

Local Vessels Advisory Committee
Pilotage Advisory Committee
High Speed Craft Consultative Committee
Port Operations Committee

**Marine Works for the Construction of a Subsea Pipeline Connecting
the Hong Kong Offshore Liquefied Natural Gas Terminal and
the Lamma Power Station**

Purpose

The Hongkong Electric Company Limited will construct a subsea pipeline connecting the Hong Kong Offshore Liquefied Natural Gas Terminal and the Lamma Power Station. The project brief of the Hongkong Electric Company Limited is set out in the **Annex**.

2. Members are invited to submit your comments, if any, on the above project by replying to the Secretariat on or before 14 January 2021.

Marine Department

8 January 2021

**Marine Works for Construction of the Subsea Pipeline Connecting
the Hong Kong Offshore Liquefied Natural Gas Terminal and
the Lamma Power Station**

Purpose

1. This paper is to brief Members on the marine works associated with the construction of the subsea pipeline connecting the Hong Kong Offshore Liquefied Natural Gas Terminal (the Terminal) and the Lamma Power Station (LPS) (refer to Annex A).

Background

2. To reduce carbon intensity from 2020 onwards and support the Hong Kong Special Administrative Region (HKSAR) Government's emission reduction targets set out in the Climate Action Plan 2030+ Report, as well as formulating an additional viable gas supply proposal for Hong Kong's long-term energy security, after a series of studies, CLP Power Hong Kong Limited and The Hongkong Electric Company (HK Electric) put forward the proposal of constructing an offshore LNG terminal for mooring Floating Storage and Regasification Unit (FSRU) vessel.

3. HK Electric (Project Proponent) is to construct and operate the subsea gas pipeline for LPS. The Further Environmental Permit (FEP) for this Project had been granted on 17 January 2020 (links to the FEP at <https://www.epd.gov.hk/eia/register/permit/latest/fep1952019.htm>). China Offshore Oil Engineering Company has been commissioned to engage as the Project Contractor (Project Contractor).

Proposed Marine Works

4. The proposed marine works includes the construction of the subsea pipeline connecting the Terminal to the LPS with approximate 18 km in length. The pipeline installation will include pre-trenching, dredging, pipeline laying, post-trenching, jetting and backfilling. Please refer to Annex B on information about the proposed main vessel types deployed, anchor arrangement plan and tentative works program.

5. The completion date of the works is expected at the end of the year 2021 but may be affected by the outbreak of COVID-19 and delayed completion until June 2022. The Project Contractor and Project Proponent will closely monitor the situation and will update stakeholders at appropriate juncture.

Marine Traffic Impacts

6. The works are sited at the existing marine corridors or in the vicinity of the existing marine and submarine facilities, it is anticipated that there will be impacts to the main corridors and facilities. The marine corridors and facilities include:

- i. Submarine Cables – They are mainly at the south of Lantau crossing the pipeline alignment and pose constraints to construction works (refer to Annex C – Figure 1);
- ii. Section of the subsea pipeline – It is located at water area between the proposed South Lantau Marine Park and the south of Cheung Chau Open Sea Disposal Area (refer to Annex C – Figure 1);
- iii. Recommended Traffic Separation Scheme (TSS) at South of Cheung Chau – It is located adjacent south of Shek Kwu Chau. During the construction period, close attention will be paid to the safety of vessels in this area, covering River Trade Vessels, cross-boundary ferries and vessel involved in the construction activities of the Integrated Waste Management Facilities (IWMF) (refer to Annex C – Figure 1); and
- iv. Lamma Power Station Approach Channel – During the construction period, the marine activities to/from the LPS and Pilot Boarding Station off Ha Mei Wan will be taken into consideration (refer to Annex C – Figure 2).

Proposed Marine Traffic Risk Control and Mitigation Measures

7. The basic principle of the project is not to hinder marine traffic and must pay attention to maritime safety. The Project Proponent has conducted a Marine Traffic Impact Assessment (MTIA) to identify all potential impacts to the marine traffic and facilities, appropriate mitigation measures to alleviate impacts have been developed in the MTIA. The mitigation measures include (but not limited to) the following:

- i. According to the practices of marine works, appropriate marker buoys will be provided in relevant works area, while adequate number of guard boats/tugs will be deployed in place to ensure the safety of the works area and sufficient time for evacuation in case of emergency;
- ii. The Project Contractor should invite relevant stakeholders to attend the Marine Management Liaison Group (MMLG) meeting at regular intervals during the construction period. The MMLG meeting serves the purpose of coordinating marine traffic among the interfacing contractors, existing marine operators and the Government Departments, and resolving the interfacing issues within and near the works area;
- iii. A Marine Traffic Coordination Office (MTCO) with a 24-hour hotline will be established by the Project Contractor to provide round-the-clock monitoring on marine traffic for the works. The responsible personnel at MTCO will closely liaise with the stakeholders concerned and relevant Government Departments to exchange important messages relating to the works;
- iv. Temporary Marine Traffic Management (TMTM) Plan for key works stages near the Recommended TSS at South of Cheung Chau and Lamma Power Station Approach Channel (refer to Annex C - Figure 1 and 2) will be developed, which includes traffic management measures, risk control measures, typhoon evacuation arrangements and a detailed method statement. During the construction period, the Plan will keep continuously updating before submitted to relevant stakeholders through the MMLG; and

- v. The 24-hour hotline [5649 5709, Project Health & Safety Manager] will be established to receive and/or handle public enquiries, complaints and emergencies.
8. In addition, taking into account the views of relevant stakeholders in the above-mentioned works areas, corresponding mitigation measures are proposed respectively as follows:
- i. Submarine Cables – The Land Lease Agreement of the subsea pipeline has been established. The works will be conducted according to the requirements as stated in this Agreement;
 - ii. Marine Park – As requested by the Agriculture, Fisheries and Conservation Department (AFCD), detailed construction plan for pipeline construction works are required for AFCD’s review/approval and valid permit should be obtained if works area extended into the proposed South Lantau Marine Park;
 - iii. South of Cheung Chau Open Sea Disposal Area - Traffic arrangement within the South of Cheung Chau Open Sea Disposal Area was proposed to the Civil Engineering and Development Department (CEDD) and works area will only be conducted within the allowable working zone accepted by the CEDD;
 - iv. Recommended TSS at South of Cheung Chau – Planning of marine works will endeavor to minimize the impact to the TSS and sufficient room for navigation will be maintained at all times for existing users. The Project Contractor shall conduct works according to the TMTM Plan discussed and agreed in the MMLG meeting;
 - v. IWMPF - Regular meetings with the contractor of the IWMPF Project and HK Pilots Association (HKPA) have been arranged and mechanism for information exchange has been established to ensure all construction activities due to concurrent projects are well managed in the water area; and
 - vi. Lamma Power Station Approach Channel – Consultation with the operators at the Lamma Power Station and HKPA have been conducted, it is identified that communication mechanism will be established among the key users to ensure project information are regularly updated.

Way Forward

9. The Project Proponent will establish effective communication mechanism with relevant stakeholders to ensure that the works does not adversely affect any existing marine activities, as well as managing interface safety issues before and during the construction period.

10. The Project Contractor will liaise with the Marine Department to provide all relevant information including vessels, schedule and implementation plan etc. for review and timely promulgation of Marine Department Notice.

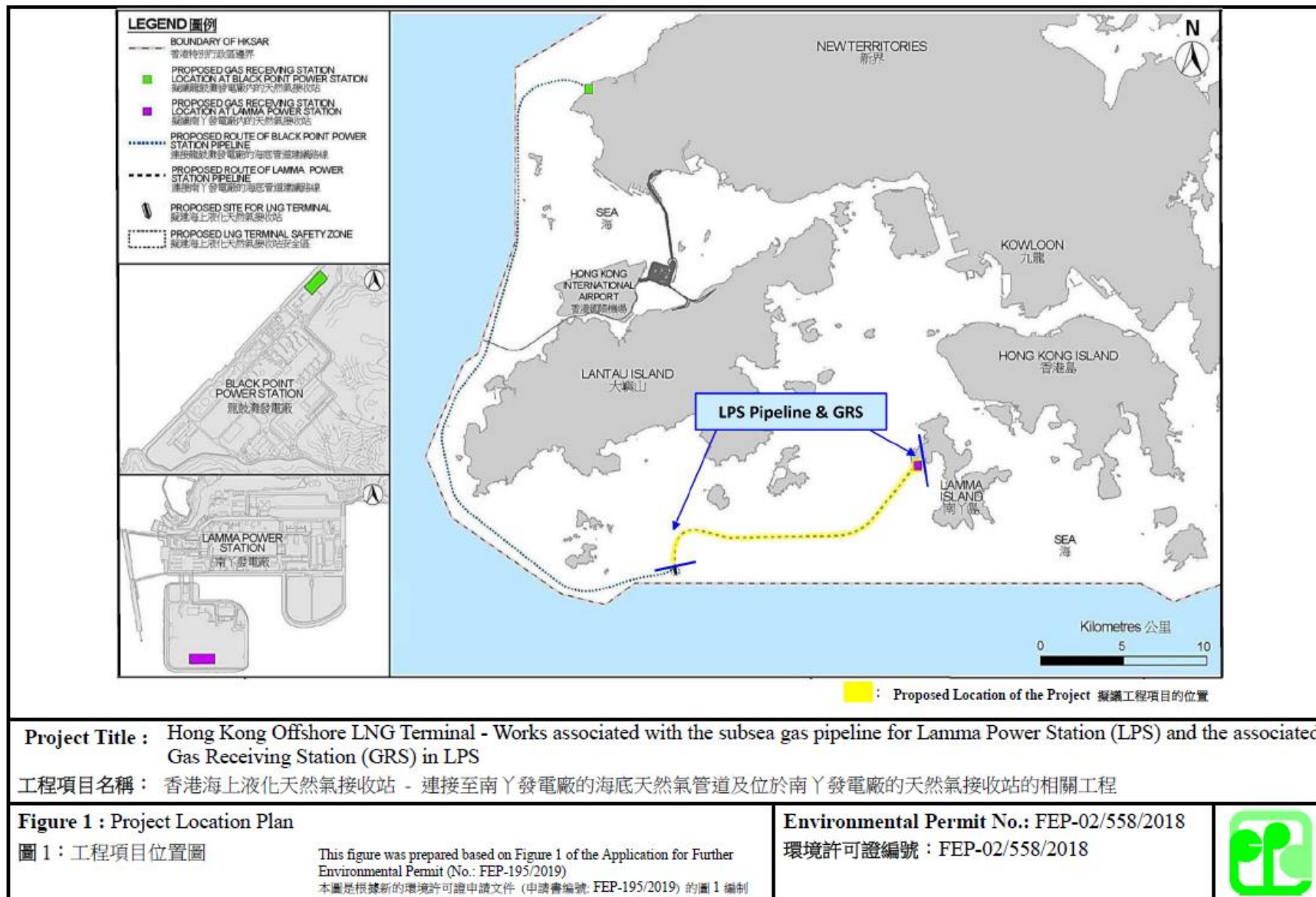
Advice Sought

11. Members are invited to note the forthcoming marine works and provide comments to the abovementioned proposed marine traffic risk control and mitigation measures. In case of any enquiry on the related matters, please contact Mr. Norman Chan of HK Electric by phone at 3143 3819, or by email: lmchan@hkelectric.com.

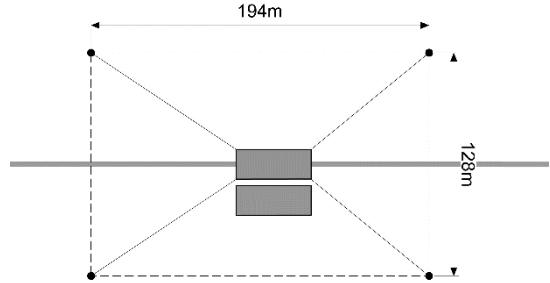
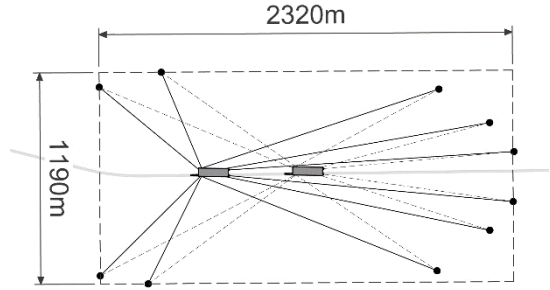
The Hongkong Electric Company, Limited

January 2021

Annex A

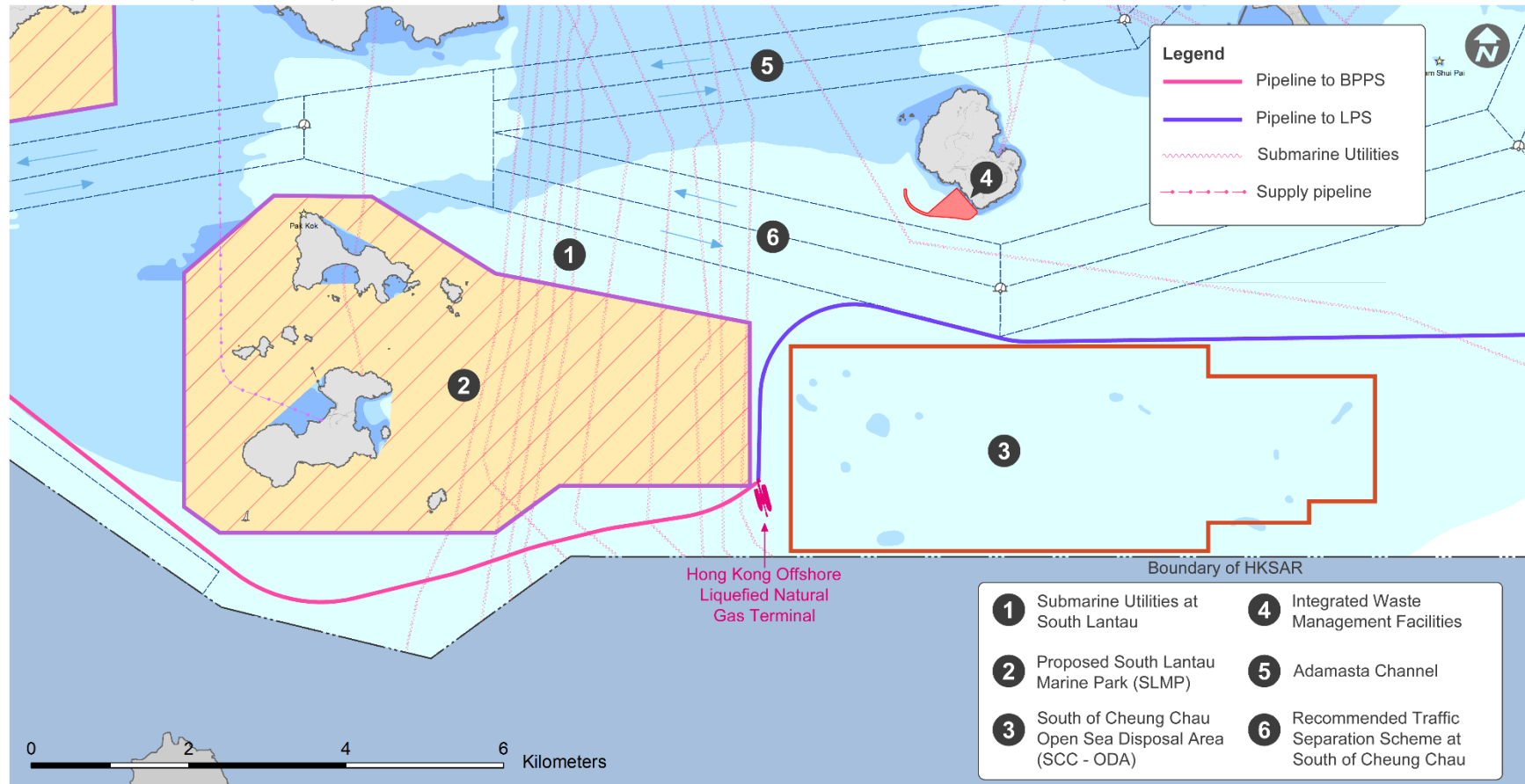


Annex B – Summary of Work types, Tentative Works Program, Vessel Types and Anchor Arrangement Plan

Work Types	Tentative Works Program		Working Vessel		Anchor Arrangement Plan for Working Vessel
	Start	Finish	Types	Length Overall LOA(m)	Works Area (m)
Pre-trenching	13 Jan 2021	17 Jan 2021	Dumb Lighter	49	
			Hopper Barge	57	
			Tug	26	
Pipeline Laying	17 Jan 2021	9 Mar 2021	Pipeline Laying Vessel	168	
Jetting	18 Mar 2021	10 Jul 2021	Post Trench Vessel	94	

Backfilling	25 May 2021	20 Jul 2021	Fall Pipe Vessel (Dynamic Positioning)	162	
			Dumb Lighter	49	
			Hopper Barge	49	

Annex C – Figure 1: Project Terminal & Recommended TSS at South of Cheung Chau



Annex C – Figure 2: Lamma Power Station Approach Channel

