



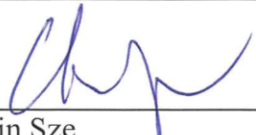
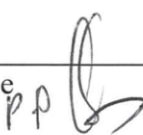
Civil Engineering and Development Department

Contract No. NL/2017/03

Tung Chung New Town Extension – Reclamation and
Advance Works

Dolphin Watching Plan

Revision 2

Complied By :	Authorized for issue :
Signature : 	Signature : 
Name: Calvin Sze Post : Environmental Manager Date : 23 Aug 2018	Name: Mr. Keith Tse Post : Site Agent Date : 23 Aug 2018



Tung Chung New Town Extension

Environmental Certification Sheet for Environmental Permit No. EP-519/2016

Reference Document/Plan

Document/Plan to be Certified:	Dolphin Watching Plan (Revision 2)
Date of Report:	23 August 2018

Reference EP Condition

Environmental Permit Condition:	Condition 2.15
The Permit Holder shall, no later than 3 months before the commencement of reclamation related marine works at Tung Chung East, submit 3 hard copies and 1 electronic copy of Dolphin Watching Plan (The Plan) to the Director for approval.	

ET Certification

I hereby certify that the above referenced document/plan complies with the above referenced condition of EP-519/2016

Jovy Tam
Environmental Team Leader
ERM-Hong Kong, Limited



Date: 14 September 2018

Qualified Ecologist Certification

I hereby confirm that the Qualified Ecologist of the ET has been consulted in preparing ecological aspects of the above referenced document/plan.

Raymond Chow
Qualified Ecologist
ERM-Hong Kong, Limited



Date: 14 September 2018



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OUR REF 198377-0065

YOUR REF

DATE 14 September 2018

Sustainable Lantau Office
Civil Engineering and Development Department
13/F, North Point Government Offices
333 Java Road, North Point
Hong Kong

For the attention of Mr. Eddie Lam / Mr. Colin Wong

Dear Sirs,

Agreement No. CE 59/2017 (EP)
Independent Environmental Checker for Tung Chung New Town Extension – Investigation

Dolphin Watching Plan (EP condition 2.15)

We refer to the Dolphin Watching Plan (Revision 2) dated 23 August 2018 and certified by the Environmental Team Leader on 14 September 2018. Please note we have no adverse comments on the captioned submission. The captioned submission is hereby verified in accordance with the requirement stipulated in Condition 2.15 of EP-519/2016.

Should you have any query, please feel free to contact the undersigned at 2608 7314 (chuawo@bv.com) or our Ivan Ting at 9222 9490 (iec.tcnte@gmail.com).

Yours faithfully,
for and on behalf of
BLACK & VEATCH HONG KONG LIMITED



MANUEL CHUA
Independent Environmental Checker

c.c. ET Leader – ERM (Attn: Mr. Jovy Tam) [by Email: joyv.tam@erm.com]
Project Manager / TCE – AECOM (Attn: Mr. Robo Lo) [by Email: sre1.tce@gmail.com]

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1.0 Introduction

Build King - SCT Joint Venture (BKSCTJV) is the Main Contractor to responsible for the execution of the construction works for the Tung Chung New Town Extension – Reclamation and Advance Works (TCNTE reclamation) under Civil Engineering and Development Department (CEDD) Contract number NL/2017/03. The work comprises of reclamation of about 129ha of land including the construction of associated seawall and eco-shoreline and drainage box culverts/channel for the development of TCNTE at Tung Chung East and Road P1.

Pursuant to Environmental Permit (Permit no. EP-519/2016) Condition 2.15, a Dolphin Watching Plan should be submitted in advance of the commencement of marine construction of the project. The plan includes regular inspection of the silt curtain, visual inspection of water surrounded by the silt curtain and works area, and a response plan to cope with any unpredicted incidents such as the sighting of Chinese White Dolphins within the water surrounded by silt curtain.

Accordance with condition 2.5 of the EP, Qualified Ecologists had been appointed to form part of the ET and carry out work relating to ecological aspects. The Qualified Ecologists had been consulted in preparation of this Plan.

2.0 Site Characteristics

The site area of the Tung Chung New Town Extension – Reclamation and Advance Works is between Tung Chung Phase 3A and Tai Ho Bay Inlet as shown in the **Appendix A**.

3.0 Dolphin Watching Plan

The Dolphin Watching Plan was developed based on the characteristics of the site and should be implemented after the silt curtain is in place. The DWP includes inspection of the silt curtain, visual inspection and the response plan of in event that Chinese White Dolphin is found within our enclosed waters. The layout and location of the silt curtain is shown in the **Appendix B**.

As a precautionary measure, dolphin exclusion zone of 250m radius is implemented in the reclamation and dredging sites during the installation of the perimeter silt curtains and any re-deployment of the perimeter silt curtains. A dolphin watching plan will be implemented for the exclusion zone. Works should not be commenced until a 30 minute of no dolphin sighting is made within the exclusion zone and will be suspended when any CWD is found within the exclusion zone.

3.1 Regular Inspection of the Silt Curtains

Before the commencement of each day of marine work, the silt curtain should be inspected by trained staff to ensure that it is intact and ends of the silt curtain are connected properly to form an enclosed area.

The silt curtain inspection will be carried out daily by a small vessel to visual inspect the integrity of the silt curtain. Both inside and outside of the silt curtain will be inspected. If significant damages were found, the marine work will be suspended until the silt curtain is repaired.

In the event of typhoon, the silt curtain will remain deployed. Once the typhoon signal is lowered, an immediate inspection shall be made by the maintenance team to check and repair any damage that may have occurred as damage to the silt curtain resulting in an opening which would allow the dolphin to enter. No work shall commence until the post typhoon inspection has been made.

3.2 Visual Inspection of the Waters Around and Outside the Silt Curtain

Prior to the commencement of marine works on each day, the waters around the silt curtain will be watched by two trained dolphin watchers. The trained dolphin watchers will scan the sea visually (naked eye/binoculars) from the viewing platform for at least 30 minutes prior to the commencement of marine works. The construction work will only commence after confirming 30 minutes of absence of dolphins.

For potential marine works of DCM trial embankment outside the perimeter silt curtain, dolphin watching (250m dolphin exclusion zone monitoring) shall be conducted 30 minutes before the marine works as well as during the marine works by the trained dolphin watchers. If dolphin is found within the dolphin exclusion zone, the relevant marine works shall be delayed until the dolphin left the exclusion zone.

As the silt curtain openings is likely be used as entrances by dolphins, trained dolphin watchers will be assigned to working vessels which worked near the openings, to regularly inspect any dolphin activities during daily work period. Meanwhile, the openings of silt curtain will be closed by curtain barrier after working hour (e.g. 18:00) to prevent the entering of dolphin into the site area.

All dolphin watchers will be trained by Qualified Ecologist, so that the dolphin watcher will have adequate knowledge to identify presence of dolphins. The refreshment training will be held half-yearly.

Thereafter, frontline staff, such as foremen, superintendents and engineers will look out for dolphin opportunistically from the active work fronts within the waters surrounded by the silt curtains throughout the work period.

In the event of Chinese White Dolphin being seen within the area enclosed by the silt curtain during the morning inspection or during the work day, all marine works shall be suspended and the action plan should be implemented immediately.

3.3 Action Plan to be Devised to cope with any Unpredicted Incidents

The frontline staff should stay alert for dolphins being found in the silt curtain during the construction works. Training session should be provided so that they have adequate knowledge to identify the present of dolphin. Training records would be maintained and provided to the Project team for checking / verification.

If a dolphin is found within the silt curtain area, the dolphin watcher will report the event to the construction manager and environmental officer immediately through handheld transceiver or mobile phone. All marine work within the silt curtain should cease until further notice. Also, maintenance team should be allocated to check the silt curtain for openings that may be missed during the daily silt curtain check. An action plan and communication flow chart and emergency contact list is in **Appendix C**.

The dolphin watcher should closely observe the movement of the dolphin and search for appearance of other dolphins within the silt curtain. The construction manager will gather the construction team to open the silt curtain to allow a shortest path for the CWD to leave the site.

The environmental officer will notify the *Project Manager*, the Environmental Team Leader, the Qualified Ecologist and gather the dolphin watchers readily available on-site to watch the position of the CWD and guide the CWD leave the site. The approximate locations, time, group size, behavior and the movement pattern of the CWD should be recorded, and submitted to the *Project*

Manager, ET and IEC for reference.

In the event of that the dolphin watcher finds that the dolphin has difficulty in escaping from the silt curtain surrounded area for an extended period of time (e.g. 30 mins). The Qualified Ecologist will instruct further action depending on the actual condition (e.g. contact AFCDC through “1823” marine mammal stranding hotline).

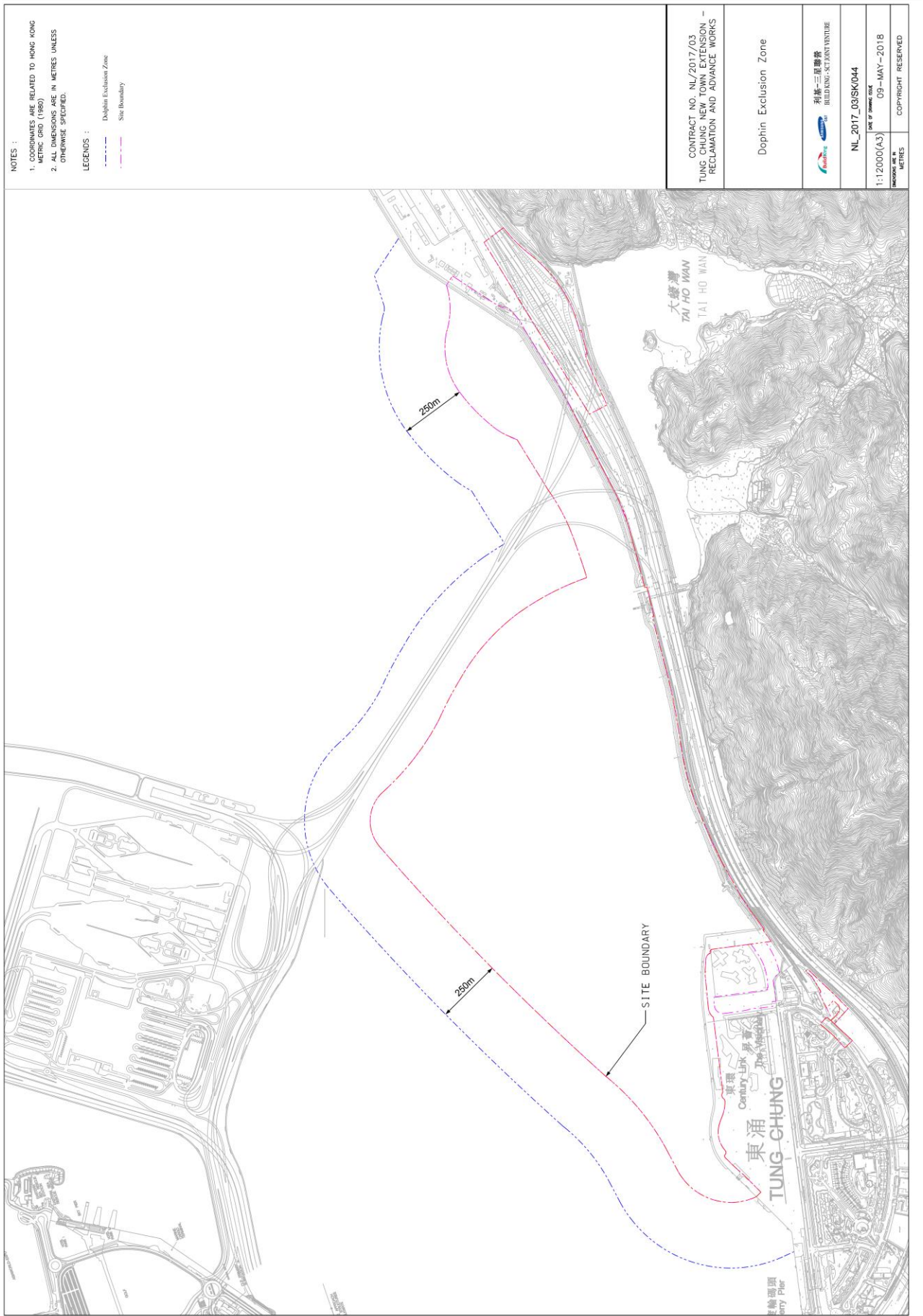
The construction works can only recommence if no dolphin is found within the observation area for 30 minutes. Also, staff should be allocated to check the silt curtain for any openings that may be missed during the daily inspection.

In case of injured or live-stranded cetaceans are found, the AFCDC will be contacted immediately through “1823” marine mammal stranding hotline.

Drill of the action plan would be conducted every 12 months to ensure relevant staff are familiar with the procedure and respective roles. Drill records would be maintained and provided to the Project team for checking / verification.

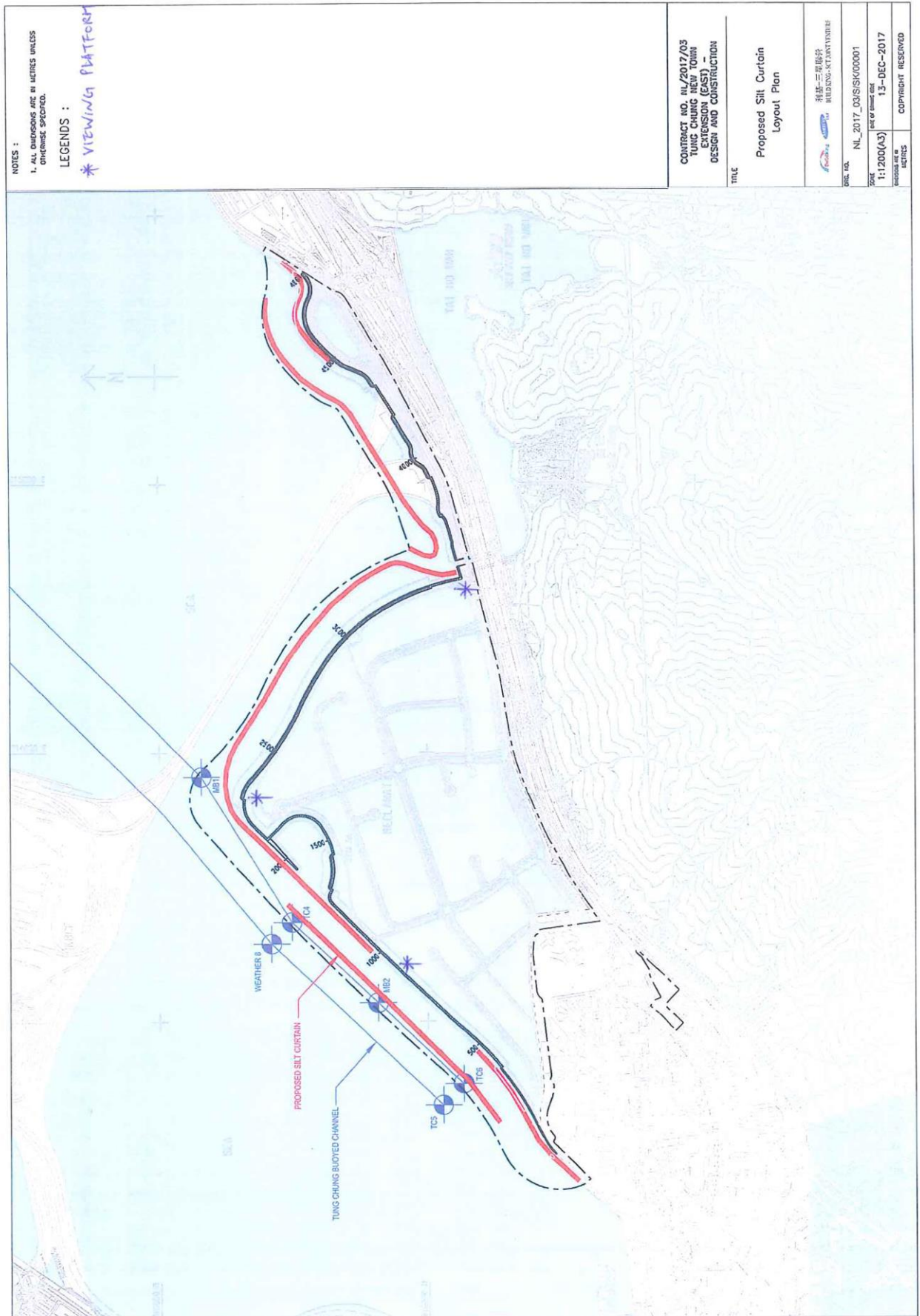
Appendix A

Site Layout Plan



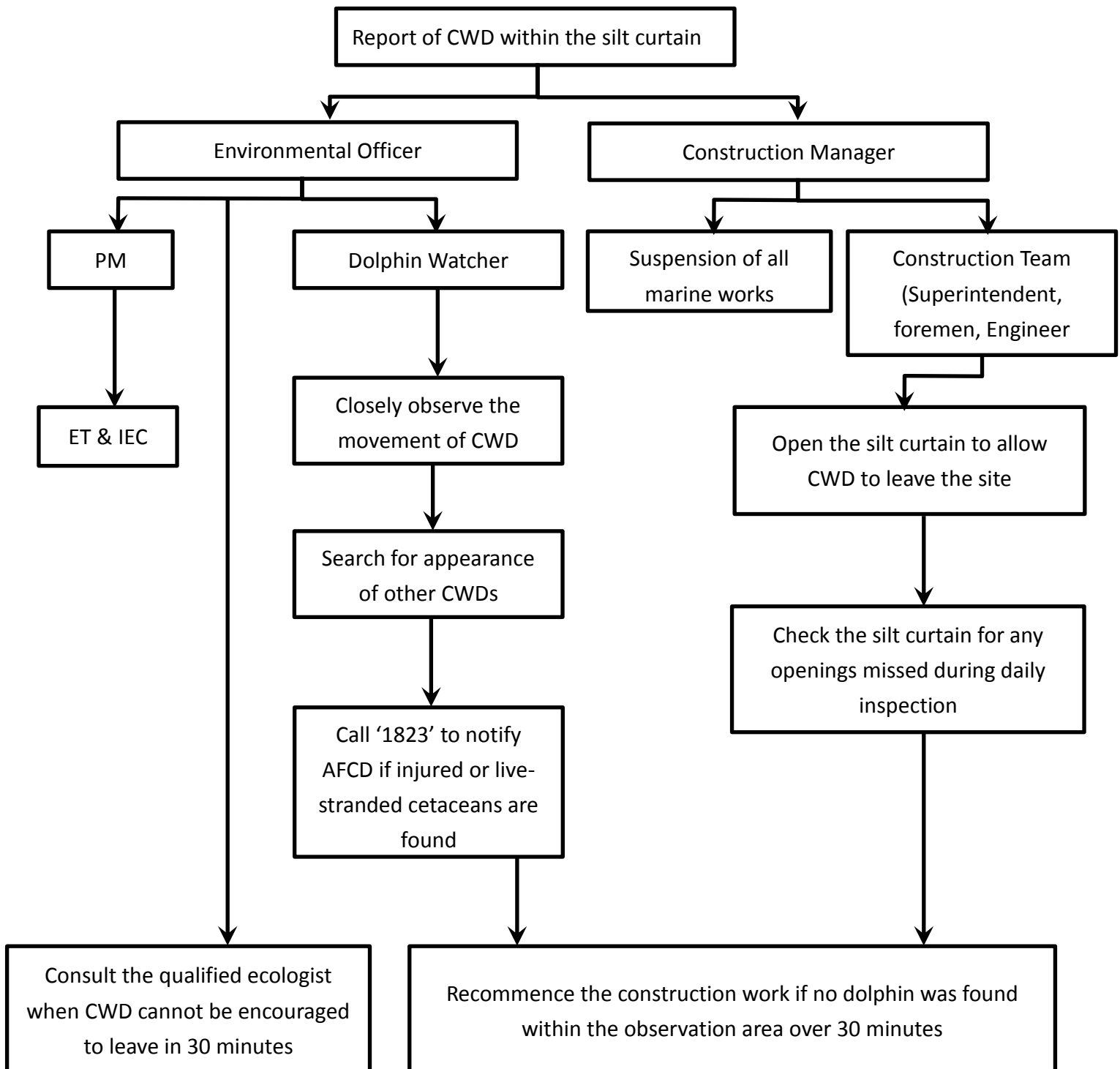
Appendix B

Silt Curtain Layout Plan



Appendix C

Communication Flow Chart and Emergency Contact List



Emergency Contact List

Post	Name	Contact No.
Environmental Officer	Calvin Sze	9205 9277
Construction Manager	Lee Wai Man	9481 6024
Superintendent	Lai Chi Wing	6997 6847

Appendix D

Implementation Schedule of the Major Environmental Mitigation Measures

Implementation Schedule of the Major Environmental Mitigation Measures

DWP Ref.	Recommended Major Environmental Mitigation Measures	Objectives of the Recommended Measures & Main Concerns to address	Implementation Agent	Location / Timing	Implementation Stage
S3.0	<u>Dolphin Watching Plan</u> Dolphin exclusion zone of 250m radius is implemented in the reclamation and dredging sites during the installation of the perimeter silt curtains and any re-deployment of the perimeter silt curtains.	Protect of dolphin	Contractor	Dolphin exclusion zone	Construction phase
S3.0	<u>Dolphin Watching Plan</u> Works should not be commenced until a 30 minute of no dolphin sighting is made within the exclusion zone and will be suspended when any CWD is found within the exclusion zone.	Protect of dolphin	Contractor	Dolphin exclusion zone	Construction phase
S3.1	<u>Regular Inspection of the Silt Curtains</u> Before the commencement of each day of marine work, the silt curtain should be inspected by trained staff to ensure that it is intact and ends of the silt curtain are connected properly to form an enclosed area.	Integrity of silt curtain	Contractor	Silt Curtain Erection Zone	Construction phase
S3.2	<u>Visual Inspection of the Waters Around and Outside the Silt Curtain</u> Prior to the commencement of marine works on each day, the waters around the silt curtain will be watched by two trained dolphin watchers. The trained dolphin watchers will scan the sea visually (naked eye/binoculars) from the viewing platform for at least 30 minutes prior to the commencement of marine works. The construction work will only commence after confirming 30 minutes of absence of dolphins.	Dolphin watcher inspection	Contractor	Waters around silt curtain	Construction phase

DWP Ref.	Recommended Major Environmental Mitigation Measures	Objectives of the Recommended Measures & Main Concerns to address	Implementation Agent	Location / Timing	Implementation Stage
S3.2	<p><u>Visual Inspection of the Waters Around and Outside the Silt Curtain</u></p> <p>For potential marine works of DCM trial embankment outside the perimeter silt curtain, dolphin watching (250m dolphin exclusion zone monitoring) shall be conducted 30 minutes before the marine works as well as during the marine works by the trained dolphin watchers. If dolphin is found within the dolphin exclusion zone, the relevant marine works shall be delayed until the dolphin left the exclusion zone.</p>	Dolphin watcher inspection	Contractor	Waters outside silt curtain	Construction phase
S3.2	<p><u>Visual Inspection of the Waters Around and Outside the Silt Curtain</u></p> <p>As the silt curtain openings is likely be used as entrances by dolphins, trained dolphin watchers will be assigned to working vessels which worked near the openings, to regularly inspect any dolphin activities during daily work period. Meanwhile, the openings of silt curtain will be closed by curtain barrier after working hour (e.g. 18:00) to prevent the entering of dolphin into the site area.</p>	Dolphin inspection near silt curtain openings	Contractor	Waters near silt curtain openings	Construction phase
S3.2	<p><u>Visual Inspection of the Waters Around and Outside the Silt Curtain</u></p> <p>In the event of Chinese White Dolphin being seen within the area enclosed by the silt curtain during the morning inspection or during the work day, all marine works shall be suspended and the action plan should be implemented immediately.</p>	Protect of dolphin	Contractor	Waters within silt curtain	Construction phase
S3.3	<p><u>Action Plan to be Devised to cope with any Unpredicted Incidents</u></p> <p>If a dolphin is found within the silt curtain area, the dolphin watcher will report the event to the construction manager and environmental officer immediately through handheld transceiver or mobile phone. All marine work within the silt curtain should cease until further notice.</p>	Communication flow chart	Contractor	Waters within silt curtain	Construction phase

DWP Ref.	Recommended Major Environmental Mitigation Measures	Objectives of the Recommended Measures & Main Concerns to address	Implementation Agent	Location / Timing	Implementation Stage
S3.3	<p><u>Action Plan to be Devised to cope with any Unpredicted Incidents</u></p> <p>The dolphin watcher should closely observe the movement of the dolphin and search for appearance of other dolphins within the silt curtain. The construction manager will gather the construction team to open the silt curtain to allow a shortest path for the CWD to leave the site.</p>	<p>Arrange a shortest path for the CWD to leave the site</p>	Contractor	Waters within silt curtain	Construction phase
S3.3	<p><u>Action Plan to be Devised to cope with any Unpredicted Incidents</u></p> <p>In the event of that the dolphin watcher finds that the dolphin has difficulty in escaping from the silt curtain surrounded area for an extended period of time (e.g. 30 mins). The Qualified Ecologist will instruct further action depending on the actual condition (e.g. contact AFCDD through “1823” marine mammal stranding hotline).</p>	<p>Protect of dolphin</p>	Contractor	Waters within silt curtain	Construction phase
S3.3	<p><u>Action Plan to be Devised to cope with any Unpredicted Incidents</u></p> <p>In case of injured or live-stranded cetaceans are found, the AFCDD will be contacted immediately through “1823” marine mammal stranding hotline.</p>	<p>Action once injured or live-stranded cetaceans are found</p>	Contractor	Waters in site area	Construction phase