
11-Jun-20	7	1325	CWD	6	WL	3	70	ON	3RS ET	22.1958	113.8408	SUMMER	NONE	P
16-Jun-20	1	1041	CWD	1	WL	2	75	ON	3RS ET	22.2609	113.8522	SUMMER	NONE	P
16-Jun-20	2	1055	CWD	6	WL	3	124	ON	3RS ET	22.2607	113.8495	SUMMER	NONE	P
16-Jun-20	3	1244	CWD	1	WL	3	112	ON	3RS ET	22.2049	113.8345	SUMMER	NONE	P
16-Jun-20	4	1310	CWD	3	WL	2	65	ON	3RS ET	22.2532	113.8336	SUMMER	NONE	P
16-Jun-20	5	1345	CWD	8	WL	2	203	ON	3RS ET	22.1945	113.8423	SUMMER	NONE	S
18-Jun-20	1	1248	CWD	5	SWL	2	118	ON	3RS ET	22.1970	113.9082	SUMMER	NONE	P
18-Jun-20	2	1321	CWD	6	SWL	3	85	ON	3RS ET	22.1937	113.8972	SUMMER	GILLNETTER	P
18-Jun-20	3	1550	CWD	2	SWL	3	46	ON	3RS ET	22.1852	113.8492	SUMMER	NONE	P
22-Jun-20	1	1144	CWD	4	SWL	2	807	ON	3RS ET	22.1939	113.9179	SUMMER	NONE	P
22-Jun-20	2	1256	CWD	4	SWL	3	178	ON	3RS ET	22.1881	113.9054	SUMMER	NONE	S
22-Jun-20	3	1321	CWD	3	SWL	2	898	ON	3RS ET	22.2123	113.8979	SUMMER	NONE	P
22-Jun-20	4	1344	CWD	4	SWL	2	386	ON	3RS ET	22.1934	113.8979	SUMMER	NONE	P
22-Jun-20	5	1432	CWD	1	SWL	3	520	ON	3RS ET	22.1688	113.8879	SUMMER	NONE	P
22-Jun-20	6	1453	CWD	5	SWL	3	305	ON	3RS ET	22.1898	113.8883	SUMMER	NONE	P
22-Jun-20	7	1548	CWD	1	SWL	3	225	ON	3RS ET	22.1795	113.8686	SUMMER	NONE	P
22-Jun-20	8	1607	CWD	1	SWL	2	67	ON	3RS ET	22.1904	113.8593	SUMMER	NONE	P
22-Jun-20	9	1614	CWD	2	SWL	2	36	ON	3RS ET	22.1824	113.8596	SUMMER	NONE	P
6-Jul-20	1	1037	CWD	1	WL	3	326	ON	3RS ET	22.2643	113.8574	SUMMER	NONE	S
6-Jul-20	2	1111	CWD	11	WL	4	634	ON	3RS ET	22.2468	113.8514	SUMMER	NONE	S
6-Jul-20	3	1216	CWD	1	WL	3	284	ON	3RS ET	22.2120	113.8363	SUMMER	NONE	P
6-Jul-20	4	1245	CWD	2	WL	3	329	ON	3RS ET	22.1961	113.8400	SUMMER	NONE	P
13-Jul-20	1	1033	CWD	5	WL	2	1238	ON	3RS ET	22.2672	113.8600	SUMMER	NONE	S
13-Jul-20	2	1126	CWD	4	WL	3	601	ON	3RS ET	22.2416	113.8299	SUMMER	NONE	P
13-Jul-20	3	1144	CWD	5	WL	3	1020	ON	3RS ET	22.2377	113.8266	SUMMER	NONE	S
13-Jul-20	4	1203	CWD	1	WL	3	13	ON	3RS ET	22.2235	113.8242	SUMMER	NONE	P
13-Jul-20	5	1223	CWD	4	WL	3	322	ON	3RS ET	22.2142	113.8266	SUMMER	NONE	P
13-Jul-20	6	1304	CWD	18	WL	3	211	ON	3RS ET	22.2020	113.8240	SUMMER	NONE	S
13-Jul-20	7	1338	CWD	19	WL	3	221	ON	3RS ET	22.1962	113.8332	SUMMER	NONE	P
13-Jul-20	8	1410	CWD	4	WL	3	129	ON	3RS ET	22.1910	113.8419	SUMMER	NONE	S
20-Jul-20	1	1028	CWD	1	SWL	2	171	ON	3RS ET	22.2119	113.9359	SUMMER	NONE	P

DATE	STG #	TIME	CWD/FP	GP SZ	AREA	BEAU	PSD	EFFORT	TYPE	DEC LAT	DEC LON	SEASON	BOAT ASSOC.	P/S
20-Jul-20	2	1237	CWD	1	SWL	2	268	ON	3RS ET	22.1767	113.9072	SUMMER	NONE	S
20-Jul-20	3	1249	CWD	4	SWL	2	362	ON	3RS ET	22.1845	113.9046	SUMMER	NONE	S
20-Jul-20	4	1407	CWD	9	SWL	3	255	ON	3RS ET	22.1673	113.8883	SUMMER	NONE	P
20-Jul-20	5	1424	CWD	5	SWL	2	243	ON	3RS ET	22.1776	113.8883	SUMMER	NONE	P
20-Jul-20	6	1510	CWD	1	SWL	2	130	ON	3RS ET	22.1765	113.8784	SUMMER	NONE	P
20-Jul-20	7	1532	CWD	5	SWL	3	247	ON	3RS ET	22.1682	113.8685	SUMMER	NONE	P
20-Jul-20	8	1604	CWD	3	SWL	2	51	ON	3RS ET	22.1962	113.8586	SUMMER	NONE	P
20-Jul-20	9	1640	CWD	2	SWL	2	42	ON	3RS ET	22.1921	113.8494	SUMMER	NONE	P
21-Jul-20	1	1054	FP	7	SWL	1	146	ON	3RS ET	22.1486	113.9340	SUMMER	NONE	S
21-Jul-20	2	1255	CWD	3	SWL	3	46	ON	3RS ET	22.1928	113.8977	SUMMER	NONE	P
21-Jul-20	3	1410	CWD	2	SWL	2	161	ON	3RS ET	22.1915	113.8790	SUMMER	NONE	P
21-Jul-20	4	1426	CWD	3	SWL	2	241	ON	3RS ET	22.1723	113.8788	SUMMER	NONE	P
21-Jul-20	5	1511	CWD	4	SWL	2	21	ON	3RS ET	22.1962	113.8587	SUMMER	NONE	P
21-Jul-20	6	1537	CWD	1	SWL	2	524	ON	3RS ET	22.1700	113.8560	SUMMER	NONE	S
21-Jul-20	7	1551	CWD	3	SWL	3	188	ON	3RS ET	22.1862	113.8493	SUMMER	PURSE SEINER	P
22-Jul-20	1	1202	CWD	2	NWL	2	308	ON	3RS ET	22.3963	113.8876	SUMMER	NONE	P
7-Aug-20	1	1006	CWD	1	WL	2	57	ON	3RS ET	22.2972	113.8611	SUMMER	NONE	P
7-Aug-20	2	1033	CWD	2	WL	2	96	ON	3RS ET	22.2768	113.8514	SUMMER	NONE	S
7-Aug-20	3	1158	CWD	3	WL	3	8	ON	3RS ET	22.2174	113.8200	SUMMER	NONE	S
7-Aug-20	4	1228	CWD	13	WL	3	111	ON	3RS ET	22.2140	113.8303	SUMMER	NONE	P
7-Aug-20	5	1337	CWD	1	WL	3	235	ON	3RS ET	22.1955	113.8396	SUMMER	NONE	P
10-Aug-20	1	1122	FP	4	SWL	2	59	ON	3RS ET	22.1802	113.9280	SUMMER	NONE	P
10-Aug-20	2	1515	CWD	2	SWL	3	3	ON	3RS ET	22.1883	113.8491	SUMMER	NONE	P
10-Aug-20	3	1528	CWD	1	SWL	3	37	ON	3RS ET	22.1931	113.8499	SUMMER	NONE	P
17-Aug-20	1	1102	CWD	9	WL	3	229	ON	3RS ET	22.2408	113.8378	SUMMER	NONE	P
17-Aug-20	2	1222	CWD	1	WL	4	304	ON	3RS ET	22.1928	113.8424	SUMMER	NONE	S
24-Aug-20	1	1054	FP	2	SWL	2	61	ON	3RS ET	22.1462	113.9319	SUMMER	NONE	S
24-Aug-20	2	1318	FP	8	SWL	2	63	ON	3RS ET	22.1565	113.8876	SUMMER	NONE	P
4-Sep-20	1	1111	FP	3	SWL	2	93	ON	3RS ET	22.1500	113.9273	AUTUMN	NONE	P
4-Sep-20	2	1129	FP	6	SWL	2	328	ON	3RS ET	22.1869	113.9273	AUTUMN	NONE	P
4-Sep-20	3	1225	FP	1	SWL	2	47	ON	3RS ET	22.1547	113.9040	AUTUMN	NONE	S
4-Sep-20	4	1330	FP	7	SWL	3	15	ON	3RS ET	22.1493	113.8977	AUTUMN	NONE	P
9-Sep-20	1	1030	CWD	2	WL	2	189	ON	3RS ET	22.2632	113.8568	AUTUMN	NONE	S

DATE	STG #	TIME	CWD/FP	GP SZ	AREA	BEAU	PSD	EFFORT	TYPE	DEC LAT	DEC LON	SEASON	BOAT ASSOC.	P/S
9-Sep-20	2	1213	CWD	8	WL	3	323	ON	3RS ET	22.1965	113.8398	AUTUMN	NONE	P
15-Sep-20	1	1053	CWD	2	WL	2	85	ON	3RS ET	22.2689	113.8508	AUTUMN	NONE	P
15-Sep-20	2	1158	CWD	2	WL	3	20	ON	3RS ET	22.2320	113.8378	AUTUMN	NONE	P
15-Sep-20	3	1242	CWD	5	WL	3	225	ON	3RS ET	22.2058	113.8398	AUTUMN	NONE	S
12-Oct-20	1	0942	CWD	1	DB	3	274	ON	3RS ET	22.4216	113.9006	AUTUMN	NONE	P
19-Oct-20	1	1103	CWD	3	WL	3	22	ON	3RS ET	22.2419	113.8371	AUTUMN	NONE	P
19-Oct-20	2	1133	CWD	1	WL	3	10	ON	3RS ET	22.2239	113.8328	AUTUMN	NONE	P
19-Oct-20	3	1148	CWD	1	WL	3	226	ON	3RS ET	22.2181	113.8197	AUTUMN	NONE	S
21-Oct-20	1	1116	FP	1	SWL	3	404	ON	3RS ET	22.1478	113.9271	AUTUMN	NONE	P
21-Oct-20	2	1447	CWD	1	SWL	4	270	ON	3RS ET	22.1945	113.8687	AUTUMN	NONE	P
21-Oct-20	3	1527	CWD	6	SWL	3	60	ON	3RS ET	22.1836	113.8492	AUTUMN	NONE	P
21-Oct-20	4	1547	CWD	15	SWL	3	1340	ON	3RS ET	22.1944	113.8498	AUTUMN	NONE	P
27-Oct-20	1	1123	CWD	6	WL	3	104	ON	3RS ET	22.2318	113.8268	AUTUMN	NONE	P
27-Oct-20	2	1138	CWD	4	WL	3	378	ON	3RS ET	22.2320	113.8336	AUTUMN	NONE	P
27-Oct-20	3	1149	CWD	3	WL	3	92	ON	3RS ET	22.2329	113.8360	AUTUMN	NONE	P
27-Oct-20	4	1213	CWD	3	WL	3	337	ON	3RS ET	22.2142	113.8288	AUTUMN	NONE	P
27-Oct-20	5	1228	CWD	3	WL	3	387	ON	3RS ET	22.2138	113.8289	AUTUMN	NONE	P
27-Oct-20	6	1232	CWD	8	WL	3	624	ON	3RS ET	22.2138	113.8336	AUTUMN	NONE	P
27-Oct-20	7	1302	CWD	7	WL	3	147	ON	3RS ET	22.2058	113.8261	AUTUMN	NONE	P
27-Oct-20	8	1320	CWD	1	WL	3	838	ON	3RS ET	22.2027	113.8233	AUTUMN	NONE	S
27-Oct-20	9	1341	CWD	3	WL	2	693	ON	3RS ET	22.1880	113.8454	AUTUMN	NONE	S
28-Oct-20	1	1306	FP	2	SWL	3	35	ON	3RS ET	22.1577	113.8977	AUTUMN	NONE	P
5-Nov-20	1	1044	CWD	1	NWL	3	112	ON	3RS ET	22.2740	113.8757	AUTUMN	NONE	S
6-Nov-20	1	1018	CWD	5	WL	2	821	ON	3RS ET	22.2759	113.8504	AUTUMN	NONE	S
6-Nov-20	2	1341	CWD	3	WL	3	206	ON	3RS ET	22.2506	113.8463	AUTUMN	NONE	P
6-Nov-20	3	1400	CWD	4	WL	2	236	ON	3RS ET	22.2414	113.8416	AUTUMN	NONE	P
6-Nov-20	4	1429	CWD	4	WL	3	246	ON	3RS ET	22.2321	113.8358	AUTUMN	NONE	P
6-Nov-20	5	1443	CWD	5	WL	2	216	ON	3RS ET	22.2236	113.8373	AUTUMN	NONE	S
6-Nov-20	6	1513	CWD	4	WL	2	500	ON	3RS ET	22.2042	113.8219	AUTUMN	NONE	S
16-Nov-20	1	0940	CWD	2	AW	2	475	ON	3RS ET	22.2971	113.8842	AUTUMN	GILLNETTER	P
16-Nov-20	2	1040	CWD	1	WL	3	800	ON	3RS ET	22.2740	113.8482	AUTUMN	NONE	S
16-Nov-20	3	1059	CWD	4	WL	3	14	ON	3RS ET	22.2607	113.8480	AUTUMN	NONE	P
16-Nov-20	4	1210	CWD	3	WL	3	232	ON	3RS ET	22.2139	113.8226	AUTUMN	NONE	P

DATE	STG #	TIME	CWD/FP	GP SZ	AREA	BEAU	PSD	EFFORT	TYPE	DEC LAT	DEC LON	SEASON	BOAT ASSOC.	P/S
16-Nov-20	5	1249	CWD	1	WL	2	285	ON	3RS ET	22.2055	113.8336	AUTUMN	NONE	P
16-Nov-20	6	1317	CWD	3	WL	2	608	ON	3RS ET	22.1901	113.8421	AUTUMN	NONE	S
17-Nov-20	1	1034	CWD	1	NWL	4	24	ON	3RS ET	22.2723	113.8701	AUTUMN	NONE	P
19-Nov-20	1	1202	FP	2	SWL	2	62	ON	3RS ET	22.1621	113.9184	AUTUMN	NONE	P
19-Nov-20	2	1514	CWD	4	SWL	2	71	ON	3RS ET	22.1883	113.8491	AUTUMN	NONE	P
9-Dec-20	1	1117	CWD	1	SWL	2	111	ON	3RS ET	22.1828	113.9277	WINTER	NONE	P
9-Dec-20	2	1159	CWD	1	SWL	2	59	ON	3RS ET	22.1730	113.9191	WINTER	NONE	P
9-Dec-20	3	1211	CWD	1	SWL	2	21	ON	3RS ET	22.1702	113.9188	WINTER	NONE	P
9-Dec-20	4	1224	FP	2	SWL	3	22	ON	3RS ET	22.1562	113.9183	WINTER	NONE	P
9-Dec-20	5	1247	CWD	2	SWL	2	148	ON	3RS ET	22.1623	113.8987	WINTER	NONE	S
9-Dec-20	6	1351	CWD	1	SWL	3	7	ON	3RS ET	22.1487	113.8958	WINTER	NONE	S
9-Dec-20	7	1516	CWD	3	SWL	3	389	ON	3RS ET	22.2007	113.8678	WINTER	NONE	P
10-Dec-20	1	1107	FP	1	SWL	2	3	ON	3RS ET	22.1645	113.9276	WINTER	NONE	P
10-Dec-20	2	1156	FP	1	SWL	2	54	ON	3RS ET	22.1473	113.9180	WINTER	NONE	P
10-Dec-20	3	1307	FP	1	SWL	2	51	ON	3RS ET	22.1548	113.8975	WINTER	NONE	P
10-Dec-20	4	1430	CWD	2	SWL	3	53	ON	3RS ET	22.1921	113.8679	WINTER	NONE	P
10-Dec-20	5	1448	CWD	1	SWL	3	122	ON	3RS ET	22.1991	113.8600	WINTER	NONE	S
10-Dec-20	6	1459	CWD	1	SWL	3	449	ON	3RS ET	22.1951	113.8589	WINTER	NONE	P
10-Dec-20	7	1535	CWD	4	SWL	3	805	ON	3RS ET	22.1905	113.8490	WINTER	NONE	P
11-Dec-20	1	1129	CWD	1	WL	2	109	ON	3RS ET	22.2229	113.8213	WINTER	NONE	P
11-Dec-20	2	1146	CWD	2	WL	2	133	ON	3RS ET	22.2149	113.8312	WINTER	NONE	P
16-Dec-20	1	0940	CWD	2	AW	3	19	ON	3RS ET	22.2937	113.8775	WINTER	NONE	P
16-Dec-20	2	1039	CWD	4	WL	3	493	ON	3RS ET	22.2687	113.8538	WINTER	NONE	P
16-Dec-20	3	1139	CWD	1	WL	3	8	ON	3RS ET	22.2323	113.8307	WINTER	NONE	P

Abbreviations: STG# = Sighting Number; GP SZ = Dolphin Group Size; BEAU = Beaufort Sea State; PSD = Perpendicular Distance (in metres); N/A = Not Applicable; DEC LAT = Latitude (WGS84 in Decimal), DEC LON = Longitude (WGS84 in Decimal); BOAT ASSOC. = Fishing Boat Association

CWD Small Vessel Line-transect Survey

Photo Identification – Residency Pattern of Selected Dolphin Individuals

ID	Residency	2015	2016				2017				2018				2019				2020				#STG
		WI	AU	SP	SU	WI	AU	SP	SU	WI	AU	SP	SU	WI	AU	SP	SU	WI	AU	SP	SU	WI	
NLMM002	SR		2	1	3	2	1			1	1	1		2				1					15
NLMM004	SR			1	1	2		4		3	2	3		2	4	1		1				2	26
NLMM006	SR		3	2	1	4			1		2	1	2		1	2		1					20
NLMM013	SR		3	2	1	4			2		2	3	2		2	2		1			1		25
NLMM019	SR				2	2	4	2	1		1		1		3		1	2			1		20
NLMM020	SR					2	4	1	2		1	1			2			2			1		16
NLMM023	SR		1			1	2	1	1	1	2	1	1	2	1				2				16
NLMM063	YR										3	2	3	1	1	1	2	2			3		18
SLMM002	SR	1	4		1	1				1			2	1	1	2		2	1	4			21
SLMM003	YR	1		1		2			1		2	2	3	2	4	1	2	1	4	3	2	7	38
SLMM007	YR	1		1	1	2		1		2	2		1	1	2		1	2	2	2	2	3	26
SLMM010	YR	1	2	4	1	2		1	1	3			3	3	1		1	3	5	1	2	1	35
SLMM011	SV		2		4	1		3	2	1					1		1	1		2			18
SLMM012	YR	1	1	1		1	2						2	2	2		2	3	3	2	1	3	26
SLMM014	YR		1	1	3	3		2	5	4	2	3		2	1	1	1	1	1	4	4	3	42
SLMM022	SR		3	2		2		2		1				2	3	1	1		1			2	20
SLMM023	SR			1		1	1	4	2			1	1			1			3	3		2	20
SLMM028	SR		1		4			3		2	1	1	1	3	2		2			2	2		24
SLMM030	SR		2		2		2	1	1	2				3		2				2			17
SLMM031	SR				3	1	1	1	1	2		1	1		1		1		1	4		2	20
SLMM034	SR		1		2				2		1	3				3				5			17
SLMM037	YR				2	1	2	1		1	1			1	2		3		3	2	1	6	26
SLMM049	YR				1	1				3		2		1	3	1	3		2	1	4	1	23
SLMM052	YR	1	1					3	1	3	1	1	2	1	2	1	4	1	2	3	2	2	31

ID	Residency	2015	2016				2017				2018				2019				2020				#STG
		WI	AU	SP	SU	WI	AU	SP	SU	WI	AU	SP	SU	WI	AU	SP	SU	WI	AU	SP	SU	WI	
WLMM001	SR	1	1				1	2	2	3	2	3	1	5	2	1		2		1	2	4	33
WLMM004	SR	1						2	1			1	2	2	2	1	1				1	1	15
WLMM006	SR	1			1				2			1	2	2	1	1	1			2		1	15
WLMM007	YR	1	2	1		1		2		4	1	2		1	2	2		2	4	3	1	1	30
WLMM008	SR	1			1			3	3				1		1		1	1	1		2		15
WLMM009	SR	1			1				4			1	2	2		1				1	2	1	16
WLMM027	YR		5	1	3		2		3	1		2	3	2	1	1	2	1		2			29
WLMM028	YR		2	2			1		1			1	1	4				1	1	2	1	3	20
WLMM029	SR		1	2			1		1			1	2	3	2		1	1		2	1	1	19
WLMM043	SR		1		2			2	3	1	1	3	1	1	1	4	3				3		26
WLMM054	SR		3				2	1	1			1	5		4	2		1					20
WLMM056	YR		1				2			1	2	2			2	1	2	2	2	1		2	20
WLMM060	SR		1					2		2	3	1	2	1	1	1			2	1	1		18
WLMM063	SR					1			1	2	1		3	1	1	2	1				1	1	15
WLMM065	SR						4			1	2	1	2	1	2		1	1	1			1	17
WLMM071	SR							2		4	3	1	3	2	2	1			2		1	1	22
WLMM078	YR							1	2			2	2	2	2	1	2	1					15
WLMM079	YR						1	2	2		2	1	1	1	3	1	5	1	5		3	1	29
WLMM114	YR										1	2	2	1	1	1			3	4	2	3	20
WLMM131	SR										1				1	1	4		1	2	4	1	15

***** Residency: YR = Year-round Resident; SR = Seasonal Resident; SV = Seasonal Visitor
Seasons: AU = Autumn; SP = Spring; SU = Summer; WI = Winter,
#STG = Total number of sightings

CWD Land-based Theodolite Tracking

CWD Groups by Survey Date

Date	Station	Start Time	End Time	Duration	Beaufort Range	Visibility Range	No. of Focal Follow Dolphin Groups Tracked	Group Size Range
8/Jan/20	Sha Chau	8:52	14:52	6:00	2	2-3	0	-
14/Jan/20	Lung Kwu Chau	9:20	15:20	6:00	2-3	2	3	1-3
19/Feb/20	Lung Kwu Chau	9:03	15:03	6:00	2-3	2	4	1
20/Feb/20	Sha Chau	8:50	14:50	6:00	2	2	0	-
9/Mar/20	Lung Kwu Chau	8:50	14:50	6:00	2-3	2-3	0	-
23/Mar/20	Sha Chau	10:52	16:52	6:00	2-3	2	0	-
9/Apr/20	Sha Chau	10:34	16:34	6:00	2	2	0	-
16/Apr/20	Lung Kwu Chau	9:09	15:09	6:00	2	2-3	4	1-4
27/May/20	Lung Kwu Chau	8:56	14:56	6:00	2	3	1	1
28/May/20	Sha Chau	10:45	16:45	6:00	2	3	0	-
4/Jun/20	Lung Kwu Chau	9:00	15:00	6:00	2-3	1	0	-
10/Jun/20	Sha Chau	10:45	16:45	6:00	3	1	0	-
7/Jul/20	Sha Chau	10:45	16:45	6:00	2-3	1	0	-
15/Jul/20	Lung Kwu Chau	8:54	14:54	6:00	2-3	1	0	-
17/Aug/20	Lung Kwu Chau	8:55	14:55	6:00	2-3	1-2	2	1-2
24/Aug/20	Sha Chau	10:56	16:56	6:00	2	2	0	-
3/Sep/20	Lung Kwu Chau	9:01	15:01	6:00	2	3	0	-
7/Sep/20	Sha Chau	10:37	16:37	6:00	2	2	0	-
19/Oct/20	Lung Kwu Chau	9:03	15:03	6:00	2-3	3	1	1
27/Oct/20	Sha Chau	10:52	16:52	6:00	2	2-3	0	-
4/Nov/20	Sha Chau	10:55	16:55	6:00	2-3	3	0	-

Date	Station	Start Time	End Time	Duration	Beaufort Range	Visibility Range	No. of Focal Follow Dolphin Groups Tracked	Group Size Range
16/Nov/20	Lung Kwu Chau	8:57	14:57	6:00	2-3	3	2	2-3
10/Dec/20	Sha Chau	10:52	16:52	6:00	2	3	0	-
28/Dec/20	Lung Kwu Chau	8:59	14:59	6:00	2-3	2	3	2-4

Visibility Range: 1=Excellent, 2=Good, 3=Fair, 4=Poor

Annex 1 List of References for CWD Monitoring

Buckland, S. T., D. R. Anderson, K. P. Burnham, J. L. Laake, D. L. Borchers and L. Thomas. 2001. Introduction to Distance Sampling: Estimating Abundance of Biological Populations. Oxford University Press.

Buckland, S. T., D. R. Anderson, K. P. Burnham, J. L. Laake, D. L. Borchers and L. Thomas. 2004. Advanced Distance Sampling. Oxford University Press.

Buckstaff, K.C., Wells, R.S., Gannon, J.G., Nowacek, D.P. 2013. Responses of bottlenose dolphins (*Tursiops truncatus*) to construction and demolition of coastal marine structures. Aquat. Mamm. 39, 174-186. (doi: 10.1578/AM.39.2.2013.174)

Castellote, M., Clark, C.W., Lammers, M.O. 2012. Acoustic and behavioral changes by fin whales (*Balaenoptera physalus*) in response to shipping and airgun noise. Biol. Conserv. 147, 115-122. (doi:10.1016/j.biocon.2011.12.021)

Chen, T., Hung, S.K., Qiu, Y., Jia, X. & Jefferson, T.A. 2010. Distribution, abundance, and individual movements of Indo-Pacific humpback dolphins (Sousa chinensis) in the Pearl River Estuary, China. Mammalia, 74, 117-125.

Finneran, J.J., Schlundt, C.E., Branstetter, B.K., Trickey, J.S., Bowman, V., Jenkins, K. 2015. Effects of multiple impulses from a seismic air gun on bottlenose dolphin hearing and behavior. J. Acoust. Soc. Amer. 137, 1634-1646. (doi: http://dx.doi.org/10.1121/1.4916591)

Gailey, G. & Ortega-Ortiz, J.G. 2002. A note on a computer-based system for theodolite tracking of cetaceans. Journal of Cetacean Research and Management, 4, 213-218.

Gailey, G., Würsig, B. & McDonald, T.L. 2007. Abundance, behavior, and movement patterns of western gray whales in relation to a 3-D seismic survey, Northeast Sakhalin Island, Russia. Environmental Monitoring and Assessment, 134, 75-91.

Hastie T., Tibshirani R. 1986. Generalized additive models. Statistical Science:297-310.

Hoyt, E. 2011. Marine Protected Areas for Whales, Dolphins, and Porpoises, Second Edition. Earthscan Press, London, UK. 464 pp.

Huang, S., Karczmarski, L., Chen, J., Zhou, R., Wen, L., Zhang, H., Li, H. & Wu, Y. 2012. Demography and population trends of the largest population of Indo-Pacific humpback dolphins. Biological Conservation, 147:234-242.

Hung, S.K. 2008. Habitat use of Indo-Pacific humpback dolphins (Sousa chinensis) in Hong Kong. Ph.D. dissertation. University of Hong Kong, Hong Kong, 266 p.

Hung, S.K. 2016. Monitoring of Marine Mammals in Hong Kong Waters (2015 – 2016) Final Report (1 April 2015 to 31 March 2016). Agriculture, Fisheries and Conservation Department of the Hong Kong SAR Government.

Jefferson, T.A. 2000. Population biology of the Indo-Pacific hump-backed dolphin in Hong Kong waters. Wildlife Monographs, 144, 65 pp.

Jefferson, T.A. 2018. Hong Kong's Indo-Pacific humpback dolphins (*Sousa chinensis*): Assessing past and future anthropogenic impacts and working toward sustainability. Aquatic Mammals 44:711-728.

Jefferson, T.A. and S. Leatherwood. 1997. Distribution and abundance of Indo-Pacific hump-backed dolphins (*Sousa chinensis* Osbeck, 1765) in Hong Kong waters. Asian Marine Biology 14:93-110.

Lammers, M.O., Brainard, R.E., Au, W.W.L., Mooney, T.A. & Wong, K.B. 2008. An ecological acoustic recorder (EAR) for long-term monitoring of biological and anthropogenic sounds on coral reefs and other marine habitats. Journal of the Acoustical Society of America, 123, 1720-1728.

Lundquist, D., Gemmell, N.J. & Würsig, B. 2012. Behavioural responses of dusky dolphin groups (Lagenorhynchus obscurus) to tour vessels off Kaikoura, New Zealand. PLos ONE, 7, 9pp.

Lusseau, D. 2006. The short-term behavioral reactions of bottlenose dolphins to interactions with boats in Doubtful Sound, New Zealand. Marine Mammal Science, 22(4), 802-818.

Marques, F. F. C. and S. T. Buckland. 2003. Incorporating covariates into standard line transect analyses. Biometrics 59:924-935.

Marques, F. F. C. and S. T. Buckland. 2004. Covariate models for the detection function. Pages 31-47 in S. T. Buckland, D. R. Anderson, K. P. Burnham, J. L. Laake, D. L. Borchers and L. Thomas, eds. *Advanced Distance Sampling*. Oxford University Press.

Mott MacDonald. 2014. Expansion of Hong Kong International Airport into a Three-Runway System Environmental Impact Assessment Report. The Airport Authority Hong Kong, Hong Kong.

Munger, L., Lammers, M.O., Cifuentes, M., Würsig, B., Jefferson, T.A. & Hung, S.K. 2016. Indo-Pacific humpback dolphin occurrence north of Lantau Island, Hong Kong, based on year-round passive acoustic monitoring. Journal of the Acoustical Society of America, 140, 2754–2765.

Mott MacDonald 2014. Expansion of Hong Kong International Airport into a Three-Runway System. Environmental Impact Assessment Report. Final report to the Hong Kong SAR Government.

Mott MacDonald 2019. Chinese White Dolphin Monitoring Annual Review Report – January 2018 to December 2018. Final report to the Hong Kong SAR Government.

Nowacek, D.P., Thorne, L.H., Johnston, D.W., Tyack, P.L. 2007. Responses of cetaceans to anthropogenic noise. Mamm. Rev. 372, 81-115. (doi: 10.1111/j.1365-2907.2007.00104.x)

Piwetz, S., Hung, S., Wang, J., Lundquist, D. & Würsig, B. 2012. Influence of vessel traffic on movements of Indo-Pacific Humpback dolphins (Sousa chinensis) off Lantau Island, Hong Kong. Aquatic Mammals, 38, 325-331.

Quinn, G. P., & Keough, M. J. 2002. Experimental design and data analysis for biologists. Cambridge University Press.

Rolland, R.M., Parks, S.E., Hunt, K.E., Castellote, M., Corkeron, P.J., Nowacek, D.P., Wasser, S.K., and Kraus, S.D. 2012. Evidence that ship noise increases stress in right whales. Proc. R. Soc. B 279, 2363-2368. (doi: 10.1098/rspb.2011.2429)

Sims, P.Q., Vaughn, R., Hung, S.K. & Würsig, B. 2012a. Sounds of Indo-Pacific humpback dolphins (Sousa chinensis) in West Hong Kong: A preliminary description. J. Acoust. Soc. Am. 131: EL48-EL53.

Sims, P.Q., Hung, S.K. & Würsig, B. 2012b. High-speed vessel noises in West Hong Kong waters and their contributions relative to Indo-Pacific humpback dolphins (Sousa chinensis). Journal of Marine Biology, 2012, 11 pp.

Thomas, L., S. T. Buckland, E. A. Rexstad, J. L. Laake, S. Strindberg, S. L. Hedley, J. R. B. Bishop, T. A. Marques and K. P. Burnham. 2010. Distance software: design and analysis of distance sampling surveys for estimating population size. Journal of Applied Ecology 47:5-14.

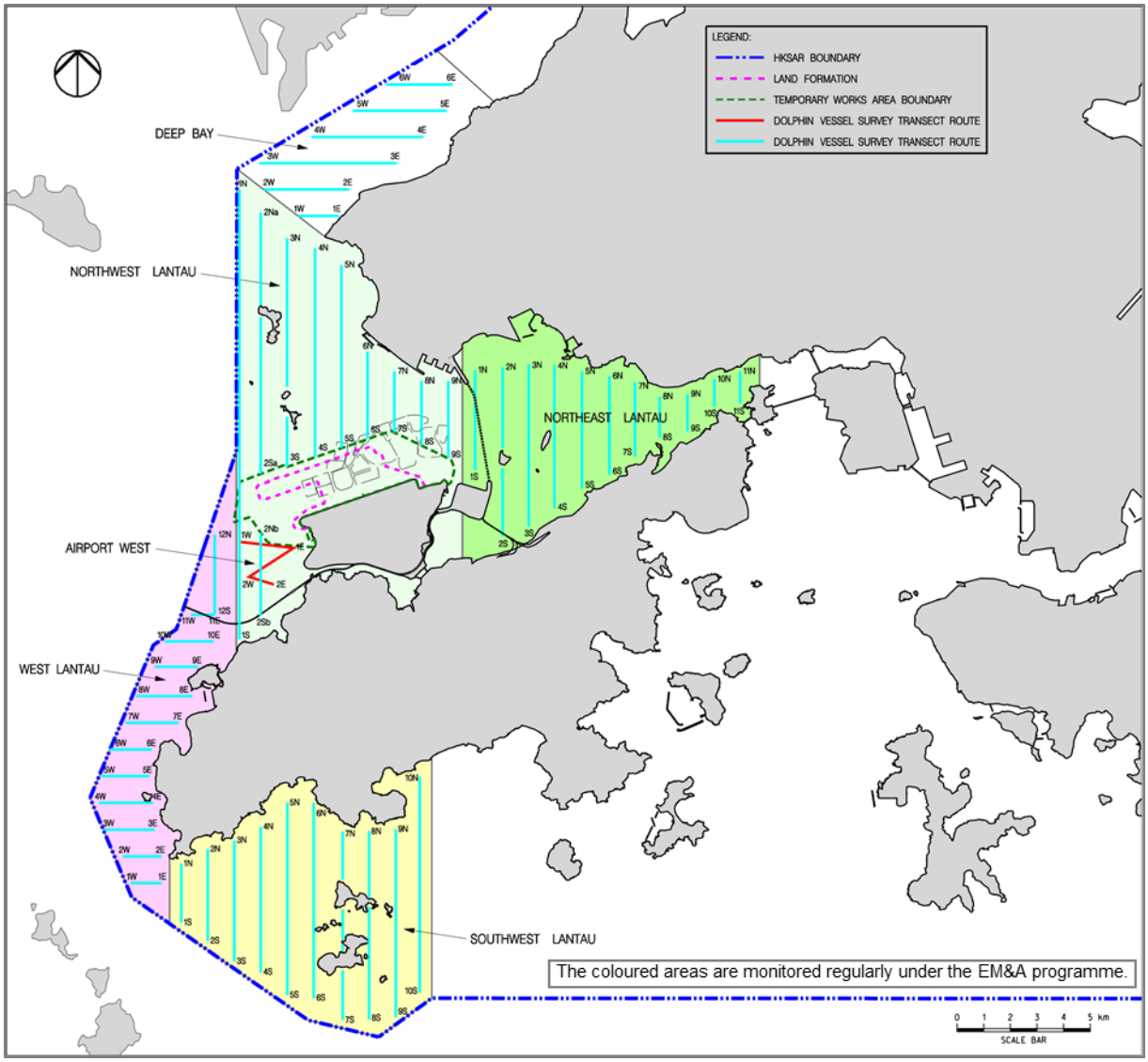
Turchin, P. 1998. Quantitative Analysis of Movement: Measuring and modelling population redistribution in animals and plants. Sinauer Associates, Inc., U.S.A.

Wiggins, S.M. & Hildebrand, J. 2007. High-frequency Acoustic Recording Package (HARP) for broad-band, long-term marine mammal monitoring. In: Symposium on Underwater Technology and Workshop on Scientific Use of Submarine Cables and Related Technologies (ed. by Anonymous), pp. 551-557.

Wood S. 2006. Generalized additive models: an introduction with R CRC press.

Würsig, B., Cipriano, F. & Würsig, M. 1991. Dolphin movement patterns: information from radio and theodolite tracking studies. In: Dolphin societies: Discoveries and puzzles (ed. by K. Pryor & K.S. Norris), pp. 79-111. University of California Press.

Reference: Additional Vessel Survey for CWD Monitoring in Deep Bay Area



The additional survey in Deep Bay (DB) was conducted on a voluntary basis at the same frequency of two surveys per month.

All DB data were for reference and used only for density and abundance estimation.

(Note: The transect route in the DB survey area could not be fully travelled due to obstruction by the existing oyster culture rafts.)

Appendix F. Summary of Environmental Complaints and Cumulative Statistics on Exceedances, Notification of Summons, and Prosecution

Summary of Environmental Complaints

Date of Complaint Received	Details	Analysis / Remedial Actions	Status
6 Jul 2020	A complaint regarding suspected improper chemical waste disposal at the pier near Marina Garden, Tuen Mun was received on 6 Jul 2020.	ET requested the concerned Contractor for details on the complaint. Based on information provided by Contractor, no chemical waste has been generated from the Contractor.	Closed
13 Jul 2020	A complaint regarding the discharge of muddy water from the construction site which was near Aviation Fuel Supply Company (AFSC) Operation Limited premise to the surrounding surface water channel was received on 13 Jul 2020.	ET investigated the related work contracts that carried out construction activities at or near the alleged area. Based on information provided by contractors and ET's inspection findings, no malpractices were observed.	Closed
28 Aug 2020	A complaint regarding dust issue at Chek Lap Kok South Road was received on 28 Aug 2020.	ET investigated the potential related work contracts whose barges moored at or near the alleged area. Based on information provided by contractors and ET's inspection findings, no malpractices were observed.	Closed
6 Oct 2020	A complaint regarding solid waste and suspected open burning at 3RS was received on 6 Oct 2020.	ET requested the relevant contractors for details related to the complaint. Site inspections and on-site investigation were also conducted by ET and IEC during which there was no related observation found on improper storage of solid waste or opening burning. All contractors were reminded to continue with the proper handling of general waste.	Closed
15 Oct 2020	A complaint regarding oil spillage from barges at 3RS project area was received on 15 Oct 2020.	ET requested the relevant contractors for details related to the complaint. Regular site inspections and night-time *ad-hoc* inspections were also conducted by ET during which there was no observation indicating malpractice leading to oil spillage. All contractors were reminded to continue with their current proper practice in handling of oil and fuel to prevent spillage.	Closed
20 Oct 2020	A complaint regarding illegal fuel delivery at 3RS project area was received on 20 Oct 2020.	ET requested the relevant contractors for details related to the complaint. Regular site inspections and night-time *ad-hoc* inspections were also conducted by ET during which there was no observation indicating malpractice leading to fuel spillage. ET also conducted random check on contractors' fuel purchasing record of Ultra Low Sulphur Diesel (ULSD) or equivalent were purchased by the contractors. All contractors were reminded to	Closed

		continue with their current proper practice in handling fuel and implementation on their spill response plans.	
6 Nov 2020	A complaint regarding dust issue at 3RS construction site area was received on 6 Nov 2020.	ET requested the relevant contractor to provide information related to the complaint. During regular site inspections, no dust issue was recorded at the alleged area. The Contractor has reviewed and updated the dust control management plan to enhance water spraying to strengthen their dust suppression measure All contractors were reminded to properly and adequately implement dust suppression measures especially in the current dry season to prevent air pollution on site.	Closed
19 Nov 2020	A complaint regarding illegal refuel delivery leading to water pollution at 3RS project area was received on 19 Nov 2020.	ET requested the relevant contractors to provide information related to the complaint. Regular site inspections and night-time ad-hoc inspections were also conducted by ET during which no occurrence regarding oil spillage onto sea surface was observed. ET also conducted a night-time inspection along the reclaimed land during which no oil spillage onto the sea surface from fuel transfer activities was observed. All contractors were reminded to continue with their current proper handling of oil and fuel on site and implementation on their spill response plans.	Closed
19 Nov 2020	A complaint regarding illegal cement discharge and domestic waste disposal from marine vessel was received on 19 Nov 2020.	ET requested the relevant contractor to provide information related to the complaint. ET conducted day-time and night-time inspections on the concerned vessel after receiving the complaint and checked the site inspection records of the vessel around the alleged period, and no adverse observation was made. The Contractor had followed their contract-specific Spill Response Plan and provided spill kits on the vessel. To follow up, the relevant contractor was reminded to strictly follow the standard operation procedures for cement refilling works and the contract-specific Spill Response Plan.	Closed
27 Nov 2020	A complaint regarding smoke and dust from a contractor was received on 27 Nov 2020.	For the complaint received on 27 November 2020, ET requested the relevant contractors to provide information related to the complaint. During regular site inspections, dust generation from vehicular movements was observed in the alleged area on one occasion and was rectified by the Contractor afterwards. The Contractors implemented water spraying according to their dust control management plans. All contractors were reminded to properly and adequately implement dust suppression measures especially in the current dry season and to prevent air pollution on site.	Closed

Cumulative Statistics for Valid Exceedances for the Environmental Monitoring

		Total no. recorded in the reporting month	Total no. recorded since the project commenced
1-hr TSP	Action	0	0
	Limit	0	0
Noise	Action	0	0
	Limit	0	0
Waste	Action	0	0
	Limit	0	0
Water	Action	0	0
	Limit	0	0
CWD	Action	0	0
	Limit	0	0

Remark: Exceedances, which are not found project related, are not shown in this table.

Cumulative Statistics for Non-compliance, Complaints, Notifications of Summons and Prosecution

Reporting Period	Cumulative Statistics			
	Non-compliance	Complaints	Notifications of Summons	Prosecutions
This reporting period	0	10	0	0
From 28 December 2015 to end of the reporting period	0	27	1	1

Appendix G. Tree Schedule

Appendix G

Contracts	Tree ID	Easting	Northing	Chinese Name	*Latin Name*	Tree Measurement			Recommendation in LVP	Status as of end December 2020	Remarks
						DBH (mm)	Crown Spread (m)	Height (m)			
Exiting Works Contracts											
3302	T01	811275.297	818150.991	王棕	*Roystonea regia*	330	3	11	RETAIN	Retain	
3302	T02	811264.902	818147.829	鳳凰木	*Delonix regia*	310	7	10	FELL	Fell	
3302	T03	811263.970	818145.696	王棕	*Roystonea regia*	340	3	8	RETAIN	Retain	
3302	T04	811197.022	818119.301	木棉	*Bombax ceiba*	400	7	8	RETAIN	Retain	
3302	T05	811170.337	818121.173	大葉合歡	*Albizia lebbeck*	354	7	8	FELL	Fell	
3302	T06	811162.015	818120.276	楝	*Melia azedarach*	350	10	10	FELL	Fell	
3302	T07	811156.704	818109.776	銀海棗	*Phoenix sylvestris*	360	7	12	RETAIN	Retain	
3302	T08	811157.985	818104.865	榕樹	*Ficus microcarpa*	350	10	8	RETAIN	Retain	
3302	T09	811154.973	818114.253	雞蛋花	*Plumeria rubra*	191	4	3.5	RETAIN	Retain	
3302	T10	811154.739	818117.318	垂葉榕	*Ficus benjamina*	450	5	5.5	RETAIN	Retain	
3302	T11	811162.660	818130.209	火焰木	*Spathodea campanulata*	370	6	10	RETAIN	Retain	
3302	T12	811167.380	818133.426	蒲葵	*Livistona chinensis*	300	4	11	RETAIN	Retain	
3501	T2834	811564.826	819989.263	銀樺	*Grevillea robusta*	95	2	4	FELL	Fell	
3501	T2840	811583.814	820019.745	銀樺	*Grevillea robusta*	135	4	7	FELL	Fell	
3501	T2841	811581.424	820017.802	銀樺	*Grevillea robusta*	135	3	6	FELL	Fell	
3501	T2842	811579.389	820013.517	銀樺	*Grevillea robusta*	160	4	6	FELL	Fell	
3501	T2843	811570.203	820021.011	銀樺	*Grevillea robusta*	125	3	6	FELL	Fell	
3501	T2844	811569.526	820018.664	銀樺	*Grevillea robusta*	110	3	6	FELL	Fell	
3501	T2845	811566.205	820014.999	銀樺	*Grevillea robusta*	170	4	6	FELL	Fell	
3501	T2846	811560.860	820016.716	銀樺	*Grevillea robusta*	165	4	8	FELL	Fell	
3501	T2847	811557.684	820018.792	銀樺	*Grevillea robusta*	160	4	7	FELL	Fell	
3501	T2848	811557.945	820015.551	銀樺	*Grevillea robusta*	150	4	7	FELL	Fell	
3501	T2849	811553.484	820017.694	銀樺	*Grevillea robusta*	95	3	6	FELL	Fell	
3501	T2850	811552.831	820014.626	銀樺	*Grevillea robusta*	105	3	5	FELL	Fell	
3501	T2851	811553.571	820012.506	紅膠木	*Lophostemon confertus*	150	4	6	FELL	Fell	
3501	T2852	811550.004	820027.267	楝	*Melia azedarach*	275	8	9	FELL	Fell	
3501	T2853	811550.004	820028.299	楝	*Melia azedarach*	210	3	7	FELL	Fell	
3501	T2854	811545.157	820031.346	楝	*Melia azedarach*	470	10	9	FELL	Fell	
3501	T2855	811544.552	820031.723	楝	*Melia azedarach*	230	6	9	FELL	Fell	
3501	T2856	811541.734	820025.226	耳果相思	*Acacia auriculiformis*	230	8	9	FELL	Fell	
3501	T2857	811533.586	820023.626	洋紫荊	*Bauhinia x Blakeana*	175	4	5	FELL	Fell	
3501	T2858	811544.246	820017.027	銀樺	*Grevillea robusta*	155	3	4	FELL	Fell	
3501	T2859	811544.739	820005.874	銀樺	*Grevillea robusta*	105	3	6	FELL	Fell	
3501	T2860	811544.339	820002.513	銀樺	*Grevillea robusta*	95	3	6	FELL	Fell	
3501	T2861	811536.815	820015.382	銀樺	*Grevillea robusta*	120	2	5	FELL	Fell	
3501	T2862	811535.419	820012.965	銀樺	*Grevillea robusta*	110	2	5	FELL	Fell	
3501	T2863	811535.788	820009.776	銀樺	*Grevillea robusta*	125	3	5	FELL	Fell	
3501	T2864	811532.010	820006.746	銀樺	*Grevillea robusta*	150	4	7	FELL	Fell	
3501	T2865	811512.828	820010.789	垂葉榕	*Ficus benjamina*	185	4	7	FELL	Fell	
3501	T2866	811515.806	819996.902	*紅膠木*	*Lophostemon confertus*	225	4	6	FELL	Fell	

Contracts	Tree ID	Easting	Northing	Chinese Name	*Latin Name*	Tree Measurement			Recommendation in LVP	Status as of end December 2020	Remarks
						DBH (mm)	Crown Spread (m)	Height (m)			
3501	T2867	811508.914	819997.550	垂葉榕	*Ficus benjamina*	160	4	5	FELL	Fell	
3501	T2868	811507.267	820000.659	垂葉榕	*Ficus benjamina*	160	4	5	FELL	Fell	
3501	T2869	811513.026	819988.862	銀樺	*Grevillea robusta*	155	3	8	FELL	Fell	
3501	T2870	811506.500	819991.396	垂葉榕	*Ficus benjamina*	150	4	7	FELL	Fell	
3501	T2871	811504.880	819988.678	垂葉榕	*Ficus benjamina*	180	4	7	FELL	Fell	
3501	T2872	811502.769	819988.202	垂葉榕	*Ficus benjamina*	180	4	7	FELL	Fell	
3501	T2873	811500.947	819985.060	垂葉榕	*Ficus benjamina*	200	4	7	FELL	Fell	
3501	T2874	811504.630	819985.165	垂葉榕	*Ficus benjamina*	165	4	7	FELL	Fell	
3501	T2875	811503.555	819982.468	垂葉榕	*Ficus benjamina*	210	4	7	FELL	Fell	
3501	T2876	811499.728	819980.100	垂葉榕	*Ficus benjamina*	190	4	7	FELL	Fell	
3501	T2877	811499.980	819976.821	垂葉榕	*Ficus benjamina*	215	6	7	FELL	Fell	
3501	T2878	811503.184	819978.072	垂葉榕	*Ficus benjamina*	205	6	7	FELL	Fell	
3501	T2879	811503.642	819974.334	垂葉榕	*Ficus benjamina*	215	6	7	FELL	Fell	
3501	T2880	811499.977	819973.587	垂葉榕	*Ficus benjamina*	160	4	7	FELL	Fell	
3501	T2881	811502.953	819970.909	垂葉榕	*Ficus benjamina*	220	5	7	FELL	Fell	
3501	T2882	811501.449	819968.218	垂葉榕	*Ficus benjamina*	240	7	7	FELL	Fell	
3501	T2885	811524.395	819959.493	銀樺	*Grevillea robusta*	125	3	6	FELL	Fell	
3501	T2886	811519.066	819956.518	銀樺	*Grevillea robusta*	100	3	6	FELL	Fell	
3501	T2887	811514.400	819956.820	垂葉榕	*Ficus benjamina*	165	3	6	FELL	Fell	
3501	T2888	811515.122	819948.868	垂葉榕	*Ficus benjamina*	250	6	7	FELL	Fell	
3501	T2889	811518.986	819948.249	垂葉榕	*Ficus benjamina*	190	4	7	FELL	Fell	
3501	T2890	811526.581	819949.787	垂葉榕	*Ficus benjamina*	230	5	7	FELL	Fell	
3501	T2891	811527.204	819941.173	垂葉榕	*Ficus benjamina*	230	4	6	FELL	Fell	
3503	T1252	811942.889	819462.737	旅人蕉	*Ravenala madagascariensis*	320	2	4	RETAIN	Retain	
3503	T1253	811942.170	819462.076	旅人蕉	*Ravenala madagascariensis*	255	2	5	RETAIN	Retain	
3503	T1254	811941.455	819461.627	旅人蕉	*Ravenala madagascariensis*	200	2	5	RETAIN	Retain	
3503	T1255	811940.879	819461.577	旅人蕉	*Ravenala madagascariensis*	290	2	4	RETAIN	Retain	
3503	T1256	811940.544	819461.280	旅人蕉	*Ravenala madagascariensis*	220	2	5	RETAIN	Retain	
3503	T1257	811938.751	819460.180	旅人蕉	*Ravenala madagascariensis*	190	2	5	RETAIN	Retain	
3503	T1258	811937.702	819458.816	旅人蕉	*Ravenala madagascariensis*	255	2	5	RETAIN	Retain	
3503	T1259	811936.921	819457.860	旅人蕉	*Ravenala madagascariensis*	245	2	5	RETAIN	Retain	
3503	T1260	811936.154	819456.038	旅人蕉	*Ravenala madagascariensis*	210	2	5	RETAIN	Retain	
3503	T1278	811939.741	819459.409	旅人蕉	*Ravenala madagascariensis*	240	2	5	RETAIN	Retain	
3503	T1280	811939.020	819458.955	旅人蕉	*Ravenala madagascariensis*	240	2	5	RETAIN	Retain	
3503	T199	811874.9683	819780.9829	耳果相思	*Acacia auriculiformis*	293	7	10	FELL	Fell	
3503	T200	811867.3162	819782.114	楝	*Melia azedarach*	143	6	8	FELL	Fell	
3503	T245	811846.5496	819771.2276	垂葉榕	*Ficus benjamina*	156	3	5	FELL	Fell	
3503	T246	811845.3174	819768.2582	垂葉榕	*Ficus benjamina*	172	4	6	FELL	Fell	
3503	T247	811848.2183	819767.3812	垂葉榕	*Ficus benjamina*	210	5	7	FELL	Fell	
3503	T248	811847.5771	819764.0966	垂葉榕	*Ficus benjamina*	172	4	7	FELL	Fell	
3503	T249	811849.7733	819763.4818	垂葉榕	*Ficus benjamina*	191	4	7	FELL	Fell	
3503	T250	811851.512	819759.3679	垂葉榕	*Ficus benjamina*	200	5	7	FELL	Fell	

Contracts	Tree ID	Easting	Northing	Chinese Name	*Latin Name*	Tree Measurement			Recommendation in LVP	Status as of end December 2020	Remarks
						DBH (mm)	Crown Spread (m)	Height (m)			
3503	T251	811850.5332	819756.9545	垂葉榕	*Ficus benjamina*	140	5	7	FELL	Fell	
3503	T252	811853.0333	819755.9432	垂葉榕	*Ficus benjamina*	225	4	7	FELL	Fell	
3503	T253	811852.0991	819753.5101	垂葉榕	*Ficus benjamina*	145	3	6	FELL	Fell	
3503	T254	811854.5348	819752.1039	垂葉榕	*Ficus benjamina*	135	4	7	FELL	Fell	
3503	T255	811853.8168	819749.7097	垂葉榕	*Ficus benjamina*	190	4	7	FELL	Fell	
3503	T256	811856.1014	819748.5197	垂葉榕	*Ficus benjamina*	165	4	6	FELL	Fell	
3503	T257	811855.1171	819745.8945	垂葉榕	*Ficus benjamina*	160	4	7	FELL	Fell	
3503	T258	811857.4192	819744.8442	垂葉榕	*Ficus benjamina*	230	5	7	FELL	Fell	
3503	T259	811856.6922	819742.2958	垂葉榕	*Ficus benjamina*	170	5	7	FELL	Fell	
3503	T260	811859.4105	819741.1989	垂葉榕	*Ficus benjamina*	165	4	7	FELL	Fell	
3503	T261	811858.1933	819738.821	垂葉榕	*Ficus benjamina*	145	4	7	FELL	Fell	
3503	T262	811860.8916	819737.4109	垂葉榕	*Ficus benjamina*	160	4	7	FELL	Fell	
3503	T263	811859.7647	819734.9073	垂葉榕	*Ficus benjamina*	200	5	8	FELL	Fell	
3503	T264	811862.3331	819733.8653	垂葉榕	*Ficus benjamina*	245	5	8	FELL	Fell	
3503	T265	811861.3125	819731.1781	垂葉榕	*Ficus benjamina*	220	6	8	FELL	Fell	
3503	T266	811863.7152	819730.2974	垂葉榕	*Ficus benjamina*	145	4	7	FELL	Fell	
3503	T267	811863.0106	819727.6284	垂葉榕	*Ficus benjamina*	180	4	8	FELL	Fell	
3503	T268	811865.3478	819726.4652	垂葉榕	*Ficus benjamina*	200	6	8	FELL	Fell	
3503	T269	811864.8145	819723.7498	垂葉榕	*Ficus benjamina*	220	6	9	FELL	Fell	
3503	T2718	811737.3118	819724.557	垂葉榕	*Ficus benjamina*	180	5	7	FELL	Fell	
3503	T2719	811736.0886	819729.7665	垂葉榕	*Ficus benjamina*	135	4	5	FELL	Fell	
3503	T272	811869.8078	819712.8991	垂葉榕	*Ficus benjamina*	180	4	7	FELL	Fell	
3503	T2720	811733.9528	819732.6672	垂葉榕	*Ficus benjamina*	135	3	6	FELL	Fell	
3503	T2721	811731.0087	819741.1771	垂葉榕	*Ficus benjamina*	125	3	5	FELL	Fell	
3503	T2722	811729.0826	819747.1919	垂葉榕	*Ficus benjamina*	145	3	5	FELL	Fell	
3503	T2723	811727.4899	819750.7511	垂葉榕	*Ficus benjamina*	110	3	5	FELL	Fell	
3503	T2724	811725.4148	819756.9635	垂葉榕	*Ficus benjamina*	120	3	5	FELL	Fell	
3503	T2725	811717.5441	819780.6435	垂葉榕	*Ficus benjamina*	150	4	6	FELL	Fell	
3503	T2726	811716.1256	819783.8559	垂葉榕	*Ficus benjamina*	140	3	6	FELL	Fell	
3503	T2727	811701.1278	819827.63	垂葉榕	*Ficus benjamina*	220	5	7	FELL	Fell	
3503	T2728	811699.2648	819833.2894	垂葉榕	*Ficus benjamina*	170	3	6	FELL	Fell	
3503	T2729	811698.0665	819836.5809	垂葉榕	*Ficus benjamina*	165	3	6	FELL	Fell	
3503	T273	811871.533	819709.1063	垂葉榕	*Ficus benjamina*	180	4	7	FELL	Fell	
3503	T2730	811696.5413	819840.9023	垂葉榕	*Ficus benjamina*	170	3	6	FELL	Fell	
3503	T2731	811695.6629	819844.0416	垂葉榕	*Ficus benjamina*	135	3	5	FELL	Fell	
3503	T2732	811694.5866	819847.0217	垂葉榕	*Ficus benjamina*	190	4	6	FELL	Fell	
3503	T2734	811692.3213	819853.8894	垂葉榕	*Ficus benjamina*	180	3	6	FELL	Fell	
3503	T2735	811691.1826	819856.653	垂葉榕	*Ficus benjamina*	180	3	7	FELL	Fell	
3503	T2737	811671.2792	819863.96	垂葉榕	*Ficus benjamina*	170	4	6	FELL	Fell	
3503	T2738	811667.5138	819865.5985	垂葉榕	*Ficus benjamina*	180	4	6	FELL	Fell	
3503	T2739	811664.2252	819864.8028	垂葉榕	*Ficus benjamina*	125	3	6	FELL	Fell	
3503	T2740	811665.6255	819861.8557	垂葉榕	*Ficus benjamina*	180	4	6	FELL	Fell	

Contracts	Tree ID	Easting	Northing	Chinese Name	*Latin Name*	Tree Measurement			Recommendation in LVP	Status as of end December 2020	Remarks
						DBH (mm)	Crown Spread (m)	Height (m)			
3503	T2741	811666.4677	819896.7604	黃槿	*Hibiscus tiliaceus*	265	8	8	FELL	Fell	
3503	T2742	811663.587	819899.6396	黃槿	*Hibiscus tiliaceus*	155	7	7	FELL	Fell	
3503	T2743	811662.9199	819902.2067	黃槿	*Hibiscus tiliaceus*	140	6	6	FELL	Fell	
3503	T2744	811661.5425	819905.3429	黃槿	*Hibiscus tiliaceus*	190	7	6	FELL	Fell	
3503	T2745	811660.5227	819908.1113	黃槿	*Hibiscus tiliaceus*	125	6	6	FELL	Fell	
3503	T2746	811659.5621	819911.0754	黃槿	*Hibiscus tiliaceus*	150	6	6	FELL	Fell	
3503	T2747	811659.0684	819913.1558	黃槿	*Hibiscus tiliaceus*	150	6	6	FELL	Fell	
3503	T2748	811658.3119	819915.7848	黃槿	*Hibiscus tiliaceus*	155	7	5	FELL	Fell	
3503	T2749	811657.3576	819918.9308	黃槿	*Hibiscus tiliaceus*	295	8	7	FELL	Fell	
3503	T275	811874.7882	819701.2678	垂葉榕	*Ficus benjamina*	216	6	8	FELL	Fell	
3503	T2750	811655.1594	819934.2419	垂葉榕	*Ficus benjamina*	170	4	6	FELL	Fell	
3503	T2751	811660.2811	819936.2932	垂葉榕	*Ficus benjamina*	250	6	7	FELL	Fell	
3503	T2752	811676.0981	819912.2405	黃槿	*Hibiscus tiliaceus*	285	8	8	FELL	Fell	
3503	T2753	811674.8702	819915.7525	黃槿	*Hibiscus tiliaceus*	245	7	8	FELL	Fell	
3503	T2754	811673.028	819926.0714	黃槿	*Hibiscus tiliaceus*	240	7	7	FELL	Fell	
3503	T2755	811675.8052	819928.1589	黃槿	*Hibiscus tiliaceus*	215	6	7	FELL	Fell	
3503	T2756	811677.6014	819932.0019	黃槿	*Hibiscus tiliaceus*	195	5	6	FELL	Fell	
3503	T2757	811680.775	819933.2527	黃槿	*Hibiscus tiliaceus*	210	5	7	FELL	Fell	
3503	T2758	811684.2845	819934.2151	黃槿	*Hibiscus tiliaceus*	230	7	8	FELL	Fell	
3503	T2759	811689.3446	819936.2824	黃槿	*Hibiscus tiliaceus*	315	8	8	FELL	Fell	
3503	T276	811876.5692	819697.608	垂葉榕	*Ficus benjamina*	185	4	7	FELL	Fell	
3503	T2760	811679.4328	819944.6381	垂葉榕	*Ficus benjamina*	190	5	7	FELL	Fell	
3503	T2761	811689.0292	819947.8907	垂葉榕	*Ficus benjamina*	230	6	8	FELL	Fell	
3503	T2762	811707.4455	819941.5871	黃槿	*Hibiscus tiliaceus*	300	7	8	FELL	Fell	
3503	T2764	811718.0322	819944.6888	黃槿	*Hibiscus tiliaceus*	215	6	6	FELL	Fell	
3503	T2765	811723.8962	819944.8007	黃槿	*Hibiscus tiliaceus*	170	5	6	FELL	Fell	
3503	T2766	811726.0197	819941.1453	黃槿	*Hibiscus tiliaceus*	190	6	7	FELL	Fell	
3503	T2767	811728.6136	819942.1798	黃槿	*Hibiscus tiliaceus*	250	7	7	FELL	Fell	
3503	T2768	811738.5728	819932.6347	銀樺	*Grevillea robusta*	120	3	6	FELL	Fell	
3503	T2769	811740.1361	819930.3655	銀樺	*Grevillea robusta*	100	3	6	FELL	Fell	
3503	T277	811878.5209	819693.5559	垂葉榕	*Ficus benjamina*	213	4	7	FELL	Fell	
3503	T2770	811748.4875	819916.8297	銀樺	*Grevillea robusta*	180	4	9	FELL	Fell	
3503	T279	811881.5847	819685.8313	垂葉榕	*Ficus benjamina*	194	4	7	FELL	Fell	
3503	T280	811883.439	819682.1788	垂葉榕	*Ficus benjamina*	165	4	6	FELL	Fell	
3503	T281	811884.8408	819678.4291	垂葉榕	*Ficus benjamina*	190	5	7	FELL	Fell	
3503	T282	811886.353	819674.7187	垂葉榕	*Ficus benjamina*	260	6	8	FELL	Fell	
3503	T2835	811551.5261	819981.7465	銀樺	*Grevillea robusta*	145	3	6	FELL	Fell	
3503	T2836	811555.75	819981.7259	銀樺	*Grevillea robusta*	135	3	5	FELL	Fell	
3503	T2837	811530.2271	819973.1317	銀樺	*Grevillea robusta*	100	3	5	FELL	Fell	
3503	T2838	811591.033	820015.0922	銀樺	*Grevillea robusta*	135	3	6	FELL	Fell	
3503	T2839	811587.4376	820014.3732	紅膠木	*Lophostemon confertus*	190	8	7	FELL	Fell	
3503	T2883	811530.4277	819965.4969	銀樺	*Grevillea robusta*	130	3	6	FELL	Fell	

Contracts	Tree ID	Easting	Northing	Chinese Name	*Latin Name*	Tree Measurement			Recommendation in LVP	Status as of end December 2020	Remarks
						DBH (mm)	Crown Spread (m)	Height (m)			
3503	T2884	811527.9982	819964.4492	銀樺	*Grevillea robusta*	140	3	6	FELL	Fell	
3503	T2914	811467.2535	819924.1006	垂葉榕	*Ficus benjamina*	230	8	9	FELL	To-be-felled	
3503	T2915	811470.812	819923.8546	垂葉榕	*Ficus benjamina*	215	6	8	FELL	To-be-felled	
3503	T2916	811468.0169	819917.6263	垂葉榕	*Ficus benjamina*	225	6	7	FELL	To-be-felled	
3503	T2917	811458.8193	819899.6831	垂葉榕	*Ficus benjamina*	200	8	8	FELL	To-be-felled	
3503	T2918	811456.9986	819895.9072	垂葉榕	*Ficus benjamina*	260	8	9	FELL	To-be-felled	
3503	T2919	811462.0653	819895.1999	垂葉榕	*Ficus benjamina*	245	8	8	FELL	To-be-felled	
3503	T2938	811537.0355	819917.5632	垂葉榕	*Ficus benjamina*	225	8	8	FELL	Fell	
3503	T2939	811537.8463	819915.4534	垂葉榕	*Ficus benjamina*	205	8	8	FELL	Fell	
3503	T2940	811538.7845	819911.7577	垂葉榕	*Ficus benjamina*	165	4	8	FELL	Fell	
3503	T2941	811539.5657	819908.1966	垂葉榕	*Ficus benjamina*	215	8	8	FELL	Fell	
3503	T2942	811540.2171	819906.0237	垂葉榕	*Ficus benjamina*	130	2	5	FELL	Fell	
3503	T2943	811541.6946	819902.593	垂葉榕	*Ficus benjamina*	230	8	7	FELL	Fell	
3503	T2944	811534.5625	819901.4187	垂葉榕	*Ficus benjamina*	215	6	7	FELL	Fell	
3503	T2945	811545.4702	819897.6905	楝	*Melia azedarach*	210	6	7	FELL	Fell	
3503	T2946	811547.357	819898.4851	楝	*Melia azedarach*	140	6	7	FELL	Fell	
3503	T2950	811571.0078	819862.0616	黃槿	*Hibiscus tiliaceus*	205	6	8	FELL	Fell	
3503	T2951	811573.6261	819860.1849	黃槿	*Hibiscus tiliaceus*	285	6	8	FELL	Fell	
3503	T2952	811577.0766	819858.264	黃槿	*Hibiscus tiliaceus*	255	8	8	FELL	Fell	
3503	T2953	811580.874	819857.1261	黃槿	*Hibiscus tiliaceus*	225	7	8	FELL	Fell	
3503	T2954	811584.1838	819857.5631	黃槿	*Hibiscus tiliaceus*	205	7	8	FELL	Fell	
3503	T2955	811586.0076	819854.2774	黃槿	*Hibiscus tiliaceus*	225	8	8	FELL	Fell	
3503	T2956	811589.2795	819855.0102	黃槿	*Hibiscus tiliaceus*	240	6	8	FELL	Fell	
3503	T2957	811587.7548	819858.6342	黃槿	*Hibiscus tiliaceus*	230	6	7	FELL	Fell	
3503	T2958	811590.8355	819859.6539	黃槿	*Hibiscus tiliaceus*	225	6	7	FELL	Fell	
3503	T2959	811591.9372	819855.6997	黃槿	*Hibiscus tiliaceus*	215	6	8	FELL	Fell	
3503	T2960	811595.0588	819856.5982	黃槿	*Hibiscus tiliaceus*	190	7	8	FELL	Fell	
3503	T2961	811593.7039	819860.7705	黃槿	*Hibiscus tiliaceus*	260	8	8	FELL	Fell	
3503	T2962	811597.3169	819861.8913	黃槿	*Hibiscus tiliaceus*	265	8	8	FELL	Fell	
3503	T2963	811598.9118	819858.1086	黃槿	*Hibiscus tiliaceus*	300	8	8	FELL	Fell	
3503	T2964	811601.96	819862.4595	黃槿	*Hibiscus tiliaceus*	285	8	8	FELL	Fell	
3503	T2965	811605.1951	819864.3796	黃槿	*Hibiscus tiliaceus*	275	8	8	FELL	Fell	
3503	T2966	811609.8764	819861.5876	黃槿	*Hibiscus tiliaceus*	265	7	8	FELL	Fell	
3503	T2967	811758.7007	819662.7	垂葉榕	*Ficus benjamina*	155	4	6	FELL	Fell	
3503	T2968	811776.8647	819623.9263	垂葉榕	*Ficus benjamina*	225	8	8	FELL	Fell	
3503	T2969	811777.519	819622.6111	垂葉榕	*Ficus benjamina*	195	7	8	FELL	Fell	
3503	T2970	811675.9677	819581.9765	垂葉榕	*Ficus benjamina*	205	6	9	FELL	Fell	
3503	T2971	811674.3926	819575.3587	垂葉榕	*Ficus benjamina*	170	5	8	FELL	Fell	
3503	T2972	811673.83	819571.3163	垂葉榕	*Ficus benjamina*	260	6	8	FELL	Fell	
3503	T2973	811673.7105	819567.6357	垂葉榕	*Ficus benjamina*	215	7	8	FELL	Fell	
3503	T2974	811673.3071	819563.5969	垂葉榕	*Ficus benjamina*	210	7	8	FELL	Fell	
3503	T2975	811672.1035	819559.9442	垂葉榕	*Ficus benjamina*	215	7	8	FELL	Fell	

Contracts	Tree ID	Easting	Northing	Chinese Name	*Latin Name*	Tree Measurement			Recommendation in LVP	Status as of end December 2020	Remarks
						DBH (mm)	Crown Spread (m)	Height (m)			
3503	T2976	811672.2852	819556.2132	垂葉榕	*Ficus benjamina*	180	6	8	FELL	Fell	
3503	T2977	811671.4024	819552.9569	垂葉榕	*Ficus benjamina*	195	7	8	FELL	Fell	
3503	T2978	811671.0478	819549.3686	垂葉榕	*Ficus benjamina*	205	6	8	FELL	Fell	
3503	T2979	811671.0063	819545.7492	垂葉榕	*Ficus benjamina*	225	7	8	FELL	Fell	
3503	T2980	811670.7522	819541.1446	垂葉榕	*Ficus benjamina*	240	8	8	FELL	Fell	
3503	T2981	811669.8359	819538.2594	垂葉榕	*Ficus benjamina*	160	5	8	FELL	Fell	
3503	T2982	811666.841	819536.211	垂葉榕	*Ficus benjamina*	240	8	8	FELL	Fell	
3503	T2984	811650.695	819558.8973	大花紫薇	*Lagerstroemia speciosa*	145	5	4	FELL	Fell	
3503	T2985	811651.3961	819567.1367	大花紫薇	*Lagerstroemia speciosa*	125	4	4	FELL	Fell	
3503	T2986	811643.298	819503.9816	垂葉榕	*Ficus benjamina*	225	6	8	FELL	Fell	
3503	T2987	811643.6152	819501.4488	垂葉榕	*Ficus benjamina*	195	5	8	FELL	Fell	
3503	T2991	811636.8564	819504.6597	垂葉榕	*Ficus benjamina*	195	7	8	FELL	Fell	
3503	T2992	811663.42	819511.0293	垂葉榕	*Ficus benjamina*	205	7	8	FELL	Fell	
3503	T2993	811663.0745	819507.9529	垂葉榕	*Ficus benjamina*	170	6	7	FELL	Fell	
3503	T2994	811663.4943	819502.1075	垂葉榕	*Ficus benjamina*	210	6	7	FELL	Fell	
3503	T2995	811663.799	819498.4195	垂葉榕	*Ficus benjamina*	180	6	7	FELL	Fell	
3503	T2996	811666.3258	819491.4093	垂葉榕	*Ficus benjamina*	110	2	5	FELL	Fell	
3503	T2997	811668.146	819488.1384	垂葉榕	*Ficus benjamina*	120	3	5	FELL	Fell	
3503	T2998	811671.1243	819485.7112	垂葉榕	*Ficus benjamina*	110	2	5	FELL	Fell	
3503	T3001	811668.9877	819478.4861	鐵刀木	*Senna siamea*	220	6	10	FELL	Fell	
3503	T3002	811671.8945	819481.3156	鐵刀木	*Senna siamea*	125	4	7	FELL	Fell	
3503	T3003	811673.8026	819482.5442	垂葉榕	*Ficus benjamina*	110	3	6	FELL	Fell	
3503	T3004	811675.7389	819483.6615	垂葉榕	*Ficus benjamina*	125	3	6	FELL	Fell	
3503	T3005	811677.7225	819482.8662	垂葉榕	*Ficus benjamina*	95	3	5	FELL	Fell	
3503	T3006	811680.0778	819482.066	垂葉榕	*Ficus benjamina*	120	4	6	FELL	Fell	
3503	T3007	811682.7056	819480.8761	垂葉榕	*Ficus benjamina*	185	5	7	FELL	Fell	
3503	T3008	811686.6082	819480.8518	垂葉榕	*Ficus benjamina*	170	6	8	FELL	Fell	
3503	T3009	811689.7741	819479.7525	垂葉榕	*Ficus benjamina*	200	5	7	FELL	Fell	
3503	T3011	811678.0046	819478.3947	鐵刀木	*Senna siamea*	155	7	10	FELL	Fell	
3503	T3012	811713.0237	819468.8084	銀樺	*Grevillea robusta*	110	3	4	FELL	Fell	
3503	T3013	811723.7036	819472.9494	鐵刀木	*Senna siamea*	120	4	5	FELL	Fell	
3503	T3014	811728.9686	819474.3808	鐵刀木	*Senna siamea*	110	6	7	FELL	Fell	
3503	T3025	811773.4733	819481.227	鐵刀木	*Senna siamea*	140	6	7	FELL	Fell	
3503	T3026	811775.2586	819482.4594	鐵刀木	*Senna siamea*	180	7	7	FELL	Fell	
3503	T3027	811777.4513	819482.3962	紅膠木	*Lophostemon confertus*	125	5	7	FELL	Fell	
3503	T3029	811811.2023	819502.8837	鐵刀木	*Senna siamea*	215	7	8	FELL	Fell	
3503	T3030	811607.241	819475.165	鐵刀木	*Senna siamea*	215	5	9	RETAIN	Retain	
3503	T3031	811614.052	819464.003	鐵刀木	*Senna siamea*	180	5	9	RETAIN	Retain	
3503	T3189	811710.587	819398.281	鐵刀木	*Senna siamea*	155	6	10	RETAIN	Retain	
3503	T3190	811713.0888	819417.0996	鐵刀木	*Senna siamea*	210	8	15	FELL	Fell	
3503	T3191	811708.031	819411.045	銀樺	*Grevillea robusta*	120	4	6	RETAIN	Retain	
3503	T3193	811702.0131	819412.2825	銀樺	*GREVILLEA ROBUSTA*	155	5	9	FELL	Fell	

Contracts	Tree ID	Easting	Northing	Chinese Name	*Latin Name*	Tree Measurement			Recommendation in LVP	Status as of end December 2020	Remarks
						DBH (mm)	Crown Spread (m)	Height (m)			
3503	T3194	811699.116	819414.699	銀樺	*Grevillea robusta*	130	4	6	RETAIN	Retain	
3503	T3196	811702.0285	819419.7629	鐵刀木	*Senna siamea*	165	6	12	FELL	Fell	
3503	T3227	811700.935	819447.6326	紅膠木	*Lophostemon confertus*	125	3	5	FELL	Fell	
3503	T562	811881.6266	819763.8929	耳果相思	*Acacia auriculiformis*	300	6	10	FELL	Fell	
3503	T563	811881.7689	819753.8192	耳果相思	*Acacia auriculiformis*	240	6	10	FELL	Fell	
3503	T564	811889.3323	819739.9014	台灣相思	*Acacia confusa*	300	8	8	FELL	Fell	
3503	T565	811885.6822	819735.3161	耳果相思	*Acacia auriculiformis*	240	6	8	FELL	Fell	
3503	T566	811893.1562	819733.4543	耳果相思	*Acacia auriculiformis*	310	7	10	FELL	Fell	
3503	T568	811899.3509	819709.3941	銀合歡	*Leucaena leucocephala*	325	8	8	FELL	Fell	
3503	T569	811900.9756	819699.3232	銀合歡	*Leucaena leucocephala*	300	8	8	FELL	Fell	
3503	T636	811762.2942	819891.578	銀樺	*Grevillea robusta*	115	4	8	FELL	Fell	
3503	T637	811763.2402	819888.8642	銀樺	*Grevillea robusta*	135	4	8	FELL	Fell	
3503	T638	811764.0844	819886.4193	銀樺	*Grevillea robusta*	145	4	8	FELL	Fell	
3503	T639	811765.1834	819883.9324	銀樺	*Grevillea robusta*	140	4	10	FELL	Fell	
3503	T640	811767.1844	819879.9601	鐵刀木	*Senna siamea*	260	9	10	FELL	Fell	
3503	T641	811768.0325	819878.0379	銀樺	*Grevillea robusta*	115	3	7	FELL	Fell	
3503	T642	811770.3142	819872.9406	銀樺	*Grevillea robusta*	145	4	8	FELL	Fell	
3503	T643	811770.9152	819870.4573	銀樺	*Grevillea robusta*	125	4	8	FELL	Fell	
3503	T644	811770.7072	819868.5772	鐵刀木	*Senna siamea*	210	6	9	FELL	Fell	
3503	T645	811772.704	819866.9045	銀樺	*Grevillea robusta*	190	5	8	FELL	Fell	
3503	T646	811774.0805	819863.5729	鐵刀木	*Senna siamea*	190	6	6	FELL	Fell	
3503	T647	811772.9364	819861.1877	銀樺	*Grevillea robusta*	105	2	4	FELL	Fell	
3503	T648	811777.0587	819854.2343	鐵刀木	*Senna siamea*	245	7	10	FELL	Fell	
3503	T649	811778.4854	819851.921	鐵刀木	*Senna siamea*	260	7	9	FELL	Fell	
3503	T650	811779.3136	819846.9965	鐵刀木	*Senna siamea*	250	6	8	FELL	Fell	
3503	T651	811779.9751	819841.4906	銀樺	*Grevillea robusta*	210	4	9	FELL	Fell	
3503	T652	811782.5554	819840.4916	銀樺	*Grevillea robusta*	175	5	10	FELL	Fell	
3503	T653	811781.9413	819837.0654	鐵刀木	*Senna siamea*	215	8	9	FELL	Fell	
3503	T654	811784.0636	819835.1722	鐵刀木	*Senna siamea*	190	6	8	FELL	Fell	
3503	T656	811784.956	819828.7968	銀樺	*Grevillea robusta*	160	3	8	FELL	Fell	
3503	T657	811786.4555	819828.9715	銀樺	*Grevillea robusta*	190	4	9	FELL	Fell	
3503	T665	811828.0763	819701.2597	銀樺	*Grevillea robusta*	110	2	6	FELL	Fell	
3503	T666	811826.0731	819694.1514	銀樺	*Grevillea robusta*	105	3	7	FELL	Fell	
3503	T667	811827.2089	819690.4866	銀樺	*Grevillea robusta*	145	3	7	FELL	Fell	
3503	T668	811831.7269	819679.09	銀樺	*Grevillea robusta*	110	3	6	FELL	Fell	
3503	T669	811834.439	819664.3402	銀樺	*Grevillea robusta*	110	4	7	FELL	Fell	
3503	T670	811836.7472	819658.5941	銀樺	*Grevillea robusta*	200	4	10	FELL	Fell	
3503	T671	811837.3882	819653.0066	銀樺	*Grevillea robusta*	145	5	7	FELL	Fell	
3503	T672	811837.567	819648.2486	銀樺	*Grevillea robusta*	180	4	7	FELL	Fell	
3503	T675	811817.0486	819730.4167	鐵刀木	*SENNA SIAMEA*	100	3	7	FELL	Fell	
3503	T677	811818.829	819725.7787	鐵刀木	*Senna siamea*	180	5	7	FELL	Fell	
3503	T678	811821.1564	819704.7097	黃槿	*Hibiscus tiliaceus*	205	5	5	FELL	Fell	

Contracts	Tree ID	Easting	Northing	Chinese Name	*Latin Name*	Tree Measurement			Recommendation in LVP	Status as of end December 2020	Remarks
						DBH (mm)	Crown Spread (m)	Height (m)			
3503	T679	811822.2785	819700.2688	黃槿	*Hibiscus tiliaceus*	110	3	4	FELL	Fell	
3503	T680	811820.2073	819698.0592	黃槿	*Hibiscus tiliaceus*	95	2	3	FELL	Fell	
3503	T681	811817.9536	819696.8511	黃槿	*Hibiscus tiliaceus*	130	3	4	FELL	Fell	
3503	T682	811823.4308	819696.916	黃槿	*Hibiscus tiliaceus*	120	4	4	FELL	Fell	
3503	T683	811826.3931	819686.7894	黃槿	*Hibiscus tiliaceus*	160	5	6	FELL	Fell	
3503	T684	811825.1633	819676.7568	黃槿	*Hibiscus tiliaceus*	165	5	5	FELL	Fell	
3503	T689	811833.7284	819653.4138	銀樺	*Grevillea robusta*	140	3	9	FELL	Fell	
3503	T690	811836.5697	819647.4155	銀樺	*Grevillea robusta*	130	3	6	FELL	Fell	
3503	T691	811836.892	819640.758	銀樺	*Grevillea robusta*	195	4	9	FELL	Fell	
3503	T692	811836.5158	819614.4323	垂葉榕	*Ficus benjamina*	205	6	7	FELL	Fell	
3503	T693	811833.9809	819613.4796	垂葉榕	*Ficus benjamina*	205	6	7	FELL	Fell	
3503	T694	811831.9495	819612.7264	垂葉榕	*Ficus benjamina*	255	6	7	FELL	Fell	
3503	T695	811833.8823	819607.2979	垂葉榕	*Ficus benjamina*	165	4	6	FELL	Fell	
3503	T696	811835.9394	819608.1413	垂葉榕	*Ficus benjamina*	200	4	6	FELL	Fell	
3503	T697	811839.0658	819609.2891	垂葉榕	*Ficus benjamina*	190	4	6	FELL	Fell	
3503	T698	811840.7643	819602.4292	垂葉榕	*Ficus benjamina*	215	5	7	FELL	Fell	
3503	T699	811838.4668	819601.5919	垂葉榕	*Ficus benjamina*	190	5	7	FELL	Fell	
3503	T700	811835.9245	819600.5875	垂葉榕	*Ficus benjamina*	250	6	7	FELL	Fell	
3503	T701	811839.9549	819596.8615	垂葉榕	*Ficus benjamina*	210	5	7	FELL	Fell	
3503	T702	811842.1469	819594.7435	耳果相思	*Acacia auriculiformis*	290	6	10	FELL	Fell	
3503	T703	811837.4088	819593.5575	垂葉榕	*Ficus benjamina*	235	7	7	FELL	Fell	
3503	T704	811839.2185	819585.8756	垂葉榕	*Ficus benjamina*	265	8	9	FELL	Fell	
3503	T705	811831.801	819548.2848	垂葉榕	*Ficus benjamina*	155	5	7	FELL	Fell	
3503	T706	811832.4036	819547.1106	耳果相思	*Acacia auriculiformis*	125	3	9	FELL	Fell	
3503	T707	811832.2062	819545.9792	耳果相思	*Acacia auriculiformis*	140	3	9	FELL	Fell	
3503	T708	811831.5541	819545.6695	耳果相思	*Acacia auriculiformis*	235	5	9	FELL	Fell	
3503	T709	811828.4242	819547.4772	垂葉榕	*Ficus benjamina*	190	6	7	FELL	Fell	
3503	T710	811825.1637	819546.3268	垂葉榕	*Ficus benjamina*	140	4	7	FELL	Fell	
3503	T711	811822.4641	819545.9012	垂葉榕	*Ficus benjamina*	170	4	7	FELL	Fell	
3503	T712	811820.048	819544.9957	垂葉榕	*Ficus benjamina*	190	6	7	FELL	Fell	
3503	T713	811821.5465	819538.1386	垂葉榕	*Ficus benjamina*	180	4	5	FELL	Fell	
3503	T714	811825.1873	819539.5038	垂葉榕	*Ficus benjamina*	150	5	6	FELL	Fell	
3503	T715	811828.6209	819540.8304	垂葉榕	*Ficus benjamina*	110	3	5	FELL	Fell	
3503	T718	811829.6561	819538.1053	耳果相思	*Acacia auriculiformis*	175	6	10	FELL	Fell	
3503	T719	811829.2841	819537.079	耳果相思	*Acacia auriculiformis*	190	4	8	FELL	Fell	
3503	T720	811827.7935	819532.9051	耳果相思	*Acacia auriculiformis*	295	5	11	FELL	Fell	
3503	T721	811824.9833	819531.1756	垂葉榕	*Ficus benjamina*	250	6	9	FELL	Fell	
3503	T722	811826.3862	819528.8965	耳果相思	*Acacia auriculiformis*	170	4	10	FELL	Fell	
3503	T723	811825.0296	819526.0719	耳果相思	*Acacia auriculiformis*	270	4	10	FELL	Fell	
3503	T741	811863.281	819624.893	宮粉羊蹄甲	*Bauhinia variegata*	180	5	6	FELL	Fell	
3503	T742	811863.8422	819621.1064	宮粉羊蹄甲	*Bauhinia variegata*	145	4	5	FELL	Fell	
3503	T743	811864.0362	819616.2237	宮粉羊蹄甲	*Bauhinia variegata*	180	4	5	FELL	Fell	

Contracts	Tree ID	Easting	Northing	Chinese Name	*Latin Name*	Tree Measurement			Recommendation in LVP	Status as of end December 2020	Remarks
						DBH (mm)	Crown Spread (m)	Height (m)			
3503	T744	811864.2603	819613.8466	濕地松	*Pinus elliottii*	120	2	6	FELL	Fell	
3503	T745	811864.3107	819612.2685	濕地松	*Pinus elliottii*	110	3	5	FELL	Fell	
3503	T746	811864.5279	819608.6838	濕地松	*Pinus elliottii*	120	2	5	FELL	Fell	
3503	T747	811866.3477	819600.0625	耳果相思	*Acacia auriculiformis*	340	6	9	FELL	Fell	
3503	T751	811885.3647	819613.0168	台灣相思	*Acacia confusa*	170	5	9	FELL	Fell	
3503	T752	811885.7403	819611.96	台灣相思	*Acacia confusa*	185	5	9	FELL	Fell	
3503	T753	811886.3905	819612.5858	台灣相思	*Acacia confusa*	145	3	7	FELL	Fell	
3503	T754	811886.5755	819610.5082	台灣相思	*Acacia confusa*	190	4	8	FELL	Fell	
3503	T755	811885.4178	819613.7529	台灣相思	*Acacia confusa*	100	3	8	FELL	Fell	
3503	T756	811886.2295	819614.2155	台灣相思	*Acacia confusa*	95	2	7	FELL	Fell	
3503	T757	811884.5501	819614.9549	台灣相思	*Acacia confusa*	135	3	9	FELL	Fell	
3503	T758	811885.1692	819616.4815	台灣相思	*Acacia confusa*	110	3	8	FELL	Fell	
3503	T759	811885.9032	819616.1757	台灣相思	*Acacia confusa*	105	2	6	FELL	Fell	
3503	T760	811885.8479	819617.1665	台灣相思	*Acacia confusa*	100	1	5	FELL	Fell	
3503	T761	811885.6758	819618.0693	台灣相思	*Acacia confusa*	165	5	8	FELL	Fell	
3503	T762	811884.4044	819620.962	台灣相思	*Acacia confusa*	165	4	8	FELL	Fell	
3503	T763	811884.975	819621.6593	台灣相思	*Acacia confusa*	135	3	7	FELL	Fell	
3503	T764	811884.8794	819622.6219	台灣相思	*Acacia confusa*	100	2	6	FELL	Fell	
3503	T765	811883.1193	819623.1704	台灣相思	*Acacia confusa*	160	5	9	FELL	Fell	
3503	T766	811883.1991	819622.2865	台灣相思	*Acacia confusa*	105	3	9	FELL	Fell	
3503	T767	811884.2291	819622.0277	台灣相思	*Acacia confusa*	145	4	9	FELL	Fell	
3503	T768	811882.1484	819616.1089	耳果相思	*Acacia auriculiformis*	265	6	10	FELL	Fell	
3503	T769	811880.4934	819624.2423	耳果相思	*Acacia auriculiformis*	250	7	10	FELL	Fell	
3503	T770	811881.8289	819630.2467	黃花夾竹桃	*Thevetia peruviana*	130	4	4	FELL	Fell	
3503	T771	811879.2905	819632.1584	黃花夾竹桃	*Thevetia peruviana*	135	5	5	FELL	Fell	
3503	T772	811878.9684	819631.6994	耳果相思	*Acacia auriculiformis*	220	5	10	FELL	Fell	
3503	T773	811882.0702	819635.0853	黃花夾竹桃	*Thevetia peruviana*	125	5	4	FELL	Fell	
3503	T774	811880.297	819638.9309	黃花夾竹桃	*Thevetia peruviana*	240	7	5	FELL	Fell	
3503	T775	811877.0709	819639.6152	耳果相思	*Acacia auriculiformis*	310	9	11	FELL	Fell	
3503	T776	811875.0276	819647.2709	大葉相思	*Acacia mangium*	390	8	10	FELL	Fell	
3503	T789	811841.273	819641.8088	銀樺	*Grevillea robusta*	100	3	5	FELL	Fell	
3503	T790	811842.2498	819632.8738	銀樺	*Grevillea robusta*	205	4	10	FELL	Fell	
3503	T791	811842.2014	819628.5416	耳果相思	*Acacia auriculiformis*	205	4	9	FELL	Fell	
3503	T792	811843.4386	819623.8498	銀樺	*Grevillea robusta*	200	5	9	FELL	Fell	
3503	T793	811842.3108	819628.8753	銀樺	*Grevillea robusta*	115	3	8	FELL	Fell	
3503	T794	811843.1885	819618.5265	銀樺	*Grevillea robusta*	100	2	7	FELL	Fell	
3503	T795	811843.6596	819612.4284	銀樺	*Grevillea robusta*	145	4	9	FELL	Fell	
3503	T796	811843.6666	819599.8194	銀樺	*Grevillea robusta*	100	2	6	FELL	Fell	
3503	T797	811843.2603	819594.2444	銀樺	*Grevillea robusta*	100	2	6	FELL	Fell	
3503	T798	811843.5965	819588.8107	銀樺	*Grevillea robusta*	165	3	9	FELL	Fell	
3503	T799	811843.3053	819585.8036	銀樺	*Grevillea robusta*	115	2	8	FELL	Fell	
3503	T800	811841.5196	819575.2359	銀樺	*Grevillea robusta*	145	3	8	FELL	Fell	

Contracts	Tree ID	Easting	Northing	Chinese Name	*Latin Name*	Tree Measurement			Recommendation in LVP	Status as of end December 2020	Remarks
						DBH (mm)	Crown Spread (m)	Height (m)			
3503	T801	811840.51	819569.2426	銀樺	*Grevillea robusta*	160	4	9	FELL	Fell	
3503	T802	811838.6529	819567.721	銀樺	*Grevillea robusta*	125	3	7	FELL	Fell	
3503	T803	811839.4151	819563.2405	銀樺	*GREVILLEA ROBUSTA*	170	3	7	FELL	Fell	
3503	T805	811835.3023	819550.8619	鐵刀木	*Senna siamea*	260	6	9	FELL	Fell	
3503	T806	811834.0203	819547.1969	鐵刀木	*Senna siamea*	170	5	8	FELL	Fell	
3503	T807	811832.9753	819543.6504	鐵刀木	*Senna siamea*	160	5	7	FELL	Fell	
3503	T808	811828.865	819534.9118	銀樺	*Grevillea robusta*	140	6	12	FELL	Fell	
3503	T809	811827.273	819526.0796	鐵刀木	*Senna siamea*	145	4	6	FELL	Fell	
3503	T810	811825.3367	819522.3289	鐵刀木	*Senna siamea*	125	3	6	FELL	Fell	
3503	T812	811844.476	819472.355	細葉榕	*Ficus microcarpa*	465	8	14	TRANSPLANT	Transplanted	
3503	T813	811843.473	819476.373	細葉榕	*Ficus microcarpa*	540	12	14	RETAIN	Retain	
3503	T814	811848.091	819476.008	細葉榕	*Ficus microcarpa*	435	8	14	TRANSPLANT	Transplanted	
3503	T815	811847.561	819480.942	細葉榕	*Ficus microcarpa*	475	8	14	TRANSPLANT	Transplanted	
3503	T816	811851.615	819479.6995	細葉榕	*Ficus microcarpa*	370	8	14	FELL	Fell	
3503	T817	811852.4927	819483.8324	細葉榕	*Ficus microcarpa*	446	12	12	FELL	Fell	
3503	T818	811857.692	819472.1271	細葉榕	*Ficus microcarpa*	1000	12	12	FELL	Fell	
3503	T819	811867.3128	819477.67	細葉榕	*Ficus microcarpa*	730	12	14	FELL	Fell	
3503	T820	811865.755	819467.469	鳳凰木	*Delonix regia*	300	7	9	FELL	Fell	
3503	T821	811873.354	819471.072	鳳凰木	*Delonix regia*	340	6	7	FELL	Fell	
3503	T824	811871.6048	819451.0912	細葉榕	*Ficus microcarpa*	1000	12	12	FELL	Fell	
3503	T825	811862.967	819445.3242	細葉榕	*Ficus microcarpa*	950	10	12	FELL	Fell	
3503	T827	811852.5277	819447.9131	細葉榕	*Ficus microcarpa*	900	12	10	FELL	Fell	
3503	T828	811840.1687	819448.4583	細葉榕	*Ficus microcarpa*	450	12	10	FELL	Fell	
3503	T829	811834.950	819450.478	細葉榕	*Ficus microcarpa*	450	10	12	TRANSPLANT	Transplanted	
3503	T830	811837.974	819454.637	細葉榕	*Ficus microcarpa*	425	8	12	TRANSPLANT	Transplanted	
3503	T831	811833.979	819457.520	細葉榕	*Ficus microcarpa*	385	8	12	TRANSPLANT	Transplanted	
3503	T832	811837.5654	819459.683	細葉榕	*Ficus microcarpa*	450	12	12	FELL	Fell	
3503	T833	811834.113	819463.663	細葉榕	*Ficus microcarpa*	550	10	12	RETAIN	Retain	
3503	T834	811841.579	819461.552	羅漢松	*Podocarpus macrophyllus*	310	4	6	RETAIN	Retain	
3503	T835	811844.795	819460.472	羅漢松	*Podocarpus macrophyllus*	135	3	4	TRANSPLANT	Transplanted	
3503	T836	811846.862	819461.371	羅漢松	*Podocarpus macrophyllus*	100	2	4	TRANSPLANT	Transplanted	
3503	T837	811850.223	819459.190	羅漢松	*Podocarpus macrophyllus*	150	3	6	FELL	Fell	
3503	T838	811847.6852	819459.637	羅漢松	*Podocarpus macrophyllus*	100	2	5	TRANSPLANT	Transplanted	
3601	T0001	810205.050	817199.955	耳果相思	*Acacia auriculiformis*	310	5	9	FELL	Fell	
3601	T0002	810205.460	817196.267	木麻黃	*Casuarina equisetifolia*	110	2	8	FELL	Fell	
3601	T0003	810207.955	817197.940	木麻黃	*Casuarina equisetifolia*	280	5	10	FELL	Fell	
3601	T0004	810218.344	817194.593	木麻黃	*Casuarina equisetifolia*	250	4	10	FELL	Fell	
3601	T0005	810215.500	817192.341	木麻黃	*Casuarina equisetifolia*	240	5	12	FELL	Fell	
3601	T0006	810211.065	817189.129	木麻黃	*Casuarina equisetifolia*	420	6	10	FELL	Fell	
3601	T0007	810214.387	817186.798	木麻黃	*Casuarina equisetifolia*	130	2	7	FELL	Fell	
3601	T0008	810216.777	817184.108	木麻黃	*Casuarina equisetifolia*	100	2	5	FELL	Fell	
3601	T0009	810212.385	817183.785	木麻黃	*Casuarina equisetifolia*	100	3	6	FELL	Fell	

Contracts	Tree ID	Easting	Northing	Chinese Name	*Latin Name*	Tree Measurement			Recommendation in LVP	Status as of end December 2020	Remarks
						DBH (mm)	Crown Spread (m)	Height (m)			
3601	T0010	810228.557	817186.359	木麻黃	*Casuarina equisetifolia*	200	4	7	FELL	Fell	
3601	T0011	810232.458	817185.173	木麻黃	*Casuarina equisetifolia*	450	5	9	FELL	Fell	
3601	T0012	810229.337	817189.036	木麻黃	*Casuarina equisetifolia*	400	7	12	FELL	Fell	
3601	T0013	810230.999	817190.663	木麻黃	*Casuarina equisetifolia*	180	4	9	FELL	Fell	
3601	T0014	810232.390	817192.459	木麻黃	*Casuarina equisetifolia*	160	4	9	FELL	Fell	
3602	T0001	810186.657	817201.128	木麻黃	*Casuarina equisetifolia*	*200*	2	10	FELL	Fell	
3602	T0002	810186.868	817199.781	木麻黃	*Casuarina equisetifolia*	*290*	7	12	FELL	Fell	
3602	T0010	810181.695	817206.24	木麻黃	*Casuarina equisetifolia*	*300*	1	2	FELL	Fell	
3602	T0011	810180.477	817207.006	台灣相思	*Acacia confusa*	*150*	1	1	FELL	Fell	
3602	T0012	810179.159	817207.274	台灣相思	*Acacia confusa*	*130*	5	7	FELL	Fell	
3602	T0013	810177.179	817208.138	台灣相思	*Acacia confusa*	*130*	5	8	FELL	Fell	
3602	T0017	810175.155	817196.108	台灣相思	*Acacia confusa*	*170*	7	10	FELL	Fell	
3602	T0024	810169.093	817197.334	台灣相思	*Acacia confusa*	*220*	6	8	FELL	Fell	
3602	T0035	810156.643	817202.348	大葉相思	*Acacia mangium Willd.*	*300*	6	9	RETAIN	Retain	
3602	T0036	810155.517	817203.044	大葉相思	*Acacia mangium Willd.*	*450*	7	12	RETAIN	Retain	
3602	T0037	810157.141	817206.661	潺槁樹	*Litsea glutinosa*	*75*	2	5	FELL	Fell	
3602	T0039	810155.564	817205.236	潺槁樹	*Litsea glutinosa*	*130*	4	7	FELL	Fell	
3602	T0045	810154.491	817206.957	台灣相思	*Acacia confusa*	*150*	4	9	FELL	Fell	
3603	T0001	810118.790	817215.640	木麻黃	*Casuarina equisetifolia*	300	4	12	FELL	Fell	
3603	T0002	810119.320	817216.590	木麻黃	*Casuarina equisetifolia*	160	2	12	FELL	Fell	
3603	T0003	810119.670	817217.600	木麻黃	*Casuarina equisetifolia*	350	6	14	FELL	Fell	
3603	T0004	810118.230	817217.370	木麻黃	*Casuarina equisetifolia*	280	4	14	FELL	Fell	
3603	T0005	810118.250	817219.540	台灣相思	*Acacia confusa*	140	6	10	FELL	Fell	
3603	T0006	810119.500	817219.490	台灣相思	*Acacia confusa*	100	4	8	FELL	Fell	
3603	T0007	810120.780	817219.460	台灣相思	*Acacia confusa*	180	4	10	FELL	Fell	
3603	T0008	810121.960	817219.460	台灣相思	*Acacia confusa*	320	5	12	FELL	Fell	
3603	T0009	810122.800	817220.530	台灣相思	*Acacia confusa*	220	4	10	FELL	Fell	
3603	T0010	810123.750	817223.180	台灣相思	*Acacia confusa*	240	6	10	FELL	Fell	
3603	T0011	810122.730	817223.150	台灣相思	*Acacia confusa*	100	2	6	FELL	Fell	
3603	T0012	810121.750	817223.030	台灣相思	*Acacia confusa*	140	2	6	FELL	Fell	
3603	T0013	810120.700	817223.070	台灣相思	*Acacia confusa*	110	2	6	FELL	Fell	
3603	T0014	810119.880	817223.860	台灣相思	*Acacia confusa*	250	4	3	FELL	Fell	
3603	T0015	810118.860	817223.720	台灣相思	*Acacia confusa*	95	2	3	FELL	Fell	
3603	T0016	810116.600	817216.520	木麻黃	*Casuarina equisetifolia*	180	4	14	FELL	Fell	
3603	T0017	810116.130	817215.340	木麻黃	*Casuarina equisetifolia*	240	2	9	FELL	Fell	
3603	T0018	810114.700	817215.720	台灣相思	*Acacia confusa*	95	2	3	FELL	Fell	
3603	T0019	810113.270	817216.170	台灣相思	*Acacia confusa*	130	4	8	FELL	Fell	
3603	T0020	810111.820	817216.720	台灣相思	*Acacia confusa*	220	4	8	FELL	Fell	
3603	T0021	810110.220	817217.320	台灣相思	*Acacia confusa*	130	4	8	FELL	Fell	
3603	T0022	810108.500	817218.010	台灣相思	*Acacia confusa*	110	4	8	FELL	Fell	
3603	T0023	810111.520	817223.560	木麻黃	*Casuarina equisetifolia*	130	2	6	FELL	Fell	
3603	T0024	810112.6500	817224.7300	木麻黃	*Casuarina equisetifolia*	190	5	10	FELL	Fell	

Contracts	Tree ID	Easting	Northing	Chinese Name	*Latin Name*	Tree Measurement			Recommendation in LVP	Status as of end December 2020	Remarks
						DBH (mm)	Crown Spread (m)	Height (m)			
3603	T0025	810109.680	817224.990	木麻黃	*Casuarina equisetifolia*	120	4	5	FELL	Fell	
3603	T0026	810107.820	817226.460	木麻黃	*Casuarina equisetifolia*	100	4	8	FELL	Fell	
3603	T0027	810105.840	817220.800	木麻黃	*Casuarina equisetifolia*	120	2	8	FELL	Fell	
3603	T0028	810104.720	817221.940	木麻黃	*Casuarina equisetifolia*	360	4	12	FELL	Fell	
3603	T0029	810102.930	817221.390	木麻黃	*Casuarina equisetifolia*	150	4	10	FELL	Fell	
3603	T0030	810103.180	817222.960	木麻黃	*Casuarina equisetifolia*	95	2	6	FELL	Fell	
3603	T0031	810101.200	817222.690	木麻黃	*Casuarina equisetifolia*	95	2	5	FELL	Fell	
3603	T0032	810099.260	817220.710	耳果相思	*Acacia auriculiformis*	200	5	8	FELL	Fell	
3603	T0033	810097.520	817221.950	木麻黃	*Casuarina equisetifolia*	120	4	8	FELL	Fell	
3603	T0034	810093.510	817224.570	台灣相思	*Acacia confusa*	300	8	7	FELL	Fell	
3603	T0035	810089.380	817223.780	朴樹	*Celtis sinensis*	120	3	7	FELL	Fell	
3603	T0036	810087.450	817224.160	木麻黃	*Casuarina equisetifolia*	350	6	12	FELL	Fell	
3603	T0037	810085.730	817224.500	木麻黃	*Casuarina equisetifolia*	220	4	12	FELL	Fell	
3603	T0038	810083.860	817224.980	木麻黃	*Casuarina equisetifolia*	140	4	12	FELL	Fell	
3603	T0039	810082.510	817225.460	木麻黃	*Casuarina equisetifolia*	95	2	3	FELL	Fell	
3603	T0040	810084.300	817228.720	木麻黃	*Casuarina equisetifolia*	120	4	12	FELL	Fell	
3603	T0041	810087.590	817227.180	木麻黃	*Casuarina equisetifolia*	140	4	8	FELL	Fell	
3603	T0042	810088.640	817228.040	木麻黃	*Casuarina equisetifolia*	140	4	8	FELL	Fell	
3603	T0043	810087.590	817228.760	木麻黃	*Casuarina equisetifolia*	200	5	14	FELL	Fell	
3603	T0044	810089.840	817233.090	耳果相思	*Acacia auriculiformis*	180	3	5	FELL	Fell	
3603	T0045	810088.540	817234.610	木麻黃	*Casuarina equisetifolia*	140	4	10	FELL	Fell	
3603	T0046	810087.270	817235.070	木麻黃	*Casuarina equisetifolia*	140	2	8	FELL	Fell	
3603	T0047	810085.680	817234.700	木麻黃	*Casuarina equisetifolia*	190	4	8	FELL	Fell	
3603	T0048	810084.710	817235.790	木麻黃	*Casuarina equisetifolia*	180	4	10	FELL	Fell	
3603	T0049	810083.440	817236.080	木麻黃	*Casuarina equisetifolia*	180	4	12	FELL	Fell	
3603	T0050	810082.060	817235.100	台灣相思	*Acacia confusa*	100	4	5	FELL	Fell	
3603	T0051	810080.580	817235.560	台灣相思	*Acacia confusa*	100	2	4	FELL	Fell	
3603	T0052	810078.510	817236.920	台灣相思	*Acacia confusa*	100	2	3	FELL	Fell	
3603	T0053	810078.540	817233.440	台灣相思	*Acacia confusa*	150	4	6	FELL	Fell	
3603	T0054	810077.740	817232.670	台灣相思	*Acacia confusa*	220	4	8	FELL	Fell	
3603	T0055	810077.090	817231.690	台灣相思	*Acacia confusa*	95	2	4	FELL	Fell	
3603	T0056	810075.810	817232.260	台灣相思	*Acacia confusa*	140	4	7	FELL	Fell	
3603	T0057	810077.380	817236.770	台灣相思	*Acacia confusa*	120	4	6	FELL	Fell	
3603	T0058	810076.280	817236.780	台灣相思	*Acacia confusa*	95	2	4	FELL	Fell	
3603	T0059	810075.310	817237.510	台灣相思	*Acacia confusa*	95	2	3	FELL	Fell	
3603	T0060	810075.000	817235.020	耳果相思	*Acacia auriculiformis*	110	2	8	FELL	Fell	
3603	T0061	810074.260	817238.480	木麻黃	*Casuarina equisetifolia*	160	4	12	FELL	Fell	
3603	T0062	810075.230	817239.370	木麻黃	*Casuarina equisetifolia*	300	5	14	FELL	Fell	
3603	T0063	810073.800	817239.730	木麻黃	*Casuarina equisetifolia*	180	4	12	FELL	Fell	
3603	T0064	810072.440	817240.290	木麻黃	*Casuarina equisetifolia*	180	4	12	FELL	Fell	
3603	T0065	810072.360	817239.080	木麻黃	*Casuarina equisetifolia*	180	4	10	FELL	Fell	
3603	T0066	810070.180	817237.990	台灣相思	*Acacia confusa*	95	1	3	FELL	Fell	

Contracts	Tree ID	Easting	Northing	Chinese Name	*Latin Name*	Tree Measurement			Recommendation in LVP	Status as of end December 2020	Remarks
						DBH (mm)	Crown Spread (m)	Height (m)			
3603	T0067	810069.040	817237.080	台灣相思	*Acacia confusa*	95	1	2	FELL	Fell	
3603	T0068	810067.520	817234.480	木麻黃	*Casuarina equisetifolia*	140	4	12	FELL	Fell	
3603	T0069	810066.920	817235.680	木麻黃	*Casuarina equisetifolia*	220	4	14	FELL	Fell	
3603	T0070	810065.880	817234.540	木麻黃	*Casuarina equisetifolia*	220	4	14	FELL	Fell	
3801	CT1	811779.400	820047.420	洋紫荊	*Bauhinia x blakeana*	170	6	5	RETAIN	Not under 3RS contract works area	Confirmed not locate within 3RS works area. Removed as the land was acquired by the government for construction of temporary emergency hospital to handle COVID-19 pandemic in early Sep 2020.
3801	CT10	811778.996	820066.748	黃槿	*Hibiscus tiliaceus*	260	8	8	RETAIN	Not under 3RS contract works area	Confirmed not locate within 3RS works area. Removed as the land was acquired by the government for construction of temporary emergency hospital to handle COVID-19 pandemic in early Sep 2020.
3801	CT100	811708.059	820136.975	銀合歡	*Leucaena leucocephala*	170	8	12	FELL	Fell	
3801	CT1000	811607.372	820089.480	羊蹄甲屬	*Bauhinia spp.*	130	6	9	FELL	Fell	
3801	CT1001	811606.424	820089.670	紅膠木	*Lophostemon confertus*	170	5	10	FELL	Fell	
3801	CT1002	811609.506	820095.199	楝	*Melia azedarach*	300	9	13	FELL	Fell	
3801	CT1003	811607.877	820095.079	羊蹄甲屬	*Bauhinia spp.*	110	4	6	FELL	Fell	
3801	CT1004	811604.373	820092.891	台灣相思	*Acacia confusa*	200	7	11	FELL	Fell	
3801	CT1005	811603.943	820091.949	台灣相思	*Acacia confusa*	160	5	11	FELL	Fell	
3801	CT1006	811603.128	820090.076	台灣相思	*Acacia confusa*	286	9	14	FELL	Fell	
3801	CT1007	811603.031	820091.028	台灣相思	*Acacia confusa*	150	4	10	FELL	Fell	
3801	CT1008	811600.940	820091.174	台灣相思	*Acacia confusa*	140	5	11	FELL	Fell	
3801	CT1009	811601.456	820091.886	台灣相思	*Acacia confusa*	110	5	11	FELL	Fell	
3801	CT101	811709.156	820139.805	銀合歡	*Leucaena leucocephala*	130	6	11	FELL	Fell	
3801	CT1010	811600.653	820092.141	台灣相思	*Acacia confusa*	110	4	10	FELL	Fell	
3801	CT1011	811601.135	820093.077	台灣相思	*Acacia confusa*	240	7	12	FELL	Fell	
3801	CT1012	811601.878	820095.769	黃槿	*Hibiscus tiliaceus*	225	8	9	FELL	Fell	
3801	CT1013	811599.434	820095.420	大葉相思	*Acacia mangium*	190	5	11	FELL	Fell	
3801	CT1014	811598.990	820091.664	羊蹄甲屬	*Bauhinia spp.*	270	7	10	FELL	Fell	
3801	CT1015	811595.349	820090.995	大葉相思	*Acacia mangium*	220	6	13	FELL	Fell	
3801	CT1016	811593.924	820091.210	大葉相思	*Acacia mangium*	220	5	10	FELL	Fell	
3801	CT1017	811594.438	820091.634	大葉相思	*Acacia mangium*	270	6	12	FELL	Fell	
3801	CT1018	811594.056	820092.363	大葉相思	*Acacia mangium*	250	6	12	FELL	Fell	
3801	CT1019	811594.678	820094.767	台灣相思	*Acacia confusa*	160	6	11	FELL	Fell	
3801	CT102	811704.726	820142.180	台灣相思	*Acacia confusa*	150	6	10	FELL	Fell	
3801	CT1020	811593.529	820095.048	台灣相思	*Acacia confusa*	100	5	6	FELL	Fell	
3801	CT1021	811592.600	820095.118	台灣相思	*Acacia confusa*	110	6	8	FELL	Fell	
3801	CT1022	811591.996	820093.947	台灣相思	*Acacia confusa*	130	6	6	FELL	Fell	
3801	CT1023	811591.141	820093.820	台灣相思	*Acacia confusa*	200	7	11	FELL	Fell	
3801	CT1024	811590.773	820092.600	台灣相思	*Acacia confusa*	140	6	8	FELL	Fell	
3801	CT1025	811587.510	820091.877	楝	*Melia azedarach*	330	7	12	FELL	Fell	
3801	CT1026	811586.993	820091.341	台灣相思	*Acacia confusa*	130	7	6	FELL	Fell	

Contracts	Tree ID	Easting	Northing	Chinese Name	*Latin Name*	Tree Measurement			Recommendation in LVP	Status as of end December 2020	Remarks
						DBH (mm)	Crown Spread (m)	Height (m)			
3801	CT1027	811585.559	820091.233	台灣相思	*Acacia confusa*	320	8	11	FELL	Fell	
3801	CT1028	811585.686	820092.992	大葉相思	*Acacia mangium*	270	7	12	FELL	Fell	
3801	CT1029	811585.350	820094.412	大葉相思	*Acacia mangium*	260	6	10	FELL	Fell	
3801	CT103	811702.715	820142.816	台灣相思	*Acacia confusa*	140	7	12	FELL	Fell	
3801	CT1030	811583.754	820092.969	楝	*Melia azedarach*	210	6	11	FELL	Fell	
3801	CT1031	811583.108	820096.896	台灣相思	*Acacia confusa*	120	4	5	FELL	Fell	
3801	CT1032	811581.253	820091.932	紅膠木	*Lophostemon confertus*	180	5	10	FELL	Fell	
3801	CT1033	811580.528	820092.523	大葉相思	*Acacia mangium*	100	4	8	FELL	Fell	
3801	CT1034	811577.009	820091.211	羊蹄甲屬	*Bauhinia spp.*	100	6	6	FELL	Fell	
3801	CT1035	811576.435	820092.461	台灣相思	*Acacia confusa*	150	7	6	FELL	Fell	
3801	CT1036	811575.761	820090.461	羊蹄甲屬	*Bauhinia spp.*	170	9	11	FELL	Fell	
3801	CT1037	811576.526	820093.358	大葉相思	*Acacia mangium*	280	9	11	FELL	Fell	
3801	CT1038	811575.973	820093.172	台灣相思	*Acacia confusa*	110	7	7	FELL	Fell	
3801	CT1039	811575.124	820093.899	台灣相思	*Acacia confusa*	110	6	8	FELL	Fell	
3801	CT104	811701.026	820144.182	台灣相思	*Acacia confusa*	120	7	11	FELL	Fell	
3801	CT1040	811574.214	820093.757	台灣相思	*Acacia confusa*	205	6	11	FELL	Fell	
3801	CT1041	811574.478	820092.307	台灣相思	*Acacia confusa*	150	6	8	FELL	Fell	
3801	CT1042	811573.330	820091.987	台灣相思	*Acacia confusa*	130	5	8	FELL	Fell	
3801	CT1043	811572.789	820095.282	紅膠木	*Lophostemon confertus*	100	3	5	FELL	Fell	
3801	CT1044	811571.245	820095.114	紅膠木	*Lophostemon confertus*	195	5	12	FELL	Fell	
3801	CT1045	811568.545	820094.611	楝	*Melia azedarach*	280	10	12	FELL	Fell	
3801	CT1046	811566.727	820093.252	紅膠木	*Lophostemon confertus*	230	5	10	FELL	Fell	
3801	CT1047	811568.953	820091.315	楝	*Melia azedarach*	160	7	11	FELL	Fell	
3801	CT1048	811568.353	820091.045	紅膠木	*Lophostemon confertus*	110	4	10	FELL	Fell	
3801	CT1049	811567.019	820089.853	死樹	Dead tree	100	2	6	FELL	Fell	
3801	CT105	811699.745	820145.874	台灣相思	*Acacia confusa*	110	6	10	FELL	Fell	
3801	CT1050	811566.127	820091.444	羊蹄甲屬	*Bauhinia spp.*	130	5	10	FELL	Fell	
3801	CT1051	811565.009	820089.141	大葉相思	*Acacia mangium*	180	4	11	FELL	Fell	
3801	CT1052	811564.049	820090.051	羊蹄甲屬	*Bauhinia spp.*	190	6	11	FELL	Fell	
3801	CT1053	811563.228	820088.533	台灣相思	*Acacia confusa*	160	5	10	FELL	Fell	
3801	CT1054	811562.323	820088.771	台灣相思	*Acacia confusa*	190	6	9	FELL	Fell	
3801	CT1055	811561.331	820088.018	台灣相思	*Acacia confusa*	120	4	10	FELL	Fell	
3801	CT1056	811561.552	820087.052	台灣相思	*Acacia confusa*	120	3	10	FELL	Fell	
3801	CT1057	811564.132	820087.086	台灣相思	*Acacia confusa*	160	6	10	FELL	Fell	
3801	CT1058	811561.629	820085.749	台灣相思	*Acacia confusa*	150	5	11	FELL	Fell	
3801	CT1059	811559.710	820086.199	黃槿	*Hibiscus tiliaceus*	180	4	8	FELL	Fell	
3801	CT106	811699.102	820145.128	台灣相思	*Acacia confusa*	100	5	9	FELL	Fell	
3801	CT1060	811560.023	820085.072	黃槿	*Hibiscus tiliaceus*	180	5	10	FELL	Fell	
3801	CT1061	811559.064	820085.206	黃槿	*Hibiscus tiliaceus*	180	6	10	FELL	Fell	
3801	CT1062	811559.525	820084.247	黃槿	*Hibiscus tiliaceus*	130	5	10	FELL	Fell	
3801	CT1063	811559.921	820084.002	黃槿	*Hibiscus tiliaceus*	150	5	11	FELL	Fell	
3801	CT1064	811559.676	820083.576	死樹	Dead tree	190	4	10	FELL	Fell	

Contracts	Tree ID	Easting	Northing	Chinese Name	*Latin Name*	Tree Measurement			Recommendation in LVP	Status as of end December 2020	Remarks
						DBH (mm)	Crown Spread (m)	Height (m)			
3801	CT1065	811557.779	820082.453	紅膠木	*Lophostemon confertus*	130	4	10	FELL	Fell	
3801	CT1066	811559.947	820081.485	羊蹄甲屬	*Bauhinia spp.*	180	8	10	FELL	Fell	
3801	CT1067	811560.620	820080.298	羊蹄甲屬	*Bauhinia spp.*	110	6	6	FELL	Fell	
3801	CT1068	811559.103	820079.650	死樹	Dead tree	110	5	7	FELL	Fell	
3801	CT1069	811557.033	820074.486	大葉合歡	*Albizia lebbeck*	150	5	6	FELL	Fell	
3801	CT107	811699.198	820146.775	台灣相思	*Acacia confusa*	130	7	10	FELL	Fell	
3801	CT1070	811555.169	820069.753	黃槿	*Hibiscus tiliaceus*	110	5	5	FELL	Fell	
3801	CT1071	811555.400	820068.590	黃槿	*Hibiscus tiliaceus*	110	7	6	FELL	Fell	
3801	CT1072	811555.341	820068.535	黃槿	*Hibiscus tiliaceus*	100	4	8	FELL	Fell	
3801	CT1073	811553.969	820067.809	黃槿	*Hibiscus tiliaceus*	160	4	7	FELL	Fell	
3801	CT1074	811551.642	820068.428	羊蹄甲屬	*Bauhinia spp.*	130	3	6	FELL	Fell	
3801	CT1075	811550.499	820068.186	羊蹄甲屬	*Bauhinia spp.*	110	3	6	FELL	Fell	
3801	CT1076	811552.339	820064.925	黃槿	*Hibiscus tiliaceus*	180	5	8	FELL	Fell	
3801	CT1077	811551.714	820064.022	黃槿	*Hibiscus tiliaceus*	100	2	7	FELL	Fell	
3801	CT1078	811552.751	820064.019	黃槿	*Hibiscus tiliaceus*	120	5	7	FELL	Fell	
3801	CT1079	811553.933	820064.056	黃槿	*Hibiscus tiliaceus*	230	7	10	FELL	Fell	
3801	CT108	811695.784	820145.940	銀合歡	*Leucaena leucocephala*	122	7	11	FELL	Fell	
3801	CT1080	811553.922	820063.035	黃槿	*Hibiscus tiliaceus*	170	10	10	FELL	Fell	
3801	CT1081	811553.631	820062.288	黃槿	*Hibiscus tiliaceus*	170	6	10	FELL	Fell	
3801	CT1082	811552.391	820062.737	黃槿	*Hibiscus tiliaceus*	150	7	10	FELL	Fell	
3801	CT1083	811551.511	820061.720	台灣相思	*Acacia confusa*	150	5	10	FELL	Fell	
3801	CT1084	811551.307	820062.904	黃槿	*Hibiscus tiliaceus*	130	5	9	FELL	Fell	
3801	CT1085	811549.398	820063.355	黃槿	*Hibiscus tiliaceus*	140	6	8	FELL	Fell	
3801	CT1086	811549.346	820064.416	羊蹄甲屬	*Bauhinia spp.*	100	5	6	FELL	Fell	
3801	CT1087	811555.660	820057.850	羊蹄甲屬	*Bauhinia spp.*	120	6	7	FELL	Fell	
3801	CT1088	811548.880	820057.057	台灣相思	*Acacia confusa*	150	6	10	FELL	Fell	
3801	CT1089	811548.236	820055.579	黃槿	*Hibiscus tiliaceus*	130	7	9	FELL	Fell	
3801	CT109	811705.843	820144.767	台灣相思	*Acacia confusa*	120	9	8	FELL	Fell	
3801	CT1090	811547.480	820056.281	黃槿	*Hibiscus tiliaceus*	220	9	8	FELL	Fell	
3801	CT1091	811547.944	820054.095	黃槿	*Hibiscus tiliaceus*	130	6	9	FELL	Fell	
3801	CT1092	811547.965	820053.037	黃槿	*Hibiscus tiliaceus*	170	6	9	FELL	Fell	
3801	CT1093	811546.709	820054.670	黃槿	*Hibiscus tiliaceus*	120	6	9	FELL	Fell	
3801	CT1094	811545.351	820054.741	黃槿	*Hibiscus tiliaceus*	180	8	8	FELL	Fell	
3801	CT1095	811544.148	820054.496	黃槿	*Hibiscus tiliaceus*	270	10	9	FELL	Fell	
3801	CT1096	811545.917	820053.257	黃槿	*Hibiscus tiliaceus*	120	4	5	FELL	Fell	
3801	CT1097	811549.236	820052.378	台灣相思	*Acacia confusa*	190	5	10	FELL	Fell	
3801	CT1098	811549.193	820051.175	黃花夾竹桃	*Thevetia peruviana*	110	4	5	FELL	Fell	
3801	CT1099	811551.200	820051.622	台灣相思	*Acacia confusa*	110	5	9	FELL	Fell	
3801	CT110	811706.547	820144.347	台灣相思	*Acacia confusa*	140	6	6	FELL	Fell	
3801	CT1100	811554.902	820054.938	羊蹄甲屬	*Bauhinia spp.*	190	7	9	FELL	Fell	
3801	CT1101	811551.836	820050.553	台灣相思	*Acacia confusa*	190	4	7	FELL	Fell	
3801	CT1102	811551.922	820049.473	台灣相思	*Acacia confusa*	170	5	6	FELL	Fell	

Contracts	Tree ID	Easting	Northing	Chinese Name	*Latin Name*	Tree Measurement			Recommendation in LVP	Status as of end December 2020	Remarks
						DBH (mm)	Crown Spread (m)	Height (m)			
3801	CT1103	811559.421	820044.326	羊蹄甲屬	*Bauhinia spp.*	220	6	8	FELL	Fell	
3801	CT1104	811559.250	820046.366	楝	*Melia azedarach*	600	10	13	FELL	Fell	
3801	CT1105	811565.195	820043.652	大葉相思	*Acacia mangium*	290	8	13	FELL	Fell	
3801	CT1106	811566.393	820042.044	黃槿	*Hibiscus tiliaceus*	290	8	10	FELL	Fell	
3801	CT1107	811567.495	820042.292	黃槿	*Hibiscus tiliaceus*	130	7	7	FELL	Fell	
3801	CT1108	811568.062	820041.905	黃槿	*Hibiscus tiliaceus*	150	5	11	FELL	Fell	
3801	CT1109	811568.775	820041.524	黃槿	*Hibiscus tiliaceus*	150	6	10	FELL	Fell	
3801	CT111	811710.312	820144.229	銀合歡	*Leucaena leucocephala*	120	6	14	FELL	Fell	
3801	CT1110	811571.069	820040.143	台灣相思	*Acacia confusa*	260	8	15	FELL	Fell	
3801	CT1111	811571.879	820039.158	台灣相思	*Acacia confusa*	150	4	5	FELL	Fell	
3801	CT1112	811572.832	820038.796	台灣相思	*Acacia confusa*	180	7	7	FELL	Fell	
3801	CT1113	811574.389	820038.694	羊蹄甲屬	*Bauhinia spp.*	120	6	7	FELL	Fell	
3801	CT1114	811575.194	820037.855	大葉相思	*Acacia mangium*	240	5	15	FELL	Fell	
3801	CT1115	811576.128	820037.145	大葉相思	*Acacia mangium*	300	6	15	FELL	Fell	
3801	CT1116	811576.837	820037.461	大葉相思	*Acacia mangium*	180	4	14	FELL	Fell	
3801	CT1117	811578.856	820036.349	大葉相思	*Acacia mangium*	350	10	15	FELL	Fell	
3801	CT1118	811581.254	820035.240	大葉相思	*Acacia mangium*	320	6	12	FELL	Fell	
3801	CT1119	811581.266	820034.378	台灣相思	*Acacia confusa*	140	6	7	FELL	Fell	
3801	CT112	811709.264	820144.397	銀合歡	*Leucaena leucocephala*	130	7	13	FELL	Fell	
3801	CT1120	811582.400	820034.075	台灣相思	*Acacia confusa*	120	5	5	FELL	Fell	
3801	CT1121	811585.549	820033.011	台灣相思	*Acacia confusa*	180	7	8	FELL	Fell	
3801	CT1122	811586.315	820032.910	台灣相思	*Acacia confusa*	130	4	10	FELL	Fell	
3801	CT1123	811587.468	820033.300	台灣相思	*Acacia confusa*	150	5	10	FELL	Fell	
3801	CT1124	811587.897	820032.460	台灣相思	*Acacia confusa*	260	7	14	FELL	Fell	
3801	CT1125	811593.367	820031.377	台灣相思	*Acacia confusa*	160	6	7	FELL	Fell	
3801	CT1126	811594.803	820030.913	台灣相思	*Acacia confusa*	200	7	8	FELL	Fell	
3801	CT1127	811598.796	820029.958	大葉相思	*Acacia mangium*	310	8	14	FELL	Fell	
3801	CT1128	811599.528	820029.759	大葉相思	*Acacia mangium*	250	7	12	FELL	Fell	
3801	CT1129	811608.477	820029.014	濕地松	*Pinus elliottii*	100	3	5	FELL	Fell	
3801	CT113	811709.039	820146.496	台灣相思	*Acacia confusa*	130	7	9	FELL	Fell	
3801	CT1130	811609.126	820028.329	濕地松	*Pinus elliottii*	140	4	10	FELL	Fell	
3801	CT1131	811616.238	820030.840	台灣相思	*Acacia confusa*	140	7	7	FELL	Fell	
3801	CT1132	811616.308	820031.851	台灣相思	*Acacia confusa*	190	6	10	FELL	Fell	
3801	CT1133	811615.852	820033.203	台灣相思	*Acacia confusa*	220	8	13	FELL	Fell	
3801	CT1134	811616.563	820034.090	台灣相思	*Acacia confusa*	240	8	15	FELL	Fell	
3801	CT1135	811617.394	820032.983	台灣相思	*Acacia confusa*	170	6	11	FELL	Fell	
3801	CT1136	811618.703	820033.940	台灣相思	*Acacia confusa*	130	4	12	FELL	Fell	
3801	CT1137	811618.532	820032.164	台灣相思	*Acacia confusa*	240	7	15	FELL	Fell	
3801	CT1138	811618.342	820030.837	死樹	Dead tree	140	5	8	FELL	Fell	
3801	CT1139	811623.664	820032.115	黃槿	*Hibiscus tiliaceus*	100	4	6	FELL	Fell	
3801	CT114	811707.566	820147.036	台灣相思	*Acacia confusa*	120	6	8	FELL	Fell	
3801	CT1141	811626.059	820031.226	楝	*Melia azedarach*	350	10	16	FELL	Fell	

Contracts	Tree ID	Easting	Northing	Chinese Name	*Latin Name*	Tree Measurement			Recommendation in LVP	Status as of end December 2020	Remarks
						DBH (mm)	Crown Spread (m)	Height (m)			
3801	CT1142	811619.670	820038.156	大葉相思	*Acacia mangium*	154	4	9	FELL	Fell	
3801	CT1143	811620.477	820039.727	大葉相思	*Acacia mangium*	250	4	15	FELL	Fell	
3801	CT1144	811621.862	820039.024	大葉相思	*Acacia mangium*	110	2	7	FELL	Fell	
3801	CT1145	811621.406	820040.377	大葉相思	*Acacia mangium*	140	3	14	FELL	Fell	
3801	CT1146	811621.669	820040.969	大葉相思	*Acacia mangium*	220	4	15	FELL	Fell	
3801	CT1149	811619.755	820042.274	台灣相思	*Acacia confusa*	370	7	11	FELL	Fell	
3801	CT115	811707.393	820147.792	台灣相思	*Acacia confusa*	120	9	6	FELL	Fell	
3801	CT1152	811618.639	820047.981	羊蹄甲屬	*Bauhinia spp.*	110	5	7	FELL	Fell	
3801	CT1154	811622.603	820042.126	楝	*Melia azedarach*	270	8	16	FELL	Fell	
3801	CT1155	811624.929	820047.806	楝	*Melia azedarach*	350	7	16	FELL	Fell	
3801	CT1156	811626.882	820047.854	大葉相思	*Acacia mangium*	200	4	15	FELL	Fell	
3801	CT1157	811627.734	820047.406	大葉相思	*Acacia mangium*	210	4	15	FELL	Fell	
3801	CT1158	811625.486	820032.298	大葉相思	*Acacia mangium*	200	4	15	FELL	Fell	
3801	CT116	811706.347	820149.170	台灣相思	*Acacia confusa*	220	8	8	FELL	Fell	
3801	CT1164	811632.061	820041.410	大葉相思	*Acacia mangium*	560	8	15	FELL	Fell	
3801	CT1165	811634.854	820043.787	台灣相思	*Acacia confusa*	100	4	15	FELL	Fell	
3801	CT1166	811634.853	820045.135	台灣相思	*Acacia confusa*	260	5	15	FELL	Fell	
3801	CT1167	811635.727	820044.693	台灣相思	*Acacia confusa*	200	4	15	FELL	Fell	
3801	CT1168	811637.726	820042.463	台灣相思	*Acacia confusa*	220	8	15	FELL	Fell	
3801	CT1169	811638.538	820042.044	台灣相思	*Acacia confusa*	190	6	15	FELL	Fell	
3801	CT117	811707.663	820148.779	楝	*Melia azedarach*	110	5	9	FELL	Fell	
3801	CT1170	811640.857	820047.005	楝	*Melia azedarach*	260	5	16	FELL	Fell	
3801	CT1172	811635.452	820050.197	大葉相思	*Acacia mangium*	170	5	13	FELL	Fell	
3801	CT1174	811643.340	820044.909	楝	*Melia azedarach*	120	4	10	FELL	Fell	
3801	CT1175	811647.168	820048.671	大葉相思	*Acacia mangium*	180	3	16	FELL	Fell	
3801	CT1176	811646.197	820048.819	大葉相思	*Acacia mangium*	150	3	15	FELL	Fell	
3801	CT1177	811647.399	820049.684	大葉相思	*Acacia mangium*	210	4	16	FELL	Fell	
3801	CT1178	811646.640	820049.654	大葉相思	*Acacia mangium*	140	4	15	FELL	Fell	
3801	CT1179	811645.758	820050.287	大葉相思	*Acacia mangium*	180	4	15	FELL	Fell	
3801	CT118	811705.761	820150.826	銀合歡	*Leucaena leucocephala*	150	6	12	FELL	Fell	
3801	CT1180	811645.450	820049.221	大葉相思	*Acacia mangium*	210	4	16	FELL	Fell	
3801	CT1181	811643.271	820050.480	大葉相思	*Acacia mangium*	230	6	15	FELL	Fell	
3801	CT1183	811643.274	820052.950	大葉相思	*Acacia mangium*	200	4	15	FELL	Fell	
3801	CT1184	811642.496	820053.529	大葉相思	*Acacia mangium*	140	1	15	FELL	Fell	
3801	CT1185	811645.629	820052.199	大葉相思	*Acacia mangium*	230	5	16	FELL	Fell	
3801	CT1186	811646.430	820053.883	台灣相思	*Acacia confusa*	120	4	9	FELL	Fell	
3801	CT1187	811650.231	820052.131	紅膠木	*Lophostemon confertus*	110	4	9	FELL	Fell	
3801	CT1188	811651.140	820053.474	台灣相思	*Acacia confusa*	170	5	14	FELL	Fell	
3801	CT1189	811649.912	820055.087	台灣相思	*Acacia confusa*	110	3	13	FELL	Fell	
3801	CT119	811702.085	820153.875	銀合歡	*Leucaena leucocephala*	186	5	11	FELL	Fell	
3801	CT1190	811650.468	820060.683	台灣相思	*Acacia confusa*	220	5	15	FELL	Fell	
3801	CT1191	811652.187	820058.898	台灣相思	*Acacia confusa*	110	3	14	FELL	Fell	

Contracts	Tree ID	Easting	Northing	Chinese Name	*Latin Name*	Tree Measurement			Recommendation in LVP	Status as of end December 2020	Remarks
						DBH (mm)	Crown Spread (m)	Height (m)			
3801	CT1192	811654.182	820059.095	台灣相思	*Acacia confusa*	140	4	14	FELL	Fell	
3801	CT1193	811655.487	820060.236	台灣相思	*Acacia confusa*	110	3	13	FELL	Fell	
3801	CT1194	811656.468	820061.666	黃槿	*Hibiscus tiliaceus*	130	4	6	TRANSPLANT	Transplanted and removed eventually	Uprooted and collapsed due to Typhoon Higos on 18 August 2020. Tree removal was conducted as recommended by tree specialist of the contractor of Southern Landside Petrol Filing Station.
3801	CT1195	811658.884	820062.634	台灣相思	*Acacia confusa*	130	5	14	FELL	Fell	
3801	CT1196	811658.433	820059.086	台灣相思	*Acacia confusa*	190	5	13	FELL	Fell	
3801	CT1197	811663.043	820060.145	台灣相思	*Acacia confusa*	120	4	11	FELL	Fell	
3801	CT1198	811660.394	820060.711	台灣相思	*Acacia confusa*	110	4	14	FELL	Fell	
3801	CT1199	811662.340	820061.619	台灣相思	*Acacia confusa*	200	5	12	FELL	Fell	
3801	CT120	811702.188	820151.943	羊蹄甲屬	*Bauhinia spp.*	100	6	7	FELL	Fell	
3801	CT1200	811662.964	820061.084	台灣相思	*Acacia confusa*	140	4	11	FELL	Fell	
3801	CT1201	811664.458	820064.519	台灣相思	*Acacia confusa*	100	3	7	FELL	Fell	
3801	CT1202	811663.410	820064.703	台灣相思	*Acacia confusa*	100	4	8	FELL	Fell	
3801	CT1203	811665.251	820065.394	台灣相思	*Acacia confusa*	110	4	10	FELL	Fell	
3801	CT1204	811663.421	820065.990	台灣相思	*Acacia confusa*	140	5	9	FELL	Fell	
3801	CT1205	811666.248	820066.615	黃槿	*Hibiscus tiliaceus*	190	7	13	FELL	Fell	
3801	CT1206	811665.529	820068.028	台灣相思	*Acacia confusa*	140	4	14	FELL	Fell	
3801	CT1207	811662.625	820067.925	台灣相思	*Acacia confusa*	100	5	11	FELL	Fell	
3801	CT1208	811662.574	820067.142	台灣相思	*Acacia confusa*	180	5	11	FELL	Fell	
3801	CT1209	811661.430	820067.505	台灣相思	*Acacia confusa*	170	4	13	FELL	Fell	
3801	CT121	811697.537	820157.064	台灣相思	*Acacia confusa*	140	6	9	FELL	Fell	
3801	CT1210	811661.889	820068.614	台灣相思	*Acacia confusa*	170	4	13	FELL	Fell	
3801	CT1211	811660.773	820068.864	台灣相思	*Acacia confusa*	140	5	8	FELL	Fell	
3801	CT1212	811659.711	820068.287	台灣相思	*Acacia confusa*	100	5	7	FELL	Fell	
3801	CT1213	811660.620	820066.902	台灣相思	*Acacia confusa*	150	6	14	FELL	Fell	
3801	CT1214	811660.827	820066.009	台灣相思	*Acacia confusa*	120	4	10	FELL	Fell	
3801	CT1215	811661.478	820065.705	楝	*Melia azedarach*	350	8	15	FELL	Fell	
3801	CT1216	811658.891	820066.853	台灣相思	*Acacia confusa*	110	5	9	FELL	Fell	
3801	CT1217	811642.036	820069.080	黃槿	*Hibiscus tiliaceus*	170	7	7	FELL	Fell	
3801	CT122	811697.277	820156.280	台灣相思	*Acacia confusa*	122	6	6	FELL	Fell	
3801	CT1221	811651.082	820064.429	台灣相思	*Acacia confusa*	160	6	14	FELL	Fell	
3801	CT1222	811650.983	820063.225	台灣相思	*Acacia confusa*	110	4	14	FELL	Fell	
3801	CT1224	811649.110	820055.915	台灣相思	*Acacia confusa*	100	4	12	FELL	Fell	
3801	CT1225	811645.138	820057.496	紅膠木	*Lophostemon confertus*	130	4	11	FELL	Fell	
3801	CT1226	811646.680	820061.645	台灣相思	*Acacia confusa*	100	3	10	FELL	Fell	
3801	CT1227	811646.453	820065.996	台灣相思	*Acacia confusa*	140	5	10	FELL	Fell	
3801	CT123	811695.152	820152.291	銀合歡	*Leucaena leucocephala*	120	8	4	FELL	Fell	
3801	CT1230	811642.252	820065.051	大葉相思	*Acacia mangium*	300	5	15	FELL	Fell	
3801	CT1233	811641.814	820058.809	大葉相思	*Acacia mangium*	220	4	13	FELL	Fell	
3801	CT1234	811640.277	820056.745	大葉相思	*Acacia mangium*	490	5	11	FELL	Fell	
3801	CT1236	811637.069	820057.613	紅膠木	*Lophostemon confertus*	150	5	9	FELL	Fell	

Contracts	Tree ID	Easting	Northing	Chinese Name	*Latin Name*	Tree Measurement			Recommendation in LVP	Status as of end December 2020	Remarks
						DBH (mm)	Crown Spread (m)	Height (m)			
3801	CT1237	811636.263	820057.154	紅膠木	*Lophostemon confertus*	140	7	8	FELL	Fell	
3801	CT1239	811633.574	820054.150	台灣相思	*Acacia confusa*	140	4	12	FELL	Fell	
3801	CT124	811695.622	820158.091	大葉相思	*Acacia mangium*	140	4	11	FELL	Fell	
3801	CT1240	811633.596	820052.218	台灣相思	*Acacia confusa*	100	4	10	FELL	Fell	
3801	CT1241	811632.650	820052.715	台灣相思	*Acacia confusa*	100	4	9	FELL	Fell	
3801	CT1242	811631.635	820055.291	大葉相思	*Acacia mangium*	180	3	15	FELL	Fell	
3801	CT1244	811630.680	820052.887	大葉相思	*Acacia mangium*	260	3	16	FELL	Fell	
3801	CT1245	811628.597	820052.926	台灣相思	*Acacia confusa*	240	5	15	FELL	Fell	
3801	CT1247	811624.968	820052.652	楝	*Melia azedarach*	280	9	16	FELL	Fell	
3801	CT1248	811623.953	820053.506	楝	*Melia azedarach*	220	6	14	FELL	Fell	
3801	CT1249	811624.959	820054.452	黃槿	*Hibiscus tiliaceus*	150	5	13	FELL	Fell	
3801	CT125	811694.041	820158.993	台灣相思	*Acacia confusa*	110	5	9	FELL	Fell	
3801	CT1250	811623.931	820055.134	黃槿	*Hibiscus tiliaceus*	110	4	12	FELL	Fell	
3801	CT1251	811628.667	820058.672	台灣相思	*Acacia confusa*	180	4	15	FELL	Fell	
3801	CT1252	811627.483	820059.908	台灣相思	*Acacia confusa*	130	5	13	FELL	Fell	
3801	CT1253	811627.492	820062.194	羊蹄甲屬	*Bauhinia spp.*	110	5	10	TRANSPLANT	Transplanted	
3801	CT1254	811625.276	820062.024	台灣相思	*Acacia confusa*	130	4	14	FELL	Fell	
3801	CT1255	811625.053	820059.890	台灣相思	*Acacia confusa*	100	4	10	FELL	Fell	
3801	CT1256	811626.243	820059.254	台灣相思	*Acacia confusa*	100	2	14	FELL	Fell	
3801	CT1257	811626.096	820057.985	台灣相思	*Acacia confusa*	140	4	15	FELL	Fell	
3801	CT1258	811625.230	820058.734	台灣相思	*Acacia confusa*	190	6	15	FELL	Fell	
3801	CT1259	811623.876	820059.493	台灣相思	*Acacia confusa*	160	5	15	FELL	Fell	
3801	CT126	811694.133	820160.858	黃花夾竹桃	*Thevetia peruviana*	100	5	6	FELL	Fell	
3801	CT1260	811623.284	820059.999	台灣相思	*Acacia confusa*	100	4	11	FELL	Fell	
3801	CT1261	811621.412	820059.069	大葉相思	*Acacia mangium*	230	4	15	FELL	Fell	
3801	CT1262	811622.963	820057.720	台灣相思	*Acacia confusa*	150	3	15	FELL	Fell	
3801	CT1263	811622.836	820055.500	黃槿	*Hibiscus tiliaceus*	130	4	12	FELL	Fell	
3801	CT1264	811621.279	820056.564	台灣相思	*Acacia confusa*	100	5	8	FELL	Fell	
3801	CT1265	811619.348	820054.325	紅膠木	*Lophostemon confertus*	100	5	8	FELL	Fell	
3801	CT1266	811620.374	820057.219	大葉相思	*Acacia mangium*	120	1	6	FELL	Fell	
3801	CT1267	811619.655	820057.960	大葉相思	*Acacia mangium*	350	5	16	FELL	Fell	
3801	CT1268	811617.395	820058.807	楝	*Melia azedarach*	150	6	11	FELL	Fell	
3801	CT1269	811619.470	820058.930	大葉相思	*Acacia mangium*	130	1	11	FELL	Fell	
3801	CT127	811692.824	820160.944	大葉相思	*Acacia mangium*	220	6	12	FELL	Fell	
3801	CT1270	811619.393	820059.762	大葉相思	*Acacia mangium*	160	2	14	FELL	Fell	
3801	CT1271	811624.011	820062.722	台灣相思	*Acacia confusa*	180	3	15	FELL	Fell	
3801	CT1272	811622.316	820064.100	台灣相思	*Acacia confusa*	190	5	12	FELL	Fell	
3801	CT1273	811621.141	820063.192	台灣相思	*Acacia confusa*	170	3	11	FELL	Fell	
3801	CT1274	811618.461	820062.540	楝	*Melia azedarach*	280	6	15	FELL	Fell	
3801	CT1275	811618.213	820063.536	台灣相思	*Acacia confusa*	180	4	10	FELL	Fell	
3801	CT1276	811620.568	820065.793	台灣相思	*Acacia confusa*	260	6	11	FELL	Fell	
3801	CT1277	811615.659	820057.847	台灣相思	*Acacia confusa*	190	8	8	FELL	Fell	

Contracts	Tree ID	Easting	Northing	Chinese Name	*Latin Name*	Tree Measurement			Recommendation in LVP	Status as of end December 2020	Remarks
						DBH (mm)	Crown Spread (m)	Height (m)			
3801	CT1278	811614.812	820058.290	尾葉桉	*Eucalyptus urophylla*	450	8	20	FELL	Fell	
3801	CT128	811690.112	820162.537	大葉相思	*Acacia mangium*	330	7	15	FELL	Fell	
3801	CT1280	811613.313	820058.735	紅膠木	*Lophostemon confertus*	110	5	9	FELL	Fell	
3801	CT1281	811610.873	820058.940	大葉相思	*Acacia mangium*	360	7	16	FELL	Fell	
3801	CT1282	811610.668	820060.409	大葉相思	*Acacia mangium*	120	5	7	FELL	Fell	
3801	CT1283	811610.597	820062.377	大葉相思	*Acacia mangium*	230	4	16	FELL	Fell	
3801	CT1284	811607.665	820059.682	大葉相思	*Acacia mangium*	290	6	12	FELL	Fell	
3801	CT1285	811607.536	820060.925	大葉相思	*Acacia mangium*	220	4	15	FELL	Fell	
3801	CT1287	811608.440	820066.620	台灣相思	*Acacia confusa*	240	6	12	FELL	Fell	
3801	CT1288	811606.768	820069.493	大葉相思	*Acacia mangium*	250	5	12	FELL	Fell	
3801	CT1289	811605.304	820069.953	大葉相思	*Acacia mangium*	380	8	12	FELL	Fell	
3801	CT129	811690.358	820160.586	大葉相思	*Acacia mangium*	130	7	10	FELL	Fell	
3801	CT1290	811603.451	820068.775	大葉相思	*Acacia mangium*	320	8	15	FELL	Fell	
3801	CT1291	811605.452	820067.383	台灣相思	*Acacia confusa*	210	9	10	FELL	Fell	
3801	CT1292	811606.745	820067.803	台灣相思	*Acacia confusa*	250	5	15	FELL	Fell	
3801	CT1293	811606.717	820066.758	台灣相思	*Acacia confusa*	140	4	12	FELL	Fell	
3801	CT1294	811606.785	820066.146	台灣相思	*Acacia confusa*	100	4	7	FELL	Fell	
3801	CT1295	811606.498	820064.918	台灣相思	*Acacia confusa*	120	5	8	FELL	Fell	
3801	CT1296	811605.550	820065.321	台灣相思	*Acacia confusa*	100	6	8	FELL	Fell	
3801	CT1297	811604.589	820063.802	台灣相思	*Acacia confusa*	380	8	11	FELL	Fell	
3801	CT1298	811603.751	820063.459	台灣相思	*Acacia confusa*	140	5	4	FELL	Fell	
3801	CT130	811688.375	820158.488	台灣相思	*Acacia confusa*	120	4	11	FELL	Fell	
3801	CT1300	811618.362	820072.427	台灣相思	*Acacia confusa*	120	3	8	FELL	Fell	
3801	CT1302	811622.585	820065.226	台灣相思	*Acacia confusa*	150	5	11	FELL	Fell	
3801	CT1303	811626.904	820071.159	大葉相思	*Acacia mangium*	200	4	14	FELL	Fell	
3801	CT1306	811629.785	820070.348	大葉相思	*Acacia mangium*	160	3	14	FELL	Fell	
3801	CT1307	811628.994	820073.017	大葉相思	*Acacia mangium*	230	4	15	FELL	Fell	
3801	CT1308	811635.324	820073.108	大葉相思	*Acacia mangium*	120	4	14	FELL	Fell	
3801	CT1309	811635.673	820071.721	大葉相思	*Acacia mangium*	180	5	14	FELL	Fell	
3801	CT131	811693.742	820155.840	大葉相思	*Acacia mangium*	220	4	8	FELL	Fell	
3801	CT1311	811637.911	820070.255	大葉相思	*Acacia mangium*	300	5	15	FELL	Fell	
3801	CT1313	811639.084	820071.703	大葉相思	*Acacia mangium*	300	6	15	FELL	Fell	
3801	CT1314	811640.729	820070.597	大葉相思	*Acacia mangium*	150	2	8	FELL	Fell	
3801	CT1315	811639.819	820072.291	大葉相思	*Acacia mangium*	160	4	11	FELL	Fell	
3801	CT1316	811637.298	820075.442	台灣相思	*Acacia confusa*	170	4	14	FELL	Fell	
3801	CT1317	811636.247	820076.238	台灣相思	*Acacia confusa*	150	4	15	FELL	Fell	
3801	CT1319	811634.887	820077.749	台灣相思	*Acacia confusa*	120	5	10	FELL	Fell	
3801	CT132	811693.236	820155.279	大葉相思	*Acacia mangium*	140	3	11	FELL	Fell	
3801	CT1320	811632.856	820076.156	台灣相思	*Acacia confusa*	170	6	12	FELL	Fell	
3801	CT1321	811631.814	820077.456	台灣相思	*Acacia confusa*	130	2	10	FELL	Fell	
3801	CT1322	811630.009	820078.671	楝	*Melia azedarach*	270	5	14	FELL	Fell	
3801	CT1323	811622.014	820078.397	大葉相思	*Acacia mangium*	140	7	6	FELL	Fell	

Contracts	Tree ID	Easting	Northing	Chinese Name	*Latin Name*	Tree Measurement			Recommendation in LVP	Status as of end December 2020	Remarks
						DBH (mm)	Crown Spread (m)	Height (m)			
3801	CT1324	811621.603	820078.664	大葉相思	*Acacia mangium*	260	6	13	FELL	Fell	
3801	CT1325	811619.443	820079.972	大葉相思	*Acacia mangium*	140	6	10	FELL	Fell	
3801	CT1326	811620.325	820080.663	大葉相思	*Acacia mangium*	350	7	12	FELL	Fell	
3801	CT1327	811612.824	820086.555	旅人蕉	*Ravenala madagascariensis*	160	2	5	FELL	Fell	
3801	CT1328	811576.335	820054.894	台灣相思	*Acacia confusa*	440	12	9	FELL	Fell	
3801	CT1329	811615.419	820052.415	紅膠木	*Lophostemon confertus*	100	3	5	FELL	Fell	
3801	CT133	811691.916	820152.671	大葉相思	*Acacia mangium*	290	6	12	FELL	Fell	
3801	CT1334	811643.088	820040.639	大葉相思	*Acacia mangium*	300	5	14	FELL	Fell	
3801	CT1335	811643.238	820042.562	黃槿	*Hibiscus tiliaceus*	110	4	6	FELL	Fell	
3801	CT1336	811644.853	820044.200	大葉相思	*Acacia mangium*	150	2	10	FELL	Fell	
3801	CT1337	811645.467	820044.164	大葉相思	*Acacia mangium*	250	6	13	FELL	Fell	
3801	CT1338	811647.339	820045.445	大葉相思	*Acacia mangium*	310	5	14	FELL	Fell	
3801	CT1339	811647.985	820044.867	大葉相思	*Acacia mangium*	160	5	8	FELL	Fell	
3801	CT134	811691.325	820152.406	楝	*Melia azedarach*	280	7	12	FELL	Fell	
3801	CT1340	811647.847	820046.273	黃槿	*Hibiscus tiliaceus*	100	3	7	FELL	Fell	
3801	CT1342	811652.415	820044.718	死樹	Dead tree	230	4	7	FELL	Fell	
3801	CT1343	811650.168	820049.929	大葉相思	*Acacia mangium*	280	4	14	FELL	Fell	
3801	CT1344	811651.101	820051.318	大葉相思	*Acacia mangium*	230	3	12	FELL	Fell	
3801	CT1345	811651.687	820052.090	大葉相思	*Acacia mangium*	250	5	11	FELL	Fell	
3801	CT1346	811652.422	820052.719	大葉相思	*Acacia mangium*	100	4	6	FELL	Fell	
3801	CT1347	811660.138	820057.935	台灣相思	*Acacia confusa*	130	5	8	FELL	Fell	
3801	CT1348	811659.995	820058.726	台灣相思	*Acacia confusa*	200	4	10	FELL	Fell	
3801	CT135	811690.529	820151.936	楝	*Melia azedarach*	140	6	10	FELL	Fell	
3801	CT136	811689.178	820148.711	台灣相思	*Acacia confusa*	110	5	7	FELL	Fell	
3801	CT137	811688.138	820148.992	台灣相思	*Acacia confusa*	120	4	7	FELL	Fell	
3801	CT1373	811478.350	820107.230	楝	*Melia azedarach*	220	5	7	RETAIN	Retain	
3801	CT1375	811478.960	820112.150	台灣相思	*Acacia confusa*	130	3	5	RETAIN	Retain	
3801	CT1376	811479.940	820111.960	台灣相思	*Acacia confusa*	110	5	6	RETAIN	Retain	
3801	CT1378	811484.080	820113.450	台灣相思	*Acacia confusa*	180	5	6	RETAIN	Retain	
3801	CT1379	811484.940	820114.390	黃花夾竹桃	*Thevetia peruviana*	100	4	4	FELL	Fell	
3801	CT138	811686.644	820153.384	台灣相思	*Acacia confusa*	187	5	11	FELL	Fell	
3801	CT1380	811483.351	820116.098	楝	*Melia azedarach*	150	3	7	FELL	Fell	
3801	CT1381	811483.244	820117.593	楝	*Melia azedarach*	220	4	7	FELL	Fell	
3801	CT1382	811485.435	820117.488	黃槿	*Hibiscus tiliaceus*	130	4	6	FELL	Fell	
3801	CT1384	811485.550	820119.160	黃槿	*Hibiscus tiliaceus*	150	5	7	NA	Retain	The status updated to retain in Sep 2020.
3801	CT1385	811487.838	820119.829	紅膠木	*Lophostemon confertus*	100	4	6	RETAIN	Removed	Removed due to damage by typhoon Mangkhut (17 Sept 2018)
3801	CT1386	811491.045	820120.986	大葉相思	*Acacia mangium*	220	6	8	RETAIN	Removed	Removed due to damage by typhoon Mangkhut (17 Sept 2018)
3801	CT1387	811489.400	820123.200	大葉相思	*Acacia mangium*	160	4	9	RETAIN	Retain	
3801	CT1388	811489.950	820123.660	羊蹄甲屬	*Bauhinia spp.*	100	4	6	RETAIN	Retain	
3801	CT1389	811489.802	820124.525	大葉相思	*Acacia mangium*	230	4	7	RETAIN	Retain	
3801	CT139	811684.867	820154.505	台灣相思	*Acacia confusa*	142	6	11	FELL	Fell	

Contracts	Tree ID	Easting	Northing	Chinese Name	*Latin Name*	Tree Measurement			Recommendation in LVP	Status as of end December 2020	Remarks
						DBH (mm)	Crown Spread (m)	Height (m)			
3801	CT1390	811493.120	820127.530	台灣相思	*Acacia confusa*	160	7	6	RETAIN	Retain	
3801	CT1391	811493.560	820127.990	台灣相思	*Acacia confusa*	130	6	7	RETAIN	Retain	
3801	CT1392	811492.950	820129.490	台灣相思	*Acacia confusa*	120	6	6	RETAIN	Retain	
3801	CT1393	811495.560	820128.240	台灣相思	*Acacia confusa*	100	5	5	RETAIN	Retain	
3801	CT1394	811494.630	820129.660	台灣相思	*Acacia confusa*	150	3	8	RETAIN	Retain	
3801	CT1395	811494.440	820130.760	黃花夾竹桃	*Thevetia peruviana*	100	4	5	RETAIN	Retain	
3801	CT1396	811495.470	820130.990	黃花夾竹桃	*Thevetia peruviana*	110	5	5	RETAIN	Retain	
3801	CT1397	811499.890	820130.570	銀合歡	*Leucaena leucocephala*	190	6	9	RETAIN	Retain	
3801	CT1398	811504.913	820134.222	黃槿	*Hibiscus tiliaceus*	110	4	6	FELL	Fell	
3801	CT1399	811504.710	820133.380	台灣相思	*Acacia confusa*	100	4	5	RETAIN	Retain	
3801	CT140	811682.454	820154.147	台灣相思	*Acacia confusa*	220	7	10	FELL	Fell	
3801	CT1400	811504.540	820136.560	黃槿	*Hibiscus tiliaceus*	110	4	6	FELL	Removed	Removed due to damage by typhoon Mangkhut (17 Sept 2018)
3801	CT1401	811505.556	820136.879	黃槿	*Hibiscus tiliaceus*	100	4	6	FELL	Fell	
3801	CT1403	811509.950	820138.500	楝	*Melia azedarach*	130	5	7	RETAIN	Retain	
3801	CT1404	811510.430	820138.390	楝	*Melia azedarach*	110	4	6	RETAIN	Retain	
3801	CT1406	811515.030	820144.490	台灣相思	*Acacia confusa*	100	3	5	RETAIN	Retain	
3801	CT1407	811519.870	820152.010	台灣相思	*Acacia confusa*	120	5	5	FELL	Retain	The status updated to retain in Dec 2020.
3801	CT1408	811523.766	820156.346	台灣相思	*Acacia confusa*	110	4	7	FELL	Fell	
3801	CT1409	811524.439	820157.794	台灣相思	*Acacia confusa*	110	4	6	FELL	Fell	
3801	CT141	811685.461	820158.845	台灣相思	*Acacia confusa*	214	7	12	FELL	Fell	
3801	CT1410	811524.060	820160.860	黃花夾竹桃	*Thevetia peruviana*	100	5	5	RETAIN	Removed	Removed due to damage by typhoon Sinlaku (1 Aug 2020)
3801	CT1411	811523.190	820161.190	黃花夾竹桃	*Thevetia peruviana*	100	4	6	RETAIN	Retain	
3801	CT1412	811524.592	820161.933	紅膠木	*Lophostemon confertus*	260	5	12	RETAIN	Removed	Removed due to damage by typhoon Mangkhut (17 Sept 2018)
3801	CT1413	811527.230	820165.090	羊蹄甲屬	*Bauhinia spp.*	130	6	5	RETAIN	Retain	
3801	CT1414	811525.930	820164.220	羊蹄甲屬	*Bauhinia spp.*	160	6	6	RETAIN	Retain	
3801	CT1415	811524.080	820163.520	羊蹄甲屬	*Bauhinia spp.*	130	5	8	RETAIN	Retain	
3801	CT1416	811522.180	820161.470	羊蹄甲屬	*Bauhinia spp.*	110	6	6	RETAIN	Retain	
3801	CT1417	811521.180	820161.130	台灣相思	*Acacia confusa*	160	5	11	RETAIN	Retain	
3801	CT1418	811517.310	820159.920	黃槿	*Hibiscus tiliaceus*	230	8	10	RETAIN	Retain	
3801	CT1419	811512.250	820154.110	台灣相思	*Acacia confusa*	100	5	6	FELL	Removed	Removed due to damage by typhoon Sinlaku (1 Aug 2020)
3801	CT142	811681.989	820161.006	銀合歡	*Leucaena leucocephala*	100	3	13	FELL	Fell	
3801	CT1420	811510.520	820151.960	黃槿	*Hibiscus tiliaceus*	110	5	5	FELL	Removed	Removed due to damage by typhoon Sinlaku (1 Aug 2020)
3801	CT1421	811511.670	820153.020	台灣相思	*Acacia confusa*	100	2	7	FELL	Removed	Removed due to damage by typhoon Sinlaku (1 Aug 2020)
3801	CT1426	811488.407	820155.898	大葉相思	*Acacia mangium*	120	5	5	RETAIN	Retain	
3801	CT1427	811487.122	820155.523	大葉相思	*Acacia mangium*	410	8	15	RETAIN	Retain	
3801	CT1428	811486.052	820154.674	大葉相思	*Acacia mangium*	390	7	16	RETAIN	Retain	
3801	CT1429	811485.208	820154.697	潺槁樹	*Litsea glutinosa*	149	6	9	RETAIN	Retain	
3801	CT143	811679.461	820160.363	台灣相思	*Acacia confusa*	186	4	12	FELL	Fell	
3801	CT1430	811482.581	820152.646	黃槿	*Hibiscus tiliaceus*	180	8	14	FELL	Fell	
3801	CT1431	811484.712	820149.682	紅膠木	*Lophostemon confertus*	110	6	6	FELL	Fell	

Contracts	Tree ID	Easting	Northing	Chinese Name	*Latin Name*	Tree Measurement			Recommendation in LVP	Status as of end December 2020	Remarks
						DBH (mm)	Crown Spread (m)	Height (m)			
3801	CT1432	811486.363	820148.963	紅膠木	*Lophostemon confertus*	110	4	7	RETAIN	Retain	
3801	CT1433	811483.288	820147.865	大葉相思	*Acacia mangium*	280	5	13	RETAIN	Retain	
3801	CT1434	811484.933	820146.409	黃槿	*Hibiscus tiliaceus*	200	4	6	FELL	Fell	
3801	CT1435	811482.598	820145.589	大葉相思	*Acacia mangium*	180	3	6	FELL	Fell	
3801	CT1436	811478.942	820150.082	楝	*Melia azedarach*	100	6	8	FELL	Fell	
3801	CT1437	811476.562	820151.440	紅膠木	*Lophostemon confertus*	180	4	15	FELL	Fell	
3801	CT1438	811475.167	820151.343	紅膠木	*Lophostemon confertus*	149	5	14	FELL	Fell	
3801	CT1439	811476.251	820146.221	台灣相思	*Acacia confusa*	110	4	13	FELL	Fell	
3801	CT144	811678.506	820160.891	台灣相思	*Acacia confusa*	120	4	12	FELL	Fell	
3801	CT1440	811475.744	820145.599	台灣相思	*Acacia confusa*	240	6	15	FELL	Fell	
3801	CT1442	811468.820	820131.727	黃槿	*Hibiscus tiliaceus*	190	8	10	FELL	Fell	
3801	CT1443	811469.149	820123.608	黃槿	*Hibiscus tiliaceus*	160	6	9	RETAIN	Retain	
3801	CT1448	811464.061	820117.944	台灣相思	*Acacia confusa*	110	4	8	RETAIN	Retain	
3801	CT1449	811464.605	820117.022	台灣相思	*Acacia confusa*	110	3	8	RETAIN	Retain	
3801	CT145	811677.559	820161.263	台灣相思	*Acacia confusa*	120	7	11	FELL	Fell	
3801	CT1450	811463.188	820115.153	潺槁樹	*Litsea glutinosa*	100	5	7	RETAIN	Retain	
3801	CT1451	811462.516	820116.395	台灣相思	*Acacia confusa*	180	6	10	RETAIN	Retain	
3801	CT1452	811460.820	820118.492	大葉相思	*Acacia mangium*	250	5	13	FELL	Fell	
3801	CT1453	811457.301	820119.470	羊蹄甲屬	*Bauhinia spp.*	110	6	7	FELL	Fell	
3801	CT1454	811456.815	820122.820	細葉榕	*Ficus microcarpa*	140	4	5	FELL	Fell	
3801	CT1455	811449.865	820117.011	大葉相思	*Acacia mangium*	180	5	8	FELL	Fell	
3801	CT1456	811453.436	820115.681	黃槿	*Hibiscus tiliaceus*	100	5	8	FELL	Fell	
3801	CT1457	811453.633	820114.931	黃槿	*Hibiscus tiliaceus*	130	6	10	FELL	Fell	
3801	CT1458	811454.686	820114.537	黃槿	*Hibiscus tiliaceus*	160	5	10	FELL	Fell	
3801	CT1459	811456.069	820114.382	黃槿	*Hibiscus tiliaceus*	130	4	10	FELL	Fell	
3801	CT146	811677.850	820155.510	楝	*Melia azedarach*	360	14	12	FELL	Fell	
3801	CT1460	811454.371	820112.693	大葉相思	*Acacia mangium*	190	6	10	FELL	Fell	
3801	CT1461	811455.518	820112.302	大葉相思	*Acacia mangium*	150	5	11	FELL	Fell	
3801	CT1462	811455.842	820110.939	大葉相思	*Acacia mangium*	290	7	12	FELL	Retain	The status updated to retain in Sep 2020.
3801	CT1463	811457.807	820109.919	大葉相思	*Acacia mangium*	300	5	12	RETAIN	Retain	
3801	CT1464	811458.701	820109.731	台灣相思	*Acacia confusa*	120	5	10	RETAIN	Retain	
3801	CT1465	811459.544	820110.471	台灣相思	*Acacia confusa*	110	7	7	FELL	Fell	
3801	CT1466	811461.003	820109.928	台灣相思	*Acacia confusa*	120	4	10	RETAIN	Removed	Removed due to damage by typhoon Mangkhut (17 Sept 2018)
3801	CT1467	811459.548	820109.118	台灣相思	*Acacia confusa*	170	5	8	RETAIN	Retain	
3801	CT1469	811456.928	820104.333	黃槿	*Hibiscus tiliaceus*	190	8	11	FELL	Fell	
3801	CT147	811676.956	820157.021	銀合歡	*Leucaena leucocephala*	120	7	11	FELL	Fell	
3801	CT1470	811454.386	820104.735	大葉相思	*Acacia mangium*	350	7	15	FELL	Fell	
3801	CT1471	811450.719	820111.181	羊蹄甲屬	*Bauhinia spp.*	210	7	9	FELL	Fell	
3801	CT1472	811440.179	820139.344	台灣相思	*Acacia confusa*	340	7	14	FELL	Fell	
3801	CT1473	811441.608	820140.438	台灣相思	*Acacia confusa*	269	7	7	FELL	Fell	
3801	CT1474	811442.852	820140.406	大葉相思	*Acacia mangium*	260	5	10	FELL	Fell	
3801	CT1475	811443.547	820140.181	大葉相思	*Acacia mangium*	210	6	13	FELL	Fell	

Contracts	Tree ID	Easting	Northing	Chinese Name	*Latin Name*	Tree Measurement			Recommendation in LVP	Status as of end December 2020	Remarks
						DBH (mm)	Crown Spread (m)	Height (m)			
3801	CT1476	811444.064	820139.125	大葉相思	*Acacia mangium*	110	5	6	FELL	Fell	
3801	CT1477	811446.706	820140.094	大葉相思	*Acacia mangium*	350	8	15	FELL	Fell	
3801	CT1478	811446.402	820140.830	大葉相思	*Acacia mangium*	260	8	14	FELL	Fell	
3801	CT1479	811448.072	820142.206	紅膠木	*Lophostemon confertus*	150	5	10	FELL	Fell	
3801	CT148	811673.636	820157.351	台灣相思	*Acacia confusa*	110	6	10	FELL	Fell	
3801	CT1480	811449.306	820142.725	紅膠木	*Lophostemon confertus*	150	5	9	FELL	Fell	
3801	CT1481	811450.085	820140.740	紅膠木	*Lophostemon confertus*	110	4	10	FELL	Fell	
3801	CT1482	811450.558	820141.599	紅膠木	*Lophostemon confertus*	220	3	15	FELL	Fell	
3801	CT1483	811450.388	820132.627	黃槿	*Hibiscus tiliaceus*	254	8	10	FELL	Fell	
3801	CT1484	811451.668	820134.187	黃槿	*Hibiscus tiliaceus*	230	8	10	FELL	Fell	
3801	CT1485	811457.459	820129.115	細葉榕	*Ficus microcarpa*	140	5	7	FELL	Fell	
3801	CT1486	811463.072	820135.838	黃槿	*Hibiscus tiliaceus*	100	5	8	FELL	Fell	
3801	CT1487	811461.865	820136.852	黃槿	*Hibiscus tiliaceus*	170	8	11	FELL	Fell	
3801	CT1488	811461.273	820137.744	黃槿	*Hibiscus tiliaceus*	150	6	10	FELL	Fell	
3801	CT1489	811459.659	820137.312	台灣相思	*Acacia confusa*	100	5	10	FELL	Fell	
3801	CT149	811673.213	820158.776	台灣相思	*Acacia confusa*	158	7	10	FELL	Fell	
3801	CT1490	811453.169	820143.395	黃槿	*Hibiscus tiliaceus*	100	12	8	FELL	Fell	
3801	CT1491	811454.113	820142.348	黃槿	*Hibiscus tiliaceus*	200	7	13	FELL	Fell	
3801	CT1492	811454.555	820143.391	黃槿	*Hibiscus tiliaceus*	140	7	12	FELL	Fell	
3801	CT1493	811455.170	820144.072	黃槿	*Hibiscus tiliaceus*	130	6	8	FELL	Fell	
3801	CT1494	811455.622	820143.023	黃槿	*Hibiscus tiliaceus*	140	5	12	FELL	Fell	
3801	CT1495	811456.677	820144.407	黃槿	*Hibiscus tiliaceus*	320	12	14	FELL	Fell	
3801	CT1496	811458.068	820144.427	黃槿	*Hibiscus tiliaceus*	250	12	14	FELL	Fell	
3801	CT1497	811457.804	820142.600	黃槿	*Hibiscus tiliaceus*	170	8	10	FELL	Fell	
3801	CT1498	811459.400	820142.432	黃槿	*Hibiscus tiliaceus*	170	6	12	FELL	Fell	
3801	CT1499	811458.729	820145.511	大葉相思	*Acacia mangium*	200	6	15	FELL	Fell	
3801	CT150	811672.400	820158.169	台灣相思	*Acacia confusa*	100	5	11	FELL	Fell	
3801	CT1500	811460.064	820145.233	大葉相思	*Acacia mangium*	300	6	13	FELL	Fell	
3801	CT1501	811460.764	820146.292	大葉相思	*Acacia mangium*	170	5	11	FELL	Fell	
3801	CT1502	811464.165	820143.652	羊蹄甲屬	*Bauhinia spp.*	110	8	10	FELL	Fell	
3801	CT1503	811464.748	820144.361	羊蹄甲屬	*Bauhinia spp.*	180	8	15	FELL	Fell	
3801	CT1504	811464.766	820147.468	羊蹄甲屬	*Bauhinia spp.*	100	5	6	FELL	Fell	
3801	CT1505	811466.932	820146.691	台灣相思	*Acacia confusa*	150	3	15	FELL	Fell	
3801	CT1506	811467.327	820147.260	台灣相思	*Acacia confusa*	200	10	15	FELL	Fell	
3801	CT1507	811467.737	820146.199	台灣相思	*Acacia confusa*	180	6	15	FELL	Fell	
3801	CT1508	811469.768	820143.836	黃槿	*Hibiscus tiliaceus*	170	7	10	FELL	Fell	
3801	CT1509	811470.662	820146.178	黃槿	*Hibiscus tiliaceus*	120	7	7	FELL	Fell	
3801	CT151	811669.638	820159.704	台灣相思	*Acacia confusa*	184	7	10	FELL	Fell	
3801	CT1510	811468.988	820147.294	黃槿	*Hibiscus tiliaceus*	220	9	14	FELL	Fell	
3801	CT1511	811470.221	820147.208	黃槿	*Hibiscus tiliaceus*	230	8	13	FELL	Fell	
3801	CT1512	811470.411	820148.880	黃槿	*Hibiscus tiliaceus*	310	12	15	FELL	Fell	
3801	CT1513	811469.145	820149.581	黃槿	*Hibiscus tiliaceus*	140	7	12	FELL	Fell	

Contracts	Tree ID	Easting	Northing	Chinese Name	*Latin Name*	Tree Measurement			Recommendation in LVP	Status as of end December 2020	Remarks
						DBH (mm)	Crown Spread (m)	Height (m)			
3801	CT1514	811468.771	820148.627	黃槿	*Hibiscus tiliaceus*	230	8	15	FELL	Fell	
3801	CT1515	811445.192	820185.063	羊蹄甲屬	*Bauhinia spp.*	160	4	7	RETAIN	Retain	
3801	CT1516	811447.273	820185.038	羊蹄甲屬	*Bauhinia spp.*	120	4	6	RETAIN	Retain	
3801	CT1517	811449.007	820185.903	楝	*Melia azedarach*	140	5	5	RETAIN	Retain	
3801	CT1518	811502.864	820197.557	大葉相思	*Acacia mangium*	310	7	10	RETAIN	Retain	
3801	CT1519	811503.420	820197.576	大葉相思	*Acacia mangium*	150	5	8	RETAIN	Retain	
3801	CT152	811668.613	820159.904	台灣相思	*Acacia confusa*	140	6	10	FELL	Fell	
3801	CT1520	811503.390	820198.788	紅膠木	*Lophostemon confertus*	140	5	6	RETAIN	Retain	
3801	CT1521	811504.484	820198.881	紅膠木	*Lophostemon confertus*	110	5	5	RETAIN	Retain	
3801	CT1522	811507.675	820200.094	大葉相思	*Acacia mangium*	300	8	11	RETAIN	Retain	
3801	CT1523	811509.224	820197.715	台灣相思	*Acacia confusa*	480	10	10	RETAIN	Retain	
3801	CT1524	811512.232	820199.176	潺槁樹	*Litsea glutinosa*	340	8	7	RETAIN	Retain	
3801	CT1525	811524.855	820196.62	黃槿	*Hibiscus tiliaceus*	315	9	9	FELL	Fell	
3801	CT1526	811528.464	820197.931	潺槁樹	*Litsea glutinosa*	130	2	8	FELL	Fell	
3801	CT1527	811530.157	820202.241	台灣相思	*Acacia confusa*	190	8	9	FELL	Fell	
3801	CT1528	811531.456	820201.819	台灣相思	*Acacia confusa*	170	8	10	FELL	Fell	
3801	CT1529	811532.798	820201.518	台灣相思	*Acacia confusa*	230	6	11	FELL	Fell	
3801	CT153	811667.746	820163.081	台灣相思	*Acacia confusa*	120	5	10	FELL	Fell	
3801	CT1530	811533.631	820203.323	台灣相思	*Acacia confusa*	160	6	11	FELL	Fell	
3801	CT1531	811533.060	820203.957	台灣相思	*Acacia confusa*	120	7	12	FELL	Fell	
3801	CT1532	811528.736	820205.350	黃槿	*Hibiscus tiliaceus*	260	14	12	FELL	Fell	
3801	CT1533	811527.794	820205.283	黃槿	*Hibiscus tiliaceus*	256	7	11	FELL	Fell	
3801	CT1536	811529.440	820207.638	黃槿	*Hibiscus tiliaceus*	180	6	10	FELL	Fell	
3801	CT1537	811530.052	820215.424	黃槿	*Hibiscus tiliaceus*	343	8	10	FELL	Fell	
3801	CT1538	811531.053	820214.455	黃槿	*Hibiscus tiliaceus*	140	5	10	FELL	Fell	
3801	CT1539	811531.553	820215.492	黃槿	*Hibiscus tiliaceus*	312	9	10	FELL	Fell	
3801	CT154	811666.662	820162.647	台灣相思	*Acacia confusa*	140	7	12	FELL	Fell	
3801	CT1540	811533.317	820209.086	台灣相思	*Acacia confusa*	110	5	10	FELL	Fell	
3801	CT1541	811534.340	820209.244	台灣相思	*Acacia confusa*	130	5	11	FELL	Fell	
3801	CT1542	811535.438	820209.635	台灣相思	*Acacia confusa*	160	5	11	FELL	Fell	
3801	CT1543	811534.437	820208.264	台灣相思	*Acacia confusa*	350	11	14	FELL	Fell	
3801	CT1544	811541.329	820209.083	黃槿	*Hibiscus tiliaceus*	150	7	11	FELL	Fell	
3801	CT1545	811542.621	820209.510	黃槿	*Hibiscus tiliaceus*	100	7	7	FELL	Fell	
3801	CT1546	811542.151	820211.165	黃槿	*Hibiscus tiliaceus*	150	7	10	FELL	Fell	
3801	CT1547	811544.149	820211.673	台灣相思	*Acacia confusa*	190	7	13	FELL	Fell	
3801	CT1548	811544.413	820210.407	台灣相思	*Acacia confusa*	270	8	14	FELL	Fell	
3801	CT1549	811546.865	820211.707	大葉相思	*Acacia mangium*	170	5	11	FELL	Fell	
3801	CT155	811666.611	820163.807	台灣相思	*Acacia confusa*	100	6	6	FELL	Fell	
3801	CT1550	811546.747	820212.665	大葉相思	*Acacia mangium*	160	5	10	FELL	Fell	
3801	CT1551	811547.796	820215.863	羊蹄甲屬	*Bauhinia spp.*	100	5	5	FELL	Fell	
3801	CT1552	811545.487	820215.402	羊蹄甲屬	*Bauhinia spp.*	120	5	8	FELL	Fell	
3801	CT1553	811538.095	820217.971	大葉相思	*Acacia mangium*	160	4	9	FELL	Fell	

Contracts	Tree ID	Easting	Northing	Chinese Name	*Latin Name*	Tree Measurement			Recommendation in LVP	Status as of end December 2020	Remarks
						DBH (mm)	Crown Spread (m)	Height (m)			
3801	CT1554	811539.014	820218.602	大葉相思	*Acacia mangium*	100	4	7	FELL	Fell	
3801	CT1555	811539.321	820219.454	大葉相思	*Acacia mangium*	220	5	12	FELL	Fell	
3801	CT1556	811539.868	820218.663	大葉相思	*Acacia mangium*	290	6	13	FELL	Fell	
3801	CT1557	811540.921	820221.041	黃槿	*Hibiscus tiliaceus*	250	6	8	FELL	Fell	
3801	CT1558	811541.612	820218.749	大葉相思	*Acacia mangium*	280	6	11	FELL	Fell	
3801	CT1559	811542.978	820221.187	黃槿	*Hibiscus tiliaceus*	190	6	10	FELL	Fell	
3801	CT156	811665.051	820163.492	台灣相思	*Acacia confusa*	110	5	10	FELL	Fell	
3801	CT1560	811542.915	820222.447	黃槿	*Hibiscus tiliaceus*	180	5	10	FELL	Fell	
3801	CT1561	811544.355	820222.750	黃槿	*Hibiscus tiliaceus*	350	10	8	FELL	Fell	
3801	CT1562	811543.772	820221.872	黃槿	*Hibiscus tiliaceus*	100	5	9	FELL	Fell	
3801	CT1563	811547.428	820222.653	紅花夾竹桃	*Nerium indicum*	160	8	6	FELL	Fell	
3801	CT1564	811551.029	820225.987	大葉相思	*Acacia mangium*	180	4	9	FELL	Fell	
3801	CT1565	811552.028	820223.701	大葉相思	*Acacia mangium*	210	7	10	FELL	Fell	
3801	CT1566	811552.941	820224.343	大葉相思	*Acacia mangium*	330	8	11	FELL	Fell	
3801	CT1567	811553.772	820224.388	大葉相思	*Acacia mangium*	140	4	8	FELL	Fell	
3801	CT1568	811554.754	820216.516	紅膠木	*Lophostemon confertus*	160	3	9	FELL	Fell	
3801	CT1569	811554.812	820217.597	紅膠木	*Lophostemon confertus*	200	4	9	FELL	Fell	
3801	CT157	811664.319	820163.098	台灣相思	*Acacia confusa*	140	5	9	FELL	Fell	
3801	CT1570	811580.721	820232.601	濕地松	*Pinus elliottii*	140	4	7	FELL	Fell	
3801	CT1571	811582.050	820232.978	濕地松	*Pinus elliottii*	120	3	7	FELL	Fell	
3801	CT1572	811584.740	820234.111	濕地松	*Pinus elliottii*	100	2	6	FELL	Fell	
3801	CT158	811664.962	820164.489	台灣相思	*Acacia confusa*	140	7	10	FELL	Fell	
3801	CT159	811664.143	820165.097	台灣相思	*Acacia confusa*	158	7	9	FELL	Fell	
3801	CT161	811666.039	820169.281	銀合歡	*Leucaena leucocephala*	110	6	14	FELL	Fell	
3801	CT162	811668.833	820166.265	台灣相思	*Acacia confusa*	164	7	12	FELL	Fell	
3801	CT163	811669.172	820164.397	台灣相思	*Acacia confusa*	100	6	8	FELL	Fell	
3801	CT164	811669.899	820164.371	台灣相思	*Acacia confusa*	150	6	11	FELL	Fell	
3801	CT165	811677.860	820166.248	台灣相思	*Acacia confusa*	120	5	12	FELL	Fell	
3801	CT166	811677.983	820168.284	台灣相思	*Acacia confusa*	140	5	15	FELL	Fell	
3801	CT167	811677.161	820168.643	台灣相思	*Acacia confusa*	100	6	10	FELL	Fell	
3801	CT168	811675.424	820169.247	台灣相思	*Acacia confusa*	140	7	13	FELL	Fell	
3801	CT169	811686.062	820165.938	楝	*Melia azedarach*	210	7	14	FELL	Fell	
3801	CT170	811683.474	820167.147	大葉相思	*Acacia mangium*	210	7	15	FELL	Fell	
3801	CT171	811681.322	820169.796	大葉相思	*Acacia mangium*	190	6	12	FELL	Fell	
3801	CT172	811680.450	820169.984	黃花夾竹桃	*Thevetia peruviana*	110	5	8	FELL	Fell	
3801	CT173	811676.672	820172.436	台灣相思	*Acacia confusa*	180	9	16	FELL	Fell	
3801	CT176	811672.992	820174.377	台灣相思	*Acacia confusa*	210	7	16	FELL	Fell	
3801	CT177	811671.350	820175.099	台灣相思	*Acacia confusa*	140	6	16	FELL	Fell	
3801	CT178	811671.995	820172.922	羊蹄甲屬	*Bauhinia spp.*	110	7	9	FELL	Fell	
3801	CT179	811669.648	820173.002	台灣相思	*Acacia confusa*	170	6	14	FELL	Fell	

Contracts	Tree ID	Easting	Northing	Chinese Name	*Latin Name*	Tree Measurement			Recommendation in LVP	Status as of end December 2020	Remarks
						DBH (mm)	Crown Spread (m)	Height (m)			
3801	CT1792	811729.966	820235.793	小果皂莢	*Gleditsia australis*	95	3	5	RETAIN	Not under 3RS contract works area	Confirmed not locate within 3RS works area. Removed as the land was acquired by the government for construction of temporary emergency hospital to handle COVID-19 pandemic in early Sep 2020.
3801	CT1793	811729.532	820239.130	構樹	*Broussonetia papyrifera*	95	3	5	RETAIN	Not under 3RS contract works area	Confirmed not locate within 3RS works area. Removed as the land was acquired by the government for construction of temporary emergency hospital to handle COVID-19 pandemic in early Sep 2020.
3801	CT1794	811739.937	820208.692	洋紫荊	*Bauhinia x blakeana*	230	6	7	TRANSPLANT	Transplanted and removed eventually	The tree within the land parcel was acquired by the government for construction of emergency hospital to handle COVID19 pandemic at AsiaWorld-Expo. The tree was felled in late 2020.
3801	CT1795	811739.346	820213.489	洋紫荊	*Bauhinia x blakeana*	360	6	8	TRANSPLANT	Transplanted and removed eventually	The tree within the land parcel was acquired by the government for construction of emergency hospital to handle COVID19 pandemic at AsiaWorld-Expo. The tree was felled in late 2020.
3801	CT1797	811749.218	820235.896	洋紫荊	*Bauhinia x blakeana*	210	6	8	RETAIN	Not under 3RS contract works area	Confirmed not locate within 3RS works area. Removed as the land was acquired by the government for construction of temporary emergency hospital to handle COVID-19 pandemic in early Sep 2020.
3801	CT180	811666.364	820175.308	台灣相思	*Acacia confusa*	180	7	16	FELL	Fell	
3801	CT1802	811758.456	820248.276	洋紫荊	*Bauhinia x blakeana*	190	7	8	RETAIN	Not under 3RS contract works area	Confirmed not locate within 3RS works area. Removed as the land was acquired by the government for construction of temporary emergency hospital to handle COVID-19 pandemic in early Sep 2020.
3801	CT181	811665.456	820174.386	台灣相思	*Acacia confusa*	110	5	13	FELL	Fell	
3801	CT182	811660.177	820171.247	台灣相思	*Acacia confusa*	120	5	10	FELL	Fell	
3801	CT183	811658.475	820166.754	大葉相思	*Acacia mangium*	250	9	10	FELL	Fell	
3801	CT184	811657.574	820166.492	大葉相思	*Acacia mangium*	220	6	10	FELL	Fell	
3801	CT1843	811391.635	817613.111	細葉榕	*Ficus microcarpa*	310	3	6	RETAIN	Retain	
3801	CT1844	811380.606	817612.382	細葉榕	*Ficus microcarpa*	570	4	8	RETAIN	Retain	
3801	CT1845	811381.886	817624.303	細葉榕	*Ficus microcarpa*	520	4	7	RETAIN	Retain	
3801	CT1846	811382.300	817634.589	細葉榕	*Ficus microcarpa*	410	4	7	RETAIN	Retain	
3801	CT1847	811380.899	817640.183	細葉榕	*Ficus microcarpa*	590	4	6	RETAIN	Retain	
3801	CT1848	811378.905	817645.662	細葉榕	*Ficus microcarpa*	480	4	8	RETAIN	Retain	
3801	CT1849	811372.259	817656.310	細葉榕	*Ficus microcarpa*	320	4	7	RETAIN	Retain	
3801	CT185	811657.255	820165.399	大葉相思	*Acacia mangium*	230	6	10	FELL	Fell	
3801	CT1850	811363.127	817671.363	細葉榕	*Ficus microcarpa*	370	4	8	RETAIN	Retain	
3801	CT1851	811363.547	817681.440	細葉榕	*Ficus microcarpa*	450	4	8	RETAIN	Retain	
3801	CT1852	811359.624	817692.088	細葉榕	*Ficus microcarpa*	420	4	7	RETAIN	Retain	
3801	CT1853	811354.966	817706.226	細葉榕	*Ficus microcarpa*	380	3	7	RETAIN	Retain	
3801	CT1855	811343.868	817780.938	羊蹄甲屬	*Bauhinia* spp.	290	4	3	RETAIN	Retain	
3801	CT1856	811343.087	817775.999	藍花楹	*Jacaranda mimosifolia*	210	5	7	RETAIN	Retain	
3801	CT1857	811347.770	817768.980	羊蹄甲屬	*Bauhinia* spp.	280	7	6	RETAIN	Retain	

Contracts	Tree ID	Easting	Northing	Chinese Name	*Latin Name*	Tree Measurement			Recommendation in LVP	Status as of end December 2020	Remarks
						DBH (mm)	Crown Spread (m)	Height (m)			
3801	CT1859	811354.794	817740.366	羊蹄甲屬	*Bauhinia* spp.	230	4	7	RETAIN	Retain	
3801	CT186	811657.592	820164.354	大葉相思	*Acacia mangium*	150	5	9	FELL	Fell	
3801	CT1860	811356.875	817729.968	羊蹄甲屬	*Bauhinia* spp.	110	2	4	RETAIN	Retain	
3801	CT1861	811357.838	817726.588	銀合歡	*Leucaena leucocephala*	130	3	8	RETAIN	Retain	
3801	CT1862	811359.575	817718.314	羊蹄甲屬	*Bauhinia* spp.	180	4	7	RETAIN	Retain	
3801	CT1863	811357.122	817711.776	藍花楹	*Jacaranda mimosifolia*	120	1	4	RETAIN	Removed	Removed due to damage by typhoon Higos (18 Aug 2020)
3801	CT1865	811363.236	817705.666	羊蹄甲屬	*Bauhinia* spp.	240	3	8	RETAIN	Retain	
3801	CT1866	811364.495	817701.562	羊蹄甲屬	*Bauhinia* spp.	230	4	10	RETAIN	Retain	
3801	CT1867	811366.029	817697.454	羊蹄甲屬	*Bauhinia* spp.	270	5	7	RETAIN	Retain	
3801	CT1868	811367.453	817693.620	羊蹄甲屬	*Bauhinia* spp.	260	4	8	RETAIN	Retain	
3801	CT1869	811368.603	817689.845	羊蹄甲屬	*Bauhinia* spp.	280	4	7	RETAIN	Retain	
3801	CT187	811656.760	820166.104	大葉相思	*Acacia mangium*	120	5	7	FELL	Fell	
3801	CT1870	811367.667	817686.011	藍花楹	*Jacaranda mimosifolia*	160	4	8	RETAIN	Retain	
3801	CT1871	811371.082	817683.385	紅花羊蹄甲	*Bauhinia purpurea*	180	6	8	RETAIN	Retain	
3801	CT1872	811372.396	817679.098	紅花羊蹄甲	*Bauhinia purpurea*	220	4	8	RETAIN	Retain	
3801	CT1873	811373.915	817674.713	羊蹄甲屬	*Bauhinia* spp.	160	1	5	RETAIN	Retain	
3801	CT1874	811383.723	817650.311	洋紫荊	*Bauhinia x blakeana*	180	6	7	RETAIN	Retain	
3801	CT1876	811399.008	817618.562	羊蹄甲屬	*Bauhinia* spp.	230	4	8	RETAIN	Retain	
3801	CT1877	811402.845	817611.179	紅花羊蹄甲	*Bauhinia purpurea*	200	4	8	RETAIN	Retain	
3801	CT1878	811405.603	817606.686	紅花羊蹄甲	*Bauhinia purpurea*	240	5	8	RETAIN	Retain	
3801	CT188	811647.477	820168.303	台灣相思	*Acacia confusa*	130	7	10	FELL	Fell	
3801	CT1885	811353.834	817631.933	鐵刀木	*Senna siamea (syn. Cassia siamea)*	240	3	7	RETAIN	Retain	
3801	CT1886	811354.984	817636.267	鐵刀木	*Senna siamea (syn. Cassia siamea)*	260	4	10	RETAIN	Retain	
3801	CT1887	811355.580	817640.384	麻楝	*Chukrasia tabularis*	110	2	5	RETAIN	Retain	
3801	CT1888	811428.848	820134.355	細葉榕	*Ficus microcarpa*	300	6	8	RETAIN	Retain	
3801	CT1889	811422.128	820125.551	紅花羊蹄甲	*Bauhinia purpurea*	235	6	8	RETAIN	Not under 3RS contract works area	Confirmed not locate within 3RS works area.
3801	CT189	811648.680	820169.098	台灣相思	*Acacia confusa*	160	8	10	FELL	Fell	
3801	CT1890	811421.577	820124.746	楝	*Melia azedarach*	385	7	13	RETAIN	Not under 3RS contract works area	Confirmed not locate within 3RS works area.
3801	CT1891	811421.766	820122.939	台灣相思	*Acacia confusa*	110	4	7	FELL	Fell	
3801	CT1892	811418.941	820124.187	楝	*Melia azedarach*	345	7	13	RETAIN	Not under 3RS contract works area	Confirmed not locate within 3RS works area.
3801	CT1893	811418.558	820134.982	銀合歡	*Leucaena leucocephala*	160	6	10	FELL	Not under 3RS contract works area	Confirmed not locate within 3RS works area.
3801	CT1894	811415.941	820133.798	大王椰子	*Roystonea regia*	220	5	11	RETAIN	Not under 3RS contract works area	Confirmed not locate within 3RS works area.
3801	CT1895	811417.251	820121.145	紅花羊蹄甲	*Bauhinia purpurea*	115	4	9	FELL	Not under 3RS contract works area	Confirmed not locate within 3RS works area.
3801	CT1896	811418.101	820118.999	紅花羊蹄甲	*Bauhinia purpurea*	120	5	8	FELL	Not under 3RS contract works area	Confirmed not locate within 3RS works area.
3801	CT1897	811416.715	820123.334	楝	*Melia azedarach*	185	5	12	RETAIN	Not under 3RS contract works area	Confirmed not locate within 3RS works area.
3801	CT1898	811415.329	820120.520	台灣相思	*Acacia confusa*	170	6	10	RETAIN	Not under 3RS contract works area	Confirmed not locate within 3RS works area.
3801	CT1899	811413.121	820127.276	楝	*Melia azedarach*	190	6	11	RETAIN	Not under 3RS contract works area	Confirmed not locate within 3RS works area.

Contracts	Tree ID	Easting	Northing	Chinese Name	*Latin Name*	Tree Measurement			Recommendation in LVP	Status as of end December 2020	Remarks
						DBH (mm)	Crown Spread (m)	Height (m)			
3801	CT190	811646.837	820168.898	台灣相思	*Acacia confusa*	130	5	9	FELL	Fell	
3801	CT1900	811413.444	820132.697	銀合歡	*Leucaena leucocephala*	240	6	14	RETAIN	Not under 3RS contract works area	Confirmed not locate within 3RS works area.
3801	CT1901	811411.009	820131.884	銀合歡	*Leucaena leucocephala*	265	6	14	RETAIN	Not under 3RS contract works area	Confirmed not locate within 3RS works area.
3801	CT1902	811413.450	820119.803	台灣相思	*Acacia confusa*	115	4	9	RETAIN	Not under 3RS contract works area	Confirmed not locate within 3RS works area.
3801	CT1903	811412.345	820118.269	耳果相思	*Acacia auriculiformis*	200	6	14	FELL	Fell	
3801	CT1904	811409.703	820125.912	台灣相思	*Acacia confusa*	205	8	12	RETAIN	Not under 3RS contract works area	Confirmed not locate within 3RS works area.
3801	CT1905	811409.245	820130.943	銀合歡	*Leucaena leucocephala*	195	6	11	RETAIN	Not under 3RS contract works area	Confirmed not locate within 3RS works area.
3801	CT1906	811407.373	820130.892	銀合歡	*Leucaena leucocephala*	100	4	9	RETAIN	Not under 3RS contract works area	Confirmed not locate within 3RS works area.
3801	CT1907	811406.374	820130.186	銀合歡	*Leucaena leucocephala*	155	5	11	RETAIN	Not under 3RS contract works area	Confirmed not locate within 3RS works area.
3801	CT1908	811405.316	820130.175	銀合歡	*Leucaena leucocephala*	185	6	11	RETAIN	Not under 3RS contract works area	Confirmed not locate within 3RS works area.
3801	CT1909	811404.951	820130.043	銀合歡	*Leucaena leucocephala*	195	6	11	RETAIN	Not under 3RS contract works area	Confirmed not locate within 3RS works area.
3801	CT191	811645.828	820169.164	台灣相思	*Acacia confusa*	180	7	10	FELL	Fell	
3801	CT1910	811403.694	820129.600	銀合歡	*Leucaena leucocephala*	175	6	11	RETAIN	Not under 3RS contract works area	Confirmed not locate within 3RS works area.
3801	CT1911	811402.934	820129.352	銀合歡	*Leucaena leucocephala*	155	7	10	RETAIN	Not under 3RS contract works area	Confirmed not locate within 3RS works area.
3801	CT1912	811402.151	820129.015	銀合歡	*Leucaena leucocephala*	175	5	10	RETAIN	Not under 3RS contract works area	Confirmed not locate within 3RS works area.
3801	CT1913	811404.413	820126.414	楝	*Melia azedarach*	230	7	12	RETAIN	Not under 3RS contract works area	Confirmed not locate within 3RS works area.
3801	CT1914	811402.489	820125.698	大葉相思	*Acacia mangium*	265	7	12	RETAIN	Not under 3RS contract works area	Confirmed not locate within 3RS works area.
3801	CT1915	811410.772	820117.821	台灣相思	*Acacia confusa*	110	6	11	FELL	Fell	
3801	CT1916	811409.750	820118.537	台灣相思	*Acacia confusa*	120	5	6	FELL	Not under 3RS contract works area	Confirmed not locate within 3RS works area.
3801	CT1917	811407.774	820117.712	台灣相思	*Acacia confusa*	185	6	12	FELL	Not under 3RS contract works area	Confirmed not locate within 3RS works area.
3801	CT1918	811409.481	820113.127	羊蹄甲屬	*Bauhinia* spp.	110	6	8	FELL	Fell	
3801	CT1919	811411.271	820111.204	黃槿	*Hibiscus tiliaceus*	155	7	8	FELL	Fell	
3801	CT192	811644.947	820169.518	台灣相思	*Acacia confusa*	120	6	8	FELL	Fell	
3801	CT1920	811406.304	820113.529	紅膠木	*Lophostemon confertus*	160	5	11	FELL	Fell	
3801	CT1921	811405.857	820115.854	紅膠木	*Lophostemon confertus*	170	6	12	FELL	Fell	
3801	CT1922	811403.620	820113.931	台灣相思	*Acacia confusa*	110	1	11	FELL	Fell	
3801	CT1923	811403.396	820113.484	台灣相思	*Acacia confusa*	110	5	12	FELL	Fell	
3801	CT1924	811400.089	820111.096	黃槿	*Hibiscus tiliaceus*	145	4	8	FELL	Fell	
3801	CT1925	811399.866	820112.200	黃槿	*Hibiscus tiliaceus*	130	6	9	FELL	Fell	
3801	CT1926	811398.996	820112.052	黃槿	*Hibiscus tiliaceus*	115	6	9	FELL	Fell	
3801	CT1927	811399.271	820112.690	台灣相思	*Acacia confusa*	150	6	12	FELL	Fell	
3801	CT1928	811398.235	820112.583	台灣相思	*Acacia confusa*	170	5	12	FELL	Fell	
3801	CT1929	811396.943	820112.368	台灣相思	*Acacia confusa*	200	7	12	FELL	Fell	
3801	CT193	811643.239	820169.055	黃槿	*Hibiscus tiliaceus*	100	6	4	FELL	Fell	

Contracts	Tree ID	Easting	Northing	Chinese Name	*Latin Name*	Tree Measurement			Recommendation in LVP	Status as of end December 2020	Remarks
						DBH (mm)	Crown Spread (m)	Height (m)			
3801	CT1930	811397.720	820111.779	黃槿	*Hibiscus tiliaceus*	200	6	11	FELL	Fell	
3801	CT1931	811396.582	820111.552	黃槿	*Hibiscus tiliaceus*	210	6	11	FELL	Fell	
3801	CT1932	811395.944	820111.552	黃槿	*Hibiscus tiliaceus*	283	7	13	FELL	Fell	
3801	CT1933	811395.591	820124.989	銀合歡	*Leucaena leucocephala*	225	8	12	FELL	Not under 3RS contract works area	Confirmed not locate within 3RS works area.
3801	CT1934	811394.365	820126.533	大王椰子	*Roystonea regia*	195	3	7	FELL	Not under 3RS contract works area	Confirmed not locate within 3RS works area.
3801	CT1935	811391.775	820124.898	大王椰子	*Roystonea regia*	175	5	8	FELL	Not under 3RS contract works area	Confirmed not locate within 3RS works area.
3801	CT1936	811389.839	820117.859	羊蹄甲屬	*Bauhinia* spp.	105	5	11	RETAIN	Not under 3RS contract works area	Confirmed not locate within 3RS works area.
3801	CT1937	811389.384	820119.495	羊蹄甲屬	*Bauhinia* spp.	160	5	13	RETAIN	Not under 3RS contract works area	Confirmed not locate within 3RS works area.
3801	CT1938	811387.277	820125.171	大王椰子	*Roystonea regia*	295	7	13	FELL	Not under 3RS contract works area	Confirmed not locate within 3RS works area.
3801	CT1939	811385.278	820121.629	大王椰子	*Roystonea regia*	135	4	8	RETAIN	Not under 3RS contract works area	Confirmed not locate within 3RS works area.
3801	CT194	811647.099	820170.705	紅膠木	*Lophostemon confertus*	110	6	7	FELL	Fell	
3801	CT1940	811381.781	820121.993	大王椰子	*Roystonea regia*	280	5	13	RETAIN	Not under 3RS contract works area	Confirmed not locate within 3RS works area.
3801	CT1941	811379.316	820119.971	大王椰子	*Roystonea regia*	175	5	10	RETAIN	Not under 3RS contract works area	Confirmed not locate within 3RS works area.
3801	CT1942	811376.816	820119.971	大王椰子	*Roystonea regia*	280	4	11	RETAIN	Not under 3RS contract works area	Confirmed not locate within 3RS works area.
3801	CT1943	811386.611	820111.907	羊蹄甲屬	*Bauhinia* spp.	145	4	14	FELL	Not under 3RS contract works area	Confirmed not locate within 3RS works area.
3801	CT1944	811384.836	820108.993	羊蹄甲屬	*Bauhinia* spp.	125	3	8	FELL	Not under 3RS contract works area	Confirmed not locate within 3RS works area.
3801	CT1945	811383.257	820110.775	大葉相思	*Acacia mangium*	185	4	10	RETAIN	Not under 3RS contract works area	Confirmed not locate within 3RS works area.
3801	CT1946	811384.182	820112.194	大葉相思	*Acacia mangium*	190	6	12	RETAIN	Not under 3RS contract works area	Confirmed not locate within 3RS works area.
3801	CT1947	811380.318	820110.963	楝	*Melia azedarach*	365	8	12	RETAIN	Not under 3RS contract works area	Confirmed not locate within 3RS works area.
3801	CT1948	811379.908	820110.229	楝	*Melia azedarach*	250	7	11	FELL	Not under 3RS contract works area	Confirmed not locate within 3RS works area.
3801	CT1949	811381.211	820110.008	大葉相思	*Acacia mangium*	245	7	11	FELL	Not under 3RS contract works area	Confirmed not locate within 3RS works area.
3801	CT195	811648.907	820170.951	紅膠木	*Lophostemon confertus*	120	5	9	FELL	Fell	
3801	CT196	811656.047	820174.360	台灣相思	*Acacia confusa*	300	8	13	FELL	Fell	
3801	CT197	811658.662	820177.947	楝	*Melia azedarach*	230	7	13	FELL	Fell	
3801	CT198	811660.299	820178.993	台灣相思	*Acacia confusa*	130	6	10	FELL	Fell	
3801	CT199	811657.880	820179.319	台灣相思	*Acacia confusa*	130	5	13	FELL	Fell	
3801	CT200	811655.969	820178.959	台灣相思	*Acacia confusa*	100	3	10	FELL	Fell	
3801	CT201	811655.786	820180.102	耳果相思	*Acacia auriculiformis*	180	6	14	FELL	Fell	
3801	CT202	811652.113	820182.405	大葉相思	*Acacia mangium*	230	6	14	FELL	Fell	
3801	CT203	811650.822	820177.183	銀合歡	*Leucaena leucocephala*	110	5	12	FELL	Fell	
3801	CT204	811646.331	820176.852	台灣相思	*Acacia confusa*	150	7	11	FELL	Fell	
3801	CT205	811645.269	820177.900	台灣相思	*Acacia confusa*	120	7	13	FELL	Fell	
3801	CT206	811644.245	820178.156	台灣相思	*Acacia confusa*	170	8	15	FELL	Fell	

Contracts	Tree ID	Easting	Northing	Chinese Name	*Latin Name*	Tree Measurement			Recommendation in LVP	Status as of end December 2020	Remarks
						DBH (mm)	Crown Spread (m)	Height (m)			
3801	CT207	811644.127	820181.841	台灣相思	*Acacia confusa*	140	7	14	FELL	Fell	
3801	CT208	811647.929	820181.165	台灣相思	*Acacia confusa*	130	5	14	FELL	Fell	
3801	CT209	811648.879	820181.789	台灣相思	*Acacia confusa*	120	4	15	FELL	Fell	
3801	CT210	811646.912	820182.868	台灣相思	*Acacia confusa*	130	4	14	FELL	Fell	
3801	CT212	811645.445	820184.991	台灣相思	*Acacia confusa*	120	5	12	FELL	Fell	
3801	CT213	811645.095	820186.558	台灣相思	*Acacia confusa*	140	5	12	FELL	Fell	
3801	CT214	811643.149	820186.397	青果榕	*Ficus variegata*	220	8	15	FELL	Fell	
3801	CT217	811639.417	820188.072	台灣相思	*Acacia confusa*	170	6	11	FELL	Fell	
3801	CT218	811636.965	820188.049	台灣相思	*Acacia confusa*	150	5	11	FELL	Fell	
3801	CT219	811640.292	820184.068	台灣相思	*Acacia confusa*	140	5	12	FELL	Fell	
3801	CT220	811641.476	820182.823	台灣相思	*Acacia confusa*	120	6	13	FELL	Fell	
3801	CT221	811639.794	820181.531	台灣相思	*Acacia confusa*	130	6	13	FELL	Fell	
3801	CT222	811639.073	820180.793	台灣相思	*Acacia confusa*	112	5	13	FELL	Fell	
3801	CT223	811637.328	820181.255	台灣相思	*Acacia confusa*	130	7	12	FELL	Fell	
3801	CT224	811636.552	820182.481	台灣相思	*Acacia confusa*	180	8	12	FELL	Fell	
3801	CT225	811638.424	820179.225	台灣相思	*Acacia confusa*	249	8	12	FELL	Fell	
3801	CT226	811638.866	820172.737	紅膠木	*Lophostemon confertus*	120	5	9	FELL	Fell	
3801	CT227	811637.149	820173.115	紅膠木	*Lophostemon confertus*	110	4	8	FELL	Fell	
3801	CT228	811635.727	820172.814	台灣相思	*Acacia confusa*	160	7	10	FELL	Fell	
3801	CT229	811634.606	820175.087	黃槿	*Hibiscus tiliaceus*	110	5	7	FELL	Fell	
3801	CT230	811633.556	820175.201	黃槿	*Hibiscus tiliaceus*	100	5	6	FELL	Fell	
3801	CT231	811632.835	820174.508	紅膠木	*Lophostemon confertus*	110	7	6	FELL	Fell	
3801	CT232	811629.994	820175.478	紅膠木	*Lophostemon confertus*	100	4	5	FELL	Fell	
3801	CT233	811628.890	820172.596	楝	*Melia azedarach*	150	6	7	FELL	Fell	
3801	CT234	811627.992	820173.085	楝	*Melia azedarach*	130	5	8	FELL	Fell	
3801	CT235	811627.127	820173.390	台灣相思	*Acacia confusa*	120	4	8	FELL	Fell	
3801	CT236	811626.228	820173.720	台灣相思	*Acacia confusa*	160	7	9	FELL	Fell	
3801	CT237	811625.334	820174.019	台灣相思	*Acacia confusa*	261	8	10	FELL	Fell	
3801	CT238	811625.774	820175.690	台灣相思	*Acacia confusa*	130	6	9	FELL	Fell	
3801	CT239	811627.687	820175.277	台灣相思	*Acacia confusa*	140	5	9	FELL	Fell	
3801	CT240	811626.430	820178.005	大葉相思	*Acacia mangium*	140	2	10	FELL	Fell	
3801	CT241	811627.306	820178.934	大葉相思	*Acacia mangium*	200	4	10	FELL	Fell	
3801	CT242	811634.271	820182.916	死樹	Dead tree	100	6	4	FELL	Fell	
3801	CT243	811627.061	820182.529	楝	*Melia azedarach*	220	8	9	FELL	Fell	
3801	CT244	811625.027	820183.954	台灣相思	*Acacia confusa*	158	5	9	FELL	Fell	
3801	CT245	811623.381	820183.302	台灣相思	*Acacia confusa*	100	5	8	FELL	Fell	
3801	CT246	811622.449	820183.456	台灣相思	*Acacia confusa*	130	5	11	FELL	Fell	
3801	CT247	811622.881	820185.972	楝	*Melia azedarach*	260	9	10	FELL	Fell	
3801	CT248	811626.322	820187.588	台灣相思	*Acacia confusa*	130	6	11	FELL	Fell	
3801	CT249	811627.316	820187.632	台灣相思	*Acacia confusa*	140	6	12	FELL	Fell	

Contracts	Tree ID	Easting	Northing	Chinese Name	*Latin Name*	Tree Measurement			Recommendation in LVP	Status as of end December 2020	Remarks
						DBH (mm)	Crown Spread (m)	Height (m)			
3801	CT25	811765.890	820102.090	黃槿	*Hibiscus tiliaceus*	350	8	8	RETAIN	Not under 3RS contract works area	Confirmed not locate within 3RS works area. Removed as the land was acquired by the government for construction of temporary emergency hospital to handle COVID-19 pandemic in early Sep 2020.
3801	CT250	811626.093	820188.988	台灣相思	*Acacia confusa*	110	5	10	FELL	Fell	
3801	CT251	811628.441	820189.007	台灣相思	*Acacia confusa*	100	6	9	FELL	Fell	
3801	CT252	811629.038	820188.473	台灣相思	*Acacia confusa*	100	4	14	FELL	Fell	
3801	CT253	811628.994	820187.277	台灣相思	*Acacia confusa*	190	9	15	FELL	Fell	
3801	CT254	811634.744	820190.433	台灣相思	*Acacia confusa*	162	6	9	FELL	Fell	
3801	CT255	811627.857	820192.216	大葉相思	*Acacia mangium*	350	10	14	FELL	Fell	
3801	CT256	811620.891	820192.285	台灣相思	*Acacia confusa*	130	6	10	FELL	Fell	
3801	CT257	811620.248	820191.642	台灣相思	*Acacia confusa*	110	5	5	FELL	Fell	
3801	CT258	811618.360	820191.8	台灣相思	*Acacia confusa*	230	8	13	FELL	Fell	
3801	CT259	811616.201	820189.564	台灣相思	*Acacia confusa*	160	8	13	FELL	Fell	
3801	CT26	811762.970	820103.290	黃槿	*Hibiscus tiliaceus*	210	4	8	RETAIN	Not under 3RS contract works area	Confirmed not locate within 3RS works area. Removed as the land was acquired by the government for construction of temporary emergency hospital to handle COVID-19 pandemic in early Sep 2020.
3801	CT260	811617.578	820188.518	台灣相思	*Acacia confusa*	150	6	11	FELL	Fell	
3801	CT261	811616.667	820188.642	台灣相思	*Acacia confusa*	198	4	12	FELL	Fell	
3801	CT262	811616.286	820186.763	台灣相思	*Acacia confusa*	156	5	14	FELL	Fell	
3801	CT263	811615.407	820186.922	台灣相思	*Acacia confusa*	120	6	12	FELL	Fell	
3801	CT264	811612.672	820191.971	楝	*Melia azedarach*	220	7	10	FELL	Fell	
3801	CT265	811608.837	820192.214	黃槿	*Hibiscus tiliaceus*	130	9	8	FELL	Fell	
3801	CT266	811607.771	820192.352	黃槿	*Hibiscus tiliaceus*	110	7	9	FELL	Fell	
3801	CT267	811605.940	820196.44	台灣相思	*Acacia confusa*	180	10	9	FELL	Fell	
3801	CT268	811603.780	820194.29	耳果相思	*Acacia auriculiformis*	310	5	13	FELL	Fell	
3801	CT269	811603.510	820195.09	耳果相思	*Acacia auriculiformis*	249	5	13	FELL	Fell	
3801	CT27	811752.679	820070.061	台灣相思	*Acacia confusa*	120	6	5	FELL	Fell	
3801	CT270	811602.800	820202.900	台灣相思	*Acacia confusa*	156	6	10	FELL	Fell	
3801	CT271	811602.570	820204.130	台灣相思	*Acacia confusa*	177	8	10	FELL	Fell	
3801	CT272	811601.180	820204.200	台灣相思	*Acacia confusa*	177	8	10	FELL	Fell	
3801	CT273	811595.900	820198.76	楝	*Melia azedarach*	290	7	10	FELL	Fell	
3801	CT274	811596.800	820196.99	楝	*Melia azedarach*	160	6	9	FELL	Fell	
3801	CT275	811595.840	820197.14	楝	*Melia azedarach*	240	6	11	FELL	Fell	
3801	CT276	811595.260	820197.820	楝	*Melia azedarach*	100	5	5	TRANSPLANT	Transplanted	
3801	CT277	811593.710	820196.84	楝	*Melia azedarach*	240	7	11	FELL	Fell	
3801	CT278	811593.220	820197.56	台灣相思	*Acacia confusa*	100	4	4	FELL	Fell	
3801	CT279	811592.440	820195.41	大葉相思	*Acacia mangium*	470	8	15	FELL	Fell	
3801	CT28	811749.735	820076.922	台灣相思	*Acacia confusa*	110	6	10	FELL	Fell	
3801	CT280	811588.930	820194.17	楝	*Melia azedarach*	220	5	15	FELL	Fell	
3801	CT281	811590.545	820190.559	台灣相思	*Acacia confusa*	170	8	13	FELL	Fell	

Contracts	Tree ID	Easting	Northing	Chinese Name	*Latin Name*	Tree Measurement			Recommendation in LVP	Status as of end December 2020	Remarks
						DBH (mm)	Crown Spread (m)	Height (m)			
3801	CT282	811590.413	820189.831	台灣相思	*Acacia confusa*	110	4	4	FELL	Fell	
3801	CT283	811591.912	820189.888	台灣相思	*Acacia confusa*	130	8	13	FELL	Fell	
3801	CT284	811592.465	820190.999	台灣相思	*Acacia confusa*	150	6	14	FELL	Fell	
3801	CT285	811593.309	820192.003	台灣相思	*Acacia confusa*	170	6	14	FELL	Fell	
3801	CT286	811597.544	820189.239	楝	*Melia azedarach*	410	15	14	FELL	Fell	
3801	CT287	811598.413	820188.294	台灣相思	*Acacia confusa*	110	6	6	FELL	Fell	
3801	CT288	811599.048	820187.264	台灣相思	*Acacia confusa*	160	5	12	FELL	Fell	
3801	CT289	811599.833	820186.409	台灣相思	*Acacia confusa*	130	7	4	FELL	Fell	
3801	CT29	811748.524	820077.019	台灣相思	*Acacia confusa*	230	6	9	FELL	Fell	
3801	CT290	811600.576	820186.269	台灣相思	*Acacia confusa*	226	6	14	FELL	Fell	
3801	CT292	811602.567	820188.954	黃槿	*Hibiscus tiliaceus*	120	5	7	FELL	Fell	
3801	CT293	811610.278	820183.583	台灣相思	*Acacia confusa*	150	6	13	FELL	Fell	
3801	CT294	811610.664	820182.520	台灣相思	*Acacia confusa*	160	8	13	FELL	Fell	
3801	CT295	811613.009	820183.408	台灣相思	*Acacia confusa*	110	2	10	FELL	Fell	
3801	CT296	811615.405	820179.992	台灣相思	*Acacia confusa*	140	7	12	FELL	Fell	
3801	CT297	811616.217	820179.134	台灣相思	*Acacia confusa*	150	8	12	FELL	Fell	
3801	CT298	811618.344	820180.692	台灣相思	*Acacia confusa*	130	4	10	FELL	Fell	
3801	CT299	811618.669	820179.628	台灣相思	*Acacia confusa*	120	5	10	FELL	Fell	
3801	CT3	811777.300	820054.800	洋紫荊	*Bauhinia x blakeana*	117	8	6	RETAIN	Not under 3RS contract works area	Confirmed not locate within 3RS works area. Removed as the land was acquired by the government for construction of temporary emergency hospital to handle COVID-19 pandemic in early Sep 2020.
3801	CT30	811749.506	820077.887	台灣相思	*Acacia confusa*	180	5	9	FELL	Fell	
3801	CT300	811617.973	820179.118	台灣相思	*Acacia confusa*	222	7	10	FELL	Fell	
3801	CT301	811613.979	820174.946	台灣相思	*Acacia confusa*	120	4	7	FELL	Fell	
3801	CT302	811608.407	820175.061	潺槁樹	*Litsea glutinosa*	110	5	5	FELL	Fell	
3801	CT303	811606.791	820175.354	台灣相思	*Acacia confusa*	170	7	9	FELL	Fell	
3801	CT304	811605.578	820176.479	台灣相思	*Acacia confusa*	140	7	9	FELL	Fell	
3801	CT305	811607.000	820178.026	紅膠木	*Lophostemon confertus*	110	4	8	FELL	Fell	
3801	CT306	811608.708	820177.804	紅膠木	*Lophostemon confertus*	160	5	9	FELL	Fell	
3801	CT307	811609.093	820179.437	紅膠木	*Lophostemon confertus*	110	5	9	FELL	Fell	
3801	CT308	811609.490	820180.219	紅膠木	*Lophostemon confertus*	110	5	9	FELL	Fell	
3801	CT31	811751.161	820077.486	楝	*Melia azedarach*	180	6	7	FELL	Fell	
3801	CT310	811605.323	820181.508	黃槿	*Hibiscus tiliaceus*	110	5	8	FELL	Fell	
3801	CT311	811600.991	820178.702	台灣相思	*Acacia confusa*	180	8	12	FELL	Fell	
3801	CT312	811598.721	820180.011	羊蹄甲屬	*Bauhinia* spp.	100	4	5	FELL	Fell	
3801	CT313	811598.031	820178.956	楝	*Melia azedarach*	210	8	9	FELL	Fell	
3801	CT314	811598.059	820177.339	楝	*Melia azedarach*	200	8	7	FELL	Fell	
3801	CT315	811598.245	820175.703	大葉相思	*Acacia mangium*	180	8	9	FELL	Fell	
3801	CT316	811596.075	820176.511	台灣相思	*Acacia confusa*	100	4	5	FELL	Fell	
3801	CT317	811595.119	820180.506	台灣相思	*Acacia confusa*	120	5	10	FELL	Fell	
3801	CT318	811600.488	820183.166	大葉相思	*Acacia mangium*	120	10	4	FELL	Fell	

Contracts	Tree ID	Easting	Northing	Chinese Name	*Latin Name*	Tree Measurement			Recommendation in LVP	Status as of end December 2020	Remarks
						DBH (mm)	Crown Spread (m)	Height (m)			
3801	CT319	811589.055	820183.051	黃槿	*Hibiscus tiliaceus*	180	8	10	FELL	Fell	
3801	CT32	811750.827	820079.902	楝	*Melia azedarach*	230	6	11	FELL	Fell	
3801	CT320	811588.532	820181.949	黃槿	*Hibiscus tiliaceus*	100	5	5	FELL	Fell	
3801	CT321	811588.774	820183.646	黃槿	*Hibiscus tiliaceus*	120	5	10	FELL	Fell	
3801	CT322	811590.517	820183.644	台灣相思	*Acacia confusa*	100	4	9	FELL	Fell	
3801	CT323	811588.233	820186.440	台灣相思	*Acacia confusa*	140	4	12	FELL	Fell	
3801	CT324	811587.510	820186.455	台灣相思	*Acacia confusa*	170	6	12	FELL	Fell	
3801	CT325	811586.351	820186.221	台灣相思	*Acacia confusa*	160	8	12	FELL	Fell	
3801	CT326	811584.605	820185.869	台灣相思	*Acacia confusa*	100	7	11	FELL	Fell	
3801	CT327	811587.177	820184.553	台灣相思	*Acacia confusa*	100	5	9	FELL	Fell	
3801	CT328	811586.244	820184.265	台灣相思	*Acacia confusa*	130	6	14	FELL	Fell	
3801	CT329	811585.496	820184.249	台灣相思	*Acacia confusa*	100	4	12	FELL	Fell	
3801	CT33	811749.556	820079.688	楝	*Melia azedarach*	260	10	10	FELL	Fell	
3801	CT330	811586.581	820183.557	黃槿	*Hibiscus tiliaceus*	170	8	10	FELL	Fell	
3801	CT331	811587.165	820181.696	黃槿	*Hibiscus tiliaceus*	100	7	7	FELL	Fell	
3801	CT332	811583.918	820180.155	大葉相思	*Acacia mangium*	140	4	12	FELL	Fell	
3801	CT333	811584.895	820179.336	大葉相思	*Acacia mangium*	210	6	11	FELL	Fell	
3801	CT334	811581.583	820176.857	黃槿	*Hibiscus tiliaceus*	180	8	10	FELL	Fell	
3801	CT335	811580.963	820175.778	黃槿	*Hibiscus tiliaceus*	200	9	9	FELL	Fell	
3801	CT336	811579.604	820175.243	黃槿	*Hibiscus tiliaceus*	120	7	8	FELL	Fell	
3801	CT337	811577.501	820175.575	楝	*Melia azedarach*	180	7	10	FELL	Fell	
3801	CT338	811580.583	820180.042	紅膠木	*Lophostemon confertus*	100	4	10	FELL	Fell	
3801	CT339	811580.319	820182.740	台灣相思	*Acacia confusa*	140	7	11	FELL	Fell	
3801	CT34	811748.574	820079.676	台灣相思	*Acacia confusa*	170	6	9	FELL	Fell	
3801	CT340	811579.356	820183.553	台灣相思	*Acacia confusa*	110	7	5	FELL	Fell	
3801	CT341	811577.983	820182.648	台灣相思	*Acacia confusa*	150	8	12	FELL	Fell	
3801	CT342	811576.174	820181.160	耳果相思	*Acacia auriculiformis*	130	4	9	FELL	Fell	
3801	CT343	811580.652	820183.828	台灣相思	*Acacia confusa*	130	7	12	FELL	Fell	
3801	CT344	811579.769	820184.596	台灣相思	*Acacia confusa*	170	8	12	FELL	Fell	
3801	CT345	811579.003	820185.295	台灣相思	*Acacia confusa*	170	7	3	FELL	Fell	
3801	CT347	811571.962	820182.147	黃槿	*Hibiscus tiliaceus*	140	8	7	FELL	Fell	
3801	CT347A	811569.712	820181.571	黃槿	*Hibiscus tiliaceus*	110	7	8	FELL	Fell	
3801	CT348	811570.618	820176.739	黃槿	*Hibiscus tiliaceus*	120	5	5	FELL	Fell	
3801	CT348A	811570.306	820180.994	黃槿	*Hibiscus tiliaceus*	110	7	8	FELL	Fell	
3801	CT349	811571.688	820176.833	黃槿	*Hibiscus tiliaceus*	120	5	7	FELL	Fell	
3801	CT35	811747.949	820078.950	台灣相思	*Acacia confusa*	130	6	9	FELL	Fell	
3801	CT350	811571.441	820176.083	黃槿	*Hibiscus tiliaceus*	140	6	8	FELL	Fell	
3801	CT351	811572.443	820173.627	楝	*Melia azedarach*	180	6	9	FELL	Fell	
3801	CT352	811569.070	820173.973	紅膠木	*Lophostemon confertus*	120	5	8	FELL	Fell	
3801	CT353	811568.271	820174.479	紅膠木	*Lophostemon confertus*	180	8	13	FELL	Fell	
3801	CT354	811566.584	820173.781	台灣相思	*Acacia confusa*	130	8	14	FELL	Fell	
3801	CT355	811566.157	820174.421	台灣相思	*Acacia confusa*	160	7	14	FELL	Fell	

Contracts	Tree ID	Easting	Northing	Chinese Name	*Latin Name*	Tree Measurement			Recommendation in LVP	Status as of end December 2020	Remarks
						DBH (mm)	Crown Spread (m)	Height (m)			
3801	CT356	811565.050	820176.274	台灣相思	*Acacia confusa*	190	9	11	FELL	Fell	
3801	CT356A	811563.000	820174.348	黃花夾竹桃	*Thevetia peruviana*	120	5	5	FELL	Fell	
3801	CT357	811562.290	820169.075	黃槿	*Hibiscus tiliaceus*	100	7	5	FELL	Fell	
3801	CT358	811561.220	820169.530	黃槿	*Hibiscus tiliaceus*	130	6	6	FELL	Fell	
3801	CT359	811562.410	820166.168	黃槿	*Hibiscus tiliaceus*	180	7	9	FELL	Fell	
3801	CT36	811748.387	820082.323	台灣相思	*Acacia confusa*	110	6	7	FELL	Fell	
3801	CT360	811563.474	820167.774	黃槿	*Hibiscus tiliaceus*	100	5	4	FELL	Fell	
3801	CT361	811557.571	820164.222	黃槿	*Hibiscus tiliaceus*	200	9	10	FELL	Fell	
3801	CT362	811556.710	820163.534	黃槿	*Hibiscus tiliaceus*	170	8	9	FELL	Fell	
3801	CT363	811556.379	820166.009	台灣相思	*Acacia confusa*	150	7	11	FELL	Fell	
3801	CT364	811556.397	820169.840	黃槿	*Hibiscus tiliaceus*	170	7	10	FELL	Fell	
3801	CT365	811556.338	820170.816	黃槿	*Hibiscus tiliaceus*	230	10	10	FELL	Fell	
3801	CT366	811554.484	820168.727	黃槿	*Hibiscus tiliaceus*	110	4	7	FELL	Fell	
3801	CT369	811545.411	820159.783	台灣相思	*Acacia confusa*	120	7	7	FELL	Fell	
3801	CT369A	811546.329	820157.769	黃花夾竹桃	*Thevetia peruviana*	120	5	5	FELL	Fell	
3801	CT37	811750.258	820081.748	台灣相思	*Acacia confusa*	150	5	6	FELL	Fell	
3801	CT370	811539.719	820144.976	黃槿	*Hibiscus tiliaceus*	150	5	9	FELL	Fell	
3801	CT371	811540.311	820145.315	死樹	Dead tree	160	5	9	FELL	Fell	
3801	CT372	811542.162	820144.061	楝	*Melia azedarach*	170	8	12	FELL	Fell	
3801	CT373	811541.862	820141.012	楝	*Melia azedarach*	110	5	9	FELL	Fell	
3801	CT374	811541.995	820140.255	楝	*Melia azedarach*	150	5	9	FELL	Fell	
3801	CT375	811540.395	820138.731	台灣相思	*Acacia confusa*	140	7	10	FELL	Fell	
3801	CT376	811539.691	820138.373	台灣相思	*Acacia confusa*	100	2	4	FELL	Fell	
3801	CT377	811540.038	820137.499	台灣相思	*Acacia confusa*	140	5	13	FELL	Fell	
3801	CT378	811541.467	820138.117	台灣相思	*Acacia confusa*	160	6	10	FELL	Fell	
3801	CT379	811542.477	820136.790	台灣相思	*Acacia confusa*	130	7	9	FELL	Fell	
3801	CT37A	811749.695	820082.564	台灣相思	*Acacia confusa*	110	5	5	FELL	Fell	
3801	CT38	811747.748	820087.335	台灣相思	*Acacia confusa*	160	5	5	FELL	Fell	
3801	CT380	811541.016	820135.756	黃槿	*Hibiscus tiliaceus*	180	6	10	FELL	Fell	
3801	CT381	811541.415	820135.206	黃槿	*Hibiscus tiliaceus*	277	8	11	FELL	Fell	
3801	CT382	811544.472	820136.937	大葉相思	*Acacia mangium*	200	7	13	FELL	Fell	
3801	CT383	811545.009	820136.290	大葉相思	*Acacia mangium*	150	5	11	FELL	Fell	
3801	CT384	811546.860	820134.049	楝	*Melia azedarach*	130	8	5	FELL	Fell	
3801	CT385	811547.407	820133.621	楝	*Melia azedarach*	390	10	13	FELL	Fell	
3801	CT386	811545.164	820131.244	楝	*Melia azedarach*	210	6	14	FELL	Fell	
3801	CT387	811546.463	820129.222	黃槿	*Hibiscus tiliaceus*	220	6	9	FELL	Fell	
3801	CT388	811549.776	820127.886	台灣相思	*Acacia confusa*	130	4	8	FELL	Fell	
3801	CT389	811550.014	820127.527	楝	*Melia azedarach*	230	7	14	FELL	Fell	
3801	CT39	811746.892	820087.273	台灣相思	*Acacia confusa*	200	6	9	FELL	Fell	
3801	CT390	811550.829	820128.488	台灣相思	*Acacia confusa*	140	5	8	FELL	Fell	
3801	CT391	811551.538	820127.006	楝	*Melia azedarach*	110	4	9	FELL	Fell	
3801	CT392	811551.629	820128.109	台灣相思	*Acacia confusa*	260	9	15	FELL	Fell	

Contracts	Tree ID	Easting	Northing	Chinese Name	*Latin Name*	Tree Measurement			Recommendation in LVP	Status as of end December 2020	Remarks
						DBH (mm)	Crown Spread (m)	Height (m)			
3801	CT393	811552.278	820127.864	台灣相思	*Acacia confusa*	130	5	9	FELL	Fell	
3801	CT394	811554.501	820126.665	楝	*Melia azedarach*	190	6	15	FELL	Fell	
3801	CT395	811556.164	820124.991	楝	*Melia azedarach*	150	5	9	FELL	Fell	
3801	CT396	811558.887	820124.196	楝	*Melia azedarach*	250	7	15	FELL	Fell	
3801	CT397	811563.497	820122.778	台灣相思	*Acacia confusa*	160	7	10	FELL	Fell	
3801	CT398	811563.466	820124.198	台灣相思	*Acacia confusa*	140	6	7	FELL	Fell	
3801	CT399	811564.981	820123.600	台灣相思	*Acacia confusa*	140	6	10	FELL	Fell	
3801	CT4	811776.990	820058.030	洋紫荊	*Bauhinia x blakeana*	130	7	5	RETAIN	Not under 3RS contract works area	Confirmed not locate within 3RS works area. Removed as the land was acquired by the government for construction of temporary emergency hospital to handle COVID-19 pandemic in early Sep 2020.
3801	CT40	811744.787	820085.847	楝	*Melia azedarach*	240	7	8	FELL	Fell	
3801	CT400	811564.628	820124.241	台灣相思	*Acacia confusa*	130	6	9	FELL	Fell	
3801	CT401	811564.289	820125.226	台灣相思	*Acacia confusa*	150	9	13	FELL	Fell	
3801	CT402	811565.217	820125.175	台灣相思	*Acacia confusa*	100	5	8	FELL	Fell	
3801	CT403	811564.839	820126.036	台灣相思	*Acacia confusa*	120	5	12	FELL	Fell	
3801	CT404	811562.956	820127.747	黃花夾竹桃	*Thevetia peruviana*	117	4	7	FELL	Fell	
3801	CT405	811563.674	820127.654	黃花夾竹桃	*Thevetia peruviana*	100	3	9	FELL	Fell	
3801	CT406	811565.776	820126.154	台灣相思	*Acacia confusa*	140	7	12	FELL	Fell	
3801	CT407	811567.132	820127.264	黃花夾竹桃	*Thevetia peruviana*	136	4	9	FELL	Fell	
3801	CT408	811570.464	820127.440	黃花夾竹桃	*Thevetia peruviana*	146	3	7	FELL	Fell	
3801	CT409	811573.813	820127.057	大葉相思	*Acacia mangium*	310	8	15	FELL	Fell	
3801	CT41	811743.761	820089.377	楝	*Melia azedarach*	100	4	6	FELL	Fell	
3801	CT410	811574.436	820127.371	銀合歡	*Leucaena leucocephala*	100	6	13	FELL	Fell	
3801	CT411	811568.800	820121.917	大葉相思	*Acacia mangium*	160	8	14	FELL	Fell	
3801	CT412	811577.448	820126.902	大葉相思	*Acacia mangium*	230	7	14	FELL	Fell	
3801	CT413	811577.714	820127.244	大葉相思	*Acacia mangium*	140	5	15	FELL	Fell	
3801	CT414	811581.792	820124.546	紅膠木	*Lophostemon confertus*	120	5	9	FELL	Fell	
3801	CT415	811582.341	820125.869	羊蹄甲屬	*Bauhinia* spp.	130	7	9	FELL	Fell	
3801	CT416	811583.838	820126.617	楝	*Melia azedarach*	160	6	15	FELL	Fell	
3801	CT417	811584.964	820126.648	楝	*Melia azedarach*	150	6	12	FELL	Fell	
3801	CT418	811585.571	820126.089	台灣相思	*Acacia confusa*	150	8	5	FELL	Fell	
3801	CT419	811586.362	820126.210	台灣相思	*Acacia confusa*	140	9	13	FELL	Fell	
3801	CT42	811746.165	820089.613	台灣相思	*Acacia confusa*	170	5	7	FELL	Fell	
3801	CT420	811587.302	820126.117	台灣相思	*Acacia confusa*	170	5	11	FELL	Fell	
3801	CT421	811588.630	820126.027	台灣相思	*Acacia confusa*	150	8	12	FELL	Fell	
3801	CT422	811590.441	820126.009	台灣相思	*Acacia confusa*	150	9	12	FELL	Fell	
3801	CT423	811590.945	820126.389	台灣相思	*Acacia confusa*	190	10	11	FELL	Fell	
3801	CT424	811591.889	820125.298	台灣相思	*Acacia confusa*	100	5	6	FELL	Fell	
3801	CT425	811592.963	820124.931	台灣相思	*Acacia confusa*	110	4	6	FELL	Fell	
3801	CT426	811593.562	820125.921	台灣相思	*Acacia confusa*	160	10	14	FELL	Fell	
3801	CT427	811593.957	820125.913	死樹	Dead tree	170	8	12	FELL	Fell	

Contracts	Tree ID	Easting	Northing	Chinese Name	*Latin Name*	Tree Measurement			Recommendation in LVP	Status as of end December 2020	Remarks
						DBH (mm)	Crown Spread (m)	Height (m)			
3801	CT428	811594.525	820125.174	台灣相思	*Acacia confusa*	170	11	13	FELL	Fell	
3801	CT429	811599.937	820122.669	台灣相思	*Acacia confusa*	140	5	13	FELL	Fell	
3801	CT43	811742.235	820095.116	台灣相思	*Acacia confusa*	206	8	8	FELL	Fell	
3801	CT430	811604.440	820121.972	大葉相思	*Acacia mangium*	140	8	12	FELL	Fell	
3801	CT431	811605.429	820122.065	大葉相思	*Acacia mangium*	210	9	13	FELL	Fell	
3801	CT432	811606.256	820123.023	大葉相思	*Acacia mangium*	120	6	8	FELL	Fell	
3801	CT433	811606.493	820122.058	大葉相思	*Acacia mangium*	160	5	11	FELL	Fell	
3801	CT434	811607.521	820122.902	大葉相思	*Acacia mangium*	240	8	14	FELL	Fell	
3801	CT435	811609.123	820122.279	楝	*Melia azedarach*	230	6	14	FELL	Fell	
3801	CT436	811606.825	820126.286	羊蹄甲屬	*Bauhinia* spp.	130	7	8	FELL	Fell	
3801	CT437	811608.822	820125.772	羊蹄甲屬	*Bauhinia* spp.	150	9	8	FELL	Fell	
3801	CT438	811610.717	820125.653	羊蹄甲屬	*Bauhinia* spp.	120	5	10	FELL	Fell	
3801	CT439	811611.915	820122.181	楝	*Melia azedarach*	210	7	13	FELL	Fell	
3801	CT44	811742.018	820096.878	台灣相思	*Acacia confusa*	140	5	8	FELL	Fell	
3801	CT440	811616.465	820121.391	台灣相思	*Acacia confusa*	230	7	10	FELL	Fell	
3801	CT441	811618.568	820121.241	台灣相思	*Acacia confusa*	180	8	10	FELL	Fell	
3801	CT442	811619.682	820121.146	台灣相思	*Acacia confusa*	110	4	6	FELL	Fell	
3801	CT443	811623.012	820118.846	台灣相思	*Acacia confusa*	130	5	10	FELL	Fell	
3801	CT444	811624.418	820119.154	紅膠木	*Lophostemon confertus*	110	5	7	FELL	Fell	
3801	CT445	811621.031	820124.575	台灣相思	*Acacia confusa*	110	4	7	FELL	Fell	
3801	CT446	811622.188	820124.470	台灣相思	*Acacia confusa*	160	8	10	FELL	Fell	
3801	CT447	811625.011	820123.776	台灣相思	*Acacia confusa*	210	9	14	FELL	Fell	
3801	CT448	811625.935	820123.460	台灣相思	*Acacia confusa*	130	8	13	FELL	Fell	
3801	CT449	811626.961	820123.328	台灣相思	*Acacia confusa*	120	8	14	FELL	Fell	
3801	CT45	811740.882	820098.639	台灣相思	*Acacia confusa*	130	5	7	FELL	Fell	
3801	CT450	811627.752	820123.101	台灣相思	*Acacia confusa*	120	5	14	FELL	Fell	
3801	CT451	811628.511	820122.961	台灣相思	*Acacia confusa*	220	9	15	FELL	Fell	
3801	CT452	811630.122	820120.083	大葉相思	*Acacia mangium*	190	7	10	FELL	Fell	
3801	CT453	811636.933	820117.605	台灣相思	*Acacia confusa*	190	8	11	FELL	Fell	
3801	CT454	811637.853	820116.964	台灣相思	*Acacia confusa*	160	6	11	FELL	Fell	
3801	CT455	811640.899	820116.177	耳果相思	*Acacia auriculiformis*	280	7	15	FELL	Fell	
3801	CT456	811641.336	820116.099	大葉相思	*Acacia mangium*	190	5	12	FELL	Fell	
3801	CT457	811640.144	820117.408	大葉相思	*Acacia mangium*	190	7	13	FELL	Fell	
3801	CT458	811647.587	820116.440	羊蹄甲屬	*Bauhinia spp.*	120	6	7	FELL	Fell	
3801	CT459	811650.024	820113.891	大葉相思	*Acacia mangium*	320	8	15	FELL	Fell	
3801	CT46	811740.407	820098.008	台灣相思	*Acacia confusa*	170	6	9	FELL	Fell	
3801	CT460	811650.238	820112.821	台灣相思	*Acacia confusa*	200	6	8	FELL	Fell	
3801	CT461	811651.801	820112.943	大葉相思	*Acacia mangium*	230	6	13	FELL	Fell	
3801	CT462	811652.783	820110.938	台灣相思	*Acacia confusa*	170	2	5	FELL	Fell	
3801	CT463	811655.205	820111.821	台灣相思	*Acacia confusa*	130	10	12	FELL	Fell	
3801	CT464	811655.382	820110.962	台灣相思	*Acacia confusa*	100	5	5	FELL	Fell	
3801	CT465	811656.252	820110.739	台灣相思	*Acacia confusa*	150	7	12	FELL	Fell	

Contracts	Tree ID	Easting	Northing	Chinese Name	*Latin Name*	Tree Measurement			Recommendation in LVP	Status as of end December 2020	Remarks
						DBH (mm)	Crown Spread (m)	Height (m)			
3801	CT466	811658.259	820111.001	羊蹄甲屬	*Bauhinia* spp.	100	2	7	FELL	Fell	
3801	CT467	811657.594	820109.536	台灣相思	*Acacia confusa*	170	7	13	FELL	Fell	
3801	CT468	811663.670	820106.670	台灣相思	*Acacia confusa*	280	8	14	FELL	Fell	
3801	CT469	811664.861	820107.684	台灣相思	*Acacia confusa*	210	7	12	FELL	Fell	
3801	CT47	811739.809	820097.621	台灣相思	*Acacia confusa*	166	6	7	FELL	Fell	
3801	CT470	811668.850	820104.569	楝	*Melia azedarach*	190	8	15	FELL	Fell	
3801	CT471	811671.853	820101.349	紅膠木	*Lophostemon confertus*	190	8	10	FELL	Fell	
3801	CT472	811683.171	820096.999	大葉相思	*Acacia mangium*	300	8	14	FELL	Fell	
3801	CT473	811684.071	820095.415	台灣相思	*Acacia confusa*	190	8	15	FELL	Fell	
3801	CT474	811685.045	820093.647	台灣相思	*Acacia confusa*	170	7	15	FELL	Fell	
3801	CT475	811686.829	820095.120	潺槁樹	*Litsea glutinosa*	100	3	5	FELL	Fell	
3801	CT476	811687.830	820093.042	台灣相思	*Acacia confusa*	220	6	4	FELL	Fell	
3801	CT477	811688.458	820091.561	台灣相思	*Acacia confusa*	250	11	14	FELL	Fell	
3801	CT478	811689.519	820091.909	台灣相思	*Acacia confusa*	320	12	15	FELL	Fell	
3801	CT479	811689.985	820094.007	黃花夾竹桃	*Thevetia peruviana*	100	5	8	FELL	Fell	
3801	CT480	811691.131	820093.457	黃花夾竹桃	*Thevetia peruviana*	100	4	6	FELL	Fell	
3801	CT481	811691.718	820092.772	黃花夾竹桃	*Thevetia peruviana*	110	7	6	FELL	Fell	
3801	CT482	811691.930	820091.097	羊蹄甲屬	*Bauhinia spp.*	120	5	4	FELL	Fell	
3801	CT483	811692.459	820089.034	黃槿	*Hibiscus tiliaceus*	130	5	9	FELL	Fell	
3801	CT484	811694.017	820087.966	楝	*Melia azedarach*	270	5	16	FELL	Fell	
3801	CT485	811694.423	820087.391	台灣相思	*Acacia confusa*	130	5	9	FELL	Fell	
3801	CT486	811694.801	820088.751	羊蹄甲屬	*Bauhinia spp.*	130	8	6	FELL	Fell	
3801	CT487	811695.713	820089.786	楝	*Melia azedarach*	320	8	13	FELL	Fell	
3801	CT488	811697.804	820086.572	楝	*Melia azedarach*	280	9	11	FELL	Fell	
3801	CT489	811698.732	820085.742	大葉相思	*Acacia mangium*	150	5	9	FELL	Fell	
3801	CT490	811698.649	820085.337	大葉相思	*Acacia mangium*	480	10	15	FELL	Fell	
3801	CT491	811698.397	820084.309	大葉相思	*Acacia mangium*	310	8	14	FELL	Fell	
3801	CT492	811700.729	820082.547	大葉相思	*Acacia mangium*	110	2	8	FELL	Fell	
3801	CT493	811701.690	820083.460	大葉相思	*Acacia mangium*	140	5	8	FELL	Fell	
3801	CT494	811702.346	820082.617	大葉相思	*Acacia mangium*	230	8	14	FELL	Fell	
3801	CT495	811701.812	820081.676	大葉相思	*Acacia mangium*	280	7	13	FELL	Fell	
3801	CT496	811703.190	820082.497	大葉相思	*Acacia mangium*	170	6	13	FELL	Fell	
3801	CT497	811704.000	820081.022	台灣相思	*Acacia confusa*	110	3	6	FELL	Fell	
3801	CT498	811704.600	820080.461	台灣相思	*Acacia confusa*	160	7	12	FELL	Fell	
3801	CT499	811705.521	820079.793	台灣相思	*Acacia confusa*	120	5	13	FELL	Fell	
3801	CT5	811777.050	820062.150	黃槿	*Hibiscus tiliaceus*	350	10	9	RETAIN	Not under 3RS contract works area	Confirmed not locate within 3RS works area. Removed as the land was acquired by the government for construction of temporary emergency hospital to handle COVID-19 pandemic in early Sep 2020.
3801	CT50	811733.587	820104.750	羊蹄甲屬	*Bauhinia spp.*	130	5	5	FELL	Fell	
3801	CT500	811705.686	820078.834	台灣相思	*Acacia confusa*	150	2	6	FELL	Fell	
3801	CT501	811706.372	820081.647	台灣相思	*Acacia confusa*	226	7	12	FELL	Fell	

Contracts	Tree ID	Easting	Northing	Chinese Name	*Latin Name*	Tree Measurement			Recommendation in LVP	Status as of end December 2020	Remarks
						DBH (mm)	Crown Spread (m)	Height (m)			
3801	CT501A	811707.392	820080.549	台灣相思	*Acacia confusa*	110	6	10	FELL	Fell	
3801	CT502	811707.000	820079.000	台灣相思	*Acacia confusa*	140	5	11	FELL	Fell	
3801	CT503	811708.760	820077.670	台灣相思	*Acacia confusa*	227	8	13	FELL	Fell	
3801	CT504	811709.981	820078.056	台灣相思	*Acacia confusa*	110	6	13	FELL	Fell	
3801	CT505	811710.965	820077.751	台灣相思	*Acacia confusa*	184	8	15	FELL	Fell	
3801	CT506	811715.970	820073.136	黃槿	*Hibiscus tiliaceus*	178	6	10	FELL	Fell	
3801	CT507	811718.047	820071.040	黃槿	*Hibiscus tiliaceus*	110	7	6	FELL	Fell	
3801	CT508	811713.210	820072.231	台灣相思	*Acacia confusa*	120	5	10	FELL	Fell	
3801	CT509	811713.841	820072.123	台灣相思	*Acacia confusa*	156	5	10	FELL	Fell	
3801	CT51	811735.070	820106.072	大葉相思	*Acacia mangium*	140	3	6	FELL	Fell	
3801	CT510	811713.814	820071.502	台灣相思	*Acacia confusa*	120	5	9	FELL	Fell	
3801	CT511	811714.260	820071.228	台灣相思	*Acacia confusa*	100	5	11	FELL	Fell	
3801	CT512	811715.178	820070.421	台灣相思	*Acacia confusa*	180	5	12	FELL	Fell	
3801	CT513	811715.650	820070.497	台灣相思	*Acacia confusa*	230	8	12	FELL	Fell	
3801	CT514	811716.689	820069.425	台灣相思	*Acacia confusa*	110	5	8	FELL	Fell	
3801	CT515	811718.195	820067.333	大葉相思	*Acacia mangium*	180	6	12	FELL	Fell	
3801	CT516	811719.139	820067.499	大葉相思	*Acacia mangium*	270	9	13	FELL	Fell	
3801	CT517	811719.954	820065.740	大葉相思	*Acacia mangium*	110	2	11	FELL	Fell	
3801	CT518	811720.709	820065.931	大葉相思	*Acacia mangium*	150	4	12	FELL	Fell	
3801	CT519	811721.150	820064.339	大葉相思	*Acacia mangium*	100	2	7	FELL	Fell	
3801	CT52	811738.477	820108.984	銀合歡	*Leucaena leucocephala*	140	6	9	FELL	Fell	
3801	CT520	811722.188	820064.339	大葉相思	*Acacia mangium*	160	4	10	FELL	Fell	
3801	CT521	811721.725	820063.689	大葉相思	*Acacia mangium*	190	5	12	FELL	Fell	
3801	CT522	811723.744	820061.349	台灣相思	*Acacia confusa*	100	2	5	FELL	Fell	
3801	CT523	811725.635	820061.600	台灣相思	*Acacia confusa*	160	6	9	FELL	Fell	
3801	CT524	811726.999	820061.395	楝	*Melia azedarach*	260	7	10	FELL	Fell	
3801	CT525	811726.418	820059.608	紅膠木	*Lophostemon confertus*	120	3	5	FELL	Fell	
3801	CT526	811727.427	820059.515	台灣相思	*Acacia confusa*	130	4	7	FELL	Fell	
3801	CT528	811727.783	820058.111	台灣相思	*Acacia confusa*	180	8	12	FELL	Fell	
3801	CT529	811728.910	820058.908	楝	*Melia azedarach*	220	5	12	FELL	Fell	
3801	CT53	811736.538	820109.681	大葉相思	*Acacia mangium*	160	4	9	FELL	Fell	
3801	CT532	811731.196	820053.918	大葉相思	*Acacia mangium*	120	5	9	FELL	Fell	
3801	CT533	811732.426	820053.158	大葉相思	*Acacia mangium*	100	5	9	FELL	Fell	
3801	CT534	811733.116	820053.205	大葉相思	*Acacia mangium*	250	6	12	FELL	Fell	
3801	CT535	811734.510	820051.640	大葉相思	*Acacia mangium*	170	6	11	FELL	Fell	
3801	CT536	811733.249	820050.840	大葉相思	*Acacia mangium*	190	5	10	FELL	Fell	
3801	CT537	811737.093	820047.748	黃槿	*Hibiscus tiliaceus*	130	6	8	FELL	Fell	
3801	CT538	811737.978	820045.486	大葉相思	*Acacia mangium*	260	9	12	FELL	Fell	
3801	CT539	811740.969	820044.556	耳果相思	*Acacia auriculiformis*	100	5	9	FELL	Fell	
3801	CT54	811735.914	820110.362	大葉相思	*Acacia mangium*	100	4	6	FELL	Fell	
3801	CT540	811741.432	820040.669	台灣相思	*Acacia confusa*	200	10	10	FELL	Fell	
3801	CT541	811743.035	820039.490	台灣相思	*Acacia confusa*	160	6	10	FELL	Fell	

Contracts	Tree ID	Easting	Northing	Chinese Name	*Latin Name*	Tree Measurement			Recommendation in LVP	Status as of end December 2020	Remarks
						DBH (mm)	Crown Spread (m)	Height (m)			
3801	CT542	811743.432	820038.589	台灣相思	*Acacia confusa*	180	7	11	FELL	Fell	
3801	CT543	811742.825	820038.029	台灣相思	*Acacia confusa*	230	8	11	FELL	Fell	
3801	CT544	811743.665	820037.876	台灣相思	*Acacia confusa*	190	7	10	FELL	Fell	
3801	CT545	811739.268	820049.919	潺槁樹	*Litsea glutinosa*	150	5	6	FELL	Fell	
3801	CT546	811741.343	820056.363	台灣相思	*Acacia confusa*	120	5	7	FELL	Fell	
3801	CT547	811732.375	820058.426	潺槁樹	*Litsea glutinosa*	140	5	6	FELL	Fell	
3801	CT548	811722.478	820073.696	楝	*Melia azedarach*	310	8	11	FELL	Fell	
3801	CT549	811716.561	820079.409	楝	*Melia azedarach*	260	8	12	FELL	Fell	
3801	CT55	811736.649	820111.144	大葉相思	*Acacia mangium*	280	5	11	FELL	Fell	
3801	CT555	811695.021	820105.536	銀合歡	*Leucaena leucocephala*	162	4	12	FELL	Fell	
3801	CT556	811693.206	820106.820	銀合歡	*Leucaena leucocephala*	162	6	13	FELL	Fell	
3801	CT557	811685.459	820100.681	死樹	Dead tree	200	3	5	FELL	Fell	
3801	CT558	811684.391	820104.330	死樹	Dead tree	170	3	4	FELL	Fell	
3801	CT559	811684.993	820106.267	銀合歡	*Leucaena leucocephala*	135	6	14	FELL	Fell	
3801	CT56	811734.516	820113.249	紅膠木	*Lophostemon confertus*	110	4	5	FELL	Fell	
3801	CT561	811684.815	820110.600	銀合歡	*Leucaena leucocephala*	232	8	14	FELL	Fell	
3801	CT562	811682.641	820110.503	椰子	*Cocos nucifera*	190	4	5	FELL	Fell	
3801	CT563	811682.432	820118.340	楝	*Melia azedarach*	170	10	14	FELL	Fell	
3801	CT564	811677.881	820117.771	黃花夾竹桃	*Thevetia peruviana*	110	3	4	FELL	Fell	
3801	CT565	811680.359	820119.373	黃花夾竹桃	*Thevetia peruviana*	232	5	8	FELL	Fell	
3801	CT566	811681.461	820121.944	台灣相思	*Acacia confusa*	240	10	14	FELL	Fell	
3801	CT567	811682.761	820123.636	台灣相思	*Acacia confusa*	120	7	14	FELL	Fell	
3801	CT568	811684.787	820123.500	台灣相思	*Acacia confusa*	170	10	13	FELL	Fell	
3801	CT569	811684.243	820124.115	台灣相思	*Acacia confusa*	160	10	15	FELL	Fell	
3801	CT57	811730.716	820108.620	羊蹄甲屬	*Bauhinia spp.*	120	4	3	FELL	Fell	
3801	CT570	811687.861	820123.538	台灣相思	*Acacia confusa*	150	5	5	FELL	Fell	
3801	CT571	811686.055	820126.012	台灣相思	*Acacia confusa*	250	9	11	FELL	Fell	
3801	CT572	811683.843	820125.468	楝	*Melia azedarach*	240	10	5	FELL	Fell	
3801	CT573	811680.728	820124.520	大葉相思	*Acacia mangium*	180	10	10	FELL	Fell	
3801	CT574	811678.298	820124.801	大葉相思	*Acacia mangium*	110	3	9	FELL	Fell	
3801	CT575	811677.517	820124.466	大葉相思	*Acacia mangium*	270	8	16	FELL	Fell	
3801	CT576	811677.027	820123.856	大葉相思	*Acacia mangium*	130	5	9	FELL	Fell	
3801	CT577	811676.923	820122.893	大葉相思	*Acacia mangium*	160	5	9	FELL	Fell	
3801	CT578	811674.008	820125.277	楝	*Melia azedarach*	160	10	10	FELL	Fell	
3801	CT579	811673.845	820125.904	楝	*Melia azedarach*	250	10	15	FELL	Fell	
3801	CT58	811729.951	820109.747	台灣相思	*Acacia confusa*	184	6	8	FELL	Fell	
3801	CT580	811680.676	820127.920	羊蹄甲屬	*Bauhinia spp.*	120	4	10	FELL	Fell	
3801	CT581	811679.211	820130.713	台灣相思	*Acacia confusa*	140	9	13	FELL	Fell	
3801	CT582	811680.000	820130.848	台灣相思	*Acacia confusa*	150	7	12	FELL	Fell	
3801	CT583	811680.782	820131.188	台灣相思	*Acacia confusa*	190	6	13	FELL	Fell	
3801	CT584	811679.250	820131.256	台灣相思	*Acacia confusa*	130	5	12	FELL	Fell	
3801	CT585	811679.431	820132.418	台灣相思	*Acacia confusa*	170	7	14	FELL	Fell	

Contracts	Tree ID	Easting	Northing	Chinese Name	*Latin Name*	Tree Measurement			Recommendation in LVP	Status as of end December 2020	Remarks
						DBH (mm)	Crown Spread (m)	Height (m)			
3801	CT586	811677.985	820131.842	台灣相思	*Acacia confusa*	120	5	14	FELL	Fell	
3801	CT587	811678.203	820131.061	台灣相思	*Acacia confusa*	120	5	12	FELL	Fell	
3801	CT588	811677.008	820131.609	台灣相思	*Acacia confusa*	170	7	14	FELL	Fell	
3801	CT589	811672.651	820130.192	黃槿	*Hibiscus tiliaceus*	130	5	7	FELL	Fell	
3801	CT59	811728.801	820111.344	台灣相思	*Acacia confusa*	150	3	9	FELL	Fell	
3801	CT590	811669.397	820132.110	楝	*Melia azedarach*	220	8	11	FELL	Fell	
3801	CT591	811669.850	820132.892	楝	*Melia azedarach*	130	6	10	FELL	Fell	
3801	CT592	811670.361	820133.727	楝	*Melia azedarach*	210	9	11	FELL	Fell	
3801	CT593	811676.391	820135.223	台灣相思	*Acacia confusa*	262	9	13	FELL	Fell	
3801	CT594	811667.884	820146.255	楝	*Melia azedarach*	280	10	13	FELL	Fell	
3801	CT595	811667.767	820147.457	楝	*Melia azedarach*	180	5	11	FELL	Fell	
3801	CT596	811671.796	820143.142	台灣相思	*Acacia confusa*	301	12	13	FELL	Fell	
3801	CT597	811674.187	820142.143	台灣相思	*Acacia confusa*	262	8	12	FELL	Fell	
3801	CT598	811677.801	820140.586	台灣相思	*Acacia confusa*	206	7	11	FELL	Fell	
3801	CT599	811680.470	820138.077	黃槿	*Hibiscus tiliaceus*	215	4	11	FELL	Fell	
3801	CT6	811772.600	820062.760	黃槿	*Hibiscus tiliaceus*	340	8	10	RETAIN	Not under 3RS contract works area	Confirmed not locate within 3RS works area. Removed as the land was acquired by the government for construction of temporary emergency hospital to handle COVID-19 pandemic in early Sep 2020.
3801	CT60	811727.606	820112.655	台灣相思	*Acacia confusa*	170	5	9	FELL	Fell	
3801	CT600	811681.389	820140.016	台灣相思	*Acacia confusa*	180	7	11	FELL	Fell	
3801	CT601	811683.556	820136.642	台灣相思	*Acacia confusa*	143	6	10	FELL	Fell	
3801	CT602	811681.498	820135.152	台灣相思	*Acacia confusa*	160	5	13	FELL	Fell	
3801	CT604	811686.934	820134.588	楝	*Melia azedarach*	190	5	9	FELL	Fell	
3801	CT605	811689.640	820132.743	台灣相思	*Acacia confusa*	100	4	5	FELL	Fell	
3801	CT606	811687.072	820133.438	楝	*Melia azedarach*	190	9	10	FELL	Fell	
3801	CT607	811687.530	820132.713	楝	*Melia azedarach*	220	6	11	FELL	Fell	
3801	CT608	811685.586	820131.186	台灣相思	*Acacia confusa*	180	10	14	FELL	Fell	
3801	CT609	811690.192	820125.902	台灣相思	*Acacia confusa*	130	5	5	FELL	Fell	
3801	CT61	811728.869	820112.829	台灣相思	*Acacia confusa*	120	5	8	FELL	Fell	
3801	CT610	811692.627	820124.030	台灣相思	*Acacia confusa*	100	7	5	FELL	Fell	
3801	CT611	811692.498	820123.154	台灣相思	*Acacia confusa*	110	7	10	FELL	Fell	
3801	CT612	811693.533	820122.547	台灣相思	*Acacia confusa*	130	8	7	FELL	Fell	
3801	CT613	811694.360	820118.888	羊蹄甲屬	*Bauhinia spp.*	140	6	6	FELL	Fell	
3801	CT614	811695.590	820120.299	台灣相思	*Acacia confusa*	150	5	8	FELL	Fell	
3801	CT615	811696.364	820119.534	台灣相思	*Acacia confusa*	190	7	8	FELL	Fell	
3801	CT616	811697.005	820118.959	台灣相思	*Acacia confusa*	110	5	4	FELL	Fell	
3801	CT617	811700.510	820121.409	台灣相思	*Acacia confusa*	130	6	5	FELL	Fell	
3801	CT618	811698.305	820123.669	台灣相思	*Acacia confusa*	100	4	4	FELL	Fell	
3801	CT619	811699.270	820125.260	台灣相思	*Acacia confusa*	310	12	9	FELL	Fell	
3801	CT62	811732.446	820114.914	羊蹄甲屬	*Bauhinia spp.*	140	5	9	FELL	Fell	
3801	CT620	811702.449	820118.659	台灣相思	*Acacia confusa*	130	5	7	FELL	Fell	

Contracts	Tree ID	Easting	Northing	Chinese Name	*Latin Name*	Tree Measurement			Recommendation in LVP	Status as of end December 2020	Remarks
						DBH (mm)	Crown Spread (m)	Height (m)			
3801	CT621	811703.179	820117.873	台灣相思	*Acacia confusa*	184	5	7	FELL	Fell	
3801	CT622	811705.370	820115.206	台灣相思	*Acacia confusa*	140	6	10	FELL	Fell	
3801	CT623	811706.322	820112.971	楝	*Melia azedarach*	140	4	7	FELL	Fell	
3801	CT624	811706.909	820112.250	楝	*Melia azedarach*	220	7	11	FELL	Fell	
3801	CT625	811704.968	820107.885	台灣相思	*Acacia confusa*	130	5	9	FELL	Fell	
3801	CT626	811705.261	820107.528	台灣相思	*Acacia confusa*	120	6	9	FELL	Fell	
3801	CT627	811710.856	820104.409	台灣相思	*Acacia confusa*	163	5	4	FELL	Fell	
3801	CT628	811711.271	820103.560	台灣相思	*Acacia confusa*	110	5	8	FELL	Fell	
3801	CT629	811709.677	820108.246	台灣相思	*Acacia confusa*	170	7	5	FELL	Fell	
3801	CT63	811733.066	820116.783	羊蹄甲屬	*Bauhinia spp.*	140	7	7	FELL	Fell	
3801	CT630	811712.284	820109.161	大葉相思	*Acacia mangium*	180	6	8	FELL	Fell	
3801	CT631	811713.042	820107.669	台灣相思	*Acacia confusa*	110	5	7	FELL	Fell	
3801	CT632	811715.233	820105.360	台灣相思	*Acacia confusa*	100	4	8	FELL	Fell	
3801	CT633	811715.935	820105.649	楝	*Melia azedarach*	150	4	8	FELL	Fell	
3801	CT634	811715.561	820104.807	台灣相思	*Acacia confusa*	170	6	9	FELL	Fell	
3801	CT635	811716.143	820104.036	台灣相思	*Acacia confusa*	170	7	9	FELL	Fell	
3801	CT636	811717.532	820104.049	楝	*Melia azedarach*	260	7	10	FELL	Fell	
3801	CT637	811718.425	820104.110	黃花夾竹桃	*Thevetia peruviana*	110	4	7	FELL	Fell	
3801	CT638	811720.435	820101.525	楝	*Melia azedarach*	230	6	8	FELL	Fell	
3801	CT639	811719.456	820101.346	楝	*Melia azedarach*	160	7	8	FELL	Fell	
3801	CT64	811732.053	820118.692	羊蹄甲屬	*Bauhinia spp.*	110	6	5	FELL	Fell	
3801	CT640	811718.448	820099.422	台灣相思	*Acacia confusa*	120	4	8	FELL	Fell	
3801	CT641	811719.755	820097.002	台灣相思	*Acacia confusa*	120	5	8	FELL	Fell	
3801	CT642	811717.520	820094.261	台灣相思	*Acacia confusa*	120	7	10	FELL	Fell	
3801	CT643	811712.542	820094.387	台灣相思	*Acacia confusa*	130	5	7	FELL	Fell	
3801	CT644	811720.338	820089.959	台灣相思	*Acacia confusa*	170	9	12	FELL	Fell	
3801	CT645	811722.459	820088.188	死樹	Dead tree	130	8	6	FELL	Fell	
3801	CT646	811724.402	820088.717	台灣相思	*Acacia confusa*	198	9	8	FELL	Fell	
3801	CT647	811724.451	820088.218	台灣相思	*Acacia confusa*	170	7	13	FELL	Fell	
3801	CT648	811725.148	820084.660	台灣相思	*Acacia confusa*	240	8	13	FELL	Fell	
3801	CT649	811726.185	820086.232	台灣相思	*Acacia confusa*	160	8	13	FELL	Fell	
3801	CT65	811732.419	820119.146	羊蹄甲屬	*Bauhinia spp.*	120	5	7	FELL	Fell	
3801	CT650	811725.889	820087.217	台灣相思	*Acacia confusa*	110	5	12	FELL	Fell	
3801	CT651	811726.146	820088.611	台灣相思	*Acacia confusa*	120	8	10	FELL	Fell	
3801	CT652	811727.545	820089.135	楝	*Melia azedarach*	250	7	10	FELL	Fell	
3801	CT653	811723.448	820096.911	羊蹄甲屬	*Bauhinia spp.*	100	4	5	FELL	Fell	
3801	CT654	811724.632	820095.491	羊蹄甲屬	*Bauhinia spp.*	120	5	6	FELL	Fell	
3801	CT655	811722.894	820094.498	紅膠木	*Lophostemon confertus*	110	5	7	FELL	Fell	
3801	CT656	811726.570	820086.829	台灣相思	*Acacia confusa*	160	7	13	FELL	Fell	
3801	CT657	811729.221	820086.093	大葉相思	*Acacia mangium*	180	5	9	FELL	Fell	
3801	CT658	811728.346	820084.776	台灣相思	*Acacia confusa*	140	6	13	FELL	Fell	
3801	CT659	811727.822	820083.859	台灣相思	*Acacia confusa*	150	7	12	FELL	Fell	

Contracts	Tree ID	Easting	Northing	Chinese Name	*Latin Name*	Tree Measurement			Recommendation in LVP	Status as of end December 2020	Remarks
						DBH (mm)	Crown Spread (m)	Height (m)			
3801	CT66	811731.262	820119.343	羊蹄甲屬	*Bauhinia spp.*	150	5	8	FELL	Fell	
3801	CT660	811729.841	820082.662	台灣相思	*Acacia confusa*	188	8	14	FELL	Fell	
3801	CT661	811730.342	820081.042	台灣相思	*Acacia confusa*	140	6	12	FELL	Fell	
3801	CT662	811732.060	820081.652	台灣相思	*Acacia confusa*	150	5	10	FELL	Fell	
3801	CT663	811732.872	820080.443	台灣相思	*Acacia confusa*	130	5	8	FELL	Fell	
3801	CT664	811732.623	820079.190	台灣相思	*Acacia confusa*	100	4	8	FELL	Fell	
3801	CT665	811734.208	820078.169	台灣相思	*Acacia confusa*	110	5	8	FELL	Fell	
3801	CT666	811737.094	820072.622	台灣相思	*Acacia confusa*	130	6	8	FELL	Fell	
3801	CT667	811738.314	820070.083	台灣相思	*Acacia confusa*	140	5	8	FELL	Fell	
3801	CT668	811736.370	820069.716	台灣相思	*Acacia confusa*	110	5	7	FELL	Fell	
3801	CT669	811735.492	820070.903	羊蹄甲屬	*Bauhinia spp.*	100	4	6	FELL	Fell	
3801	CT67	811730.398	820120.243	台灣相思	*Acacia confusa*	180	7	10	FELL	Fell	
3801	CT670	811735.915	820071.012	台灣相思	*Acacia confusa*	160	6	7	FELL	Fell	
3801	CT671	811735.009	820072.239	台灣相思	*Acacia confusa*	262	7	9	FELL	Fell	
3801	CT672	811668.547	820088.977	大葉相思	*Acacia mangium*	340	9	10	FELL	Fell	
3801	CT673	811666.354	820113.763	羊蹄甲屬	*Bauhinia spp.*	110	5	9	FELL	Fell	
3801	CT674	811664.554	820113.198	羊蹄甲屬	*Bauhinia spp.*	140	5	10	FELL	Fell	
3801	CT675	811660.285	820113.025	大葉相思	*Acacia mangium*	210	5	12	FELL	Fell	
3801	CT676	811658.432	820113.350	台灣相思	*Acacia confusa*	200	6	11	FELL	Fell	
3801	CT677	811658.418	820114.567	台灣相思	*Acacia confusa*	180	6	11	FELL	Fell	
3801	CT678	811657.237	820114.638	台灣相思	*Acacia confusa*	120	5	9	FELL	Fell	
3801	CT679	811656.321	820114.775	台灣相思	*Acacia confusa*	140	7	9	FELL	Fell	
3801	CT68	811731.110	820120.534	台灣相思	*Acacia confusa*	160	7	8	FELL	Fell	
3801	CT680	811657.034	820115.678	台灣相思	*Acacia confusa*	100	5	9	FELL	Fell	
3801	CT681	811658.085	820115.423	台灣相思	*Acacia confusa*	140	4	10	FELL	Fell	
3801	CT682	811658.810	820116.191	台灣相思	*Acacia confusa*	140	6	8	FELL	Fell	
3801	CT683	811659.954	820116.000	台灣相思	*Acacia confusa*	160	6	8	FELL	Fell	
3801	CT684	811660.536	820115.803	台灣相思	*Acacia confusa*	190	7	9	FELL	Fell	
3801	CT685	811656.720	820116.574	台灣相思	*Acacia confusa*	230	6	10	FELL	Fell	
3801	CT686	811657.067	820117.386	楝	*Melia azedarach*	220	5	11	FELL	Fell	
3801	CT688	811656.994	820125.820	潺槁樹	*Litsea glutinosa*	100	4	6	FELL	Fell	
3801	CT689	811655.204	820121.931	台灣相思	*Acacia confusa*	110	7	8	FELL	Fell	
3801	CT69	811729.891	820120.859	台灣相思	*Acacia confusa*	170	7	8	FELL	Fell	
3801	CT690	811654.325	820122.711	台灣相思	*Acacia confusa*	260	9	10	FELL	Fell	
3801	CT691	811654.274	820122.080	台灣相思	*Acacia confusa*	180	7	8	FELL	Fell	
3801	CT692	811652.982	820123.153	台灣相思	*Acacia confusa*	130	7	9	FELL	Fell	
3801	CT693	811653.371	820124.291	台灣相思	*Acacia confusa*	130	5	8	FELL	Fell	
3801	CT694	811652.325	820124.395	台灣相思	*Acacia confusa*	150	7	9	FELL	Fell	
3801	CT695	811652.403	820125.156	台灣相思	*Acacia confusa*	130	4	10	FELL	Fell	
3801	CT696	811651.370	820125.110	台灣相思	*Acacia confusa*	120	6	8	FELL	Fell	
3801	CT697	811650.970	820126.683	羊蹄甲屬	*Bauhinia spp.*	120	4	5	FELL	Fell	
3801	CT698	811652.013	820130.329	紅膠木	*Lophostemon confertus*	160	4	10	FELL	Fell	

Contracts	Tree ID	Easting	Northing	Chinese Name	*Latin Name*	Tree Measurement			Recommendation in LVP	Status as of end December 2020	Remarks
						DBH (mm)	Crown Spread (m)	Height (m)			
3801	CT699	811650.005	820131.666	台灣相思	*Acacia confusa*	190	7	8	FELL	Fell	
3801	CT7	811771.720	820066.210	黃槿	*Hibiscus tiliaceus*	360	11	10	RETAIN	Not under 3RS contract works area	Confirmed not locate within 3RS works area. Removed as the land was acquired by the government for construction of temporary emergency hospital to handle COVID-19 pandemic in early Sep 2020.
3801	CT70	811728.118	820123.298	台灣相思	*Acacia confusa*	150	5	9	FELL	Fell	
3801	CT700	811649.234	820132.527	台灣相思	*Acacia confusa*	180	7	10	FELL	Fell	
3801	CT701	811648.433	820131.499	台灣相思	*Acacia confusa*	200	6	12	FELL	Fell	
3801	CT702	811648.636	820132.490	台灣相思	*Acacia confusa*	110	4	8	FELL	Fell	
3801	CT703	811647.245	820133.698	大葉相思	*Acacia mangium*	140	4	10	FELL	Fell	
3801	CT704	811646.308	820133.284	楝	*Melia azedarach*	120	4	12	FELL	Fell	
3801	CT705	811646.328	820134.522	楝	*Melia azedarach*	110	4	9	FELL	Fell	
3801	CT706	811647.221	820134.985	楝	*Melia azedarach*	120	4	9	FELL	Fell	
3801	CT707	811648.229	820135.608	楝	*Melia azedarach*	120	2	6	FELL	Fell	
3801	CT708	811645.684	820135.196	楝	*Melia azedarach*	130	5	8	FELL	Fell	
3801	CT709	811644.058	820137.438	耳果相思	*Acacia auriculiformis*	100	4	8	FELL	Fell	
3801	CT71	811727.211	820124.000	台灣相思	*Acacia confusa*	160	6	7	FELL	Fell	
3801	CT710	811641.396	820134.938	台灣相思	*Acacia confusa*	150	8	9	FELL	Fell	
3801	CT711	811640.400	820134.843	台灣相思	*Acacia confusa*	100	4	10	FELL	Fell	
3801	CT712	811640.380	820135.848	台灣相思	*Acacia confusa*	110	5	10	FELL	Fell	
3801	CT713	811638.711	820136.869	台灣相思	*Acacia confusa*	191	8	10	FELL	Fell	
3801	CT714	811637.918	820137.258	台灣相思	*Acacia confusa*	163	5	12	FELL	Fell	
3801	CT715	811638.709	820136.154	台灣相思	*Acacia confusa*	130	5	9	FELL	Fell	
3801	CT716	811639.280	820131.614	羊蹄甲屬	*Bauhinia spp.*	110	7	9	FELL	Fell	
3801	CT717	811640.823	820129.758	楝	*Melia azedarach*	270	7	13	FELL	Fell	
3801	CT718	811641.624	820129.984	羊蹄甲屬	*Bauhinia spp.*	120	6	8	FELL	Fell	
3801	CT719	811641.649	820127.805	台灣相思	*Acacia confusa*	110	5	9	FELL	Fell	
3801	CT72	811726.432	820124.609	大葉相思	*Acacia mangium*	270	6	12	FELL	Fell	
3801	CT720	811641.983	820126.995	台灣相思	*Acacia confusa*	200	7	10	FELL	Fell	
3801	CT721	811648.793	820121.870	台灣相思	*Acacia confusa*	160	9	12	FELL	Fell	
3801	CT722	811647.629	820121.355	台灣相思	*Acacia confusa*	100	4	11	FELL	Fell	
3801	CT723	811647.298	820120.607	台灣相思	*Acacia confusa*	140	5	13	FELL	Fell	
3801	CT724	811649.231	820119.858	台灣相思	*Acacia confusa*	110	5	12	FELL	Fell	
3801	CT725	811647.785	820119.434	台灣相思	*Acacia confusa*	100	5	10	FELL	Fell	
3801	CT726	811646.231	820119.473	台灣相思	*Acacia confusa*	200	6	11	FELL	Fell	
3801	CT727	811645.723	820121.032	台灣相思	*Acacia confusa*	150	7	10	FELL	Fell	
3801	CT728	811642.169	820122.250	羊蹄甲屬	*Bauhinia spp.*	110	6	9	FELL	Fell	
3801	CT729	811642.032	820125.191	台灣相思	*Acacia confusa*	170	8	10	FELL	Fell	
3801	CT73	811726.139	820120.074	台灣相思	*Acacia confusa*	170	10	9	FELL	Fell	
3801	CT730	811641.077	820125.497	台灣相思	*Acacia confusa*	170	9	11	FELL	Fell	
3801	CT731	811638.493	820125.537	台灣相思	*Acacia confusa*	150	7	12	FELL	Fell	
3801	CT732	811637.737	820125.192	羊蹄甲屬	*Bauhinia spp.*	120	4	8	FELL	Fell	

Contracts	Tree ID	Easting	Northing	Chinese Name	*Latin Name*	Tree Measurement			Recommendation in LVP	Status as of end December 2020	Remarks
						DBH (mm)	Crown Spread (m)	Height (m)			
3801	CT733	811637.863	820126.066	台灣相思	*Acacia confusa*	140	6	8	FELL	Fell	
3801	CT734	811636.771	820125.851	台灣相思	*Acacia confusa*	170	5	11	FELL	Fell	
3801	CT735	811637.912	820128.845	台灣相思	*Acacia confusa*	150	7	12	FELL	Fell	
3801	CT736	811638.656	820129.217	台灣相思	*Acacia confusa*	100	3	12	FELL	Fell	
3801	CT737	811637.191	820130.323	台灣相思	*Acacia confusa*	110	3	11	FELL	Fell	
3801	CT738	811636.316	820129.878	台灣相思	*Acacia confusa*	110	2	11	FELL	Fell	
3801	CT739	811635.090	820131.588	台灣相思	*Acacia confusa*	170	6	12	FELL	Fell	
3801	CT74	811725.411	820120.985	台灣相思	*Acacia confusa*	150	6	10	FELL	Fell	
3801	CT740	811635.596	820133.466	楝	*Melia azedarach*	170	1	11	FELL	Fell	
3801	CT741	811634.112	820132.415	台灣相思	*Acacia confusa*	170	5	15	FELL	Fell	
3801	CT742	811633.419	820132.746	台灣相思	*Acacia confusa*	110	4	9	FELL	Fell	
3801	CT743	811631.555	820131.863	大葉相思	*Acacia mangium*	160	4	13	FELL	Fell	
3801	CT744	811631.484	820130.848	大葉相思	*Acacia mangium*	170	3	15	FELL	Fell	
3801	CT745	811630.960	820132.217	大葉相思	*Acacia mangium*	130	4	15	FELL	Fell	
3801	CT746	811627.839	820131.068	楝	*Melia azedarach*	270	9	15	FELL	Fell	
3801	CT747	811627.941	820133.460	大葉相思	*Acacia mangium*	150	3	14	FELL	Fell	
3801	CT748	811624.973	820132.750	大葉相思	*Acacia mangium*	240	5	14	FELL	Fell	
3801	CT749	811624.892	820133.709	大葉相思	*Acacia mangium*	160	4	13	FELL	Fell	
3801	CT75	811723.776	820122.316	台灣相思	*Acacia confusa*	110	5	10	FELL	Fell	
3801	CT750	811625.911	820134.671	台灣相思	*Acacia confusa*	100	5	10	FELL	Fell	
3801	CT751	811624.927	820135.487	台灣相思	*Acacia confusa*	160	5	12	FELL	Fell	
3801	CT752	811623.359	820136.054	台灣相思	*Acacia confusa*	160	8	12	FELL	Fell	
3801	CT753	811619.166	820136.604	台灣相思	*Acacia confusa*	140	6	11	FELL	Fell	
3801	CT754	811619.192	820135.553	台灣相思	*Acacia confusa*	170	7	11	FELL	Fell	
3801	CT755	811620.308	820133.625	大葉相思	*Acacia mangium*	190	6	9	FELL	Fell	
3801	CT756	811617.352	820134.181	台灣相思	*Acacia confusa*	130	6	6	FELL	Fell	
3801	CT757	811616.209	820134.397	台灣相思	*Acacia confusa*	170	5	13	FELL	Fell	
3801	CT758	811615.358	820134.516	台灣相思	*Acacia confusa*	150	6	9	FELL	Fell	
3801	CT759	811615.360	820135.360	台灣相思	*Acacia confusa*	150	7	10	FELL	Fell	
3801	CT76	811721.819	820124.078	楝	*Melia azedarach*	220	10	11	FELL	Fell	
3801	CT760	811616.474	820137.221	台灣相思	*Acacia confusa*	130	5	11	FELL	Fell	
3801	CT761	811615.978	820138.200	台灣相思	*Acacia confusa*	160	5	12	FELL	Fell	
3801	CT762	811615.183	820137.415	台灣相思	*Acacia confusa*	130	7	8	FELL	Fell	
3801	CT763	811614.280	820138.663	台灣相思	*Acacia confusa*	190	8	10	FELL	Fell	
3801	CT764	811612.488	820136.608	台灣相思	*Acacia confusa*	150	7	11	FELL	Fell	
3801	CT765	811611.804	820128.114	銀合歡	*Leucaena leucocephala*	140	8	14	FELL	Fell	
3801	CT766	811605.438	820134.692	銀合歡	*Leucaena leucocephala*	100	10	9	FELL	Fell	
3801	CT767	811600.977	820136.418	銀合歡	*Leucaena leucocephala*	214	11	11	FELL	Fell	
3801	CT768	811607.029	820137.200	台灣相思	*Acacia confusa*	170	6	11	FELL	Fell	
3801	CT769	811601.200	820138.216	羊蹄甲屬	*Bauhinia spp.*	160	7	9	FELL	Fell	
3801	CT77	811725.729	820127.252	大葉相思	*Acacia mangium*	120	4	7	FELL	Fell	
3801	CT770	811600.374	820138.421	台灣相思	*Acacia confusa*	170	8	11	FELL	Fell	

Contracts	Tree ID	Easting	Northing	Chinese Name	*Latin Name*	Tree Measurement			Recommendation in LVP	Status as of end December 2020	Remarks
						DBH (mm)	Crown Spread (m)	Height (m)			
3801	CT771	811599.144	820138.377	台灣相思	*Acacia confusa*	210	8	9	FELL	Fell	
3801	CT772	811597.809	820139.198	台灣相思	*Acacia confusa*	110	3	12	FELL	Fell	
3801	CT773	811597.260	820138.444	台灣相思	*Acacia confusa*	140	10	9	FELL	Fell	
3801	CT774	811597.287	820139.165	台灣相思	*Acacia confusa*	160	4	8	FELL	Fell	
3801	CT775	811595.962	820139.020	台灣相思	*Acacia confusa*	120	3	7	FELL	Fell	
3801	CT776	811593.928	820138.370	銀合歡	*Leucaena leucocephala*	100	4	12	FELL	Fell	
3801	CT777	811594.215	820138.075	台灣相思	*Acacia confusa*	130	7	7	FELL	Fell	
3801	CT778	811593.166	820139.137	台灣相思	*Acacia confusa*	130	4	6	FELL	Fell	
3801	CT779	811591.717	820133.980	羊蹄甲屬	*Bauhinia spp.*	140	2	8	FELL	Fell	
3801	CT78	811724.421	820128.780	大葉相思	*Acacia mangium*	180	5	10	FELL	Fell	
3801	CT780	811589.094	820133.741	台灣相思	*Acacia confusa*	100	6	6	FELL	Fell	
3801	CT781	811588.415	820134.141	台灣相思	*Acacia confusa*	110	7	10	FELL	Fell	
3801	CT782	811588.561	820134.753	台灣相思	*Acacia confusa*	130	4	9	FELL	Fell	
3801	CT783	811588.879	820136.717	銀合歡	*Leucaena leucocephala*	100	4	12	FELL	Fell	
3801	CT784	811586.948	820136.122	台灣相思	*Acacia confusa*	120	5	10	FELL	Fell	
3801	CT785	811587.466	820133.550	台灣相思	*Acacia confusa*	120	7	9	FELL	Fell	
3801	CT786	811585.906	820133.493	台灣相思	*Acacia confusa*	120	5	12	FELL	Fell	
3801	CT787	811584.819	820133.217	台灣相思	*Acacia confusa*	100	6	9	FELL	Fell	
3801	CT788	811583.845	820133.243	台灣相思	*Acacia confusa*	120	4	12	FELL	Fell	
3801	CT789	811582.540	820133.145	台灣相思	*Acacia confusa*	130	5	13	FELL	Fell	
3801	CT79	811724.688	820129.666	大葉相思	*Acacia mangium*	210	5	8	FELL	Fell	
3801	CT790	811581.815	820133.942	楝	*Melia azedarach*	130	5	13	FELL	Fell	
3801	CT791	811581.298	820133.189	台灣相思	*Acacia confusa*	120	4	13	FELL	Fell	
3801	CT792	811578.941	820135.776	羊蹄甲屬	*Bauhinia spp.*	100	3	10	FELL	Fell	
3801	CT793	811578.058	820130.990	銀合歡	*Leucaena leucocephala*	100	5	13	FELL	Fell	
3801	CT794	811576.009	820133.651	銀合歡	*Leucaena leucocephala*	111	3	13	FELL	Fell	
3801	CT795	811575.216	820134.153	銀合歡	*Leucaena leucocephala*	140	7	13	FELL	Fell	
3801	CT796	811577.485	820135.113	銀合歡	*Leucaena leucocephala*	120	8	7	FELL	Fell	
3801	CT797	811576.206	820134.814	銀合歡	*Leucaena leucocephala*	120	9	9	FELL	Fell	
3801	CT798	811571.463	820135.500	銀合歡	*Leucaena leucocephala*	100	5	9	FELL	Fell	
3801	CT799	811570.756	820128.819	銀合歡	*Leucaena leucocephala*	110	3	13	FELL	Fell	
3801	CT8	811774.646	820069.519	黃槿	*Hibiscus tiliaceus*	660	11	11	RETAIN	Not under 3RS contract works area	Confirmed not locate within 3RS works area. Removed as the land was acquired by the government for construction of temporary emergency hospital to handle COVID-19 pandemic in early Sep 2020.
3801	CT80	811724.289	820130.573	大葉相思	*Acacia mangium*	110	3	5	FELL	Fell	
3801	CT800	811567.750	820130.213	銀合歡	*Leucaena leucocephala*	110	10	7	FELL	Fell	
3801	CT801	811562.869	820130.496	銀合歡	*Leucaena leucocephala*	110	5	9	FELL	Fell	
3801	CT802	811561.617	820130.104	銀合歡	*Leucaena leucocephala*	190	6	13	FELL	Fell	
3801	CT803	811557.283	820130.588	銀合歡	*Leucaena leucocephala*	120	3	10	FELL	Fell	
3801	CT804	811554.902	820133.605	銀合歡	*Leucaena leucocephala*	240	8	14	FELL	Fell	
3801	CT805	811555.149	820137.178	銀合歡	*Leucaena leucocephala*	130	5	11	FELL	Fell	

Contracts	Tree ID	Easting	Northing	Chinese Name	*Latin Name*	Tree Measurement			Recommendation in LVP	Status as of end December 2020	Remarks
						DBH (mm)	Crown Spread (m)	Height (m)			
3801	CT806	811559.949	820139.787	銀合歡	*Leucaena leucocephala*	100	7	9	FELL	Fell	
3801	CT807	811566.206	820137.497	銀合歡	*Leucaena leucocephala*	120	9	9	FELL	Fell	
3801	CT808	811550.692	820140.926	銀合歡	*Leucaena leucocephala*	230	13	15	FELL	Fell	
3801	CT809	811546.582	820140.800	銀合歡	*Leucaena leucocephala*	160	5	14	FELL	Fell	
3801	CT81	811722.544	820132.500	大葉相思	*Acacia mangium*	210	5	10	FELL	Fell	
3801	CT810	811546.590	820144.611	銀合歡	*Leucaena leucocephala*	100	2	9	FELL	Fell	
3801	CT811	811544.960	820145.644	羊蹄甲屬	*Bauhinia spp.*	110	4	6	FELL	Fell	
3801	CT812	811551.197	820149.059	銀合歡	*Leucaena leucocephala*	120	4	13	FELL	Fell	
3801	CT813	811562.402	820145.653	銀合歡	*Leucaena leucocephala*	240	12	14	FELL	Fell	
3801	CT814	811561.741	820144.121	銀合歡	*Leucaena leucocephala*	130	10	9	FELL	Fell	
3801	CT815	811562.284	820142.342	黃花夾竹桃	*Thevetia peruviana*	110	4	8	FELL	Fell	
3801	CT816	811564.294	820147.487	台灣相思	*Acacia confusa*	170	9	11	FELL	Fell	
3801	CT817	811563.617	820147.668	台灣相思	*Acacia confusa*	160	8	12	FELL	Fell	
3801	CT818	811564.151	820148.929	台灣相思	*Acacia confusa*	150	5	10	FELL	Fell	
3801	CT819	811564.361	820149.574	台灣相思	*Acacia confusa*	170	6	10	FELL	Fell	
3801	CT82	811721.594	820131.589	台灣相思	*Acacia confusa*	250	8	12	FELL	Fell	
3801	CT820	811565.021	820150.461	楝	*Melia azedarach*	100	5	9	FELL	Fell	
3801	CT821	811569.155	820152.269	羊蹄甲屬	*Bauhinia spp.*	350	6	8	FELL	Fell	
3801	CT822	811573.060	820153.799	台灣相思	*Acacia confusa*	100	3	5	FELL	Fell	
3801	CT823	811571.472	820151.374	羊蹄甲屬	*Bauhinia spp.*	110	4	9	FELL	Fell	
3801	CT824	811574.713	820148.659	黃花夾竹桃	*Thevetia peruviana*	100	3	5	FELL	Fell	
3801	CT825	811576.045	820146.801	大葉相思	*Acacia mangium*	170	4	9	FELL	Fell	
3801	CT826	811572.201	820145.635	大葉相思	*Acacia mangium*	130	3	13	FELL	Fell	
3801	CT827	811569.832	820145.748	大葉相思	*Acacia mangium*	240	5	15	FELL	Fell	
3801	CT828	811567.519	820144.873	銀合歡	*Leucaena leucocephala*	160	11	13	FELL	Fell	
3801	CT829	811565.683	820143.266	台灣相思	*Acacia confusa*	130	5	10	FELL	Fell	
3801	CT83	811719.933	820136.186	銀合歡	*Leucaena leucocephala*	120	7	8	FELL	Fell	
3801	CT830	811567.407	820142.123	台灣相思	*Acacia confusa*	262	8	14	FELL	Fell	
3801	CT831	811568.429	820142.307	台灣相思	*Acacia confusa*	100	3	8	FELL	Fell	
3801	CT832	811568.567	820140.845	台灣相思	*Acacia confusa*	200	5	12	FELL	Fell	
3801	CT833	811565.694	820138.207	銀合歡	*Leucaena leucocephala*	110	9	9	FELL	Fell	
3801	CT834	811566.979	820136.897	銀合歡	*Leucaena leucocephala*	130	9	8	FELL	Fell	
3801	CT835	811569.853	820137.673	銀合歡	*Leucaena leucocephala*	100	6	10	FELL	Fell	
3801	CT836	811570.161	820142.657	銀合歡	*Leucaena leucocephala*	130	6	13	FELL	Fell	
3801	CT837	811572.243	820144.089	銀合歡	*Leucaena leucocephala*	210	6	15	FELL	Fell	
3801	CT838	811574.635	820140.154	銀合歡	*Leucaena leucocephala*	130	5	15	FELL	Fell	
3801	CT839	811576.650	820137.984	銀合歡	*Leucaena leucocephala*	130	3	7	FELL	Fell	
3801	CT84	811719.219	820136.163	大葉相思	*Acacia mangium*	320	6	8	FELL	Fell	
3801	CT840	811577.628	820138.723	銀合歡	*Leucaena leucocephala*	190	3	9	FELL	Fell	
3801	CT841	811578.316	820142.223	銀合歡	*Leucaena leucocephala*	150	4	13	FELL	Fell	
3801	CT842	811579.737	820141.507	銀合歡	*Leucaena leucocephala*	140	4	11	FELL	Fell	
3801	CT843	811580.667	820139.394	羊蹄甲屬	*Bauhinia spp.*	130	6	9	FELL	Fell	

Contracts	Tree ID	Easting	Northing	Chinese Name	*Latin Name*	Tree Measurement			Recommendation in LVP	Status as of end December 2020	Remarks
						DBH (mm)	Crown Spread (m)	Height (m)			
3801	CT844	811581.310	820138.926	羊蹄甲屬	*Bauhinia spp.*	120	4	10	FELL	Fell	
3801	CT845	811584.404	820138.480	楝	*Melia azedarach*	160	4	11	FELL	Fell	
3801	CT846	811585.268	820137.673	台灣相思	*Acacia confusa*	150	6	11	FELL	Fell	
3801	CT847	811586.029	820137.552	台灣相思	*Acacia confusa*	200	5	11	FELL	Fell	
3801	CT848	811587.422	820139.790	大葉相思	*Acacia mangium*	180	5	12	FELL	Fell	
3801	CT849	811589.924	820140.332	大葉相思	*Acacia mangium*	170	5	14	FELL	Fell	
3801	CT85	811718.831	820137.027	大葉相思	*Acacia mangium*	200	5	11	FELL	Fell	
3801	CT850	811591.556	820144.270	死樹	Dead tree	110	3	7	FELL	Fell	
3801	CT851	811589.685	820144.051	大葉相思	*Acacia mangium*	110	4	8	FELL	Fell	
3801	CT852	811588.829	820144.002	大葉相思	*Acacia mangium*	120	4	9	FELL	Fell	
3801	CT853	811587.225	820143.919	羊蹄甲屬	*Bauhinia spp.*	100	5	8	FELL	Fell	
3801	CT854	811585.540	820145.185	羊蹄甲屬	*Bauhinia spp.*	120	5	9	FELL	Fell	
3801	CT855	811584.517	820145.257	台灣相思	*Acacia confusa*	130	4	9	FELL	Fell	
3801	CT857	811580.058	820144.562	楝	*Melia azedarach*	240	6	15	FELL	Fell	
3801	CT858	811580.584	820145.353	大葉相思	*Acacia mangium*	150	4	10	FELL	Fell	
3801	CT859	811574.848	820144.564	紅膠木	*Lophostemon confertus*	190	4	12	FELL	Fell	
3801	CT86	811718.356	820137.511	大葉相思	*Acacia mangium*	100	1	7	FELL	Fell	
3801	CT860	811577.483	820146.380	大葉相思	*Acacia mangium*	160	4	10	FELL	Fell	
3801	CT861	811580.149	820149.877	楝	*Melia azedarach*	140	8	9	FELL	Fell	
3801	CT862	811581.324	820150.528	楝	*Melia azedarach*	160	5	11	FELL	Fell	
3801	CT863	811584.560	820148.364	黃花夾竹桃	*Thevetia peruviana*	227	6	5	FELL	Fell	
3801	CT864	811585.547	820145.824	台灣相思	*Acacia confusa*	260	10	15	FELL	Fell	
3801	CT865	811587.979	820145.608	台灣相思	*Acacia confusa*	120	4	11	FELL	Fell	
3801	CT866	811588.179	820146.363	台灣相思	*Acacia confusa*	100	4	8	FELL	Fell	
3801	CT867	811588.976	820145.743	台灣相思	*Acacia confusa*	150	5	10	FELL	Fell	
3801	CT868	811589.724	820145.959	台灣相思	*Acacia confusa*	130	9	11	FELL	Fell	
3801	CT869	811591.414	820146.139	台灣相思	*Acacia confusa*	170	8	12	FELL	Fell	
3801	CT87	811717.268	820134.654	台灣相思	*Acacia confusa*	140	7	11	FELL	Fell	
3801	CT870	811594.954	820145.213	台灣相思	*Acacia confusa*	130	3	6	FELL	Fell	
3801	CT871	811598.786	820143.495	台灣相思	*Acacia confusa*	156	5	8	FELL	Fell	
3801	CT872	811601.688	820142.760	大葉相思	*Acacia mangium*	110	4	9	FELL	Fell	
3801	CT873	811595.781	820140.705	銀合歡	*Leucaena leucocephala*	120	4	11	FELL	Fell	
3801	CT874	811605.070	820141.771	大葉相思	*Acacia mangium*	310	8	14	FELL	Fell	
3801	CT875	811607.701	820143.001	台灣相思	*Acacia confusa*	130	8	10	FELL	Fell	
3801	CT876	811606.565	820144.331	台灣相思	*Acacia confusa*	100	7	7	FELL	Fell	
3801	CT877	811607.277	820144.851	台灣相思	*Acacia confusa*	150	6	11	FELL	Fell	
3801	CT878	811608.072	820146.824	楝	*Melia azedarach*	160	4	12	FELL	Fell	
3801	CT879	811609.273	820144.867	台灣相思	*Acacia confusa*	180	5	11	FELL	Fell	
3801	CT88	811716.411	820138.704	大葉相思	*Acacia mangium*	110	6	5	FELL	Fell	
3801	CT880	811609.509	820143.208	台灣相思	*Acacia confusa*	160	4	12	FELL	Fell	
3801	CT881	811615.677	820142.284	大葉相思	*Acacia mangium*	180	5	12	FELL	Fell	
3801	CT882	811617.651	820141.156	死樹	Dead tree	340	8	10	FELL	Fell	

Contracts	Tree ID	Easting	Northing	Chinese Name	*Latin Name*	Tree Measurement			Recommendation in LVP	Status as of end December 2020	Remarks
						DBH (mm)	Crown Spread (m)	Height (m)			
3801	CT883	811623.063	820139.727	台灣相思	*Acacia confusa*	100	5	12	FELL	Fell	
3801	CT884	811623.527	820141.084	大葉相思	*Acacia mangium*	200	5	15	FELL	Fell	
3801	CT885	811628.092	820137.432	台灣相思	*Acacia confusa*	130	5	13	FELL	Fell	
3801	CT886	811628.826	820137.058	台灣相思	*Acacia confusa*	130	6	13	FELL	Fell	
3801	CT887	811631.684	820141.243	羊蹄甲屬	*Bauhinia spp.*	110	5	5	FELL	Fell	
3801	CT888	811634.432	820142.740	台灣相思	*Acacia confusa*	160	6	9	FELL	Fell	
3801	CT889	811635.834	820143.492	台灣相思	*Acacia confusa*	120	4	7	FELL	Fell	
3801	CT89	811715.371	820140.085	大葉相思	*Acacia mangium*	190	5	12	FELL	Fell	
3801	CT890	811634.916	820143.892	台灣相思	*Acacia confusa*	140	6	7	FELL	Fell	
3801	CT891	811634.225	820144.356	台灣相思	*Acacia confusa*	160	5	8	FELL	Fell	
3801	CT892	811633.245	820144.855	台灣相思	*Acacia confusa*	110	3	8	FELL	Fell	
3801	CT893	811633.575	820143.683	台灣相思	*Acacia confusa*	120	4	9	FELL	Fell	
3801	CT894	811629.873	820143.990	大葉相思	*Acacia mangium*	140	4	9	FELL	Fell	
3801	CT895	811629.602	820141.735	楝	*Melia azedarach*	230	7	10	FELL	Fell	
3801	CT896	811626.640	820143.059	台灣相思	*Acacia confusa*	160	7	10	FELL	Fell	
3801	CT897	811625.725	820143.760	台灣相思	*Acacia confusa*	140	6	9	FELL	Fell	
3801	CT898	811624.816	820143.764	台灣相思	*Acacia confusa*	130	5	12	FELL	Fell	
3801	CT899	811622.496	820144.157	台灣相思	*Acacia confusa*	120	4	11	FELL	Fell	
3801	CT90	811715.871	820141.038	銀合歡	*Leucaena leucocephala*	156	7	9	FELL	Fell	
3801	CT900	811621.995	820144.111	台灣相思	*Acacia confusa*	130	6	11	FELL	Fell	
3801	CT901	811623.874	820148.391	羊蹄甲屬	*Bauhinia spp.*	190	5	7	FELL	Fell	
3801	CT902	811616.806	820148.572	台灣相思	*Acacia confusa*	180	5	8	FELL	Fell	
3801	CT903	811615.634	820146.515	台灣相思	*Acacia confusa*	150	4	8	FELL	Fell	
3801	CT904	811616.003	820146.226	台灣相思	*Acacia confusa*	120	3	7	FELL	Fell	
3801	CT905	811617.460	820144.787	台灣相思	*Acacia confusa*	110	4	8	FELL	Fell	
3801	CT906	811615.943	820145.358	台灣相思	*Acacia confusa*	110	3	8	FELL	Fell	
3801	CT907	811614.500	820145.765	台灣相思	*Acacia confusa*	150	5	8	FELL	Fell	
3801	CT908	811613.465	820148.156	台灣相思	*Acacia confusa*	231	5	8	FELL	Fell	
3801	CT909	811605.529	820149.520	台灣相思	*Acacia confusa*	170	4	7	FELL	Fell	
3801	CT91	811714.961	820141.592	楝	*Melia azedarach*	120	4	11	FELL	Fell	
3801	CT910	811604.252	820149.564	台灣相思	*Acacia confusa*	140	5	8	FELL	Fell	
3801	CT911	811603.428	820150.140	台灣相思	*Acacia confusa*	120	5	6	FELL	Fell	
3801	CT912	811604.253	820150.610	台灣相思	*Acacia confusa*	170	3	7	FELL	Fell	
3801	CT913	811601.190	820147.756	大葉相思	*Acacia mangium*	150	3	7	FELL	Fell	
3801	CT914	811600.852	820149.490	羊蹄甲屬	*Bauhinia spp.*	100	4	5	FELL	Fell	
3801	CT915	811594.236	820151.876	楝	*Melia azedarach*	190	5	7	FELL	Fell	
3801	CT916	811593.879	820152.722	楝	*Melia azedarach*	140	4	7	FELL	Fell	
3801	CT917	811670.016	820072.115	羊蹄甲屬	*Bauhinia spp.*	120	4	7	FELL	Fell	
3801	CT918	811667.265	820071.504	大葉相思	*Acacia mangium*	180	3	10	FELL	Fell	
3801	CT919	811666.338	820069.213	黃槿	*Hibiscus tiliaceus*	170	7	10	FELL	Fell	
3801	CT92	811716.807	820139.580	大葉相思	*Acacia mangium*	110	6	7	FELL	Fell	
3801	CT920	811665.058	820069.603	黃花夾竹桃	*Thevetia peruviana*	110	6	8	FELL	Fell	

Contracts	Tree ID	Easting	Northing	Chinese Name	*Latin Name*	Tree Measurement			Recommendation in LVP	Status as of end December 2020	Remarks
						DBH (mm)	Crown Spread (m)	Height (m)			
3801	CT921	811664.677	820072.149	台灣相思	*Acacia confusa*	210	5	11	FELL	Fell	
3801	CT922	811666.505	820075.134	台灣相思	*Acacia confusa*	140	4	10	FELL	Fell	
3801	CT923	811665.474	820076.628	台灣相思	*Acacia confusa*	210	6	10	FELL	Fell	
3801	CT924	811663.803	820074.288	楝	*Melia azedarach*	280	5	12	FELL	Fell	
3801	CT925	811662.143	820074.568	楝	*Melia azedarach*	240	3	12	FELL	Fell	
3801	CT926	811661.820	820076.670	台灣相思	*Acacia confusa*	180	7	8	FELL	Fell	
3801	CT927	811661.633	820072.276	台灣相思	*Acacia confusa*	100	4	7	FELL	Fell	
3801	CT928	811659.005	820073.211	台灣相思	*Acacia confusa*	120	4	8	FELL	Fell	
3801	CT929	811656.636	820075.849	台灣相思	*Acacia confusa*	100	3	5	FELL	Fell	
3801	CT93	811713.309	820143.632	銀合歡	*Leucaena leucocephala*	218	15	9	FELL	Fell	
3801	CT930	811658.430	820076.247	台灣相思	*Acacia confusa*	120	4	8	FELL	Fell	
3801	CT931	811658.357	820077.197	大葉相思	*Acacia mangium*	290	6	12	FELL	Fell	
3801	CT933	811657.583	820077.756	台灣相思	*Acacia confusa*	180	3	12	FELL	Fell	
3801	CT934	811657.506	820078.760	大葉相思	*Acacia mangium*	230	4	11	FELL	Fell	
3801	CT935	811656.423	820079.238	大葉相思	*Acacia mangium*	140	4	11	FELL	Fell	
3801	CT937	811656.524	820077.007	台灣相思	*Acacia confusa*	130	4	8	FELL	Fell	
3801	CT938	811655.646	820079.505	大葉相思	*Acacia mangium*	240	4	11	FELL	Fell	
3801	CT939	811654.826	820077.818	台灣相思	*Acacia confusa*	100	5	8	FELL	Fell	
3801	CT94	811713.024	820131.351	台灣相思	*Acacia confusa*	140	9	10	FELL	Fell	
3801	CT940	811653.505	820081.248	紅膠木	*Lophostemon confertus*	100	4	15	FELL	Fell	
3801	CT941	811654.776	820076.723	台灣相思	*Acacia confusa*	130	7	7	FELL	Fell	
3801	CT942	811653.900	820077.304	台灣相思	*Acacia confusa*	280	7	11	FELL	Fell	
3801	CT943	811650.929	820079.337	羊蹄甲屬	*Bauhinia spp.*	120	5	6	FELL	Fell	
3801	CT944	811648.167	820080.445	羊蹄甲屬	*Bauhinia spp.*	110	5	7	FELL	Fell	
3801	CT945	811647.472	820080.151	羊蹄甲屬	*Bauhinia spp.*	100	7	8	FELL	Fell	
3801	CT946	811647.460	820080.816	羊蹄甲屬	*Bauhinia spp.*	150	7	7	FELL	Fell	
3801	CT947	811646.663	820080.322	羊蹄甲屬	*Bauhinia spp.*	120	5	10	FELL	Fell	
3801	CT948	811644.172	820079.271	楝	*Melia azedarach*	390	9	11	FELL	Fell	
3801	CT949	811643.895	820081.576	台灣相思	*Acacia confusa*	205	8	9	FELL	Fell	
3801	CT95	811712.308	820131.465	台灣相思	*Acacia confusa*	130	5	10	FELL	Fell	
3801	CT950	811644.415	820081.982	台灣相思	*Acacia confusa*	120	7	7	FELL	Fell	
3801	CT951	811644.374	820083.085	大葉相思	*Acacia mangium*	210	5	11	FELL	Fell	
3801	CT952	811645.348	820084.083	大葉相思	*Acacia mangium*	205	5	7	FELL	Fell	
3801	CT953	811642.829	820084.523	大葉相思	*Acacia mangium*	230	4	11	FELL	Fell	
3801	CT954	811642.497	820083.054	台灣相思	*Acacia confusa*	120	4	8	FELL	Fell	
3801	CT955	811641.830	820084.715	大葉相思	*Acacia mangium*	100	3	5	FELL	Fell	
3801	CT956	811641.135	820083.922	大葉相思	*Acacia mangium*	290	5	12	FELL	Fell	
3801	CT957	811641.451	820082.261	台灣相思	*Acacia confusa*	130	4	8	FELL	Fell	
3801	CT958	811639.808	820083.258	台灣相思	*Acacia confusa*	150	4	10	FELL	Fell	
3801	CT959	811640.123	820084.116	大葉相思	*Acacia mangium*	140	4	8	FELL	Fell	
3801	CT96	811711.858	820130.574	台灣相思	*Acacia confusa*	140	5	9	FELL	Fell	
3801	CT960	811639.974	820088.710	大葉相思	*Acacia mangium*	300	6	11	FELL	Fell	

Contracts	Tree ID	Easting	Northing	Chinese Name	*Latin Name*	Tree Measurement			Recommendation in LVP	Status as of end December 2020	Remarks
						DBH (mm)	Crown Spread (m)	Height (m)			
3801	CT961	811637.927	820085.962	紅膠木	*Lophostemon confertus*	100	5	8	FELL	Fell	
3801	CT962	811635.834	820087.092	紅膠木	*Lophostemon confertus*	100	5	8	FELL	Fell	
3801	CT963	811636.340	820084.950	羊蹄甲屬	*Bauhinia spp.*	100	3	8	FELL	Fell	
3801	CT964	811637.112	820082.146	紅膠木	*Lophostemon confertus*	120	5	6	FELL	Fell	
3801	CT965	811631.954	820085.976	台灣相思	*Acacia confusa*	260	7	12	FELL	Fell	
3801	CT966	811633.441	820086.855	台灣相思	*Acacia confusa*	120	4	9	FELL	Fell	
3801	CT967	811631.858	820086.727	台灣相思	*Acacia confusa*	120	6	6	FELL	Fell	
3801	CT968	811632.465	820087.105	台灣相思	*Acacia confusa*	160	4	11	FELL	Fell	
3801	CT969	811630.829	820087.183	台灣相思	*Acacia confusa*	130	5	8	FELL	Fell	
3801	CT97	811711.245	820131.195	台灣相思	*Acacia confusa*	170	7	10	FELL	Fell	
3801	CT970	811631.393	820087.900	台灣相思	*Acacia confusa*	120	7	7	FELL	Fell	
3801	CT971	811633.283	820088.061	台灣相思	*Acacia confusa*	110	5	6	FELL	Fell	
3801	CT972	811635.631	820089.192	楝	*Melia azedarach*	240	5	12	FELL	Fell	
3801	CT973	811629.298	820085.653	楝	*Melia azedarach*	220	7	12	FELL	Fell	
3801	CT974	811623.906	820086.085	大葉相思	*Acacia mangium*	310	5	12	FELL	Fell	
3801	CT975	811622.994	820086.361	大葉相思	*Acacia mangium*	140	3	11	FELL	Fell	
3801	CT976	811623.550	820087.356	大葉相思	*Acacia mangium*	170	5	11	FELL	Fell	
3801	CT977	811621.966	820087.134	死樹	Dead tree	170	3	12	FELL	Fell	
3801	CT978	811623.281	820088.260	大葉相思	*Acacia mangium*	180	4	11	FELL	Fell	
3801	CT979	811624.497	820088.077	大葉相思	*Acacia mangium*	280	8	12	FELL	Fell	
3801	CT98	811710.313	820131.891	台灣相思	*Acacia confusa*	150	7	9	FELL	Fell	
3801	CT980	811624.120	820089.260	大葉相思	*Acacia mangium*	100	5	7	FELL	Fell	
3801	CT981	811625.260	820092.836	大葉相思	*Acacia mangium*	210	4	10	FELL	Fell	
3801	CT982	811622.968	820092.013	紅膠木	*Lophostemon confertus*	100	4	6	FELL	Fell	
3801	CT983	811622.077	820091.055	台灣相思	*Acacia confusa*	160	6	10	FELL	Fell	
3801	CT984	811621.398	820090.268	台灣相思	*Acacia confusa*	100	5	10	FELL	Fell	
3801	CT985	811621.163	820091.290	台灣相思	*Acacia confusa*	120	5	6	FELL	Fell	
3801	CT986	811620.622	820090.790	台灣相思	*Acacia confusa*	110	5	10	FELL	Fell	
3801	CT987	811619.796	820090.089	台灣相思	*Acacia confusa*	190	7	10	FELL	Fell	
3801	CT988	811619.133	820087.566	大葉相思	*Acacia mangium*	230	6	12	FELL	Fell	
3801	CT989	811618.346	820089.535	羊蹄甲屬	*Bauhinia spp.*	110	3	10	FELL	Fell	
3801	CT99	811706.145	820136.848	楝	*Melia azedarach*	220	7	9	FELL	Fell	
3801	CT990	811616.978	820087.816	紅膠木	*Lophostemon confertus*	110	3	8	FELL	Fell	
3801	CT991	811617.107	820090.263	羊蹄甲屬	*Bauhinia spp.*	140	5	10	FELL	Fell	
3801	CT992	811614.730	820091.061	大葉相思	*Acacia mangium*	210	3	11	FELL	Fell	
3801	CT993	811614.324	820090.844	大葉相思	*Acacia mangium*	130	2	11	FELL	Fell	
3801	CT994	811613.921	820091.427	大葉相思	*Acacia mangium*	210	4	9	FELL	Fell	
3801	CT995	811613.384	820091.001	大葉相思	*Acacia mangium*	400	9	14	FELL	Fell	
3801	CT996	811613.115	820088.535	大葉相思	*Acacia mangium*	410	6	13	FELL	Fell	
3801	CT997	811611.615	820088.742	羊蹄甲屬	*Bauhinia spp.*	100	6	8	FELL	Fell	
3801	CT998	811610.086	820091.235	羊蹄甲屬	*Bauhinia spp.*	110	5	7	FELL	Fell	
3801	CT999	811608.617	820089.393	羊蹄甲屬	*Bauhinia spp.*	100	2	12	FELL	Fell	

Contracts	Tree ID	Easting	Northing	Chinese Name	*Latin Name*	Tree Measurement			Recommendation in LVP	Status as of end December 2020	Remarks
						DBH (mm)	Crown Spread (m)	Height (m)			
3801	P252/CT305	811786.397	819946.253	垂葉榕	*Ficus benjamina*	215	5	7	FELL	Fell	
3801	P252/CT306	811785.442	819950.058	垂葉榕	*Ficus benjamina*	200	6	7	FELL	Fell	
3801	P252/CT307	811784.457	819954.052	垂葉榕	*Ficus benjamina*	225	6	7	FELL	Fell	
3801	P252/CT308	811783.426	819957.428	垂葉榕	*Ficus benjamina*	210	6	7	FELL	Fell	
3801	P252/CT309	811782.225	819961.739	垂葉榕	*Ficus benjamina*	280	7	7	FELL	Fell	
3801	P252/CT310	811779.809	819969.496	垂葉榕	*Ficus benjamina*	210	5	6	FELL	Fell	
3801	P252/CT311	811778.480	819973.314	垂葉榕	*Ficus benjamina*	255	6	7	FELL	Fell	
3801	P252/CT312	811777.481	819977.223	垂葉榕	*Ficus benjamina*	215	6	7	FELL	Fell	
3801	P252/CT313	811776.405	819980.743	垂葉榕	*Ficus benjamina*	225	6	7	FELL	Fell	
3801	P252/CT314	811770.989	819930.305	垂葉榕	*Ficus benjamina*	140	3	5	FELL	Fell	
3801	P252/CT315	811769.878	819933.451	大葉相思	*Acacia mangium*	220	3	7	FELL	Fell	
3801	P252/CT316	811757.330	819970.896	大葉相思	*Acacia mangium*	245	5	8	FELL	Fell	
3801	P252/CT506	811736.868	820021.775	大葉相思	*Acacia mangium*	205	4	5	FELL	Fell	
3801	P252/CT507	811728.866	820034.748	耳果相思	*Acacia auriculiformis*	160	4	5	FELL	Fell	
3801	P252/CT508	811725.942	820039.012	大葉相思	*Acacia mangium*	255	5	7	FELL	Fell	
3801	P252/CT509	811717.896	820049.460	大葉相思	*Acacia mangium*	160	4	6	FELL	Fell	
3801	P252/CT510	811714.594	820053.262	大葉相思	*Acacia mangium*	220	5	6	FELL	Fell	
3801	P252/CT511	811711.315	820056.891	耳果相思	*Acacia auriculiformis*	200	5	7	FELL	Fell	
3801	P252/CT512	811704.103	820064.238	大葉相思	*Acacia mangium*	205	5	7	FELL	Fell	
3801	P252/CT513	811699.979	820068.095	大葉相思	*Acacia mangium*	205	5	7	FELL	Fell	
3801	P252/CT514	811692.594	820074.350	大葉相思	*Acacia mangium*	175	5	6	FELL	Fell	
3801	P252/CT515	811688.504	820077.506	大葉相思	*Acacia mangium*	245	5	8	FELL	Fell	
3801	P252/CT544	811674.863	820053.976	台灣相思	*Acacia confusa*	175	7	7	FELL	Fell	
3801	P252/CT545	811675.324	820053.377	台灣相思	*Acacia confusa*	255	5	11	FELL	Fell	
3801	P252/CT546	811676.786	820051.154	台灣相思	*Acacia confusa*	230	8	11	FELL	Fell	
3801	P252/CT547	811674.578	820053.029	台灣相思	*Acacia confusa*	130	5	10	FELL	Fell	
3801	P252/CT548	811676.225	820050.495	台灣相思	*Acacia confusa*	285	8	11	FELL	Fell	
3801	P252/CT549	811677.397	820049.129	台灣相思	*Acacia confusa*	150	5	6	FELL	Fell	
3801	P252/CT550	811676.920	820049.641	台灣相思	*Acacia confusa*	250	6	9	FELL	Fell	
3801	P252/CT551	811678.441	820048.391	台灣相思	*Acacia confusa*	115	4	6	FELL	Fell	
3801	P252/CT552	811678.364	820047.144	大葉相思	*Acacia mangium*	170	3	5	FELL	Fell	
3801	P252/CT553	811681.041	820038.225	大葉相思	*Acacia mangium*	135	4	4	FELL	Fell	
3801	P252/CT554	811678.721	820035.693	大葉相思	*Acacia mangium*	250	8	10	FELL	Fell	
3801	P252/CT555	811677.782	820034.753	大葉相思	*Acacia mangium*	145	5	5	FELL	Fell	
3801	P252/CT556	811677.084	820042.980	台灣相思	*Acacia confusa*	110	2	4	FELL	Fell	
3801	P252/CT558	811674.373	820041.894	台灣相思	*Acacia confusa*	135	4	7	FELL	Fell	
3801	P252/CT558A	811673.066	820042.919	楝	*Melia azedarach*	339	6	9	FELL	Fell	
3801	P252/CT559	811674.194	820039.949	台灣相思	*Acacia confusa*	190	5	7	FELL	Fell	
3801	P252/CT560	811675.793	820041.152	洋紫荊	*Bauhinia x blakeana*	155	5	5	FELL	Fell	
3801	P282/CT2781	811730.934	819980.528	大葉合歡	*Albizia lebbeck*	387	5	7	FELL	Fell	
3801	P282/CT2782	811732.589	819980.236	大葉合歡	*Albizia lebbeck*	420	7	7	FELL	Fell	
3801	P282/CT2783	811705.680	819982.670	垂葉榕	*Ficus benjamina*	330	4	7	FELL	Fell	

Contracts	Tree ID	Easting	Northing	Chinese Name	*Latin Name*	Tree Measurement			Recommendation in LVP	Status as of end December 2020	Remarks
						DBH (mm)	Crown Spread (m)	Height (m)			
3801	P282/CT2784	811715.065	819959.190	垂葉榕	*Ficus benjamina*	280	5	8	FELL	Fell	
3801	P282/CT2785	811710.165	819974.829	垂葉榕	*Ficus benjamina*	290	4	6	FELL	Fell	
3801	P282/CT2786	811722.794	819993.266	銀樺	*Grevillea robusta*	220	2	7	FELL	Fell	
3801	P282/CT2787	811721.805	819994.885	銀樺	*Grevillea robusta*	160	2	3	FELL	Fell	
3801	P282/CT2788	811719.302	819996.355	銀樺	*Grevillea robusta*	240	3	4	FELL	Fell	
3801	P282/CT2789	811717.300	819998.983	銀樺	*Grevillea robusta*	210	3	3	FELL	Fell	
3801	P282/CT2790	811714.266	819999.652	銀樺	*Grevillea robusta*	110	2	2	FELL	Fell	
3801	P282/CT2791	811707.011	820006.025	銀樺	*Grevillea robusta*	130	2	2	FELL	Fell	
3801	P282/CT2792	811702.827	820008.238	銀樺	*Grevillea robusta*	220	2	6	FELL	Fell	
3801	P282/CT2793	811671.180	820035.119	台灣相思	*Acacia confusa*	215	6	11	FELL	Fell	
3801	P282/CT2794	811669.341	820036.385	台灣相思	*Acacia confusa*	190	5	10	FELL	Fell	
3801	P282/CT2795	811671.386	820037.808	台灣相思	*Acacia confusa*	151	5	8	FELL	Fell	
3801	P282/CT2796	811672.821	820036.394	台灣相思	*Acacia confusa*	167	4	6	FELL	Fell	
3801	P282/CT2797	811673.009	820039.742	台灣相思	*Acacia confusa*	145	3	10	FELL	Fell	
3801	P282/CT2798	811669.020	820030.417	紅花羊蹄甲	*Bauhinia purpurea*	125	4	6	FELL	Fell	
3801	P282/CT2799	811664.127	820032.433	台灣相思	*Acacia confusa*	130	3	7	FELL	Fell	
3801	P282/CT2800	811661.345	820030.472	台灣相思	*Acacia confusa*	294	4	11	FELL	Fell	
3801	P282/CT2801	811663.492	820030.323	台灣相思	*Acacia confusa*	135	5	9	FELL	Fell	
3801	P282/CT2802	811661.830	820029.017	台灣相思	*Acacia confusa*	210	4	10	FELL	Fell	
3801	P282/CT2803	811659.870	820029.129	台灣相思	*Acacia confusa*	210	4	11	FELL	Fell	
3801	P282/CT2804	811658.410	820029.157	台灣相思	*Acacia confusa*	205	4	5	FELL	Fell	
3801	P282/CT2805	811657.118	820027.234	台灣相思	*Acacia confusa*	195	7	8	FELL	Fell	
3801	P282/CT2806	811655.342	820027.159	台灣相思	*Acacia confusa*	280	7	9	FELL	Fell	
3801	P282/CT2807	811657.049	820026.390	台灣相思	*Acacia confusa*	300	6	8	FELL	Fell	
3801	P282/CT2808	811658.352	820025.477	楝	*Melia azedarach*	305	5	8	FELL	Fell	
NA: Not provided in LVP					**Existing Works Contracts Sub-total**			**Retain**	165	118	
								Transplant	14	14	
								Fell	1950	1931	
								NA	1	0	

Contracts	Tree ID	Easting	Northing	Chinese Name	*Latin Name*	Tree Measurement			Recommendation in LVP	Status as of end December 2020	Remarks
						DBH (mm)	Crown Spread (m)	Height (m)			
New Works Contracts (awarded within 2020) (The number and recommendation of trees are provisional and are subject to updated tree survey results)											
3508	T01HK	811496.08	819846.25	細葉榕	*Ficus microcarpa*	150	7	6	RETAIN	NA	
3508	T02HK	811510.247	819805.106	細葉榕	*Ficus microcarpa*	150	7	6	RETAIN	NA	
3508	T1230	811955.808	819463.969	耳果相思	*Acacia auriculiformis*	320	7	11	RETAIN	NA	
3508	T1231	811954.369	819466.181	旅人蕉	*Ravenala madagascariensis*	220	2	5	RETAIN	NA	
3508	T1232	811953.456	819466.539	旅人蕉	*Ravenala madagascariensis*	200	2	5	RETAIN	NA	
3508	T1233	811953.809	819465.779	旅人蕉	*Ravenala madagascariensis*	190	2	4	RETAIN	NA	
3508	T1234	811952.497	819464.64	旅人蕉	*Ravenala madagascariensis*	200	2	5	RETAIN	NA	
3508	T1235	811951.646	819464.563	旅人蕉	*Ravenala madagascariensis*	200	2	5	RETAIN	NA	
3508	T1236	811951.432	819465.22	旅人蕉	*Ravenala madagascariensis*	200	2	5	RETAIN	NA	
3508	T1237	811950.932	819466.17	旅人蕉	*Ravenala madagascariensis*	240	2	5	RETAIN	NA	
3508	T1238	811950.258	819465.774	旅人蕉	*Ravenala madagascariensis*	210	2	5	RETAIN	NA	
3508	T1239	811949.186	819464.353	旅人蕉	*Ravenala madagascariensis*	205	2	4	RETAIN	NA	
3508	T1240	811950.534	819463.95	旅人蕉	*Ravenala madagascariensis*	240	2	5	RETAIN	NA	
3508	T1241	811951.337	819464.358	旅人蕉	*Ravenala madagascariensis*	270	2	5	RETAIN	NA	
3508	T1242	811951.379	819463.411	旅人蕉	*Ravenala madagascariensis*	220	2	5	RETAIN	NA	
3508	T1243	811950.501	819463.08	旅人蕉	*Ravenala madagascariensis*	230	2	4	RETAIN	NA	
3508	T1244	811949.156	819462.48	旅人蕉	*Ravenala madagascariensis*	220	2	5	RETAIN	NA	
3508	T1245	811948.447	819462.922	旅人蕉	*Ravenala madagascariensis*	290	2	5	RETAIN	NA	
3508	T1246	811948.085	819463.697	旅人蕉	*Ravenala madagascariensis*	210	2	5	RETAIN	NA	
3508	T1248	811946.05	819464.03	旅人蕉	*Ravenala madagascariensis*	220	2	5	RETAIN	NA	
3508	T1249	811945.355	819463.638	旅人蕉	*Ravenala madagascariensis*	220	2	4	RETAIN	NA	
3508	T1261	811937.418	819455.235	旅人蕉	*Ravenala madagascariensis*	210	2	5	RETAIN	NA	
3508	T1262	811937.655	819457.269	旅人蕉	*Ravenala madagascariensis*	215	2	5	RETAIN	NA	
3508	T1263	811938.507	819456.742	旅人蕉	*Ravenala madagascariensis*	190	2	5	RETAIN	NA	
3508	T1264	811938.728	819455.422	旅人蕉	*Ravenala madagascariensis*	255	2	5	RETAIN	NA	
3508	T1265	811939.361	819456.368	旅人蕉	*Ravenala madagascariensis*	220	2	4	RETAIN	NA	
3508	T1267	811940.256	819457.636	旅人蕉	*Ravenala madagascariensis*	255	2	5	RETAIN	NA	
3508	T1268	811941.614	819458.577	旅人蕉	*Ravenala madagascariensis*	220	2	5	RETAIN	NA	
3508	T1269	811943.616	819460.29	旅人蕉	*Ravenala madagascariensis*	330	2	5	RETAIN	NA	
3508	T1270	811945.717	819461.351	旅人蕉	*Ravenala madagascariensis*	240	2	5	RETAIN	NA	
3508	T1271	811945.432	819462.478	旅人蕉	*Ravenala madagascariensis*	240	2	5	RETAIN	NA	
3508	T1272	811944.617	819462.221	旅人蕉	*Ravenala madagascariensis*	290	2	5	RETAIN	NA	
3508	T1273	811943.837	819461.793	旅人蕉	*Ravenala madagascariensis*	290	2	5	RETAIN	NA	
3508	T1274	811942.187	819460.257	旅人蕉	*Ravenala madagascariensis*	215	2	5	RETAIN	NA	
3508	T1275	811941.574	819459.926	旅人蕉	*Ravenala madagascariensis*	290	2	5	RETAIN	NA	
3508	T1276	811941.009	819459.48	旅人蕉	*Ravenala madagascariensis*	140	2	4	RETAIN	NA	
3508	T1277	811940.2881	819458.8344	旅人蕉	*Ravenala madagascariensis*	245	2	5	RETAIN	NA	
3508	T1279	811939.4901	819458.4649	旅人蕉	*Ravenala madagascariensis*	230	2	5	RETAIN	NA	
3508	T1282	811934.699	819452.582	旅人蕉	*Ravenala madagascariensis*	260	2	5	RETAIN	NA	
3508	T1283	811934.555	819451.536	旅人蕉	*Ravenala madagascariensis*	200	2	4	RETAIN	NA	

Contracts	Tree ID	Easting	Northing	Chinese Name	*Latin Name*	Tree Measurement			Recommendation in LVP	Status as of end December 2020	Remarks
						DBH (mm)	Crown Spread (m)	Height (m)			
3508	T1284	811932.968	819451.255	旅人蕉	*Ravenala madagascariensis*	220	2	5	RETAIN	NA	
3508	T1285	811932.277	819450.194	旅人蕉	*Ravenala madagascariensis*	175	2	4	RETAIN	NA	
3508	T1286	811931.796	819449.509	旅人蕉	*Ravenala madagascariensis*	220	2	5	RETAIN	NA	
3508	T1287	811931.117	819448.93	旅人蕉	*Ravenala madagascariensis*	255	2	4	RETAIN	NA	
3508	T1288	811930.867	819448.151	旅人蕉	*Ravenala madagascariensis*	190	2	4	RETAIN	NA	
3508	T1289	811929.999	819446.7	旅人蕉	*Ravenala madagascariensis*	260	2	5	RETAIN	NA	
3508	T1290	811929.496	819445.855	旅人蕉	*Ravenala madagascariensis*	180	2	5	RETAIN	NA	
3508	T1291	811929.157	819445.115	旅人蕉	*Ravenala madagascariensis*	240	2	5	RETAIN	NA	
3508	T1292	811928.624	819444.401	旅人蕉	*Ravenala madagascariensis*	200	2	5	RETAIN	NA	
3508	T1293	811928.242	819442.335	旅人蕉	*Ravenala madagascariensis*	320	2	5	RETAIN	NA	
3508	T1294	811928.566	819441.163	旅人蕉	*Ravenala madagascariensis*	220	2	5	RETAIN	NA	
3508	T1296	811927.611	819439.632	旅人蕉	*Ravenala madagascariensis*	200	2	5	RETAIN	NA	
3508	T1297	811926.955	819439.904	旅人蕉	*Ravenala madagascariensis*	230	2	5	RETAIN	NA	
3508	T1298	811925.706	819440.422	旅人蕉	*Ravenala madagascariensis*	200	2	5	RETAIN	NA	
3508	T1299	811924.824	819438.608	旅人蕉	*Ravenala madagascariensis*	255	2	5	RETAIN	NA	
3508	T1300	811924.499	819437.856	旅人蕉	*Ravenala madagascariensis*	165	2	4	RETAIN	NA	
3508	T1301	811924.138	819437.015	旅人蕉	*Ravenala madagascariensis*	210	2	5	RETAIN	NA	
3508	T1302	811924.243	819435.803	旅人蕉	*Ravenala madagascariensis*	215	3	6	RETAIN	NA	
3508	T1303	811924.1	819435.069	旅人蕉	*Ravenala madagascariensis*	265	3	6	RETAIN	NA	
3508	T1304	811924.619	819434.669	旅人蕉	*Ravenala madagascariensis*	320	3	6	RETAIN	NA	
3508	T1305	811925.219	819435.261	旅人蕉	*Ravenala madagascariensis*	215	2	5	RETAIN	NA	
3508	T1306	811926.558	819435.816	旅人蕉	*Ravenala madagascariensis*	215	2	5	RETAIN	NA	
3508	T1307	811927.571	819437.299	旅人蕉	*Ravenala madagascariensis*	260	3	6	RETAIN	NA	
3508	T1308	811926.073	819436.95	旅人蕉	*Ravenala madagascariensis*	300	3	6	RETAIN	NA	
3508	T1309	811926.178	819438.326	旅人蕉	*Ravenala madagascariensis*	260	3	6	RETAIN	NA	
3508	T1311	811928.595	819439.056	旅人蕉	*Ravenala madagascariensis*	200	2	5	RETAIN	NA	
3508	T1312	811929.597	819440.581	旅人蕉	*Ravenala madagascariensis*	190	2	5	RETAIN	NA	
3508	T1313	811930.015	819441.357	旅人蕉	*Ravenala madagascariensis*	190	2	5	RETAIN	NA	
3508	T1314	811929.186	819441.74	旅人蕉	*Ravenala madagascariensis*	170	2	5	RETAIN	NA	
3508	T1315	811930.532	819442.38	旅人蕉	*Ravenala madagascariensis*	255	2	5	RETAIN	NA	
3508	T1316	811931.821	819443.589	旅人蕉	*Ravenala madagascariensis*	300	2	6	RETAIN	NA	
3508	T1317	811932.197	819444.38	旅人蕉	*Ravenala madagascariensis*	175	2	5	RETAIN	NA	
3508	T1318	811933.066	819445.972	旅人蕉	*Ravenala madagascariensis*	200	2	5	RETAIN	NA	
3508	T1320	811934.405	819448.343	旅人蕉	*Ravenala madagascariensis*	220	2	5	RETAIN	NA	
3508	T1321	811935.366	819449.96	旅人蕉	*Ravenala madagascariensis*	255	2	5	RETAIN	NA	
3508	T1322	811935.955	819450.822	旅人蕉	*Ravenala madagascariensis*	250	2	6	RETAIN	NA	
3508	T1323	811935.539	819452.067	旅人蕉	*Ravenala madagascariensis*	230	2	5	RETAIN	NA	
3508	T1327	811933.085	819449.616	旅人蕉	*Ravenala madagascariensis*	270	2	5	RETAIN	NA	
3508	T1328	811932.494	819448.234	旅人蕉	*Ravenala madagascariensis*	240	2	5	RETAIN	NA	
3508	T1329	811932.029	819447.54	旅人蕉	*Ravenala madagascariensis*	285	2	5	RETAIN	NA	
3508	T1330	811931.222	819446.265	旅人蕉	*Ravenala madagascariensis*	220	2	5	RETAIN	NA	
3508	T1331	811930.509	819445.466	旅人蕉	*Ravenala madagascariensis*	255	2	5	RETAIN	NA	

Contracts	Tree ID	Easting	Northing	Chinese Name	*Latin Name*	Tree Measurement			Recommendation in LVP	Status as of end December 2020	Remarks
						DBH (mm)	Crown Spread (m)	Height (m)			
3508	T1332	811930.2	819444.687	旅人蕉	*Ravenala madagascariensis*	215	2	5	RETAIN	NA	
3508	T1333	811930.235	819443.451	旅人蕉	*Ravenala madagascariensis*	240	2	5	RETAIN	NA	
3508	T1335	811947.14	819456.731	楝	*Melia azedarach*	150	5	7	RETAIN	NA	
3508	T1377	811483.52	820111.47	台灣相思	*Acacia confusa*	120	4	5	RETAIN	NA	
3508	T1381A	811871.959	819347.037	紅花夾竹桃	*Nerium oleander*	160	4	8	RETAIN	NA	
3508	T1382A	811872.417	819347.825	紅花夾竹桃	*Nerium oleander*	95	4	8	RETAIN	NA	
3508	T1383	811484.94	820118.79	黃槿	*Hibiscus tiliaceus*	120	1	1	RETAIN	NA	
3508	T1384	811485.55	820119.16	黃槿	*Hibiscus tiliaceus*	150	1	1	RETAIN	NA	
3508	T1384A	811873.813	819349.865	紅花夾竹桃	*Nerium oleander*	110	4	8	RETAIN	NA	
3508	T1385A	811875.347	819351.786	紅花夾竹桃	*Nerium oleander*	140	4	8	RETAIN	NA	
3508	T1386A	811875.808	819352.495	紅花夾竹桃	*Nerium oleander*	110	3	7	RETAIN	NA	
3508	T1387A	811876.93	819353.043	紅花夾竹桃	*Nerium oleander*	120	3	7	RETAIN	NA	
3508	T1388A	811876.582	819353.785	紅花夾竹桃	*Nerium oleander*	135	3	7	RETAIN	NA	
3508	T1389	811489.72	820124.5	大葉相思	*Acacia mangium*	230	4	7	RETAIN	NA	
3508	T1389A	811877.166	819354.413	紅花夾竹桃	*Nerium oleander*	130	4	8	RETAIN	NA	
3508	T1390A	811877.969	819355.713	紅花夾竹桃	*Nerium oleander*	155	4	8	RETAIN	NA	
3508	T1391A	811878.57	819356.315	紅花夾竹桃	*Nerium oleander*	160	4	8	RETAIN	NA	
3508	T1392A	811878.787	819357.144	紅花夾竹桃	*Nerium oleander*	160	4	8	RETAIN	NA	
3508	T1405	811510.841	820137.951	銀合歡	*Leucaena leucocephala*	120	1	2	RETAIN	NA	
3508	T1405A	811774.025	819300.863	台灣相思	*Acacia confusa*	180	3	6	FELL	Fell	
3508	T1406A	811774.709	819300.774	耳果相思	*Acacia auriculiformis*	305	6	12	FELL	Fell	
3508	T1407A	811773.852	819303.562	台灣相思	*Acacia confusa*	195	4	10	FELL	Fell	
3508	T1408	811777.131	819308.69	台灣相思	*Acacia confusa*	160	4	10	FELL	Fell	
3508	T1409	811780.368	819309.182	耳果相思	*Acacia auriculiformis*	230	4	12	FELL	Fell	
3508	T1410A	811778.834	819311.458	楝	*Melia azedarach*	275	4	12	FELL	Fell	
3508	T1411A	811780.185	819314.314	台灣相思	*Acacia confusa*	145	3	7	FELL	Fell	
3508	T1412A	811783.034	819313.585	耳果相思	*Acacia auriculiformis*	240	5	11	FELL	Fell	
3508	T1413A	811782.069	819317.003	台灣相思	*Acacia confusa*	205	4	9	FELL	Fell	
3508	T1416A	811786.869	819324.217	台灣相思	*Acacia confusa*	205	4	9	FELL	Fell	
3508	T1418A	811788.345	819326.73	楝	*Melia azedarach*	205	5	12	FELL	Fell	
3508	T1419	811789.486	819327.468	楝	*Melia azedarach*	300	8	12	FELL	Fell	
3508	T1420	811790.446	819329.505	台灣相思	*Acacia confusa*	170	6	8	FELL	Fell	
3508	T1421	811791.237	819327.128	台灣相思	*Acacia confusa*	175	5	9	FELL	Fell	
3508	T1423	811791.696	819331.913	楝	*Melia azedarach*	270	6	12	FELL	Fell	
3508	T1424	811792.984	819333.07	台灣相思	*Acacia confusa*	125	2	6	FELL	Fell	
3508	T1425	811793.522	819333.981	台灣相思	*Acacia confusa*	145	4	9	FELL	Fell	
3508	T1429	811794.895	819337.465	楝	*Melia azedarach*	350	1	1	FELL	NA	
3508	T1430	811796.24	819340.331	楝	*Melia azedarach*	265	8	10	FELL	Fell	
3508	T1431	811797.401	819340.423	紅膠木	*Lophostemon confertus*	105	3	6	FELL	Fell	
3508	T1432	811797.989	819342.986	台灣相思	*Acacia confusa*	160	4	8	FELL	Fell	
3508	T1433	811799.895	819344.938	紅膠木	*Lophostemon confertus*	115	4	5	FELL	Fell	
3508	T1434	811799.719	819345.603	楝	*Melia azedarach*	320	5	10	FELL	Fell	

Contracts	Tree ID	Easting	Northing	Chinese Name	*Latin Name*	Tree Measurement			Recommendation in LVP	Status as of end December 2020	Remarks
						DBH (mm)	Crown Spread (m)	Height (m)			
3508	T1437	811803.951	819349.669	楝	*Melia azedarach*	250	6	12	FELL	Fell	
3508	T1438	811804.925	819351.554	楝	*Melia azedarach*	150	4	6	FELL	Fell	
3508	T1439	811805.739	819352.436	楝	*Melia azedarach*	350	8	12	FELL	Fell	
3508	T1440	811802.891	819351.494	台灣相思	*Acacia confusa*	160	3	6	FELL	Fell	
3508	T1441A	811804.654	819354.468	台灣相思	*Acacia confusa*	170	3	6	FELL	Fell	
3508	T1442A	811806.079	819357.49	楝	*Melia azedarach*	215	5	12	FELL	Fell	
3508	T1443A	811807.735	819360.366	楝	*Melia azedarach*	350	8	12	FELL	Fell	
3508	T1444A	811809.276	819363.503	楝	*Melia azedarach*	320	10	10	FELL	Fell	
3508	T1445A	811823.746	819344.693	台灣相思	*Acacia confusa*	235	8	12	FELL	Fell	
3508	T1446A	811822.287	819342.18	楝	*Melia azedarach*	205	8	12	FELL	Fell	
3508	T1447A	811815.695	819338.36	耳果相思	*Acacia auriculiformis*	265	6	11	FELL	Fell	
3508	T1448A	811818.224	819336.991	台灣相思	*Acacia confusa*	175	4	8	FELL	Fell	
3508	T1449A	811818.995	819336.91	台灣相思	*Acacia confusa*	320	8	12	FELL	Fell	
3508	T1450A	811817.437	819334.836	耳果相思	*Acacia auriculiformis*	215	8	10	FELL	Fell	
3508	T1452A	811812.384	819326.2	台灣相思	*Acacia confusa*	345	8	12	FELL	Fell	
3508	T1453A	811810.122	819324.896	楝	*Melia azedarach*	190	6	10	FELL	Fell	
3508	T1454A	811809.509	819323.894	楝	*Melia azedarach*	295	6	14	FELL	Fell	
3508	T1455A	811807.152	819325.754	耳果相思	*Acacia auriculiformis*	225	8	12	FELL	Fell	
3508	T1457A	811806.964	819319.115	台灣相思	*Acacia confusa*	205	7	12	FELL	Fell	
3508	T1458A	811806.64	819317.457	台灣相思	*Acacia confusa*	95	3	8	FELL	Fell	
3508	T1459A	811805.755	819317.146	台灣相思	*Acacia confusa*	190	6	10	FELL	Fell	
3508	T1460A	811805.329	819316.167	台灣相思	*Acacia confusa*	155	6	12	FELL	Fell	
3508	T1461A	811804.911	819317.042	台灣相思	*Acacia confusa*	135	4	8	FELL	Fell	
3508	T1462A	811804.537	819315.102	台灣相思	*Acacia confusa*	170	4	10	FELL	Fell	
3508	T1463A	811803.783	819314.253	台灣相思	*Acacia confusa*	170	4	9	FELL	Fell	
3508	T1464A	811802.874	819314.158	台灣相思	*Acacia confusa*	170	4	9	FELL	Fell	
3508	T1465A	811802.905	819311.623	楝	*Melia azedarach*	260	6	12	FELL	Fell	
3508	T1466A	811799.036	819313.178	耳果相思	*Acacia auriculiformis*	380	10	12	FELL	Fell	
3508	T1467A	811799.243	819308.493	紅膠木	*Lophostemon confertus*	120	4	8	FELL	Fell	
3508	T1469A	811796.29	819308.829	耳果相思	*Acacia auriculiformis*	240	8	10	FELL	Fell	
3508	T1471A	811794.421	819300.437	大葉相思	*Acacia mangium*	170	4	8	FELL	Fell	
3508	T1476	811787.154	819290.546	台灣相思	*Acacia confusa*	230	8	12	FELL	Fell	
3508	T1477	811769.404	819269.417	耳果相思	*Acacia auriculiformis*	260	6	12	FELL	Fell	
3508	T1478	811934.331	819409.923	旅人蕉	*Ravenala madagascariensis*	220	2	5	RETAIN	NA	
3508	T1479	811935.653	819409.353	旅人蕉	*Ravenala madagascariensis*	285	2	5	RETAIN	NA	
3508	T1480	811936.828	819407.401	旅人蕉	*Ravenala madagascariensis*	175	2	5	RETAIN	NA	
3508	T1481	811941.453	819402.796	旅人蕉	*Ravenala madagascariensis*	255	3	5	RETAIN	NA	
3508	T1482	811942.687	819402.386	旅人蕉	*Ravenala madagascariensis*	230	3	5	RETAIN	NA	
3508	T1483	811946.659	819399.578	旅人蕉	*Ravenala madagascariensis*	220	3	5	RETAIN	NA	
3508	T1484	811946.896	819400.401	旅人蕉	*Ravenala madagascariensis*	300	3	6	RETAIN	NA	
3508	T1485A	811948.306	819398.649	旅人蕉	*Ravenala madagascariensis*	290	3	5	RETAIN	NA	
3508	T1486	811958.015	819391.869	旅人蕉	*Ravenala madagascariensis*	285	3	5	RETAIN	NA	

Contracts	Tree ID	Easting	Northing	Chinese Name	*Latin Name*	Tree Measurement			Recommendation in LVP	Status as of end December 2020	Remarks
						DBH (mm)	Crown Spread (m)	Height (m)			
3508	T1487	811959.266	819392.679	旅人蕉	*Ravenala madagascariensis*	270	3	5	RETAIN	NA	
3508	T1488	811960.148	819390.381	旅人蕉	*Ravenala madagascariensis*	185	3	5	RETAIN	NA	
3508	T1489	811960.66	819389.932	旅人蕉	*Ravenala madagascariensis*	205	3	5	RETAIN	NA	
3508	T1490	811963.219	819389.753	旅人蕉	*Ravenala madagascariensis*	250	3	5	RETAIN	NA	
3508	T1491	811990.215	819347.091	椰子	*Cocos nucifera*	285	4	6	RETAIN	NA	
3508	T1492	811991.883	819349.564	椰子	*Cocos nucifera*	285	4	6	RETAIN	NA	
3508	T1493	811989.307	819351.254	椰子	*Cocos nucifera*	280	4	6	TRANSPLANT	NA	
3508	T1494	811993.551	819351.991	椰子	*Cocos nucifera*	285	4	6	TRANSPLANT	NA	
3508	T1495	811992.617	819356.109	椰子	*Cocos nucifera*	230	4	6	TRANSPLANT	NA	
3508	T1496	811994.227	819358.466	椰子	*Cocos nucifera*	285	4	6	TRANSPLANT	NA	
3508	T1497	811995.885	819360.927	椰子	*Cocos nucifera*	310	4	6	TRANSPLANT	NA	
3508	T1498	811998.599	819359.242	椰子	*Cocos nucifera*	285	4	6	TRANSPLANT	NA	
3508	T1499	812000.382	819361.73	椰子	*Cocos nucifera*	285	4	6	TRANSPLANT	NA	
3508	T1500	812002.163	819364.494	椰子	*Cocos nucifera*	285	4	6	TRANSPLANT	NA	
3508	T1501	812003.526	819366.622	椰子	*Cocos nucifera*	285	4	6	TRANSPLANT	NA	
3508	T1502	812001.218	819368.586	椰子	*Cocos nucifera*	285	4	6	TRANSPLANT	NA	
3508	T1503	812002.906	819371.18	椰子	*Cocos nucifera*	260	4	6	TRANSPLANT	NA	
3508	T1504	812005.411	819369.3	椰子	*Cocos nucifera*	285	4	6	TRANSPLANT	NA	
3508	T1506	812006.324	819375.896	椰子	*Cocos nucifera*	255	4	6	RETAIN	NA	
3508	T1507	812008.042	819378.517	椰子	*Cocos nucifera*	250	4	6	RETAIN	NA	
3508	T1508	812009.773	819381.001	椰子	*Cocos nucifera*	230	4	5	RETAIN	NA	
3508	T1509	812011.488	819383.414	椰子	*Cocos nucifera*	300	4	6	RETAIN	NA	
3508	T1512	812014.255	819386.336	椰子	*Cocos nucifera*	280	4	6	RETAIN	NA	
3508	T1514	812016.634	819391.046	椰子	*Cocos nucifera*	300	4	6	RETAIN	NA	
3508	T1515	812018.437	819393.493	椰子	*Cocos nucifera*	285	4	6	RETAIN	NA	
3508	T1518	812020.135	819395.886	椰子	*Cocos nucifera*	230	4	6	RETAIN	NA	
3508	T1519	812021.876	819398.428	椰子	*Cocos nucifera*	230	4	6	RETAIN	NA	
3508	T1521	812023.537	819401.022	椰子	*Cocos nucifera*	285	4	6	RETAIN	NA	
3508	T1522	812027.183	819406.119	椰子	*Cocos nucifera*	285	4	6	RETAIN	NA	
3508	T1524	812032.541	819413.666	椰子	*Cocos nucifera*	220	4	6	RETAIN	NA	
3508	T1525	812034.273	819416.273	椰子	*Cocos nucifera*	285	4	5	RETAIN	NA	
3508	T1527	812037.898	819421.007	椰子	*Cocos nucifera*	285	4	6	RETAIN	NA	
3508	T1528	812039.583	819423.549	椰子	*Cocos nucifera*	285	4	6	RETAIN	NA	
3508	T1531	812041.338	819426.334	椰子	*Cocos nucifera*	265	4	5	RETAIN	NA	
3508	T1532	812042.917	819428.646	椰子	*Cocos nucifera*	240	4	6	RETAIN	NA	
3508	T1536	812046.331	819433.584	椰子	*Cocos nucifera*	270	4	5	RETAIN	NA	
3508	T2906	811459.93	820075.367	台灣相思	*Acacia confusa*	180	3	8	RETAIN	NA	
3508	T3030A	811618.466	819456.946	鐵刀木	*Senna siamea*	178	6	8	FELL	NA	
3508	T3038	811627.673	819443.421	黃槿	*Hibiscus tiliaceus*	140	5	5	FELL	NA	
3508	T3038A	811623.973	819443.742	耳果相思	*Acacia auriculiformis*	100	2	8	FELL	NA	
3508	T3038B	811626.242	819440.901	耳果相思	*Acacia auriculiformis*	130	4	8	FELL	NA	
3508	T3039	811631.266	819438.686	黃槿	*Hibiscus tiliaceus*	150	4	5	FELL	NA	

Contracts	Tree ID	Easting	Northing	Chinese Name	*Latin Name*	Tree Measurement			Recommendation in LVP	Status as of end December 2020	Remarks
						DBH (mm)	Crown Spread (m)	Height (m)			
3508	T3046	811640.969	819395.303	王棕	*Roystonea regia*	225	2	6	TRANSPLANT	NA	
3508	T3047	811642.989	819389.785	王棕	*Roystonea regia*	190	2	6	TRANSPLANT	NA	
3508	T3048	811644.918	819384.088	王棕	*Roystonea regia*	215	2	6	TRANSPLANT	NA	
3508	T3049	811645.891	819381.117	王棕	*Roystonea regia*	225	2	5	TRANSPLANT	NA	
3508	T3050	811646.859	819378.305	王棕	*Roystonea regia*	225	3	6	TRANSPLANT	NA	
3508	T3051	811647.903	819375.532	王棕	*Roystonea regia*	240	2	6	TRANSPLANT	NA	
3508	T3052	811648.734	819372.619	王棕	*Roystonea regia*	250	2	7	TRANSPLANT	NA	
3508	T3053	811649.705	819369.908	王棕	*Roystonea regia*	205	2	6	TRANSPLANT	NA	
3508	T3054	811650.614	819366.797	王棕	*Roystonea regia*	180	2	7	TRANSPLANT	NA	
3508	T3055	811651.805	819364.094	王棕	*Roystonea regia*	250	2	7	TRANSPLANT	NA	
3508	T3056	811672.481	819340.2	鐵刀木	*Senna siamea*	165	6	9	RETAIN	NA	
3508	T3058	811672.122	819335.454	鐵刀木	*Senna siamea*	130	4	9	RETAIN	NA	
3508	T3059	811668.864	819333.681	鐵刀木	*Senna siamea*	180	6	9	RETAIN	NA	
3508	T3063	811673.151	819325.262	椰子	*Cocos nucifera*	250	4	8	RETAIN	NA	
3508	T3071	811683.438	819357.281	楝	*Melia azedarach*	215	6	10	RETAIN	NA	
3508	T3072	811688.035	819359.502	銀合歡	*Leucaena leucocephala*	127	4	11	RETAIN	NA	
3508	T3077	811681.578	819368.778	銀合歡	*Leucaena leucocephala*	115	4	12	RETAIN	NA	
3508	T3078	811684.828	819371.903	鐵刀木	*Senna siamea*	155	6	10	RETAIN	NA	
3508	T3086	811679.779	819378.26	鐵刀木	*Senna siamea*	145	3	11	RETAIN	NA	
3508	T3087	811679.025	819379.406	銀合歡	*Leucaena leucocephala*	95	2	8	RETAIN	NA	
3508	T3088	811677.433	819380.142	銀合歡	*Leucaena leucocephala*	125	3	12	RETAIN	NA	
3508	T3092	811680.218	819381.979	鐵刀木	*Senna siamea*	100	2	10	RETAIN	NA	
3508	T3095	811677	819382.504	鐵刀木	*Senna siamea*	115	3	8	RETAIN	NA	
3508	T3096	811676.868	819384.848	銀合歡	*Leucaena leucocephala*	105	2	12	RETAIN	NA	
3508	T3097	811677.359	819385.563	銀合歡	*Leucaena leucocephala*	140	4	11	RETAIN	NA	
3508	T3098	811677.039	819385.685	鐵刀木	*Senna siamea*	150	3	12	RETAIN	NA	
3508	T3099	811675.495	819385.743	銀合歡	*Leucaena leucocephala*	155	5	12	RETAIN	NA	
3508	T3100	811674.909	819385.257	銀合歡	*Leucaena leucocephala*	200	5	11	RETAIN	NA	
3508	T3101	811676.369	819386.669	銀合歡	*Leucaena leucocephala*	130	6	11	RETAIN	NA	
3508	T3102	811684.955	819383.808	宮粉羊蹄甲	*Bauhinia variegata*	160	6	10	FELL	NA	
3508	T3103	811685.995	819383.816	宮粉羊蹄甲	*Bauhinia variegata*	100	6	8	FELL	NA	
3508	T3104	811688.003	819384.188	宮粉羊蹄甲	*Bauhinia variegata*	100	4	7	FELL	NA	
3508	T3105	811689.389	819386.069	楝	*Melia azedarach*	190	6	8	FELL	NA	
3508	T3106	811690.401	819385.346	黃槿	*Hibiscus tiliaceus*	195	5	7	FELL	NA	
3508	T3107	811691.349	819384.265	銀合歡	*Leucaena leucocephala*	210	8	12	FELL	NA	
3508	T3110	811694.649	819381.586	大葉相思	*Acacia mangium*	160	3	7	FELL	NA	
3508	T3111	811695.983	819379.749	黃槿	*Hibiscus tiliaceus*	165	4	6	FELL	NA	
3508	T3113	811692.051	819378.333	土蜜樹	*Bridelia tomentosa*	115	4	11	FELL	NA	
3508	T3114	811695.144	819375.722	耳果相思	*Acacia auriculiformis*	140	4	7	FELL	NA	
3508	T3115	811694.071	819375.126	台灣相思	*Acacia confusa*	110	3	10	FELL	NA	
3508	T3116	811694.981	819373.865	耳果相思	*Acacia auriculiformis*	195	6	11	FELL	NA	
3508	T3117	811695.56	819375.296	楝	*Melia azedarach*	140	3	10	FELL	NA	

Contracts	Tree ID	Easting	Northing	Chinese Name	*Latin Name*	Tree Measurement			Recommendation in LVP	Status as of end December 2020	Remarks
						DBH (mm)	Crown Spread (m)	Height (m)			
3508	T3118	811701.285	819374.388	黃槿	*Hibiscus tiliaceus*	275	10	10	FELL	NA	
3508	T3119	811703.535	819371.655	耳果相思	*Acacia auriculiformis*	150	3	8	FELL	NA	
3508	T3120	811704.365	819371.493	黃槿	*Hibiscus tiliaceus*	170	5	7	FELL	NA	
3508	T3123	811693.008	819375.143	台灣相思	*Acacia confusa*	105	3	10	FELL	NA	
3508	T3125	811687.507	819375.844	楝	*Melia azedarach*	150	6	11	FELL	NA	
3508	T3126	811693.996	819362.42	台灣相思	*Acacia confusa*	155	6	12	RETAIN	NA	
3508	T3127	811699.684	819365.162	耳果相思	*Acacia auriculiformis*	155	6	10	FELL	NA	
3508	T3128	811700.949	819363.14	宮粉羊蹄甲	*Bauhinia variegata*	110	6	8	FELL	NA	
3508	T3131	811709.744	819364.448	宮粉羊蹄甲	*Bauhinia variegata*	105	4	8	FELL	NA	
3508	T3134	811702.47	819367.627	楝	*Melia azedarach*	155	2	9	FELL	NA	
3508	T3135	811705.019	819358.753	台灣相思	*Acacia confusa*	155	4	10	FELL	NA	
3508	T3139	811708.697	819347.185	耳果相思	*Acacia auriculiformis*	145	4	9	FELL	NA	
3508	T3140	811709.652	819346.057	耳果相思	*Acacia auriculiformis*	190	4	9	FELL	NA	
3508	T3141	811709.679	819346.706	耳果相思	*Acacia auriculiformis*	170	4	9	FELL	NA	
3508	T3142	811713.061	819347.842	耳果相思	*Acacia auriculiformis*	160	6	9	FELL	NA	
3508	T3143	811710.173	819342.518	銀合歡	*Leucaena leucocephala*	155	5	9	FELL	NA	
3508	T3144	811718.086	819346.121	垂葉榕	*Ficus benjamina*	150	4	7	FELL	NA	
3508	T3145	811717.295	819342.701	垂葉榕	*Ficus benjamina*	180	4	7	FELL	NA	
3508	T3146	811716.764	819339.153	垂葉榕	*Ficus benjamina*	175	4	7	FELL	NA	
3508	T3147	811716.339	819334.97	垂葉榕	*Ficus benjamina*	150	4	6	FELL	NA	
3508	T3148	811716.607	819331.385	垂葉榕	*Ficus benjamina*	190	5	6	FELL	NA	
3508	T3149	811716.525	819327.908	垂葉榕	*Ficus benjamina*	165	5	6	FELL	NA	
3508	T3153	811714.424	819358.316	台灣相思	*Acacia confusa*	150	4	7	FELL	NA	
3508	T3157	811722.863	819371.335	大葉相思	*Acacia mangium*	110	2	7	FELL	NA	
3508	T3158	811721.163	819371.569	黃槿	*Hibiscus tiliaceus*	135	3	7	FELL	NA	
3508	T3159	811721.145	819372.531	台灣相思	*Acacia confusa*	150	3	7	FELL	NA	
3508	T3160	811720.145	819372.855	黃槿	*Hibiscus tiliaceus*	100	3	7	FELL	NA	
3508	T3161	811721.382	819374.136	台灣相思	*Acacia confusa*	190	6	8	FELL	NA	
3508	T3162	811720.714	819375.912	台灣相思	*Acacia confusa*	155	3	8	FELL	NA	
3508	T3163	811722.299	819375.571	台灣相思	*Acacia confusa*	225	6	10	FELL	NA	
3508	T3165	811724.192	819377.515	宮粉羊蹄甲	*Bauhinia variegata*	105	4	6	FELL	NA	
3508	T3168	811724.749	819383.442	台灣相思	*Acacia confusa*	285	8	10	FELL	NA	
3508	T3169	811722.095	819386.336	潺槁樹	*Litsea glutinosa*	100	4	6	FELL	NA	
3508	T3170	811721.285	819386.955	大葉相思	*Acacia mangium*	170	4	8	FELL	NA	
3508	T3171	811720.311	819387.349	大葉相思	*Acacia mangium*	215	6	10	FELL	NA	
3508	T3172	811721.558	819386.087	大葉相思	*Acacia mangium*	270	6	10	FELL	NA	
3508	T3173	811718.255	819386.706	大葉相思	*Acacia mangium*	125	4	9	FELL	NA	
3508	T3174	811719.675	819385.118	大葉相思	*Acacia mangium*	115	1	0	FELL	NA	
3508	T3175	811718.623	819384.506	大葉相思	*Acacia mangium*	180	1	1	FELL	NA	
3508	T3176	811717.544	819386.181	大葉相思	*Acacia mangium*	205	4	9	FELL	NA	
3508	T3177	811719.098	819381.592	台灣相思	*Acacia confusa*	210	6	10	FELL	NA	
3508	T3178	811714.848	819381.594	台灣相思	*Acacia confusa*	150	6	9	FELL	NA	

Contracts	Tree ID	Easting	Northing	Chinese Name	*Latin Name*	Tree Measurement			Recommendation in LVP	Status as of end December 2020	Remarks
						DBH (mm)	Crown Spread (m)	Height (m)			
3508	T3179	811713.955	819381.559	台灣相思	*Acacia confusa*	220	6	9	FELL	NA	
3508	T3180	811715.391	819378.192	台灣相思	*Acacia confusa*	165	6	10	FELL	NA	
3508	T3181	811715.95	819376.568	台灣相思	*Acacia confusa*	135	4	10	FELL	NA	
3508	T3183	811719.177	819377.271	台灣相思	*Acacia confusa*	155	4	10	FELL	NA	
3508	T3209	811700.122	819363.654	宮粉羊蹄甲	*Bauhinia variegata*	180	8	6	FELL	NA	
3508	T3211	811697.113	819405.346	台灣相思	*Acacia confusa*	290	8	9	FELL	NA	
3508	T3212	811696.127	819402.697	潺槁樹	*Litsea glutinosa*	120	3	7	FELL	NA	
3508	T3213	811696.559	819401.431	楝	*Melia azedarach*	155	5	7	FELL	NA	
3508	T3214	811701.332	819397.298	宮粉羊蹄甲	*Bauhinia variegata*	170	7	7	FELL	NA	
3508	T3215	811708.882	819395.503	大葉相思	*Acacia mangium*	180	6	10	FELL	NA	
3508	T3216	811708.785	819394.555	大葉相思	*Acacia mangium*	235	6	10	FELL	NA	
3508	T3217	811705.023	819394.006	大葉相思	*Acacia mangium*	180	4	7	FELL	NA	
3508	T3218	811707.126	819392.027	楝	*Melia azedarach*	115	3	7	FELL	NA	
3508	T3219	811707.871	819391.142	潺槁樹	*Litsea glutinosa*	100	3	5	FELL	NA	
3508	T3220	811703.234	819393.104	紅膠木	*Lophostemon confertus*	100	2	5	FELL	NA	
3508	T3241	811784.996	819372.228	旅人蕉	*Ravenala madagascariensis*	195	2	5	FELL	Fell	
3508	T3242	811784.572	819370.879	旅人蕉	*Ravenala madagascariensis*	190	2	5	FELL	Fell	
3508	T3243	811783.564	819371.308	旅人蕉	*Ravenala madagascariensis*	205	3	7	FELL	Fell	
3508	T3244	811782.355	819371.912	旅人蕉	*Ravenala madagascariensis*	250	3	7	FELL	Fell	
3508	T3245	811781.988	819371.135	旅人蕉	*Ravenala madagascariensis*	225	2	7	FELL	Fell	
3508	T3246	811781.333	819371.272	旅人蕉	*Ravenala madagascariensis*	205	2	5	FELL	Fell	
3508	T3247	811781.182	819370.349	旅人蕉	*Ravenala madagascariensis*	180	2	5	FELL	Fell	
3508	T3249	811779.345	819371.573	旅人蕉	*Ravenala madagascariensis*	190	2	4	FELL	Fell	
3508	T3251	811779.58	819369.814	旅人蕉	*Ravenala madagascariensis*	225	2	5	FELL	Fell	
3508	T3252	811778.849	819369.583	旅人蕉	*Ravenala madagascariensis*	300	3	6	FELL	Fell	
3508	T3253	811778.456	819371.121	旅人蕉	*Ravenala madagascariensis*	240	2	5	FELL	Fell	
3508	T3254	811778.312	819371.932	旅人蕉	*Ravenala madagascariensis*	160	1	4	FELL	Fell	
3508	T3257	811776.588	819367.776	旅人蕉	*Ravenala madagascariensis*	320	3	6	FELL	Fell	
3508	T3258	811775.177	819367.931	旅人蕉	*Ravenala madagascariensis*	185	2	5	FELL	Fell	
3508	T3259	811775.361	819369.156	旅人蕉	*Ravenala madagascariensis*	250	3	5	FELL	Fell	
3508	T3261	811773.379	819369.093	旅人蕉	*Ravenala madagascariensis*	195	3	5	FELL	Fell	
3508	T3262	811774.002	819368.351	旅人蕉	*Ravenala madagascariensis*	180	2	5	FELL	Fell	
3508	T3263	811771.89	819366.486	旅人蕉	*Ravenala madagascariensis*	190	2	4	FELL	Fell	
3508	T3264	811771.088	819366.016	旅人蕉	*Ravenala madagascariensis*	240	3	7	FELL	Fell	
3508	T3265	811769.706	819366.018	旅人蕉	*Ravenala madagascariensis*	195	2	5	FELL	Fell	
3508	T3266	811770.781	819365.088	旅人蕉	*Ravenala madagascariensis*	190	2	4	FELL	NA	
3508	T3267	811769.313	819365.038	旅人蕉	*Ravenala madagascariensis*	240	3	6	FELL	Fell	
3508	T3268	811769.131	819363.843	旅人蕉	*Ravenala madagascariensis*	250	4	7	FELL	Fell	
3508	T3269	811768.539	819363.532	旅人蕉	*Ravenala madagascariensis*	190	2	5	FELL	Fell	
3508	T3270	811767.228	819363.494	旅人蕉	*Ravenala madagascariensis*	275	4	7	FELL	Fell	
3508	T3271	811766.091	819363.28	旅人蕉	*Ravenala madagascariensis*	195	4	6	FELL	Fell	
3508	T3272	811766.769	819362.548	旅人蕉	*Ravenala madagascariensis*	190	2	4	FELL	Fell	

Contracts	Tree ID	Easting	Northing	Chinese Name	*Latin Name*	Tree Measurement			Recommendation in LVP	Status as of end December 2020	Remarks
						DBH (mm)	Crown Spread (m)	Height (m)			
3508	T3274	811765.133	819362.515	旅人蕉	*Ravenala madagascariensis*	175	3	6	FELL	Fell	
3508	T3275	811766.086	819361.46	旅人蕉	*Ravenala madagascariensis*	265	4	7	FELL	Fell	
3508	T3276	811763.267	819362.075	旅人蕉	*Ravenala madagascariensis*	215	4	7	FELL	Fell	
3508	T3277	811763.26	819362.943	旅人蕉	*Ravenala madagascariensis*	225	4	7	FELL	Fell	
3508	T3278	811762.231	819362.993	旅人蕉	*Ravenala madagascariensis*	210	4	7	FELL	Fell	
3508	T3280	811761.398	819362.354	旅人蕉	*Ravenala madagascariensis*	180	4	6	FELL	Fell	
3508	T3281	811761.25	819360.106	旅人蕉	*Ravenala madagascariensis*	210	3	6	FELL	Fell	
3508	T3282	811760.004	819359.739	旅人蕉	*Ravenala madagascariensis*	180	3	6	FELL	NA	
3508	T3283	811759.698	819360.757	旅人蕉	*Ravenala madagascariensis*	220	4	7	FELL	Fell	
3508	T3284	811759.299	819361.152	旅人蕉	*Ravenala madagascariensis*	215	4	7	FELL	Fell	
3508	T3285	811758.618	819360.88	旅人蕉	*Ravenala madagascariensis*	210	5	7	FELL	Fell	
3508	T3286	811758.691	819360.538	旅人蕉	*Ravenala madagascariensis*	240	5	7	FELL	Fell	
3508	T3287	811762.395	819358.787	旅人蕉	*Ravenala madagascariensis*	190	4	6	FELL	Fell	
3508	T3288	811759.039	819358.441	旅人蕉	*Ravenala madagascariensis*	230	4	7	FELL	Fell	
3508	T3289	811758.127	819358.081	旅人蕉	*Ravenala madagascariensis*	225	2	4	FELL	Fell	
3508	T3290	811757.34	819357.477	旅人蕉	*Ravenala madagascariensis*	170	3	6	FELL	Fell	
3508	T3291	811757.98	819356.907	旅人蕉	*Ravenala madagascariensis*	200	4	6	FELL	Fell	
3508	T3292	811759.728	819357.014	旅人蕉	*Ravenala madagascariensis*	260	3	6	FELL	Fell	
3508	T3293	811758.928	819356.538	旅人蕉	*Ravenala madagascariensis*	260	3	7	FELL	Fell	
3508	T3295	811757.189	819356.424	旅人蕉	*Ravenala madagascariensis*	195	4	7	FELL	Fell	
3508	T3297	811756.592	819355.333	旅人蕉	*Ravenala madagascariensis*	215	4	7	FELL	Fell	
3508	T3298	811756.309	819353.534	旅人蕉	*Ravenala madagascariensis*	205	2	4	FELL	Fell	
3508	T3299	811758.065	819353.885	旅人蕉	*Ravenala madagascariensis*	210	4	7	FELL	Fell	
3508	T3300	811759.973	819354.088	旅人蕉	*Ravenala madagascariensis*	260	4	7	FELL	Fell	
3508	T3301	811758.85	819353.072	旅人蕉	*Ravenala madagascariensis*	275	4	7	FELL	Fell	
3508	T3302	811757.3	819352.962	旅人蕉	*Ravenala madagascariensis*	170	2	4	FELL	Fell	
3508	T3303	811757.191	819352.096	旅人蕉	*Ravenala madagascariensis*	220	3	6	FELL	Fell	
3508	T3304	811757.087	819351.718	旅人蕉	*Ravenala madagascariensis*	235	4	7	FELL	Fell	
3508	T3305	811757.216	819350.691	旅人蕉	*Ravenala madagascariensis*	170	2	5	FELL	Fell	
3508	T3306	811756.398	819350.596	旅人蕉	*Ravenala madagascariensis*	195	3	7	FELL	Fell	
3508	T3307	811757.131	819350.006	旅人蕉	*Ravenala madagascariensis*	175	3	6	FELL	Fell	
3508	T3308	811757.886	819350.317	旅人蕉	*Ravenala madagascariensis*	230	4	7	FELL	Fell	
3508	T3309	811757.174	819349.127	旅人蕉	*Ravenala madagascariensis*	215	4	7	FELL	Fell	
3508	T3310	811756.203	819349.138	旅人蕉	*Ravenala madagascariensis*	165	2	4	FELL	Fell	
3508	T3311	811756.135	819348.567	旅人蕉	*Ravenala madagascariensis*	210	3	7	FELL	Fell	
3508	T3312	811756.021	819347.646	旅人蕉	*Ravenala madagascariensis*	185	2	6	FELL	Fell	
3508	T3313	811755.943	819346.761	旅人蕉	*Ravenala madagascariensis*	230	3	7	FELL	Fell	
3508	T3314	811755.74	819345.509	旅人蕉	*Ravenala madagascariensis*	215	4	6	FELL	Fell	
3508	T3315	811756.436	819345.096	旅人蕉	*Ravenala madagascariensis*	190	4	6	FELL	Fell	
3508	T3316	811757.139	819345.071	旅人蕉	*Ravenala madagascariensis*	225	4	7	FELL	Fell	
3508	T3317	811755.759	819344.188	旅人蕉	*Ravenala madagascariensis*	160	2	4	FELL	Fell	
3508	T3318	811755.53	819343.109	旅人蕉	*Ravenala madagascariensis*	175	3	5	FELL	Fell	

Contracts	Tree ID	Easting	Northing	Chinese Name	*Latin Name*	Tree Measurement			Recommendation in LVP	Status as of end December 2020	Remarks
						DBH (mm)	Crown Spread (m)	Height (m)			
3508	T3319	811756.33	819342.842	旅人蕉	*Ravenala madagascariensis*	210	3	7	FELL	Fell	
3508	T3320	811757.238	819342.267	旅人蕉	*Ravenala madagascariensis*	240	4	7	FELL	Fell	
3508	T3321	811756.174	819341.593	旅人蕉	*Ravenala madagascariensis*	240	4	6	FELL	Fell	
3508	T3322	811755.457	819341.648	旅人蕉	*Ravenala madagascariensis*	225	4	7	FELL	Fell	
3508	T3323	811755.869	819339.663	旅人蕉	*Ravenala madagascariensis*	220	4	7	FELL	Fell	
3508	T3324	811756.684	819338.653	旅人蕉	*Ravenala madagascariensis*	255	4	7	FELL	Fell	
3508	T3325	811755.798	819338.158	旅人蕉	*Ravenala madagascariensis*	155	2	4	FELL	Fell	
3508	T3326	811754.877	819336.811	旅人蕉	*Ravenala madagascariensis*	225	4	7	FELL	Fell	
3508	T3327	811754.671	819335.895	旅人蕉	*Ravenala madagascariensis*	190	4	7	FELL	Fell	
3508	T3329	811756.388	819336.699	旅人蕉	*Ravenala madagascariensis*	240	4	7	FELL	Fell	
3508	T3330	811756.242	819335.482	旅人蕉	*Ravenala madagascariensis*	290	4	7	FELL	Fell	
3508	T3331	811756.938	819334.873	旅人蕉	*Ravenala madagascariensis*	295	4	6	FELL	Fell	
3508	T3332	811757.091	819335.5	旅人蕉	*Ravenala madagascariensis*	215	4	7	FELL	Fell	
3508	T3333	811757.537	819336.435	旅人蕉	*Ravenala madagascariensis*	250	4	7	FELL	Fell	
3508	T3334	811757.404	819337.117	旅人蕉	*Ravenala madagascariensis*	195	3	5	FELL	Fell	
3508	T3335	811757.6	819337.982	旅人蕉	*Ravenala madagascariensis*	155	4	6	FELL	Fell	
3508	T3336	811758.023	819338.924	旅人蕉	*Ravenala madagascariensis*	270	4	7	FELL	Fell	
3508	T3337	811758.152	819340.682	旅人蕉	*Ravenala madagascariensis*	170	2	5	FELL	Fell	
3508	T3338	811758.257	819341.327	旅人蕉	*Ravenala madagascariensis*	135	3	6	FELL	Fell	
3508	T3339	811758.517	819343.514	旅人蕉	*Ravenala madagascariensis*	205	4	6	FELL	Fell	
3508	T3340	811758.605	819344.168	旅人蕉	*Ravenala madagascariensis*	245	4	7	FELL	Fell	
3508	T3341	811757.826	819345.021	旅人蕉	*Ravenala madagascariensis*	240	4	7	FELL	Fell	
3508	T3343	811758.711	819345.938	旅人蕉	*Ravenala madagascariensis*	200	4	7	FELL	Fell	
3508	T3344	811759.072	819346.491	旅人蕉	*Ravenala madagascariensis*	225	5	7	FELL	Fell	
3508	T3345	811757.945	819346.755	旅人蕉	*Ravenala madagascariensis*	215	5	9	FELL	Fell	
3508	T3346	811759.372	819349.598	旅人蕉	*Ravenala madagascariensis*	205	4	9	FELL	Fell	
3508	T3347	811760.149	819349.718	旅人蕉	*Ravenala madagascariensis*	210	4	8	FELL	Fell	
3508	T3348	811760.521	819350.578	旅人蕉	*Ravenala madagascariensis*	220	4	8	FELL	Fell	
3508	T3349	811759.632	819351.472	旅人蕉	*Ravenala madagascariensis*	220	4	8	FELL	Fell	
3508	T3351	811762.121	819353.723	旅人蕉	*Ravenala madagascariensis*	175	5	8	FELL	Fell	
3508	T3352	811761.623	819354.983	旅人蕉	*Ravenala madagascariensis*	180	4	6	FELL	Fell	
3508	T3354	811761.639	819356.48	旅人蕉	*Ravenala madagascariensis*	300	5	9	FELL	Fell	
3508	T3359	811764.302	819356.455	旅人蕉	*Ravenala madagascariensis*	180	5	7	FELL	Fell	
3508	T3360	811763.732	819357.017	旅人蕉	*Ravenala madagascariensis*	175	4	7	FELL	Fell	
3508	T3362	811763.889	819357.764	旅人蕉	*Ravenala madagascariensis*	215	5	9	FELL	Fell	
3508	T3363	811759.15	819359.067	旅人蕉	*Ravenala madagascariensis*	205	5	8	FELL	NA	
3508	T3365	811760.324	819363.114	旅人蕉	*Ravenala madagascariensis*	230	4	6	FELL	Fell	
3508	T3366	811761.428	819363.506	旅人蕉	*Ravenala madagascariensis*	230	3	5	FELL	Fell	
3508	T3367	811763.679	819359.981	旅人蕉	*Ravenala madagascariensis*	215	5	8	FELL	Fell	
3508	T3368	811763.718	819359.146	旅人蕉	*Ravenala madagascariensis*	225	5	9	FELL	Fell	
3508	T3369	811764.646	819359.399	旅人蕉	*Ravenala madagascariensis*	240	5	8	FELL	Fell	
3508	T3370	811764.844	819360.38	旅人蕉	*Ravenala madagascariensis*	215	5	8	FELL	Fell	

Contracts	Tree ID	Easting	Northing	Chinese Name	*Latin Name*	Tree Measurement			Recommendation in LVP	Status as of end December 2020	Remarks
						DBH (mm)	Crown Spread (m)	Height (m)			
3508	T3371	811765.707	819358.939	旅人蕉	*Ravenala madagascariensis*	300	6	10	FELL	Fell	
3508	T3372	811765.346	819357.231	旅人蕉	*Ravenala madagascariensis*	190	4	7	FELL	Fell	
3508	T3374	811766.017	819358.613	旅人蕉	*Ravenala madagascariensis*	170	5	8	FELL	Fell	
3508	T3375	811766.919	819359.104	旅人蕉	*Ravenala madagascariensis*	150	1	4	FELL	Fell	
3508	T3376	811766.847	819359.968	旅人蕉	*Ravenala madagascariensis*	180	4	6	FELL	Fell	
3508	T3377	811766.274	819360.745	旅人蕉	*Ravenala madagascariensis*	215	4	8	FELL	Fell	
3508	T3378	811767.684	819360.406	旅人蕉	*Ravenala madagascariensis*	260	5	8	FELL	NA	
3508	T3381	811768.397	819361.218	旅人蕉	*Ravenala madagascariensis*	255	5	8	FELL	Fell	
3508	T3382	811768.024	819362.166	旅人蕉	*Ravenala madagascariensis*	235	5	8	FELL	Fell	
3508	T3383	811769.153	819362.035	旅人蕉	*Ravenala madagascariensis*	220	5	8	FELL	Fell	
3508	T3384	811770.043	819361.481	旅人蕉	*Ravenala madagascariensis*	240	4	8	FELL	Fell	
3508	T3385	811770.777	819361.827	旅人蕉	*Ravenala madagascariensis*	205	5	8	FELL	Fell	
3508	T3386	811771.22	819362.531	旅人蕉	*Ravenala madagascariensis*	170	4	7	FELL	Fell	
3508	T3387	811771.576	819363.64	旅人蕉	*Ravenala madagascariensis*	190	4	6	FELL	Fell	
3508	T3389	811772.795	819363.644	旅人蕉	*Ravenala madagascariensis*	240	5	8	FELL	Fell	
3508	T3390	811772.675	819365.467	旅人蕉	*Ravenala madagascariensis*	210	4	8	FELL	Fell	
3508	T3391	811773.112	819365.981	旅人蕉	*Ravenala madagascariensis*	180	4	8	FELL	Fell	
3508	T3392	811774.552	819366.576	旅人蕉	*Ravenala madagascariensis*	225	5	9	FELL	Fell	
3508	T3393	811775.034	819365.948	旅人蕉	*Ravenala madagascariensis*	265	5	7	FELL	Fell	
3508	T3394	811775.921	819365.872	旅人蕉	*Ravenala madagascariensis*	205	5	7	FELL	Fell	
3508	T3396	811777.003	819366.688	旅人蕉	*Ravenala madagascariensis*	260	3	5	FELL	Fell	
3508	T3397	811777.758	819367.55	旅人蕉	*Ravenala madagascariensis*	210	5	7	FELL	Fell	
3508	T3398	811777.985	819367.917	旅人蕉	*Ravenala madagascariensis*	220	5	9	FELL	Fell	
3508	T3401	811780.723	819368.723	旅人蕉	*Ravenala madagascariensis*	240	5	9	FELL	Fell	
3508	T3402	811781.586	819368.578	旅人蕉	*Ravenala madagascariensis*	275	5	9	FELL	Fell	
3508	T3403	811782.707	819368.416	旅人蕉	*Ravenala madagascariensis*	225	5	8	FELL	Fell	
3508	T3406	811783.636	819368.51	旅人蕉	*Ravenala madagascariensis*	190	4	7	FELL	Fell	
3508	T3407	811783.556	819368.971	旅人蕉	*Ravenala madagascariensis*	165	3	6	FELL	Fell	

NA: Not yet received by contractor in the reportig period

New Works Contracts Sub-total	**Retain**	155	0	
	Transplant	22	0	
	Fell	269	190	
	NA	0	256	
Total (Existing and New Works Contracts)	**Retain**	320	118	
	Transplant	36	14	
	Fell	2219	2121	
	NA	1	256	