

Construction Works Schedule

Hong Kong Offshore LNG Terminal -

Works associated with the subsea gas pipeline for Black Point Power Station (BPPS)

and the associated Gas Receiving Station (GRS) in BPPS

Version 1
September 2020

Hong Kong Offshore LNG Terminal - Works associated with the subsea gas pipeline for Black Point Power Station (BPPS) and the associated Gas Receiving Station (GRS) in BPPS
Environmental Certification Sheet
FEP-03/558/2018


Reference Document/Plan

Document/ Plan to be Certified/ Verified:	Construction Works Schedule
Date of Report:	September 2020
Date received by ET:	14 September 2020
Date received by IEC:	15 September 2020


Reference EP Requirement

EP Condition:	Condition No. 2.7 of FEP-03/558/2018
Content:	<i>Construction Works Schedule</i>
<p>The Permit Holder shall, no later than 1 month before the commencement of construction of the Project, deposit with the Director 3 hard copies and 1 electronic copy of a construction works schedule of the Project. The construction works schedule shall include but not limited to a detailed schedule, sequence and programme of the construction works and key environmental mitigation measures for the Project. The Project shall be constructed in accordance with the information as contained in the deposited construction works schedule.</p>	

ET Certification

I hereby certify that the above referenced document/ plan complies with the above referenced condition of FEP-03/558/2018.	
Mr Raymond Chow, Environmental Team Leader:	 Date: 14 September 2020

IEC Verification

I hereby verify that the above referenced document/ plan complies with the above referenced condition of FEP-03/558/2018.	
Mr Arthur Lo, Independent Environmental Checker:	 Date: 15 September 2020

Schedule of the works associated with the subsea gas pipeline for Black Point Power Station (BPPS) and the associated Gas Receiving Station (GRS) in BPPS								
WORK	Q3 2020	Q4 2020	Q1 2021	Q2 2021	Q3 2021	Q4 2021	Q1 2022	Q2 2022
Preparation Phase								
Pre-survey								
Removal of obstructions								
Construction Phase								
Pre-trenching including Deployment of Silt Curtain and Pilot Test								
Cofferdam and Sheet Pile Construction								
Pipeline Laying								
Post-trenching including Deployment of Silt Curtain and Pilot Test								
Rock Armour Placement								
Intermediate and Final Hydrotesting for Pipeline								
Gas Receiving Station (GRS) including pipe rack construction, preparation works at the vent header for tie-in of the new GRS, fencing, new gas receiving facility and new pipeline connection, and pre-commissioning, commissioning and start up								
Remarks: Pilot tests on the efficiency of silt curtain system shall be conducted during the early stage of construction to confirm the removal efficiency of the silt curtains.								

Note (Key Environmental Mitigation Measures):

- The key environmental mitigation measures are stipulated in Conditions 3.1 to 3.9 of FEP-03/558/2018 and are summarized below:
 - No working vessels for construction of the Project shall enter into, transit through, stop over or anchor within the existing marine parks and the Southwest Lantau Marine Park and the proposed South Lantau Marine Park, unless otherwise agreed by the Director of Environmental Protection
 - Working vessels for construction of the Project shall not be operated at a speed higher than 10 knots when moving within the areas frequented by Chinese White Dolphin or Finless Porpoise, including the waters near Sha Chau and Lung Kwu Chau Marine Park, the waters at the west of Lantau Island and the waters between Soko Islands and Shek Kwu Chau
 - Implementation of a 250 m radius marine mammal exclusion zone for dredging and jetting works
 - Implementation of waste management measures in accordance with the Waste Management Plan
 - Working rates for dredging and jetting, silt curtain arrangement and other measures at specific work locations are provided in the table below

Work Location	Plants Involved	Allowed Maximum Work Rate	Silt curtain at plants	Double silt curtain at water sensitive receivers	Other Location Specific Measures
Pipeline Riser Sections at Double Berth Jetty					
Pipeline Riser (BPPS KP0.0 – 0.1)	1 Grab Dredger	8,000m ³ day ⁻¹ for 24 hours each day	Yes	No	<ul style="list-style-type: none"> Pipeline construction works to be conducted at daily maximum of 12 hours with daylight (0700– 1900)
BPPS pipeline					
Pipeline shore approach at BPPS (BPPS KP44.9 – 45.0)	1 Grab Dredger	1,500m ³ day ⁻¹ for 24 hours each day	Yes	Yes	-
West of BPPS (BPPS KP42.9 – 44.9)	1 Jetting Machine	1,000m day ⁻¹ for 24 hours each day	Yes	Yes	-
Urmston Road (BPPS KP41.1 – 42.9)	1 Grab Dredger	8,000m ³ day ⁻¹ for 24 hours each day	Yes	No	-
Lung Kwu Chau to Urmston Anchorage (BPPS KP37.5 – 41.1)	1 Jetting Machine	1,000m day ⁻¹ for 24 hours each day	Yes	Yes	-
Sha Chau to Lung Kwu Chau (BPPS KP36.0 – 37.5)	1 Jetting Machine	720m day ⁻¹ for 24 hours each day	Yes	Yes	-
Sha Chau to Lung Kwu Chau (BPPS KP31.5 – 36.0)	1 Jetting Machine	720m day ⁻¹ for 24 hours each day	Yes	Yes	-
West of Tai O to West of HKIA (BPPS KP21.3 – 31.5)	1 Jetting Machine	1,500m day ⁻¹ for 24 hours each day from KP21.3 to 26.2 720m day ⁻¹ for 24 hours each day from KP26.2 to 31.5	Yes	No	-

Work Location	Plants Involved	Allowed Maximum Work Rate	Silt curtain at plants	Double silt curtain at water sensitive receivers	Other Location Specific Measures
Southwest Lantau (BPPS KP15.6 – 21.3)	1 Jetting Machine	1,500m day ⁻¹ for 24 hours each day	Yes	No	<ul style="list-style-type: none"> Avoid the peak months of Chinese White Dolphin (CWD) calving (May and June)
Adamasta Channel (BPPS KP12.1 – 15.6)	1 Jetting Machine	1,000m day ⁻¹ for 24 hours each day	Yes	No	-
Southwest of Soko Islands (BPPS KP8.9 – 12.1)	1 Jetting Machine	1,000m day ⁻¹ for 24 hours each day	Yes	No	-
South of Soko Islands (BPPS KP5.0 – 8.9)	1 Jetting Machine	1,000m day ⁻¹ for 24 hours each day	Yes	Yes	<ul style="list-style-type: none"> Pipeline construction works to be conducted at daily maximum of 12 hours with daylight (0700– 1900)
Jetty Approach (BPPS KP0.1 – 5.0), excluding Subsea Cable Sterile Corridors	1 Jetting Machine	1,000m day ⁻¹ for 24 hours each day	Yes	Yes	<ul style="list-style-type: none"> Pipeline construction works to be conducted at daily maximum of 12 hours with daylight (0700– 1900)
Subsea Cable Sterile Corridors (BPPS KP1.49 – 2.75 & KP3.55 – 4.43)	2 Grab Dredgers, followed by 1 Jetting Machine	8,000m ³ day ⁻¹ for 24 hours each day for each dredger 720m day ⁻¹ for 24 hours each day for jetting machine	Yes	Not required for grab dredging; Yes for jetting	<ul style="list-style-type: none"> Pipeline construction works to be conducted at daily maximum of 12 hours with daylight (0700– 1900)