

# 東業德勤測試顧問有限公司 ETS-TESTCONSULT LIMITED 8/F., Block B, Veristrong Industrial Centre, 34-36 Au Pul Wan Street, Fotan, Hong Kong

Tel : 2695 8318 Fax : 2695 3944 strial Centre, 34-36 Au Pui Wan Street, Fotan, Hong Kong E-mail : etl@ets-testconsult.com Web site : www.ets-testconsult.com

# CHINA HARBOUR ENGINEERING CO. LTD.

# CONTRACT NO.: HY/2013/02 HONG KONG – ZHUHAI- MACAO BRIDGE HONG KONG BOUNDARY CROSSING FACILITIES – INFRASTRUCTURE WORKS STAGE I (WESTERN PORTION)

MONTHLY EM&A REPORT NO. 20

(01 JULY - 31 JULY 2016)

Prepared by: LO, Ting Yi Certified by: I'AU, Chi Leuna Environmental Team Leader

Report No.: ENA63406

Issued Date: 5 August 2016

This report shall not be reproduced unless with prior written approval from this laboratory



Ref.: HYDHZMBEEM00\_0\_4451L.16

9 August 2016

By Fax (3468 2076) and By Post

AECOM Asia Co. Ltd. The PRE's Office 5 Ying Hei Road, Tung Chung, Lantau Hong Kong

Attention: Mr. Ringo Tso

Dear Sir,

Re: Agreement No. CE 48/2011 (EP) Environmental Project Office for the HZMB Hong Kong Link Road, HZMB Hong Kong Boundary Crossing Facilities, and Tuen Mun-Chek Lap Kok Link – Investigation

Contract No. HY/2013/02 – HZMB HKBCF – Infrastructure Works Stage I (Western Portion) Monthly Environmental Monitoring & Audit Report for July 2016

Reference is made to the Environmental Team's submission of Monthly Environmental Monitoring & Audit Report for July 2016 certified by the ET Leader (ET's ref.: "OC/60397/CLL" dated 9 August 2016) and provided to us via e-mail on 9 August 2016.

We are pleased to inform you that we have no adverse comment on the captioned submission. We write to verify the captioned submission in accordance with Condition 5.4 of the Environmental Permit No. EP-353/2009/K.

Thank you very much for your attention and please feel free to contact the undersigned should you require further information.

Yours faithfully, For and on behalf of Ramboll Environ Hong Kong Limited

Kong

Raymond Dai Independent Environmental Checker

c.c.

HyD HyD ETS CHEC Mr. Vico Cheung Mr. Chee-Kuen Yu Mr. C. L. Lau Mr. Kenny Yu (By Fax: 3188 6614) (By Fax: 3188 6614) (By Fax: 2695 3944) (By Fax: 3915 0300)

Internal: DY, YH, ENPO Site

 $\label{eq:projects} Q:\Projects\HYDHZMBEEM00\02\_Proj\_Mgt\02\_Corr\HYDHZMBEEM00\_0\_4451L.16.doc$ 

Ramboll Environ Hong Kong Limited 英環香港有限公司 Rm 2403, 24/F., Jubilee Centre, 18 Fenwick Street, Wanchai, Hong Kong Tel: 852.3465 2888 Fax: 852.3465 2899 www.Ramboll-Environ.com



8/F Block B, Veristrong Industrial Centre, 34-36 Au Pui Wan Street, Fo Tan, Hong Kong

T: +852 2695 8318 F: +852 2695 3944 E: etl@ets-testconsult.com W: www.ets-testconsult.com



Your Ref. : ---Our Ref. : OC/60397/CLL

09 August 2016

Ramboll Environ Hong Kong Limited Room 2403, Jubilee Centre 18 Fenwick Street, Wan Chai Hong Kong

<u>By E-mail</u>

Attn: Mr. Raymond Dai

Dear Mr. Dai,

Contract No. HY/2013/02 Hong Kong – Zhuhai – Macao Bridge Hong Kong Boundary Crossing Facilities – Infrastructure Works Stage I (Western Portion) Monthly EM&A Report for July 2016

In accordance with the requirement specified in Condition 5.4 of the Environmental Permit No. EP-353/2009/K, we are pleased to submit the certified EM&A Report for July 2016 revised with the IEC's comment for your onward verification.

Yours faithfully, ETS-TESTCONSULT LIMITED

Mr. C. L. Lau Environmental Team Leader

CLL/pn



Contract No.: HY/2013/02 – Hong Kong-Zhuhai-Macao Bridge Hong Kong Boundary Crossing Facilities – Infrastructure Works Stage I (Western Portion) ENA63406 Monthly EM&A Report No.20

	E OF CONTENTS CUTIVE SUMMARY	1
1	INTRODUCTION	1-2
1.1	Basic Project Information	1
1.2	Project Organization	2
1.3	Construction Programme	2
1.4	Construction Works Undertaken During the Reporting Period	2
2	AIR QUALITY MONITORING	3-4
2.1	Monitoring Locations	3
2.2	Monitoring Requirements	4
2.3	Monitoring Results	4
3	NOISE MONITORING	5
3.1	Monitoring Locations	5
3.2	Monitoring Requirements	5
3.3	Monitoring Results	5
4	WATER QUALITY MONITORING	6-7
4.1	Monitoring Locations	6
4.2	Monitoring Requirements	6
4.3	Monitoring Locations	7
5	DOLPHIN MONITORING	8
5.1	Monitoring Locations	8
5.2	Monitoring Requirements	8
5.3	Monitoring Locations	8
6	ENVIRONMENTAL SITE INSPECTION AND AUDIT	9-12
6.1	Site Inspection	9
6.2	Advice on the Solid and Liquid Waste Management Status	9-10
6.3	Environmental Licenses and Permits	11
6.4	Implementation Status of Environmental Mitigation Measures	11
6.5	Summary of Exceedance of the Environmental Quality Performance Limit	11
6.6	Summary of Complaints, Notification of Summons and Successful Prosecution	11-12
7	FUTURE KEY ISSUES	12
7.1	Construction Programme for the Coming Months	12
7.2	Environmental Site Inspection Schedule for the Coming Month	12
8	CONCLUSION	12
8.1	Conclusions	12



# FIGURES

- Figure 1 Air Quality and Noise Monitoring Stations for HKBCF
- Figure 2 Water Quality Monitoring Stations (construction phases)
- Figure 3 Dolphin Monitoring Transect Line and Layout Map

# Table

- Table 1.1 Contact Information of Key Personnel
- Table 2.1 Air Quality Monitoring Locations
- Table 2.2 Action and Limit Levels for 1-hour TSP
- Table 2.3 Action and Limit Levels for 24-hour TSP
- Table 3.1 Construction Noise Monitoring Locations
- Table 3.2 Action and Limit Levels for Construction Noise
- Table 4.1
   Water Quality Monitoring Stations(construction phases)
- Table 4.2
   Action and Limit Levels for Water Quality
- Table 5.1aAction and Limit Levels for Chinese White Dolphin Monitoring Approach to Define Action<br/>evel (AL) and Limit Level (LL)
- Table 5.1b Action and Limit Levels for Chinese White Dolphin Monitoring -
- Table 6.1 Summary of marine sediment disposed to dumping site via Contract No. HY/2013/03
- Table 7.1 Construction Activities for coming month

# APPENDICES

- Appendix A Location of Works Areas
- Appendix B Project Organization for Environmental Works
- Appendix C Construction Programme
- Appendix D Event and Action Plan
- Appendix E Monthly Summery of Waste Flow Table & Monthly Summery of Marine Sediment
- Appendix F Environmental Licenses and Permits
- Appendix G Implementation Schedule for Environmental Mitigation Measures (EMIS)
- Appendix H Statistics on Environmental Complaints, Notification of Summons and Successful Prosecutions
- Appendix I Environmental Site Inspection Schedule



# **EXECUTIVE SUMMARY**

This Monthly Environmental Monitoring and Audit (EM&A) Report is prepared for Contract HY/2013/02 "Hong Kong–Zhuhai-Macao Bridge Hong Kong Boundary Crossing Facilities (HKBCF) – Infrastructure Works Stage I (Western Portion)" (hereafter referred to as "the Contract") for the Highways Department of Hong Kong Special Administrative Region (HKSAR). The Contract was awarded to China Harbour Engineering Co., Ltd. (hereafter referred to as "the Contractor") and ETS-Testconsult Limited was appointed as the Environmental Team (ET) by the Contractor.

The Contract is part of Hong Kong–Zhuhai–Macao Bridge HKBCF which is a "Designated Project", under Schedule 2 of the Environmental Impact Assessment Ordinance (EIAO) (Cap 499) and Environmental Impact Assessment (EIA) Report (Register No. AEIAR-145/2009) was prepared for the Project. The current Environmental Permit (EP) No. EP-353/2009/K for HKBCF was issued on 11 April 2016. These documents are available through the EIA Ordinance Register. Site preparation works of the Contract was started on 25 July 2014 and the construction works of the Contract commenced on 24 November 2014.

ETS-Testconsult Limited has been appointed by the Contractor to implement the Environmental Monitoring & Audit (EM&A) programme for the Contract in accordance with the Updated EM&A Manual for HKBCF (Version 1.0) and provide environmental team services to the Contract.

This is the Twentieth Monthly Environmental Monitoring and Audit (EM&A) Report for the Contract which summaries findings of the EM&A works conducted during the reporting period from 01 July 2016 to 31 July 2016.

### Site Activities

As informed by the Contractor, site activities were carried out in this reporting month:

- Bored piles works in Portion A, D, C & F;
- Pier / Abutment in Portion D & A;
- Pile Cap in Portion D & A;
- Pre-bored H-pile for sign gantries in Portion D;
- UU Detection Works in Portion I;
- Pit excavation work and duct laying in Portion I;
- Storm drain construction;
- Footing construction of directional signs in Portion I;
- Marine delivery of precast segment; &
- Marine sediment excavation activities from the land-based works and corresponding disposal at the designated disposal sites.

# Environmental Monitoring and Audit Progress

The monthly EM&A programme was undertaken in accordance with the Updated EM&A Manual for HKBCF (Version 1.0). It should be noted that the air quality and noise monitoring works for the Contract are covered by Contract No. HY/2010/02 "Hong Kong-Zhuhai-Macao Bridge HKBCF – Reclamation Works" and Contract No. HY/2011/03 "Hong Kong-Zhuhai-Macao Bridge Hong Kong Link Road – Section between Scenic Hill and HKBCF". The ET of the Contract or another ET of the HZMB project is required to conduct impact air quality monitoring at AMS6 and AMS7, noise monitoring at NMS2 and NMS3B, water quality monitoring show in **Figure 2** and dolphin monitoring show in **Figure 3** as part of EM&A programme if these monitoring stations are no longer covered under Contract No. HY/2010/02 and HY/2011/03. However, this is subject to ENPO's final decision on which ET should carry out the monitoring works at these stations. The dates of site inspection during the reporting period are listed below:

TESTCONSULT LIM

### Breaches of Action and Limit Levels

Summary of Action and Limit Level exceedance of 1-hr TSP level and 24-hr TSP level at AMS6 shall be referred to the monthly EM&A report prepared by Contract No. HY/2011/03.

There was no Action and Limit Level exceedance of 1-hr TSP level and 24-hr TSP level recorded at station AMS7 by the Environmental Team of Contract No. HY/2010/02 during the reporting period.

There was no Action and Limit Level exceedance for noise recorded at station NMS2 and station NMS3B by the Environmental Team of Contract No. HY/2010/02 during the reporting period.

There was no Action and Limit Level exceedance for water quality recorded at the monitoring stations showed at **Table 4.1** by the Environmental Team of Contract No. HY/2010/02 during the reporting period.

Impact dolphin monitoring results at all transects are reported in the EM&A Report prepared for Contract No. HY/2010/02.

#### <u>Complaint Log</u>

There was no complaint received in relation to the environmental impact during the reporting period.

#### Notifications of Summons and Successful Prosecutions

There were no notifications of summons or prosecutions received during the reporting period.

#### **Reporting Change**

There were no reporting changes during the reporting period

#### Future Key Issues

The future key issues to be undertaken in the upcoming month are as follows:

- Bored piles works in Portion A, D, C, F;
- Pier / Abutment in Portion D & A;
- Pile Cap in Portion , D, A, C & F;
- Pre-bored H-pile for sign gantries in Portion D;
- Storm drain and water main construction;
- Footing construction of directional signs and duct laying in Portion I;
- Marine delivery of precast segment & Construction of bridge deck in Portion D; &
- Marine sediment excavation activities from the land-based works and corresponding disposal at the designated disposal sites.



# 1. INTRODUCTION

### 1.1. Basic Project Information

- 1.1.1. This Monthly Environmental Monitoring and Audit (EM&A) Report is prepared for Contract HY/2013/02 "Hong Kong–Zhuhai-Macao Bridge Hong Kong Boundary Crossing Facilities (HKBCF) Infrastructure Works Stage I (Western Portion)" (hereafter referred to as "the Contract") for the Highways Department of Hong Kong Special Administrative Region (HKSAR). The Contract was awarded to China Harbour Engineering Co., Ltd. (hereafter referred to as "the Contractor") and ETS-Testconsult Limited was appointed as the Environmental Team (ET) by the Contractor.
- 1.1.2. The Contract is part of Hong Kong–Zhuhai–Macao Bridge HKBCF which is a "Designated Project", under Schedule 2 of the Environmental Impact Assessment Ordinance (EIAO) (Cap 499) and Environmental Impact Assessment (EIA) Report (Register No. AEIAR-145/2009) was prepared for the Project. The current Environmental Permit (EP) No. EP-353/2009/K for HKBCF was issued on 11 April 2016. These documents are available through the EIA Ordinance Register. Site preparation works of the Contract started on 25 July 2014 and the construction works of the Contract commenced on 24 November 2014. The works area of the Contract is shown in Appendix A.
- **1.1.3.** The proposed works under this Contract comprise the following:
  - Construction of the viaducts and roads at the western portion of Hong Kong Boundary Crossing Facilities (HKBCF) mainly for connection with the Hong Kong–Zhuhai–Macao Bridge (HZMB), Hong Kong Link Road (HKLR), Hong Kong International Airport (HKIA) and the Tuen Mun-Chek Lap Kok Link (TM-CLKL);
  - Construction of the road modification at the SkyCity Interchange at Airport Island;
  - Construction of associated street lighting, street furniture, road marking, road signage, drainage, sewerage, fresh water and flushing water supply, irrigation, landscape, electrical and mechanical (E&M), utilities and services works;
  - Provisioning of civil engineering works and power supply installation for the Traffic Control and Surveillance System TCSS);
  - Other works in accordance with the Contract.
- **1.1.4.** This is the Twentieth Monthly Environmental Monitoring and Audit (EM&A) Report for the Contract which summaries the audit findings of the EM&A programme during the reporting period from 01 July 2016 to 31 July 2016.



# 1.2. Project Organization

**1.2.1.** The project organization structure and lines of communication with respect to the on-site environmental management structure is shown in **Appendix B**. The key personnel contact names and numbers are summarized in **Table 1.1**.

Party	Position	Name of Key Staff	Tel. No.	Fax No.
Engineer or Engineer's Representative (AECOM Asia Co. Ltd.)	Resident Engineer	Mr. Fred Yeung	6330 8293	3152 5116
Environmental Project Office / Independent Environmental Checker (Ramboll Environ Hong	Environmental Project Office Leader	Mr. Y. H. Hui	3465 2888	3465 2899
	Independent Environmental Checker	Mr. Raymond Dai	3465 2888	3465 2899
Kong Limited)	Environmental Site Supervisor	Mr. Ray Yan	5181 8165	3465 2899
Contractor	Environmental Officer	Mr. Richard Ng	5977 0593	3915 0300
(China Harbour Engineering Co., Ltd.)	Assistant Environmental Officer	Mr Paper Chan	6486 8967	3915 0300
	Environmental Supervisor	Mr Endy Tse	5512 2662	3915 0300
Environmental Team (ETS-Testconsult Ltd.)	Environmental Team Leader	Mr C. L. Lau	2946 7791	2695 3944

Table 1.1	<b>Contact Information of Ke</b>	y Personnel

#### 1.3 Construction Programme

**1.3.1** A copy of the Contractor's construction programme is provided in **Appendix C**.

# 1.4 Construction Works Undertaken During the Reporting Period

- **1.4.1** A summary of the construction activities undertaken during this reporting period is shown below:
  - Bored piles works in Portion A, D, C & F;
  - Pier / Abutment in Portion D & A;
  - Pile Cap in Portion D & A;
  - Pre-bored H-pile for sign gantries in Portion D;
  - UU Detection Works in Portion I;
  - Pit excavation work and duct laying in Portion I;
  - Storm drain construction;
  - Footing construction of directional signs in Portion I;
  - Marine delivery of precast segment; &
  - Marine sediment excavation activities from the land-based works and corresponding disposal at the designated disposal sites.

# 2 AIR QUALITY MONITORING

# 2.1 Monitoring Locations

2.1.1 The air quality monitoring works for the Contract are covered by Contract No. HY/2010/02 Hong Kong-Zhuhai-Macao Bridge HKBCF – Reclamation Works and Contract No. HY/2011/03 Hong Kong-Zhuhai-Macao Bridge Hong Kong Link Road – Section between Scenic Hill and HKBCF. The ET of the Contract or another ET of the HZMB project is required to conduct impact air quality monitoring at AMS6 and AMS7 as part of EM&A programme if these air quality monitoring stations are no longer covered under Contract No. HY/2010/02 and HY/2011/03. Table 2.1 and Figure 1 shows the locations of air monitoring stations.

Table 2.1 Air Quality Monitoring Locations	able 2.1	a Locations
--	----------	-------------

Identification No.	Location Description
AMS6 <sup>(1)</sup>	Dragonair / CNAC (Group) Buidling
AMS7 <sup>(1) (2)</sup>	Hong Kong SkyCity Marriott Hotel

Remarks:

- (1) The ET of this Contract should conduct impact air quality monitoring at the AMS listed in the table as part of EM&A programme according to latest notification from ENPO when the monitoring station(s) is/are no longer covered by another ET of the HZMB project.
- (2) The air quality monitoring location AMS7A was relocated back to the original monitoring location AMS7 of the updated EM&A Manual started from January 2016.

# 2.2 Monitoring Requirements

- **2.2.1** The monitoring requirements, monitoring equipment, monitoring parameters, frequency and duration, monitoring methodology, monitoring schedule, meteorological information are detailed in the monthly EM&A Reports prepared for Contract Nos. HY/2010/02 and HY/2011/03.
- **2.2.2** The Action and Limit Levels for 1-hr TSP and 24-hr TSP are provided in **Table 2.2** and **Table 2.3** respectively. The Action and Limit Levels of AMS7 are as same as its original levels and AMS7A.

#### Table 2.2Action and Limit Levels for 1-hour TSP

Monitoring Station	Action Level,µg/m <sup>3</sup>	Limit Level,µg/m <sup>3</sup>
AMS6 – Dragnair / SNAC (Group) Building (HKIA)	360	500
AMS7 – Hong Kong SkyCity Marriott Hotel	370	500

#### Table 2.3 Action and Limit Levels for 24-hour TSP

Monitoring Station	Action Level,µg/m <sup>3</sup>	Limit Level,µg/m <sup>3</sup>
AMS6 – Dragnair / SNAC (Group) Building (HKIA)	173	260
AMS7 – Hong Kong SkyCity Marriott Hotel	183	260

- **2.2.3** The event and action plan is provided in **Appendix D**.
- **2.2.4** If exceedance(s) at these stations is/are recorded by the ET of the Contract or referred by the other ET under the HZMB project to the Contract, the ET of the Contract will carry out an investigation and findings will be reported in the monthly EM&A Report.



# 2.3 Monitoring Results

- **2.3.1** The monitoring results for AMS6 and AMS7 are reported in the monthly EM&A Reports prepared for Contract Nos. HY/2011/03 and HY/2010/02 respectively.
- **2.3.2** Summary of Action and Limit Level exceedance of 1-hr TSP level and 24-hr TSP level at AMS6 shall be referred to the monthly EM&A report prepared by Contract No. HY/2011/03.
- **2.3.3** There was no Action and Limit Level exceedance of 1-hr TSP level and 24-hr TSP level recorded at station AMS7 by the Environmental Team of Contract No. HY/2010/02 during the reporting period.



# 3 NOISE MONITORING

## 3.1 Monitoring Locations

3.1.1 The noise monitoring works for the Contract are covered by Contract No. HY/2010/02 Hong Kong-Zhuhai-Macao Bridge HKBCF – Reclamation Works. The ET of the Contract or another ET of the HZMB project is required to conduct noise monitoring at NMS2 and NMS3B as part of EM&A programme if these monitoring stations are no longer covered under Contract No. HY/2010/02. Table 3.1 and Figure 1 shows the locations of noise monitoring stations.

Table 3.1	Construction	Noise	Monitoring	Locations
	Construction	110130	Monitoring	Locations

Identification No.	Location Description	
NMS2 <sup>(1)</sup>	Sea View Crescent	
NMS3B <sup>(1) (2)</sup>	Site Boundary of Site Office Area at Works Area WA2	

Remarks:

(1) The ET of this Contract should conduct impact noise monitoring at the NMS listed in the table as part of EM&A programme according to latest notification from ENPO when the monitoring station(s) is/are no longer covered by another ET of the HZMB project.

(2) The Action and Limit Levels for schools will be applied for this alternative monitoring location.

#### 3.2 Monitoring Requirements

- **3.2.1** The monitoring requirements, monitoring equipment, monitoring parameters, frequency and duration, monitoring methodology, monitoring schedule, meteorological information are detailed in the monthly EM&A Reports prepared for Contract No. HY/2010/02.
- **3.2.2** The Action and Limit Levels for construction noise are provided in **Table 3.2**

#### Table 3.2 Action and Limit Levels for Construction Noise

Parameter	Action Level	Limit Level
07:00 – 19:00 hours on normal weekdays	When one documented complaint is received	75 dB(A)*

Notes:

If works are to be carried out during restricted hours, the conditions stipulated in the construction noise permit issued by the Noise Control Authority have to be followed.

\* Reduce to 70 dB(A) for schools and 65 dB(A) during school examination period.

- **3.2.3** The event and action plan is provided in **Appendix D**.
- **3.2.4** If exceedance(s) at these stations is/are recorded by the ET of the Contract or referred by the other ET under the HZMB project to the Contract, the ET of the Contract will carry out an investigation and findings will be reported in the monthly EM&A Report.

#### 3.3 Monitoring Results

**3.3.1** The monitoring results for NMS2 and NMS3B are reported in the monthly EM&A Reports prepared for Contract No. HY/2010/02. There was no exceedance for noise recorded at station NMS2 and station NMS3B by the Environmental Team of Contract No. HY/2010/02 during the reporting period.



# 4 WATER QUALITY MONITORING

# 4.1 Monitoring Locations

The water monitoring works for the Contract are covered by Contract No. HY/2010/02 Hong Kong-Zhuhai-Macao Bridge HKBCF – Reclamation Works. The ET of the Contract or another ET of the HZMB project is required to conduct water quality monitoring at fifteen stations (3 Impact Stations, 7 Sensitive Receiver Stations and 5 Control/Far Field Stations) as part of EM&A programme if these monitoring stations are no longer covered under Contract No. HY/2010/02. **Table 4.1** and **Figure 2** shows the locations of water quality monitoring stations.

Station	Description	East	North
IS7	Impact Station (Close to HKBCF construction site)	812244	818777
IS10	Impact Station (Close to HKBCF construction site)	812577	820670
IS(Mf)11	Impact Station (Close to HKBCF construction site)	813562	820716
SR3	Sensitive receivers (San Tau SSSI)	810525	816456
SR4(N)	Sensitive receivers (Tai Ho)	814705	817859
SR5	Sensitive receivers (Artificial Reef in NE Airport)	811489	820455
SR6	Sensitive receivers (Sha Chau and Lung Kwu Chau Marine Park)	805837	821818
SR7	Sensitive receivers (Tai Mo Do)	814293	821431
SR10A <sup>[1]</sup>	Sensitive receivers (Ma Wan FCZ)1	823741	823495
SR10B(N) <sup>[1]</sup>	Sensitive receivers (Ma Wan FCZ)2	823683	823187
CS(Mf)3	Control Station	809989	821117
CS(Mf)5	Control Station	817990	821129
CS4	Control Station	810025	824004
CS6	Control Station	817028	823992
CSA [2]	Control Station	818103	823064

Table 4.1 Water Quality Monitoring Stations (construction phases)

Note:

(1) Additional monitoring station for Ma Wan FCZ.

(2) Additional control monitoring station for Ma Wan FCZ

Remarks:

The ET of this Contract should conduct impact water quality monitoring at the WQMS listed in the table as part of EM&A programme according to latest notification from ENPO when the monitoring station(s) is/are no longer covered by another ET of the HZMB project. The ET of the Contract shall communicate and share the monitoring data to the ET(s) of other works contracts if the water quality monitoring station(s) is/are as part of EM&A programme.

#### 4.2 Monitoring Requirements

The monitoring requirements, monitoring equipment, monitoring parameters, frequency and duration, monitoring methodology, monitoring schedule, meteorological information are detailed in the monthly EM&A Reports prepared for Contract Nos. HY/2010/02.

**4.2.1** The event and action plan is provided in **Appendix D**.



Contract No.: HY/2013/02 – Hong Kong-Zhuhai-Macao Bridge Hong Kong Boundary Crossing Facilities – Infrastructure Works Stage I (Western Portion) ENA63406 Monthly EM&A Report No.20

#### 4.2.2 The Action and Limit Levels for Water Quality are provided in Table 4.2

#### Table 4.2 Action and Limit Levels for Water Quality

Parameters	Action	Limit
DO in mg/L (Surface, Middle & Bottom)	Surface and Middle 5.0 Bottom 4.7	Surface and Middle 4.2 (except 5 mg/L for FCZ) Bottom 3.6
SS in mg/L (depth-averaged) at all monitoring stations and control stations	23.5 and 120% of upstream control station's SS at the same tide of the same day*	34.4 and 130% of upstream control station's SS at the same tide of the same day and 10mg/L for WSD Seawater intakes*
Turbidity in NTU (depth- averaged)	27.5 and 120% of upstream control station's turbidity at the same tide of the same day*	47.0 and 130% of upstream control station's turbidity at the same tide of the same day*

\* Remarks: Reference is made to EPD approval of adjustment of water quality assessment criteria issued and became effective on 18 February 2013.

Notes: 1. "depth-averaged" is calculated by taking the arithmetic means of reading of all three depths.

For DO, non-compliance of the water quality limits occurs when monitoring result is lower than the limits.
 For turbidity, SS, non-compliance of the water quality limits occurs when monitoring result is higher than the limits.

- 4. All the figures given in the table are used for reference only and the EPD may amend the figures whenever it is considered as necessary.
- 5. The 1%-ile of baseline data for dissolved oxygen (surface and middle) and dissolved oxygen (bottom) are 4.2mg/L and 3.6mg/L respectively.
- **4.2.3** If exceedance(s) at these stations is/are recorded by the ET of the Contract or referred by the other ET under the HZMB project to the Contract, the ET of the Contract will carry out an investigation and findings will be reported in the monthly EM&A Report.

# 4.3 Monitoring Result

**4.3.1** The monitoring results for the monitoring stations showed in **Table 4.1** are reported in the monthly EM&A Report prepared for Contract No. HY/2010/02. There was no Action and Limit Level exceedance recorded by the Environmental Team of Contract No. HY/2010/02 during the reporting period.

# 5 DOLPHIN MONITORING

# 5.1 Monitoring Locations

The dolphin monitoring works for the Contract are covered by Contract No. HY/2010/02 Hong Kong-Zhuhai-Macao Bridge HKBCF – Reclamation Works. The ET of the Contract or another ET of the HZMB project is required to conduct dolphin monitoring at 23 transects as part of EM&A programme if these transects are no longer covered under Contract No. HY/2010/02. The dolphin monitoring should adopt line-transect vessel survey method. The survey follows pre-set and fixed transect lines in the two areas defined by AFCD as: Northeast Lantau survey area; and Northwest Lantau survey area. **Figure 3** shows the co-ordinates for the transect lines and layout map.

### Remarks:

The ET of this Contract should conduct impact dolphin monitoring as part of EM&A programme according to latest notification from ENPO when the monitoring station(s) is/are no longer covered by another ET of the HZMB project.

# 5.2 Monitoring Requirements

The monitoring requirements, monitoring equipment, monitoring parameters, frequency and duration, monitoring methodology, monitoring schedule, meteorological information are detailed in the monthly EM&A Reports prepared for Contract Nos. HY/2010/02.

- **5.2.1** The event and action plan is provided in **Appendix D**.
- 5.2.2 The Action and Limit Levels for Chinese White Dolphin Monitoring are provided in Table 5.1a & Table 5.1b

Table 5.1a Action and Limit Levels for Chinese White Dolphin Monitoring – Approach to Define Action Level (AL) and Limit Level (LL)

	North Lantau	Social Cluster
	NEL	NWL
Action Level	(STG < 70% of baseline) & (ANI < 70% of baseline)	(STG < 70% of baseline) & (ANI < 70% of baseline)
Limit Level	[(STG < 40% of baseline) & (ANI < 40% AND [ (STG < 40% of baseline) & (ANI	

For North Lantau Social Cluster, action level will be trigger if either NEL or NWL fall below the criteria; limit level will be triggered if both NEL and NWL fall below the criteria.

# Table 5.1(b) Derived Value of Action Level (AL) and Limit Level (LL) for Chinese White Dolphin Monitoring

	North Lantau	Social Cluster
	NEL	NWL
Action Level	STG < 4.2) & (ANI < 15.5 )	(STG < 6.9) & (ANI < 31.3)
Limit Level	[(STG < 2.4) & (ANI < 8.9)] AND [(STG	< 3.9) & (ANI < 17.9)]

**5.2.3** If exceedance(s) at these transects is/are recorded by the ET of the Contract or referred by the other ET under the HZMB project to the Contract, the ET of the Contract will carry out an investigation and findings will be reported in the monthly EM&A Report.

#### 5.3 Monitoring Result

The dolphin survey results for all transects are reported in the monthly EM&A Reports prepared for Contract No. HY/2010/02.



# 6 ENVIRONMENTAL SITE INSPECTION AND AUDIT

#### 6.1 Site Inspection

- **6.1.1** Site Inspections were carried out on a weekly basis to monitor the implementation of proper environmental pollution control mitigation measures for the project. During the reporting period, site inspections were carried out on 07, 15, 21 & 28 July 2016.
- **6.1.2** Particular observations during the site inspections are described below:

#### 30 June 2016

- (a) Greneral refuse was observed to be discarded improperly at Portion D. General refuse were collected. The observation was closed on 07 July 2016.
- (b) Cement operation was not carried out in a totally enclosed system at Portion D. The cement operation was carried out in a fully enclosed system. The observation was closed on 07 July 2016.
- (c) Inappropriate NRMM label was observed at Portion D. Appropriate NRMM label was provided for the generator. The observation was closed on 07 July 2016.

#### 07 July 2016

- (a) Improper colour of chemical waste storage label was observed at Portion A. The colour of chemical waste storage label was corrected. The observation was closed on 15 July 2016.
- (b) Canvas was reminded to be provided under the bridge of the wharfage to prevent construction materials dropping into the sea. Canvas was provided. The reminder was closed on 15 July 2016.

#### 15 July 2016

- (a) Oil container without drip tray was observed at Portion C. The oil container was removed. The observation was closed on 21 July 2016.
- (b) General refuse discarded improperly was observed at Portion C. The general refuse was collected. The observation was closed on 21 July 2016.
- (c) Oil contaminated soil was observed on the ground at Portion D. The contaminated soil was removed and treated as a chemical waste. The observation was closed on 21 July 2016.

#### 21 July 2016

- (a) Inapporpriate NRMM label of a generator was observed at Portion C. An appropriate NRMM label was provided for the generator. The observation was closed on 28 July 2016.
- (b) The drip tray of an oil container was observed to be damaged at Portion C. The drip tray was repaired. The observation was closed on 28 July 2016.

#### 28 July 2016

- (a) Improper disposal and separation of the general refuse and construction materials was observed at Portion A. The Contractor was reminded to collect the wastes. Follow-actions for outstanding observation will be inspected during the next site inspection.
- (b) Improper disposal of the general refuse was observed at Portion D. The Contractor was reminded to collect the wastes. Follow-actions for outstanding observation will be inspected during the next site inspection.
- (c) Chemical wastes and oil contamination produced by generator without drip tray was observed at Portion A. The Contractor was reminded to provide the drip tray for the generator and treat the contaminated soil as a chemical waste. Follow-actions for outstanding observation will be inspected during the next site inspection.

### 6.2 Advice on the Solid and Liquid Waste Management Status

**6.2.1** The Contractor registered as a chemical waste producer for the Contract. Sufficient numbers of receptacles were available for general refuse collection and sorting.



Contract No.: HY/2013/02 – Hong Kong-Zhuhai-Macao Bridge Hong Kong Boundary Crossing Facilities – Infrastructure Works Stage I (Western Portion) ENA63406 Monthly EM&A Report No.20

**6.2.2** 957 m<sup>3</sup> of excavated marine sediment was generated in this reporting period. The excavated marine sediment was stored properly on site during this reporting period until further instruction by the Engineer. The disposal of excavated sediment as per EP-353/2009/K to be implemented subject to confirmation.

## 6.2.3 Disposal of Marine Sediment

- **6.2.3.1** For the marine sediment disposal, after the acceptance of the review of the approved Sediment Quality Report (SQR) for this Project under EPD letter dated 19 August 2015, an approval to dispose the marine sediment extracted from bored piling for this Project was then approved under memo from Secretary, Marine Fill Committee of CEDD dated 20 August 2015 for the disposal of marine sediment extracted from bored piling works. The disposal sites allocated to this Project are the Mud Pit CMP2 of the Confined Marine Sediment Disposal Facility to the South of The Brothers (or at the East of Sha Chau). As advised by CEDD in the memo dated 19 February 2016, from 00:00 on 22 March 2016 onward, the disposal space at CMP2 of the South of The Brothers is closed and all disposal of contaminated sediment is to be carried out at CMP Vd to the East of Sha Chau (ESC). As a practical means, the disposal operation is managed by one contractor who is also responsible for applying dumping permit and its subsequent extension applications from EPD. Contract No. HY/2013/03 has been assigned to coordinate and arrange for disposal of extracted marine sediment from Contract No. HY/2013/02, HY/2013/03 and HY/2013/04.
- **6.2.3.2** For the dumping arrangement, the barge for disposal of marine sediment will moor at the temporary loading and unloading at the east shore of the HKBCF Island, which has been being used by contractor Contract No. HY/2010/02 for reclamation activities. In terms of safety consideration and to avoid mixing of sediment between contracts, each dumping date will be allocated to one Contract. The quantity of marine sediment disposed on each date is from one Contract.
- 6.2.3.3 During dumping, HY/2013/02 is responsible for transporting the marine sediment from his site area to the barge by Land transportation. The estimated quantity of marine sediment in each truck is confirmed by Resident Site Staff of each Contract. The trip tickets for transportation and disposal of marine sediment are collected and checked. Contract No. HY/2013/03 as the dumping permit holder (EP/MD/17-040 and EP/MD/17-062 in this reporting period) is responsible for reporting to EPD the quantity disposed of as the condition stipulated in the dumping permit.
- **6.2.4** There was 728 m<sup>3</sup> marine sediment extracted from bored piling in this Contract disposed to allocated dumping site via Contract No. HY/2013/03 on 13 July 2016 in this reporting period. The quantity disposed up to end of July 2016 was 11744 m<sup>3</sup>. The Monthly Summary of Marine sediment disposed to dumping site was provided in **Appendix E** and **Table 6.1**.

Table 0.1 Outlind y of marine Sediment dispos	
Month/Year	Quantity disposed (m <sup>3</sup> )
January 2016	1272
February 2016	2816
March 2016	600
April 2016	5128
May 2016	0
June 2016	1200
July 2016	728
Total =	11744

# Table 6.1 Summary of marine sediment disposed to dumping site via Contract No. HY/2013/03

- **6.2.5** The Contractor shall ensure no spilling and overflowing of materials during loading / unloading / transportation is allowed.
- 6.2.6 The monthly summary of waste flow table is detailed in Appendix E.
- **6.2.7** The Contractor was reminded that chemical waste containers should be properly treated and stored temporarily in designated chemical waste storage area on site in accordance with the Code of Practice on the Packing, Labelling and Storage of Chemical Waste.



#### 6.3 Environmental Licenses and Permits

The valid environmental licenses and permits during the reporting period are summarized in **Appendix F**.

#### 6.4 Implementation Status of Environmental Mitigation Measures

- **6.4.1** In response to the site audit findings, the Contractor carried out corrective actions.
- **6.4.2** The Contractor waters 8 times per day on all exposed soil within the project site and associated works areas when construction activities are being undertaken.
- **6.4.3** The Contractor was reminded to provide well-maintained plant operated on-site and plant served regularly;
- 6.4.4 The Contractor was reminded to switch off vehicles and equipment while not in use;
- 6.4.5 The Contractor was reminded to schedule the construction works to minimize noise nuisance etc.
- **6.4.6** The implementation status of Regular Marine Travel Route Plan (RMTRP) was checked by ET. Training material of Regular Marine Travel Route Plan was prepared and given to relevant staff. Those records were kept properly. Since the marine delivery of precast segments was commenced and the RMTRP training was provided for the Captain on 21 July 2016, the Captain was reminded to use regular travel routes in order to minimize the chance of vessel collision and the routes would not go through the dolphin hotspot in Brothers Islands. The marine traffic records and geographical plots of all the vessels tracks to demonstrate the conformance of the vessel to the proposed route in July 2016 would be provided to ER, ETL, IEC/ENPO for checking within the month of August 2016.
- **6.4.7** The tool box training of dolphin was carried out in Dec 2015. According to the action plan and communication flow chart of dolphin instruction, if any dolphin intruded BCF perimeter silt curtain, ETL should be informed. There was no notification received on any dolphin intrusion during the reporting period.
- **6.4.8** A summary of the implementation Schedule of Environmental Mitigation Measures (EMIS) is presented in **Appendix G**. Most of the necessary mitigation measures were implemented properly.

#### 6.5 Summary of Exceedance of the Environmental Quality Performance Limit

- **6.5.1** Summary of Action and Limit Level exceedance of 1-hr TSP level and 24-hr TSP level at AMS6 shall be referred to the monthly EM&A report prepared by Contract No. HY/2011/03.
- **6.5.2** There was no Action and Limit Level exceedance of 1-hr TSP level and 24-hr TSP level recorded at station AMS7 by the Environmental Team of Contract No. HY/2010/02 during the reporting period.
- **6.5.3** There was no Action and Limit Level exceedance for noise recorded at station NMS2 and station NMS3B by the Environmental Team of Contract No. HY/2010/02 during the reporting period.
- **6.5.4** There was no Action and Limit Level exceedance for water quality recorded at the monitoring stations showed at **Table 4.1** by the Environmental Team of Contract No. HY/2010/02 during the reporting period.
- **6.5.5** Impact dolphin monitoring results at all transects are reported in the EM&A Reports prepared for Contract No. HY/2010/02.

#### 6.6 Summary of Complaints, Notification of Summons and Successful Prosecution

- **6.6.1** There were no complaints received during the reporting period.
- 6.6.2 There were no notifications of summons or prosecutions received during the reporting period.



6.6.3 Statistics on environmental complaints, notifications of summons and successful prosecutions are summarized in Appendix H.

# 7 FUTURE KEY ISSUES

### 7.1 Construction Programme for the Coming Months

**7.1.1** As informed by the Contractor, the major construction activities for August 2016 are summarized in **Table 7.1**.

Site Area	Description of Activities
Portion A, D, C & F	Bored Piles Works
	Pile Cap
Portion A & D	Pier / Abutment
Portion D	Pre-bored H-pile for sign gantries
	Marine delivery of precast segment & Construction of bridge deck
Portion I	Footing construction of directional signs and dust laying
	Storm drain and water main construction
	Marine sediment excavation activities from the land-based works and
	corresponding disposal at the designated disposal sites

 Table 7.1
 Construction Activities for Coming Month

### 7.2 Environmental Site Inspection Schedule for the Coming Month

7.2.1 The tentative schedule for weekly site inspections for August 2016 is provided in Appendix I

# 8 CONCLUSION

#### 8.1 Conclusions

- **8.1.1** The site preparation work of the Contract was started on 25 July 2014 and the construction works of the Contract commenced on 24 November 2014.
- **8.1.2** Summary of Action and Limit Level exceedance of 1-hr TSP level and 24-hr TSP level at AMS6 shall be referred to the monthly EM&A report prepared by Contract No. HY/2011/03.
- **8.1.3** There was no Action and Limit Level exceedance of 1-hr TSP level and 24-hr TSP level recorded at station AMS7 by the Environmental Team of Contract No. HY/2010/02 during the reporting period.
- **8.1.4** There was no Action and Limit Level exceedance for noise recorded at station NMS2 and station NMS3B by the Environmental Team of Contract No. HY/2010/02 during the reporting period.
- **8.1.5** There was no Action and Limit Level exceedance for water quality recorded at the monitoring stations showed at **Table 4.1** by the Environmental Team of Contract No. HY/2010/02 during the reporting period.
- **8.1.6** Impact dolphin monitoring results at all transects are reported in the EM&A Reports prepared for Contract No. HY/2010/02.
- **8.1.7** There were no complaints received during the reporting period.
- **8.1.8** There were no notifications of summons or prosecutions received during the reporting period.

- END OF REPORT -



# FIGURES



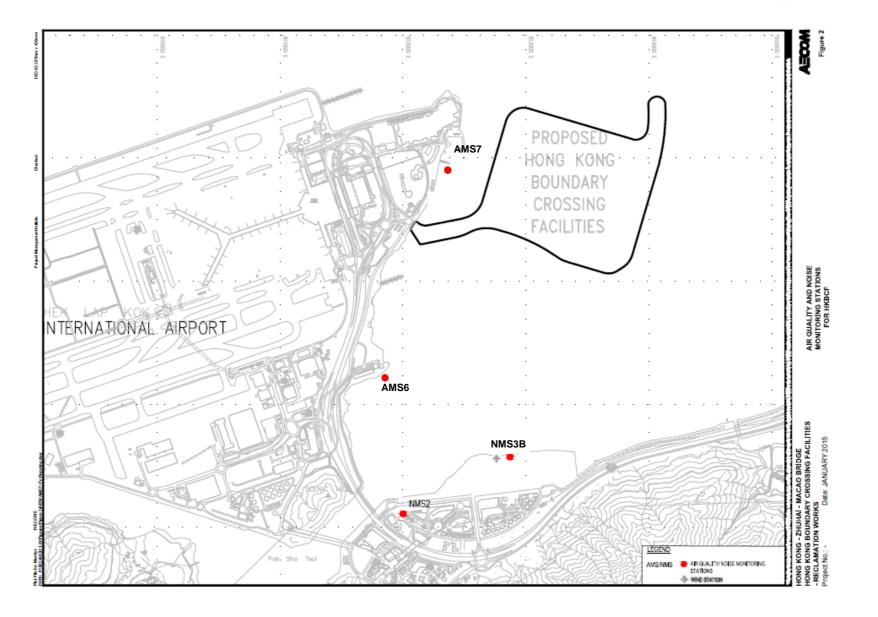
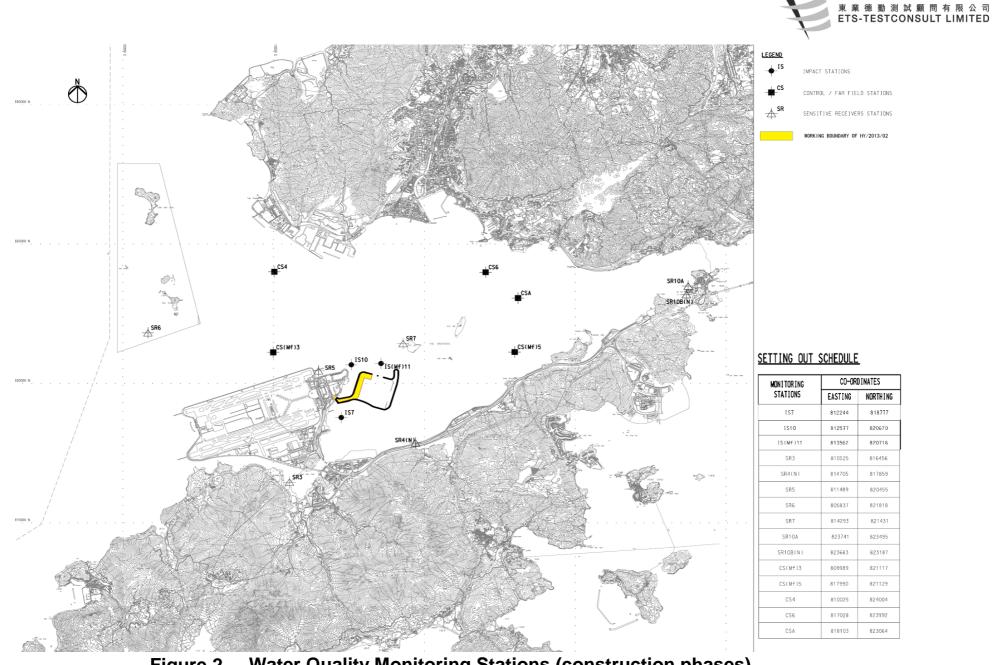
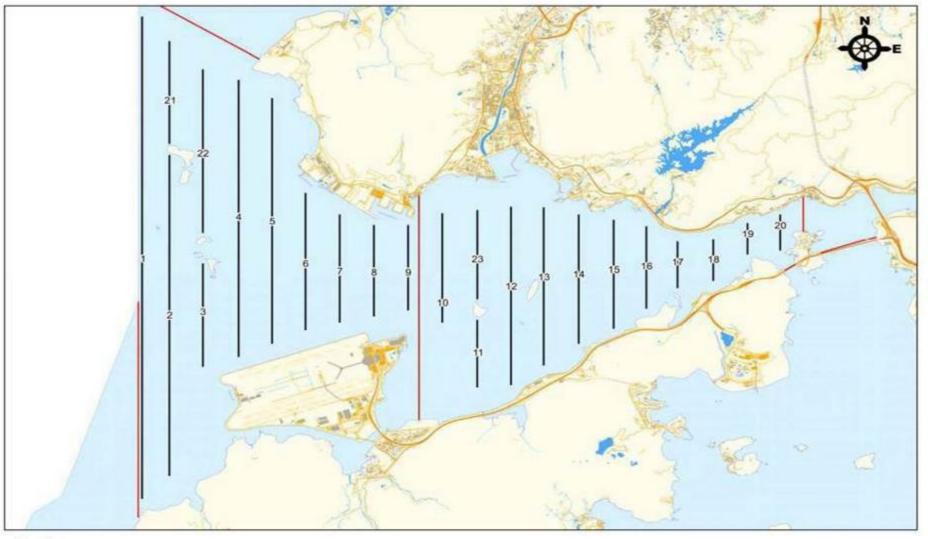


Figure 1 Air Quality and Noise Monitoring Stations for HKBCF









#### Remarks:

\*Transect 10 is now 3.6km in length due to the HKBCF construction site.

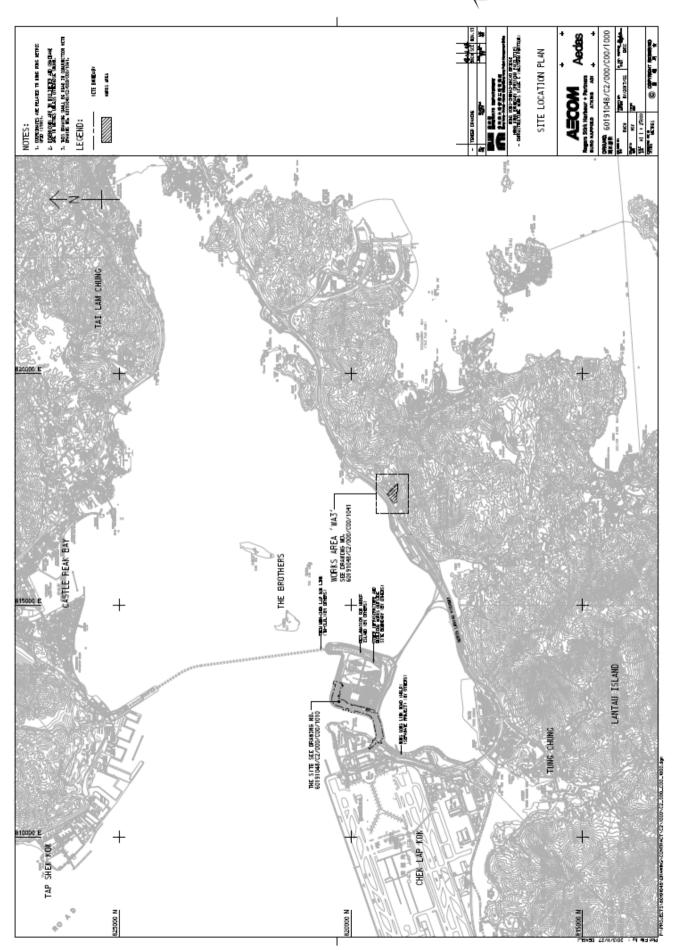
\*Coordinates for transect lines 1, 2, 7, 8, 9 and 11 have been updated in respect to the Proposal for Alteration of Transect Line for Dolphin Monitoring approved by EPD on 19 August 2015. The total transect length for both NEL and NWL combined is 108km.

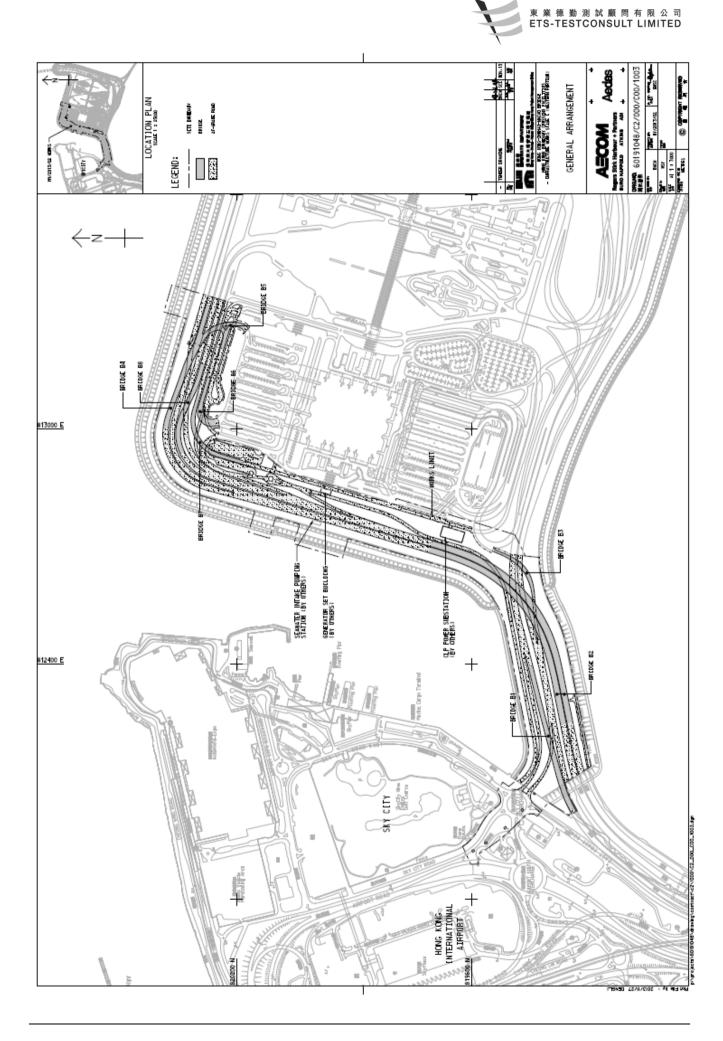
Figure 3 Dolphin Monitoring Transect Line and Layout Map

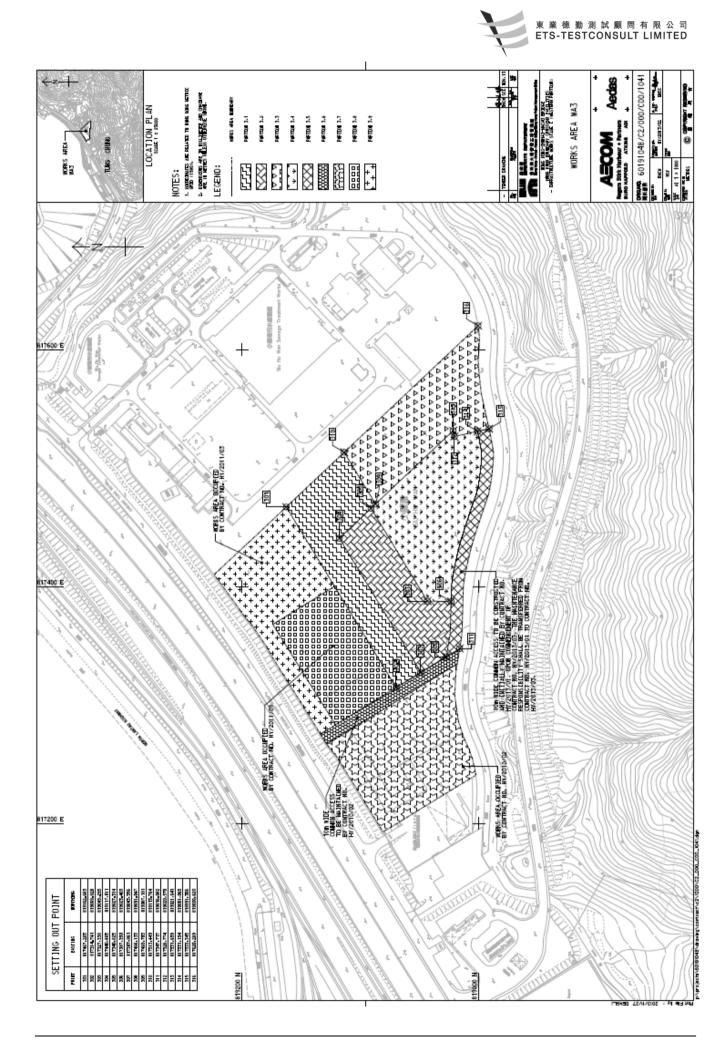


Appendix A

**Location of Works Areas** 



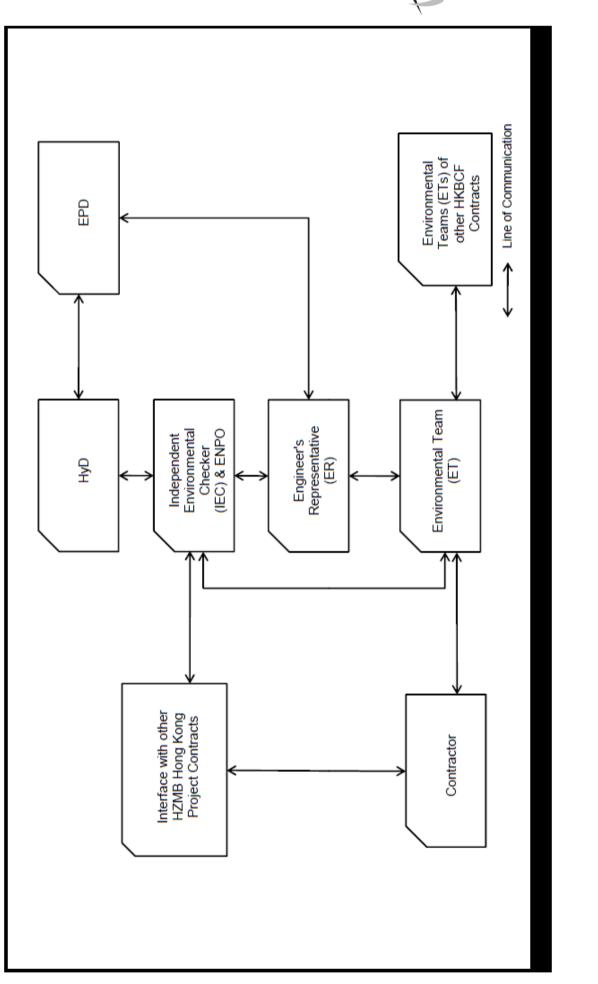






Appendix B

# **Project Organization for Environmental Works**





Appendix C

**Construction Programme** 



ay 1D	Activity Name	Original Start Duration	Finish	Activity % C Complete	alendar	Ficel	July August	2016 Sactardar	Originar I Ha
IRCE Late	Petrophyse (Missions Desting) Marship Desses	479 28-05-85	Int of 15		_		Joby August 19 26 03 10 17 24 31 57 14 2	1 28 04 11 18 25	Octaber Nov 02 09 16 23 30
and the second secon	astructure (Western Portion) - Monthly Progre	CONTRACTOR OF THE OWNER OF THE			-	809			
eliminari entractual		76 24-07-16			vp-7d	1051			
Contraction of the second s	Lore	0 24-07-16	and the second se		-	1127	1	_	
CA4	Possession of Portion A4 (COW+386d)	0 24-07-16	124-077-11		VP-7d	-243	1		
	Possession of Portion A5 (COW+386d)	0 24-07-16			VP-7d	-344	annon an		******
	Possession of Portion F (CDW+487d)	0 24-07-16		0% V		-243	•		
Key Date	And the second states and second states and second	0 24-07-16	24-07-16		-	1127	+		0
	KD9-CLP cabling other then portion A4, A5, E & F (COW+29Dc	0	24-07-16	0% V	VP-7d	-439	· •	1	
	KD10-CLP cabling for portion A4, A5, E & F (COW+510d)	0	24-07-16		VP-7d	-160			econo - artanta ante de la como
	KD15-handover of Portion B2 to Ht/2013/03 (COW+250d)	0	24-07-16			1127	1		
KD16	KD16-handover of Portion A2 & B3 to HV/2013/04 (COW+25-	0	24-07-16	0% V	-	1127	1 I		
HA2	Unadapped Protice A3 (MPA C)	the second s	24-07-10		VP+Zd	1127	I		
	Handover of Portion A2 (KD16) Handover of Portion B2 (KD15)	0	24-07-11		VP-7d VP-7d	1127	I		
	Handover of Portion B3 (KD16)	0	24-07-16			1127	******		
	Handover of Portion H (KD11)	0	24-07-11	0% V		-180			
nterfaces w		0 24 07-16	24-07-11			1127	+		
HW/2013/0	1 - Passenger Clearance Building	0 24-07-16			VP-7d	1127	•		
A1-0100	Handover of 81 & 83 to PCB for there works	0 24-07-16			VP-7d	1127	+		
	Handover of Abutment at Bridge 6	0	24-07-11	0% W	VP-7d	-222	······································		
	Handover of Abutment at Bridge 5b (A506)	0	24-07-1t	0% W	VP-7d	-68	•		
	Handover of Pumping Station, Gen set Building, intake & discl	0	24-07-1f	0% W	VP-7d	1127	•		
The second se	Handover of Gen set Building to PCB	0 24-07-16		0% W	VP-7d	1127	1		
	3 - Volical Clearance Plazas	0 24 07 16	24 07-11		The second design of the secon	1127	·····		
	Handover of B2 to VCP for there works	0 24-07-16			VP-7d		1		
	Design - Bridge Works	75 24-07-16	and the second se		VP-7d	-217			
Bridge B2	B2 Substructure - Cap const work start	0 24-07-16	24-07-10		VP-78	-323	I		
Bridge B4	bz substructure - Cap const work start	0 24-07-16	Int wallet		-	-323	I I		-
And in case of the local division of the	B4 Substructure - Cap const work start	0 05-10-16	0.2,10,14		VP-7d	-624			
Bridge BS		0 10 08 16	10.08.14		(9.7d)	-158			
A3-1680	85 Substructure - Cap const work start	0 10-08-16	10 00 11		VP-7d		•		
Bridge 87	Contract of the second second second	0 08 10 16	08-10-16		VP-7d	-456			•
A3-1880	87 Substructure - Cap const work start	0 08-10-16			P-76	-456			•
ridge Strue	cture	323 02-12-15	04-01-11	Strength I	6d/h	809			and the second
Iridge 3		232 07-01-16	05-11-11		6d/h	-314			
Bore Pile [1	4d/ple + 35d for test & report)	120 07-01-16	28-07-14	Second Second	fid/fi	347			
	83 - Bore Pile A301-P305 P1 (5 nos)	49 07-01-16			6d/h	-351			
And in case of the local diversion of the local diversion of the local diversion of the local diversion of the	63 - Bare Pile A301-P305 P2 (5 nos)	49 08-04-16	and the second division of the second divisio	91.84%	6d/h	-347			
Pile Cap		49 26 07-16	And in case of the local division of the loc	Concerned in	6d/h	291		-	
	83 - Pile cap P305, P304 (2 nos)	21 26-07-16			6d/h	-351			
	83 - Pile cap P303-P302 (2 nos) 83 - Pile cap A301 (1 nos)	21 11-08-16				-337			
Pier & Abut		21 27-08-16 42 19 08 16		0%	6d/h	-291			
	83 - Pier & Abutment P305, P304 (2 nos)	14 19-08-16	the second second second		6d/h	-291			
	83 - Pier & Abutment P303, P302 (2 nos)	14 05-09-16			6d/h	-331			
	83 - Pier & Abutment A301 (1 nos)	14 22-09-16			6d/h	-291			
Deck 1 (P30		51 05-09-16	05-11-11	_	6d/h	-351			
	B3 - Falsework & Base F/W (P305-P304)	14 05-09-16	21-09-16	0%	6d/h	-351			
83-0080	83 - Rebar & post-tender member (P305-P304)	14 22-09-16			6d/h	-351	······································		
	B3 - Side formworks (P305-P304)	5 06-10-16			6d/h	-351			
Rer	naining Level of Effort	Summ	arv			_		Date Revision	Ch., Approved
	ual Level of Effort D-Critical Remaining Work	- rounn	-1				Page 1 of 6	24-07-16 monthly Report No. 24	
	ual Work • • Milestone								



						Filoat						
	3 - Concrete base portion (P305-P304)	1 13-10-16	11 10 11	Activity % Complete		1000	16 03 10 17 24 3	August 81   87   14   21	38 04	September 1 11 18 25	02 02	Gelaber 18 3 16 25 30
-0110 83	3 - Top slab rebar (P305-P304) 3 - Top slab rebar (P305-P304)			0%		-351						
	3 - 10p stab rebar (P305-P304) 3 - Concrete top stab (P305-P304)	5 14-10-16 1 20-10-16		0%	and the second sec	-351						
	3 - Curing & post-tensioning (P305-P304)	14 21-10-16		0%		-351	an and a state of the state of					
LK 2 (P304		14 21-10-15		0%	6d/n	-351					1	
	3 - Falsework & Base F/W (P304-P303)	14 11-10-15		0%	6d/h	-351						
pe 2N	S - Faisework a base r/ w (F304-F303)	206 16-02-16		0.16	6d/h	860					-	
	d/pile = 35a for report)	63 16-02-16		1	6d/h	-110						
	2N - Bore Pile P209-P207 (6 nos)	63 16-02-16			and the second	-310						
Cap	En Obierterzos-rzor (onda)	49 01 05 16		32,00%	6d/h	-510						
	2N - Pile cap P210-P212 (3 nos)	21 16-06-16		66 67%	and the second se	923						
	2N - Pile cap P209-P207 (3 nos)	21 01-06-16				-315						
r & Abutm		72 18 04 16		33.33%	6d/h	923						
	2N - Pier & Abutment P213-A215 (3 nos)	14 25-07-16		0%	and the second se	-260					(1)+)	
	2N - Pier & Abutment P210-P212 (3 nos)	14 02-08-16		0%	6d/h	923						
	2N - Pier & Abutment P209-P207 (3 nos)	14 30-06-16			6d/h	-322						
	2N - Pier & Abutment P206-P204 (3 nos)	14 25-04-16			6d/h	-218						
	2N - Pier & Abutment P203-A201 (3 nos)	14 18-04-16			6d/h	-210						
k 1 (P211		51 05-08-16		The state of the s	6d/h	322		-				
	2N - Falsework & Base F/W (P211-P209)	14 05-08-16	20-08-14	0%	6d/h	-322						
	2N - Rebar & post-tender member (P211-P209)	14 22-08-16		0%		-322						
-0320 B2	2N - Side formworks (P211-P209)	5 03-09-16	08-09-10	0%		-322						
-0330 B2	2N - Concrete base portion (P211-P209)	1 09-09-16	09-09-14	0%		-322						
-0340 B2	2N - Top slab rebar (P211-P209)	5 10-09-16	16-09-16	0%	6d/h	-322	······································		H			
-0350 B2	2N - Concrete top slab (P211-P209)	1 17-09-16	17-09-11	0%	6d/h	-322						
2-0350 B2	2N - Curing & post-tensioning (P211-P209)	14 19-09-16	05-10-16	0%	6d/h	-322						
ck 2  1 212	P211}	38 08-09-16	25-10-11	1000	6d/h	316			-			
2-1920 B2	2N - Falsework & Base F/W (P212-P211)	14 08-09-16	24-09-16	0%	6d/h	-316			-	0-0-00		
2-1930 B2	2N - Rebar & post-tender member (P212-P211)	14 24-09-16	12-10-16	0%	6d/h	-316					-(1993)-0	······································
2-1940 BZ	2N - Side formworks (P212-P211)	5 13-10-16	18-10-10	0%	6d/h	-316						
2-1950 BZ	2N - Concrete base portion (P212-P211)	1 19-10-16	19-10-11	0%	6d/h	-316						
2-1960 B2	2N - Top slab rebar (P212-P211)	5 20-10-16	25-10-16	0%	6d/h	-316						
ck 3 (P213-		14 18 10 16	02-11-11		6d/h	-316						
-0400 B2	2N - Falsework & Base F/W (P213-P212)	14 18-10-16	02-11-16	0%	6d/h	-316						
ck 5 (1208-	and the second se	38 08 09 16	25-10-11		Gid/fb	322						
2-1990 B2	2N - Falsowork & Base F/W (P208-P209)	14 08-09-16	24-09-16	0%	6d/h	-322						
	2N - Rebar & post-tender member (P208-P209)	14 24-09-16	12-10-16	0%		-322						
	2N - Side formworks (P208-P209)	5 13-10-16		0%	6d/h	-322			a state and the state			
	2N - Concrete base portion(P208-P209)	1 19-10-16		0%	and the second se	-322						
Concession of the local division of the loca	2N - Top slab rebar (P208-P209)	5 20-10-16	a second s	0%	Contractory of the local division of the loc	-322						
ck 6 (P208-		14 18-10-16		Contractory of the	6d/h	+322						
	2N - Falsework & Base F/W (P208-P207)	14 18-10-16		0%		-322						C-C-C-C-C-C-C-C-C-C-C-C-C-C-C-C-C-C-C-
ge 25		268 02-12-15		-	6d/h	-274		and the second	and an and a second			
e Pile		129 02-12-15	and the owner of the local division of the l	and the second second	o od/h	-344						
	25 - Bore Pile P213-A215 (6 nos)	63 02-12-15				-342				1		
	25 - Bore Pile P210-P212 (6 nos) 25 - Bore Pile P209-P207 (6 nos)	63 05-01-16				-355						
-1020 B2	23 - BUIEFIE F209-F207 [5 H05]	63 17-02-16 32 02-05-16	29-07-14	92.06%	6d/h	-368						
	25 - Pile cap P213-A215 (3 nos)	21 22-06-16	100000	14.29%		-316				*****		
	25 - Pile cap P213-A213 (3 nos) 25 - Pile cap P210-P212 (3 nos)	21 15-06-16		52.38%	6d/h	-316						
	25 - Pile cap P209-P207 (3 nos)	21 02-05-16				-322						
-1070 B2		76 19 04 16	a loss of the second	00.07%	odyn	-370						
Contraction of the local division of the loc	25 - Pier & Abutment P213-A215 (3 nos)	14 06-08-16	and the second se	0%	6d/h	and in case of the						di secondo de la constante de
Rema	aining Level of Effort	Summ	ary				Page 2 of 6		Date	Revision	Ch	Approved
	al Level of Effort Effort Critical Remaining Work		· ·				Page 2 016		24-07-16	monthly Report No. 24	4	



It (P21:A200)         It (22:00:16         (22:00:16         (22:00:17)         (26:07)         (22:07)           1170         B25 - Fabreave R, Baser F/W (P21:P209)         14         22:08:16         06:09:11         ON         6d/h         322           1180         B25. Reber R, poot-tend or member (P21:P209)         5         21:09:15         22:09:11         ON         6d/h         322           1180         B25 Sonctree base portion (P21:P209)         12:09:15         22:09:14         ON         6d/h         322           1210         B25 Concrete base portion (P21:P209)         10:51:04:16         0:51:04:16         0:51:04:16         0:51:04:16         0:51:04:16         0:51:04:16         0:51:04:16         0:51:04:16         0:51:04:16         0:51:04:16         0:51:04:16         0:51:04:16         0:51:04:16         0:51:04:16         0:51:04:16         0:51:04:16         0:51:04:16         0:51:04:16         0:51:04:17         0:51:04:16         0:51:04:17         0:51:04:16         0:51:04:16         0:51:04:16         0:51:04:17         0:51:04:16         0:51:04:15:04:16         0:51:04:15:02:17         0:51:05:05:05         0:51:05:05:05         0:51:05:05:05         0:51:05:05:05:05         0:51:05:05:05:05         0:51:05:05:05:07         0:51:05:05:05:01         0:50:05:05:05:07         0:51:05:05:05:07<	August September Dobber 4 31 07 14 21 28 04 11 18 25 12 18 16 23
1100       120	
140       025-Per & Abument P203-A201 (3 no.)       14       14-0-16       22-07-16       78.57%       6.6/h       197         140213-52000       50       22.00116       22.00116       06.6/h       122         1150       025-Rebark & Base F/W (P211-P209)       14       07.0916       23.0911       0%       66/h       122         1150       025-Concrete base portion (P211-P209)       12.70916       27.0911       0%       66/h       1322         1200       025-Concrete base portion (P211-P209)       12.70916       27.0911       0%       66/h       1322         1210       025-Concrete base bafe (P211-P209)       10       05.10-11       0%       66/h       1322         1210       025-Concrete base bafe (P211-P209)       10       05.10-11       0%       66/h       1322         1210       025-Fabework & Base F/W (P212-P211)       14       13-10-11       0%       66/h       1322         1210       025-Fabework & Base F/W (P208-P209)       14       13-10-11       0%       66/h       1322         1210       025-Fabework & Base F/W (P208-P209)       14       13-10-11       0%       66/h       1322         1210       025-Fabework & Base F/W (P208-P209)       14       13-10	
94:1072-1082-Fallowork & Base F/W (P21-P209)         14         22:08-16         05:09-11         05:60/1	
22-1170       B25: Fabrave & Base F/W (P211-P209)       14       27.09-16       23-09-11       ON:       6d/h       -322         22-1180       B25: Robis & postsender member (P211-P209)       14       07.09-16       23-09-11       ON:       6d/h       -322         22-100       B25: Obstender member (P211-P209)       12.70-91-16       27.09-11       0%:       6d/h       -322         22-120       B25: Stabis mbar (P211-P209)       10       05-10-11       ON:       6d/h       -322         22-120       B25: Stabis mbar (P211-P209)       10       05-10-11       ON:       6d/h       -322         22-120       B25: Stabis mbar (P211-P209)       10       05-10-11       ON:       6d/h       -322         22-120       B25: Stabis absork & Base F/W (P212-P211)       14       14       13-0-11       ON:       6d/h       -322         22-110       B25: Rabus & Bost tender member (P208-P209)       14       24       29-101       28-10-11       ON:       6d/h       -322         22-110       B25: Rabus & Bost tender member (P208-P209)       14       31-0-11       ON:       6d/h       -322         22-110       B25: Rabus & Bost tender member (P208-P209)       14       32-0-0-11       OH:       6d/h	
21:190       D35       Rebar & post-bend or member (P211-P209)       14       0.70-9-16       23-9-11       0.95       64/h       -322         21:190       D25       Size State formworks (P211-P209)       5       21.09-16       26-09-11       0.95       64/h       -322         21:200       D25       Concrete base portion (P211-P209)       5       28-99-16       0-41-011       0.95       64/h       -322         21:200       D25       Concrete base portion (P211-P209)       10       0-51-014       0.95       64/h       -322         21:200       D25       Falsework & Base F/W (P212-P211)       14       24-09-16       13-10-11       0%       64/h       -322         22:200       D25       Falsework & Base F/W (P212-P211)       14       124-09-16       13-10-11       0%       64/h       -322         22:100       D25       Falsework & Base F/W (P212-P211)       14       13-10-16       0%       64/h       -322         22:110       D25       Falsework & Base F/W (P208-P209)       14       13-10-16       0%       64/h       -322         22:110       D25       False Apost-tender member (P208-P209)       14       13-10-16       0%       64/h       -327         22	
21.1300       B23 - Side formwarks (P211-P209)       5 21.09.16       26.90.11       OK       64/h       -322         22.1300       B25 - Concrete base portion (P211-P209)       1 27.09.16       27.09.11       OK       64/h       -322         22.1300       B25 - Concrete base portion (P211-P209)       1 05.10.16       05.10.11       05.64/h       -322         22.230       B25 - Concrete base portion (P211-P209)       1 05.10.16       05.10.11       05.64/h       -322         22.206       B25 - Fabsework & Base F/W (P212-P211)       14       24.09.16       13.10.11       05.64/h       -322         22.206       B25 - Fabsework & Base F/W (P212-P211)       14       13.10.16       28.10.11       05.64/h       -322         22.210       B25 - Fabsework & Base F/W (P208-P209)       14       13.10.16       05.64/h       -322         22.210       B25 - Fabsework & Base F/W (P208-P209)       14       13.10.11       05.64/h       -322         22.210       B25 - Fabsework & Base F/W (P208-P209)       14       13.10.11       05.64/h       -322         22.210       B25 - Fabsework & Base F/W (P208-P207)       14       25.07.61       01.64/h       -307         10-2100       B1 - Fabswork & Base F/W (P105-P107)       14       25.07.61 <td>and second se</td>	and second se
22-1200       B23 - Concrete base portion (P211-P209)       1 27:09-16       O79-911       O79       6d/h       322         22120       B25 - Top Lab mean (P211-P209)       5 28:09-16       O4-16-11       O51       6d/h       -322         22-120       B25 - Concrete base M(P211-P209)       1 05-10-16       O51-06-10       O55       6d/h       -322         22-200       B25 - Conrest base M(P211-P209)       14       05-10-16       O25       6d/h       -322         22-200       B25 - Rebar & post-tender member (P212-P211)       14       24:09-16       13-10-11       O%       6d/h       -322         22-200       B25 - Rebar & post-tender member (P212-P211)       14       13-10-11       O%       6d/h       -322         22-100       B25 - Rebar & post-tender member (P208-P209)       14       24:09-16       13-10-11       O%       6d/h       -322         22-100       B25 - Rebar & post-tender member (P208-P209)       14       24:09-16       13-10-11       O%       6d/h       -322         22-110       B25 - M26 & Base F/W (P208-P209)       14       24:09-16       13-10-11       O%       6d/h       -322         22-110       B25 - M26 & Base F/W (P208-P209)       14       14:020-16       10-16       0% <td></td>	
22.12.0       B25-Top Libbrebar (P21-P209)       5       28.0-916       0.4-10-11       0%       6.d/h       -322         22.12.0       B25-Concrete top Jibb (P211-P209)       1.0-5-10-16       0.5-10-16       0%       6.d/h       -322         23.20       B25-Concrete top Jibb (P211-P209)       1.0<5-10-16	
20-1220       B25 - Concrete top slab (P211-P209)       1       0.5 1.0 16       0.5 6 d/h       -322         22.1230       B25 - Coning & post-tensioning (P211-P209)       1.0 0 5 1.0 16       0.5 1.0 11       0.5 6 d/h       -322         22.200       B25 - Falswork & Base F/W (P212-P211)       1.4 24:09-16       1.3 1.0 11       0.5 6 d/h       -322         20.200       B25 - Rebar & post-tensioning (P212-P211)       1.4 1.3 1.0 1.6       2.8 1.0 11       0.5 6 d/h       -322         20.210       B25 - Rebar & post-tensioning (P212-P211)       1.4 1.3 1.0 1.6       2.8 1.0 11       0.5 6 d/h       -322         20.210       B25 - Rebar & post-tensioning (P208-P209)       1.4 1.3 1.0 1.6       2.8 1.0 11       0.5 6 d/h       -322         22.140       B25 - Rebar & post-tensioning (P208-P209)       1.4 1.3 1.0 1.6       0.4 0.7 1.5       0.4 0.1 0.5       -321         20.210       B25 - Rebar & post-tensioning (P208-P209)       1.4 1.0 2.0 0.7 1.6       0.4 0.4 0.7 1.5       0.4 0.1 0.5       -321         20.210       B25 - Rebar & post-tension member (P208-P209)       1.4 1.0 2.0 0.7 1.6       0.4 0.4 0.7 1.5       0.4 0.4 0.7 1.5       0.4 0.4 0.7 1.5       0.4 0.4 0.7 1.5       0.4 0.4 0.7 1.5         1.0210       B1 - Galowork & Base F/W (P105-P107)       1.4 2.0 0.8 1.6       2.9 0.0 11       0.5	
12-1230       B25 - Curing & post-tensioning (P211-P209)       14       0.610-16       22-10-11       0%       60/h       -322         162.7       (P222-P211)       12       20.0916       282.0-11       60/h       322         162.7       (P222-P211)       14       14.00-16       10.11       0%       60/h       322         12.2000       B25.7       Rebark & post-tensioning (P212-P211)       14       13.10-16       28.10-11       0%       60/h       322         12.2007       B25.7       Rebark & post-tensioning (P208-P209)       14       13.10-16       28.10-11       0%       60/h       -322         12.210       B25.7       Rebark & post-tensioning (P208-P209)       14       13.10-16       28.10-11       0%       60/h       -322         12.210       B25.7       Rebark & post-tensioning (P208-P209)       14       13.10-16       28.10-11       0%       60/h       -322         12.210       B1.7       Rebark & post-tensioning (P108-P107)       14       12.50-716       01.08-11       50/h       60/h       -307         14.0220       B1.       Falsevork & Base F/W (P105-P107)       14       12.50-716       09.08-11       0%       60/h       -307         14.024	
cith 2 (22)2-22213)       23       24	
22-2050       B25 - Falsework & Base F/W (P212-P211)       14       24-09-16       23-10-16       0%       6d/h       -322         22-2070       B25 - Rebark & post-tender member (P212-P211)       14       13-10-16       0%       6d/h       -322         22-2070       B25 - Rebark & post-tender member (P208-P209)       14       24-09-16       23-10-16       0%       6d/h       -322         22-2130       B25 - Rebark & post-tender member (P208-P209)       14       24-09-16       23-10-16       0%       6d/h       -322         22-2130       B25 - Rebark & post-tender member (P208-P209)       14       24-09-16       13-10-16       0%       6d/h       -322         22-2140       B1 - Falsework & Base F/W (P208-P209)       14       24-09-16       13-10-16       0%       6d/h       -326         11-0110       B1 - Pier & Abutment P103 (1 nos)       14       02-07-16       09-08-16       0%       6d/h       -307         11-0220       B1 - Falsework & Base F/W (P105-P107)       14       10-08-16       25-08-16       0%       6d/h       -307         11-0220       B1 - Concrete base potton (P105-P107)       12-90-816       29-08-16       0%       6d/h       -307         11-0220       B1 - Concrete base potton (P105-P	
22-2070       B2S - Rebar & post-tender member (P212-P211)       14       13-10-16       28-10-16       O%       6d/h       -322         CCS 57200 #22-02)       CS3       22-020-16       22-021-16       6d/h       -322         CCS 57200 #22-02)       CS3       22-021-16       22-021-16       6d/h       -322         CCS 57200 #22-02)       14       13-10-16       28-10-16       O%       6d/h       -322         C2-2140 #22-0216       CSA 572-05       D1-11-16       O%       6d/h       -322         C2-2140 #22-0216       CSA 572-06       D1-11-16       O%       6d/h       -322         C2-2140 #22-0716       D1-11-16       O%       6d/h       -322         C2-2140 #22-0717       14       10-02-07-16       D1-08-14       O%       6d/h       -307         I1-0110 #1 - Falsework & Base F/W (P105-P107)       14       25-07-16       O9-08-14       O%       6d/h       -307         I1-0220 #1 - Saber bender member (P105-P107)       14       25-08-16       O%       6d/h       -307         I1-0220 #1 - Concrete base portion (P105-P107)       10       59-08-16       O%       6d/h       -307         I1-0220 #1 - Concrete base portion (P105-P107)       10       05-09-16	
215 (#2029-#209)       23       24:09-16       25:10-11       6d/n       322         22.210       B25 - Rabework & Base F/W (#208-#209)       14       24:09-16       13:10-16       0%       6d/n       -322         dign 1       46       02:0-716       D4:11:11       0%       6d/n       -322         dign 1       46       02:0-716       D1:41:11       6d/n       -322         dign 1       46       02:0-716       D1:41:11       6d/n       -325         dign 1       46       02:0-716       D1:41:11       6d/n       -307         dign 1       46       02:0-716       D1:41:11       6d/n       -307         dign 1       14       02:0-716       D1:0-81:11       5d/n       -307         11:0200       B1 - Raisework & Base F/W (P105-P107)       14       25:0-91:11       0%       6d/n       -307         11:0210       B1 - Concrate top slach base portion (P105-P107)       1       05:0-91:1       0%       6d/n       -307         11:0220       B1 - Concrate top slach base portion (P105-P107)       1       05:0-91:1       0%       6d/n       -307         11:0220       B1 - Concrate top slach base portion (P108-A109)       14       2:0-91:16	
22-2130       B25 - Fabework & Base F/W (P208-P209)       14       24-09-16       13-10-1t       0%       6d/h       -322         22-2140       B25 - Rebar & post-tender member (P208-P209)       14       13-10-1t       0%       6d/h       -322         der.1	
22-2140       B25 - Rebar & post-tender member (P208-P209)       14 <td></td>	
dign:1       -46, 02.07.16       D4-11.14       Bit/h       -307         et & Abdurheint.       110       02.07.16       D1.98.34       64/h       226         11-0110       B1 - Files & Abutment P103 (1 nos)       14       02.07.16       01.08.14       50%       64/h       -256         11-0200       B1 - Falsework & Base F/W (P105-P107)       14       25-09-16       64/h       -307         11-0220       B1 - Falsework & Base F/W (P105-P107)       14       25-08-16       0%       64/h       -307         11-0220       B1 - Galework & Post-tender member (P105-P107)       12       25-08-16       0%       64/h       -307         11-0220       B1 - Ganoreta ko past-tender member (P105-P107)       12       25-08-16       0%       64/h       -307         11-0220       B1 - Ganoreta ko past-tender member (P105-P107)       10       05-09-16       0%       64/h       -307         11-0250       B1 - Curing & post-tender member (P107)       14       06-09-16       22-09-16       0%       64/h       -307         11-220       B1 - Balswork & Base F/W (P108-A109)       14       25-08-16       0%       64/h       -307         11-220       B1 - Rebar & post-tender member (P108-A109)       14       25-09-1	
art & Abutment       14       02-07-16       02-08-14       add/n       -256         11-0110       B1 - File & Abutment P103 (1 nos)       14       02-07-16       02-08-14       50%       6d/n       -256         11-0110       B1 - File & Abutment P103 (1 nos)       12       2507-16       22-08-16       50%       6d/n       -307         11-0200       B1 - Falsework & Base F/W (P105-P107)       14       12-08-16       25-08-14       0%       6d/n       -307         11-0210       B1 - Rehar & post-tender member (P105-P107)       14       12-08-16       25-08-14       0%       6d/n       -307         11-0220       B1 - Concrete base portion (P105-P107)       12       29-08-16       25-08-14       0%       6d/n       -307         11-0240       B1 - Concrete base portion (P105-P107)       10-50-9-16       05-09-14       0%       6d/n       -307         11-0240       B1 - Concrete base sorting (P108-A109)       14       26-09-16       22-09-14       0%       6d/n       -307         11-2200       B1 - Falsework & Base F/W (P108-A109)       14       26-09-16       22-09-16       0%       6d/n       -307         11-2200       B1 - Falsework & Base F/W (P108-A109)       14       12-09-16       28-	
N1-0110       B1 - Pier & Abutment P103 (1 nos)       14       02-07-16       01-08-14       50%       6d/h       -256         N1-0200       B1 - Falsevork & Base F/W (P105-P107)       14       25-07-16       09-08-11       0%       6d/h       -307         N1-0210       B1 - Falsevork & Base F/W (P105-P107)       14       10-08-16       25-08-11       0%       6d/h       -307         N1-0210       B1 - Falsevork & Dase Formworks (P105-P107)       1       29-08-16       27-08-14       0%       6d/h       -307         N1-0220       B1 - Concrete base portion (P105-P107)       1       29-08-16       27-08-14       0%       6d/h       -307         N1-0250       B1 - Concrete base portion (P105-P107)       1       05-09-14       0%       6d/h       -307         N1-0250       B1 - Concrete base showing (P105-P107)       14       06-09-14       0%       6d/h       -307         N1-0250       B1 - Concrete base showing (P108-A109)       14       12-09-16       22-09-14       0%       6d/h       -307         N1-280       B1 - Relaw A post-tender member (P108-A109)       14       12-09-16       0%       6d/h       -307         N1-280       B1 - Relaw A post-tender member (P108-A109)       14       12-016 </td <td></td>	
Vicit 1 (P105-P107)       11       23:07-16       22:09-16       66/7       -307         11-0200       B1 - Rabevrak & Base F/W (P105-P107)       14       25:07-16       09-08-11       0%       6d/h       -307         11-0210       B1 - Rebar & post-tender member (P105-P107)       14       25:08-16       25:08-11       0%       6d/h       -307         11-0210       B1 - Concrete base portion (P105-P107)       1       29:08-16       25:08-11       0%       6d/h       -307         11-0210       B1 - Concrete base portion (P105-P107)       1       05:09-16       0%       6d/h       -307         11-0250       B1 - Concrete base portion (P105-P107)       1       05:09-16       0%       6d/h       -307         11-0250       B1 - Concrete base sportion (P108-A109)       14       06:09-16       0%       6d/h       -307         11-280       B1 - Rebar & post-tender member (P108-A109)       14       26:09-16       0%       6d/h       -307         11-280       B1 - Concrete base portion (P108-A109)       14       26:09-16       0%       6d/h       -307         11-300       B1 - Concrete base portion (P108-A109)       14       26:09-16       0%       6d/h       -307         11-300	
N1-0200       B1 - Falsework & Base F/W (P105-P107)       14       25-07-16       09-08-14       0%       6d/h       -307         N1-0210       B1 - Bebar & post-tender member (P105-P107)       14       10-08-16       25-08-14       0%       6d/h       -307         N1-0210       B1 - Concrete base portion (P105-P107)       12       29-08-16       29-08-14       0%       6d/h       -307         N1-0240       B1 - Top slab mebar (P105-P107)       12       29-08-16       03-09-14       0%       6d/h       -307         N1-0240       B1 - Top slab mebar (P105-P107)       1       05-09-16       05-09-16       0%       6d/h       -307         N1-0260       B1 - Concrete bap sale (P105-P107)       1       05-09-16       0%       6d/h       -307         N1-0260       B1 - Concrete bap sale (P108-A109)       14       26-09-16       29-09-14       0%       6d/h       -307         N1-2200       B1 - Falsework & Base F/W (P108-A109)       14       12-09-16       0%       6d/h       -307         N1-230       B1 - Concrete bap sale pottom (P108-A109)       1       42-09-16       29-09-14       0%       6d/h       -307         N1-300       B1 - State form works (P108-A109)       1       15-16	
14-0210       B1 - Rebar & post-tender member (P105-P107)       14       10-08-16       25-08-14       0%       6d/h       -307         14-0220       B1 - Side formworks (P105-P107)       5       23-08-16       27-08-14       0%       6d/h       -307         11-0210       B1 - Concrete base portion (P105-P107)       1       25-08-14       0%       6d/h       -307         11-0210       B1 - Concrete base portion (P105-P107)       1       25-08-16       0%       6d/h       -307         11-0250       B1 - Concrete base portion (P105-P107)       1       05-09-16       0%       6d/h       -307         11-0250       B1 - Concrete base portion (P105-P107)       1       05-09-16       0%       6d/h       -307         11-0250       B1 - Falsework & Base F/W (P108-A109)       14       26-09-16       22-09-16       0%       6d/h       -307         11-280       B1 - Falsework & Base F/W (P108-A109)       14       12-09-16       0%       6d/h       -307         11-290       B1 - State formworks (P108-A109)       14       12-09-16       0%       6d/h       -307         11-300       B1 - Concrete base portion (P108-A109)       1       15-10-16       0%       6d/h       -307         11	
81 - 3220       81 - 5ide formworks (P105-P107)       5       23-08-16       27-08-16       0%       6d/h       -307         11 - 0210       81 - Concrete base portion (P105-P107)       1       29-08-16       0%       6d/h       -307         11 - 0210       81 - Concrete base portion (P105-P107)       1       05-09-16       0%       6d/h       -307         11 - 0210       81 - Concrete base portion (P105-P107)       1       05-09-16       0%       6d/h       -307         11 - 0210       81 - Concrete base portion (P105-P107)       1       05-09-16       0%       6d/h       -307         11 - 0210       81 - Falsework & Base F/W (P108-A109)       14       126-09-16       22-09-16       0%       6d/h       -307         11 - 220       81 - Stake & post-tender member (P108-A109)       14       12-09-16       0%       6d/h       -307         11 - 300       81 - Concrete base portion (P108-A109)       1       12-01-16       0%       6d/h       -307         11 - 300       81 - Concrete base portion (P108-A109)       1       13-10-16       13-10-16       0%       6d/h       -307         11 - 300       81 - Concrete base portion (P108-A109)       1       13-10-16       13-10-16       0%       6d/h	
11-0210       B1 - Concrete base portion (P105-P107)       1       29-08-16       0%       6d/h       -307         14-0240       B1 - Top side nethar (P105-P107)       5       30-08-16       03-09-16       0%       6d/h       -307         14-0250       B1 - Concrete top side (P105-P107)       1       05-09-16       0%       6d/h       -307         14-0250       B1 - Concrete top side (P105-P107)       1       05-09-16       0%       6d/h       -307         0250       B1 - Concrete top side (P105-P107)       14       06-09-16       0%       6d/h       -307         02512       P10K-A109)       12       20-08-16       12-09-11       0%       6d/h       -307         021-220       B1 - Rebark & post-tendem member (P108-A109)       14       12-09-16       28-10-16       0%       6d/h       -307         11-300       B1 - Concrete base portion (P108-A109)       1       05-10-16       0%       6d/h       -307         11-310       B1 - Concrete base portion (P108-A109)       1       15-10-16       0%       6d/h       -307         11-320       B1 - Concrete top side (P108-A109)       1       15-10-16       0%       6d/h       -307         11-320       B1 - Concrete top si	
11-0240       B1 - Top slab rebar (P105-P107)       5       30-08-16       03-09-16       0%       6d/h       -307         15-0250       B1 - Concrete top slab (P105-P107)       1       05-09-16       0%       6d/h       -307         11-0260       B1 - Concrete top slab (P105-P107)       14       06-09-16       22-09-16       0%       6d/h       -307         11-0260       B1 - Concrete top slab (P105-P107)       14       06-09-16       22-09-16       0%       6d/h       -307         11-220       B1 - Falsework & Base F/W (P108-A109)       14       12-09-16       29-014       0%       6d/h       -307         11-230       B1 - State formworks (P108-A109)       14       12-09-16       29-014       0%       6d/h       -307         11-230       B1 - Concrete top sace portion (P108-A109)       14       12-09-16       0%       6d/h       -307         11-300       B1 - Concrete top sace portion (P108-A109)       1       15-16       15-10-16       0%       6d/h       -307         11-300       B1 - Concrete top sace portion (P108-A109)       1       15-10-16       0%       6d/h       -307         11-300       B1 - Concrete top sace (P108-A109)       1       15-10-16       0%       6d/h </td <td></td>	
81-0250       B1 - Concrete top slab (P105-P107)       1       05-09-16       05-09-16       05-09-16       050         81-0200       B1 - Curing & post-tensioning (P105-P107)       14       06-09-16       22-09-11       056       6d/h       -307         81-2200       B1 - Falsework & Base F/W (P108-A109)       132       26/08-16       22-09-11       056       6d/h       -307         81-3200       B1 - Falsework & Base F/W (P108-A109)       14       22-09-16       056       6d/h       -307         81-300       B1 - Concrete top softom (P108-A109)       14       22-09-16       056       6d/h       -307         81-300       B1 - Concrete top softom (P108-A109)       14       12-09-16       28-09-16       056       6d/h       -307         81-300       B1 - Concrete top softom (P108-A109)       10       051-016       051-011       056       6d/h       -307         81-300       B1 - Concrete top softom (P108-A109)       1       13-10-16       151-014       056       6d/h       -307         11-330       B1 - Concrete top soft pottom (P108-A109)       14       14-10-16       29-10-16       064       -307         11-340       B1 - Falsework & Base F/W (P103-P104)       14       03-10-16       04-11-16 </td <td></td>	
11-0260       B1 - Curing & post-tensioning (P105-P107)       14       06-09-16       22-09-1t       0%       6d/h       -307         6xt 2 (P108-A109)       53       25/09-1t       0%       6d/h       -307         11-270       B1 - Falsework & Base F/W (P108-A109)       14       26-09-1t       0%       6d/h       -307         11-270       B1 - Falsework & Base F/W (P108-A109)       14       12-09-1t       0%       6d/h       -307         11-280       B1 - Relaw & post-tender member (P108-A109)       14       12-09-1t       0%       6d/h       -307         11-290       B1 - Side formworks (P108-A109)       1       12-09-1t       0%       6d/h       -307         11-300       B1 - Concrete base portion (P108-A109)       1       05-10-1t       0%       6d/h       -307         11-300       B1 - Concrete base portion (P108-A109)       1       14-10-15       25-10-1t       0%       6d/h       -307         11-300       B1 - Concrete base portion (P108-A109)       14       14-10-15       25-10-1t       0%       6d/h       -307         11-300       B1 - Concrete base portion (P108-P104)       14       14-10-15       25-10-1t       0%       6d/h       -307         11-3400	
Sch 2 (P10R-A109)       52 2010 8.16       29-10-10       66171       -307         51 - 700       61 - falsework & Base F/W (P108-A109)       14 26-08-16       12-09-16       0%       6d/h       -307         51 - 280       B1 - Rabar & post-tender member (P108-A109)       14 12-09-16       28-09-16       0%       6d/h       -307         51 - 280       B1 - Rabar & post-tender member (P108-A109)       14 12-09-16       28-09-16       0%       6d/h       -307         51 - 300       B1 - Concrete base portion (P108-A109)       10 55-10-16       05-10-11       0%       6d/h       -307         51 - 300       B1 - Concrete base portion (P108-A109)       10 55-10-16       05-10-11       0%       6d/h       -307         51 - 300       B1 - Concrete top slab (P108-A109)       11 31-016       13-10-16       0%       6d/h       -307         11-320       B1 - Concrete top slab (P108-A109)       11 31-016       13-10-16       0%       6d/h       -307         11-330       B1 - Concrete top slab (P108-A109)       11 31-016       13-10-16       0%       6d/h       -307         11-340       B1 - Falsework & Base f/W (P103-P104)       14 03-10-16       29-10-16       0%       6d/h       -307         11-350       B1 - Rebar	
1.270     61 - Falsework & Base F/W (P108-A109)     14     220-03-05     12-09-16     056     6d/h       11-280     81 - Rebar & Rost-render member (P108-A109)     14     12-09-16     28-09-16     056     6d/h     -307       11-280     81 - State & Rost-render member (P108-A109)     14     12-09-16     28-09-16     056     6d/h     -307       11-290     81 - State & Rost-render member (P108-A109)     14     12-09-16     056     6d/h     -307       11-300     81 - Concrete base portion (P108-A109)     1     051-0-16     051-0-11     056     6d/h     -307       11-310     81 - Concrete base portion (P108-A109)     1     13-10-16     13-10-16     6d/h     -307       11-320     81 - Concrete base post-tensioning (P108-A109)     1     13-10-16     056     6d/h     -307       11-330     81 - Concrete base post-tensioning (P108-A109)     14     14-10-16     29-10-16     056     6d/h     -307       11-340     81 - Falsework & Base F/W (P103-P104)     14     03-10-16     04-11-16     056     6d/h     -307       11-340     81 - Falsework & Base F/W (P103-P104)     14     03-10-16     051     6d/h     -307       11-350     81 - Rober & Bost-tender member (P103-P104)     14     02-10-16 <td></td>	
11 280       B1 - Rebar & post-tender member (P108-A109)       14       12-09-16       28-09-16       0%       6d/h       -307         11-290       B1 - Side formworks (P108-A109)       5       28-09-16       0%       6d/h       -307         11-300       B1 - Concrete base portion (P108-A109)       1       05-10-16       0%       6d/h       -307         11-300       B1 - Concrete base portion (P108-A109)       1       05-10-16       05-10-11       0%       6d/h       -307         11-310       B1 - Concrete base portion (P108-A109)       1       15-10-16       05%       6d/h       -307         11-310       B1 - Concrete base portion (P108-A109)       1       11-10-16       0%       6d/h       -307         11-320       B1 - Curing & post-tensioning (P108-A109)       11       11-10-16       0%       6d/h       -307         11-330       B1 - Curing & post-tensioning (P108-A109)       14       14-10-16       29-10-16       0%       6d/h       -307         11-340       B1 - Falsework & Base F/W (P103-P104)       14       23-10-16       04-11-16       0%       6d/h       -307         11-340       B1 - Rebar & post-tender member (P103-P104)       14       29-10-16       0%       6d/h       -307	
11-290       B1 - Side formworks (P108-A109)       5       28-09-16       04-10-14       0%       6d/h       -307         11-300       B1 - Concrete base portion (P108-A109)       1       05-10-16       05-10-11       0%       6d/h       -307         11-310       B1 - Top slab rebar (P108-A109)       1       05-10-16       05-10-11       0%       6d/h       -307         11-320       B1 - Concrete top slab (P108-A109)       1       13-10-16       13-10-11       0%       6d/h       -307         11-330       B1 - Curing & post-tensioning (P108-A109)       1       13-10-16       13-10-11       0%       6d/h       -307         11-330       B1 - Curing & post-tensioning (P108-A109)       14       14-10-16       04-11-11       0%       6d/h       -307         11-340       B1 - Curing & post-tensioning (P108-P104)       14       20-10-16       04-11-11       0%       6d/h       -307         11-350       B1 - Rebar & Base F/W (P103-P104)       14       20-10-16       04-11-11       0%       6d/h       -307         11-350       B1 - Rebar & Bost - Marcher Member (P103-P104)       14       20-10-16       04-11-11       0%       6d/h       -307         10/40 & 4       20-00-16       04-10-	
11-300       B1 - Concrete base portion (P108-A109)       1       05-10-16       05-10-16       054       -307         11-310       B1 - Top side nebar (P108-A109)       5       05-10-16       12-10-16       055       64/h       -307         11-320       B1 - Concrete top side (P108-A109)       1       13-10-16       13-10-16       055       64/h       -307         11-320       B1 - Concrete top side (P108-A109)       1       13-10-16       13-10-16       055       64/h       -307         11-320       B1 - Concrete top side (P108-A109)       1       14-10-16       13-10-16       055       64/h       -307         11-330       B1 - Concrete top side (P108-P104)       14       14-10-16       25-10-16       04-11-17       055       64/h       -307         11-350       B1 - Rebar & post-tender member (P103-P104)       14       02-10-16       04-11-16       055       64/h       -307         11-350       B1 - Rebar & post-tender member (P103-P104)       14       02-10-16       04-11-16       056       64/h       -307         11-350       B1 - Rebar & post-tender member (P103-P104)       14       02-10-16       04-11-16       056       64/h       -307         11-300       B1 - Rebar & post-tend	
11.310       B1 - Top slab rebar (P108-A109)       5 0 65 10:16       0.71 0:16       0.71 0:16       0.71 0:16         11.320       B1 - Concrete top slab (P108-A109)       1 13-10-16       12-10-16       0.75 6:4/h       -307         11.320       B1 - Curing & post-tensioning (P108-A109)       1 13-10-16       13-10-16       0.75 6:4/h       -307         11.320       B1 - Curing & post-tensioning (P108-A109)       1 13-10-16       12-10-16       0.75 6:4/h       -307         11.330       B1 - Falsework & Base F/W (P103-P104)       14       03-10-16       20-10-16       0.75 6:4/h       -307         11-340       B1 - Falsework & Base F/W (P103-P104)       14       03-10-16       20-10-16       0.75 6:4/h       -307         11-350       B1 - Robar & post-tender member (P103-P104)       14       20-10-16       0.75 6:4/h       -307         dge 4       104       27-04-16       29-10-16       6:4/h       -484         vor P1e       36 127:04-16       07-10.17       6:4/h       -466         4-0010       B4 - Bore P1ie P403, P404 (4 nos)       63       27-04-16       20-10-16       6:4/h       -462         4-0010       B4 - Bore P1ie P403, A401 (4 nos)       63       27-04-16       20-10-16       6:5/h       -62	
11-320       81 - Concrete top slab (P108-A109)       1       13-10-16       13-10-16       0%       6d/h       -307         11-330       61 - Curing & post-tensioning (P108-A109)       14       14-10-16       29-10-11       0%       6d/h       -307         11-330       61 - Curing & post-tensioning (P108-A109)       14       14-10-16       29-10-11       0%       6d/h       -307         11-340       81 - Falsework & Base F/W (P103-P104)       14       03-10-16       20-10-11       0%       6d/h       -307         11-350       81 - Rebar & post-tender member (P103-P104)       14       20-10-16       0%       6d/h       -307         dge 4       104       27-04-16       29-10-11       0%       6d/h       -484         exp Ple       36       27-04-16       29-10-11       6d/h       -484         4-0010       84 - Bore Plie P403, P404 (4 nos)       63       27-04-16       29-10-11       6d/h       -462         4-0020       84 - Bore Plie P403, P404 (4 nos)       63       27-04-16       20-10-11       61/h       -462         4-0030       64 - Bore Plie P403, P404 (4 nos)       63       27-04-16       20-10-11       0%       6d/h       -462         4-0030 <t< td=""><td></td></t<>	
11-330       B1 - Curing & post-tensioning (P108-A109)       14       14-10-16       29-10-1t       0%       6d/h       -307         64/3       (P103+P104)       28       03-10-16       04-11-1c       0.6/h       -307         11-340       B1 - Falsework & Base F/W (P103-P104)       14       20-10-1t       0%       6d/h       -307         dige 4       104       27-04-16       29-10-1t       0%       6d/h       -307         dige 4       104       27-04-16       29-10-1t       0%       6d/h       -307         dige 4       104       27-04-16       29-10-1t       0%       6d/h       -466         so P3de       36       27-04-16       07-10-1t       4.66       -466         40-0010       B4 - Bore P1ie P403, P404 (4 nos)       63       27-04-16       20-10-1t       61/h       -462         40-0020       B4 - Bore P1ie P403, P404 (4 nos)       63       27-04-16       20-10-1t       0%       6d/h       -462         40-0030       B4 - Bore P1ie P403, P404 (4 nos)       63       27-04-16       20-10-1t       0%       6d/h       -462         40-0030       B4 - Bore P1ie P403, A401 (4 nos)       63       27-10-1t       0%       6d/h       -	
Sck 3 (P103-P104)         28 (03-10-16)         04-1-1-10         6d/h         -307           11-300         81 - Falsework & Base F/W (P103-P104)         14 (03-10-16)         20-10-11         0% (6d/h)         -307           11-350         81 - Robar & post-tender member (P103-P104)         14 (20-10-16)         04-11-11         0% (6d/h)         -307           01-350         81 - Robar & post-tender member (P103-P104)         14 (20-10-16)         04-11-11         0% (6d/h)         -307           03(6-4         106 (27-04-16)         02-10-12         0% (6d/h)         -307           360 - 8         27-04-16         07-10-12         6d/h)         -466           40-010         84 - 80re Pile P403, P404 (4 nos)         63 (27-04-16)         20-10-12         4.75%         6d/h)         -465           40-010         84 - 80re Pile P402, A401 (4 nos)         63 (27-04-16)         20-10-11         0% (6d/h)         -465           40-010         84 - 80re Pile P402, A401 (4 nos)         63 (27-04-16)         20-10-11         0% (6d/h)         -465           40-010         84 - 80re Pile P402, A401 (4 nos)         63 (27-04-16)         20-10-11         0% (6d/h)         -465           40-010         84 - 80re Pile P402, A401 (4 nos)         63 (27-01-16)         29-10-11         0	
11-340       81 - Falsework & Base F/W (P103-P104)       14       03-10-16       20-10-16       0%       6d/h       -307         11-350       81 - Rebar & post-tender member (P103-P104)       14       20-10-16       04-11-16       0%       6d/h       -307         64.6.4       104       27-04-16       29-10-16       04-11-16       0%       6d/h       -488         200 P36       36       27-04-16       07-10-11       6d/h       -488         40-010       84 - Bore P1le P405, P406 (4 nos)       63       27-04-16       07-10-11       4.75%       6d/h       -466         44-0020       84 - Bore P1le P403, P404 (4 nos)       63       27-04-16       20-08-11       61.9%       6d/h       -462         44-0030       84 - Bore P1le P403, A401 (4 nos)       63       25-07-16       20-10-11       61.9%       6d/h       -466         42002       84 - Bore P1le P402, A401 (4 nos)       63       25-07-16       10-10-11       65/h       -462         44-0030       84 - Bore P1le P402, A401 (4 nos)       63       29-10-11       0%       6d/h       -466         42 con       21       105-10-16       29-10-11       0%       6d/h       -466	
11-350     B1 - Rebar & post-tender member (P103-P104)     14     20-10-16     04-11-16     0%     6d/h     -307       dge 4     104     27-04-16     29-10-16     6d/h     -484       vin P1e     36 [27-04-16     07-10-11     6d/h     -464       44-0010     B4 - Bore P1le P403, P404 (4 nos)     63     27-04-16     20-08-11     61/h     -462       44-0010     B4 - Bore P1le P402, A401 (4 nos)     63     27-04-16     20-08-11     61.9%     6d/h     -462       44-0010     B4 - Bore P1le P402, A401 (4 nos)     63     27-01-11     0%     6d/h     -466       42-0010     B4 - Bore P1le P402, A401 (4 nos)     63     29-10-11     0%     6d/h     -466	
dgg 4         104_27-04-16         29-10-16         6d/h         -484           vic Pile         36_27-04-16         07-10-17         6d/h         -484           u4-0010         84-80re Pile P403, P406 (4 nos)         63         04-07-16         04-10-11         4.75%         6d/h         -466           u4-0010         84 - 80re Pile P403, P404 (4 nos)         63         27-04-16         20-08-11         61.9%         6d/h         -462           u4-0010         84 - 80re Pile P402, A401 (4 nos)         63         27-04-16         20-08-11         0%         6d/h         -466           u4-0010         84 - 80re Pile P402, A401 (4 nos)         63         29-10-11         0%         6d/h         -466           u6 con         21         075-10-16         29-10-11         0%         6d/h         -505	
Scie Pile         Scie 27:04-16         07:10-11         6d/h         4466           44-0010         84 - Bore Pile P403, P404 (4 nos)         63 20-07-16         04-10-16         4.758/         6d/h         -505           44-0010         84 - Bore Pile P402, A401 (4 nos)         63 27-04-16         20-08-16         61.9%         6d/h         -466           44-0010         84 - Bore Pile P402, A401 (4 nos)         63 25-07-16         07-10-11         0%         6d/h         -466           46-0010         84 - Bore Pile P402, A401 (4 nos)         63 25-07-16         07-10-11         0%         6d/h         -466           40-0010         84 - Bore Pile P402, A401 (4 nos)         63 25-07-16         07-10-11         0%         6d/h         -466	
M4-0010         B4 - Bore Pile P405, P406 (4 nos)         63         04-07-16         04-10-16         4.76%         66/h         -505           M4-0020         B4 - Bore Pile P403, P404 (4 nos)         63         27-04-16         20-08-11         61.9%         6d/h         -462           M4-0030         B4 - Bore Pile P402, A401 (4 nos)         63         25-07-16         07-10-11         0%         6d/h         -466           M4-0030         B4 - Bore Pile P402, A401 (4 nos)         63         25-07-16         07-10-11         0%         6d/h         -466	
4-0020         B4 - Bore Plie P403, P404 (4 nos)         63         27-04-16         20-08-1t         61.9%         6d/h         -462           4-0030         B4 - Bore Plie P402, A401 [4 nos)         63         25-07-16         07-10-1t         0%         6d/h         -466           N Gio         21         05.10         16         29.10         11         65/h         505	
44-0030         84 - 8one Pille P402, A401 [4 mos)         63         25-07-16         07-10-11         0%         6d/h         -466           Ac Coo         21         05-10-16         29-10-11         65/h         505	
e Cao	
AND	
	and commencement of the second s
4-0040 B4 - Pile Cap P405, P406 (2 nos) 21:05-10-16 29-10-11 0% 6d/h - 505 dge 7 119:25-07-16 13:12:11 6d/h - 333	
119/25/07/16 12/12/11 60/16 333 94/Ph	
Send particular in the send of	
77-1030 87 - Pile Cap P703, P704, P705 (3 nos) 21 08-10-16 02-11-1( 0% 6d/h - 372	
Remaining Level of Effort D-C Remaining Work. Summary Page 3 of 6	Date Revision Ch Approve
Actual Level of Effort Actual Level of Effort Actual Level of Effort	24-07-16 monthly Report No. 24



Y	Xctivity Name	Original Start Duration	Finish	Actives % Complete	Calendar	Total Ficat	8 03 10 17 24 31 67 14 1	2018	September	Oct	uber N
ge 8		63 20-10-16	04-01-17	-	6d/h	-366				02 09	V 23 30
e Pie		63 20-10-16			6d/h	-366					Y
	88 - Bore Pile P803, P804 (4 nos)	63 20-10-16		0%							
ge 6		109 12-05-16	of the summer of the local division of the l	-	6d/h	-		_			
e Pile	86 - Bore Pile P602-P603 (4 nos)	66 12-05-16 63 25-05-16	25-08-11	55.56%	6d/h	-208					
	B6 - Bore Pile P604, A605 (4 nos) B6 - Bore Pile P604, A605 (4 nos)	63 12-05-16		61.9%	6d/h						
Can	Bo - Bole Prie Poot, Abos (4 nos)	35 25-08-16	STATISTICS IN CONTRACTOR	61.5 %	6d/h	-222		*****			
	86 - Pile cap P502-P603 (2 nos)	14 26-08-16	Contraction of the local distance of the loc	0%	6d/h	Concession of the local division of the loca					
	86 - Pile cap P604, A605 (2 nos)	21 12-09-16	07-10-16	0%	6d/h	-222					
& Abu	tmont	35 12-09-16	25-10-16	-	6d/h	222					
	86 - Pier & Abutment P602-P603 (2 nos)	14 12-09-16		0%					<b></b>		
And in case of the local division of the loc	86 - Pier & Abutment P604, A605 (2 nos)	14 08-10-16	of the local division of the local divisiono	0%	6d/h	summer of the local division of the		AND DECEMBER OF THE PARTY OF			
And a state of the	01-P602)	28 29 09 16	and a second second		6d/b	233					-
	B5 - Falsework & Base F/W (A601-P602)	14 29-09-16		0%	6d/h						
-1130 ge 5	86 - Rebar & post-tender member (A601-P602)	14 18-10-16 127 28-04-16		0%	6d/h 6d/h	-233					
e Prin	and the second se	114 28:04-16			6d/h	-144					
	85 - Bore Pile PS02- A503 (4 nos)	63 28-04-16		77.78%	6d/h						
	85 - Bore Pile P504-P505(4 nos)	63 06-05-16		61.9%	6d/h				1		
	B5 - Bore Pile P507-A508(4 nos)	63 10-06-16	27-09-1f	12.7%	6d/h	-144					
Cap	State and the second	62 10 08 16	24-10-11	- Chine Street	6d/h	-144					
+1040	B5 - Pile Cap P502, A503 (2 nos)	14 10-08-16	25-08-1t	0%	6d/h	-127					
	85 - Pile Cap P504, P505 (2 nos)	14 22-08-16	06-09-16	0%	6d/h	-137			1000		
-1070	B5 - Pile Cap P507, A508 (2 nos)	21 28-09-16	24-10-16	0%	6d/h	-144			-		
raabu		24 26 08 16	the second s		6d/h	-137					
	B5 - Pier & Abutment P502, A503 (2 nos)	14 26-08-16		0%							
	85 - Pier & Abutment P505, P504 (2 nos)	14 07-09-16	and the second second second	0%	_	and the second s					
	wer Drainage Works	109 27-06-16	and the second se		6d/h	-199					
and the second second	ibelow +1.3m (2m/day)	86 12-07-16 48 25-07-16	of the local division in which the local division in which the local division in the loc	States and a local division of	64/h	and the second se					
	ert (3 near B) end Box C3.2 - M42E.5 (8m) 1050mm	10 25-07-16	of the second	0%		-434					
	M42E.5 - M38E.3 (25m) 900mm	13 05-08-16		0%	6d/h				to concerning a subject of		*****
	M38E.3 - M37E.1 (25m) 300mm	13 20-08-16		0%			-				
	M38E.3 - M38E.1 (49m) 450mm	25 20-08-16		0%	6d/h		-				
[c] - end	of \$1 million and the second second second second	38 20-09-16	04-11-16	al and the	6d/h	434			-		
	M42E.5 - M42E.4 (38m) 750mm	19 20-09-16		0%							
_	M42E.4 - M42E.3 (37m) 600mm	19 14-10-16		0%	6d/h	-					
	ween B1 & B2	87 25-07-16	31-10-16		6d/h	-432					
	Box C3.1 - M34E.8 (2.65m) 1200mm	30 25-07-16		0%							
	M34E.8 - M33E.2 (42m) 600mm	21 05-08-16		0%	6d/h 6d/h						
	M33E.2 - M33E.1 (40m) 450mm M34E.8 - M34E.7 (27m) 1050mm	20 30-08-16		0%						-	
	M34E.8 - M34E.7 (27m) 1050mm M34E.7 - M34E.6 (33m) 900mm	14 23-09-16		0%						-	
	rulvert C4	44 02-08-16	and the second se		6d/h	-370				10	
	Box C4.1 - M4E.9 (48m) 900mm	24 02-08-16		0%							
	M4E.11 - M2E.1 (19m) 450mm	10 30-08-16		0%							
-0140	M4E10 - M3E2 (20m) 450mm	20 10-09-16	22-09-16	0%	6d/h	-370		•	<b></b>		
) - Sejina		78 18-07-16	26-10-11		6d/in	-191					
	M76A.23 - M53A.9 (44m) 1200mm	22 18-07-16		18.18%							
	M76A.22 - M66A.6 (12m) 600mm	6 08-08-16		0%	6d/h						
	M76A.21 - M49A.11 (58m) 1200mm	29 15-08-16		0%	6d/h						
-0520	M76A.20 - M67A.6 (17m) 900mm	9 19-09-16	28-09-10	0%	6d/h	-191				lot 1	
	maining Level of Effort Emeraining Work	Summ	vary				Page 4 of 6	Date	Revision	Ch	Approved
AC	tual Level of Effort - Critical Remaining	Work	- 1				S 33 5 1 1 1 5 5 5 5 5 5	24-07-16	monthly Report No. 24		



D10355       MAX-14 (Max 14)       MAX-14 (M	D	Activity Name	Original Start Duration	Finish	Activity % Complete	Calendar	Total Filoat	July August	2016	September		October
300       MULL SUBJECT SUBJECT       17       051-146       261-161       051-061 <td>575</td> <td>M756 422 M524 10 (10m) 1050mm</td> <td></td> <td>05.10.14</td> <td></td> <td>2 - 1</td> <td>101</td> <td>0 10 17 28 31 07 14 2</td> <td>21 04</td> <td>11 10 25 1</td> <td>02 0</td> <td>16 23</td>	575	M756 422 M524 10 (10m) 1050mm		05.10.14		2 - 1	101	0 10 17 28 31 07 14 2	21 04	11 10 25 1	02 0	16 23
Noncepan         10 (070 Hz         Noncepan         0 (070 Hz         Noncepan         Noncepan         Noncepan         Noncepan         Noncepan         Noncepan         Noncepan         Noncepan         Noncepan <td></td>												
Geta       MLA13-MLA2.UB4A2.UB4A2.UB4A       Stability       Office       Stability       Stabi	-		and the second se	of the local division in which the	17.0	_			-		_	
1430       MAA13-MAA4_(17)*100m       13       04:10       04:6       4-21         110       Markadi (13)       10:200764       01:0       640       410         110       Markadi (13)       10:200764       10:0       640       410         110       Markadi (13)       10:200764       10:0       640       441         110       Markadi (13)       10:200764       10:0       640       441         110       Markadi (13)       10:200764       10:0       640       441         110       10:00076       10:200764       10:0       640       441         10:000       10:00076       10:00076       640       441       441         10:000       10:00076       10:00076       640       441       441         10:000       10:00076       10:00076       640       441       441         10:00076       10:00076       10:00076       640       441       441         10:00076       10:00076       10:00076       640       441       441       441       441       441       441       441       441       441       441       441       441       441       441       441       441				and the second					-			
Data Andre 11.30 (20-064)         101 (20-064)         000         071           Developed 11.30 (20-064)         000 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>enseeneer oo maan alaan ay ah ar ar</td><td></td><td></td><td></td><td>- Color Color and Color</td></td<>								enseeneer oo maan alaan ay ah ar				- Color Color and Color
Ul executed bit         Ul) Executed bit         Ul execut					Ule							
20200       M42-M42 (18/m) 750m       12/0-94 16       05/0-64       430         20200       M43-M42 (19/m) 750m       0       6/0-93 4       100 4 6/0       440         20200       M43-M42 (19/m) 750m       0       2/0-14       12/0-14			the second se			-						
20200       Met3_Met4_[7[n] (600m]       11 246.95       00.95 401       00.9 407       440         20200       Met3_Met1_Sing 300m       60.70 274.66       100.9 404       100.9 44.10       441         20200       Met3_Met1_Sing 300m       15 207.46       100.9 44.10       441       441         20200       Met3_Met1_Sing 300m       15 207.46       100.9 44.10       441       441         20200       Met3_Met1_Sing 300m       5 20.954       100.9 44.04       441       441         20200       Met3_Met1_Met1_Sing 300m       5 20.954       100.9 46.04       441       441         20200       Met1_Met1_Met1_Sing 300m       5 20.954       20.954       00.9 4.04       440       441         20200       Met1_Met1_Met1_Sing 300m       5 20.954       20.954       00.9 4.04       440       441       44				and the second			and the second se			2		
20 400 M412 - M12 (19m) 300m 0 7 2604 3 102 - M12 (19m) 300m 10 7 364 5 12 27 14 12 7 14 12 10 1 10 10 10 10 10 10 10 10 10 10 10 1												
Dis Conference         P2 / 2014											da d	
20.400       N112 - M112	the second s		0 00-09-10	12-09-10	0%	-						
202 0050       M12.5 - M12.2 (M1218) dollim       15 J 207 J6 207 J6 207 J6 206 J12 (F M16 J12 J6 J12			79 27 06 16	13.03.14	100%		448					
02-060       M124-Att212 (15%) Storm       5 0-09-16       0-09-17       <												
20 2070 M122-M122 (1407) 400mm 9 0 0-01-6 2 0-054 0 % 64/h 449 20 2058 M122-M122 (1407) 400mm 9 2 24-0-54 22-69-54 0% 64/h 449 20 2058 M122-M122 (1507) 450mm 9 2 24-0-54 22-69-54 0% 64/h 449 20 2058 M122-M122 (1507) 450mm 9 19 6 66-9 12 26-0-54 0% 64/h 449 20 2015 M643.1-M134 (150m) 50mm 9 19 6 66-9 12 26-0-54 0% 64/h 449 20 2015 M643.1-M134 (150m) 50mm 9 19 26-9 12 10-14 0% 64/h 449 20 2015 M643.1-M134 (150m) 50mm 9 19 26-9 12 10-14 0% 64/h 449 20 2015 M643.1-M134 (150m) 50mm 9 19 26-9 12 10-14 0% 64/h 449 20 2015 M643.1-M134 (150m) 50mm 9 19 26-9 12 10-14 0% 64/h 449 20 2015 M643.1-M134 (150m) 50mm 9 19 26-9 12 10-14 0% 64/h 449 20 2015 M643.1-M134 (150m) 50mm 9 19 26-9 12 10-14 0% 64/h 419 20 2015 M643.1-M134 (150m) 50mm 9 19 26-9 12 10-14 0% 64/h 319 20 2015 M121-M124 (120m) 30mm 9 19 26-9 12 10-14 0% 64/h 319 20 2015 M121-M124 (120m) 30mm 9 19 26-9 12 10-14 0% 64/h 319 20 2015 M121-M124 (120m) 30mm 9 19 26-9 12 10-14 0% 64/h 319 20 2015 M121-M124 (120m) 30mm 9 19 26-9 12 10-14 0% 64/h 319 20 2015 M121-M124 (120m) 30mm 9 19 26-9 12 10-14 0% 64/h 319 20 2015 M121-M124 (120m) 30mm 9 19 26-9 12 10-14 0% 64/h 319 20 2015 M121-M124 (120m) 30mm 9 19 26-9 12 10-14 0% 64/h 319 20 2015 M121-M124 (120m) 30mm 9 19 26-9 12 10-14 0% 64/h 319 20 2015 M121-M124 (120m) 30mm 9 19 26-9 12 10-14 0% 64/h 319 20 2015 M12-M124 (120m) 30mm 9 19 26-9 12 10-14 0% 64/h 319 20 2015 M12-M124 (120m) 30mm 9 19 26-9 12 10-14 0% 64/h 319 20 2015 M12-M124 (120m) 30mm 9 19 26-9 12 10-14 0% 64/h 319 20 2015 M12-M124 (120m) 30mm 9 19 26-9 12 10-14 0% 64/h 319 20 2015 M12-M124 (120m) 30mm 9 19 26-9 12 10-14 0% 64/h 319 20 2015 M12-M124 (120m) 30mm 9 19 26-9 12 10-14 0% 64/h 319 20 2015 M12-M124 (120m) 400m 9 11-10 10 0% 64/h 319 20 2015 M12-M124 (120m) 400m 9 11-10 0% 64/h 319 20 2015 M12-M124 (120m) 400m 9 11-14 10 0% 64/h 319 20 2015 M12-M124 (120m) 400m 9 11-14 0% 64/h 412 10 190 0mm 9 11 10-12 0% 100 0% 70% 74 400 40 20 400 40 40 40 40 40 40 113 2607/h 10 10% 77 4000 40 20 400 40 40 40 40 40 40 40 40 40/h 4		President of the second state of the second st										
D2 0000 ULL2 - VULL2 -										102-111111-112-27-11-11		
D2 0005 M112 - VUIZE AZ (Im) 450mm 2 21 00-95 22 20-94 00 6 64/h 448 0 469/h 412 0 460/h 4												
02-0090       034 02-0       034 02-0       034 02-0       034 02-0         02-0090       043 02-0       043 02-0       043 02-0       043 02-0       043 02-0         02-0090       043 02-0       043 02-0       043 02-0       043 02-0       043 02-0       043 02-0         02-0100       0454.1.1       0454.1.1       045 02-0       043 02-0       040 02-0       040 02-0												
Kig uters 2:       Kig Users 2:       Kig Users 2:       Kig Users 2:       Kig Users 2:         Kig uters 2:       Kig Users 2:       Kig Users 2:       Kig Users 2:       Kig Users 2:         Vis Users 2:       Kig Users 2:       Kig Users 2:       Kig Users 2:       Kig Users 2:         Vis Users 2:       Kig Users 2:       Kig Users 2:       Kig Users 2:       Kig Users 2:         Vis Users 2:       Kig Users 2:       Kig Users 2:       Kig Users 2:       Kig Users 2:         Vis Users 2:       Kig Users 2:       Kig Users 2:       Kig Users 2:       Kig Users 2:         Vis Users 2:       Kig Users 2:         Vis Users 2:       Kig Us		and an end of the last ball of the second										
0-010       M43.1.1M34.4 (13.0m) JOOm       19       90-91-4       24.91-4       0.46       4.44         0-010       M45.4 Li - M45.4 (15.0m) JOOm       19       19-10-16       15-10-11       04       6.4h       4.44         0-010       M45.4 Li - M45.4 (15.0m) JOOm       51-10-15       15-10-11       04       6.4h       4.44         0-010       M45.1 - M45.4 (15.0m) JOOm       51-10-15       15-10-11       04       6.4h       4.44         0-010       M45.1 - M45.4 (15.0m) JOOm       52-20-95       26-01       04       6.4h       -44         0-010       M45.1 - M45.1 (15.m) JOOm       52-20-95       26-01       04       6.4h       -370         0-010       M42.1 - M42.8 (15.m) JOOm       52-20-95       12-0-11       04       6.4h       -370         0-010       M42.1 - M42.8 (15.m) JOOm       70-22-07.15       10-0-11       6.4h       -320         0-100       25-07.05       12-0-11       04       6.4h       -320         0-100       25-07.05       12-0-11       04       6.4h       -320         0-100       12-00-11       25-07.15       12-0-11       04       6.4h       -320         0-100       12-00-11       12-0-11 <td>and the second se</td> <td></td> <td></td> <td>a second s</td> <td>0%</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	and the second se			a second s	0%							
D2:0110       MS6.A1		a series of the second s	Contraction of the local division of the loc	a province in the later	000	Contract of the local division of the local						
De1120 M66A.11 - M66A.11 (Sm) 600mn 5 13-10-16 12 10-11 0 V 6/m 448 2013 M66A.11 - M66A.11 (Sm) 700mn 9 13-13-10-16 12 10-11 0 V 6/m 448 2013 M67A.12 (A133m) 300mn 5 12 20-316 12 10-11 0 V 6/m 448 2013 M67A.12 (A133m) 300mn 5 12 20-316 12 10-11 0 V 6/m 448 2013 M67A.12 (A133m) 300mn 5 12 20-316 12 10-11 0 V 6/m 448 2013 M67A.12 (A133m) 300mn 5 12 20-316 12 10-11 0 V 6/m 448 2013 M67A.12 (A133m) 300mn 5 12 20-316 12 10-11 0 V 6/m 423 2013 M61A.1 - M64.1 (GM) 700-50mm 5 12 20-316 12 10-11 0 V 6/m 423 2013 M61A.1 - M64.2 (Sm) 750mm 7 10 25-07.16 12-01-11 V 6/m 448 2013 M67A.1 - M64.2 (Sm) 750mm 7 10 25-07.16 12-01-11 V 6/m 448 2013 M67A.1 - M64.2 (Sm) 750mm 7 10 25-07.16 12-01-11 V 6/m 448 2013 M67A.1 - M64.2 (Sm) 750mm 7 10 25-07.16 12-01-11 V 6/m 448 2013 M67A.1 - M64.2 (Sm) 750mm 7 10 25-07.16 12-01-11 V 6/m 448 2013 M67A.1 - M64.2 (Sm) 750mm 7 10 25-07.16 12-01-11 V 6/m 448 2013 M67A.1 - M64.2 (Sm) 750mm 7 10 25-07.16 12-02-11 V 6/m 448 2013 M67A.1 - M64.2 (Sm) 750mm 7 10 25-07.16 12-02-11 V 7/m 423 M67A.1 - M64.2 (Sm) 750m 7 10-11 V 6/m 7 10 25-07.16 12-02-11 V 7/m 423 M67A.1 - M64.2 (Sm) 750m 7 10-11 V 6/m 7 10 25-07.16 12-02-11 V 7/m 423 M67A.1 - M64.2 (Sm) 750m 7 10-11 V 7/m 423 M67A.1 - M64.2 (Sm) 750m 7 10-11 V 7/m 423 M67A.1 - M64.2 (Sm) 750m 7 10-11 V 7/m 423 M67A.1 - M64.2 (Sm) 750m 7 10-11 V 7/m 423 M67A.1 - M64.2 (Sm) 750m 7 10-11 V 7/m 440 UT-100 U CU 2000 CU 2013 C-M50 7 10-12 V 7/m 440 UT-100 U CU 2000 CU 2013 C-M50 7 10-12 V 7/m 440 UT-100 U CU 2000 CU 2000 Sm 20 26-05 Sm 12 26-07.16 12-02 V 7/m 440 UT-100 U CU 2000 CU 2000 Sm 20 26-05 Sm 12 26-07.16 12-02 V 7/m 440 UT-100 U CU 2000 CU 2000 Sm 20 26-05 Sm 12 26-07.16 12-02 V 7/m 440 UT-100 U CU 2000 CU 2000 Sm 20 26-05 Sm 12 26-07.16 12-02 V 7/m 440 UT-100 U CU 2000 CU 2000 Sm 20 26-05 Sm 12 26-07.16 12-02 V 7/m 440 UT-100 U CU 2000 CU 2000 Sm 20 26-05 Sm 12 26-07.16 02-07.16 02-07.16 02-07.16 02-07.16 02-07.16 02-07.16 02-07.16 02-07.16 02-07.16 02-07.16 02-07.16 02-07.16 02-07.16 02-07.16 02-07.16 02-07.16 02-07.1											-	
D2-0110       M66A.C1M66A.1 (Mom) 350mm       9												-
N28 / Source         Status         Status         Status         Status           26 / Status         Status         Status         Status         Status         Status         Status           26 / Status         Status         Status         Status         Status         Status         Status         Status           26 / Status         Status         Status         Status         Status         Status         Status         Status           26 / Status         S												
2 4270 M211 - M211 A M211 - M211 A M2	and the second sec		the second se	a second s	0%		and the second division of the second divisio			2 m		
20:335       M412 + M418 (15m) 450m       10       20:401 40 46				and the second se		the second second	10.000				1	
D20151       S110-116       15-10-116       0%       6/4/h       -120         attermain       70       25-07-56       17-10-11       6/4/h       -120         ortion A       70       25-07-16       17-10-11       6/4/h       -120         ortion A       70       25-07-16       17-10-11       6/4/h       -120         ortion A       70       25-07-16       16-07-16       123       6/4/h       -123         WM-1200 (resh main V DR300 (CH200-CH1200) - hestallation       14       22-09-16       0%       6/4/h       -123         WM-1300 (resh main P NR3250 (CH217-CH50) - hestallation       14       22-09-16       0%       6/4/h       -123         WM-1300 (resh main P NR3250 (CH217-CH50) - hestallation       14       22-09-16       0%       6/4/h       -123         WM-1300 (resh main P NR3250 (CH217-CH50) - hestallation       16       12-09-16       0%       4/8       -										<b>B-6</b>		
Internation         20         25.07.16         37.40.11         6.6/n         122           CHI Watermatin         20.02.07.16         17.40.11         6.6/n         122           Officin A         20.02.507.16         17.40.11         0.6/n         123           With 120 firsh main P (NIXO) CVCOC-CH1200) - Installation         42.25.07.16         10.09.11         0.4.60.11         123           With 120 firsh main P (NIXO) CVCOC-CH1200) - Installation         14.20.91.6         28.09.11         0.% 6.d/n         123           With 120 firsh main P (NIXO) CVCOC-CH1200) - Installation         14.20.91.6         28.09.11         0.% 6.d/n         123           With 120 firsh main P (NIXO) CVCOC-CH1200) - Installation         14.20.91.6         28.09.11         0.% 6.d/n         123           With 1300 Firsh main P (NIXO) CVCOC-CH1200) - Installation         14.20.91.6         17.40.11         0.% 6.d/n         123           With 1300 Firsh main P (NIXO) CVCOC-CH1200 - Tisting & backfill         14.20.91.6         14.92.91.6         14.92.91.6         14.92.91.6           UF 2000         CLP trench & Duct - bridge 2 to Such Pattern         60.14.0.16         14.92.91.6         14.92.91.6         14.92.91.6         14.92.91.6         14.92.91.6         14.92.91.6         14.92.91.6         14.92.91.6         14.92.91.6         14		Exercise Directory of the Control of the Control of Con										
https://wideumain       70       25:07.16       17:30.11       6d/n       -323         ontain A.       70       25:07.16       17:40.11       6d/n       -323         ontain A.       70       25:07.16       17:40.11       6d/n       -323         with 1200 (resh main H DK000 (CH700-CH1200) - Installation       14 20:916       28:09-11       0%       6d/n       -123         with 1200 (resh main P MS250 (CH217-CH50) - Tisting & backfill       14 20:916       28:09-11       0%       6d/n       -123         with 1300 (resh main P MS250 (CH217-CH50) - Tisting & backfill       14 20:916       17:40.11       0%       6d/n       -123         with 1200 (resh main P MS250 (CH217-CH50) - Tisting & backfill       14 20:91.6       17:40.11       0%       6d/n       -233         with 1200 (resh main P MS250 (CH217-CH50) - Tisting & backfill       14 20:01.1       0%       6d/n       -233         with 1200 (resh main P MS250 (CH217-CH50) - Tisting & backfill       14 20:01.1       0%       W/P.7d       460         UF1000 (LP trench & Duct - bindge 2 to Sub-statem       10.12:01.11       0% W-P.7d       460       -00       -00       -00       -00       -00       -00       -00       -00       -00       -00       -00       -00       -00 <t< td=""><td>and the second second</td><td>M4E.9 - M4E.8 (35m) 750mm</td><td>and the second se</td><td></td><td>0%</td><td>and the second se</td><td>-</td><td></td><td></td><td></td><td></td><td></td></t<>	and the second second	M4E.9 - M4E.8 (35m) 750mm	and the second se		0%	and the second se	-					
Ditts: A.         70         25:07:16         17:10:11         6:d/h         5:31           MM-1240 Fresh main H DN300 (CH700-CH1200) - Installation         42:25:07:16         10:09:11         0%         6d/h         123           MM-1250 Fresh main P M3250 (CH127-CH50) - Installation         14:20:09:16         25:09:11         0%         6d/h         123           MM-1310 Fresh main P M2550 (CH127-CH50) - Installation         14:20:09:16         25:09:11         0%         6d/h         123           MM-1310 Fresh main P M2550 (CH127-CH50) - Installation         14:20:09:16         21:09:11         0%         6d/h         123           MM-1310 Fresh main P M2550 (CH127-CH50) - Installation         14:20:09:16         11:12:11         0%         6d/h         123           MH2130 Fresh main P M2550 (CH127-CH50) - Installation         10:10:00:00         11:02:11         0%         6d/h         123           MF1300 CH2 French & Duct - bridge 2 to Sub-station         50:10:00:11:00         11:12:11         0%         WP72d         460           UF1000 CH2 French & Duct - bridge 2 to Sub-station         50:10:10:11:12:11         0%         WP72d         460           UF1010 CL2 French & Duct - bridge 2 to Sub-station         50:10:10:11:12:11         0%         WP72d         460         WP72d         460	000000000000000000000000000000000000000	Provide support of the state of	and the second se	a second second second	the state	CONTRACTOR OF THE OWNER OWNER OF THE OWNER OWNE	-123					
WM-1240 Fresh main H DN300 (CH700 - CH1200) - Exting & backfill       42 25 97.16       10.9-91       0%       6d/n       122         WM-1250 Fresh main H DN300 (CH700 - CH1200) - Exting & backfill       14 12-09-16       28-09-11       0%       6d/n       122         WM-1300 Fresh main P HS250 (CH217 - CH50) - Tisting & backfill       14 12-09-16       27-01-11       0%       6d/n       123         WM-1300 Fresh main P HS250 (CH217 - CH50) - Tisting & backfill       14 20-09-16       17-10-11       0%       6d/n       123         WH250 CH217 - CH50) - Tisting & backfill       14 20-09-16       17-10-11       0%       6d/n       123         WH250 CH217 - CH50) - Tisting & backfill       14 20-09-16       17-10-11       0%       WP-7d       460         UF1000 CL2 trench & Duct - bridge 2 to Sub-tisting       0 14-00-16       12-10-11       0%       WP-7d       460         UF1000 CL2 trench & Duct - bridge 2 to Sub-tisting       0 13-01-16       11-12-11       0%       WP-7d       460         UF1000 CL2 trench & Duct - bridge 2 to Sub-tisting       0 13-01-16       0%       WP-7d       460         UF1000 CL2 trench & Duct - bridge 2 to Sub-tisting       0 13-01-16       0%       WP-7d       460         UF1000 CL2 trench & Duct - bridge 2 to Sub-tistinge 2 to Sub-tisting       0 2-00-11		rmain										
WM-1200 Fresh main P MS200 (CH200-CH200) - Installation       14       12-09-16       28-09-11       0%       6d/h       -123         WM-1300 Fresh main P MS200 (CH217-CH50) - Installation       14       12-09-16       28-09-11       0%       6d/h       -123         WH0-1300 Fresh main P MS250 (CH217-CH50) - Installation       14       12-09-16       11-12-11       WD       827         WH0-1300 Fresh main P MS250 (CH217-CH50) - Tissing & backfill       468       28-05-15       11-12-11       WD-7d       460         WH0-1300 Fresh main P MS250 (CH217-CH50) - Tissing & backfill       16       24-07-16       11-12-11       WD-7d       460         WH0-1300 Fresh main P MS250 (CH217-CH50) - Tissing & backfill       10       14-09-16       11-12-11       WD-7d       460         W10-100 CLP trench & Duct - Undge 2 to Such Partian       50       14-09-16       11-12-11       WD-7d       460         UT-100 CLP trench & Duct - Undge 2 to Such Partian       50       14-09-16       11-12-11       WD-7d       460	and the second second	Construction of the second second second second	and in concerning the second se			and the second se	and the second se					
WM-1300 Fresh main P NS250 (CH217-CH50) - Installation       14       12-09-16       28-09-14       0%       6d/h       -122         WM-1310 Fresh main P NS250 (CH217-CH50) - Installation       14       12-09-16       17-10-14       0%       6d/h       -122         UP Cable trench & duct       141       26-09-14       0%       6d/h       -122         UP Cable trench & duct       141       26-07-16       11-12-14       0%       0%-7d       460         UP 1000       CLP trench & Duct - bridge 2 to Such Portion       50       13-10-16       11-12-14       0%       0%-7d       460         UP 1000       CLP trench & Duct - bridge 2 to Such Portion       50       13-08-11       0%       0%-7d       460         UF 1000       CLP trench & Duct - bridge 2 to Such Portion       50       13-08-11       0%       0%-7d       460         UF 1000       CLP trench & Duct - bridge 2 to Such Portion       50       13-08-11       0%       0%-7d       460         UF 1000       CLP trench & Duct - bridge 2 to Such Portion       50       12-407-16       07-12-11       0%       0%-7d       460         UF 10100       CLP trench & Duct - bridge 2 to Such Portion       50       12-08-11       6d/h       331       6d/h       331 </td <td></td>												
MA 1310 Fresh main P NS250 (CH217-CH50) - Tisting & backfill       14       29-09-16       17-10-11       0%       6d/h       -123         littles       45       28-05-15       11-12-11       0%       6d/h       -123         Control A Lock       141       22-07-15       11-12-11       0%       6d/h       -123         DF 1000       CLP trench & Duct - bridge 2 to Sub-station       50       16-09-16       12-10-11       0%       WP-7d       460         UF 1000       CLP trench & Duct - bridge 2 to Sub-station       50       16-16       11-12-11       WP-7d       460         UF 1000       CLP trench & Duct - bridge 2 to Sub-station       50       16-01-16       11-12-11       WP-7d       460         UF 1000       CLP trench & Duct - bridge 2 to Sub-station       50       16-16       12-10-11       0%       WP-7d       460         UF 1000       CLP trench & Duct - bridge 2 to South Portion       50       12-10-16       0%       WP-7d       460												
Nites     451     28.05.15     11.12.11     N2.27       P Cable trinch & duct     101.2607.16     11.12.11     WP-7d     460       VIF-1000     LP trench & Duct - bridge 2 to Sub-station     60     14-02.121     WP-7d     460       UF-1010     LP trench & Duct - bridge 2 to Sub-station     60     14-02.16     11-12.11     0%     WP-7d     460       UF-1000     LP trench & Duct - bridge 2 to Sub-station     60     14-02.16     11-12.11     0%     WP-7d     460       UF-1010     LP trench & Duct - bridge 2 to Sub-station     60     14-07-16     13-07-6     60     Image: Sub-station     Image: Sub-station <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>												
PCable trench & duct       141 2407-16       11-12-11       WP-7d       460         Intrine A1& A3       111 2407-16       11-12-11       WP-7d       460         JF-1000       CLP trench & Duct - bridge 2 to Sub-station       60 14-08-16       12-12-11       0% WP-7d       460         JF-1010       CLP trench & Duct - bridge 2 to South Portion       60 13-10-16       11-12-11       0% WP-7d       460         JF-1010       CLP trench & Duct - bridge 2 to South Portion       60 13-10-16       11-12-11       0% WP-7d       460         JF-1010       CLP trench & Duct - bridge 2 to South Portion       60 13-10-16       11-12-11       0% WP-7d       460         JF-1010       CLP trench & Duct - bridge 2 to South Portion       60 13-10-16       11-12-11       0% WP-7d       460         JF-1100       CLP trench & Duct - bridge 2 to South Portion       60 13-10-16       0% WP-7d       460       94       94         JF-1170       Cable duct for TCSS, ELV, LV & other department (I)       45 28-05-15       04-08-11       932       94       94       94         JF-1170       Cable duct for TCSS, ELV, LV & other department (I)       45 28-05-15       04-08-14       932       930       94       94       94       94       94       94       94 <td< td=""><td></td><td>) Fresh main P NS250 (CH217-CH50) - Testing &amp; backfil</td><td>and the second second</td><td>and the second second second</td><td>i san an a</td><td>6d/h</td><td>and the second se</td><td></td><td></td><td><b>-</b></td><td></td><td></td></td<>		) Fresh main P NS250 (CH217-CH50) - Testing & backfil	and the second	and the second second second	i san an a	6d/h	and the second se			<b>-</b>		
Intion A1 & A3       111       24.07.16       11-12-11       WP-7d       460         JF-1000       CLP trench & Duct - bridge 2 to Sub-station       50       14-09-16       11-12-11       O%       WP-7d       460         JF-1010       CLP trench & Duct - bridge 2 to South Portion       60       13-10-16       11-12-11       O%       WP-7d       460         JF-1010       CLP trench & Duct - bridge 2 to South Portion       60       13-10-16       11-12-11       60%       WP-7d       460         JF-1010       CLP trench & Duct - bridge 2 to South Portion       60       0%       WP-7d       460         JF-1010       CLP trench & Duct - bridge 2 to South Portion       60       934       647       938         JF-1170       Cable duct for TCSS, ELV, LV & other department (I)       45       28-05-15       04-08-11       77.78%       647       938         JF-1170       Cable duct for TCSS, ELV, LV & other department (I)       45       28-05-15       04-08-12       77.78%       647       938         JF-1170       Cable duct for TCSS, ELV, LV & other department (I)       45       28-07-16       07-12-11       4322         Jeborn H-Plae & Capk Lot Sign Cannty       56       22-10-16       07-12-11       4322       440		and the second	451 28-05-15	11-12-16		all	827					
JF 1000       CLP trench & Duct - bridge 2 to Such Portion       60       14-08-16       12-10-11       0%       WP-7d       460         JF 1010       CLP trench & Duct - bridge 2 to South Portion       60       13-10-16       11-12-11       0%       WP-7d       460         JF 1010       CHE trench & Duct - bridge 2 to South Portion       60       13-08-11       0%       WP-7d       460         JF 1010       CHE trench & Duct - bridge 2 to South Portion       60       13-08-11       0%       WP-7d       460         Dr 1000       CHE trench & Duct - bridge 2 to South Portion       60       13-08-11       064/h       934         Dr 1001       45       28:05-15       04-08-11       64/h       934       934         Dr 1010       45       28:05-15       04-08-11       64/h       934       934         dr 1010       45       28:05-15       04-08-11       77.12%       64/h       934         dr 111       25:07-16       07-12-11       -322       -322       936       934       -322       936       934       -322       936       934       -322       936       934       -322       936       934       -322       936       934       -322       936	P Cable to	rench & duct	141 24-07-16	11-12-16	1 I	WP-7d	-460				_	
TI-1010       CLP trench & Duct - bridge 2 to South Portion       60       13-10-16       11-12-11       0%       WP-7d       -460         TI-1080       CHEC cross road duct for CLP works       21       24.07.16       13.08-11       0%       WP-7d       -460         bile Duct (TCSS, EUX & UY)       45       28.05-13       04-08-11       0.61/h       933         TI-1170       Cable duct for TCSS, EUX (LV & other department (I)       45       28.05-15       04-08-11       77.78%       6d/h       934         TI-1170       Cable duct for TCSS, EUX (LV & other department (I)       45       28.05-15       04-08-11       77.78%       6d/h       934         td Works       113       24.07-16       07.12-11       -4322       -4322       -4322         above 16 F0 ke CLB tor Skyr Ganthy       153       24.07.16       07.12-11       -4322       -4322         with 200 Huge Static X Syn Ganthy       55       12.40.16       07.2-11       -4322       -4322         with 200 Huge Static X Syn Ganthy       55       12.40.16       07.2-11       -4322       -4322         with 200 Huge Static X Syn Ganthy       55       12.40.16       07.2-11       -4322       -460/h       -460/h       -460/h       -460/h       -460/h			141 24-07-16	11-12-11		WP-7d	460					
UT-108D       CHEC cross road duct for CLP works       21       24-07-16       13-08-11       0%       WP-7d       -460         bile Douct (TCSS, ELV, & LV)       65       28-05-15       04-08-11       64/h       934         ornahl       45       28-05-16       07-12-11       -322         ord Verss       113       24-07-16       07-12-11       -322         ord Verss       56       12-01-16       07-12-11       -322         ord Verss       56       12-01-16       07-12-11       -322         ord Verss       56       12-01-16       07-12-11       -326         ww1700       Hole Gradel Sphires Spin Gaintry       56       12-01-16       07-12-11       -326         ww2-2050       Submit& approval of road lighting system sub-contract			50 14-08-16	12-10-10	0%	WP-7d						
bile Duet (TCSS, ELV & LV)       45, 28-05-15       04-08-11       6d/h       934         prinos1       45, 28-05-15       04-08-11       6d/h       934         prinos1       45, 28-05-15       04-08-11       6d/h       934         prinos1       45, 28-05-15       04-08-11       77.78%       6d/h       934         prinos1       45, 28-05-16       07-12-11       -322       -336         ad Works       113, 26-07-16       07-12-11       -322         before LPRA & Captor System       56, 12-10-16       07-12-11       -322         velow LPRA & Captor System       56, 12-10-16       07-12-11       -322         velow LPRA & Captor System       56, 12-10-16       07-12-11       -322         velow LPRA & Captor System Sub-contractor       50, 25-07.16       07-12-11       -322         velow Lync System Sub-contractor       50, 25-07.16       04-10-11       0%       6d/h       -362         velop Coll Lync System Sub-contractor       50, 25-07.16       04-10-11       0%       6d/h       -362         velop Coll Lync System       120, 24-07.16       26-11-11       Velop -6d/h       -362									Internet Constants	Sector Contractor Sector		Research Control of Co
Image: Submission       45       28.05:13       G4-08.11       6d/h       034         T-1170       Cable duct for TCSS, ELV. LV & other department (I)       45       28.05:13       O4-08.11       77.78%       6d/h       934         d Works       113       24.07:16       07.12:11       -322       -322         ad Funiture & Fit out       113       25.07:16       07.12:11       -322         Why 7d       5d 12:10:16       07.12:11       -322         Why 7d       5d 12:10:16       07.12:11       -332         Why 7d       5d 12:10:16       07.12:11       -332         Why 7d       5d 12:10:16       07.12:11       0%       -322         Why 7d       5d 12:10:16       07.12:11       0%       -322         Why 7d       5d 12:10:16       07.12:11       0%       -322         W-2000 Submit & approval of road lighting system sub-contractor       50 2:507.16       06.10:1       0%       6d/h       -362         W-2000 Pergare, submit & approval of road lighting system design       60 16:09.16       20.11:11       WHy 7d       -390         State & design of Lingation system       120 2:407.16       20.11:11       WHy 7d       -390         State & design of Lingation system			21 24-07-16	13-08-1f	0%	WP-7d	-460					
T-1170       Cable duct for TCSS, ELV. UV & other department (I)       45       28-05-15       04-08-11       77.78%       6d/h       934         ub Works       113       24-07-16       07-12-11       9322       932         ad Fundtare & Fit out       113       25-07-16       07-12-11       9322         above Hz Pitel & Cup tor Sign Gaminy       56       12-10-16       07-12-11       9322         wh/100       H-pitel & Fit out       05       12-10-16       07-12-11       9322         wh/100       H-pitel & Gr405, FADS302, FADS301 (3x2W no.)       56       12-10-16       07-12-11       9300         wh/100       H-pitel & Gr405, FADS302, FADS301 (3x2W no.)       56       12-10-16       07-12-11       956       934         wh/100       H-pitel & Gr405, FADS302, FADS301 (3x2W no.)       56       12-0-16       04-10-11       956       64/h       -356         wh/100       Pitel & Supmoval of road lighting system sub-contractor       50       25-07-16       04-10-11       956       64/h       -362         wh/2050       Submit & approval of road lighting system design       60       16-09-16       26-11-11       WP-7d       390	ble Duct	(TCSS, EIV & IV)	45 28-05-15	04-08-11		6d/h	934					
ud Works     113     24-07-16     07-12-11     -322       ud Funithere & Fit out     113     25-07-16     07-12-11     -322       ubori IE-Pite & Capitor Sign Gaintry     36     12-10-16     07-12-11     WP/7d     3300       wir 1700     Huge Grados FADS301 (3x2wi no.)     56     12-10-16     07-12-11     0%     WP/7d     3300       wir 1700     Huge Grados FADS301 (3x2wi no.)     56     12-10-16     07-12-11     0%     WP/7d     -390       wir 1700     Huge Grados FADS301 (3x2wi no.)     56     12-0-16     07-12-11     0%     WP/7d     -390       wir 1700     Huge Grados FADS301 (3x2wi no.)     105     25-07-16     04-10-11     0%     6d/h     -362       wir 2050     Submit & approval of road lighting system sub-contracter     50     25-07-16     26-11-11     0%     6d/h     -362       wir 2050     Submit & approval of road lighting system design     50     26-07-16     26-11-11     WP/7d     -360       wir 2050     Liptic Mark Approval of road lighting system design     50     26-01-11     WP/7d     -360       wir 2050     Liptic Mark Approval of road lighting system     120     24-07-16     20-11-11     WP/7d     -390       wir 2050     Liptic Mark Approval of road lighti	A CONTRACTOR OF THE											
ad Fundtore & Fit out     113     25:07:16     07:12:11     -322       above FP12e & Cap for Sign Glinthy     56     12:10:16     07:12:11     WP:7d     396       wi-1700     H-pile     67405; FAD5301 (3:22M no.)     56     12:10:16     07:12:11     WP:7d     -396       wi-1700     H-pile     67405; FAD5301 (3:22M no.)     56     12:10:16     07:12:11     WP:7d     -396       wi-1700     H-pile     67405; FAD5302; FAD5301 (3:22M no.)     56     12:10:16     07:12:11     0%       wi-2050     Submit & approval of road lighting system sub-contractor     50     25:07:16     04:10:11     0%     6d/h     -362       wi-2050     Perpare, submit & approval of road lighting system design     50     16:09:16     26:11:11     0%     6d/h     -362       wi-2060     Perpare, submit & approval of road lighting system     120     24:07:16     20:11:11     WP:7d     -390       udscape     120     24:07:16     20:11:11     WP:7d     -390	ويعلقه وتعجزون		the second se	and a second second second	77.78%	6d/h	the second s					
Number         State         State         Or         Number         Or         Or <td>ad Work</td> <td>5</td> <td>113 24-07-16</td> <td>07-12-11</td> <td></td> <td></td> <td>+322</td> <td></td> <td></td> <td></td> <td></td> <td></td>	ad Work	5	113 24-07-16	07-12-11			+322					
RW-1700 H-pile - GT405, FA05302, FA05301 (3×2x4 no.)       56       12-10-16       07-12-11       0%       WP-7d       -396         cod Lighting Design & submits approval of road lighting system sub-contractor       105       25-07-16       04-10-11       0%       6d/h       -362         WV-2060 Perpare, submit & approval of road lighting system design       60       16-09-16       26-11-11       0%       6d/h       -362         WV-2060 Perpare, submit & approval of road lighting system design       60       16-09-16       26-11-11       0%       6d/h       -362         codet & drosges of Ling dross system       120       24-07-16       20-11-11       WP-7d       -390	and Furnit	ture & Fit out	113 25-07-16	07-12-16			+322		and the second se			
and Lighting Design & Submission         1.55         25.07.16         26.11.11         6d/h         -362           WV-2050         Submit & approval of road lighting system sub-contractor         50         25-07.16         04.10-11         0%         6d/h         -362           WV-2050         Submit & approval of road lighting system sub-contractor         50         25-07.16         04.10-11         0%         6d/h         -362           MV-2050         Perpare, submit & approval of road lighting system design         60         16-09-16         26-11-11         0%         6d/h         -362           Indscape         120         24-07-16         20-11-11         WP-7d         -390			56 12-10-16	07-12-11		wp.7d	-396					
RW-2050         Submit & approval of road lighting system sub-contractor         50         25-07-16         04-10-11         0%         6d/h	RW-1700	H-pile - GT405, FAD5302, FAD5301 (3x2x4 no.)	56 12-10-16	07-12-11	0%	WP-7d	-396					
WW 2060         Perpare, submit & approval of road lighting system design         50         16-09-16         26-11-11         0%         6d/h	and Light	ng Design & Submasion	105 25:07/16	26-11-11	and the second	6d/h	362	¥				
W2060         Perpare, submit & approval of road lighting system design         50         16-09-16         26-11-11         0%         6d/h	W-2050	Submit & approval of road lighting system sub-contractor	50 25-07-16	04-10-16	0%	6d/h	-362				-	
Indecape         120 24-07-16         20-11-11         WP-7d         -390           undet & drosgo of Engensor system         120 24-07-16         20-11-11         WP-7d         390		The set of the set of the set of the work of the set of	50 16-09-16	26-11-16	0%	6d/h	-362					
Löbet & design of Engolusis system         1 20 [24:07:16         20-11-11         WP-74         390]											6 M 1	101
		esign of lingation system			A series	And the Party of t	390					
Date Baulcion ICh				and the second second	distant of the second second	The second second						
	D-	maining Level of Effort	Sector Comm	-				A	Date	Revision	ICh.,	Appro
Page 5 of 6				0.1				Page 5 of 6				
Actual Level of Effort Critical Remaining Work			ĸ									



	нквс	F Infrastr	ucture	(Western	Porti	ion) -	Month	onthly Progress 24 - Three Month Rolling Programme								WPD01f-MRP	24	
Activity ID	Activity Name	Original Start Duration	Finish	Activity % Calendar Completo	Filest	-	-	1.6			Activ	201	E.		-	Detabar	1 Marcalia	
RW-202	0 Prepare, submit & approval of Irrigation System sub-contract:		20-11-16	0% WP-7d	-	19	26	13 10	17 24	1 31 1	07 14	21 2	1 04 1		25 1 02	00 16	23 35 64	-
					304	L	1000		-									=
																		2
	emaining Level of Effort - Remaining Work	Summ	ary					Page 6 of	6				Date	Revision	Ch	٨	pproved	-
	ctual Level of Effort Critical Remaining Work							. ago 0 01					24-07-16 m	onthly Report No	0.24			
	ctual Work    Miestone																	-
									_			_						-



Appendix D

**Event and Action Plan** 



### Event/Action Plan for Air Quality

	EVENT		ACTI	ON	
		ET	IEC	ER	CONTRACTOR
	ON LEVEL ceedance	1. Identify source,	1. Check monitoring	1. Notify Contractor.	1. Rectify any
100000000	one mple	<ul> <li>investigate the causes of exceedance and propose remedial measures;</li> <li>Inform IEC and ER;</li> <li>Repeat measurement to confirm finding;</li> <li>Increase monitoring frequency to daily.</li> </ul>	data submitted by ET; 2. Check Contractor's working method.		unacceptable practice; 2. Amend working methods if appropriate.
for moi con	ceedance two or rre nsecutive nples	<ol> <li>Identify source;</li> <li>Inform IEC and ER;</li> <li>Advise the ER on the effectiveness of the proposed remedial measures;</li> <li>Repeat measurement s to confirm findings;</li> <li>Increase monitoring frequency to daily;</li> <li>Discuss with IEC and Contractor on remedial actions required;</li> <li>If exceedance continues, arrange meeting with IEC and ER;</li> <li>If exceedance stops, cease additional monitoring.</li> </ol>	<ol> <li>Check monitoring data submitted by ET;</li> <li>Check Contractor's working method;</li> <li>Discuss with ET and Contractor on possible remedial measures;</li> <li>Advise the ER on the effectiveness of the proposed remedial measures;</li> <li>Supervise Implementation of remedial measures.</li> </ol>	<ol> <li>Confirm receipt of notification of failure in writing;</li> <li>Notify Contractor;</li> <li>Ensure remedial measures properly implemented.</li> </ol>	<ol> <li>Submit proposals for remedial to ER within 3 working days of notification;</li> <li>Implement the agreed proposals;</li> <li>Amend proposal if appropriate.</li> </ol>



	EVENT	ACTION								
		ET	IEC	ER	CONTRACTOR					
1.	MIT LEVEL Exceedance for one sample	<ol> <li>Identify source, investigate the causes of exceedance and propose remedial measures;</li> <li>Inform ER, Contractor and EPD;</li> <li>Repeat measurement to confirm finding;</li> <li>Increase monitoring frequency to daily;</li> <li>Assess effectiveness of Contractor's remedial actions and keep IEC, EPD and ER informed of the results.</li> </ol>	<ol> <li>Check monitoring data submitted by ET;</li> <li>Check Contractor's working method;</li> <li>Discuss with ET and Contractor on possible remedial measures;</li> <li>Advise the ER on the effectiveness of the proposed remedial measures;</li> <li>Supervise implementation of remedial measures.</li> </ol>	<ol> <li>Confirm receipt of notification of failure in writing;</li> <li>Notify Contractor;</li> <li>Ensure remedial measures properly implemented.</li> </ol>	<ol> <li>Take immediate action to avoid further exceedance;</li> <li>Submit proposals for remedial actions to IEC within 3 working days of notification;</li> <li>Implement the agreed proposals;</li> <li>Amend proposal if appropriate.</li> </ol>					
2.	Exceedance for two or more consecutive samples	<ol> <li>Notify IEC, ER, Contractor and EPD;</li> <li>Identify source;</li> <li>Repeat measurement to confirm findings;</li> <li>Increase monitoring frequency to daily;</li> <li>Carry out analysis of Contractor's working procedures to determine possible mitigation to be implemented;</li> <li>Arrange meeting with IEC and ER to discuss the remedial actions to be taken;</li> <li>Assess effectiveness of Contractor's remedial actions and keep IEC, EPD and ER informed of the results;</li> <li>If exceedance stops, cease additional monitoring.</li> </ol>	<ol> <li>Discuss amongst ER, ET, and Contractor on the potential remedial actions;</li> <li>Review Contractor's remedial actions whenever necessary to assure their effectiveness and advise the ER accordingly;</li> <li>Supervise the implementation of remedial measures.</li> </ol>	<ol> <li>Confirm receipt of notification of failure in writing;</li> <li>Notify Contractor;</li> <li>In consultation with the IEC, agree with the Contractor on the remedial measures to be implemented;</li> <li>Ensure remedial measures properly implemented;</li> <li>If exceedance continues, consider what portion of the work is responsible and instruct the Contractor to stop that portion of work until the exceedance is abated.</li> </ol>	<ol> <li>Take immediate action to avoid further exceedance;</li> <li>Submit proposals for remedial actions to IEC within 3 working days of notification;</li> <li>Implement the agreed proposals;</li> <li>Resubmit proposals if problem still not under control;</li> <li>Stop the relevant portion of works as determined by the ER until the exceedance is abated.</li> </ol>					



Event / Action	Plan for	Construction	Noise	Monitoring
----------------	----------	--------------	-------	------------

EVENT		ACTION		
	ET	IEC	ER	CONTRACTOR
Action Level	<ol> <li>Notify IEC and Contractor;</li> <li>Identify source, investigate the causes of exceedance and propose remedial measures;</li> <li>Report the results of investigation to the IEC, ER and Contractor;</li> <li>Discuss with the Contractor and formulate remedial measures;</li> <li>Increase monitoring frequency to check mitigation effectiveness.</li> </ol>	<ol> <li>Review the analysed results submitted by the ET;</li> <li>Review the proposed remedial measures by the Contractor and advise the ER accordingly;</li> <li>Supervise the implementation of remedial measures.</li> </ol>	<ol> <li>Confirm receipt of notification of failure in writing;</li> <li>Notify Contractor;</li> <li>Require Contractor to propose remedial measures for the analysed noise problem;</li> <li>Ensure remedial measures are properly implemented.</li> </ol>	<ol> <li>Submit noise mitigation proposals to IEC;</li> <li>Implement noise mitigation proposals.</li> </ol>
Limit Level	<ol> <li>Inform IEC, ER, EPD and Contractor;</li> <li>Identify source;</li> <li>Repeat measurements to confirm findings;</li> <li>Increase monitoring frequency;</li> <li>Carry out analysis of Contractor's working procedures to determine possible mitigation to be implemented;</li> <li>Inform IEC, ER and EPD the causes and actions taken for the exceedances;</li> <li>Assess effectiveness of Contractor's remedial actions and keep IEC, EPD and ER informed of the results;</li> <li>If exceedance stops, cease additional monitoring.</li> </ol>	<ul> <li>ET, and Contractor on the potential remedial actions;</li> <li>Review Contractors remedial actions whenever necessary to assure their effectiveness and advise the ER accordingly;</li> <li>Supervise the</li> </ul>	<ol> <li>Confirm receipt of notification of failure in writing;</li> <li>Notify Contractor;</li> <li>Require Contractor to propose remedial measures for the analysed noise problem;</li> <li>Ensure remedial measures properly implemented;</li> <li>If exceedance continues, consider what portion of the work is responsible and instruct the Contractor to stop that portion of work until the exceedance is abated.</li> </ol>	<ol> <li>Take immediate action to avoid further exceedance;</li> <li>Submit proposals for remedial actions to IEC within 3 working days of notification;</li> <li>Implement the agreed proposals;</li> <li>Resubmit proposals if problem still not under control;</li> <li>Stop the relevant portion of works as determined by the ER until the exceedance is abated.</li> </ol>



### Event and Action Plan for Water Quality

Event	ET Leader	IEC	ER	Contractor
Action level being exceeded by one sampling day	<ol> <li>Repeat in situ measurement on next day of exceedance to confirm findings</li> <li>Identify source(s) of impact</li> <li>Inform IEC, contractor and ER</li> <li>Check monitoring data, all plant, equipment and Contractor's working methods</li> </ol>	<ol> <li>Confirm receipt of notification of noncompliance in writing</li> <li>Notify Contractor</li> </ol>	<ol> <li>Confirm receipt of notification of noncompliance in writing</li> <li>Notify Contractor</li> </ol>	<ol> <li>Inform the ER and confirm notification of the noncompliance in writing</li> <li>Rectify unacceptable practice</li> <li>Amend working methods if appropriate.</li> </ol>
Action level being exceeded by two or more consecutive sampling days	<ol> <li>Repeat in situ measurement to confirm findings</li> <li>Identify source(s) of impact</li> <li>Inform IEC, Contractor and ER</li> <li>Check monitoring data, all plant, equipment and Contractor's working methods</li> <li>Discuss mitigation measures with IEC, ER and Contractor</li> <li>Ensure mitigation measures are implemented</li> <li>Increase the monitoring frequency to daily until no exceedance of Action level;</li> <li>Repeat measurement on next day of exceedance to confirm findings.</li> </ol>	<ol> <li>Check monitoring data submitted by ET and Contractor's working method</li> <li>Discuss with ET and Contractor on possible remedial actions</li> <li>Review the proposed mitigation measures submitted by Contractor and advise the ER accordingly</li> <li>Assess the effectiveness of the implemented mitigation measures.</li> </ol>	<ol> <li>Confirm receipt of notification of noncompliance in writing</li> <li>Discuss with IEC on the proposed mitigation measures</li> <li>Make agreement on mitigation measures to be implemented</li> <li>Ensure mitigation measures are properly implemented</li> <li>Assess the effectiveness of the implemented mitigation measures</li> </ol>	<ol> <li>Inform the Engineer and confirm notification of the noncompliance in writing;</li> <li>Rectify unacceptable practice</li> <li>Check all plant and equipment and consider changes of working methods</li> <li>Discuss with ET and IEC on possible remedial actions and propose mitigation measures to IEC and ER within 3 working days of notification</li> <li>Implement the agreed mitigation measures</li> <li>Amend working methods if appropriate</li> </ol>



Limit level being exceeded by one	1.	Repeat in-situ measurement	1.	Check monitoring data	1.	Confirm receipt of notification	1.	Inform the ER and confirm
sampling day	2. 3. 4. 5. 6. 7.	to confirm findings Identify source(s) of impact Inform IEC, Contractor, ER and EPD Check monitoring data, all plant, equipment and Contractor's working methods Discuss mitigation measures with IEC, ER and Contractor Ensure mitigation measures are implemented Increase the monitoring frequency to daily until no exceedance of Limit level	2. 3. 4.	submitted by ET and Contractor's working method Discuss with ET and Contractor on possible remedial actions Review the proposed mitigation measures submitted by Contractor and advise the ER accordingly Assess the effectiveness of the implemented mitigation measures	2. 3. 4. 5.	of failure in writing Discuss with IEC, ET and Contractor on the proposed mitigation measures Request Contractor to critically review the working methods Ensure mitigation measures are properly implemented Assess the effectiveness of the implemented mitigation measures	2. 3. 4. 5.	notification of the noncompliance in writing Rectify unacceptable practice Check all plant and equipment and consider changes of working methods Submit proposal of mitigation measures to ER within 3 working days of notification and discuss with ET, IEC and ER Implement the agreed mitigation measures Amend working methods if appropriate
Limit level being exceeded by two or more consecutive sampling days	1. 2. 3. 4. 5. 6. 7.	Repeat in-situ measurement to confirm findings Identify source(s) of impact Inform IEC, contractor, ER and EPD Check monitoring data, all plant, equipment and Contractor's working methods Discuss mitigation measures with IEC, ER and Contractor Ensure mitigation measures are implemented Increase the monitoring frequency to daily until no exceedance of Limit level for two consecutive days	1. 2. 3.	Check monitoring data submitted by ET and Contractor's working method Discuss with ET and Contractor on possible remedial actions Review the Contractor's mitigation measures whenever necessary to assure their effectiveness and advise the ER accordingly.	<ol> <li>1.</li> <li>2.</li> <li>3.</li> <li>4.</li> <li>5.</li> <li>6.</li> <li>7.</li> </ol>	Confirm receipt of notification of failure in writing Discuss with IEC, ET and Contractor on the proposed mitigation measures Request Contractor to critically review the working methods Make agreement on the mitigation measures to be implemented Ensure mitigation measures are properly 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 construction activities until no exceedance of Limit level.	1. 2. 3. 4. 5. 6. 7. 8.	Inform the ER and confirm notification of the noncompliance in writing Take immediate action to avoid further exceedance Rectify unacceptable practice Check all plant and equipment and consider changes of working methods Submit proposal of mitigation measures to ER within 3 working days of notification and discuss with ET, IEC and ER Implement the agreed mitigation measures Resubmit proposals of mitigation measures if problem still not under control; As directed by the engineer, to slow down or to stop all or part of the construction activities until no exceedance of Limit level.



Event	ET Leader	IEC	ER / SOR	Contractor	
Action Level	<ol> <li>Repeat statistical data analysis to confirm findings;</li> <li>Review all available and relevant data, including raw data and statistical analysis results of other parameters covered in the EM&amp;A, to ascertain if differences are as a result of natural variation or previously observed seasonal differences;</li> <li>Identify source(s) of impact;</li> <li>Inform the IEC, ER/SOR and Contractor;</li> <li>Check monitoring data.</li> <li>Review to ensure all the dolphin protective measures are fully and properly implemented and advise on additional measures if necessary.</li> </ol>	<ol> <li>Check monitoring data submitted by ET and Contractor;</li> <li>Discuss monitoring results and finding with the ET and the Contractor.</li> </ol>	<ol> <li>Discuss monitoring with the IEC and any other measures proposed by the ET;</li> <li>If ER/SOR is satisfied with the proposal of any other measures, ER/SOR to signify the agreement in writing on the measures to be implemented.</li> </ol>	<ol> <li>Inform the ER/SOR and confirm notification of the non-compliance in writing;</li> <li>Discuss with the ET and the IEC and propose measures to the IEC and the ER/SOR;</li> <li>Implement the agreed measures.</li> </ol>	
Limit Level	<ol> <li>Repeat statistical data analysis to confirm findings;</li> <li>Review all available and relevant data, including raw data and statistical analysis results of other parameters covered in the EM&amp;A, to ascertain if differences are as a result of natural variation or previously observed seasonal differences;</li> <li>Identify source(s) of impact;</li> <li>Inform the IEC, ER/SOR and Contractor of findings;</li> <li>Check monitoring data;</li> <li>Repeat review to ensure all the dolphin protective measures are fully and properly implemented and advise on additional measures if necessary.</li> <li>If ET proves that the source of impact is caused by any of the construction activity by the works contract, ET to arrange a meeting to discuss with IEC, ER/SOR and Contractor the necessity of additional dolphin monitoring and/or any other potential mitigation measures (e.g., consider to control/temporarily stop relevant construction activity etc.) and submit to IEC a proposal of additional dolphin monitoring and/or mitigation measures where necessary.</li> </ol>	<ol> <li>Check monitoring data submitted by ET and Contractor;</li> <li>Discuss monitoring results and findings with the ET and the Contractor;</li> <li>Attend the meeting to discuss with ET, ER/SOR and Contractor the necessity of additional dolphin monitoring and any other potential mitigation measures.</li> <li>Review proposals for additional monitoring and any other mitigation measures submitted by ET and Contractor and advise ER/SOR of the results and findings accordingly.</li> <li>Supervise / Audit the implementation of additional monitoring and/or any other mitigation measures and advise ER/SOR the results and findings accordingly.</li> </ol>	<ol> <li>Attend the meeting to discuss with ET, IEC and Contractor the necessity of additional dolphin monitoring and any other potential mitigation measures.</li> <li>If ER/SOR is satisfied with the proposals for additional dolphin monitoring and/or any other mitigation measures submitted by ET and Contractor and verified by IEC, ER/SOR to signify the agreement in writing on such proposals and any other mitigation measures.</li> <li>Supervise the implementation of additional monitoring and/or any other mitigation measures.</li> </ol>	<ol> <li>Inform the ER/SOR and confirm notification of the non-compliance in writing;</li> <li>Attend the meeting to discuss with ET, IEC and ER/SOR the necessity of additional dolphin monitoring and any other potential mitigation measures.</li> <li>Jointly submit with ET to IEC a proposal of additional dolphin monitoring and/or any other mitigation measures when necessary.</li> <li>Implement the agreed additional dolphin monitoring and/or any other mitigation measures.</li> </ol>	

Event / Action Plan for Dolphin Monitoring



Appendix E

Waste Flow Table





China Harbour Engineering Company Limited

### Monthly Summary Waste Flow Table for <u>2016</u> (year)

Name of Person completing the record: Paper CHAN / ES

Project : Ho	ong Kong – l	Zhuhai – Macao	Bridge, Hon	g Kong Cros	ssing Bounda	ary Facilities	s – Infrastructure	Works Stage I (W	Vestern Portion)	Contr	ract No.: HY/2013/02
	I	Actual Quantities o	of Inert C&D 1	Materials Gene	erated Monthly	y		Actual Qua	ntities of C&D Was	stes Generated Monthly	
Month	Total Quantity Generated	Hard Rock and Large Broken Concrete (see Note 1)	Reused in the Contract	Reused in other Projects	Disposed as Public Fill	Imported Fill	Metals	Paper/ cardboard packaging	Plastics (see Note 2)	Chemical Waste	Others, e.g. general refuse (see Note 3)
	(in '000m <sup>3</sup> )	(in '000m <sup>3</sup> )	(in '000m <sup>3</sup> )	(in '000m <sup>3</sup> )	(in '000m <sup>3</sup> )	(in '000m <sup>3</sup> )	(in '000 kg)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000 m <sup>3</sup> )
Jan	0	0	0	0	0	0	0	0.069	2.66	0	0.0195
Feb	0	0	0	0	0	0	0	0	0	0	0.0455
Mar	0	0	0	0	0	0	0	0.069	0	0	0.0325
Apr	0	0	0	0	0	11.592	0	0	0	0	0.0455
May	0	0	0	0	0	7.14	6.326	0.0805	0	0	0.0585
Jun	0	0	0	0	0	2.76	0	0	6.09	0	0.0325
Sub-total	0	0	0	0	0	21.492	6.326	0.2185	8.75	0	0.2340
Jul	0	0	0	0	0	0	0	0	0	0	0.0780
Aug											
Sep											
Oct											
Nov											
Dec											
Total	0	0	0	0	0	21.492	6.326	0.2185	8.75	0	0.3120

1 137 137/2012/02 - ----

Notes:

(1) The waste flow table shall also include C&D materials that are specified in the Contract to be imported for use at the Site.

(2) Plastics refer to plastic bottles/containers, plastic sheets/ foam from packaging materials.

(3) Broken concrete for recycling into aggregates.



Month	a. Volume of Marine Sediment Generated (m <sup>3</sup> )	b. Volume of Marine Sediment Disposed (m <sup>3</sup> )	c. Estimated Volume of Marine Sediment Stored on Site (m <sup>3</sup> ) <sup>(2)</sup>
Jan	4029 <sup>(1)</sup>	1272	2757
Feb	1133	2816	1074
Mar	414	600	888
Apr	4240	5128	0
May	1020	0	1020
Jun	1097	1200	917
Jul	957	728	1146
Aug			
Sep			
Oct			
Nov			
Dec			
Total	12890	11744	1146

### Monthly Summary of Marine Sediment for 2016

Note: (1) 2771 m<sup>3</sup> Marine Sediment Generated has been brought forward from previous year (2) c = (c in previous month + a - b)



Appendix F

# **Environmental Licenses and Permits**



### **Environmental Licenses and Permits**

Item No.	Type of Permit / Licence	Reference No.	Application Date	Date of Issue	Date of Expiry	Remark
1	Environmental Permit under EIAO	EP-353/2009/K	24 Mar 2016	11 Apr 2016	NA	Issued
2	Construction Dust Notification (Western Portion)	Acknowledge Receipt: 377883	5 Aug 2014	11 Aug 2014	NA	Notified
3	Construction Dust Notification (Works Area WA3)	Acknowledge Receipt: 377884	5 Aug 2014	18 Aug 2014	NA	Notified
4	Construction Waste Disposal Account	Billing Account No.: 7020516	5 Aug 2014	15 Aug 2014	NA	Account approved
5	Registration as a Chemical Waste Producer (Works Area WA3)	Waste Producer Number (WPN): 5213-961-C1186-23	1 Sep 2014	17 Oct 2014	NA	Registration completed
6	Registration as a Chemical Waste Producer (Western Portion)	Waste Producer Number (WPN): 5213-961-C1186-27	20 Oct 2014	24 Nov 2014	NA	Registration completed
7	Discharge License under WPCO (Works Area WA3)	License No.: WT00020194-2014	21 Aug 2014	27 Oct 2014	31 Oct 2019	License approved
8	Discharge License under WPCO (Western Portion)	License No.: WT00020597-2014	25 Sep 2014	16 Mar 2015	31 Mar 2020	License approved
9	Construction Noise Permit under NCO for HKBCF(Western Portion)	Permit No.: GW-RS0432-16	19 April 2016	3 May 2016	10 Nov 2016	Permit approved



Appendix G

## Implementation Schedule for Environmental Mitigation Measures (EMIS)

EIA Ref.	EM&A Log Ref	Mitigation Implementation Schedule – H Environmental Mitigation Measures	Objectives of the Recommended Measures & Main Concerns to address	Who to implement the measures?	Location	When to implement the measures?	What requirements or standards for the measure to achieve?	Implementation Status
Air Quality								
S5.5.6.1 of HKBCFEIA	A1	<ol> <li>The contractor shall follow the procedures and requirements given in the Air Pollution Control (Construction Dust) Regulation</li> </ol>	Good construction site practices to control the dust impact at the nearby sensitive receivers to within the relevant criteria	Contractor	All construction sites	Construction stage	To control the dust impact to within the HKAQO and TM-EIA criteria(Ref. 1-hr and 24 hr TSP levels are $500\mu$ gm <sup>-3</sup> and $260\mu$ gm <sup>-3</sup> , respectively)	V
S5.5.6.2 of HKBCFEIA and S4.8.1 of TKCLKLEIA	A2	<ul> <li>2) Proper watering of exposed spoil should be undertaken throughout the construction phase:</li> <li>Any excavated or stockpile of dusty material should be covered entirely by impervious sheeting or sprayed with water to maintain the entire surface wet and then removed or backfilled or reinstated where practicable within 24 hours of the excavation or unloading;</li> <li>Any dusty materials remaining after a stockpile is removed should be wetted with water and cleared from the surface of roads;</li> <li>A stockpile of dusty material should not be extend beyond the pedestrian barriers, fencing or traffic cones.</li> <li>Where practicable, vehicle washing facilities with high pressure water jet should be provided at every discernible or designated vehicle exit point. The area where vehicle washing takes place and the road section between the washing facilities and the exit point should be paved with concrete, bituminous materials or hardcores;</li> <li>When there are open excavation and reinstatement works, hoarding of not less than 2.4m high should be provided as far as practicable along the site boundary with provision for public crossing. Good site practice shall also</li> </ul>	Good construction site practices to control the dust impact at the nearby sensitive receivers to within the relevant criteria	Contractor	All construction sites	Construction stage	To control the dust impact to within the HKAQO and TM-EIA criteria(Ref. 1-hr and 24 hr TSP levels are 500µgm <sup>-3</sup> and 260µgm <sup>-3,</sup> respectively)	V

#### Environmental Mitigation Implementation Schedule – Hong Kong Boundary Crossing Facilities (Superstructures and Infrastructures)

EIA Ref.	EM&A Log Ref	Environmental Mitigation Measures	Objectives of the Recommended Measures & Main Concerns to address	Who to implement the measures?	Location	When to implement the measures?	What requirements or standards for the measure to achieve?	Implementation Status
		be adopted by the Contractor to ensure the conditions of the hoardings are properly maintained throughout the construction period;						
		The portion of any road leading only to construction site that is within 30m of a vehicle entrance or exit should be kept clear of dusty materials;						
		Surfaces where any pneumatic or power-driven drilling, cutting, polishing or other mechanical breaking operation takes place should be sprayed with water or a dust suppression chemical continuously;						
		Any area that involves demolition activities should be sprayed with water or a dust suppression chemical immediately prior to, during and immediately after the activities so as to maintain the entire surface wet;						
		Where a scaffolding is erected around the perimeter of a building under construction, effective dust screens, sheeting or netting should be provided to enclose the scaffolding from the ground floor level of the building, or a canopy should be provided from the first floor level up to the highest level of the scaffolding;						
		Any skip hoist for material transport should be totally enclosed by impervious sheeting;						
		Every stock of more than 20 bags of cement or dry pulverised fuel ash (PFA) should be covered entirely by impervious sheeting or placed in an area sheltered on the top and the 3 sides;						
		Cement or dry PFA delivered in bulk						

EIA Ref.	EM&A Log Ref	Environmental Mitigation Measures	Objectives of the Recommended Measures & Main Concerns to address	Who to implement the measures?	Location	When to implement the measures?	What requirements or standards for the measure to achieve?	Implementation Status
		should be stored in a closed silo fitted with an audible high level alarm which is interlocked with the material filling line and no overfilling is allowed;						
		Loading, unloading, transfer, handling or storage of bulk cement or dry PFA should be carried out in a totally enclosed system or facility, and any vent or exhaust should be fitted with an effective fabric filter or equivalent air pollution control system; and						
		Exposed earth should be properly treated by compaction, turfing, hydroseeding, vegetation planting or sealing with latex, vinyl, bitumen, shotcrete or other suitable surface stabiliser within six months after the last construction activity on the construction site or part of the construction site where the exposed earth lies.						
S5.5.6.3 of HKBCFEIA and S4.8.1 of TKCLKLEIA	A3	<ol> <li>The Contractor should undertake proper watering on all exposed spoil and associated work areas (with at least 8 times per day) throughout the construction phase.</li> </ol>	Control construction dust	Contractor	All construction sites	Construction stage	To control the dust impact	V
S5.5.6.4 of HKBCFEIA	A4	4) Engineer to incorporate the controlled measures into the Particular Specification (PS) for the civil work. The PS should also draw the contractor's attention to relevant latest Practice notes issued by EPD.	Control construction dust	Engineer	All construction sites	Design Stage	Air pollution Control (Construction Dust) Regulation	V

EIA Ref.	EM&A Log Ref	Environmental Mitigation Measures	Objectives of the Recommended Measures & Main Concerns to address	Who to implement the measures?	Location	When to implement the measures?	measure to achieve?	Implementation Status
S5.5.6.4 of HKBCFEIA and S4.11 of TKCLKLEIA		<ol> <li>5) Implement regular dust monitoring under EM&amp;A programme during the construction stage.</li> </ol>	Monitor the 24hr and 1hr TSP levels at the representative dust monitoring stations to ensure compliance with relevant criteria throughout the construction period.	referred by the other ET under the HZMB project to the Contract	Selected representative dust monitoring station	Construction stage	<ul> <li>Air Pollution Control (Construction Dust) Regulation</li> <li>To control the dust impact to within the HKAQO and TM-EIA criteria(Ref. 1-hr and 24 hr TSP levels are 500µgm<sup>-3</sup> and 260µgm<sup>-3</sup>, respectively)</li> </ul>	V

EIA Ref.	EM&A Log Ref	Environmental Mitigation Measures	Objectives of the Recommended Measures & Main Concerns to address	Who to implement the measures?	Location	When to implement the measures?	What requirements or standards for the measure to achieve?	Implementation Status
S5.5.7.1 of HKBCFEIA	A6	The following mitigation measures should be adopted to prevent fugitive dust emissions for concrete batching plant: Loading, unloading, handling, transfer or storage of any dusty materials should be carried out in totally enclosed system; All dust-laden air or waste gas generated by the process operations should be properly extracted and vented to fabric filtering system to meet the emission limits for TSP; Vents for all silos and cement/ pulverised fuel ash (PFA) weighing scale should be fitted with fabric filtering system; The materials which may generate airborne dusty emissions should be wetted by water spray system; All receiving hoppers should be enclosed on three sides up to 3m above unloading point; All conveyor transfer points should be totally enclosed; All access and route roads within the premises should be paved and wetted; and Vehicle cleaning facilities should be provided and used by all concrete trucks before leaving the premises to wash off any dust on the wheels and/or body.	Monitor the 24hr and 1hr TSP levels at the representative dust monitoring stations to ensure compliance with relevant criteria throughout the construction period.	Contractor	Selected representative dust monitoring station	Construction stage	Air Pollution Control (Construction Dust) Regulation - To control the dust impact to within the HKAQO and TM-EIA criteria(Ref. 1-hr and 24 hr TSP levels are 500µgm <sup>-3</sup> and 260µgm <sup>-3</sup> , respectively)	N/A

EIA Ref.	EM&A Log Ref	Environmental Mitigation Measures	Objectives of the Recommended Measures & Main Concerns to address	Who to implement the measures?	Location	When to implement the measures?	What requirements or standards for the measure to achieve?	Implementation Status
S5.5.2.7 of HKBCFEIA	Α7	The following mitigation measures should be adopted to prevent fugitive dust emissions at barging point: All road surface within the barging facilities will be paved; Dust enclosures will be provided for the loading ramp; Vehicles will be required to pass through designated wheels wash facilities; and Continuous water spray at the loading points.	Control construction dust	Contractor	All construction sites	Construction stage	Air Pollution Control (Construction Dust) Regulation	N/A (Construction in process)
Constructio	n Noise (Air	borne)						
S6.4.10 of HKBCFEIA	N1	<ol> <li>Use of good site practices to limit noise emissions by considering the following: only well-maintained plant should be operated on-site and plant should be serviced regularly during the construction programme; machines and plant (such as trucks, cranes) that may be in intermittent use should be shut down between work periods or should be throttled down to a minimum;</li> <li>plant known to emit noise strongly in one direction, where possible, be orientated so that the noise is directed away from nearby NSRs;</li> <li>silencers or mufflers on construction equipment should be properly fitted and maintained during the construction</li> </ol>	Control construction airborne noise by means of good site practices	Contractor	All construction sites	Construction stage	Noise Control Ordinance	V

EIA Ref.	EM&A Log Ref	Environmental Mitigation Measures	Objectives of the Recommended Measures & Main Concerns to address	Who to implement the measures?	Location	When to implement the measures?	What requirements or standards for the measure to achieve?	Implementation Status
		works; mobile plant should be sited as far away from NSRs as possible and practicable; material stockpiles, mobile container site officer and other structures should be effectively utilised, where practicable, to screen noise from on-site construction activities.						
S6.4.11 of HKBCFEIA	N2	<ol> <li>Install temporary hoarding located on the site boundaries between noisy construction activities and NSRs. The conditions of the hoardings shall be properly maintained throughout the construction period.</li> </ol>	Reduce the construction noise levels at low-level zone of NSRs through partial screening	Contractor	All construction sites	Construction stage	<ul> <li>Noise Control Ordinance</li> <li>Annex 5, TM_EIA</li> </ul>	V
S6.4.12 of HKBCFEIA	N3	<ol> <li>Install movable noise barriers (typically density 14kg/m<sup>2</sup>), acoustic mat or full enclosure close to noisy plants including air compressor, generators, saw.</li> </ol>	Screen the noisy plant items to be used at all construction sites	Contractor	For plant items listed in Appendix 6D of the EIA report at all construction sites	Construction stage	<ul> <li>Noise Control Ordinance</li> <li>Annex 5, TM_EIA</li> <li>75dB(A) for residential premises</li> <li>The movable barrier should achieve at least 5 dB(A) and the full enclosure should be designed to achieve 10dB(A)</li> </ul>	N/A
S6.4.13 of HKBCFEIA	N4	<ol> <li>Select "Quiet plants" which comply with the BS 5228 Part 1 or TM standards.</li> </ol>	Reduce the noise levels of plant items	Contractor	For plant items listed In Appendix 6D of the EIA report at all construction sites	Construction stage	<ul> <li>Noise Control Ordinance</li> <li>Annex 5, TM_EIA</li> </ul>	V

EIA Ref.	EM&A Log Ref	Environmental Mitigation Measures	Objectives of the Recommended Measures & Main Concerns to address	Who to implement the measures?	Location	When to implement the measures?	What requirements or standards for the measure to achieve?	Implementation Status
S6.4.14 of HKBCFEIA	N5	5) Sequencing operation of construction plants where practicable.	Operate sequentially within the same work site to reduce the construction airborne noise	Contractor	All construction sites where practicable	Construction stage	<ul> <li>Noise Control Ordinance</li> <li>Annex 5, TM_EIA</li> </ul>	V
S5.1 of TMCLKLEIA	N6	6) Implement a noise monitoring under EM&A programme.	Monitor the construction noise levels at selected representative locations	Referred by the other ET under the HZMB project to the Contract.	Selected representative noise monitoring station	Construction stage	<ul> <li>Noise Control Ordinance</li> <li>Annex 5, TM_EIA</li> <li>75dB(A) for residential premises</li> </ul>	V
Sediment								
\$7.3	S1	<ol> <li>The requirements as recommended un ETWB TC 34/2002 Management of Dredged/Excavated Sediment shall be included in the Particular Specification as appropriate.</li> </ol>	Develop sediment disposal arrangement	Engineer	All construction site areas	Design stage	<ul> <li>Waste Disposal Ordinance</li> <li>ETWB TC 34/2002</li> </ul>	V
	S2	Before re-deposition the contaminated sediment, a layer of geotextile shall be placed at the bottom of the sheet pile cellular structures to avoid direct contact of the contaminated sediment and the bottom sediment.	Develop sediment disposal arrangement	Engineer	All construction site areas	Design stage	Ordinance - ETWB TC 34/2002	V
	S3	A miniumum of 2m thick sand fill or public fill shall be placed on top of the contaminated sediment to protect and cover the sediment after redeposition.	Develop sediment disposal arrangement	Engineer	All construction site areas	Design stage	<ul> <li>Waste Disposal Ordinance</li> <li>ETWB TC 34/2002</li> </ul>	V

EIA Ref.	EM&A Log Ref	Environmental Mitigation Measures	Objectives of the Recommended Measures & Main Concerns to address	Who to implement the measures?	Location	When to implement the measures?	What requirements or standards for the measure to achieve?	Implementation Status
	S4	The contaminated sediment shall not be disturbed after re-deposition. No piling works or deep foundation which may disturb the contaminated sediment is allowed within the cellular structures.	Develop sediment disposal arrangement	Engineer	All construction site areas	Design stage	<ul> <li>Waste Disposal Ordinance</li> <li>ETWB TC 34/2002</li> </ul>	V
Waste manag	gement (Cor	nstruction Waste)				1		
S12.6 of TMCLKLEIA	WM1	The Contractor shall identify a coordinator for the management of waste.	Proper implementation of WMP	Contractor	Contractor All construction sites	Construction stage		V
S12.6 of TMCLKLEIA	WM2	The Contractor shall apply for and obtain the appropriate licenses for the disposal of public fill, chemical waste and effluent discharges.	Proper control of wastes disposal in accordance to relevant ordinances	Contractor	All construction sites	Construction Stage	<ul> <li>Land (Miscellaneous Provisions) Ordinance (Cap28);</li> <li>Waste Disposal Ordinance (Cap 354);</li> <li>Dumping at Sea Ordinance (Cap 466);</li> <li>Water Pollution Control Ordinance.</li> </ul>	V
S12.6 of TMCLKLEIA	WM3	EM&A of waste handling, storage, transportation, disposal procedures and documentation through the site audit programme shall be undertaken.	Ensure proper implementation mitigation measures stated in WMP	Contractor	All construction sites		Construction stage	V

EIA Ref.	EM&A Log Ref	Environmental Mitigation Measures	Objectives of the Recommended Measures & Main Concerns to address	Who to implement the measures?	Location	When to implement the measures?	Implementation Status
S8.3.8 of HKBCFEIA and S12.6 of TMCLKLEIA	WM4	Construction and Demolition MaterialThe following mitigation measures should be implemented in handling the waste:Maintain temporary stockpiles and reuse excavated fill material for backfilling and reinstatement;Carry out on-site sorting;Make provisions in the Contract documents to allow and promote the use of recycled aggregates where appropriate;Adopt 'Selective Demolition' technique to demolish the existing structures and facilities with a view to recovering broken concrete effectively for recycling purpose, where possible;Implement a trip-ticket system for each works contract to ensure that the disposal of C&D materials are properly documented and verified;Implement an enhanced Waste Management Plan similar to ETWBTC (Works) No. 19/2005 – "Environmental Management on Construction Sites" to encourage on-site sorting of C&D materials and to minimize their generation during the course of construction;In addition, disposal of the C&D materials onto any sensitive locations such as agricultural lands, etc. should be avoided. The Contractor shall propose the final disposal sites to the Project Proponent and get its approval before implementation;	Good site practice to minimize and recycle the C&D material as far as practicable so as to reduce the amount for final disposal	Contractor	All construction site areas	Construction stage	V
		transferred to a fill bank.					

EIA Ref.	EM&A Log Ref	Environmental Mitigation Measures	Objectives of the Recommended Measures & Main Concerns to address	Who to implement the measures?	Location	When to implement the measures?	What requirements or standards for the measure to achieve?	Implementation Status
S8.3.9 - S8.3.11 of HKBCFEIA and S12.6 of TMCLKLEIA	WM5	<u>C&amp;D Waste</u> Standard formwork or pre-fabrication should be used as far as practicable in order to minimise the arising of C&D materials. The use of more durable formwork or plastic facing for the construction works should be considered. Use of wooden hoardings should not be used, as in other projects. Metal hoarding and falsework should be used to enhance the possibility of recycling. The purchasing of construction materials will be carefully planned in order to avoid over ordering and wastage. The Contractor should recycle as much of the C&D materials as possible on-site. Public fill and C&D waste should be segregated and stored in different containers or skips to enhance reuse or recycling of materials and their proper disposal. Where practicable, concrete and masonry can be crushed and used as fill. Steel reinforcement bar can be used by scrap steel mills. Different areas of the sites should be considered for such segregation and storage.	Good site practice to minimize and recycle the C&D material as far as practicable so as to reduce the amount for final disposal	Contractor	All construction sites	Construction stage		V

S3.2.12 - WM6       Chemical Waste       Control the chemical waste that is produced, as defined by Schedule 1 of the Waste and ensure proper storage, handling and defined by Schedule 1 of the Waste and ensure proper storage, handling and storage of the Packaging, Labelling and Storage of the Packaging, Labelling and Storage of Chemical Waste) General Regulation. Should be changed by substance they are holding, resistant to corrosion, maintained in a good condition, and securely colosed; have a capacity of less than 450 liters unless the specification has been approved by the EPD; and display a label in English and Chinese in accordance with instructions prescribed in Schedule 2 of the regulation.       Control the scherage of chemical wastes should be suitable for the storage of chemical wastes the specification has been approved by the EPD; and display a label in English and Chinese in accordance with instructions prescribed in Schedule 2 of the regulation.       Control the chemical waste should be clean that area, whichever is the gradates; thave adequate vent maintail entering; and aranged so that incompatible materials are adquated waste, such as the Chemical waste should be clean that area, which ever a lole corrice to a facility licensed waste collector: be to a facility licensed waste, under approval from the rescape and that merea and the Chinesia waste should be to a facility licensed waste should be to a facility licensed waste should be to a facility licensed waste, under approval for the argued waste should be to a facility licensed waste, under approval from the receive chemical waste should be to a facility licensed waste, under approval from the receive of the maxies.       Contractor Mining in Strage of the regulation.       Waste addition, and Strage of the regulation.       Waste addition, addition, addition, addition, addition, addite clean thetering and atranged so that incompatible materials are	V

EIA Ref.	EM&A Log Ref	Environmental Mitigation Measures	Objectives of the Recommended Measures & Main Concerns to address	Who to implement the measures?	Location	When to implement the measures?	What requirements or standards for the measure to achieve?	Implementation Status
S8.3.16 of HKBCFEIA and S12.6 of TMCLKLEIA	WM7	<u>Sewage</u> Adequate numbers of portable toilets should be provided for the workers. The portable toilets should be maintained in a state, which will not deter the workers from utilizing these portable toilets. Night soil should be collected by licensed collectors regularly.	Proper handling of sewage from worker to avoid odour, pest and litter impacts.	Contractor	All construction sites	Construction stage	Waste Disposal Ordinance	V
S8.3.17 of HKBCFEIA and S12.6 of TMCLKLEIA	WM8	<u>General Refuse</u> The site and surroundings shall be kept tidy and litter free. General refuse generated on-site should be stored in enclosed bins or compaction units separately from construction and chemical wastes. A reputable waste collector should be employed by the Contractor to remove general refuse from the site, separately from construction and chemical wastes, on a daily basis to minimize odour, pest and litter impacts. Burning of refuse on construction sites is prohibited by law. Aluminium cans are often recovered from the waste stream by individual collectors if they are segregated and made easily accessible. Separate labelled bins for their deposit should be provided if feasible. Office wastes can be reduced through the recycling of paper if volumes are large enough to warrant collection. Participation in a local collection scheme should be considered by the Contractor. In addition, waste separation facilities for paper, aluminum cans, plastic bottles etc., should be provided. Training should be provided to workers about the concepts of site cleanliness and appropriate waste management procedure, including reduction, reuse and recycling of	Minimize production of the general refuse and avoid odour, pest and litter impacts.	Contractor	All construction sites	Construction stage	Waste Disposal Ordinance	V

	EM&A Log Ref	Environmental Mitigation Measures	Objectives of the Recommended Measures & Main Concerns to address	Who to implement the measures?	Location	When to implement the measures?	What requirements or standards for the measure to achieve?	Implementation Status
		wastes. Sufficient dustbins shall be provided for storage of waste as required under the Public Cleansing and Prevention of Nuisances By-laws. In addition, general refuse shall be cleared daily and shall be disposed of to the nearest licensed landfill or refuse transfer station. All waste containers shall be in a secure area on hardstanding.						
Water Quality	(Construct	tion Phase)						
	W1	Mitigation during the marine works to reduce impacts to within acceptable levels have been recommended and will comprise a series of measures that restrict the method and sequencing of dredging/backfilling, as well as protection measures. Details of the measures are provided below: No dredging works of marine sediment shall be carried out the Project except for the construction of box culverts and seawalls at Portion D. Reclamation filling for the Project shall not proceed until at least 200m of leading seawall at the reclamation area formed above +2.2mPD, unless otherwise agreement was obtained from EPD, except for the 300m gaps for marine access. All underwater filling works shall be carried out behind seawalls to avoid dispersion of suspended solids outside the Project limit; Except for the filling of the cellular structures, not more than 15% public fill shall be used for reclamation filling below +2.5mPD during construction of the seawall;	To control construction water quality	Contractor	During dredging and filling	Construction stage	TM-EIAO	V

EIA Ref.	EM&A Log Ref	Environmental Mitigation Measures	Objectives of the Recommended Measures & Main Concerns to address	Who to implement the measures?	Location	When to implement the measures?	What requirements or standards for the measure to achieve?	Implementation Status
		After the seawall is completed except for the 300m marine access as indicated in the EPs, not more than 30% public fill shall be used for reclamation filling below +2.5mPD, unless otherwise agreement from EPD was obtained;						
		No more than 2 grab dredgers with a maximum daily dredging rate of 12,000m3 shall be employed for dredging operation at Portion D of the Project;						
		Upon completion of 200m leading seawall, no more than a total of 60 filling barge trips per day shall be made with a cumulative maximum daily filling rate of 60,000 m3 for HKBCF and TMCLKL southern landfall reclamation during the filling operation; and Upon completion of the whole section of seawall except for the 300m marine access as indicated in the EPs, no more than a total of 190 filling barge trips per day shall be made with a cumulative maximum daily filling rate of 190,000 m3 for the remaining filling operations for HKBCF and TMCLKL southern landfall reclamation.						
		Closed grabs should be used for sediment dredging to reduce sediment loss when lifting the grabs to the barges. Only grab dredgers shall be used for dredging works of the Project;						
		All mechanical grabs shall be designed and maintained to avoid spillage;						
		The moving speed of construction vessels in the dredging area should be reduced to prevent disturbance to the seabed generating sediment plumes;						
		Floating type silt curtains shall be installed						

EIA Ref.	EM&A Log Ref	Environmental Mitigation Measures	Objectives of the Recommended Measures & Main Concerns to address	Who to implement the measures?	Location	When to implement the measures?	What requirements or standards for the measure to achieve?	Implementation Status
		enclosing the entire reclamation site at all time. Staggered layers of silt curtain shall be provided to prevent sediment loss at navigation accesses. The length of each staggered layers shall be at least 200m;						
		The cage-type silt-curtain with steel enclosure is proposed to be installed to enclose local pollution caused by the grab dredging.						
		The grab dredging work should be carried out within the cage-type silt curtain;						
		Single layer silt curtain to be applied around the North-east airport water intake;						
		The silt-curtains should be maintained in good condition to ensure the sediment plume generated from dredging and filling be confined effectively within the site boundary;						
		The dredging and filling works shall be scheduled to spread the works evenly over a working day;						
		Cellular structure shall be used for seawall construction;						
		A layer of geotextile shall be placed on top of the seabed before any filling activities take place inside the cellular structures to form the seawall;						
		The conveyor belts shall be fitted with windboards and conveyor release points shall be covered with curtain to prevent any spillage of filling materials onto the surrounding waters;						
		An additional layer of silt curtain shall be installed near the active stone column installation points. A layer of geotextile with						

EIA Ref.	EM&A Log Ref	Environmental Mitigation Measures	Objectives of the Recommended Measures & Main Concerns to address	Who to implement the measures?	Location	When to implement the measures?	What requirements or standards for the measure to achieve?	Implementation Status
		stone blanket on top shall be placed on the seabed prior to stone column installation works. Stone blanket -> with silt curtain.						
		the decks and exposed fittings of barges and hopper dredgers before the vessel is moved;						
		<ol> <li>Adequate freeboard shall be maintained on barges to reduce the likelihood of decks being washed by wave action;</li> <li>All vessels shall be sized such that</li> </ol>						
		adequate clearance is maintained between vessels and the sea bed at all states of the tide to ensure that undue						

EIA Ref.	EM&A Log Ref	Environmental Mitigation Measures	Objectives of the Recommended Measures & Main Concerns to address	Who to implement the measures?	Location	When to implement the measures?	What requirements or standards for the measure to achieve?	Implementation Status
		<ul> <li>turbidity is not generated by turbulence from vessel movement or propeller wash;</li> <li>10. The works shall not cause foam, oil, grease, litter or other objectionable matter to be present in the water within and adjacent to the works site.</li> </ul>						
	W2	Re-deposition of Contaminated SedimentAll dredged marine mud, which requiredType 2 Confined Marine Disposal underEnvironment, Transport and Works BureauTechnical Circular (Works) No. 34/2002,from the Project shall be disposed of insidethe sheet pile cellular structures within theProject boundary.Before re-deposition the contaminatedsediment, a layer of geotextile shall beplaced at the bottom of the sheet pilecellular structures to avoid direct contact ofthe contaminated sediment and the bottomsediment.A miniumum of 2m thick sand fill or publicfill shall be placed on top of thecontaminated sediment to protect and coverthe sediment after redeposition.The contaminated sediment shall not bedisturbed after re-deposition.No piling works or deep foundation whichmay disturb the contaminated sediment isallowed within the cellular structures.	Re-deposition of Contaminated Sediment	Contractor	Dredged Contaminated Sediment	Construction stage	<ul> <li>Waste Disposal Ordinance</li> <li>ETWB TC34/2002</li> </ul>	V
S9.11.1.3 of HKBCFEIA and S6.10 of TMCLKLEIA	W3	Land Works General construction activities on land should also be governed by standard good working practice. Specific measures to be written into the works contracts should include: wastewater from temporary site facilities should be controlled to prevent direct	To control construction water quality	Contractor	Land-based works areas	Construction stage	TM-EIAO	V

EIA Ref.	EM&A Log Ref	Environmental Mitigation Measures	Objectives of the Recommended Measures & Main Concerns to address	Who to implement the measures?	Location	When to implement the measures?	What requirements or standards for the measure to achieve?	Implementation Status
		discharge to surface or marine waters;						
		Sewage effluent and discharges from on – site kitchen facilities shall be directed to Government sewer in accordance with the requirements of the WPCO or collected for disposal offsite. The use of soakaways shall be avoided;						
		Storm drainage shall be directed to storm drains via adequately designed sand/silt removal facilities such as sand traps, silt traps and sediment basins.Channels, earth bunds or sand bag barriers should be provided on site to properly direct stormwater to such silt removal facilities. Catchpits and perimeter channels should be constructed in advance of site formation works and earthworks;						
		silt removal facilities, channels and manholes shall be maintained and any deposited silt and grit shall be removed regularly, including specifically at the onset of and after each rainstorm;						
		temporary access roads should be surfaced with crushed stone or gravel;						
		rainwater pumped out from trenches or foundation excavations should be discharged into storm drains via silt removal facilities;						
		measures should be taken to prevent the washout of construction materials, soil, silt or debris into any drainage system;						
		open stockpiles of construction materials (e.g. aggregates and sand) on site should be covered with tarpaulin or similar fabric during rainstorms;						
		manholes (including any newly constructed						

EIA Ref.	EM&A Log Ref	Environmental Mitigation Measures	Objectives of the Recommended Measures & Main Concerns to address	Who to implement the measures?	Location	When to implement the measures?	What requirements or standards for the measure to achieve?	Implementation Status
		ones) should always be adequately covered and temporarily sealed so as to prevent silt, construction materials or debris from getting into the drainage system, and to prevent storm run-off from getting into foul sewers;						
		discharges of surface run-off into foul sewers must always be prevented in order not to unduly overload the foul sewerage system;						
		All vehicles and plant should be cleaned before they leave the construction site to ensure that no earth, mud or debris is deposited by them on roads. A wheel washing bay should be provided at every site exit;						
		wheel wash overflow shall be directed to silt removal facilities before being discharged to the storm drain;						
		the section of construction road between the wheel washing bay and the public road should be surfaced with crushed stone or coarse gravel;						
		wastewater generated from concreting, plastering, internal decoration, cleaning work and other similar activities, shall be screened to remove large objects;						
		Vehicle and plant servicing areas, vehicle wash bays and lubrication facilities shall be located under roofed areas. The drainage in these covered areas shall be connected to foul sewers via a petrol interceptor in accordance with the requirements of the WPCO or collected for offsite disposal;						
		the contractors shall prepare an oil / chemical cleanup plan and ensure that leakages or spillages are contained and cleaned up immediately;						

EIA Ref.	EM&A Log Ref	Environmental Mitigation Measures	Objectives of the Recommended Measures & Main Concerns to address	Who to implement the measures?	Location	When to implement the measures?	What requirements or standards for the measure to achieve?	Implementation Status
		waste oil should be collected and stored for recycling or disposal, in accordance with the Waste Disposal Ordinance;						
		All fuel tanks and chemical storage areas should be provided with locks and be sited on sealed areas. The storage areas should be surrounded by bunds with a capacity equal to 110% of the storage capacity of the largest tank; and						
		Surface run-off from bunded areas should pass through oil/grease traps prior to discharge to the storm water system.						
S9.14 of HKBCFEIA and S6.10 of TMCLKLEIA	W4	Implement a water quality monitoring programme	Control water quality	Contractor	At identified monitoring location	During construction period	<ul> <li>TM-water</li> <li>Water Pollution</li> <li>Control Ordinance</li> </ul>	V
S6.10 of TMCLKLEIA	W5	All construction works shall be subject to routine audit to ensure implementation of all EIA recommendations and good working practice.	To control construction water quality	Contractor	All construction site areas	During construction period		V
Ecology (cor	nstruction P	hase)						
S10.7 of HKBCFEIA and S8.14 of TMCLKLE IA	E1	<ul> <li>Use closed grab in dredging works.</li> <li>Install silt curtain during the construction.</li> <li>Limit dredging and works fronts.</li> <li>Construct seawall prior to reclamation filling where practicable.</li> <li>Good site practices</li> <li>Strict enforcement of no marine dumping.</li> <li>Site runoff control</li> <li>Spill response plan</li> </ul>	Minimize marine water quality impacts		Seawall, reclamation area	During construction	TM-Water	V
S10.7 of HKBCFEIA	E2	Watering to reduce dust generation; prevention of siltation of freshwater habitats; Site runoff should be desilted, to reduce the potential for suspended sediments, organics and other contaminants to enter streams and	Prevent Sedimentation from Land-based works areas		Land-based works areas	During construction	TM-Water	V

EIA Ref.	EM&A Log Ref	Environmental Mitigation Measures	Objectives of the Recommended Measures & Main Concerns to address	Who to implement the measures?	Location	When to implement the measures?	What requirements or standards for the measure to achieve?	Implementation Status
		standing freshwater.						
S10.7 of HKBCFEIA and S8.14 of TMCLKLEIA	E3	Good site practices, including strictly following the permitted works hours, using quieter machines where practicable, and avoiding excessive lightings during night time.	Prevent disturbance to terrestrial fauna and habitats		Land-based works areas	During construction		V
S10.7 of HKBCFEIA and S8.14 of TMCLKLEIA	E4	Dolphin Exclusion Zone Dolphin watching plan	Minimize temporary marine habitat loss impact to dolphins		Marine works	During marine works	TM-EIAO	V
S10.7 of HKBCFEIA and S8.14 of TMCLKLEIA	E5	<ul> <li>Decouple compressors and other equipment on working vessels</li> <li>Proposal on design and implementation of acoustic decoupling</li> <li>measures applied during dredging and reclamation works</li> <li>Avoidance of percussive piling</li> </ul>	Minimize marine noise impacts on dolphins	Contractor	Marine works	During marine works	<ul> <li>TM-EIAO</li> <li>Marine Park Regulations</li> </ul>	
S10.7 of HKBCFEIA and S8.14 of TMCLKLEIA	E6	<ul> <li>Control vessel speed</li> <li>Skipper training</li> <li>Predefined and regular routes for working vessels; avoid Brothers Islands</li> </ul>	Minimize marine traffic disturbance on dolphins	Contractor	Marine traffic	During marine works		V
S10.10 of HKBCFEIA and S8.14 of TMCLKLEIA	E7	Vessel based dolphin monitoring	Minimize marine traffic disturbance on dolphins	Contractor	Northeast and Northwest Lantau	During marine works		V
Fisheries								
S11.7 of HKBCFEIA	F1	<ul> <li>Reduce re-suspension of sediments</li> <li>Limit dredging and works fronts.</li> <li>Good site practices</li> </ul>	Minimize marine water quality Impacts	Contractor	Seawall, reclamation area	During construction	TM-Water	V

EIA Ref.	EM&A Log Ref	Environmental Mitigation Measures	Objectives of the Recommended Measures & Main Concerns to address	Who to implement the measures?	Location	When to implement the measures?	What requirements or standards for the measure to achieve?	Implementation Status
S11.7 of HKBCFEIA	F2	Install silt-grease trap in the drainage system collecting surface runoff	Minimize impacts on marine water quality impacts	Designer	Reclamation area	During construction	TM-Water	V
Landscape &	& Visual (De	tailed Design Phase)						
S14.3.3.1 of HKBCFEIA	LV1	<ul> <li>General design measures include:</li> <li>Roadside planting and planting along the edge of the reclamation is</li> <li>proposed;</li> <li>Transplanting of mature trees in good health and amenity value where</li> <li>appropriate and reinstatement of areas disturbed during construction</li> <li>by compensatory hydro-seeding and planting;</li> <li>Protection measures for the trees to be retained during construction</li> <li>activities;</li> <li>Maximizing new tree, shrub and other vegetation planting to</li> <li>compensate tree felled and vegetation removed;</li> <li>Providing planting area around peripheral of HKBCF for tree planting</li> <li>screening effect; and</li> <li>Providing salt-tolerant native trees along the planter strip at affected seawall and newly reclaimed coastline.</li> </ul>	Minimize visual & landscape impacts	Contractor	HKBCF	Design Stage		V
Landscape &	& Visual (Co	nstruction Phase)						
S14.3.3.3 of HKBCFEIA and S10.9 of TMCLKLEIA	LV2	<u>Mitigate Landscape Impacts</u> G1. Grass-hydroseed or sheeting bare soil surface and stock pile areas.	Minimize visual & landscape impacts	Contractor	All construction site areas	Construction stage		V

EIA Ref.	EM&A Log Ref	Environmental Mitigation Measures	Objectives of the Recommended Measures & Main Concerns to address	Who to implement the measures?	Location	When to implement the measures?	What requirements or standards for the measure to achieve?	Implementation Status
S10.9 of TMCLKLEIA	LV3	LV3 Mitigate Landscape Impacts CM1. Existing trees on boundary of the Project Area shall be carefully protected during construction. Detailed Tree Protection Specification shall be provided in the Contract Specification. Under this specification, the Contractor shall be required to submit, for approval, a detailed working method statement for the protection of trees prior to undertaking any works adjacent to all retained trees, including trees in contractor's works areas. (Tree protection measures will be detailed at Tree Removal Application stage). CM2. Trees unavoidably affected by the works shall be transplanted where practical. Trees will be transplanted straight to their final receptor site and not held in a temporary nursery. A detailed Tree Transplanting Specification shall be provided in the Contract Specification. Sufficient time for necessary tree root and crown preparation periods shall be allowed in the project programme. CM7. Ensure no run-off into water body adjacent to the Project Area. CM9. Recycle/Reuse all felled trees and vegetation, e.g. mulching.	Minimize landscape impact	Contractor	All construction site areas	Construction stage		V
S14.3.3.3 of HKBCFEIA	LV4	Mitigate Visual Impacts V1. Minimize time for construction activities during construction period. V2. Provide screen hoarding at the portion of the project site/ works areas storage areas near VSRs who have close low- level views to the Project during HKBCF construction.	Minimize visual & landscape impacts	Contractor	All construction site areas	Construction stage		V

EIA Ref.	EM&A Log Ref	Environmental Mitigation Measures	Objectives of the Recommended Measures & Main Concerns to address	Who to implement the measures?	Location	When to implement the measures?	What requirements or standards for the measure to achieve?	Implementation Status
S10.9 of TMCLKLEIA	LV5	Mitigate Visual Impacts CM5. Screening of construction works by hoardings around works area in visually unobtrusive colors, to screen works. CM6. Control night-time lighting and glare by hooding all lights. CM8. Avoidance of excessive height and bulk of buildings and structures.	Minimize visual impact	Contractor	All construction site areas	Construction stage		V
EM&A								
S15.2.2 of HKBCFEIA	EM1	An Independent Environmental Checker needs to be employed as per the EM&A Manual.	Control EM&A Performance	Project Proponent	All construction site areas	Construction stage	<ul> <li>EIAO Guidance</li> <li>Note No. 4/2002</li> <li>TM_EIAO</li> </ul>	V
S15.5 - S15.6 of HKBCFEIA	EM2	An Environmental Team needs to be employed as per the EM&A Manual. Prepare a systematic Environmental Management Plan to ensure effective implementation of the mitigation measures. An environmental impact monitoring needs to be implementing by the Environmental Team to ensure all the requirements given in the EM&A Manual are fully complied with.	Perform environmental monitoring & auditing	Contractor	All construction site areas	Construction stage	<ul> <li>EIAO Guidance Note No. 4/2002</li> <li>TM_EIAO</li> </ul>	V

Legend: V = implemented; x = not implemented; N/A = not applicable



Appendix H

Statistics on Environmental Complaints, Notification of Summons and Successful Prosecutions



# Statistics on Environmental Complaints, Notification of Summons and Successful Prosecutions

Reporting Period		<b>Cumulative Statistic</b>	
	Complaints	Notifications of summons	Successful prosecutions
The reporting period	0	0	0
From commencement date of construction to end of reporting month	4	0	0



Appendix I

**Environmental Site Inspection Schedule** 



## Contract No.: HY/2013/02 Hong Kong – Zhuhai – Macao Bridge Hong Kong Boundary Crossing Facilities – Infrastructure Works Stage I (Western Portion)

## Schedule for Weekly Environmental Site Inspection

Sun	Mon	Tue	Wed	Thu	Fri	Sat
					1	2
3	4	5	6	7 Environmental Site Inspection	8	9
10	11	12	13	14	15 Environmental Site Inspection	16
17	18	19	20	21 Environmental Site Inspection	22	23
24	25	26	27	28 Environmental Site Inspection	29	30
31						

### July 2016



### Contract No.: HY/2013/02 Hong Kong – Zhuhai – Macao Bridge Hong Kong Boundary Crossing Facilities – Infrastructure Works Stage I (Western Portion)

## Schedule for Weekly Environmental Site Inspection

Sun	Mon	Tue	Wed	Thu	Fri	Sat
	1	2	3	4 Environmental Site Inspection	5	6
7	8	9	10	11 Environmental Site Inspection	12	13
14	15	16	17	18	19 Environmental Site Inspection	20
21	22	23	24	25 Environmental Site Inspection	26	27
28	29	30	31			

## August 2016