

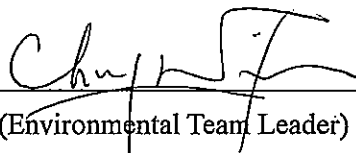
China International Water & Electric Corp

**Contract No. CV/2013/02
CEDD Maintenance Contract for Seawalls and
Navigation Channels (2013 – 2016)**

*Construction of a Landing and Access Facility at
Fung Wong Wat Beacon, Tolo Channel, Tai Po*

**Environmental Monitoring and Audit Programme
(Version 2.2)**

January 2016

Approved By 
(Environmental Team Leader)

REMARKS:

The information supplied and contained within this report is, to the best of our knowledge, correct at the time of printing.

CINOTECH accepts no responsibility for changes made to this report by third parties.

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1. INTRODUCTION

Background

- 1.1 The "CEDD Maintenance Contract for Seawalls and Navigation Channels (2013-2016)" under Contract No. CV/2013/02 was awarded to China International Water & Electric Corporation (hereinafter called the "Contractor") by the Civil Engineering and Development Department (CEDD) of the Hong Kong Special Administrative Region (HKSAR). A Task Order under Contract No. CV/2013/02 for the construction of a landing and access facility at Fung Wong Wat Beacon, Tolo Channel, Tai Po (hereinafter called the "Project") will be issued to the Contractor by CEDD accordingly.
- 1.2 Cinotech Consultants Ltd. (CINOTECH) was employed by the Contractor to serve as the Environmental Team (ET) to undertake the environmental monitoring services for the Contract.

Project Description

- 1.3 The construction of a landing and access facility at Fung Wong Wat Beacon, Tolo Channel, Tai Po is to provide safe landing and access facility for the regular inspection and maintenance of the Beacon. The Project is located within the boundary of Plover Cove Country Park/ Tolo Channel Geo-Area and partly falls within Tolo Channel (Northern Coast) Site of Special Scientific Interest (SSSI).
- 1.4 The Project Profile (Register No. PP-510/2014) for this Project was submitted to the Environmental Protection Department (EPD) on 16 June 2014 and the application of direct Environmental Permit (EP) was submitted on 25 July 2014. An Environmental Permit (No. EP-493/2014) was subsequently issued by the EPD on 22 August 2014.
- 1.5 The site layout plan is shown in **Figure 2.1** and the scope of the Project works comprises the following major items:
 - Mobilization
 - Erection of silt curtain
 - Laying rockfill material on seabed to form a bedding
 - Laying of precast concrete blocks to form the landing
 - Laying in-situ concrete on land to form the concrete stand for the precast concrete access
 - Installation 4nos. 219mm diameter bored piles on landing
 - Installation 2nos. 219mm diameter bored piles on concrete stand on land
 - Placing in-situ concrete to design level on the landing
 - Installation precast concrete access
 - Installation railing and associated facilities
 - Demolition of silt curtain
 - Demobilization
- 1.6 In order to minimize the impact on the water quality during the construction works, it is proposed that the underwater works will be carried out during the low tide period. According to the tide levels predicted by Hong Kong Observatory, the highest tide level in April and May 2016 is about 2.4mPD. Whilst there is no explicit definition from prevalent environmental standard or regulation on low tide period during the

construction period, it is proposed that the underwater works will be carried out during low tide period with water level at +1.8mPD or below, taking into account the allowable duration of works and the anticipated water quality impact. Together with the proposed mitigation measures including erection of silt curtain and regular water quality monitoring, it is considered that the proposed 1.8mPD or below is appropriate.

- 1.7 A copy of Contractor's construction programme is provided in **Appendix A**. The total construction period for this Project will last for about 7.5 months.

Environmental Team (ET)

- 1.8 The ET comprises the environmental auditor and the monitoring staff to undertake the environmental monitoring services for the Contract. The organization chart of the Environmental Team (ET) is shown on **Figure 1.1**. The monitoring staff will carry out the field monitoring work. The auditor will audit all the monitoring data and submit the raw data sheets of the monitoring data to the Service Manager within 24 hours from water sampling. The auditor will also describe the findings in the monthly reports which will be submitted to the Service Manager for comments within 7 working days from the last water sampling in the month before. In addition, the auditor will advise the Contractor and the Service Manager regarding necessary mitigation measures and assess the effectiveness of the measures.
- 1.9 According to the Project Profile (Register No. PP-510/2014), the potential impact arising from the Project should be water quality impact only and therefore water quality monitoring is required for the Project.
- 1.10 This is an Environmental Monitoring and Audit (EM&A) Programme prepared by CINOTECH to outline the specific environmental mitigation measures, monitoring methodology, locations, parameters and equipment for water quality monitoring to be adopted for the EM&A works for the Project.

2. WATER QUALITY MONITORING PROGRAMME**Monitoring Requirements**

- 2.1 Monitoring will be taken place two times per monitoring day during mid-ebb and mid-flood tides at three water depths (1 meter below surface, mid-water depth and 1 meter above seabed). Dissolved oxygen (DO) concentration, DO saturation, suspended solids (SS), temperature, turbidity and salinity will be monitored in accordance with the "Environmental Monitoring and Audit, Guidelines for Development Projects in Hong Kong".
- 2.2 Baseline water quality monitoring will be conducted three times per week for four consecutive weeks at all designated monitoring stations prior to the commencement of works.
- 2.3 During the course of the work, impact water quality monitoring for all the water quality parameters will be carried out three days per week, with sampling/measurement at all designated monitoring stations. The interval between two each series (mid-ebb and mid-flood) of sampling/measurement will normally be not less than 36 hours except there are exceedances of Action and/or Limit levels shown on Table 2.4 in which the monitoring frequency will be increased according to the Action/Event Plan.
- 2.4 Upon completion of the construction works, Post-Project monitoring for all the water quality parameters will be conducted for four consecutive weeks in the same manner as described for the impact water quality monitoring at all designated stations.

Monitoring Locations

- 2.5 A total of four monitoring stations (i.e. Stations M1 to M2 and C1 to C2) are designated for the water quality monitoring program. The locations are also summarized in Table 2.1 and shown on Figure 2.1.

Table 2.1 Water Quality Monitoring Stations

Monitoring Stations	Coordinates	
	Northing	Easting
<i>Control Stations</i>		
C1	838 356	849 899
C2	838 449	849 965
<i>Impact Stations</i>		
M1	838 405	849 890
M2	838 440	849 916

Monitoring Equipment

Instrumentation

- 2.6 A multi-parameter meter (Model YSI 6820 C-M / YSI 6920-M / Aquaread AP-2000) will be used to measure DO, DO saturation, turbidity, salinity and temperature. A sample (Kahlsico) will be used to collect water samples for laboratory analysis for SS.

Dissolved Oxygen (DO) and Temperature Measuring Equipment

- 2.7 The instrument for measuring dissolved oxygen and temperature is portable and weatherproof complete with cable, sensor, comprehensive operation manuals and use DC power source. It is capable of measuring:
- a dissolved oxygen level in the range of 0-20 mg/L and 0-200% saturation; and
 - a temperature of 0-45 degree Celsius.
- 2.8 It has a membrane electrode with automatic temperature compensation complete with a cable is not less than 25m in length.
- 2.9 Sufficient stocks of spare electrodes and cables are available for replacement where necessary.
- 2.10 Salinity compensation is built-in in the DO equipment.

Turbidity Measurement Instrument

- 2.11 Turbidity will be measured in situ by the nephelometric method. The instrument will be portable and weatherproof using a DC power source complete with cable, sensor and comprehensive operation manuals. The equipment is capable of measuring turbidity between 0-1000 NTU. The probe cable is not less than 25m in length. The meter will be calibrated in order to establish the relationship between NTU units and the levels of suspended solids.

Water Depth Detector

- 2.12 A portable, battery-operated echo sounder will be used for the determination of water depth at each designated monitoring station. This unit can either be hand held or affixed to the underside of the survey boat, if the same vessel is to be used throughout the monitoring programme.

Water Sampler

- 2.13 A water sampler, consisting of a transparent PVC or glass cylinder of a capacity of not less than two litres which can be effectively sealed with caps at both ends will be used. The water sampler has a positive latching system to keep it open and prevent premature closure until released by a messenger when the sampler is at the selected water depth.

Monitoring Position Equipment

- 2.14 A hand held Global Positioning System (GPS) will be used to ensure that the correction location has been selected prior to sample collection.

Sample Container and Storage

- 2.15 Following collection, water samples for laboratory analysis will be stored in high density polythene bottles (250ml/1L) with no preservatives added, packed in ice (cooled to 4°C without being frozen) and kept in dark during both on-site temporary storage and shipment to the testing laboratory. The samples will be delivered to the laboratory as soon as possible and the laboratory determination works were started within 24 hours after collection of the water samples. Sufficient volume of samples will be collected to achieve the detection limit.

Calibration of In Situ Instruments

- 2.16 All in situ monitoring instruments will be checked, calibrated and certified by a laboratory accredited under HOKLAS or other international accreditation scheme before use, and subsequently re-calibrated at 3 monthly intervals throughout all stages of the water quality monitoring programme. Responses of sensors and electrodes will be checked with certified standard solutions before each use. Wet bulb calibration for a DO meter will be carried out before measurement at each monitoring event.
- 2.17 For the on site calibration of field equipment (Multi-parameter Water Quality System), the BS 1427:2009, "Guide to on-site test methods for the analysis of waters" will be observed.
- 2.18 Before each round of monitoring, a zero check in distilled water will be performed with the turbidity probe of Model YSI 6820 C-M / YSI 6920-M / Aquaread AP-2000. The probe will then be calibrated with a solution of known NTU.
- 2.19 Sufficient stocks of spare parts will be maintained for replacements when necessary. Backup monitoring equipment will also being made available so that monitoring can proceed uninterrupted even when some equipment is under maintenance, calibration, etc. The equipment used for impact water quality monitoring will be included and copies of the calibration certificates will be attached in the monthly reports.

Monitoring Parameters, Frequency

- 2.20 **Table 2.2** summarizes the monitoring parameters, monitoring period and frequencies of the water quality monitoring.

Table 2.2 Water Quality Monitoring Parameters and Frequency

Monitoring Stations	Parameters, unit	Depth	Frequency
C1 C2 M1 M2	<p><u>In-situ Measurement</u></p> <ul style="list-style-type: none"> • DO, mg/L ⁽¹⁾ • DO Saturation, % ⁽¹⁾ • Salinity, ppt ⁽¹⁾ • Temperature, °C ⁽¹⁾ • Turbidity, NTU ⁽¹⁾ <p><u>Laboratory Analysis</u></p> <ul style="list-style-type: none"> • SS, mg/L ⁽²⁾ 	<ul style="list-style-type: none"> • 3 water depths: 1m below water surface, mid-depth and 1m above sea bed. • If the water depth is less than 3m, mid-depth sampling only. • If the water depth is between 3-6m, omit mid-depth sampling. 	<ul style="list-style-type: none"> • Baseline monitoring: 3 times per week for 4 consecutive weeks prior to the commencement of works. • Impact monitoring: 3 times per week (each series of sampling / measurement should not be less than 36 hours). • Post project monitoring: 3 times per week for 4 consecutive weeks upon completion of works.

Remark: (1) The parameter will be monitored in-situ with the use of multi-parameter meter.

(2) The testing of parameter will be conducted in the HOKLAS-accredited laboratory.

Monitoring Methodology and QA/QC Procedures

- 2.21 The monitoring stations will be accessed by the guide of a hand-held Global Positioning System (GPS) during water quality monitoring. The depth of the monitoring location will be measured using depth meter in order to determine the sampling depths. Afterwards, the probes of the in-situ measurement equipment will be lowered to the required depths of sampling and the measurements will be carried out accordingly.
- 2.22 At each measurement, two consecutive measurements of DO concentration, DO saturation, salinity, turbidity and temperature were taken. The probes will be retrieved out of the water after the first measurement and then re-deployed for the second measurement. Where the difference in the value between the first and second readings of each set was more than 25% of the value of the first reading, the reading will be discarded and further readings were taken.
- 2.23 For SS measurement, water sampler will be lowered into the water to the required depths of sampling. Upon reaching the pre-determined depth, a messenger to activate the sampler will then be released to travel down the wire. The water sample will be sealed within the sampler before retrieving. At each station, water samples at required depths of sampling will be collected accordingly. Water samples will be stored in a cool box and kept at less than 4°C but without frozen and sent to the laboratory as soon as possible.

Laboratory Analytical Methods

- 2.24 The testing of all parameters will be conducted by WELLAB Ltd. (HOKLAS Registration No.083) and comprehensive quality assurance and control procedures in place in order to ensure quality and consistency in results. The testing method, reporting limit and detection limit are provided in Table 2.3.

Table 2.3 Methods for Laboratory Analysis for Water Samples

Determinant	Instrumentation	Analytical Method	Detection Limit
Suspended Solid (SS)	Weighing	APHA 17e 2540D	0.5 mg/L

QA/QC Requirements

Decontamination Procedures

- 2.25 Water sampling equipment used during the course of the monitoring programme will be decontaminated by manual washing and rinsed clean seawater/distilled water after each sampling event. All disposal equipment will be discarded after sampling.

Sampling Management and Supervision

- 2.26 Water samples will be dispatched to the testing laboratory for analysis as soon as possible after the sampling. All samples will be stored in a cool box and kept at less than 4°C but without frozen. All water samples will be handled under chain of custody protocols and relinquished to the laboratory representatives at locations specified by the laboratory.
- 2.27 Quality control reports will be available for the SS analyzed in the HOKLAS-accredited laboratory, WELLAB Ltd.

Action and Limit Levels

- 2.28 The Action and Limit Levels will be formulated based on the baseline monitoring data. Guidelines for establishment of the Action and Limit levels for the impact monitoring during construction phase of the Project are provided in **Table 2.4**. An exceedance will be considered to be valid when the monitoring result exceeds both the A/L levels derived from the baseline data and the monitoring result at the control stations.

Table 2.4 Guidelines for Establishment of Action and Limit Levels

Parameter (unit)	Water Depth	Action Level	Limit Level
DO (mg/L)	Surface and Middle	5%-ile of baseline data	4 mg/L or 1%-ile of baseline data
	Bottom	5%-ile of baseline data	2 mg/L or 1%-ile of baseline data
Turbidity (NTU)	Depth average	95%-ile of baseline data and 120% of upstream control station's turbidity at the same tide of the same day	99%-ile of baseline data and 130% of turbidity at the upstream control station at the same tide of same day
SS (mg/L)	Depth average	95%-ile of baseline data and 120% of upstream control station's SS at the same tide of the same day	99%-ile of baseline data and 130% of SS readings at the upstream control station at the same tide of same day

Event and Action Plan

- 2.29 If there is Action / Limit Level exceedance in any parameters of the water quality, the actions in accordance with the Event and Action Plan as shown in **Appendix B** will be carried out.

3. ENVIRONMENTAL MITIGATION MEASURES

- 3.1 The following environmental mitigation measures will be fully implemented by the Contractor during the construction works:-

General:

- No works shall be carried out outside the Work Site Limit as indicated in **Figure 2.1**.
- Underwater works including preparation of rock surface for the precast concrete blocks and drilling works shall be carried out during low tide period and silt curtain shall be erected around the work site and down to the sea bed.

Water Quality Mitigation Measures:

a) Installation of silt curtain around the site

The full height silt curtain from water surface down to the seabed will be erected around the site as detailed in Drawing No. PW-FD11-141 of **Appendix C** and cleaning of construction materials as containment to confine the area being affected by the construction works. The silt curtain will be maintained in good and effective condition throughout the construction process.

b) Cleaning of construction material

The precast concrete block, rockfill and leveling stones will be washed off site to minimize the impact of dirt on water quality.

Ecological Mitigation Measures:

- 3.2 Underwater dive inspection had been conducted and only sea urchins were found. In order to minimize the possible impact arise from the Project, the sea urchins will be relocated out of the Work Site Limit by the Contractor before construction.

Noise Mitigation Measures

- 3.3 Noise mitigation measures such as good site practice, use of quiet plant and well planned construction method should be implemented by the Contractor in order to alleviate the potential noise impact.

4. REPORTING

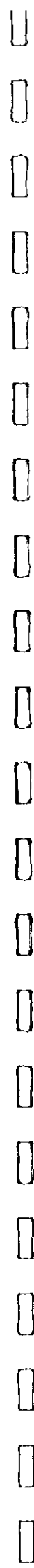
4.1 The Environmental Team will prepare and submit monthly reports to EPD for comment.

4.2 The reports will contain:

- An executive summary of the activities;
- Non-compliance against Action / Limit Levels;
- Causes of non-compliance and mitigation measures being taken;
- All monitoring data with information indicating the sampling/measurement locations, time and weather conditions; and
- Detailed description of the findings from auditing of monitoring data, exceedances and actions taken.



FIGURE



Environmental Team Leader
Dr. Priscilla Choy (Tel: 2151 2089)



ET Coordinator
 - coordination of the Project and
 compile reports
Ivy Tam (Tel: 2151 2090)



Monitoring Team
 - perform environmental monitoring works
Team Leader
Tang Wing Kwai (Tel: 9013 4523)

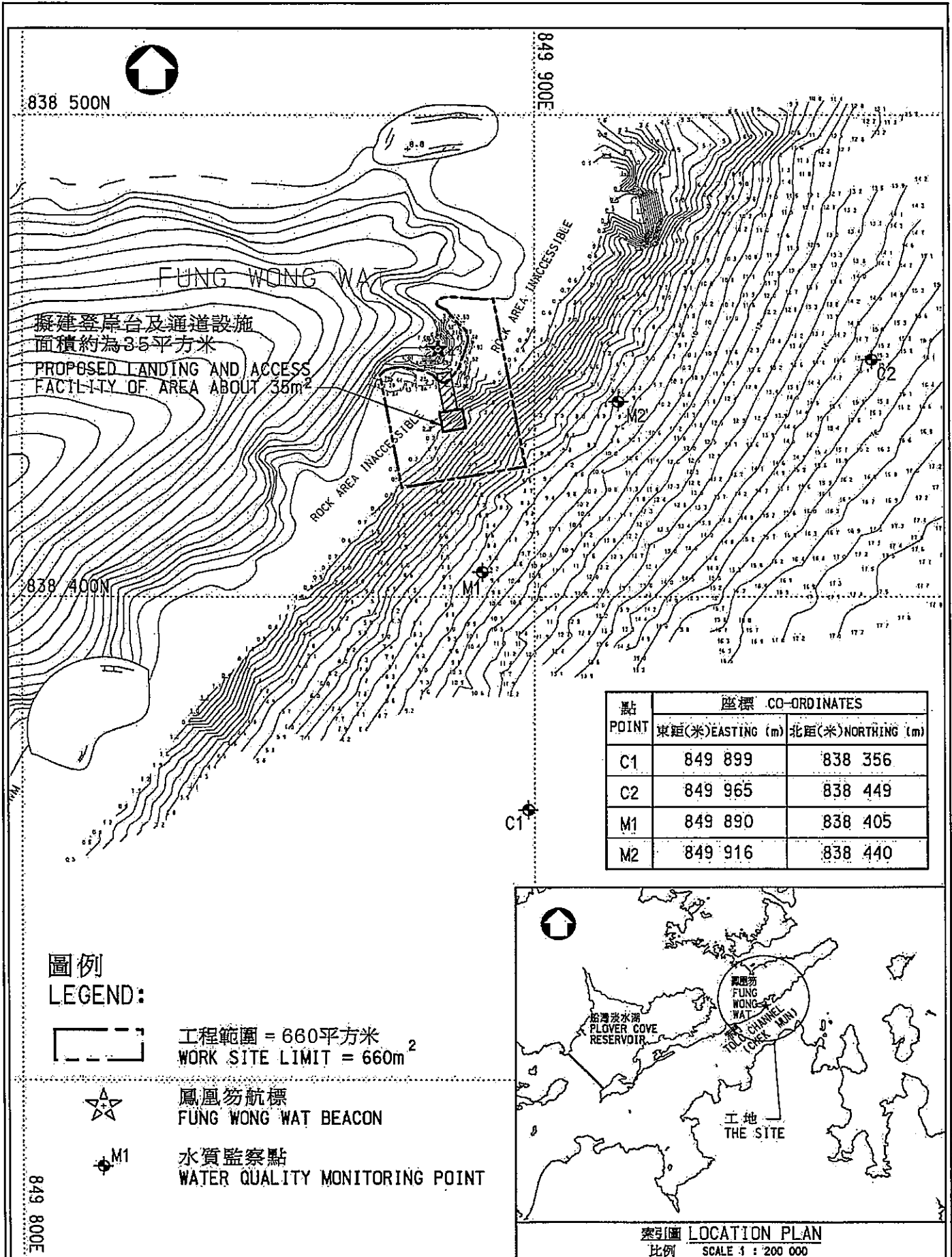
Contract No. CV/2013/02

CEDD Maintenance Contract for Seawalls and Navigation Channels (2013-2016)
 Construction of a Landing and Access Facility at Fung Wong Wat Beacon, Tolo Channel, Tai Po.


Organization Chart of the Environmental Team

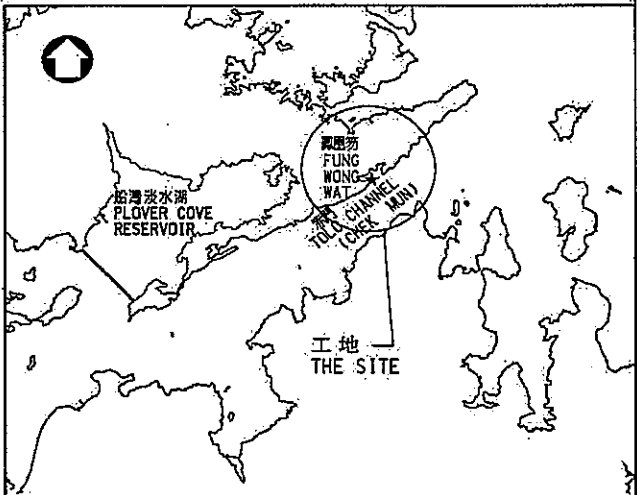
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JOB NO.	MA13057	DRAWING NO.	1.1
		REV	-





點 POINT	座標 CO-ORDINATES	
	東距(米)EASTING (m)	北距(米)NORTHING (m)
C1	849 899	838 356
C2	849 965	838 449
M1	849 890	838 405
M2	849 916	838 440

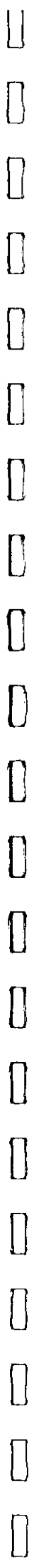
- 圖例**
LEGEND:
-  工程範圍 = 660平方米
WORK SITE LIMIT = 660m²
 -  鳳凰笏航標
FUNG WONG WAT BEACON
 -  M1 水質監察點
WATER QUALITY MONITORING POINT



索引圖 LOCATION PLAN
比例 SCALE 1 : 200 000



APPENDIX A
CONSTRUCTION PROGRAMME



Contract No : CV/2013/02
 Contract Title : CEDD Maintenance Contract for Seawalls and Navigation Channels (2013-2016)

The work may start between 1 March 2016 and 15 April 2016

New ID	Task Name	Work Day	Start Date	Finish Date	Pre-Task	February	March	April	May	June	July	August	September	October
1	Preliminary Programme for Construction of a Landing and Access Facility at Fung Wong Wat Beacon, Tolo Channel Tai Po	228 days	1 March 2016	15 October 2016										
2	Project Date	228 days	1 March 2016	15 October 2016										
3	Tentative Commencement	0 days	1 March 2016	1 March 2016										
4	Tentative Completion	0 days	15 October 2016	15 October 2016										
5	Preparation Works	91 days	1 March 2016	30 May 2016		1/3								
6	Application MDN	28 days	1 March 2016	28 March 2016		1/3								
7	Application CNP	21 days	1 March 2016	21 March 2016		1/3								
8	Erection formwork, fix re-bar and cast a concrete access at Depot or proposed casting yard	28 days	3 May 2016	30 May 2016					3/6					
9	Environmental Monitoring & Mitigation Measures	134 days	1 March 2016	12 July 2016		1/3								
10	Baseline WQM	28 days	1 March 2016	28 March 2016		1/3								
11	Impact WQM	78 days	29 March 2016	14 June 2016										
12	Post-project WQM	28 days	15 June 2016	12 July 2016										
13	Relocation sea urchin groups out of the works area before erection of silt curtain	3 days	29 March 2016	31 March 2016										
14	Site Works	76 days	1 April 2016	14 June 2016										
15	Mobilization	1 day	1 April 2016	1 April 2016										
16	Erection silt curtain	2 days	2 April 2016	3 April 2016										
17	Laying rockfill material on seabed to form a bedding (During low tide period)	21 days	4 April 2016	24 April 2016										
18	Laying of precast concrete blocks to form the landing	1 day	25 April 2016	25 April 2016										
19	Laying in-situ concrete on land to form the concrete stand for the precast concrete access	7 days	26 April 2016	2 May 2016										
20	Installation 4 nos. 219mm diameter bored piles on landing (During low tide period)	16 days	26 April 2016	11 May 2016										
21	Installation 2 nos. 219mm diameter bored piles on concrete stand on land (During low tide period)	8 days	12 May 2016	19 May 2016										
22	Placing in-situ concrete to design level on the landing	7 days	12 May 2016	18 May 2016										
23	Installation precast concrete access	3 days	31 May 2016	2 June 2016										
24	Installation railing and associated facilities	10 days	3 June 2016	12 June 2016										
25	Demolition silt curtain	1 day	13 June 2016	13 June 2016										
26	Demobilization	1 day	14 June 2016	14 June 2016										

Task Milestone

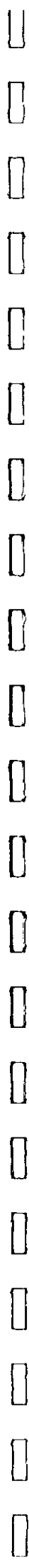
Summary External Milestone

Deadline

Preliminary Programme - Fung Wong Wat Beacon
 Date: 21/12/2015



**APPENDIX B
EVENT AND ACTION PLAN**



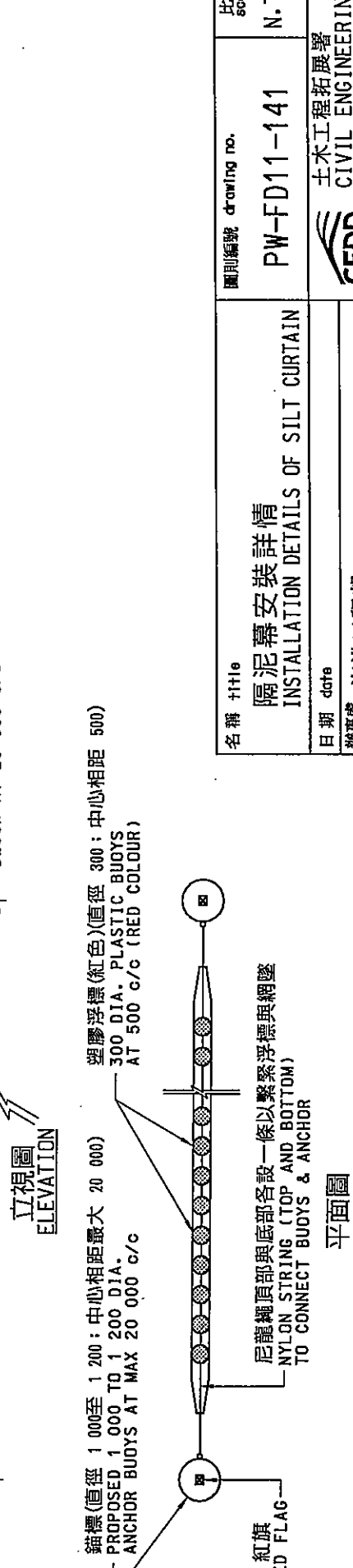
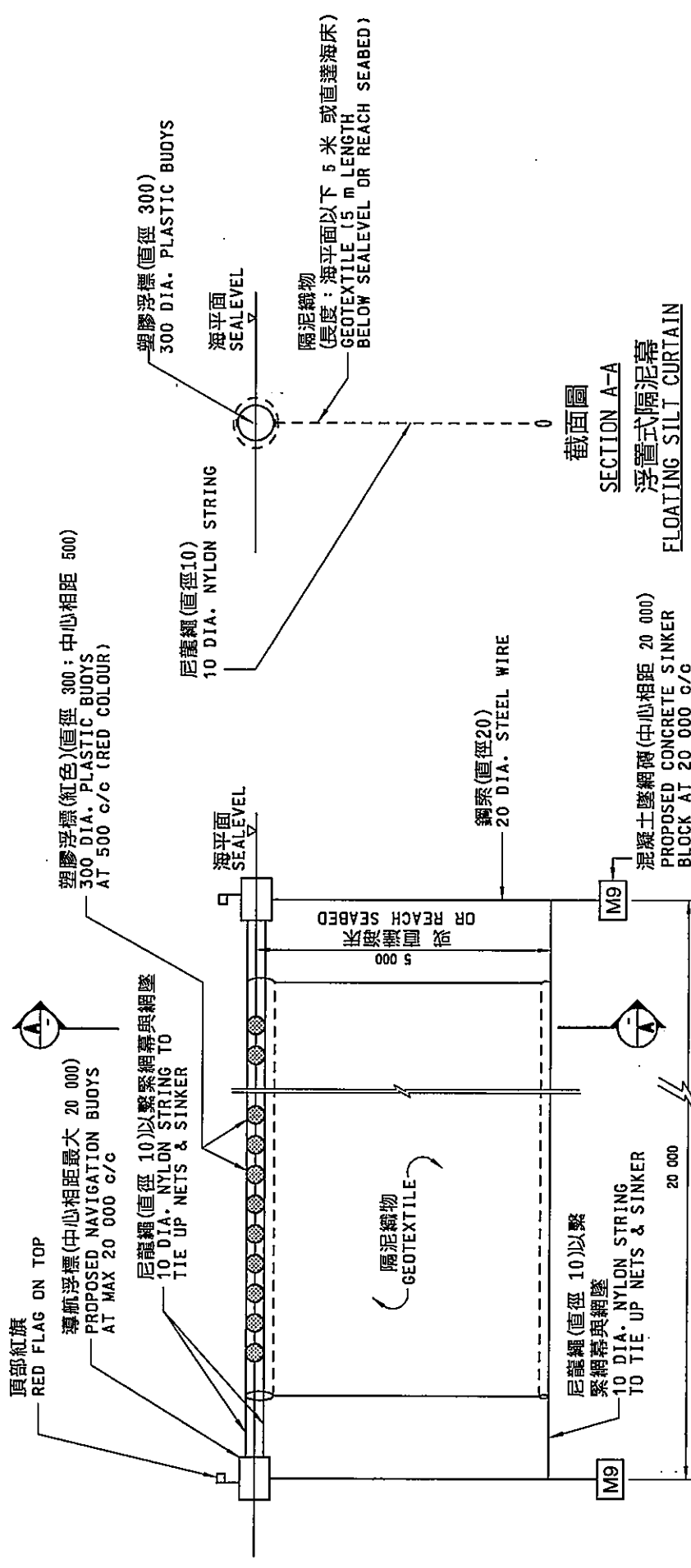
Appendix B Event and Action Plan for Water Quality

Exceedance	Environmental Team (Monitoring Staff + Environmental Auditor)	Contractor	Service Manager's delegate
<p>Action level being exceeded by one sampling day</p>	<p>Repeat in-situ measurement to confirm findings; Investigate cause(s); Inform Service Manager's delegate and Contractor; Check monitoring data, all plant, equipment and contractor's working methods; Discuss mitigation measures with the Service Manager's delegate and Contractor; Repeat measurement on the next day of exceedance.</p>	<p>Inform the Service Manager's delegate and confirm notification of exceedance in writing; Review working methods and rectify unacceptable practice; Check all plant and equipment; Propose mitigation measures to Service Manager's delegate and discuss with Environmental Team and the Service Manager's delegate; Implement the agreed mitigation measures.</p>	<p>Discuss with Environmental Team and the Contractor on the proposed mitigation measures; Make agreement on the mitigation measures to be implemented; Assess the effectiveness of the implemented mitigation measures.</p>
<p>Action level being exceeded by more than two consecutive sampling days</p>	<p>Repeat in-situ measurement to confirm findings; Investigate cause(s) and identify source(s) of impact; Inform Service Manager's delegate and Contractor; Check monitoring data, all plant, equipment and contractor's working methods; Discuss mitigation measures with the Service Manager's delegate and Contractor; Ensure mitigation measures are implemented; Prepare to increase the number of monitoring stations and monitoring frequency to daily; Repeat measurement on the next day of exceedance.</p>	<p>Inform the Service Manager's delegate and confirm notification of exceedance in writing; Review working methods and rectify unacceptable practice; Check all plant and equipment; Propose mitigation measures to Service Manager within 3 working days upon the notification and discuss with Environmental Team and the Service Manager's delegate; Implement the agreed mitigation measures.</p>	<p>Discuss with Environmental Team and the Contractor on the proposed mitigation measures; Make agreement on the mitigation measures to be implemented; Assess the effectiveness of the implemented mitigation measures.</p>

<p>Limit level being exceeded by one sampling day</p>	<p>Repeat in-situ measurement to confirm findings; Investigate cause(s) and identify source(s) of impact; Inform Service Manager's delegate, Contractor and EPD immediately by fax; Check monitoring data, all plant, equipment and contractor's working methods; Discuss mitigation measures with the Service Manager's delegate and Contractor; Ensure mitigation measures are implemented; Increase the monitoring frequency to daily until no exceedance of Limit level.</p>	<p>Inform Service Manager's delegate and confirm notification of exceedance in writing; Review critically the working methods and rectify unacceptable practice; check all plant and equipment; Propose mitigation measures to Service Manager's delegate within 3 working days upon the notification and discuss with Environmental Team and the Service Manager; Implement the agreed mitigation measures.</p>	<p>Discuss with Environmental Team and the Contractor on the proposed mitigation measures; Request contractor to critically review the working methods; Make agreement on the mitigation measures to be implemented; Assess the effectiveness of the implemented mitigation measures.</p>
<p>Limit level being exceeded by more than two consecutive sampling days</p>	<p>Repeat in-situ measurement to confirm findings; Investigate cause(s), identify source(s) of impact and consider what portion of the work is responsible; Check monitoring data, all plant, equipment and contractor's working methods; Inform Service Manager's delegate, Contractor and EPD immediately by fax; Discuss mitigation measures with the Service Manager's delegate and Contractor; Arrange meeting with EPD and Service Manager's delegate to discuss the remedial actions to be taken and provide reports to EPD. Ensure mitigation measures are implemented; Access effectiveness of Contractor's remedial actions and keep EPD and Service Manager's delegate informed of the results; Increase the monitoring frequency to daily until no exceedance of Limit level for two consecutive days.</p>	<p>Inform Service Manager's delegate and confirm notification of exceedance in writing; Review critically the working methods and rectify unacceptable practice; check all plant and equipment; Propose mitigation measures to Service Manager's delegate within 3 working days upon the notification and discuss with Environmental Team and the Service Manager; Implement the agreed mitigation measures. As directed by Service Manager's delegate, to slow down or STOP all or part of the marine work until no exceedance of Limit level.</p>	<p>Discuss with Environmental Team and the Contractor on the proposed mitigation measures; Request contractor to critically review the working methods; Make agreement on the mitigation measures to be implemented; Assess the effectiveness of the implemented mitigation measures. Consider and instruct, if necessary, the Contractor to slow down or to STOP all or part of the marine work until no exceedance of Limit level.</p>

**APPENDIX C
INSTALLATION DETAILS OF SILT
CURTAIN**





截面圖
SECTION A-A
浮置式隔泥幕
FLOATING SILT CURTAIN

名稱 title	隔泥幕安裝詳情 INSTALLATION DETAILS OF SILT CURTAIN	圖則編號 drawing no.	PW-FD11-141	比例 scale	N.T.S.
日期 date		土木工程拓展署 CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT			
辦事處 office	海港工程部 PORT WORKS DIVISION	土木工程師處 CIVIL ENGINEERING OFFICE			

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