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OUR REF: (51) in EP2/N9/C/152 pt.2
來函檔號
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**Environmental Protection Department
Branch Office**

28th Floor, Southorn Centre,
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Wan Chai, Hong Kong.



環境保護署分處

香港灣仔
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一百三十號
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10 October 2017

Hongkong Electric Centre,

**Environmental Impact Assessment (EIA) Ordinance, Cap.499
Application for Environmental Permit**

**Project Title: Improvement Dredging for Lamma Power Station Navigation Channel
(Application No. AEP-535/2017)**

I refer to your above application received on 29 March 2017 for an Environmental Permit under Section 10(1) of the EIA Ordinance.

Pursuant to Section 10(5) of the EIA Ordinance, I now issue the attached Environmental Permit (No. EP-535/2017) for your use.

Under Section 15 of the EIA Ordinance, the Environmental Permit will be placed on the EIA Ordinance Register. It will also be placed on the EIA Ordinance website (<http://www.epd.gov.hk/eia/>).

Please note that if you are aggrieved by any of the conditions imposed in this Permit, you may appeal under Section 17 of the EIA Ordinance within 30 days of receipt of this Permit.

Should you have any queries concerning the above, please contact my colleague Mr. Simon HO at 2835 1153.

Yours sincerely,

(Louis P. L. Chan)

Principal Environmental Protection Officer
for Director of Environmental Protection

ENVIRONMENTAL IMPACT ASSESSMENT ORDINANCE
(CHAPTER 499)
SECTION 10
環境影響評估條例
(第 499 章)
第 10 條

ENVIRONMENTAL PERMIT TO CONSTRUCT AND OPERATE
A DESIGNATED PROJECT
建造及營辦指定工程項目的環境許可證

PART A (MAIN PERMIT)**A 部 (許可證主要部分)**

Pursuant to Section 10 of the Environmental Impact Assessment Ordinance (EIAO), the Director of Environmental Protection (the Director) grants this environmental permit to the **Hongkong Electric Co., Ltd.** (hereinafter referred to as the "Permit Holder") to construct and operate the designated project described in Part B subject to the conditions specified in Part C. The issue of this environmental permit is based on the documents, approvals or permissions described below:

根據《環境影響評估條例》(環評條例) 第 10 條的規定，環境保護署署長 (署長) 將本環境許可證批予**香港電燈有限公司**(下稱“許可證持有人”)以建造及營辦B部所說明的指定工程項目，但須遵守C部所列明的條件。本環境許可證是依據下列文件、批准或許可而簽發：

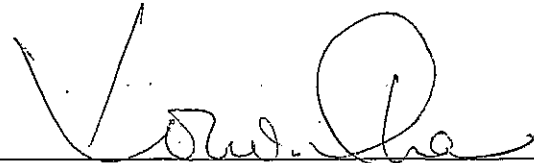
| | |
|--|--|
| Application No. 申請書編號: | AEP-535/2017 |
| Document in the Register: 登記冊上的文件: | <p>(1) Improvement Dredging for Lamma Power Station Navigation Channel (Register No. AEIAR-212/2017) -Environmental Impact Assessment Report [Hereinafter referred to as the "EIA Report"] -EIA Executive Summary [Hereinafter referred to as the "EIA Executive Summary"] -Environmental Monitoring and Audit Manual [Hereinafter referred to as the "EM&A Manual"]</p> <p>南丫發電廠航道挖泥改善工程 (登記冊檔號: AEIAR-212/2017) -環境影響評估報告 [下稱「環評報告」] -環境影響評估報告行政摘要 [下稱「環評行政摘要」] -環境監察及審核手冊 [下稱「環監手冊」]</p> <p>(2) The Director's letter of approval of the EIA Report dated 10 October 2017 (Reference : (50) in EP2/N9/C/152 Pt.2) 署長於2017年10月10日發出批准環評報告的信件(檔案編號: (50) in EP2/N9/C/152 Pt.2)</p> |



| | |
|--|--|
| | <p>(3) Application for Environmental Permit submitted by the Permit Holder on 29 March 2017 (Application No. AEP-535/2017) 許可證持有人於2017年3月29日提交的環境許可證申請文件 (申請書編號: AEP-535/2017)</p> |
|--|--|

10 October 2017
2017年10月10日

Date
日期



(Louis P.L. CHAN)

Principal Environmental Protection Officer
for Director of Environmental Protection

環境保護署署長

(首席環境保護主任陳欽林代行)



PART B (DESCRIPTION OF DESIGNATED PROJECT)

B 部 (指定工程項目的說明)

Hereunder is the description of the designated project mentioned in Part A of this environmental permit (hereinafter referred to as the "Permit"):

下列為本環境許可證(下稱“許可證”)A部所提述的指定工程項目的說明:

| | |
|--|---|
| <p>Title of Designated Project 指定工程項目的名稱</p> | <p>Improvement Dredging for Lamma Power Station Navigation Channel [This designated project is hereinafter referred to as "the Project".] 南丫發電廠航道挖泥改善工程 [本指定工程項目下稱 "工程項目"]</p> |
| <p>Nature of Designated Project 指定工程項目的性質</p> | <p>A dredging operation exceeding 500,000 m³ 挖泥量超過500,000立方米的挖泥作業</p> |
| <p>Location of Designated Project 指定工程項目的地點</p> | <p>The location of the Project is shown in <u>Figure 1</u> of this Permit. 工程項目的地點見本許可證圖1。</p> |
| <p>Scale and Scope of Designated Project 指定工程項目的規模和範圍</p> | <p>Major components of the Project include -</p> <ul style="list-style-type: none"> - Initial dredging and re-profiling of the Lamma Power Station Navigation Channel (the Channel) down to a depth of -16.5mPD during construction phase, with an estimated sediment quantity up to approx. 3.2 Mm³; and - Selected high spot dredging and re-profiling of the Channel down to depth of -16.5mPD during operation phase, approx. once 4 to 10 years with estimated dredging volume of approx. 0.9 Mm³ to 2.9 Mm³ respectively. <p>工程項目主要包括 -</p> <ul style="list-style-type: none"> - 在施工階段，於南丫發電廠航道(航道)進行初步挖泥及海床重塑挖泥工程以維持海床深度大致為輪廓基準下16.5米，而挖泥量預計最多約為320萬立方米； - 在營運期間，將需要大約每四至十年於航道進行選擇性高點挖泥和海床重塑挖泥工程以維持海床深度大致為輪廓基準下16.5米，而每次的挖泥量預計分別最多約為90萬立方米至290萬立方米。 |



PART C (PERMIT CONDITIONS)

C部 (許可證條件)

1. GENERAL CONDITIONS

一般條件

- 1.1 The Permit Holder and any person working on the Project shall comply with all conditions set out in this Permit. Any non-compliance by any person may constitute a contravention of the Environmental Impact Assessment Ordinance (EIAO) (Cap. 499) and may become the subject of appropriate action being taken under the EIAO.

許可證持有人及任何從事工程項目的人士必須完全符合本許可證載列的全部條件。任何人士如有不符合本許可證的情況，可能違反《環境影響評估條例》(第499章)的規定，而當局可根據條例採取適當行動。

- 1.2 The Permit Holder shall ensure full compliance with all legislation from time to time in force including, without limitation to, the Noise Control Ordinance (Cap. 400), Air Pollution Control Ordinance (Cap. 311), Water Pollution Control Ordinance (Cap. 358), Waste Disposal Ordinance (Cap. 354) and Dumping at Sea Ordinance (Cap. 466). This Permit does not of itself constitute any ground of defence against any proceedings instituted under any legislation or imply any approval under any legislation.

許可證持有人須經常確保完全符合現行法例的規定，包括但不限於《噪音管制條例》(第400章)、《空氣污染管制條例》(第311章)、《水污染管制條例》(第358章)、《廢物處置條例》(第354章)及《海上傾倒物料條例》(第466章)。本許可證本身不會就根據任何法例提出的法律程序構成任何抗辯理由，或根據任何法例默示任何批准。

- 1.3 The Permit Holder shall make copies of this Permit together with all documents referred to in this Permit and the documents referred to in Part A of the Permit readily available at all times for inspection by the Director or his authorised officers at all sites/offices covered by this Permit. Any reference to the Permit shall include all documents referred to in the Permit and also the relevant documents in the Register.

許可證持有人須印製本許可證的複本，連同本許可證所述的所有文件及本許可證A部所述文件，以供署長或獲授權人員任何時間內在本許可證所涵蓋的所有工地／辦事處查閱。凡提述本許可證，須包括本許可證所述的所有文件及登記冊內的相關文件。

- 1.4 The Permit Holder shall give a copy of this Permit to the person(s) in charge of the site(s) and ensure that such person(s) fully understands all conditions and all requirements incorporated in the Permit. The site(s) refers to site(s) of construction and operation of the Project and shall mean the same hereafter.

許可證持有人須把本許可證的一份複本交予有關工地的負責人，並確保這些人士完全明白本許可證的所有條件與規定。工地是指建造及營辦工程項目的工地，下文所提及的工地亦屬同一意思。



- 1.5 The Permit Holder shall display conspicuously a copy of this Permit on the Project site(s) at all site entrances/exits or at a convenient location for public's information at all times. The Permit Holder shall ensure that the most updated information about the Permit, including any amended Permit, is displayed at such locations. If the Permit Holder surrenders a part or the whole of the Permit, the notice he sends to the Director shall also be displayed at the same locations as the original Permit. The suspended, varied or cancelled Permit shall be removed from display at the Project site(s).

許可證持有人須在工程項目工地的所有進出口或一處方便地點，顯眼地展示本許可證的複本，以供公眾在任何時間內閱覽。許可證持有人須確保在這些地點展示關於本許可證(包括任何經修訂的許可證)的最新資料。許可證持有人如交回許可證的部分或全部，必須把其送交署長的通知書，在備有原有許可證的各處相同地點展示。遭暫時吊銷、更改或取消的許可證必須從工程項目工地除下，不再展示。

- 1.6 The Permit Holder shall construct and operate the Project in accordance with the project description in Part B of this Permit.

許可證持有人須依據本許可證 B 部的工程項目說明，建造及營辦工程項目。

- 1.7 The Permit Holder shall ensure that the Project is designed, constructed and operated in accordance with the information and relevant recommendations described in the EIA Report (Register No. AEIAR-212/2017), the application documents for Environmental Permit (Application No. AEP-535/2017), other relevant documents in the Register, the information and mitigation measures described in this Permit, mitigation measures to be recommended in the submissions that shall be deposited with or approved by the Director as a result of permit conditions contained in this Permit, and mitigation measures to be recommended under ongoing surveillance and monitoring activities during all stages of the Project. Where recommendations referred to in the documents of the Register are not expressly referred to in this Permit, such recommendations are nevertheless to be implemented unless expressly excluded in this Permit or otherwise agreed by the Director.

許可證持有人須確保工程項目按照下述資料設計、建造及營辦：環評報告（登記冊編號：AEIAR-212/2017）所說明的資料及相關建議；環境許可證（申請書編號：AEP-535/2017）的申請文件；登記冊內的其他相關文件；本許可證所說明的資料及緩解措施；根據本許可證內載的條件須向署長存放或獲署長批准的提交文件所建議的緩解措施；以及在工程項目各階段進行的持續監察及監測工作所建議的緩解措施。登記冊文件所述建議如沒有在本許可證明確表示，則仍須實施這些建議，除非獲本許可證明確豁除或另獲署長同意。

- 1.8 All deposited submissions, as required under this Permit, shall be rectified and resubmitted in accordance with the comments, if any, made by the Director within one month of the receipt of the Director's comments or otherwise as specified by the Director.

所有按本許可證規定提交的存放文件，須在接獲署長的意見（如有者）後 1 個月內（除非署長另行指定），根據署長的意見加以修正並重新提交。



- 1.9 All submissions approved by the Director, all submissions deposited without comments by the Director, and all submissions rectified in accordance with comments by the Director under this Permit shall be construed as part of the permit conditions described in Part C of this Permit. Any variation of the submissions shall be approved by the Director in writing or as prescribed in the relevant permit conditions. Any non-compliance with the submissions may constitute a contravention of the Environmental Impact Assessment Ordinance (Cap. 499). All submissions or any variation of the submissions shall be certified by the Environmental Team (ET) Leader and verified by the Independent Environmental Checker (IEC) referred to in Conditions 2.1 and 2.5 below before submitting to the Director under this Permit.

署長批准的所有提交文件、署長沒有給予意見的所有存放文件及根據本許可證規定由署長給予意見修正的所有提交文件，均須詮釋為本許可證 C 部說明的許可證條件的一部分。提交文件如有任何修訂，均須獲署長的書面批准，或符合有關許可證條件訂明的規定。如有不符合提交文件的情況，則可能違反《環境影響評估條例》（第 499 章）的規定。所有提交文件或提交文件的任何修訂本，均須按下文條件第 2.1 及 2.5 項所述由環境小組組長核證及獨立環境查核人核實，然後才按本許可證規定向署長提交。

- 1.10 The Permit Holder shall release all finalized submissions, as required under this Permit, to the public by depositing copies in the Environmental Impact Assessment Ordinance Register Office, or in any other places, or any internet websites as specified by the Director, or by any other means as specified by the Director for public inspection. For this purpose, the Permit Holder shall provide sufficient copies of the submissions.

許可證持有人須把所有按本許可證規定提交的文件定稿公開供公眾人士查閱，方法是把有關文件複本存放於環境影響評估條例登記冊辦事處，或署長指定的任何其他地方，或署長指定的任何互聯網網站，或署長指定的任何其他方法，以供公眾查閱。因此，許可證持有人須提供足夠數量的複本。

- 1.11 All submissions to the Director required under this Permit shall be delivered either in person or by registered mail to the Environmental Impact Assessment Ordinance Register Office (currently at 27/F, Southorn Centre, 130 Hennessy Road, Wanchai, Hong Kong). Electronic copies of all finalized submissions required under this Permit shall be prepared in Hyper Text Markup Language (HTML) (version 4.0 or later) and in Portable Document Format (PDF version 1.3 or later), unless otherwise agreed by the Director and shall be submitted at the same time as the hard copies.

本許可證規定向署長提交的所有文件，須親身送交或以掛號方式郵寄至環境影響評估條例登記冊辦事處（現址為：香港灣仔軒尼詩道 130 號修頓中心 27 樓）。所有按本許可證規定提交的文件定稿的電子版本，均須以超文本標示語言 (HTML)(第 4.0 或較後版本)和便攜式文件格式(PDF)(第 1.3 或較後版本)製作，除非另獲署長同意，並須與硬複本同時提交。

- 1.12 The Permit Holder shall notify the Director in writing the commencement dates of construction and operation of the Project no later than one month prior to the respective commencement of construction and operation of the Project. The Permit Holder shall notify the Director in writing immediately if there is any change of the



commencement dates of the construction and operation.

許可證持有人須在建造及營辦工程項目展開前，至少提早 1 個月以書面方式把建造及營辦工程的開展日期通知署長。建造及營辦工程的開展日期如有任何更改，許可證持有人必須立即以書面方式通知署長。

- 1.13 For the purpose of this Permit, "commencement of construction" does not include works related to site investigation, clearance and preparation, or other works as agreed by the Director.

為執行本許可證，「建造工程的展開」不包括有關工地勘察、工地清理和預備的工程，或署長同意的其他工程。

2 SPECIFIC CONDITIONS

Employment of EM&A Personnel

Employment of Environmental Team (ET)

- 2.1 An ET shall be established by the Permit Holder no later than 3 months before the commencement of construction and operation of the Project. The ET shall not be in any way an associated body of the Contractor or the Independent Environmental Checker (IEC) for the Project. The ET shall be headed by an ET Leader and supported by relevant specialists including qualified ecologist(s) and fisheries specialist(s). The ET Leader shall be a person who has at least 7 years of experience in environmental monitoring and auditing (EM&A) or environmental management.
- 2.2 The ET and the ET Leader shall be responsible for:
- (i) implementing the EM&A programme in accordance with the EM&A requirements as contained in the EM&A Manual of the Project;
 - (ii) certifying the environmental acceptability of permanent and temporary works, relevant plans and submissions required in the EM&A Manual and under this Permit;
 - (iii) carrying out site inspections to audit the Contractor's site practice and work methodologies with respect to environmental mitigation measures contained in the EM&A Manual of the Project and to take pro-active actions to pre-empt environmental problems;
 - (iv) notifying the IEC within 1 working day of the occurrence of each and every instance or circumstance or change of circumstances, which may affect the compliance with the recommendations of the approved EIA Report (Register No. AEIAR-212/2017) and this Permit; and
 - (v) keeping a contemporaneous log-book of any such instance or circumstance or change of circumstances. The log-book shall be kept readily available for inspection by all persons assisting in supervision of the implementation of the recommendations of the approved EIA Report (Register No.



AEIAR-212/2017) and this Permit or by the Director or his authorized officers.

- 2.3 Failure to maintain records in the log-book, failure to discharge the duties of the ET Leader as defined in the EM&A Manual or failure to comply with this Condition would entitle the Director to require the Permit Holder by notice in writing to replace the ET Leader. Failure by the Permit Holder to make replacement, or further failure to keep contemporaneous records in the log-book despite the employment of a new ET Leader may render the Permit liable to suspension, cancellation or variation.

Employment of Independent Environmental Checker

- 2.4 The Permit Holder shall employ a single IEC with a supporting team, no later than 3 months before the commencement of construction and operation of the Project. The IEC and his team shall not be in any way an associated body of the ER, the Contractor or the ET for the Project. The IEC shall be approved by the Director before appointment by the Permit Holder. The IEC shall be a person who has at least 7 years of experience in EM&A or environmental management.
- 2.5 The IEC shall report directly to the Director and shall be responsible for duties defined in the EM&A Manual and this Permit, including but not limited to the following:
- (i) to audit the overall EM&A performance, including the implementation of all environmental mitigation measures and monitoring activities on site;
 - (ii) to verify the environmental acceptability of permanent and temporary works, relevant plans and submissions required in the EM&A Manual and under this Permit;
 - (iii) to verify the log-book(s) mentioned in Condition 2.2(v);
 - (iv) to notify the Director by fax or email, within 1 working day of receipt of notification from the ET Leader, or identification by the IEC and his team, of each and every change of circumstances, and emergency events relating to violation of environmental legislation (such as illegal dumping and landfilling) or non-compliance (including suspects of non-compliance) with the recommendations (such as construction methods, mitigation measures, and environmental standards) of the approved EIA Report (Register No. AEIAR-212/2017), the EM&A Manual and this Permit, which might affect the monitoring or control of adverse environmental impacts from the Project;
 - (v) to liaise closely with the Director;
 - (vi) to accompany the Director in carrying out site inspections and attending meetings when requested;
 - (vii) to offer objective and professional advice on environmental issues, when requested, and to respond to questions and enquiries from the Director on



the EM&A programme and duties discharged by the IEC, with the support of relevant information, documents and records as appropriate; and

- (viii) to allocate adequate resources, including any necessary specialist support, for discharging the duties required in this Permit and the EM&A Manual.

- 2.6 If the Director considers the IEC fails to discharge the duties of the IEC as defined in the EM&A Manual or in this Permit, the Director may require the Permit Holder by notice in writing to replace the IEC. Failure to replace the IEC as directed or further failure to so notify the Director despite employment of a new IEC may render the Permit liable to suspension, cancellation or variation. Notification by the Permit Holder is the same as notification by the IEC for the purpose of this Condition.

Submissions and/or Measures to be Implemented before Construction and Operation of the Project

Submission of Management Organization of Main Construction Companies

- 2.7 The Permit Holder shall, no later than 3 months before the commencement of construction and operation of the Project, inform the Director in writing with the following information, which shall include at least an organization chart, names of responsible persons and their contact details:
- (i) the management organization of the main construction companies and/or any form of joint ventures associated with the construction and operation of the Project;
 - (ii) the management organization of the ET; and
 - (iii) the management organization of the IEC and the supporting team.

Submission of Construction and Operation Works Schedule and Location Plans

- 2.8 The Permit Holder shall, no later than 3 months before the commencement of construction and operation of the Project, deposit 3 hard copies and 1 electronic copy of a Works Plan (the Plan) with the Director. The Plan shall include but not limited to the following information/ specifications:
- (i) a detailed phasing programme of all construction and operation works including initial dredging (for construction phase), selected high spot dredging and re-profiling dredging (for operation phase); and
 - (ii) a location plan of all construction and operation works in an appropriate scale.

Submission of Marine Ecological Baseline Review Report

- 2.9 The Permit Holder shall, no later than 3 months before the commencement of each dredging, including selected high spot dredging and re-profiling, submit 4 hard copies and 1 electronic copy of a Marine Ecological Baseline Review Report (the Report) to the Director for approval. The Report shall review/ update the marine



ecological baseline in the Project area and its vicinity and the review shall cover species of conservation interest including but not limited to Green Turtle and Finless Porpoise. The Report shall be prepared by a qualified ecologist(s) and shall be certified by the ET Leader and verified by the IEC.

Submission of Fisheries Baseline Review Report

- 2.10 The Permit Holder shall, no later than 3 months before the commencement of each dredging, including selected high spot dredging and re-profiling, submit 4 hard copies and 1 electronic copy of a Fisheries Baseline Review Report (the Report) to the Director for approval. The Report shall be prepared by a fisheries specialist(s) and shall be certified by the ET Leader and verified by the IEC.

Submission of Sediment Quality Baseline Review

- 2.11 The Permit Holder shall, no later than 3 months before each dredging, including selected high spot dredging and re-profiling, deposit 3 hard copies and 1 electronic copy of a Sediment Quality Baseline Review Report (the Report) with the Director. The Report shall include a baseline review on the sediment quality conditions in the Project area. Before submission to the Director, the report shall be certified by the ET Leader and verified by the IEC.

Submission of Proposal on Enhancement of Water Quality Monitoring near the Project Site

- 2.12 The Permit Holder shall, no later than 3 months before the commencement of each dredging, including selected high spot and re-profiling, submit to the Director for approval 3 hard copies and 2 electronic copies of a detailed proposal on enhancement of water quality monitoring near Project site (the Proposal). The Proposal shall include but not limited to the following information/ specification:
- (i) additional location(s) of the water quality monitoring stations adjacent to the Project site boundary in addition to the water quality monitoring stations near the sensitive receivers as recommended in Section 2.5 of the EM&A Manual (Register No. AEIAR-212/2017);
 - (ii) drawings in the scale of 1:5,000 or other appropriate scale as agreed by the Director showing the proposed locations for conducting water quality monitoring;
 - (iii) monitoring methodology and measurement parameters for water samples, if applicable; and
 - (iv) the relevant updated Event & Action Plans with proposed immediate remedial action(s).

Submission of Updated EM&A Manual

- 2.13 The Permit Holder shall update the EM&A Manual to include the latest EM&A requirements in accordance with the information and recommendations described in the EIA Report, the proposal on enhancement of water quality monitoring by



taking into account any change in specific site conditions including marine ecology, fisheries and sediment quality from these reported in the EIA Report (Register No. AEIAR-212/2017). The Permit Holder shall, at least 2 months before the commencement of construction and operation of the Project, deposit with the Director 4 hard copies and 4 electronic copies of the updated EM&A Manual. Before submission to the Director, the updated EM&A Manual shall be certified by the ET Leader and verified by the IEC as conforming to the information and recommendations described in:

- (i) the EIA Report (Register No. AEIAR-212/2017);
- (ii) approved proposal on enhancement of water quality monitoring referred to in Condition 2.12;

and taking into account any specific requirements with respect to the latest site conditions including:

- (a) approved Marine Ecological Baseline Review Report referred to in Condition 2.9;
- (b) approved Fisheries Baseline Review Report referred to in Condition 2.10; and
- (c) deposited Sediment Quality Baseline Review Report referred to in Condition 2.11.

2.14 All measures recommended in the updated EM&A Manual, such as the precautionary measures for avoidance dredging of the navigation channel during finless porpoise calving season, deposited under this Condition shall be fully and properly implemented in accordance with the requirements and time schedule(s) set out in the updated EM&A Manual. The EM&A Manual deposited under this Condition shall hereinafter be referred to as the "updated EM&A Manual".

Submission of a Silt Curtain Deployment Plan

2.15 The Permit Holder shall, no later than 2 months before the commencement of marine works involving deployment of silt curtain(s) of the Project, deposit 3 hard copies and 1 electronic copy of a Silt Curtain Deployment Plan (the Plan) with the Director. The Plan shall include but not limited to the construction programme and details on the design, operation and maintenance of silt curtain(s) to be deployed during the construction. Before submission to the Director, the Plan shall be certified by the ET Leader and verified by the IEC as conforming to the relevant information, requirements and recommendations contained in the approved EIA Report (Register No. AEIAR-212/2017). The Plan shall be fully and properly implemented.

Submissions and/or Measures to be Implemented during Construction and Operation of the Project

Submission of Detailed Plan for any recurring Re-profile Dredging

2.16 The Permit Holder shall review the maintenance dredging strategy of the Channel such that dredging is conducted more frequently with a view to reducing the need for large scale dredging/ re-profiling of the Channel during the operation phase.



Should re-profiling of the Channel with estimated dredging quantity of 2.9Mm³ be required during the operation phase, the Project Proponent shall devise and submit a detailed plan (the Plan) with clear justification on why frequent small scale/ high spot dredging is not feasible. The Plan shall be provided to the Advisory Council on the Environment (ACE) for comments prior to submission to the Director for approval before commencement of works.

Measures to Minimize Water Quality Impacts

- 2.17 To minimize the water quality impacts during dredging, either Grab Dredgers or Trailer Suction Hopper Dredgers (TSHDs) shall be deployed following Conditions 2.18 and 2.19 described below. Any proposal to adopt a combination of grab dredger(s) and TSHD shall be submitted to the Director for approval at least 2 months before implementation.
- 2.18 The Permit Holder shall implement the following mitigation measures to minimize the water quality impact due to construction and operation, if grab dredgers are to be deployed for the dredging works:
- (i) no more than 5 closed grab dredgers shall be operated within the Project Area at any one time for the Project;
 - (ii) the dredging rates shall not exceed the maximum allowable dredging rates for closed grab dredgers specified in Table 1 of this Permit;
 - (iii) the lowest maximum allowable dredging rate in the affected zones should apply in total to all closed grab dredgers in all active zones specified in Table 2 of this Permit, if dredging works is carried out in more than one working zone in any day;
 - (iv) cage-type silt curtains to be installed to surround the marine dredging area in accordance with the Silt Curtain Deployment Plan deposited under Condition 2.15 of this Permit; and
 - (v) closed grab dredger to be deployed shall have a grab capacity of no less than 8 m³, except near the submarine pipeline.
- 2.19 The Permit Holder shall implement the following mitigation measures to minimize the water quality impact due to construction and operation, if TSHDs are to be deployed for the dredging works:
- (i) no more than 5 TSHDs shall be operated within the Project Area at any one time for the Project;
 - (ii) the dredging rates shall not exceed the maximum allowable dredging rates for grab dredgers specified in Table 1 of this Permit; and
 - (iii) the lowest maximum allowable dredging rate in the affected zones should apply in total to all TSHDs in all active zones specified in Table 2 of this Permit, if dredging works is carried out in more than one working zone in any day.



- 2.20 All dredgers and work-related vessels of the Project shall not travel at speeds exceed in 10 knots within the Project site boundary.
- 2.21 Loading of barges and hoppers be controlled to prevent splashing of dredged material to the surrounding water, and barges and hoppers should not be filled to a level which would cause the overflow of materials of sediment laden water during loading or transportation.

3 ENVIRONMENTAL MONITORING AND AUDIT REQUIREMENTS

- 3.1 The Permit Holder shall implement the EM&A programme in accordance with the procedures and requirements as set out in the EM&A Manual. Any change to the EM&A requirements or programme shall be justified by the ET Leader and verified by the IEC as conforming to the relevant information and requirements set out in the EM&A Manual before submission to the Director for approval.
- 3.2 The Permit Holder shall take samples, measurements and necessary remedial actions in accordance with the requirements of the EM&A Manual by:
- (i) conducting baseline environmental monitoring;
 - (ii) conducting impact environmental monitoring;
 - (iii) carrying out remedial actions described in the Event/Action Plans of the EM&A Manual in accordance with the time frame set out in the Event/Action Plans, or as agreed by the Director, in case where specified criteria in the EM&A Manual are exceeded; and
 - (iv) logging and keeping records of the details of (i) to (iii) above for all parameters within 3 working days of the collection of data or completion of remedial action(s), for the purpose of preparing and submitting the monthly EM&A Reports and to make available the information for inspection on site.
- 3.3 The Permit Holder shall submit 4 hard copies and 1 electronic copy of relevant Baseline Monitoring Reports to the Director at least 2 weeks before the commencement of construction of the Project. The submissions shall be certified by the ET Leader and verified by the IEC as having complied with the requirements as set out in the EM&A Manual before submission to the Director. Additional copies of the Baseline Monitoring Report shall be provided upon request by the Director.
- 3.4 The Permit Holder shall submit 4 hard copies and 1 electronic copy of Monthly EM&A Reports to the Director, within 2 weeks after the end of the reporting month. The monthly EM&A Reports shall include an executive summary of all environmental audit results, together with actions taken in the event of non-compliance (exceedances) of the environmental quality performance limits (Action and Limit Levels), complaints received and emergency events relating to violation of environmental legislation (such as illegal dumping and landfilling). The submissions shall be certified by the ET Leader and verified by the IEC as having



complied with the requirements as set out in the EM&A Manual before submission to the Director. Additional copies of the Monthly EM&A Reports shall be provided upon request by the Director.

- 3.5 All environmental monitoring and audit data submitted under this Permit shall be true, valid and correct.
- 3.6 To ensure a high degree of transparency regarding the monitoring data and results in view of the public concern about the Project, all environmental monitoring and audit data and results and all submissions and all performance test data and results required by this Permit shall be made available by the Permit Holder to the public through a dedicated website to be set up by the Permit Holder under Condition 4.2 below, in the shortest practicable time and in no event later than 2 weeks after such information is available.

4. **ELECTRONIC REPORTING OF EM&A INFORMATION**

- 4.1 To facilitate public inspection of the Baseline Monitoring Report and Monthly EM&A Reports via the EIAO Internet Website and at the EIAO Register Office, electronic copies of these Reports shall be prepared in Hyper Text Markup Language (HTML) (version 4.0 or later) and in Portable Document Format (PDF) (version 1.3 or later), unless otherwise agreed by the Director and shall be submitted at the same time as the hard copies as described in Conditions 3.3 and 3.4 of this Permit. For the HTML version, a content page capable of providing hyperlink to each section and sub-section of these Reports shall be included in the beginning of the document. Hyperlinks to all figures, drawings and tables in these Reports shall be provided in the main text from where the respective references are made. All graphics in these Reports shall be in interlaced GIF, JPEG or PDF format unless otherwise agreed by the Director. The content of the electronic copies of these Reports must be the same as the hard copies.
- 4.2 The Permit Holder shall, at least 2 weeks before the commencement of construction of the Project, set up a dedicated Internet website and notify the Director in writing the Internet address where the environmental monitoring data and project information is to be placed. All environmental monitoring data described in Condition 4.1 above shall be made available to the public via the abovementioned dedicated Internet website as mentioned in Condition 3.6. All finalized submissions and plans shall be made available to the public via the dedicated Internet website in the shortest possible time and in any event no later than 2 weeks after the submissions and plans are approved by or deposited with the Director, unless otherwise agreed with the Director. The Permit Holder shall maintain the dedicated website for public access of the environmental monitoring data and reports throughout the entire construction period and until 3 years after the last EM&A Report is uploaded, or otherwise as agreed by the Director.
- 4.3 The Internet website as described in Condition 4.2 above shall enable user-friendly public access to the environmental monitoring data and project information including the Project Profile of the Project, the EIA Report, and this Permit. The Internet website shall have features capable of:
- (i) providing access to all environmental monitoring data of this Project collected



since the commencement of construction;

- (ii) searching by date;
 - (iii) searching by types of monitoring data; and
 - (iv) hyperlinking to relevant monitoring data after searching;
- or otherwise as agreed by the Director.

Notes:

註：

1. This Permit consists of three parts, namely, Part A (Main Permit), Part B (Description of Designated Project) and Part C (Permit Conditions). Any person relying on this permit shall obtain independent legal advice on the legal implications under the EIAO, and the following notes are for general information only.
本許可證共有 3 部，即 A 部（許可證主要部分）；B 部（指定工程項目的說明）及 C 部（許可證條件）。任何援引本許可證的人士須就環評條例的法律含意徵詢獨立法律意見，下述註解只供一般參考用。
2. If there is a breach of any condition of this Permit, the Director or his authorized officer may, with the consent of the Secretary for the Environment, order the cessation of associated work until the remedial action is taken in respect of the resultant environmental damage, and in that case the Permit Holder shall not carry out any associated works without the permission of the Director or his authorized officer.
如違反本許可證的任何條件，署長或獲授權人員徵得環境局局長的同意後勒令停止相關工程，直至許可證持有人為所造成的環境損害採取補救行動為止。在此情況下，許可證持有人未經署長或獲授權人員同意，不得進行任何相關工程。
3. The Permit Holder may apply under Section 13 of the EIAO to the Director for a variation of the conditions of this Permit. The Permit Holder shall replace the original permit displayed on the Project site by the amended permit.
許可證持有人可根據環評條例第 13 條的規定向署長申請更改本環境許可證的條件。許可證持有人須將經修改的許可證替換在建造工地內展示的原有許可證。
4. A person who assumes the responsibility for the whole or a part of the Project may, before he assumes responsibility of the Project, apply under Section 12 of the EIAO to the Director for a further environmental permit.
承擔工程項目整項或部分工程的責任的人，在承擔責任之前，可根據環評條例第 12 條的規定向署長申請新的環境許可證。
5. Under Section 14 of the EIAO, the Director may with the consent of the Secretary for the Environment suspend, vary or cancel this Permit. The suspended, varied or cancelled Permit shall be removed from display at the Project site.
根據環評條例第 14 條的規定，署長可在環境局局長的同意下暫時吊



銷、更改或取消環境許可證。遭暫時吊銷、更改或取消的環境許可證必須從工程項目工地除下，不再展示。

6. If this Permit is cancelled or surrendered during the construction or operation of the Project, another environmental permit must be obtained under the EIAO before the Project could be continued. It is an offence under Section 26(1) of the EIAO to construct or operate a designated project listed in Part 1 and 2 of Schedule 2 of the EIAO without a valid environmental permit.

如果本許可證在工程項目建造或營辦期間取消或交回，則在繼續營辦工程項目之前，必須先根據環評條例規定取得另一份環境許可證。根據環評條例第 26(1)條的規定，任何人在沒有有效環境許可證的情況下建造或營辦環評條例附表 2 第 1 及 2 部所列明的指定工程項目，即屬犯罪。

7. Any person who constructs or operates the Project contrary to the conditions in the Permit, and is convicted of an offence under the EIAO, is liable:

如任何人在違反本許可證的條件下建造或營辦工程項目，根據環評條例，即屬犯罪—

- (i) on a first conviction on indictment to a fine of \$2 million and to imprisonment for 6 months;

一經循公訴程序首次定罪，可處罰款 200 萬元及監禁 6 個月；

- (ii) on a second or subsequent conviction on indictment to a fine of \$5 million and to imprisonment for 2 years;

一經循公訴程序第二次或其後每次定罪，可處罰款 500 萬元及監禁 2 年；

- (iii) on a first summary conviction to a fine at level 6 and to imprisonment for 6 months;

一經循簡易程序首次定罪，可處第 6 級罰款及監禁 6 個月；

- (iv) on a second or subsequent summary conviction to a fine of \$1 million and to imprisonment for 1 year; and

一經循簡易程序第二次或其後每次定罪，可處罰款 100 萬元及監禁 1 年；及

- (v) in any case where the offence is of a continuing nature, the court or magistrate may impose a fine of \$10,000 for each day on which he is satisfied the offence continued.

在任何情況下如該罪行屬持續性質，則法院或裁判官可就其信納該罪行持續的每天另處罰款 10,000 元。

8. The Permit Holder may appeal against any condition of this Permit under Section 17 of the EIAO within 30 days of receipt of this Permit.

許可證持有人可在接獲本許可證後 30 天內，根據環評條例第 17 條就本許可證的任何條件提出上訴。



9. The Notes are for general reference only and that the Permit Holder should refer to the EIAO for details and seek independent legal advice.
上述註解只供一般參考用，欲知有關詳情，許可證持有人須參閱環評條例及徵詢獨立法律意見。

Environmental Permit No. EP-542/2017
環境許可證編號:EP-542/2017



Table 1 – Recommended Maximum Allowable Dredging Rate for Grab Dredger and TSHD Options
(Modified from Table 2.5 of the EM&A Manual)

| Working Zone ¹ | Dry Season | | | | Wet Season | | | |
|--|------------|---------|---------|--------|------------|--------|--------|--------|
| | Zone 1 | Zone 2 | Zone 3 | Zone 4 | Zone 1 | Zone 2 | Zone 3 | Zone 4 |
| <u>Grab Dredger</u> | | | | | | | | |
| Maximum allowable dredging rate ² (m ³ /hr) | 2,070 | 3,760 | 3,730 | 2,400 | 3,000 | 3,070 | 2,640 | 1,600 |
| Maximum allowable dredging rate ³ (m ³ /day) | 49,800 | 90,400 | 89,600 | 57,800 | 72,100 | 73,700 | 63,500 | 38,500 |
| <u>TSHD</u> | | | | | | | | |
| Maximum allowable dredging rate ² (m ³ /hr) | 3,280 | 5,730 | 7,160 | 2,630 | 5,520 | 3,280 | 2,710 | 920 |
| Maximum allowable dredging rate ³ (m ³ /day) | 78,900 | 137,600 | 171,900 | 63,300 | 132,500 | 78,800 | 65,100 | 22,200 |

Remarks:

- 1: This Table shall be read in conjunction with Figure 2;
- 2: Values are rounded down to the nearest ten;
- 3: Refer to dredging over a 24 hour period. Notwithstanding this, the maximum hourly dredging rate for the Project shall not be exceeded in an given hour of dredging works.

Note:

- The allowable dredging rates are the total for all dredgers working simultaneously;
- Grab dredgers shall not be operated concurrently with TSHDs;
- Where exceedances are identified and confirmed by the ET and verified by the IEC as project-related, the maximum allowable hourly dredging rates of the Project shall be reduced according to Table 2.6 in the EM&A Manual (Registered No. AEIAR-212/2017). The reduced rates for the respective zone(s) and season shall apply until completion of the dredging works for the affected zone(s) and season.



Table 2 – Recommended Maximum Allowable Dredging Rate for Concurrent Dredging in Different Zones for Grab Dredger and TSHD Options
(Modified from Appendix C of the EM&A Report)

| Zone | Concurrent Dredging Scenarios (shown as shaded cells) | | | | | | | | | | |
|---|---|--------|--------|---------|--------|------------------------|--------|--------|--------|--------|-----------|
| | Two Concurrent Zones | | | | | Three Concurrent Zones | | | | | All Zones |
| 1 | | | | | | | | | | | |
| 2 | | | | | | | | | | | |
| 3 | | | | | | | | | | | |
| 4 | | | | | | | | | | | |
| Grab Dredger – Wet Season | | | | | | | | | | | |
| Zone with lowest rate | 4 | 1 | 3 | 3 | 4 | 4 | 3 | 4 | 4 | 4 | 4 |
| Maximum Dredging Rate in Total (m ³ /hr) | 1,600 | 3,000 | 2,640 | 2,640 | 1,600 | 1,600 | 2,640 | 1,600 | 1,600 | 1,600 | 1,600 |
| Maximum Dredging Rate* in Total (m ³ /day) | 38,500 | 72,100 | 63,500 | 63,500 | 38,500 | 38,500 | 63,500 | 38,500 | 38,500 | 38,500 | 38,500 |
| Grab Dredger – Dry Season | | | | | | | | | | | |
| Zone with lowest rate | 1 | 1 | 1 | 3 | 4 | 4 | 1 | 1 | 1 | 4 | 1 |
| Maximum Dredging Rate in Total (m ³ /hr) | 2,070 | 2,070 | 2,070 | 3,730 | 2,400 | 2,400 | 2,070 | 2,070 | 2,070 | 2,400 | 2,070 |
| Maximum Dredging Rate* in Total (m ³ /day) | 49,800 | 49,800 | 49,800 | 89,600 | 57,800 | 57,800 | 49,800 | 49,800 | 49,800 | 57,800 | 49,800 |
| TSHD – Wet Season | | | | | | | | | | | |
| Zone with lowest rate | 4 | 2 | 3 | 3 | 4 | 4 | 3 | 4 | 4 | 4 | 4 |
| Maximum Dredging Rate in Total (m ³ /hr) | 920 | 3,280 | 2,710 | 2,710 | 920 | 920 | 2,710 | 920 | 920 | 920 | 920 |
| Maximum Dredging Rate* in Total (m ³ /day) | 22,200 | 78,800 | 65,100 | 65,100 | 22,200 | 22,200 | 65,100 | 22,200 | 22,200 | 22,200 | 22,200 |
| TSHD – Dry Season | | | | | | | | | | | |
| Zone with lowest rate | 4 | 1 | 1 | 2 | 4 | 4 | 1 | 4 | 4 | 4 | 4 |
| Maximum Dredging Rate in Total (m ³ /hr) | 2,630 | 3,280 | 3,280 | 5,730 | 2,630 | 2,630 | 3,280 | 2,630 | 2,630 | 2,630 | 2,630 |
| Maximum Dredging Rate* in Total (m ³ /day) | 63,300 | 78,900 | 78,900 | 137,600 | 63,300 | 63,300 | 78,900 | 63,300 | 63,300 | 63,300 | 63,300 |

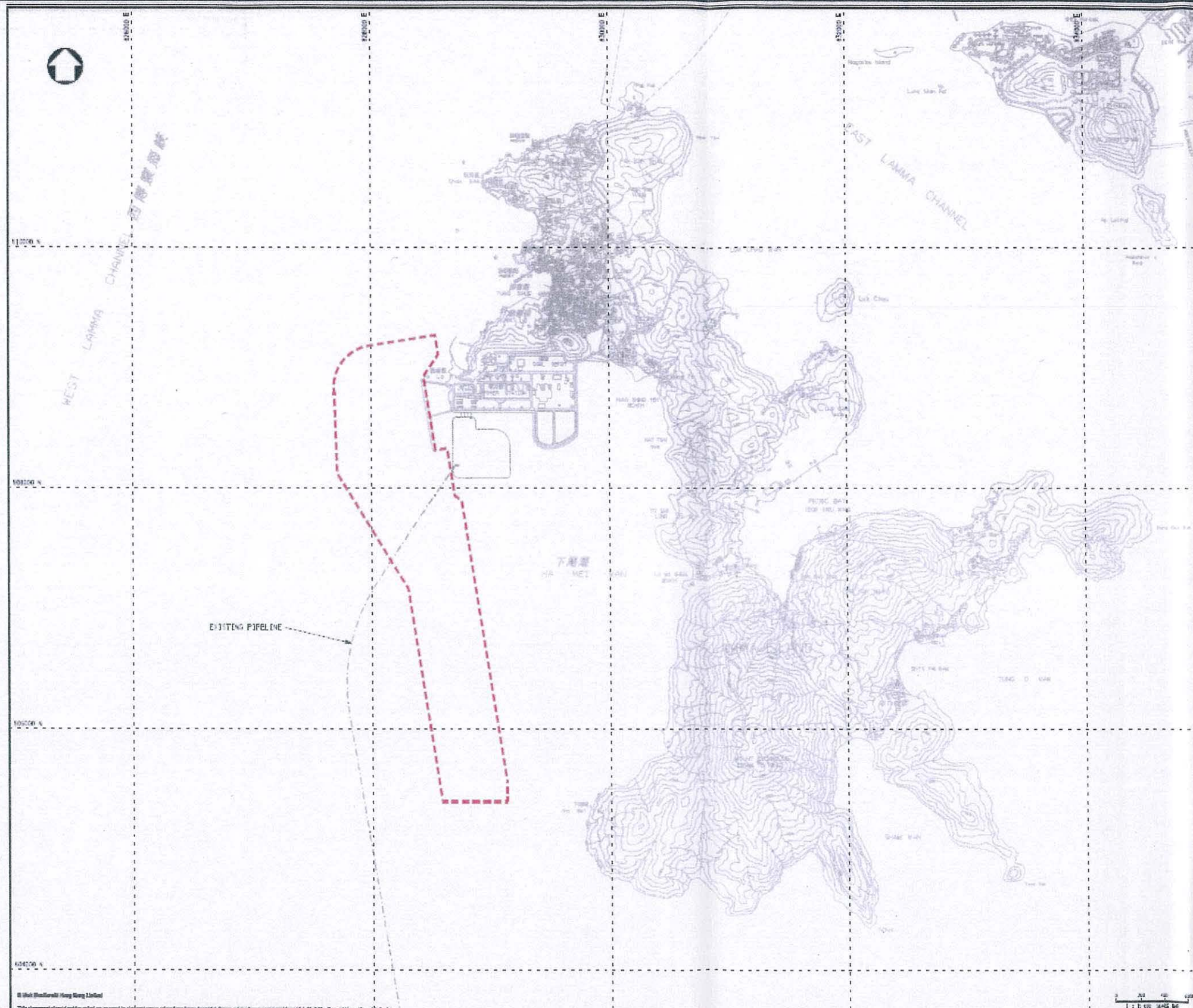
Remark:

- *: Refer to dredging over a 24 hour period. Notwithstanding this, the maximum hourly dredging rate for the Project shall not be exceeded in any given hour of dredging works.

Note:

- The allowable dredging rates are the total for all dredgers working simultaneously;
- Grab dredgers shall not be operated concurrently with TSHDs.





Key to symbols

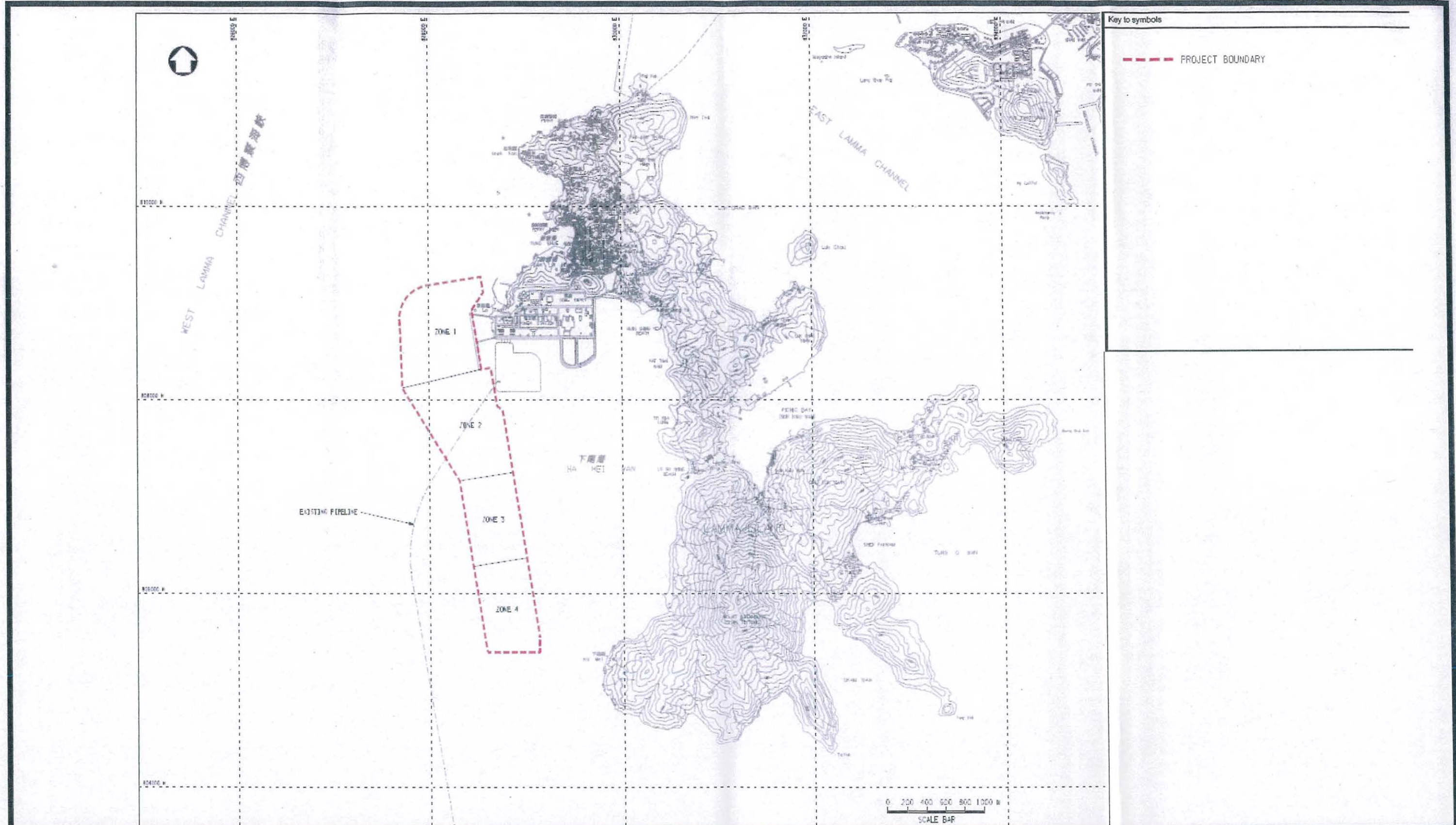
--- PROJECT BOUNDARY

Project Title
 工程項目名稱
Improvement Dredging for Lamma Power Station Navigation Channel
 南丫發電廠航道挖泥改善工程

Environmental Permit No.: EP-535/2017
 環境許可證編號: EP-535/2017

Figure 1:
 圖一
Project Area [This figure was prepared based on Figure 1.1 of the EIA Report (Register No.: AEIAR-212/2017)]
 工程項目範圍 [本圖是根據已批准的環評報告 (登記冊編號: AEIAR-212/2017) 圖 1.1 編制]





Project Title
 工程項目名稱

Improvement Dredging for Lamma Power Station Navigation Channel
 南丫發電廠航道挖泥改善工程

Figure 2:
 圖二

Boundary of Working Zones [This figure was prepared based on Figure 3.3 of the EIA Report (Register No.: AEIAR-212/2017)]
 工程區範圍 [本圖是根據已批准的環評報告 (登記冊編號: AEIAR-212/2017) 圖 3.3 編制]

Environmental Permit No.: EP-535/2017
 環境許可證編號: EP-535/2017

