



中國港灣工程有限責任公司

香港代表：振華工程有限公司

CHINA HARBOUR ENGINEERING COMPANY LIMITED
HONG KONG REPRESENTATIVE: ZHEN HUA ENGINEERING CO., LTD.

Date : 13 July 2017
Our Ref : CHEC300/OUT/2017/07/04.01/027914

By Hand

AECOM Asia Company Limited
8/F Grand Central Plaza
Tower 2, 138 Shatin Rural Committee Road
Shatin, Hong Kong

Attn: Mr. Ng Wang Shek
The Engineer's Representative

Dear Sir,

Contract no. HY/2013/03
Hong Kong-Zhuhai-Macao Bridge Hong Kong Boundary Crossing Facilities –
Vehicle Clearance and Ancillary Buildings and Facilities
EP Condition 5.4 – Monthly EM&A Report (June 2017)

Pursuant to the Condition 5.4 of the EP-353/2009/K, we are pleased to submit one soft copy and three hard copies of the certified Monthly EM&A Report (Rev.2) for June 2017 for your on-ward submission.

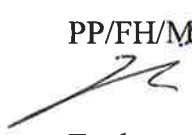
Thank you for your kind attention.

Yours faithfully,
For and on behalf of
China Harbour Engineering Co. Ltd.



Paul Pui
Site Agent

PP/FH/MC/ac



Encl.

12 July 2017

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. Patrick Lee

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/2013/03 – HZMB HKBCF – Vehicle Clearance Plazas and
Ancillary Buildings and Facilities
Monthly Environmental Monitoring & Audit Report for June 2017**

Reference is made to the Environmental Team's submission of Monthly Environmental Monitoring & Audit Report for June 2017 (Rev. 2) certified by the ET Leader (ET's ref.: "MCL/ED/0391/2017/D" dated 12 July 2017) and provided to us via e-mail on 12 July 2017.

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



Raymond Dai
Independent Environmental Checker

c.c.	HyD	Mr. Vico Cheung	(By Fax: 3188 6614)
	HyD	Mr. Ken Woo	(By Fax: 3188 6614)
	MCL	Mr. Arthur Cheng	(By Fax: 2450 8032)
	CHEC	Mr. Johnason Ko	(By Fax: 2887 3014)

Internal: DY, YH, ENPO Site

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Website : www.materialab-consultant.com

Date 12 July 2017
Our Ref. MCL/ED/0391/2017/D

Ramboll Environ Hong Kong Limited
(formerly ENVIRON Hong Kong Limited)
21/F, BEA Harbour View Centre
56 Gloucester Road, Wan Chai
Hong Kong

BY HAND

Attn.: Mr. Raymond Dai, IEC

Dear Sir,

**EP Condition 5.4 – Monthly EM&A Report for
Hong Kong-Zhuhai-Macao Bridge Hong Kong Boundary Crossing Facilities –
Vehicle Clearance Plazas and Ancillary Buildings and Facilities (Contract No. HY/2013/03)**

Pursuant to Condition 5.4 of the Environmental Permit (EP-353/2009/K) for the captioned project, we are pleased to submit the certified Monthly EM&A Report for June 2017 (Rev. 2) for your verification.

Should you require further information, please do not hesitate to contact our Miss Jamie Tam at 3565 4157 or the undersigned at 3565 4115.

Yours faithfully,
for and on behalf of
MATERIALAB CONSULTANTS LIMITED



Arthur Cheng
Environmental Team Leader

AC/jt

c.c. AECOM – Mr. P.K. Lee, Mr. W.S. Ng, Mr. Dominic Mow
RAMBOLL ENVIRON – Mr. Ray Yan, Mr. Andy Wong
CHEC – Mr. Marko Chan

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Report No.: 0165/15/ED/0836

MONTHLY ENVIRONMENTAL MONITORING & AUDIT REPORT (Rev.2)

June 2017

Client: China Harbour Engineering Co., Ltd.

Project: Contract No. HY/2013/03
Hong Kong-Zhuhai-Macao Bridge
Hong Kong Boundary Crossing Facilities -
Vehicle Clearance Plazas and
Ancillary Buildings and Facilities

Report No.: 0165/15/ED/0836

Prepared by: Jamie Tam

Reviewed by: Bong Yu

Certified by:


Arthur Cheng
Environmental Team Leader

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EXECUTIVE SUMMARY

This Monthly Environmental Monitoring and Audit (EM&A) Report is prepared for Contract No. HY/2013/03 "Hong Kong-Zhuhai-Macao Bridge Hong Kong Boundary Crossing Facilities – Vehicle Clearance Plazas and Ancillary Buildings and Facilities" (includes the construction works of Contract No. HY/2013/06 "Hong Kong-Zhuhai-Macao Bridge Hong Kong Boundary Crossing Facilities – Automatic Vehicle Clearance Support System" within Contract No. HY/2013/03 works area) (hereafter referred to as "the Contract") for the Highways Department of Hong Kong Special Administrative Region (HKSAR). Contract No. HY/2013/03 was awarded to China Harbour Engineering Co. Limited (construction works of Contract No. HY/2013/06 was awarded to ATAL Technologies Limited within Contract No. HY/2013/03 works area) (hereafter referred to as "the Contractor") and MaterialLab Consultants Limited (MCL) was appointed as the Environmental Team (ET) by the Contractor.

Contract No. HY/2013/03 (includes the construction works of Contract No. HY/2013/06 within Contract No. HY/2013/03 works area) is part of the "Hong Kong-Zhuhai-Macao Bridge Hong Kong Boundary Crossing Facilities" (HZMB HKBCF) Project which is a "Designated Project" under Schedule 2 of the Environmental Impact Assessment (EIA) Ordinance (Cap. 499) and for which an EIA Report (Register No. AEIAR-145/2009) was prepared and approved. The current Environmental Permit (EP) for HKBCF, namely No. EP-353/2009/K, was issued on 11 April 2016. These documents are available through the EIA Ordinance Register.

Commencement of Contract No. HY/2013/03 took place on 10 April 2015 while the construction works and the EM&A programme of Contract No. HY/2013/03 commenced on 29 August 2015 (commencement of Contract No. HY/2013/06 took place on 14 August 2015 while the construction works and the EM&A programme of Contract No. HY/2013/06 within Contract No. HY/2013/03 works area commenced on 13 September 2016).

MaterialLab Consultants Limited (MCL) 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 will be providing environmental team services for the Contract.

This is the 22nd Monthly EM&A Report for the Contract which summaries findings of the EM&A programme during the reporting period from 01 June 2017 to 30 June 2017 (includes the findings of the EM&A programme of Contract No. HY/2013/06 within Contract No. HY/2013/03 works area during the reporting period from 01 June 2017 to 30 June 2017) (the "reporting period"). 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 at the locations shown in **Figure 3** and ecological monitoring as shown in **Figure 4** 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 work at these stations.

The dates of site inspection for Contract No. HY/2013/03 (includes Contract No. HY/2013/06 within Contract No. HY/2013/03 works area) during the reporting period are listed below:

Environmental Site Inspection: 1, 8, 15, 22 and 30 June 2017.

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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 shown at **Table 4.1** by the Environmental Team of Contract No. HY/2010/02 during the reporting period.

Ecological monitoring results at all transects are reported in the EM&A report prepared by Contract No. HY/2010/02.

Complaint Log

There was one complaint which was under investigation during the last reporting period is reported in this reporting period. There were two complaints received in relation to the environmental impact during the reporting period.

Log No.	Environmental Complaint Ref. No.	Date of Complaint Receipt	Description
008	ENPO-C0119	31 May 2017	Air pollution
009	ENPO-C0120	2 June 2017	Air pollution
010	ENPO-C0121	6 June 2017	Air pollution

After investigation, all complaints were not related to Contract No. HY/2013/03 (including Contract No. HY/2013/06 within Contract No. HY/2013/03 works area).

Notifications of Summons and Successful Prosecutions

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

Reporting Changes

There was no reporting change during the reporting period.

Future Key Issues

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

For Contract No. HY/2013/03

1. Building at Portion A1, B, G, N, J, STP & Pumping Stations;
2. Piling at Box Culvert B & Sign Gantry;
3. CUE Construction at Portion B, C & J;
4. Drainage & Sewerage Work, Water Main & Cable Duct at Portion B, H1, H2, J, P, G & A1;
5. Radiation Screen Wall at Portion B, E P, N,M,C;
6. Sign Gantry Footing at Portion B;

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The logo for MaterialLab, featuring the word "MaterialLab" in a bold, sans-serif font. The "Material" part is in a lighter weight, and "Lab" is in a bolder weight. The text is white and set against a dark rectangular background.

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7. Sewerage Pumping Station, High Mast Lighting Foundation & Box Culvert C at Portion G;
8. Bridge Works at A1 to A9;
9. Site Foundation Works at Portion K;
10. Cover Walkway at Portion H1 & H2;
11. Box Culvert B at Portion N; Shuttle kiosk & Subway at Portion E;
12. Marine sediment excavation activities from the land-based works and corresponding disposal at the designated disposal sites within Hong Kong as allocated by the Marine Fill Committee;
13. Deployment, maintenance and inspection of silt curtain; and
14. Construction of water outfall of box culvert.

For Contract No. HY/2013/06 within Contract No. HY/2013/03 works area

1. Conduits installation at Building 037 and CUE works area.

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1. INTRODUCTION

1.1 Background

1.1.1 Materialab Consultants Limited was commissioned by China Harbour Engineering Co. Limited (also referred to as "the Contractor") to undertake the Environmental Team (ET) services (including environmental monitoring and audit (EM&A)) for Contract No. HY/2013/03 "Hong Kong-Zhuhai-Macao Bridge Hong Kong Boundary Crossing Facilities – Vehicle Clearance Plazas and Ancillary Buildings and Facilities" (includes the construction works of Contract No. HY/2013/06 "Hong Kong-Zhuhai-Macao Bridge Hong Kong Boundary Crossing Facilities – Automatic Vehicle Clearance Support System" within Contract No. HY/2013/03 works area) ("the Contract") for the Highways Department of Hong Kong Special Administrative Region (HKSAR).

1.1.2 Contract No. HY/2013/03 (includes the construction works of Contract No. HY/2013/06 within Contract No. HY/2013/03 works area) is part of Hong Kong–Zhuhai–Macao Bridge Hong Kong Boundary Crossing Facilities (HKBCF) which is "Designated Projects", under Schedule 2 of the Environmental Impact Assessment Ordinance (EIAO) (Cap 499) and for which an EIA Report (Register No. AEIAR-145-2009) was prepared and approved. The current Environmental Permit (EP) for HKBCF, namely No. EP- 353/2009/K, was issued on 11 April 2016. These documents are available through the EIA Ordinance. The general layout of the Project area is shown in **Appendix A**.

1.1.3 This is the twenty-second EM&A report to document the findings of site inspection activities and EM&A programme carried out by the Contractor of Contract No. HY/2013/03 (includes the construction works of Contract No. HY/2013/06 within Contract No. HY/2013/03 works area) from 01 June 2017 to 30 June 2017 (reporting period) under Contract No. HY/2013/03 (from 01 June 2017 to 30 June 2017 for the construction works of Contract No. HY/2013/06 within Contract No. HY/2013/03 works area) and is submitted to fulfil Condition 5.4 of the EP.

1.2 Project Description

1.2.1 The works to be executed under Contract No. HY/2013/03 include the following major items:

- a. Cargo clearance facilities including kiosks for clearance of good vehicles, customs inspection platforms, X-ray building, etc.;
- b. Passenger related facilities including processing kiosks and examination facilities for private cars and coaches, annexure for examination of accompanying passengers of private cars, etc.;
- c. Accommodation/offices for the facilities (like fire station, police station, buildings for Immigration Department [ImmD], Hong Kong Customs and Excise Department [C&ED], Agriculture, Fisheries and Conservation Department [AFCD], Food and Environmental Hygiene Department [FEHD], Department of Health [DoH] etc.) of the Government departments providing services in connection with the HKBCF;
- d. Provision of transport and miscellaneous facilities inside the HKBCF including public transport interchange (PTI), transport drop-off and pick-up areas, vehicle holding areas, passenger queuing areas, road networks, footbridges, fencing, sewerage and drainage systems, sewage treatment plant and treated effluent disposal facilities, water supply system, building services works, electronic system, and traffic control and information system including traffic control and surveillance system (TCSS), etc.;

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- e. Provision of roads connecting the BCF to the Hong Kong Link Road (HKLR), the Tuen Mun – Chek Lap Kok Link (TM-CLKL) and the Hong Kong International Airport (HKIA), expect the part of road works in HKIA entrusted to the HKLR project; and
- f. Reprovisioning of the affected HKIA's facilities, expect those affected by the Automated People Mover (APM) system such as the existing east rescue berth.

1.2.2 The works to be executed under Contract No. HY/2013/06 within Contract No. HY/2013/03 works area include the following major items:

- a. The Automatic Vehicle Clearance Support System amid to increasing traffic flow for Hong Kong-Zhuhai-Macao Bridge Hong Kong Boundary Crossing Facilities;
- b. Responsible for designs and develops a set of tailor-made computer monitoring and control systems to for daily security operation; and
- c. The Clearance Workstations at 72 vehicle clearance kiosks, Customs and Excise's inbound and outbound traffic control centers as well as a Vehicle Tracking System.

1.3 Project Organisation

1.3.1 The Project Organisation for Environmental Works of Contract No. HY/2013/03 is shown in **Appendix B**. The contact person and telephone numbers of key personnel for the captioned project are shown in **Table 1.1**:

Table 1.1 Contact Persons and Telephone Numbers of Key Personnel (for Contract No. HY/2013/03)

Party	Position	Contact Person	Telephone No.	Fax No.
Engineer or Engineer's Representative (AECOM Asia Co. Ltd.)	Chief Resident Engineer	Mr. W. S. Ng	3958 7400	3902 8800
Environmental Project Office / Independent Environmental Checker (Ramboll Environ Hong Kong Limited)	Environmental Project Office Leader	Mr. Y. H. Hui	3547 2133	3465 2899
	Independent Environmental Checker (IEC)	Mr. Raymond Dai	3465 2888	3465 2899
	Environmental Site Supervisor	Mr. Ray Yan	5181 8165	3465 2899
Contractor (China Harbour Engineering Co. Ltd)	Site Agent	Mr. Paul Pui	9125 0700	2512 0427
	Environmental Officer	Mr. Marko Chan	9427 2879	2512 0427
Environmental Team (Materialab Consultants Limited)	Environmental Team Leader (ETL)	Mr. Arthur Cheng	3565 4115	2450 8032
24-hr Complaint Hotline	--	--	5236 7111	--

1.3.2 The Project Organisation for Environmental Works of Contract No. HY/2013/06 within Contract No. HY/2013/03 works area is shown in **Appendix B**. The contact person and telephone numbers of key personnel for the captioned project are shown in **Table 1.2**:

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Table 1.2 Contact Persons and Telephone Numbers of Key Personnel (for Contract No. HY/2013/06 within Contract No. HY/2013/03 works area)

Party	Position	Contact Person	Telephone No.	Fax No.
Engineer or Engineer's Representative (AECOM Asia Co. Ltd.)	Chief Resident Engineer	Mr. W. S. Ng	3958 7400	3902 8800
Environmental Project Office / Independent Environmental Checker (Ramboll Environ Hong Kong Limited)	Environmental Project Office Leader	Mr. Y. H. Hui	3547 2133	3465 2899
	Independent Environmental Checker (IEC)	Mr. Raymond Dai	3465 2888	3465 2899
	Environmental Site Supervisor	Mr. Ray Yan	5181 8165	3465 2899
Contractor (ATAL Technologies Limited)	Site Agent	Mr. Eric Yim	2565 3355	3162 5217
	Environmental Officer	Mr. W. Li	2565 3137	3162 5217
Environmental Team (Materialab Consultants Limited)	Environmental Team Leader (ETL)	Mr. Arthur Cheng	3565 4115	2450 8032
24-hr Complaint Hotline	--	--	6509 0375	--

1.3.3 The Contract HY/2013/03 has commenced on 10 April 2015. The commencement of construction works and the EM&A programme have commenced on 29 August 2015.

1.3.4 The Contract HY/2013/06 has commenced on 14 August 2015. The commencement of construction works and the EM&A programme have commenced on 13 September 2016 within Contract No. HY/2013/03 works area.

1.4 Construction Programme

1.4.1 The construction programme for Contract No. HY/2013/03 (includes the construction works of HY/2013/06 within Contract No. HY/2013/03 works area) are provided in **Appendix C**.

1.5 Construction Works Undertaken during the Reporting Period

1.5.1 The construction works of Contract No. HY/2013/03 commenced on 29 August 2015 (includes the construction works of Contract No. HY/2013/06 commenced on 13 September 2016 within Contract No. HY/2013/03 works area). During this reporting period, the following major site activities were commenced:

For Contract No. HY/2013/03

1. Building at Portion A1, B, G, N, J, STP & Pumping Stations;
2. Piling at Box Culvert B & Sign Gantry;
3. CUE Construction at Portion B, C & J;
4. Drainage & Sewerage Work, Water Main & Cable Duct at Portion B, H1, H2, J, P, G & A1;
5. Radiation Screen Wall at Portion B, E, P, N, M, C;
6. Sign Gantry Footing at Portion B;
7. Sewerage Pumping Station, High Mast Lighting Foundation & Box Culvert C at Portion G;

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8. Bridge Works at A1 to A9;
9. Site Foundation Works at Portion K;
10. Cover Walkway at Portion H1 & H2;
11. Box Culvert B at Portion N; Shuttle kiosk & Subway at Portion E;
12. Marine sediment excavation activities from the land-based works and corresponding disposal at the designated disposal sites within Hong Kong as allocated by the Marine Fill Committee; and
13. Deployment, maintenance and inspection of silt curtain.

For Contract No. HY/2013/06 within Contract No. HY/2013/03 works area

1. Conduit & display panel installation at Building 037 and CUE works area.

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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. **Figure 1** shows the locations of air monitoring stations.

Table 2.1 Air Quality Monitoring Location

Air Monitoring Station	Location
AMS6	Dragonair/CNAC (Group) Building (A80)
AMS7	Hong Kong SkyCity Marriott Hotel

2.2 Monitoring Requirements

- 2.2.1 The monitoring requirements, equipment, parameters, frequency and duration, methodology, schedule, and meteorological information are described in the monthly EM&A Reports prepared for Contract No. HY/2010/02 and HY/2011/03.
- 2.2.2 The Action and Limit levels for 1-hr TSP and 24-hr TSP are summarized in **Table 2.2**.

Table 2.2 Action and Limit Levels for Air Quality

Monitoring Station	Action Level (µg/m³)	Limit Level (µg/m³)
1 hour TSP		
AMS6	360	500
AMS7	370	
24 hours TSP		
AMS6	173	260
AMS7	183	

- 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 No. 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 exceedances 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.

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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. **Figure 2** shows the locations of noise monitoring stations.

Table 3.1 Construction Noise Monitoring Location

ID No.	Description
NMS2	Seaview Crescent
NMS3B	Site Boundary of Site Office Area at WA2

3.2 Monitoring Requirements

- 3.2.1 The monitoring requirements, monitoring equipment, monitoring parameters, frequency and duration, monitoring methodology and monitoring schedule 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 defined in **Table 3.2**.

Table 3.2 Action and Limit Level for Construction Noise

Monitoring Station	Action Level	Limit Level
For the Time Period 0700-1900 hrs. on Normal Weekdays		
NMS2	When one documented complaint is received	75.0 dB (A) Leq (30 min.)
NMS3B		70.0 dB (A) Leq (30 min.)*

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

3.3 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. No noise exceedance was recorded at stations NMS2 and NMS3B by the ET of Contract No. HY/2010/02 during the reporting period.

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4. WATER QUALITY MONITORING

4.1 Monitoring Locations

- 4.1.1 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 impact water quality monitoring at the stations shown in **Table 4.1** and **Figure 3**.

Table 4.1 Water Quality Monitoring Stations

Station	Description	East	North
IS5	Impact Station (Close to HKBCF construction site)	811579	817106
IS(Mf)6	Impact Station (Close to HKBCF construction site)	812101	817873
IS7	Impact Station (Close to HKBCF construction site)	812244	818777
IS8	Impact Station (Close to HKBCF construction site)	814251	818412
IS(Mf)9	Impact Station (Close to HKBCF construction site)	813273	818850
IS10(N)	Impact Station (Close to HKBCF construction site)	812569	821475
IS(Mf)11	Impact Station (Close to HKBCF construction site)	813562	820716
IS(Mf)16	Impact Station (Close to HKBCF construction site)	814328	819497
IS17	Impact Station (Close to HKBCF construction site)	814539	820391
SR3	Sensitive receivers (San Tau SSSI)	810525	816456
SR4(N)	Sensitive receivers (Tai Ho)	814705	817859
SR5(N)	Control Station	812569	821475
SR6	Sensitive receivers (Sha Chau and Lung Kwu Chau Marine Park)	805837	821818
SR7	Sensitive receivers (Tai Mo Do)	814293	821431
SR10A ⁽¹⁾	Sensitive receivers(Ma Wan FCZ) 1	823741	823495
SR10B(N) ⁽¹⁾	Sensitive receivers(Ma Wan FCZ) 2	823683	823187
CS(Mf)3(N)	Control Station	808814	822355
CS(Mf)5	Control Station	817990	821129
CS4	Control Station	810025	824004
CS6	Control Station	817028	823992
CSA ⁽²⁾	Control Station	818103	823064

Note:

⁽¹⁾ Additional monitoring station for Ma Wan FCZ

⁽²⁾ Additional control monitoring station for Ma Wan FCZ

Remarks:

The ET of the 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 if water quality monitoring is 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 the other contracts if the water quality monitoring station(s) is/are as part of EM&A programme.

4.2 Monitoring Requirements

- 4.2.1 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 by Contract No. HY/2010/02.
- 4.2.2 The event and action plan is provided in **Appendix D**.
- 4.2.3 The Action and Limit Levels for Water Quality are provided in **Table 4.2**.

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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.
2. For DO, non-compliance of the water quality limits occurs when monitoring result is lower than the limits.
3. 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.

- 4.2.4 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.

4.3 Monitoring Results

- 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.

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5. ECOLOGY MONITORING

5.1 Monitoring Locations

5.1.1 The ecological 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 24 transects as part of EM&A programme if these transects are no longer covered under Contract No. HY/2010/02. The ecological 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 4** shows the co-ordinates for the transect lines and layout map.

Remarks:

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

5.2 Monitoring Requirements

5.2.1 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 by Contract No. HY/2010/02.

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

5.2.3 The Action and Limit Levels for Chinese White Dolphin Monitoring are provided in **Table 5.1(a)** & **Table 5.1(b)**.

Table 5.1(a) 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% of baseline)] AND [(STG < 40% of baseline) & (ANI < 40% of baseline)]	

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

Table 5.2(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)]	

5.2.4 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

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

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6. DISPOSAL OF MARINE SEDIMENT EXTRACTED FROM BORED PILING WORKS

6.1 Background

6.1.1 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 site allocated to this Project is the Mud Pit CMP Vd of the Confined Marine Sediment Disposal Facility to the East of Sha Chau (ESC) during this reporting period.

6.1.2 No extracted marine sediment was treated using cement solidification/stabilisation (Cement S/S) techniques under Contract No. HY/2013/03 during this reporting period. The marine sediment extracted from this Contract was disposed to the MFC allocated disposal sites directly without treatment during this reporting period. 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 all three Contracts (Contract Nos. HY/2013/02, HY/2013/03 and HY/2013/04).

6.2 Dumping Arrangements

6.2.1 The barge for disposal of marine sediment was moored at the temporary loading and unloading at the east shore of the HKBCF Island, which has been being used by reclamation 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 was allocated to one Contract. The quantity of marine sediment disposed on each date was from one Contract.

6.2.2 During dumping, Contractor of Contract No. HY/2013/03 is responsible for transporting the marine sediment from the site area of Contract No. HY/2013/03 to the barge. The estimated quantity of marine sediment in each truck is confirmed by Resident Site Staff of Contract Nos. HY/2013/02, HY/2013/03 and HY/2013/04. The trip tickets for transportation and disposal of marine sediment are collected and checked. Contract No. HY/2013/03 as the dumping permit holder is responsible for reporting to EPD the quantity disposed of as the condition stipulated in the dumping permit. The disposal site allocated to this Project is the Mud Pit CMP Vd of the Confined Marine Sediment Disposal Facility to the East of Sha Chau (ESC) during this reporting period.

6.3 Quantity Disposed

6.3.1 Marine sediment extracted from bored piling from this Contract was disposed to allocated dumping site in June 2017. The summary of marine sediment disposed up to end June 2017 is shown in the following table:

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Table 6.1 Summary of Marine Sediment Disposed to Dumping Site

Month/Year	Quantity disposed (in'000m ³)			
	HY/2013/02	HY/2013/03	HY/2013/04	Total
Jan 2016	1.272	1.950	0.800	4.022
Feb 2016	2.816	2.328	0.704	5.848
Mar 2016	0.600	2.464	3.942	7.006
Apr 2016	5.128	5.602	5.028	15.758
May 2016	0.000	0.000	0.000	0.000
Jun 2016	1.200	4.584	1.578	7.362
Sub-Total	11.016	16.928	12.052	39.996
Jul 2016	0.728	10.728	3.690	15.146
Aug 2016	1.784	1.544	4.428	7.756
Sep 2016	2.328	6.816	3.888	13.032
Oct 2016	1.096	2.376	5.286	8.758
Nov 2016	0.000	0.000	0.000	0.000
Dec 2016	1.568	4.960	2.538	9.066
Cat L in Dec 2016	0.000	2.792	3.570	6.362
Sub-Total	18.520	46.144	35.452	100.116
Jan 2017	0.000	0.656	6.552	7.208
Feb 2017	0.088	0.264	1.380	1.732
Mar 2017	0.000	0.000	0.000	0.000
Apr 2017	0.624	1.288	0.000	1.912
May 2017	0.000	1.440	0.000	1.440
June 2017	1.432	0.000	0.000	1.432
Total	20.664	49.792	43.384	113.840

Note: All sediments are in Type II disposal method except Cat L (in Type I)

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7. ENVIRONMENTAL SITE INSPECTION AND AUDIT

7.1 Site Inspection

- 7.1.1 Site audits were carried out by ET on weekly basis to monitor the implementation of proper environmental management practices and mitigation measures in the Project site.
- 7.1.2 The joint site audits for Contract No. HY/2013/03 (includes Contract No. HY/2013/06 within Contract No. HY/2013/03 works area) were conducted on 1, 8, 15, 22 and 30 June 2017 by the representatives of Engineer, Contractor, ET and IEC (IEC for 30 June 2017).
- 7.1.3 Particular observations during the site inspection and corrective actions undertaken by the Contractor are described below:

For Contract No. HY/2013/03

26 May 2017

1. The Contractor was reminded to remove general and construction waste accumulated on site. Subsequently, waste was removed. The observation was closed on 1 June 2017.
2. The Contractor was reminded to remove stagnant water accumulated on site. Subsequently, stagnant water was removed. The observation was closed on 1 June 2017.

1 June 2017

1. The Contractor was reminded to increase watering for dust suppression on site. Subsequently, watering was increased. The observation was closed on 8 June 2017.

8 June 2017

1. The Contractor was reminded to remove general waste accumulated at Building 037 and CUE works area. Subsequently, waste was removed. The observation was closed on 15 June 2017.

15 June 2017

The Contractor was reminded to remove general waste accumulated at CUE works area. Subsequently, general waste was removed. The observation was closed on 22 June 2017.

22 June 2017

1. The Contractor was reminded to remove general waste accumulated at CUE works area and Building 037. Subsequently, waste was removed. The observation was closed on 30 June 2017.

30 June 2017

1. The Contractor was reminded to increase watering for dust suppression on site. Follow-up actions for outstanding observation will be checked in the upcoming site inspections and reported in the coming reporting period.
2. The Contractor was reminded to improve housekeeping on site. Follow-up actions for outstanding observation will be checked in the upcoming site inspections and reported in the coming reporting period.
3. The Contractor was reminded to increase watering for dust suppression when drilling at A6 Bridge. Follow-up actions for outstanding observation will be checked in the upcoming site inspections and reported in the coming reporting period.

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4. The Contractor was reminded to remove stagnant water accumulated at the drip tray of a generator at CUE works area. Follow-up actions for outstanding observation will be checked in the upcoming site inspections and reported in the coming reporting period.

For Contract No. HY/2013/06 within Contract No. HY/2013/03 works area

1 June 2017

1. Nil findings.

8 June 2017

1. Nil findings.

15 June 2017

1. Nil findings.

22 June 2017

1. Nil findings.

30 June 2017

1. Nil findings.

7.2 Advice on the Solid and Liquid Waste Management Status

- 7.2.1 The Contractor of Contract No. HY/2013/03 registered as a chemical waste producer for the Contract. Sufficient numbers of receptacles were available for general refuse collection and sorting.
- 7.2.2 The monthly summary of waste flow table for Contract No. HY/2013/03 (includes Contract No. HY/2013/06 within Contract No. HY/2013/03 works area) are detailed in **Appendix E**.
- 7.2.3 Contract No. HY/2013/03 has been assigned to arrange for delivery of surplus filling materials from Contract No. HY/2013/03 to Tuen Mun - Chek Lap Kok Link (TM-CLKL) project of HZMB and the Airport Authority Hong Kong's Three Runway (3RS) Project by marine access. The estimated quantity of surplus filling materials is confirmed by Resident Site Staff of Contract No. HY/2013/03. The summary of surplus filling materials delivered to TM-CLKL and 3RS project up to the end of June 2017 is shown in **Table 7.1**.

Table 7.1 Summary of Surplus Filling Materials Delivered from Contract No. HY/2013/03 to TM-CLKL and 3RS Project

Month/Year	Density (in tonnes/m ³)	Quantity disposed (in '000m ³)		
		To TM-CLKL Project	To 3RS Project	Total
May 2017	2.3	12.637	0.000	12.637
June 2017	2.63925	14.769	11.238	26.007
Total	/	27.406	11.238	38.644

Remarks: The variation in density is due to different compositions of surplus filling materials

- 7.2.4 0.000 (in'000m³) of excavated marine sediment (from Contract No. HY/2013/03), 27.129 (in'000m³) of Inert C & D Wastes and 2.023 (in'000m³) of Non-inert C & D Wastes were generated (from Contract No. HY/2013/03) in this reporting period. 26.007(in'000m³) of Inert C & D Wastes were reused in other projects and 1.122(in'000m³) of Inert C & D Wastes was disposed as public fill. No Inert C & D Wastes and 0.020 (in tonnes) of Non-inert C & D Wastes were generated (from Contract No. HY/2013/06 within Contract No. HY/2013/03 works area) in

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this reporting period. 0.020 (in tonnes) metals were generated and recycled (from Contract No. HY/2013/06 within Contract No. HY/2013/03 works area) in this reporting period.

- 7.2.5 The excavated marine mud from the land-based works was disposed of at the designated disposal sites within Hong Kong as allocated by the Marine Fill Committee. The Contractor of Contract No. HY/2013/03 shall ensure no spilling and overflowing of materials during loading / unloading / transportation is allowed.
- 7.2.6 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.
- 7.2.7 Contractor of Contract No. HY/2013/03's site arrangement for disposal of bentonite slurry to Tseung Kwan O Area 137 Fill Bank was checked by ET and formal consent has been obtained from Tseung Kwan O Area 137 Fill Bank for receiving used bentonite slurry generated from Contract No. HY/2013/03.

7.3 Environmental Licenses and Permits

- 7.3.1 The valid environmental licenses and permits for Contract No. HY/2013/03 (includes Contract No. HY/2013/06 within Contract No. HY/2013/03 works area) during the reporting period are summarized in **Appendix F**. The Contractor of Contract No. HY/2013/06 was advised to register as a chemical waste producer when chemical waste is expected to generate for the foreseeable future from the operations (For Registration as Waste Producer Pursuant to Waste Disposal (Chemical Waste) (General) Regulation).

7.4 Implementation Status of Environmental Mitigation Measures

- 7.4.1 In response to the site audit findings, the Contractor carried out corrective actions.
- 7.4.2 A summary of the Implementation Schedule of Environmental Mitigation Measures (EMIS) is presented in **Appendix G**. All necessary mitigation measures at this stage of works were implemented properly.
- 7.4.3 Implementation status of Regular Marine Travel Route Plan (RMTRP) was checked by ET. Training of marine travel route for marine vessels operator was given to relevant staff and relevant records were kept properly. The marine traffic records and geographical plots of all the vessels tracks to demonstrate the conformance of the vessel to the proposed route in June 2017 would be provided to ER, ETL, IEC/ENPO for checking within the month of July 2017.
- 7.4.4 With respect to condition 3.26A of EP-353/2009/K approved by EPD on 11 April 2016, the numbers and operating periods of floating grout production facilities and floating concrete batching plants on-site to review on the compliance to this EP condition were checked. Under Contract No. HY/2013/03, no floating concrete batching plant was operated on-site during the reporting period.
- 7.4.5 As silt curtain was installed since May 2017, Dolphin Watching Plan (DWP) should be implemented. The status of silt curtain was reviewed by ET and there was no change on the status of silt curtain during the reporting period. Implementation status of DWP was checked by ET. The records of dolphin watching training, regular inspection of the silt curtains and visual inspection of waters surrounded by the silt curtain in June 2017 would be provided to ER, ETL, IEC/ENPO for checking within the month of July 2017.

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7.5 Summary of Exceedance of the Environmental Quality Performance Limit

- 7.5.1 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.
- 7.5.2 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.
- 7.5.3 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.
- 7.5.4 There was no Action and Limit Level exceedance for water quality recorded at the monitoring stations shown at **Table 4.1** by the Environmental Team of Contract No. HY/2010/02 during the reporting period.
- 7.5.5 Ecological monitoring results at all transects are reported in the EM&A report prepared by Contract No. HY/2010/02.

7.6 Summary of Complaints, Notification of Summons and Successful Prosecution

- 7.6.1 There was one complaint which was under investigation during the last reporting period is reported in this reporting period. There were two complaints received in relation to the environmental impact during the reporting period. The summary of environmental complaints is presented in **Table 7.1**. The details of cumulative statistics of Environmental Complaints are provided in **Appendix H**.

Table 7.1 Summary of Environmental Complaints for the Reporting Month

Log No.	Environmental Complaint Ref. No.	Date of Complaint Receipt	Description
008	ENPO-C0119	31 May 2017	Air pollution
009	ENPO-C0120	2 June 2017	Air pollution
010	ENPO-C0121	6 June 2017	Air pollution

- 7.6.2 The complaint (ENPO-C0119) was received by EPD from a member of the public on 31 May 2017 and was referred by EPD to the ENPO. Then the ENPO forwarded the complaint by email to the ET (Materialab Consultants Ltd.) of the Contract No. HY/2013/03 on 01 June 2017.

Details of Complaint

The complaint was forwarded from IEC on 01 June 2017, with the following information provided by EPD:

The complainant complained that as there was no watering for dust suppression on the road next to Building 044 and 045 on the artificial island of HZMB, a lot of dust was raised when vehicles passed by causing serious nuisance.

Investigation of Complaint

Date Complaint Investigated by Environmental Team: 1 June 2017

Summary of Investigation

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Interview was conducted on 1 June 2017 with Mr. Marko Chan, Environmental Officer of CHEC and site management. The road next to Buildings 044 and 045 was within the site boundary of Contract No. HY/2013/03. As the road was only for accessing to Buildings 044 and 045 which belonged to another contract of HZMB while Contract No. HY/2013/03 did not use it at all, Contract No. HY/2013/03 had a verbal agreement with the Contractor of Buildings 044 and 045 that the Contractor of Buildings 044 and 045 was responsible for maintaining it, including watering for dust suppression.

Investigation Results

The ET of Contract No. HY/2013/03 (including Contract No. HY/2013/06 within Contract No. HY/2013/03) concluded that the captioned complaint is not related to the construction activities of Contract No. HY/2013/03. Nevertheless, the Contractor had been reminded to discuss and reach a written agreement with the Contractor of Buildings 044 and 045 about the responsibility of maintaining the road next to Buildings 044 and 045. The Contractor had also been reminded to fulfil the conditions set out in the EP, in particular:

- Condition 3.23:

The Permit Holder shall undertake watering at least 8 times per day on all exposed soil within the Project site and associated work areas throughout the construction phase.

The Contractor had also been reminded to comply with the requirements stipulated in the Environmental Mitigation Implementation Schedule (EMIS) of the EM&A Manual, in particular:

- Air Quality:

A3: The Contractor should undertake proper watering on all exposed spoil (with at least 8 times per day) throughout the construction phase.

To follow up, the responsibility for the maintenance of area around Buildings 044 and 045 with physical demarcation had been clarified during EPD site visit and meeting on 6 June 2017. The Contractor of Buildings 044 and 045 would be responsible for the maintenance of the area.

Follow up status (complaints)

During weekly site audit on 11, 18 and 26 May 2017, ET confirmed that the Contractor had fulfilled the conditions set out in the EP including Condition 3.23 and provided workable and effective air quality mitigation measures on site including undertaking proper watering on all exposed spoil (with at least 8 times per day) throughout the construction phase.

Recommendations to the Contractor

The Contractor had been reminded to clarify and reach a written agreement with the Contractor of Buildings 044 and 045 about the responsibility of maintaining the road next to Buildings 044 and 045. The Contractor had also been reminded to fully fulfil the conditions set out in the EP and implement all air quality mitigation measures.

Follow up Status (Overall)

The captioned complaint is not valid and therefore, no additional follow up is needed. However, ET has proposed recommendations to the Contractor, and reminded on fulfilling the conditions in the EP and complying with the requirements stipulated in the Environmental Mitigation Implementation Schedule (EMIS) of the EM&A Manual to the Contractor. According to site audit conducted recently, ET confirmed all conditions of the EP had been fulfilled and all mitigation measures stipulated in the EMIS had been implemented during site audit on 11, 18 and 26 May 2017, in particular to the following aspect:

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Report No.: 0165/15/ED/0836

- Air Quality:

A3: The Contractor should undertake proper watering on all exposed spoil (with at least 8 times per day) throughout the construction phase.

To follow up on the complaint, the responsibility for the maintenance of area around Buildings 044 and 045 with physical demarcation had been clarified during EPD site visit and meeting on 6 June 2017. The Contractor of Buildings 044 and 045 would be responsible for the maintenance of the area.

7.6.3 The complaint (ENPO-C0120) was received by EPD from a member of the public on 2 June 2017 and was referred by EPD to the ENPO. Then the ENPO forwarded the complaint by email to the ET (Materialab Consultants Ltd.) of the Contract No. HY/2013/03 on 2 June 2017.

Details of Complaint

One complaint was forwarded from IEC on 2 June 2017, with the following information provided by EPD:

The complainant complained that there was no watering on the construction site of passenger clearance building on the artificial island of HZMB, resulting in a lot of dust spreading around which affected the health of workers. The complainant required EPD to conduct site inspection and reply.

Investigation of Complaint

Date Complaint Investigated by Environmental Team: 5 June 2017

Summary of Investigation

Interview was conducted on 5 June 2017 with Mr. Marko Chan, Environmental Officer of CHEC and site management. It was confirmed that watering was undertaken on all exposed spoil with at least 8 times per day except rainy days.

Investigation Results

The ET of Contract No. HY/2013/03 (including Contract No. HY/2013/06 within Contract No. HY/2013/03) concluded that the captioned complaint is not related to the construction activities of our contract. Nevertheless, ET has recommended the Contractor to remind workers to report dusty spots to contractor to ensure prompt response and necessary follow-up on dust suppression measures through the complaint hotline. The Contractor had also been reminded to fulfil the conditions set out in the EP, in particular:

- Condition 3.23:

The Permit Holder shall undertake watering at least 8 times per day on all exposed soil within the Project site and associated work areas throughout the construction phase.

The Contractor had also been reminded to comply with the requirements stipulated in the Environmental Mitigation Implementation Schedule (EMIS) of the EM&A Manual, in particular:

- Air Quality:

A3: The Contractor should undertake proper watering on all exposed spoil (with at least 8 times per day) throughout the construction phase.

Follow up status (complaints)

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Report No.: 0165/15/ED/0836

During weekly site audit on 11, 18 and 26 May and 1 June 2017, ET confirmed that the Contractor had fulfilled the conditions set out in the EP including Condition 3.23 and provided workable and effective air quality mitigation measures on site including undertaking proper watering on all exposed spoil (with at least 8 times per day) throughout the construction phase.

Recommendations to the Contractor

The Contractor had been reminded to fully fulfil the conditions set out in the EP and implement all air quality mitigation measures. ET has also recommended the Contractor to remind workers to report dusty spots to contractor to ensure prompt response and necessary follow-up on dust suppression measures through the complaint hotline.

Follow up Status (Overall)

The captioned complaint is not valid and therefore, no additional follow up is needed. However, ET has proposed recommendations to the Contractor, including reminding workers to report dusty spots to contractor to ensure prompt response and necessary follow-up on dust suppression measures through the complaint hotline, and reminded the Contractor on fulfilling the conditions in the EP and complying with the requirements stipulated in the Environmental Mitigation Implementation Schedule (EMIS) of the EM&A Manual to the Contractor. According to site audit conducted recently, ET confirmed all conditions of the EP had been fulfilled and all mitigation measures stipulated in the EMIS had been implemented during site audit on 11, 18 and 26 May and 1 June 2017 and will keep checking their implementation status during the future site audit, in particular to the following aspect:

- Air Quality:

A3: The Contractor should undertake proper watering on all exposed spoil (with at least 8 times per day) throughout the construction phase.

- 7.6.3 The complaint (ENPO-C0121) was received by EPD from a member of the public on 5 June 2017 and was referred by EPD to the ENPO. Then the ENPO forwarded the complaint by email to the ET (Materialab Consultants Ltd.) of the Contract No. HY/2013/03 on 6 June 2017.

Details of Complaint

One complaint was forwarded from IEC on 6 June 2017, with the following information provided by EPD:

The complainant complained that there was no watering on the construction site of passenger clearance building on the artificial island of HZMB, resulting in a lot of dust spreading around which affected the health of workers. The complainant required EPD to follow and reply.

Investigation of Complaint

Date Complaint Investigated by Environmental Team: 7 June 2017

Summary of Investigation

Interview was conducted on 7 June 2017 with Mr. Marko Chan, Environmental Officer of CHEC and site management. It was confirmed that watering was undertaken on all exposed spoil with at least 8 times per day except rainy days.

Investigation Results

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Report No.: 0165/15/ED/0836

The ET of Contract No. HY/2013/03 (including Contract No. HY/2013/06 within Contract No. HY/2013/03) concluded that the captioned complaint is not related to the construction activities of our contract. Nevertheless, ET has recommended the Contractor to remind workers to report dusty spots to contractor to ensure prompt response and necessary follow-up on dust suppression measures through the complaint hotline. The Contractor had been reminded to fulfil the conditions set out in the EP, in particular:

- Condition 3.23:

The Permit Holder shall undertake watering at least 8 times per day on all exposed soil within the Project site and associated work areas throughout the construction phase.

The Contractor had also been reminded to comply with the requirements stipulated in the Environmental Mitigation Implementation Schedule (EMIS) of the EM&A Manual, in particular:

- Air Quality:

A3: The Contractor should undertake proper watering on all exposed spoil (with at least 8 times per day) throughout the construction phase.

Follow up status (complaints)

During weekly site audit on 11, 18 and 26 May and 1 June 2017, ET confirmed that the Contractor had fulfilled the conditions set out in the EP including Condition 3.23 and provided workable and effective air quality mitigation measures on site including undertaking proper watering on all exposed spoil (with at least 8 times per day) throughout the construction phase.

Recommendations to the Contractor

The Contractor had been reminded to fully fulfil the conditions set out in the EP and implement all air quality mitigation measures. ET has also recommended the Contractor to remind workers to report dusty spots to contractor to ensure prompt response and necessary follow-up on dust suppression measures through the complaint hotline.

Follow up Status (Overall)

The captioned complaint is not valid and therefore, no additional follow up is needed. However, ET has proposed recommendations to the Contractor, including reminding workers to report dusty spots to contractor to ensure prompt response and necessary follow-up on dust suppression measures through the complaint hotline, and reminded the Contractor on fulfilling the conditions in the EP and complying with the requirements stipulated in the Environmental Mitigation Implementation Schedule (EMIS) of the EM&A Manual to the Contractor. According to site audit conducted recently, ET confirmed all conditions of the EP had been fulfilled and all mitigation measures stipulated in the EMIS had been implemented during site audit on 11, 18 and 26 May and 1 June 2017, in particular to the following aspect:

- Air Quality:

A3: The Contractor should undertake proper watering on all exposed spoil (with at least 8 times per day) throughout the construction phase.

- 7.6.4 There was no notification for summons or prosecutions received in relation to the environmental impact during this reporting period.

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7.6.5 Statistics on environmental complaints, notifications of summons and successful prosecutions are provided in **Appendix H**.

8. FUTURE KEY ISSUES

8.1 Construction Programme for the Coming Months

8.1.1 As informed by the Contractor, the following are the major construction activities anticipated in July 2017:

For Contract No. HY/2013/03

1. Building at Portion A1, B, G, N, J, STP & Pumping Stations;
2. Piling at Box Culvert B & Sign Gantry;
3. CUE Construction at Portion B, C & J;
4. Drainage & Sewerage Work, Water Main & Cable Duct at Portion B, H1, H2, J, P, G & A1;
5. Radiation Screen Wall at Portion B, E P, N,M,C;
6. Sign Gantry Footing at Portion B;
7. Sewerage Pumping Station, High Mast Lighting Foundation & Box Culvert C at Portion G;
8. Bridge Works at A1 to A9;
9. Site Foundation Works at Portion K;
10. Cover Walkway at Portion H1 & H2;
11. Box Culvert B at Portion N; Shuttle kiosk & Subway at Portion E;
12. Marine sediment excavation activities from the land-based works and corresponding disposal at the designated disposal sites within Hong Kong as allocated by the Marine Fill Committee;
13. Deployment, maintenance and inspection of silt curtain; and
14. Construction of water outfall of box culvert.

For Contract No. HY/2013/06 within Contract No. HY/2013/03 works area

1. Conduits installation at Building 037 and CUE works area.

8.2 Environmental Site Inspection Schedule for the Coming Month

8.2.1 The tentative schedule for weekly site inspections for July 2017 is provided in **Appendix I**.

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9. CONCLUSIONS

- 9.1 Commencement of Contract No. HY/2013/03 took place on 10 April 2015. The commencement date for construction works and the EM&A programme of Contract No. HY/2013/03 commenced on 29 August 2015 (commencement of Contract No. HY/2013/06 took place on 14 August 2015. The commencement date for construction works and the EM&A programme of Contract No. HY/2013/06 commenced on 13 September 2016 within Contract No. HY/2013/03 works area).
- 9.2 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.
- 9.3 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.
- 9.4 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.
- 9.5 There was no Action and Limit Level exceedance for water quality recorded at the monitoring stations shown at **Table 4.1** by the Environmental Team of Contract No. HY/2010/02 during the reporting period.
- 9.6 Ecological monitoring results at all transects are reported in the EM&A report prepared by Contract No. HY/2010/02.
- 9.7 Environmental site inspections were carried out on 1, 8, 15, 22 and 30 June 2017. Recommendations on remedial actions were given to the Contractor for the deficiencies identified during the site inspections.
- 9.8 There was one complaint which was under investigation during the last reporting period is reported in this reporting period. There were two complaints received in relation to the environmental impact during the reporting period. After investigation, all complaints were not related to Contract No. HY/2013/03 (including Contract No. HY/2013/06 within Contract No. HY/2013/03).
- 9.9 There were no notifications of summons or prosecutions received during the reporting period.

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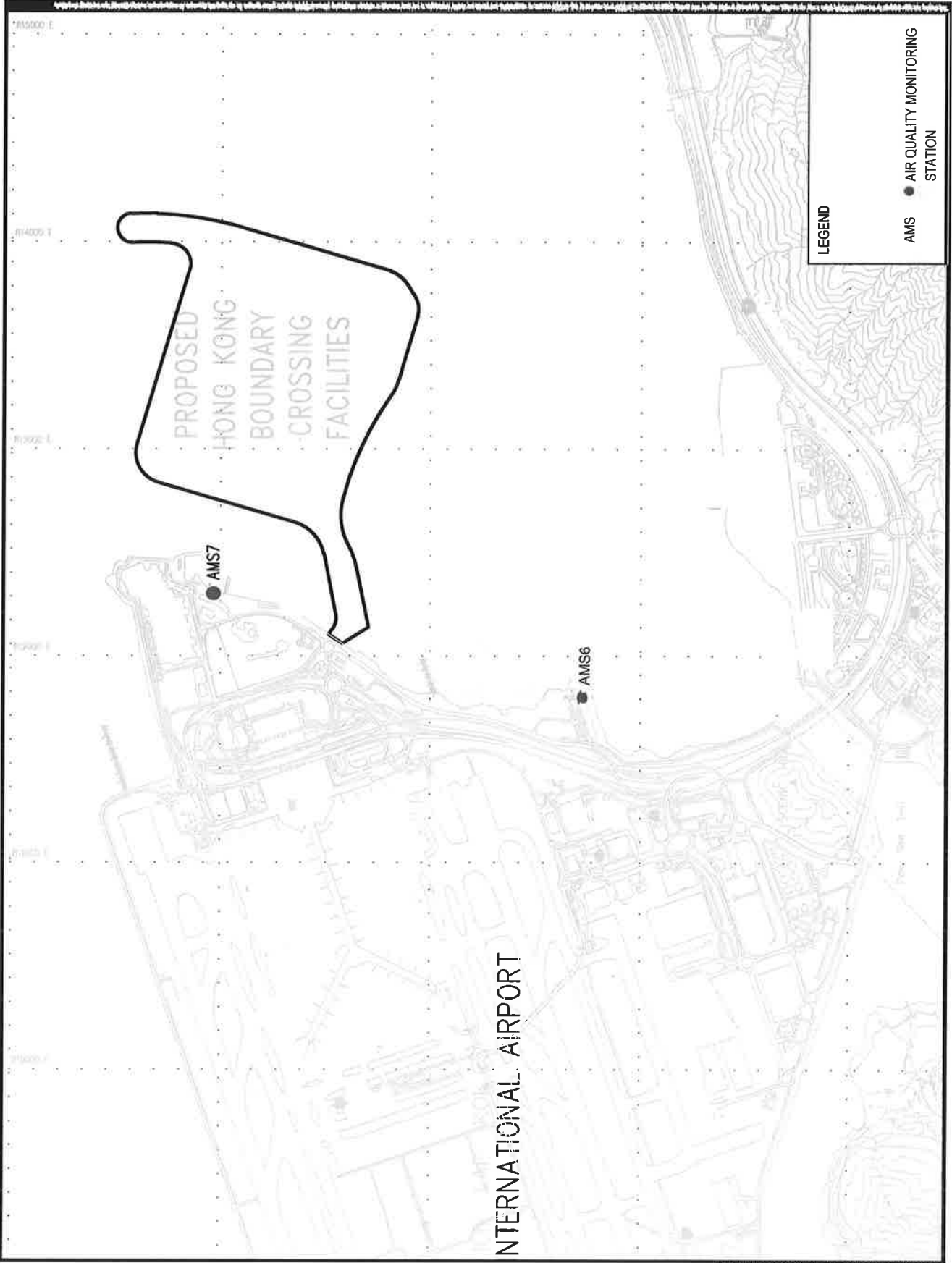
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Figure 1

Air Quality Monitoring Stations



LEGEND

AMS ● AIR QUALITY MONITORING STATION

HONG KONG - ZHUHAI - MACAO BRIDGE
- RECLAMATION WORKS
HONG KONG BOUNDARY CROSSING FACILITIES

AIR QUALITY AND NOISE
MONITORING STATIONS
FOR HKBCF

AECOM

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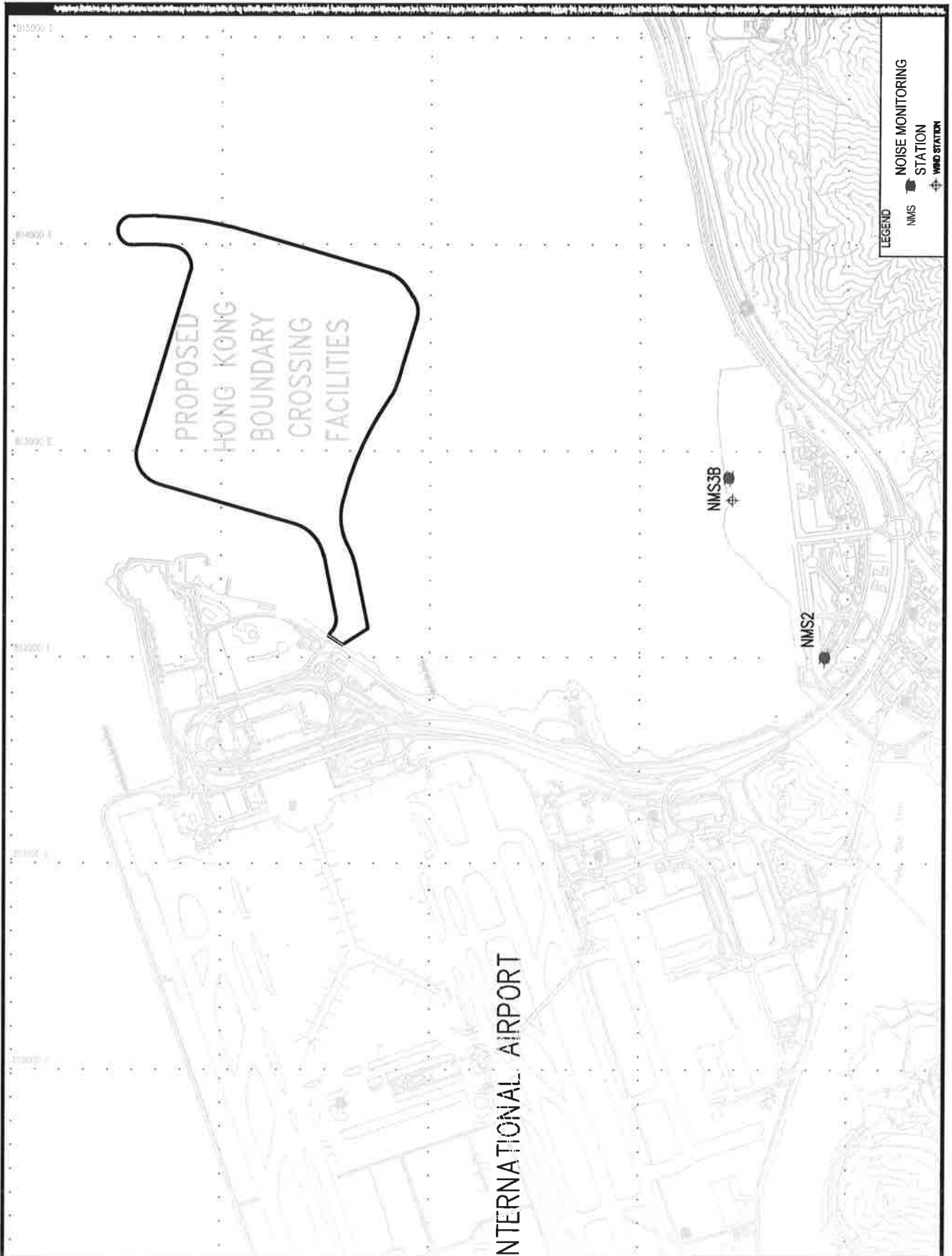
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Figure 2

Noise Monitoring Stations



AIR QUALITY AND NOISE
MONITORING STATIONS
FOR HKBCF

HONG KONG - ZHUHAI - MACAO BRIDGE
- RECLAMATION WORKS
HONG KONG BOUNDARY CROSSING FACILITIES
Project No.: -

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Figure 3

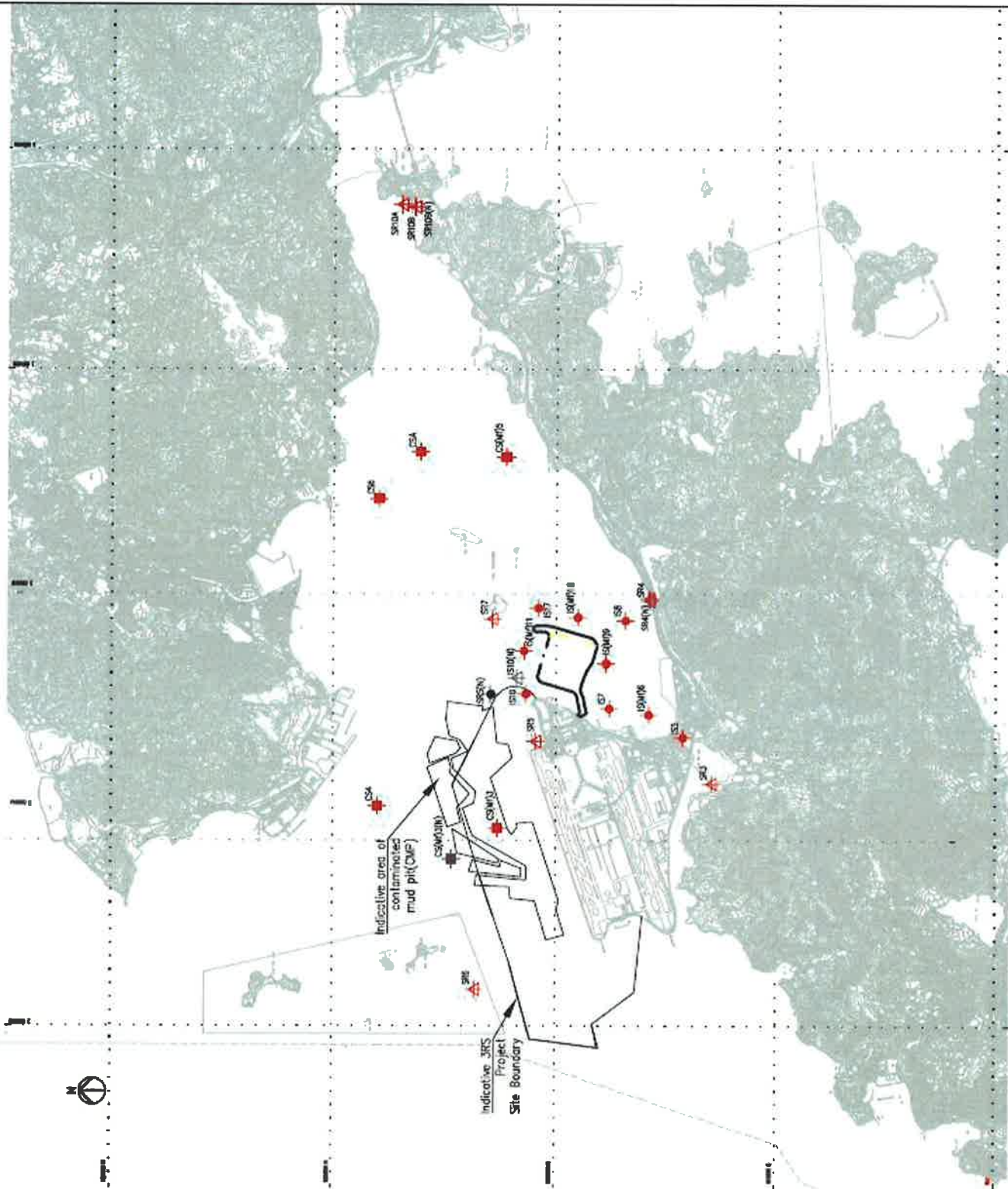
Water Quality Monitoring Stations

LEGEND

- IS  IMPACT STATIONS
- CS  CONTROL / FAR FIELD STATIONS
- SR  SENSITIVE RECEIVER STATIONS
- IS  IMPACT STATIONS (RELOCATED)
- SR  SENSITIVE RECEIVER STATIONS (RELOCATED)
- CS  CONTROL / FAR FIELD STATIONS (RELOCATED)

SETTING OUT SCHEDULE

MONITORING STATIONS	CO-ORDINATES	
	EASTING	NORTHING
IS1	811539	877166
IS1(M/0)	82200	877673
IS7	812344	816777
IS8	814258	816112
IS1(M/0)	813273	818850
SR2(M)	812588	823475
IS1(M/1)	813882	820716
IS1(M/16)	814328	819487
IS17	814538	823381
SR3	810029	816488
SR1(M)	814705	817828
IS10(M)	812942	820880
SR8	809837	827806
SR7	814593	821431
SR10A	823741	823485
SR10B(0)	823883	823887
CS1(M/3(M)	808854	822355
CS1(M/5)	817988	821129
CS4	810025	824004
CS8	817828	823982
CSA	818103	823064
IS10	812577	820870
SR5	811488	820455
CS1(M/13)	809888	82117



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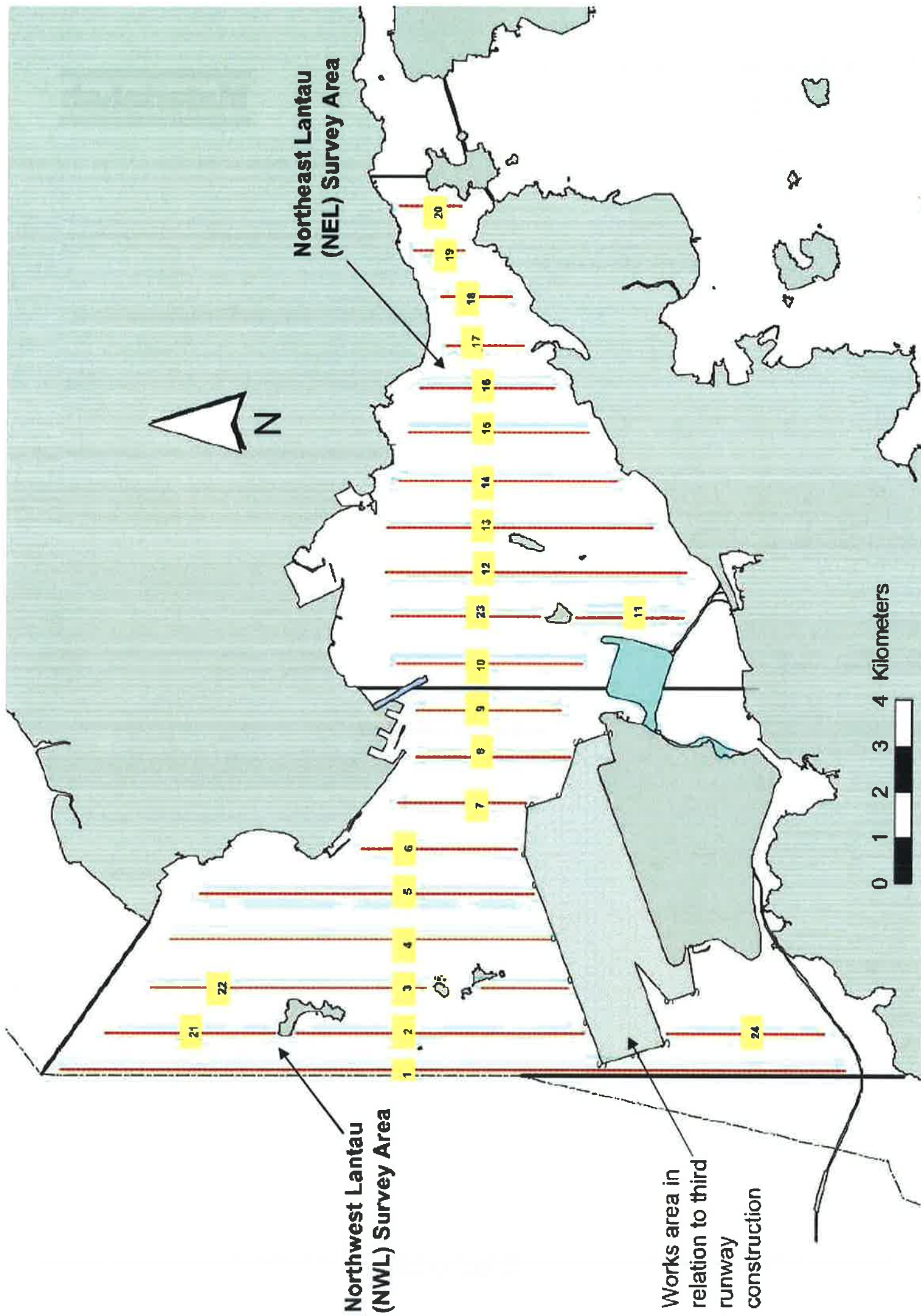
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Figure 4

Ecological Monitoring Transect Line and Layout Map



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The logo for MaterialLab, featuring the word "MaterialLab" in a bold, sans-serif font. The text is white and is set against a dark, rectangular background that has a slight 3D effect with a shadow on the right side.

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Appendix A

Location of Works Areas

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Appendix B

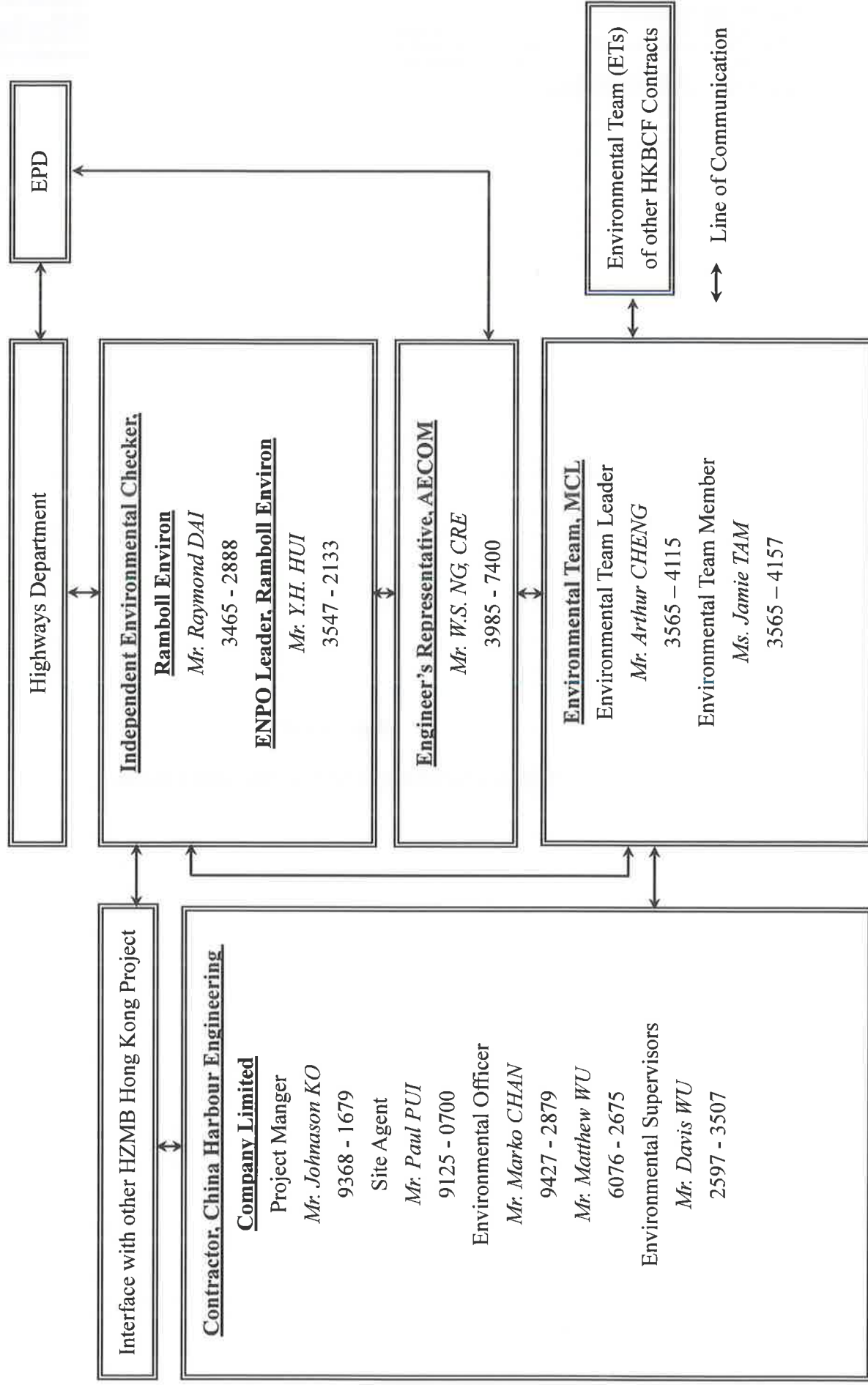
Project Organization for Environmental Works



CHINA HARBOUR ENGINEERING COMPANY LIMITED

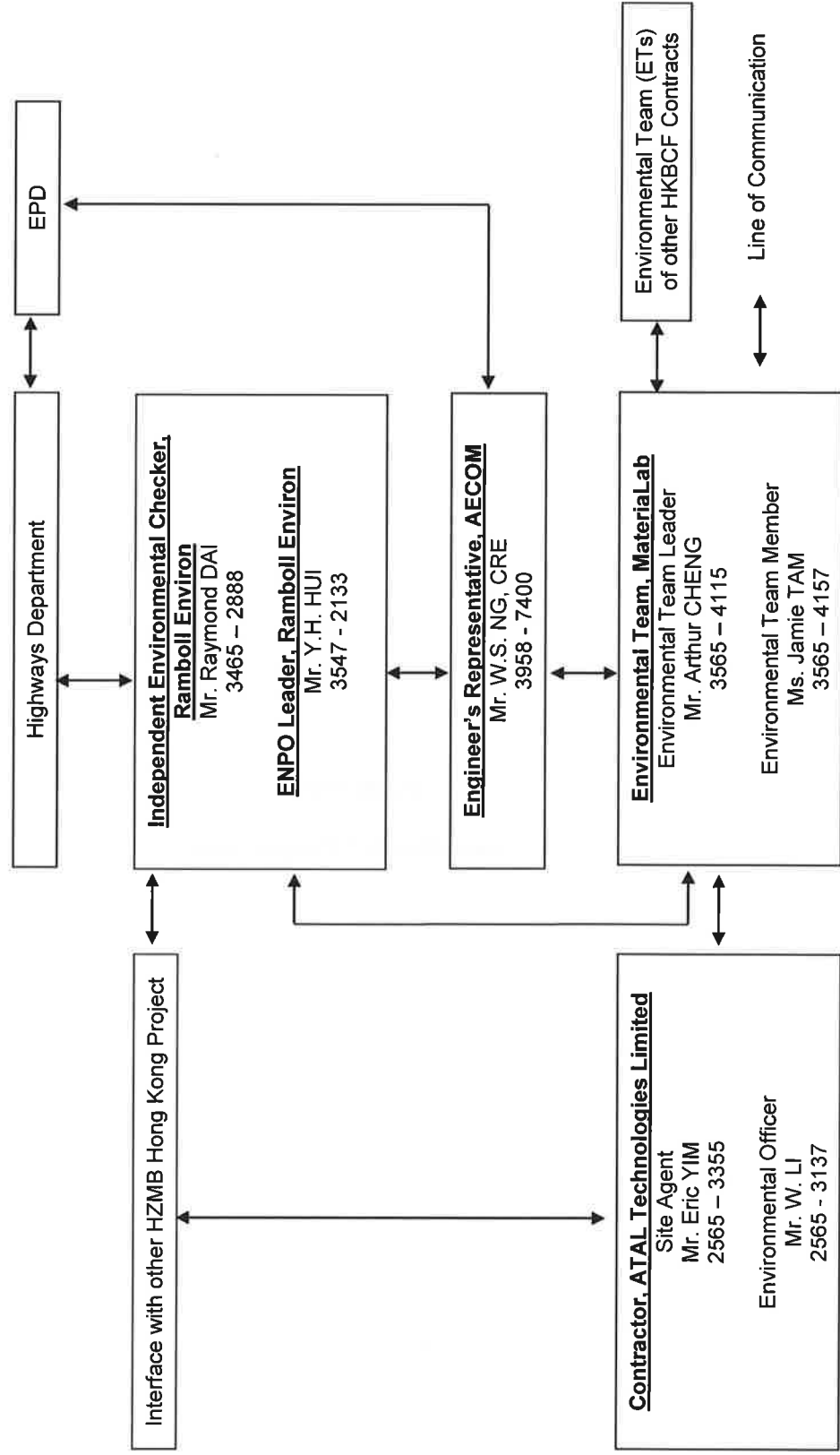
Contract No. HY/2013/03 Hong Kong-Zhuhai-Macao Bridge, Hong Kong Boundary Crossing
Facilities – Vehicle Clearance Plazas and Ancillary Buildings and Facilities

Projects Organization for Environmental Works



Contract No. HY/2013/06 (within Contract No. HY/2013/03 works area)
Hong Kong-Zhuhai-Macao Bridge, Hong Kong Boundary Crossing Facilities – Automatic Vehicle Clearance Support System

Projects Organization for Environmental Works



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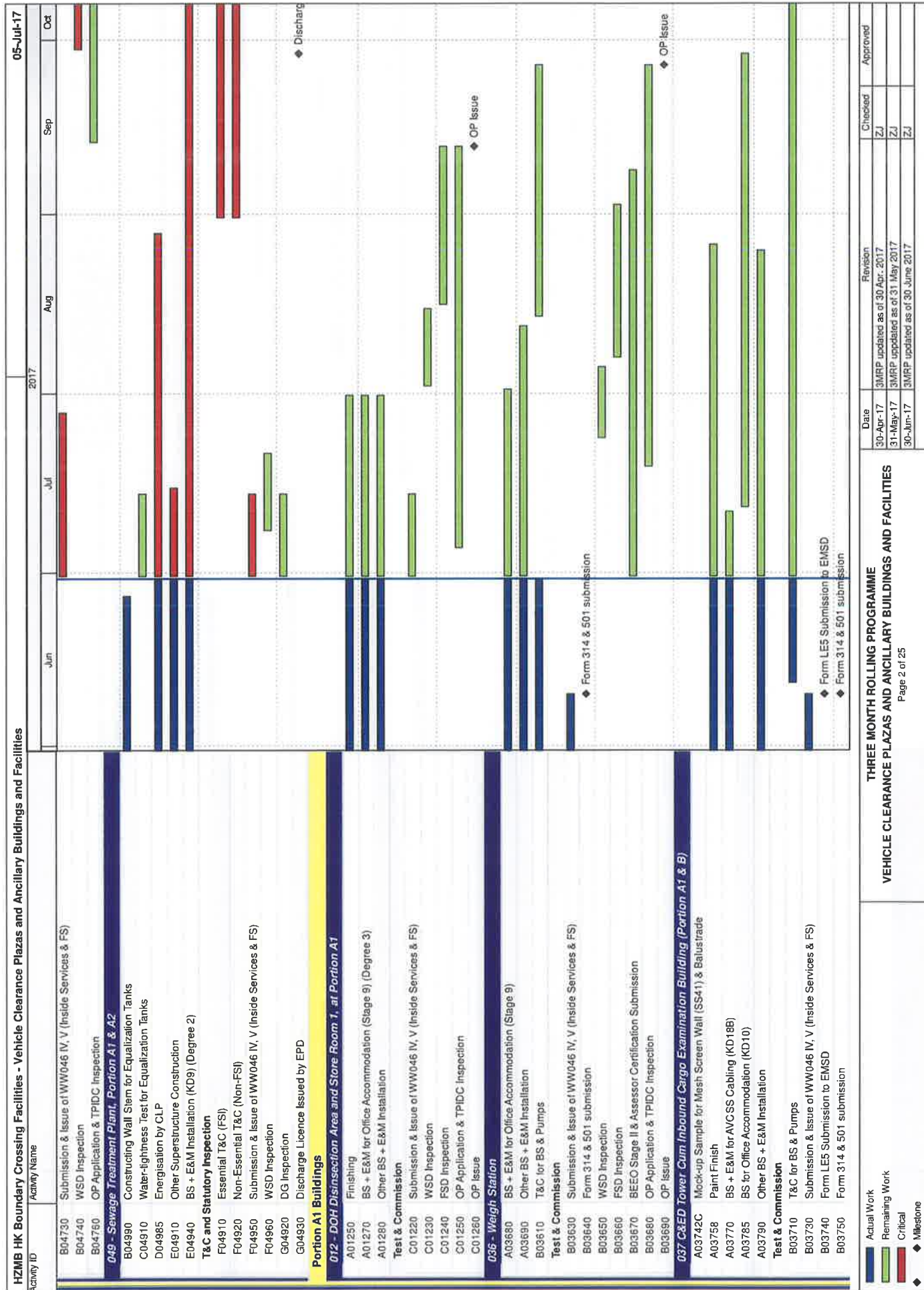
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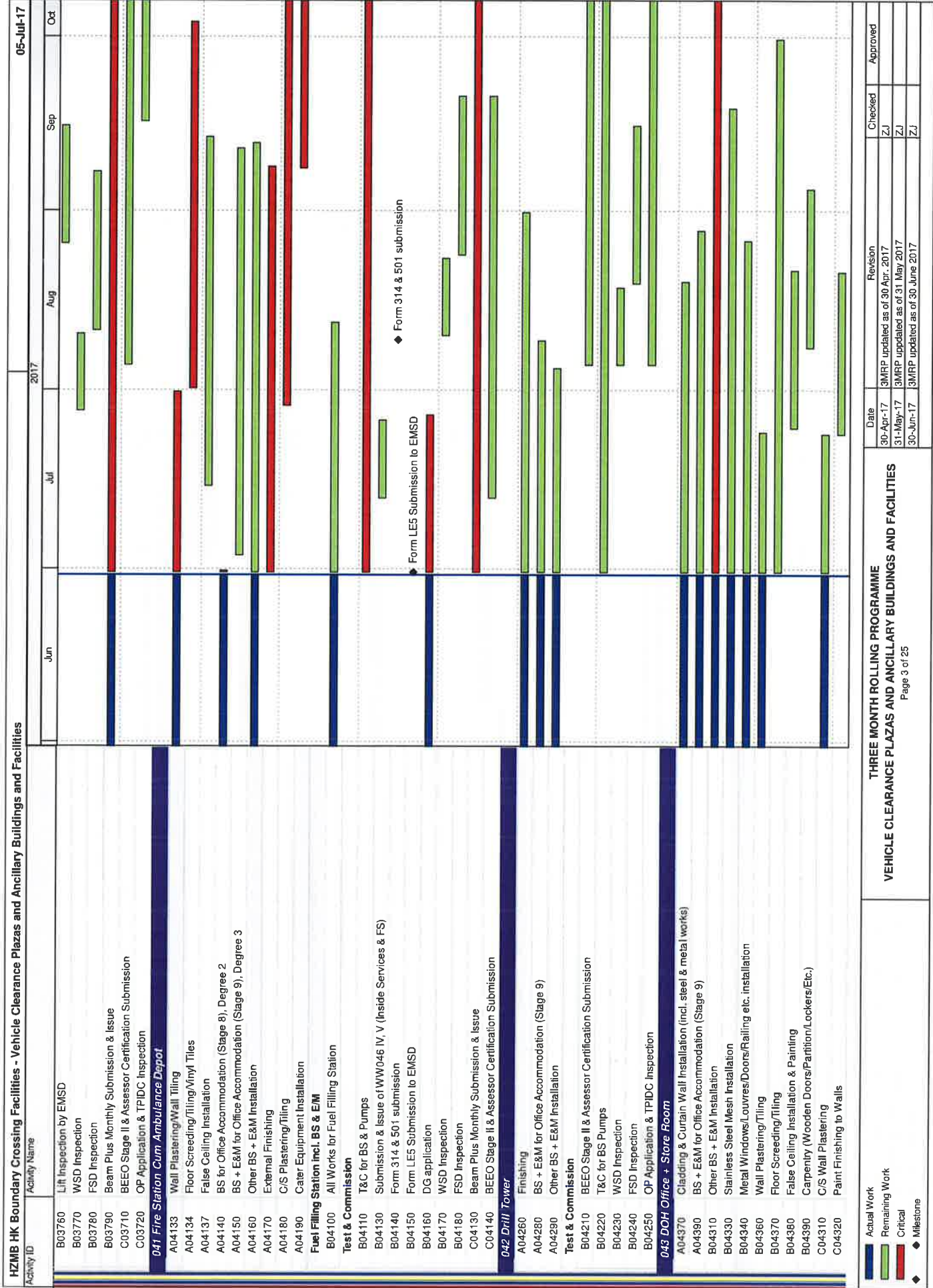
Report No.: 0165/15/ED/0836

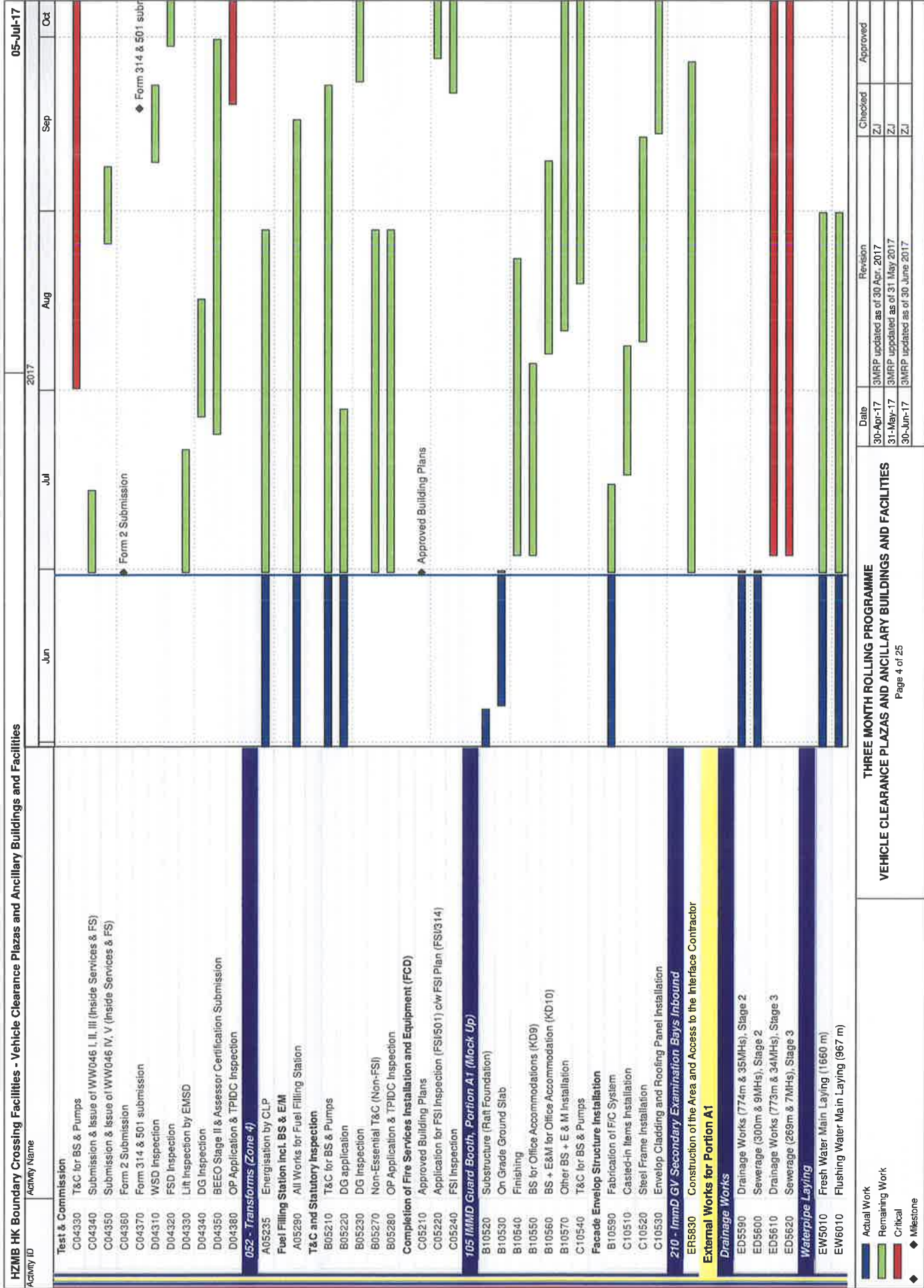
Appendix C

Construction Programme



Date	Revision	Checked	Approved
30-Apr-17	3MRP updated as of 30-Apr-2017	ZJ	
31-May-17	3MRP updated as of 31-May-2017	ZJ	
30-Jun-17	3MRP updated as of 30-June-2017	ZJ	





HZMB HK Boundary Crossing Facilities - Vehicle Clearance Plazas and Ancillary Buildings and Facilities						
Activity ID	Activity Name	Jun	Jul	Aug	Sep	Oct
EW6180	Chilled Water Pipe Laying in Portion A1 (external)					
Duct Laying for Utilities/Telecom Cabling, TCSS & Lighting						
EU5260	Duct & Cable Laying for Utilities/Telecom, CLP, BS & ELV					
EU5270	Duct & Cable Laying for TCSS & Lighting					
Roadworks						
ER1520	Subbase (8500 ton), Stage 1 (Western)					
ER3540	Blumen Pavement (10000 ton), Stage 1 (Western)					
ER3550	Rigid Pavement (900 m3), Footpath & EVA, Stage 1 (Western)					
Road Furniture						
ER0800	ELV Installation					
ER0830	Road Furniture					
PORTION A2						
Portion A2 Structures						
046 - Refuse Collection Point, Portion A2						
A04620	Superstructure w/2 water tank					
A04630	BS for Office Accommodations (Stage 8) (KD9)					
A04640	BS + E&M for Office Accommodations (Stage 9) (KD10)					
A04660	Other BS + E&M Installation					
Test & Commission						
B04620	Submission & Issue of WW046 I, II, III (Inside Services & FS)					
B04650	T&C for BS & Pumps					
B04680	OP Application & TPIDC Inspection					
048 - Reclaimed Water Pumping Station, Portion A2						
B04820	BS for Office Accommodations (Stage 8) (KD9)					
B04830	BS + E&M for Office Accommodation (Stage 9) (KD10)					
B04840	Other BS + E&M Installation					
Test & Commission						
B04850	T&C for BS & Pumps & SWT					
B04860	DG Application					
B04880	Submission & Issue of WW046 I, II, III (Inside Services & FS)					
B04890	Submission & Issue of WW046 IV, V (Inside Services & FS)					
C04810	Form 314 & 501 submission					
C04860	OP Application & TPIDC Inspection					
Retaining Wall W9-2						
SW9210	Construction of Retaining Wall W9-2 (U-shape, 6 bay)					
SW9220	Backfilling for Retaining Wall W9-2					
SW9230	Parapet for Retaining Wall W9-2 (22 pour) & E&M Works					
External Works for Portion A2						
Drainage Works						
ED2280	Drainage Works (228m & 15MHs)					
ED3560	Sewerage (322m & 9MHs)					
Waterpipe Laying						
EW2230	Fresh Water Main Laying (236m)					
EW2300	Flushing Water Main Laying (91m)					
Duct Laying for Utilities/Telecom Cabling, TCSS & Lighting						
EU5280	Duct & Cable Laying for Utilities/Telecom, CLP, BS & ELV					
EU5290	Duct & Cable Laying for TCSS & Lighting					
PORTION B						
Portion B Structures						

Actual Work
Remaining Work
Critical
Milestone

THREE MONTH ROLLING PROGRAMME			
VEHICLE CLEARANCE PLAZAS AND ANCILLARY BUILDINGS AND FACILITIES			
Date	Revision	Checked	Approved
30-Apr-17	3MRP updated as of 30 Apr. 2017	ZJ	
31-May-17	3MRP updated as of 31 May 2017	ZJ	
30-Jun-17	3MRP updated as of 30 June 2017	ZJ	

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Actual Work

Remaining Work

Critical

Milestone

30-Apr-17

31-May-17

30-Jun-17

3MRRP updated as of 30 Apr. 2017

3MRRP updated as of 31 May 2017

3MRRP updated as of 30 June 2017

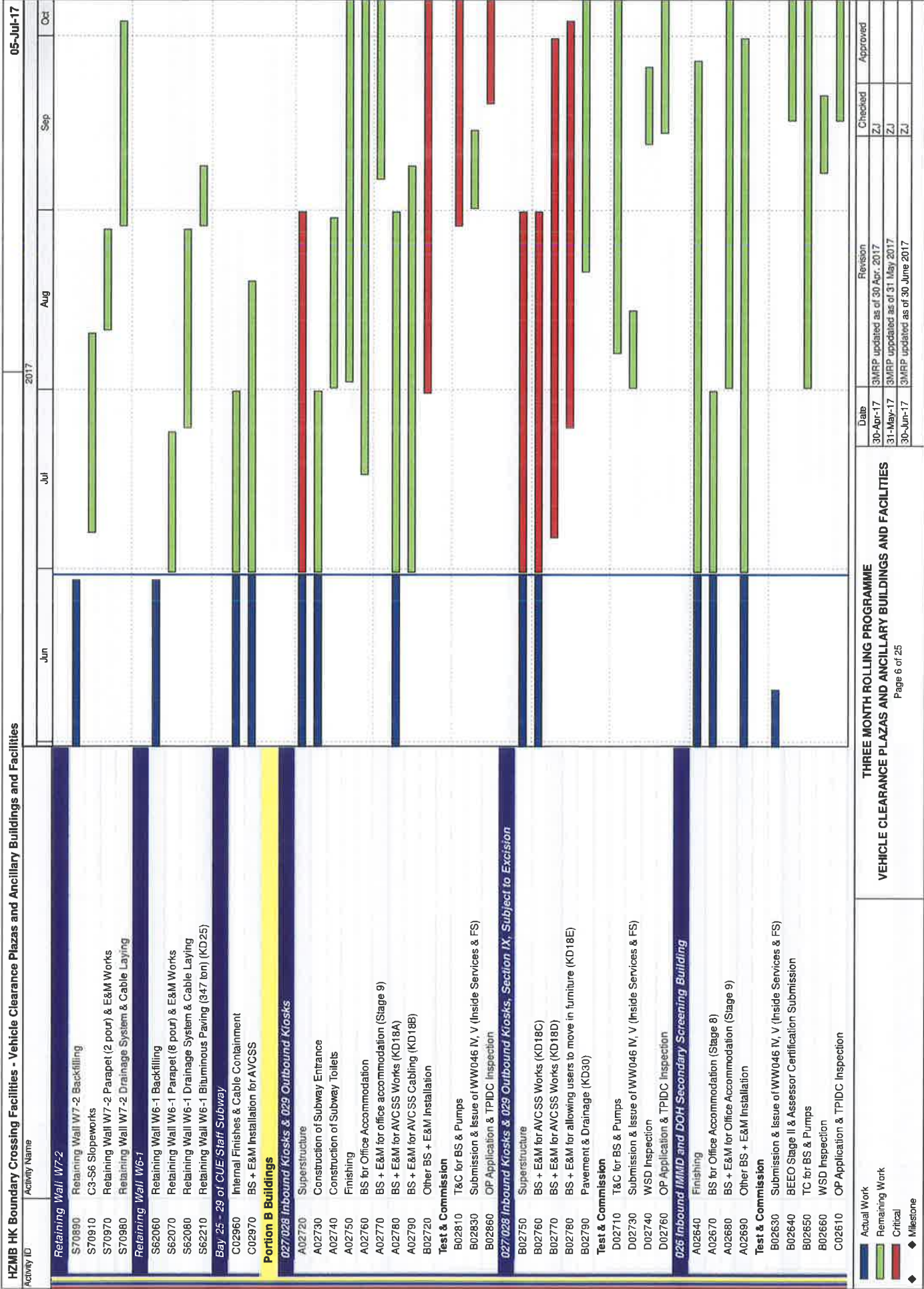
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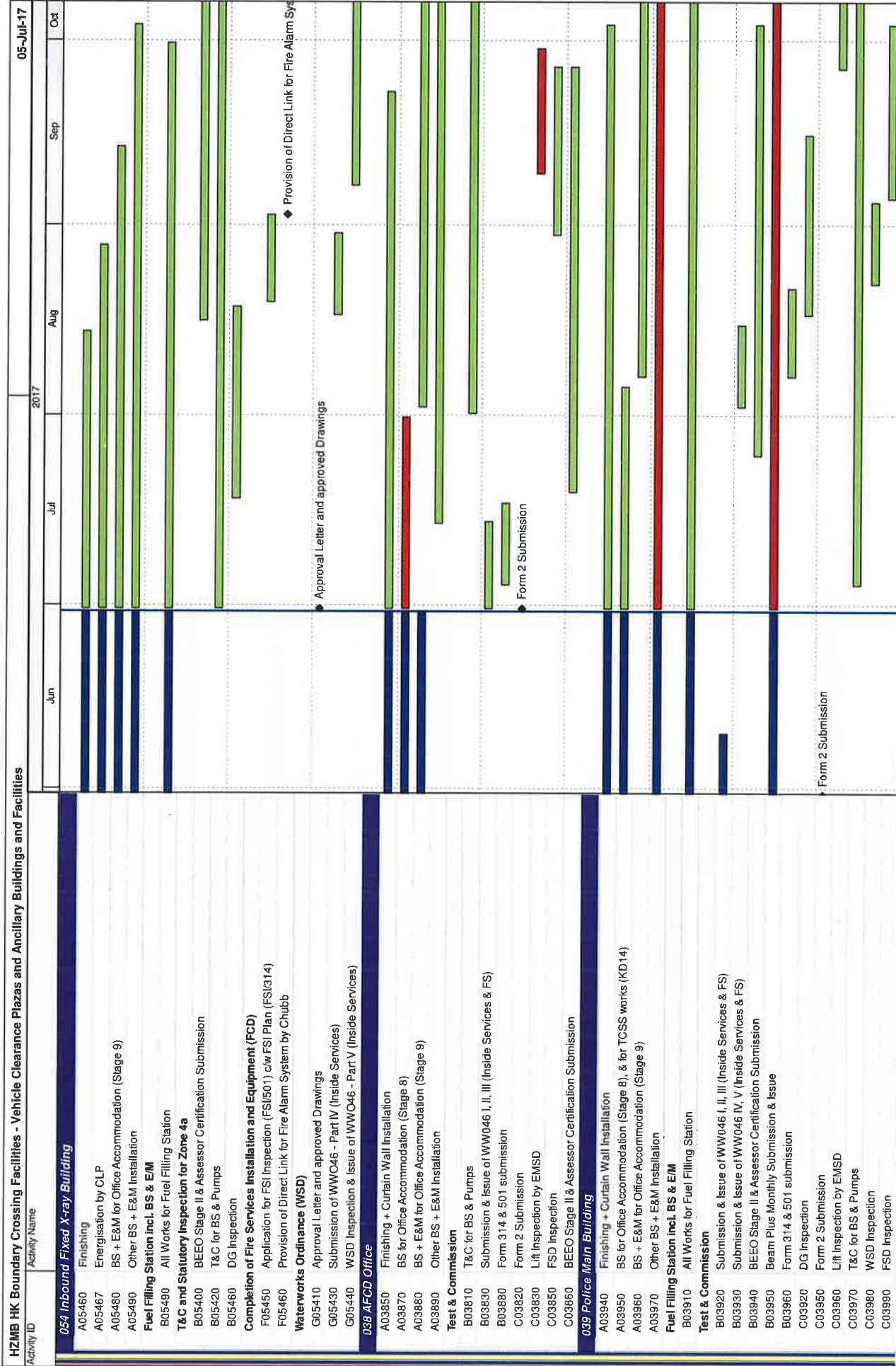
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Checked

Approved



HZMB HK Boundary Crossing Facilities - Vehicle Clearance Plazas and Ancillary Buildings and Facilities

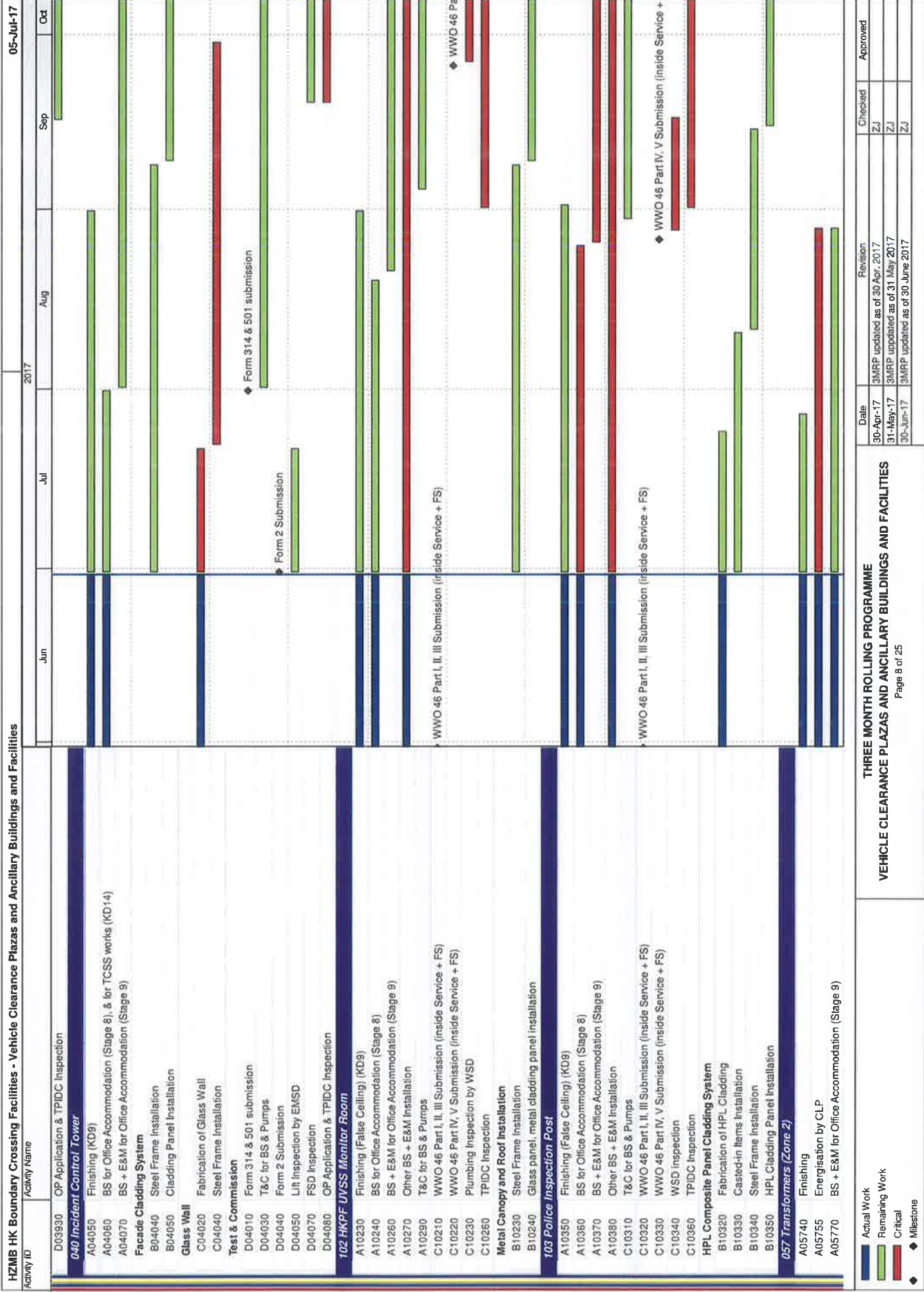


Actual Work
 Remaining Work
 Critical
 Milestone

**THREE MONTH ROLLING PROGRAMME
VEHICLE CLEARANCE PLAZAS AND ANCILLARY BUILDINGS AND FACILITIES**

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Date	Revision	Checked	Approved
30-Apr-17	3MRP updated as of 30 Apr. 2017	ZJ	
31-May-17	3MRP updated as of 31 May 2017	ZJ	
30-Jun-17	3MRP updated as of 30 June 2017	ZJ	



HZMB HK Boundary Crossing Facilities - Vehicle Clearance Plazas and Ancillary Buildings and Facilities									
Activity ID	Activity Name	Jun	Jul	Aug	Sep	Oct	05-Jul-17		
A05780	Other BS + E&M Installation								
Fuel Filling Station Incl. BS & E/M									
A05790	All Works for Fuel Filling Station								
T&C and Statutory Inspection for Zone 2a & 2b									
C05700	T&C for BS & Pumps								
F05700	Essential T&C (FSI)								
F05710	Non-Essential T&C (Non-FSI)								
F05720	OP Application & TPIDC Inspection								
Completion of Fire Services Installation and Equipment (FCD)									
F05750	Application for FSI Inspection (FSI/501) c/w FSI Plan (FSI/314)								
F05760	Provision of Direct Link for Fire Alarm System by Chubb								
F05770	FSI Inspection (2 Trials)								
DG License & EPD Generator Approval									
G05710	Approval Letter and approved Drawings								
G05730	DG Inspection								
107 - C&ED Mobile X-ray Operation Office (Cargo), Portion B									
C10740	Finishing								
C10750	BS for Office Accommodation (Stage 8)								
C10760	BS + E&M for Office Accommodation (Stage 9)								
C10770	Other BS + E&M Installation								
C10780	T&C for BS & Pumps								
C10790	TPIDC Inspection								
113 - Field Kiosk for Access Control, Portion B									
B11340	Finishing								
B11350	BS for Office Accommodation (Stage 8)								
B11360	BS + E&M for Office Accommodation (Stage 9)								
B11370	Other BS + E&M Installation								
B11380	T&C for BS & Pumps								
B11390	TPIDC Inspection								
201 - Inbound Cargo Mobile X-ray Operation Area									
ER5850	Construction of the Area and Access to the Interface Contractor								
205 - Inbound Private Car Mobile X-ray Operation Area									
ER5860	Construction of the Area and Access to the Interface Contractor								
External Works for Portion B									
Works in Location 1.7A									
BB1480	ELV Works & T&C in Location 1.7A								
Works in Location 1.7B									
BB1490	ELV Works & T&C in Location 1.7B								
Drainage Works									
ED5690	Drainage Works (1130m & 60MHz), Stage 4 (N/E)								
ED5700	Sewerage (300m & 82MHz), Stage 4 (N/E)								
Waterpipe Laying									
EW6100	Fresh Water Main Laying (1000m), Stage 3								
EW6110	Flushing Water Main Laying (931m), Stage 3								
EW6190	Chilled Water Pipe Laying in Portion B (external)								
Duct Laying for Utilities/Telecom Cabling, TCSS & Lighting									
EU5300	Duct & Cable Laying for Utilities/Telecom, CLP, BS & ELV								
EU5310	Duct & Cable Laying for TCSS & Lighting								
EU5550	ELV Installation								
EU5630	Access date to Telephone Companies								

Actual Work

Remaining Work

Critical

Milestone

THREE MONTH ROLLING PROGRAMME

VEHICLE CLEARANCE PLAZAS AND ANCILLARY BUILDINGS AND FACILITIES

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Access date to Telephone Companies

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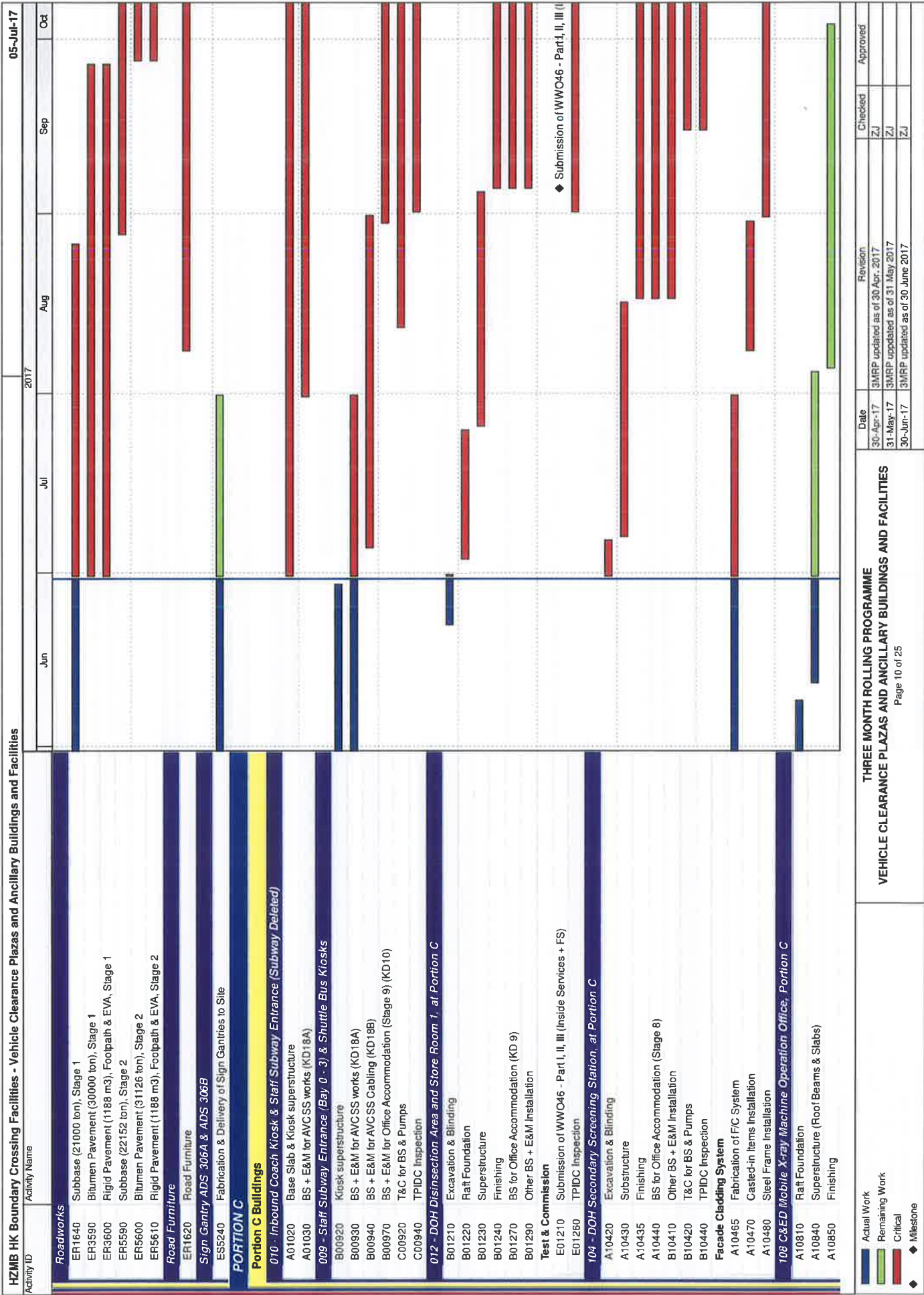
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ZJ

Contract No. HY/2013/03



HZMB HK Boundary Crossing Facilities - Vehicle Clearance Plazas and Ancillary Buildings and Facilities		2017				05-Jul-17
Activity ID	Activity Name	Jun	Jul	Aug	Sep	Oct
A10860	BS for Office Accommodation (Stage 8)					
A10890	Other BS + E&M Installation					
F10830	T&C for BS & Pumps					
F10850	TPIDC Inspection					
HPL Composite Panel Cladding System						
A10815	Fabrication of HPL Cladding					
A10820	Casted-in Items Installation					
A10830	Steel Frame Installation					
110 IMMD Guard Booth (Type 2) East						
A11080	Finishing					
A11090	BS for Office Accommodation (Stage 8)					
B11010	BS + E&M for Office Accommodation (Stage 9)					
B11020	Other BS + E&M Installation					
B11030	T&C for BS & Pumps					
B11050	TPIDC Inspection					
Facade Envelop Structure Installation						
A11045	Fabrication of F/C System					
A11050	Casted-in Items Installation					
A11060	Steel Frame Installation					
110 IMMD Guard Booth (Type 2) West						
C11010	Excavation & Blinding					
C11020	Substructure					
C11030	Finishing					
C11040	BS for Office Accommodation					
C11060	Other BS + E&M Installation					
C11070	T&C for BS & Pumps					
C11090	TPIDC Inspection					
Facade Envelop Structure Installation						
D11010	Casted-in Items Installation					
D11020	Steel Frame Installation					
D11030	Envelop Cladding and Roofing Panel Installation					
111 Field Kiosk for Carpark Operator						
A11120	Excavation & Blinding					
A11130	Raft Foundation					
A11140	Superstructure (Roof beams & Slabs)					
A11150	Finishing					
A11160	BS for Office Accommodation (Stage 8)					
A11180	Other BS + E&M Installation					
B11160	T&C for BS & Pumps					
B11180	TPIDC Inspection					
HPL Composite Panel Cladding System						
B11120	Fabrication of HPL Cladding					
B11130	Casted-in Items Installation					
B11140	Steel Frame Installation					
113 - Field Kiosk for Access Control, Portion C						
C11310	Excavation & Blinding					
C11320	Raft Foundation					
C11330	Superstructure (Roof Beams & Slabs)					
C11340	Finishing					
D11310	BS for Office Accommodation (Stage 8)					

Actual Work
 Remaining Work
 Critical
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30-Apr-17	3MRP updated as of 30-Apr-2017	ZJ	
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30-Jun-17	3MRP updated as of 30-June-2017	ZJ	

HZMB HK Boundary Crossing Facilities - Vehicle Clearance Plazas and Ancillary Buildings and Facilities									
Activity ID	Activity Name	2017				05-Jul-17			
		Jun	Jul	Aug	Sep	Oct			
D11330	Other BS + E&M Installation								
F11310	T&C for BS & Pumps								
F11330	TPDC Inspection								
204 - Inbound Coach Exam Area & Mobile X-ray Operation									
ER5760	Radiation Screen Wall Construction								
ER5880	Construction of the Area and Access to the Interface Contractor								
External Works for Portion C									
Works in Location 1.2, 1.8 & 011 - Emergency Generator Building									
BB1440	Works & T&C in Location 1.2								
BB1450	Works & T&C in Location 1.8								
BB1460	ELV System Installations and T&C for Contract HY/2013/01								
BB1470	Provisioning of Civil Engineering Works for 011-Emergency Generator Building (KD18)								
Drainage Works									
B00040	Initial Survey								
SG2400	Drainage Works (797m & 36MHs)								
SG3610	Sewerage (186m & 4MHs)								
Waterpipe Laying									
SW2410	Fresh Water Main Laying (272m)								
SW2420	Flushing Water Main Laying (105m)								
SW9280	Chilled Water Pipe Laying in Portion C (external)								
Duct Laying for Utilities/Telecom Cabling, TCSS & Lighting									
SU5320	Duct & Cable Laying for Utilities/Telecom, CLP, BS & ELV								
SU5330	Duct & Cable Laying for TCSS & Lighting								
SU5400	ELV Installation								
Roadworks									
SR2500	Subbase (4201 ton)								
SR3620	Bitumen Pavement (6200 ton)								
SR3630	Rigid Pavement (132 m3), Footpath & EVA								
Road Furniture									
SR2480	Road Furniture								
PORTION D									
Portion D Building									
1/4 - Field Kiosk for Access Control, Portion D									
C11370	Superstructure (Roof Beams & Slabs)								
C11380	Finishing								
D11340	BS for Office Accommodation (Stage 8)								
D11350	BS + E&M for Office Accommodation (Stage 9)								
D11360	Other BS + E&M Installation								
F11350	T&C for BS & Pumps								
F11370	TPDC Inspection								
External Works for Portion D									
Drainage Works									
SG3640	Drainage Works (361m & 14MHs)								
SG3760	Sewerage (121m & 6MHs)								
Waterpipe Laying									
SW3650	Fresh Water Main Laying (108m)								
Duct Laying for Utilities/Telecom Cabling, TCSS & Lighting									
B11480	ELV System Installation for Contract HY/2013/02								

 Actual Work
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 Critical
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H2MB HK Boundary Crossing Facilities - Vehicle Clearance Plazas and Ancillary Buildings and Facilities									
Activity ID	Activity Name	Jun	Jul	Aug	Sep	Oct			
SU5340	Duct & Cable Laying for Utilities/Telecom, CLP, BS & ELV								
SU5350	Duct & Cable Laying for TCSS & Lighting								
SU5640	Access date to Telephone Companies								
◆ Access date to Telephone Companies									
Roadworks									
SR3740	Subbase (251 ton)								
SR3770	Bitumen Pavement (619 ton)								
Road Furniture									
SR3720	Road Furniture (KD25)								
PORTION E									
005 - Shuttle Bus Kiosk & Staff Subway Entrance, at Portion E & M									
A00640	Backfilling & Surcharge								
A00650	Constructing Ground Slab								
A00660	Constructing Kiosk (4 Nr)								
A00670	Constructing Subway Entrance								
A00690	BS + E&M for AVC SS works (KD18B)								
B00640	Other BS + E&M Installation								
External Works for Portion E									
Drainage Works									
SG3780	Drainage Works (99m & 5MHs)								
SG3900	Sewerage (38m & 1 MH)								
Waterpipe Laying									
SW3790	Fresh Water Main Laying (45m)								
SW3800	Flushing Water Main Laying (25m)								
Duct Laying for Utilities/Telecom Cabling, TCSS & Lighting									
SU5360	Duct & Cable Laying for Utilities/Telecom, CLP, BS & ELV								
SU5370	Duct & Cable Laying for TCSS & Lighting								
Roadworks									
SR3880	Subbase (1659 ton)								
SR3910	Bitumen Pavement (2105 ton)								
SR3920	Rigid Pavement (180 m3)								
Road Furniture									
SR3860	Road Furniture (KD25)								
PORTION F									
External Works for Portion F									
Drainage Works									
B00070	Initial Survey								
SG3930	Drainage Works (122m & 9MHs)								
SG4050	Sewerage (70m & 3MHs)								
Waterpipe Laying									
SW3940	Fresh Water Main Laying (205m)								
Duct Laying for Utilities/Telecom Cabling, TCSS & Lighting									
SU5380	Duct & Cable Laying for Utilities/Telecom, CLP, BS & ELV								
SU5390	Duct & Cable Laying for TCSS & Lighting								
SU5420	ELV Installation								
Roadworks									
SR4030	Subbase (1534 ton)								
SR4060	Bitumen Pavement (1909 ton)								
PORTION G, H1 & H2									

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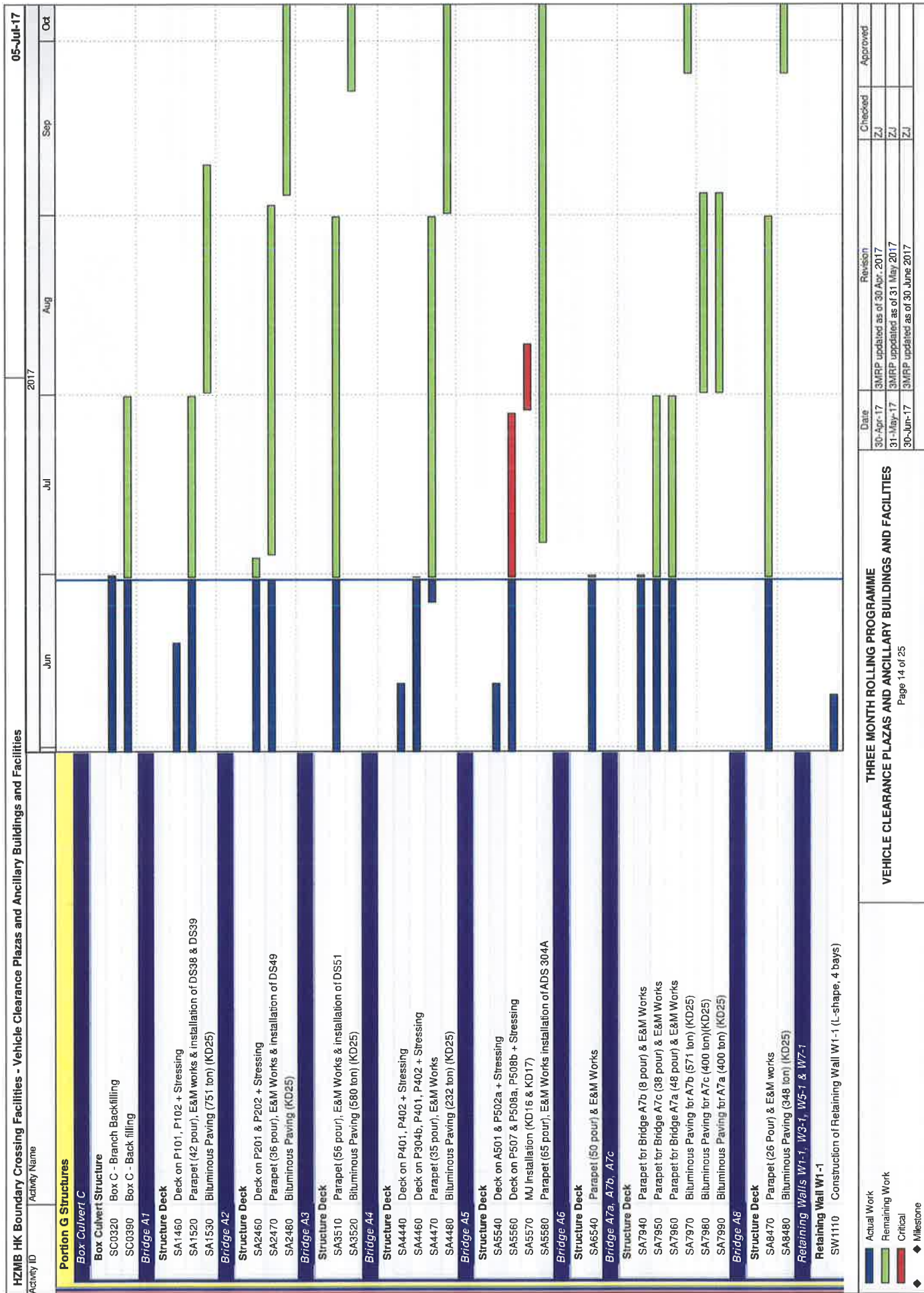
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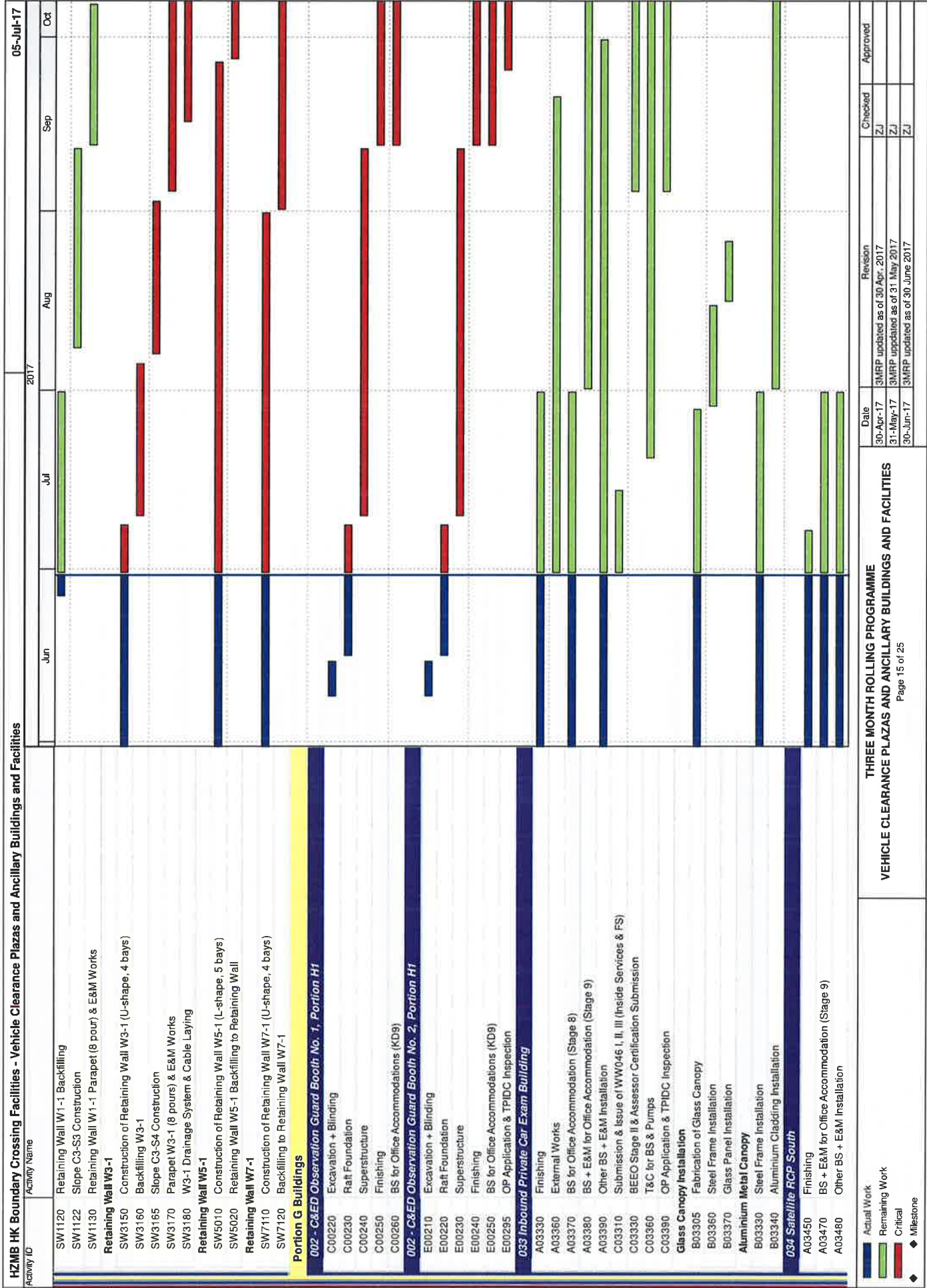
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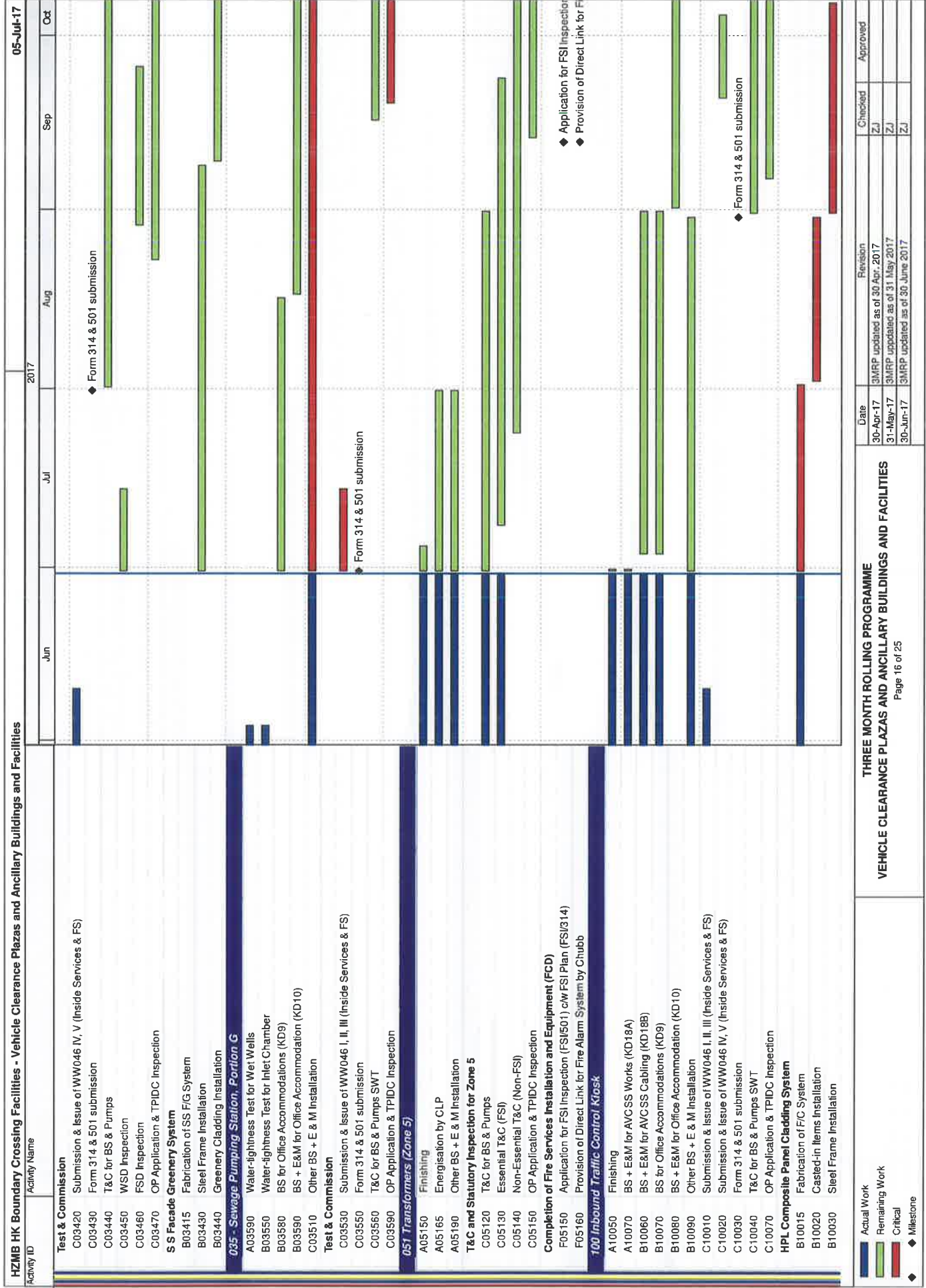
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■ Actual Work
■ Remaining Work
■ Critical
◆ Milestone





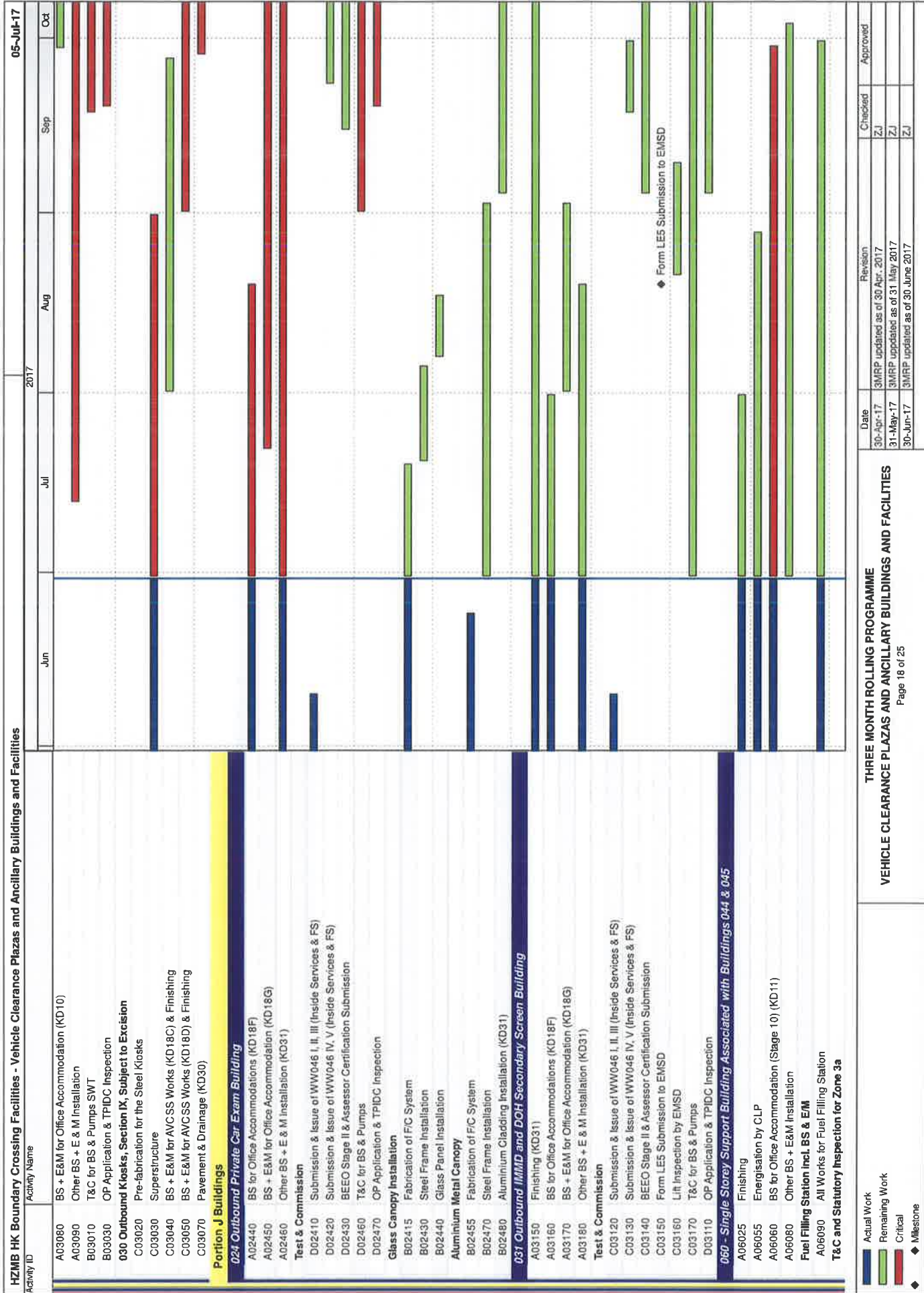
HZMB HK Boundary Crossing Facilities - Vehicle Clearance Plazas and Ancillary Buildings and Facilities						2017				05-Jul-17
Activity ID	Activity Name	Jun	Jul	Aug	Sep	Oct				
112 Field Kiosk for Taxi Queuing Area										
A11240	Finishing									
A11250	BS + E & M Installation									
A11260	T&C for BS & Pumps SWT									
A11270	FSD Inspection									
A11280	OP Application & TPIDC Inspection									
External Works for Portion G, H1 & H2										
ELV Works within Portion H2 in the Hong Kong Side PTI										
EU1550	ELV Works within Portion H2 in the Hong Kong Side PTI (KD19)									
Works within Portion H1 & H2 except the ELV Works in the Hong Kong Side PTI										
EU1560	Drainage & Sewerage Works within Portion H1 & H2 in the Hong Kong Side PTI (KD20)									
All Works within the Boundary defined in Drawing No. 60191048/C3/000/C00/1050										
BEU1570	Drainage & Sewerage Works (incl. CLP) within the Boundary defined in Drawing No. 60191048/C3/000/1050									
BEU1580	Roadworks within the Boundary defined in Drawing No. 60191048/C3/000/1050, excluding Portion H1 & H2 & Bridges (KD24)									
Drainage Works										
ED4070	Drainage Works (6954m & 393MHs)									
ED4190	Sewerage (437m & 12MHs)									
Waterpipe Laying										
EW4080	Fresh Water Main Laying (1689m)									
EW4090	Flushing Water Main Laying (411m)									
Duct Laying for Utilities/Telecom Cabling, TCSS & Lighting										
EU5400	Duct & Cable Laying for Utilities/Telecom, CLP, BS & ELV									
EU5410	Duct & Cable Laying for TCSS & Lighting									
EU5560	ELV Installation									
Roadworks										
ER4170	Subbase (17045 ton)									
ER4200	Bitumen Pavement (24549 ton)									
ER4210	Rigid Pavement (514 m3), Footpath & EVA									
Road Furniture										
ER4150	Road Furniture									
Sign Gantry DS40, DS41 & DS75										
ES0180	Fabrication & Delivery of Sign Gantries to Site									
ES0190	Erection of Sign Gantry									
Canopy and Covered Walkway										
CC1320	Footing									
CC1330	Steel Frame Installation									
PORTION J										
Portion J Structure										
Bay 30 - 41 of CUE/Stair Subway (Portion J)										
B03260	Internal Finishes & Cable Containment (KD2)									
B03270	BS + E&M Installation for AVCSS (Stage 2) (KD2)									
030 Outbound Private Car & GV Kiosks										
A03020	Pre-fabrication for the Steel Kiosks									
A03030	Superstructure (Incl. Entrance & Toilet)									
A03050	Finishing									
A03060	BS + E&M for AVCSS Works (KD18B)									
A03070	BS for Office Accommodations (KD9)									

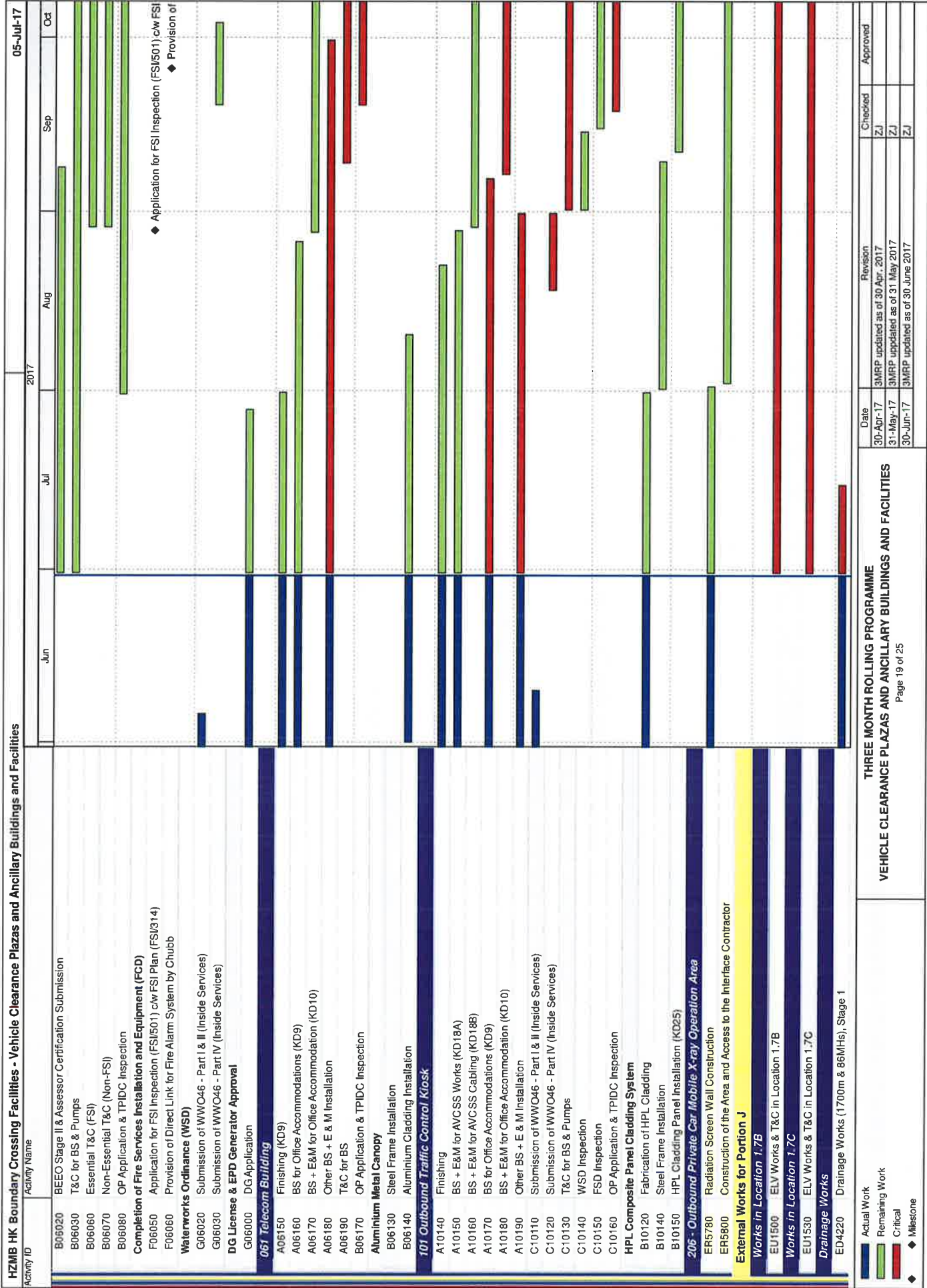
Actual Work
 Remaining Work
 Critical
 Milestone

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HZMB HK Boundary Crossing Facilities - Vehicle Clearance Plazas and Ancillary Buildings and Facilities									
Activity ID	Activity Name	2017	Jun	Jul	Aug	Sep	Oct	05-Jul-17	
ED4340	Sewerage (425m & 11MHs), Stage 1								
ED5710	Drainage Works (1697m & 85MHs), Stage 2								
ED5720	Sewerage (425m & 12MHs), Stage 2								
Waterpipe Laying									
EW4230	Fresh Water Main Laying (1541m)								
EW4240	Flushing Water Main Laying (862m)								
SW9290	Chilled Water Pipe Laying in Portion J (external)								
Duct Laying for Utilities/Telecom, TCSS & Lighting									
EU5420	Duct & Cable Laying for Utilities/Telecom, CLP, BS & ELV								
EU5430	Duct & Cable Laying for TCSS & Lighting								
EU5570	ELV Installation								
Roadworks									
ER4320	Subbase (15400 ton), Stage 1 (Northern)								
ER4350	Bitumen Pavement (20000 ton), Stage 1 (Northern)								
ER4360	Rigid Pavement (173 m3), Footpath & EVA, Stage 1 (Northern)								
ER5680	Subbase (15409 ton), Stage 2 (Southern)								
Road Furniture									
ER4300	Road Furniture (KD25)								
Sign Gantry DS104									
ES5130	Testing for P-bored Piles								
ES5150	Fabrication & Delivery of Sign Gantries to Site								
ES5160	Erection of Sign Gantry								
PORTION K, L, M, S & T									
Portion K Building									
002 - C&ED Observation Guard Booth No. 1, Portion K									
A00220	Raft Foundation								
A00230	Superstructure								
A00240	Finishing								
A00250	BS for Office Accommodations (Degree of Completion 2)								
A00260	BS + E&M for Office Accommodation (Degree of Completion 3)								
A00270	Other BS + E & M Installation								
A00280	T&C for BS & Pumps								
A00295	OP Application & TPIDC Inspection								
002 - C&ED Observation Guard Booth No. 2, Portion K									
B00220	Raft Foundation								
B00230	Superstructure								
B00240	Finishing								
B00250	BS for Office Accommodations (Degree of Completion 2)								
B00260	BS + E&M for Office Accommodation (Degree of Completion 3)								
B00270	Other BS + E & M Installation								
B00280	T&C for BS & Pumps								
B00295	OP Application & TPIDC Inspection								
Portion M Buildings									
108 - C&ED Mobile X-ray Operation Office, Portion M									
B10810	Substructure (raft Foundation)								
B10840	Superstructure (Roof beams & Slabs)								
B10850	Finishing								
B10860	BS for Office Accommodations (KD9)								
B10870	BS + E&M for Office Accommodation (KD10)								

Actual Work

Remaining Work

Critical

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3MRP updated as of 30 Apr. 2017

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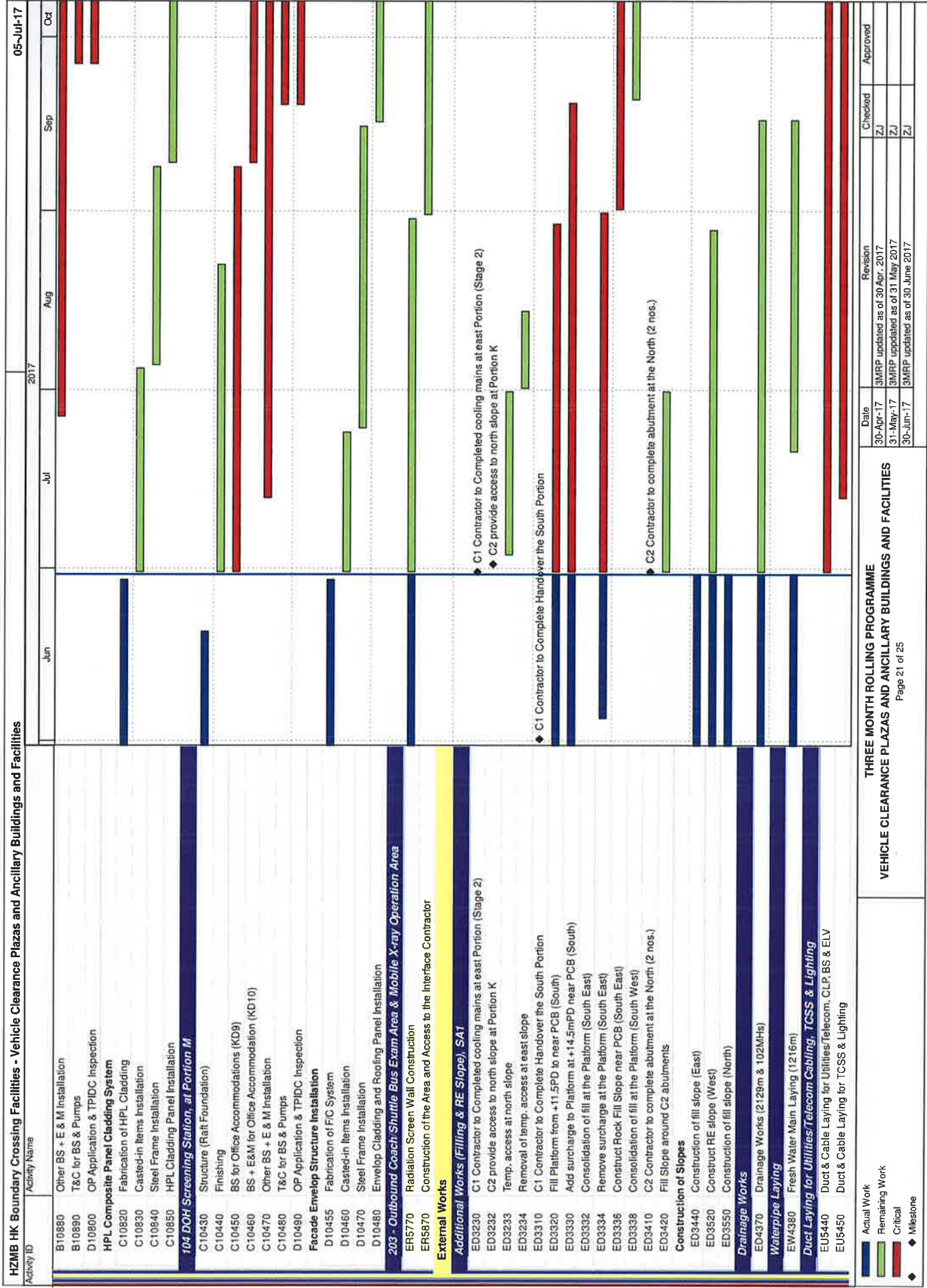
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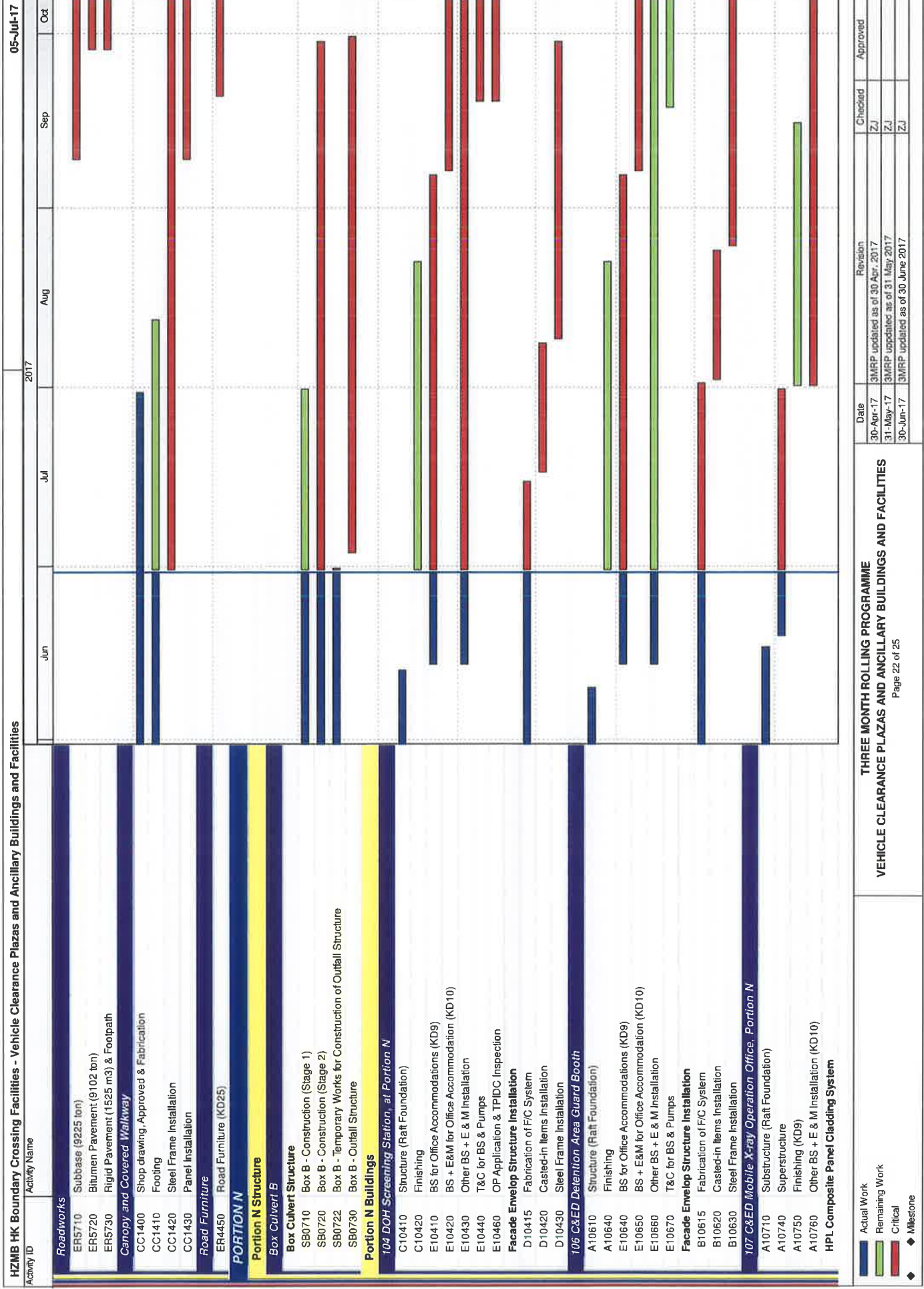
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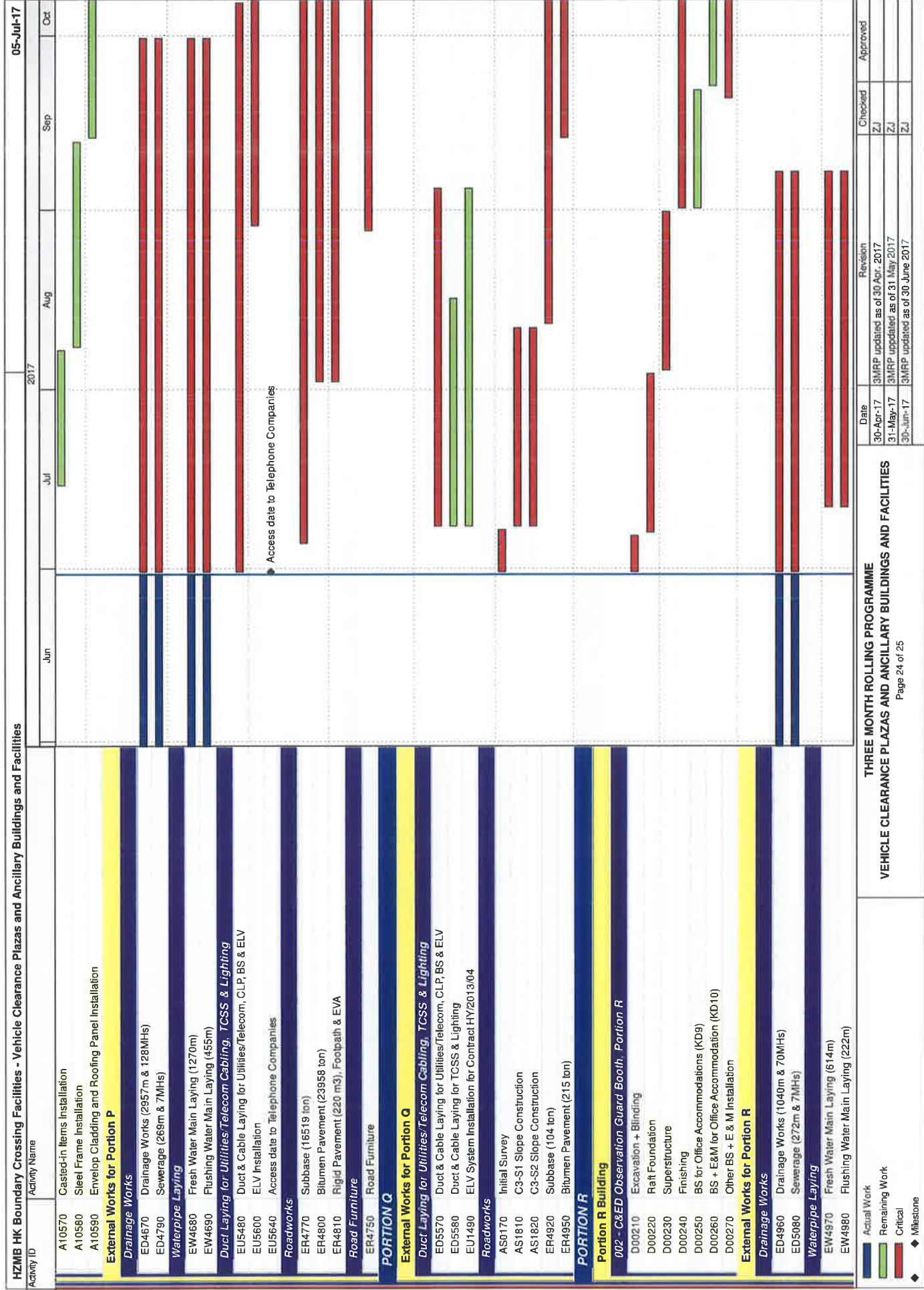


H2MB HK Boundary Crossing Facilities - Vehicle Clearance Plazas and Ancillary Buildings and Facilities									
Activity ID	Activity Name	2017	Jun	Jul	Aug	Sep	Oct	05-Jul-17	
B10720	Fabrication of HPL Composite Panel System								
B10730	Casted-in Items Installation								
B10740	Steel Frame Installation								
B10750	HPL Cladding Panel Installation								
200 - Inbound/Outbound Vehicle Detection Area									
ER5810	Construction of the Area and Access to the Interface Contractor								
202 - Outbound Cargo Mobile X-ray Operation Area									
ER5790	Radiation Screen Wall Construction								
ER5820	Construction of the Area and Access to the Interface Contractor								
211 - Inbound GV Secondary Examination Bays Outbound									
ER5840	Construction of the Bays and Access to the Interface Contractor								
External Works for Portion N									
Works in Location 1.7A									
EU1540	ELV Works & T&C in Location 1.7A								
Drainage Works									
ED4620	Drainage Works (964m & 56Mh), Stage 1 (Southern)								
ED4650	Sewerage (383m & 12Mh), Stage 1 (Southern)								
ED5750	Drainage Works (963m & 55Mh), Stage 2 (Northern)								
ED5760	Sewerage (383m & 12Mh), Stage 2 (Northern)								
Waterpipe Laying									
EW4530	Fresh Water Main Laying (641m)								
EW4540	Flushing Water Main Laying (413m)								
SW9300	Chilled Water Pipe Laying in Portion N (external)								
Duct Laying for Utilities/Telecom Cabling, TCSS & Lighting									
EU5460	Duct & Cable Laying for Utilities/Telecom, CLP, BS & ELV								
EU5470	Duct & Cable Laying for TCSS & Lighting								
Roadworks									
ER4620	Subbase (6475 ton)								
ER4650	Bitumen Pavement (10144ton)								
ER4660	Rigid Pavement (183 m3), Footpath & EVA								
Road Furniture									
ER4600	Road Furniture (KD25)								
PORTION P									
Portion Structure									
Retaining Wall RW1									
RW1110	Construction of Retaining Wall RW1 (U-shape, 5 bays)								
RW1140	Backfilling RW1								
RW1150	Parapet RW1 (20 pours)								
Portion P Buildings									
105 IMMD Guard Booth, Portion P									
A10510	Excavation + Blinding								
A10520	Substructure (Raft Foundation)								
A10530	On Grade Ground Slab								
A10540	Finishing								
E10500	BS for Office Accommodations (KD9)								
E10510	BS + E&M for Office Accommodation (KD10)								
E10520	Other BS + E & M Installation								
Facade Envelope Structure Installation									
A10560	Shop Drawing Submission and Approval								

Actual Work
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 Critical
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HZMB HK Boundary Crossing Facilities - Vehicle Clearance Plazas and Ancillary Buildings and Facilities										2017		05-Jul-17	
Activity ID	Activity Name	Jun	Jul	Aug	Sep	Oct							
Duct Laying for Utilities/Telecom Cabling, TCSS & Lighting													
EU5500	Duct & Cable Laying for Utilities/Telecom, CLP, BS & ELV												
EU5510	Duct & Cable Laying for TCSS & Lighting												
Roadworks													
ERS060	Subbase (1734 ton)												
Landscape Works													
A5170	Design and Procurement for Irrigation System												
A5190	All landscape Soft & Hard Works												

Actual Work Remaining Work Critical Milestone	THREE MONTH ROLLING PROGRAMME VEHICLE CLEARANCE PLAZAS AND ANCILLARY BUILDINGS AND FACILITIES				Date	Revision	Checked	Approved
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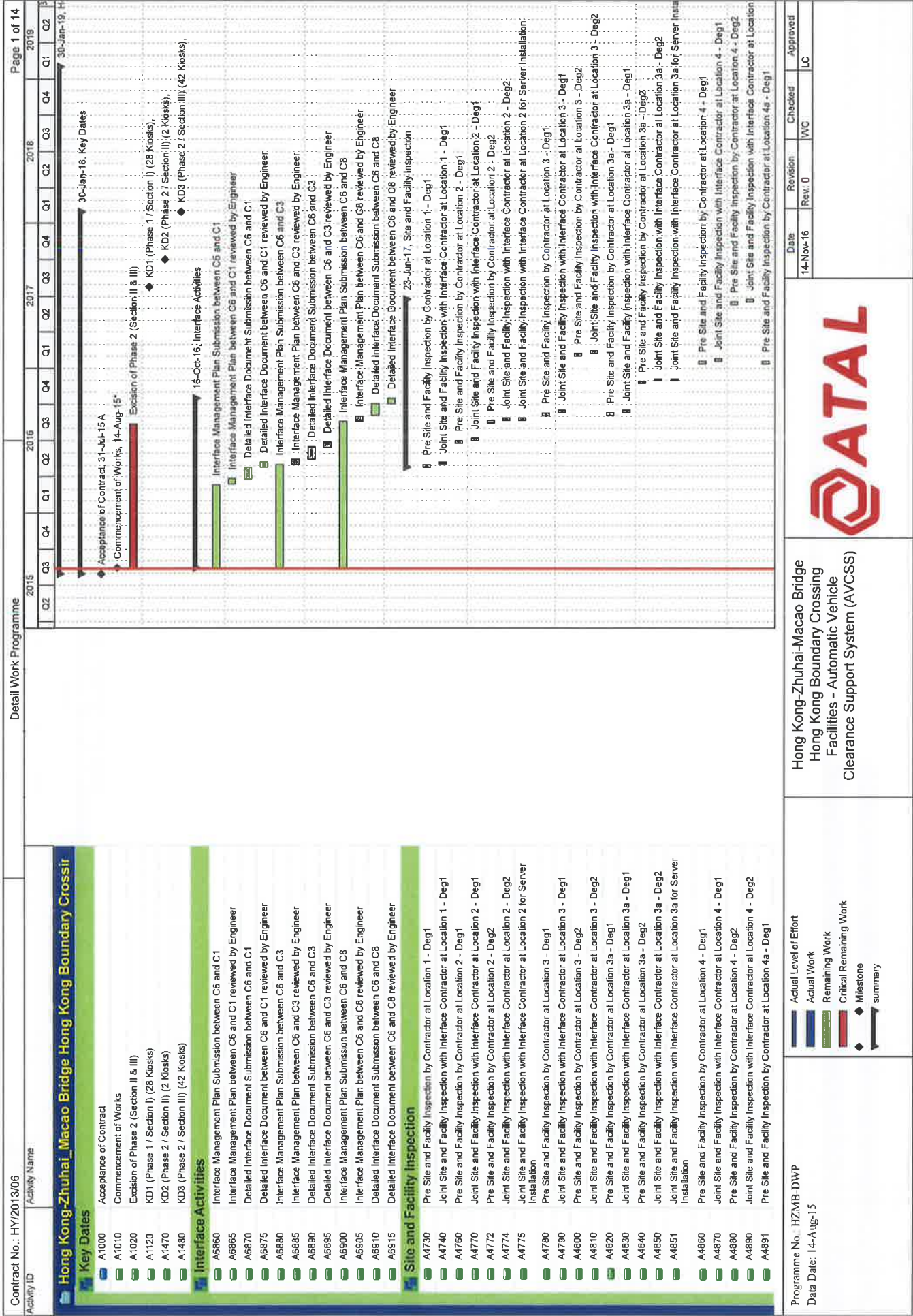
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- Actual Work
- Remaining Work
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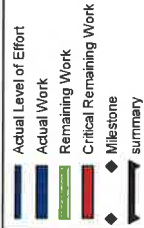
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Activity ID	Activity Name	2015			2016			2017			2018			2019	
		Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3
A4892	Joint Site and Facility Inspection with Interface Contractor at Location 4a - Deg1														
A4900	Pre Site and Facility Inspection by Contractor at Location 4a - Deg2														
A4910	Joint Site and Facility Inspection with Interface Contractor at Location 4a - Deg2														
A4920	Pre Site and Facility Inspection by Contractor at Location 5 - Deg1														
A4930	Joint Site and Facility Inspection with Interface Contractor at Location 5 - Deg1														
A4940	Pre Site and Facility Inspection by Contractor at Location 5 - Deg2														
A4950	Joint Site and Facility Inspection with Interface Contractor at Location 5 - Deg2														
A4960	Pre Site and Facility Inspection by Contractor at Location 6 - Deg1														
A4970	Joint Site and Facility Inspection with Interface Contractor at Location 6 - Deg1														
A4980	Pre Site and Facility Inspection by Contractor at Location 6 - Deg2														
A4990	Joint Site and Facility Inspection with Interface Contractor at Location 6 - Deg2														
A5000	Pre Site and Facility Inspection by Contractor at Location 7 - Deg1														
A5010	Joint Site and Facility Inspection with Interface Contractor at Location 7 - Deg1														
A5020	Pre Site and Facility Inspection by Contractor at Location 8 - Deg1														
A5030	Joint Site and Facility Inspection with Interface Contractor at Location 8 - Deg1														
A5040	Pre Site and Facility Inspection by Contractor at Location 8 - Deg2														
A5050	Joint Site and Facility Inspection with Interface Contractor at Location 8 - Deg2														
A5060	Pre Site and Facility Inspection by Contractor at Location 9 - Deg1														
A5070	Joint Site and Facility Inspection with Interface Contractor at Location 9 - Deg1														
A5080	Pre Site and Facility Inspection by Contractor at Location 9 - Deg2														
A5090	Joint Site and Facility Inspection with Interface Contractor at Location 9 - Deg2														
A5100	Pre Site and Facility Inspection by Contractor at Location 10 - Deg1														
A5110	Joint Site and Facility Inspection with Interface Contractor at Location 10 - Deg1														
A5120	Pre Site and Facility Inspection by Contractor at Location 10 - Deg2														
A5130	Joint Site and Facility Inspection with Interface Contractor at Location 10 - Deg2														
A5140	Pre Site and Facility Inspection by Contractor at Location 11 - Deg1														
A5150	Joint Site and Facility Inspection with Interface Contractor at Location 11 - Deg1														
A5160	Pre Site and Facility Inspection by Contractor at Location 11 - Deg2														
A5170	Joint Site and Facility Inspection with Interface Contractor at Location 11 - Deg2														
A5180	Pre Site and Facility Inspection by Contractor at Location 12 - Deg1														
A5190	Joint Site and Facility Inspection with Interface Contractor at Location 12 - Deg1														
A5200	Pre Site and Facility Inspection by Contractor at Location 12 - Deg2														
A5210	Joint Site and Facility Inspection with Interface Contractor at Location 12 - Deg2														
A5220	Pre Site and Facility Inspection by Contractor at Location 13 - Deg1														
A5230	Joint Site and Facility Inspection with Interface Contractor at Location 13 - Deg1														
A5240	Pre Site and Facility Inspection by Contractor at Location 13 - Deg2														
A5250	Joint Site and Facility Inspection with Interface Contractor at Location 13 - Deg2														
A5260	Pre Site and Facility Inspection by Contractor at Location 14 - Deg1														
A5270	Joint Site and Facility Inspection with Interface Contractor at Location 14 - Deg1														
A5300	Pre Site and Facility Inspection by Contractor at Location 15 - Deg1														
A5310	Joint Site and Facility Inspection with Interface Contractor at Location 15 - Deg1														
A5320	Pre Site and Facility Inspection by Contractor at Location 15 - Deg2														
A5330	Joint Site and Facility Inspection with Interface Contractor at Location 15 - Deg2														
A5340	Pre Site and Facility Inspection by Contractor at Location 16 - Deg1														
A5350	Joint Site and Facility Inspection with Interface Contractor at Location 16 - Deg1														

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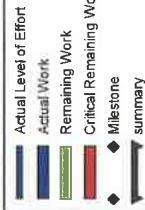


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Activity ID	Activity Name	2015						2016						2017						2018						2019					
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A5360	Pre Site and Facility Inspection by Contractor at Location 16 - Deg2																														
A5370	Joint Site and Facility Inspection with Interface Contractor at Location 16 - Deg2																														
A5375	Pre Site and Facility Inspection by Contractor at Location 17 - Deg1																														
A5378	Joint Site and Facility Inspection with Interface Contractor at Location 17 - Deg1																														
A5380	Pre Site and Facility Inspection by Contractor at Location 17 - Deg2																														
A5390	Joint Site and Facility Inspection with Interface Contractor at Location 17 - Deg2																														
A5395	Pre Site and Facility Inspection by Contractor at Location 18 - Deg1																														
A5396	Joint Site and Facility Inspection with Interface Contractor at Location 18 - Deg1																														
A5400	Pre Site and Facility Inspection by Contractor at Location 18 - Deg2																														
A5410	Joint Site and Facility Inspection with Interface Contractor at Location 18 - Deg2																														
A5420	Pre Site and Facility Inspection by Contractor at Location 19 - Deg1																														
A5430	Joint Site and Facility Inspection with Interface Contractor at Location 19 - Deg1																														
A5440	Pre Site and Facility Inspection by Contractor at Location 19 - Deg2																														
A5450	Joint Site and Facility Inspection with Interface Contractor at Location 19 - Deg2																														
A5470	Pre Site and Facility Inspection by Contractor at Inbound Vehicle Clearance Plaza																														
A5480	Joint Site and Facility Inspection with Interface Contractor at Inbound Vehicle Clearance Plaza																														
A5490	Pre Site and Facility Inspection by Contractor at Outbound Vehicle Clearance Plaza																														
A5550	Joint Site and Facility Inspection with Interface Contractor at Outbound Vehicle Clearance Plaza																														
Access Dates																															
A1070	Location 1(PCB 001) Basement)-Deg1 (270d)																														
A1081	Location 1(PCB 001) ELV Room (Grid Line E3))-Deg1 (270d)																														
A1090	Location 2(PCB 001) First Floor Main Server Room)-Deg1 (330d)																														
A1100	Location 2(PCB 001) First Floor Main Server Room)-Deg2 (380d)																														
A1101	Location 2(PCB 001) First Floor Main Server Room) - For Server Installation																														
A1102	Location 2(PCB 001) Ground Floor ELV Room (Grid Line E3)) - Deg1 (330d)																														
A1103	Location 2(PCB 001) Ground Floor DOH Port Health Control Room (Grid Line BD5)) - Deg1 (330d)																														
A1104	Location 2(PCB 001) Ground Floor DOH Port Health Control Room (Grid Line BD5)) - Deg2 (380d)																														
A1110	Location 3(Inbd Cargo Exam Bldg (037) MDF Room)-Deg1 (400d)																														
A1112	Location 3(Inbd Cargo Exam Bldg (037) ELV Room)-Deg1 (400d)																														
A1114	Location 3(Inbd Cargo Exam Bldg (037) Platform Control Room)-Deg1 (400d)																														
A1115	Location 3(Inbd Cargo Exam Bldg (037) Platform Control Room)-Deg2 (500d)																														
A1116	Location 3(Inbd Cargo Exam Bldg (037) Inspector Offices 128,129,130,131,128,129,140,141)-Deg1 (400d)																														
A1117	Location 3(Inbd Cargo Exam Bldg (037) Inspector Offices 128,129,130,131,128,129,140,141)-Deg2 (500d)																														
A1130	Location 3a(Inbd Cargo Exam Bldg ROCARS Room)-Deg1 (-)																														
A1131	Location 3a(Inbd Cargo Exam Bldg ROCARS Room)-Deg2 (480d)																														
A1140	Location 3a(Inbd Cargo Exam Bldg Main Server Room)-Deg1 (-)																														
A1141	Location 3a(Inbd Cargo Exam Bldg Main Server Room)-Deg2 (480d)																														
A1142	Location 3a(Inbd Cargo Exam Bldg Main Server Room) - For Server Installation																														
A1150	Location 4(Outbd Cargo Exam Bldg (023))-Deg1 (530d)																														
A1160	Location 4(Outbd Cargo Exam Bldg (023))-Deg2 (680d)																														
A1161	Location 4a(Outbd Cargo Exam Bldg (023))-Deg1 (-)																														

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Hong Kong-Zhuhai-Macao Bridge
Hong Kong Boundary Crossing
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Contract No.: HY2013/06		Detail Work Programme												Page 4 of 14	
Activity ID	Activity Name	2015			2016			2017			2018			2019	
		Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3
A1162	Location 4a(Outbd Cargo Exam Bldg (023))-Deg2 (630d)														
A1170	Location 5(Common Utility Enclosure & Staff Subway)-Deg1 (320d)														
A1180	Location 5(Common Utility Enclosure & Staff Subway)-Deg2 (-)														
A1190	Location 6(Common Utility Enclosure & Staff Subway)-Deg1 (400d)														
A1200	Location 6(Common Utility Enclosure & Staff Subway)-Deg2 (-)														
A1210	Location 7(Common Utility Enclosure & Staff Subway)-Deg1 (270d)														
A1230	Location 8(Inbd Private Car Annex (025))-Deg1 (430d)														
A1240	Location 8(Inbd Private Car Annex (025))-Deg2 (580d)														
A1241	Location 8(Inbd Private Car Annex (025) Canopy)-Deg1 (430d)														
A1242	Location 8(Inbd Private Car Annex (025) Canopy)-Deg2 (580d)														
A1250	Location 9(Outbd Private Car Annex (032))-Deg1 (520d)														
A1260	Location 9(Outbd Private Car Annex (032))-Deg2 (660d)														
A1261	Location 9(Outbd Private Car Annex (032) Canopy)-Deg1 (520d)														
A1262	Location 9(Outbd Private Car Annex (032) Canopy)-Deg2 (660d)														
A1270	Location 10(Shuttle Bus Kiosks (006))-Deg1 (480d)														
A1280	Location 10(Shuttle Bus Kiosks (006))-Deg2 (550d)														
A1281	Location 10(Shuttle Bus Kiosks (006) Canopy)-Deg1 (480d)														
A1282	Location 10(Shuttle Bus Kiosks (006) Canopy)-Deg2 (550d)														
A1290	Location 11(Outbd Coach Kiosks (009))-Deg1 (400d)														
A1300	Location 11(Outbd Coach Kiosks (009))-Deg2 (480d)														
A1301	Location 11(Outbd Coach Kiosks (009) Canopy)-Deg1 (400d)														
A1302	Location 11(Outbd Coach Kiosks (009) Canopy)-Deg2 (480d)														
A1303	Location 11(Inbd Coach Kiosks (010))-Deg1 (400d)														
A1304	Location 11(Inbd Coach Kiosks (010))-Deg2 (480d)														
A1305	Location 11(Inbd Coach Kiosks (010) Canopy)-Deg1 (400d)														
A1306	Location 11(Inbd Coach Kiosks (010) Canopy)-Deg2 (480d)														
A1310	Location 12(Inbd Private Car Kiosks(027))-Deg1 (400d)														
A1311	Location 12(Inbd Private Car Kiosks(027))-Deg2 (480d)														
A1312	Location 12(Inbd Private Car Kiosks(027) Canopy)-Deg1 (400d)														
A1313	Location 12(Inbd Private Car Kiosks(027) Canopy)-Deg2 (480d)														
A1314	Location 12(Inbd GV Kiosks (028))-Deg1 (400d)														
A1315	Location 12(Inbd GV Kiosks (028))-Deg2 (480d)														
A1316	Location 12(Inbd GV Kiosks (028) Canopy)-Deg1 (400d)														
A1317	Location 12(Inbd GV Kiosks (028) Canopy)-Deg2 (480d)														
A1318	Location 12(Outbd GV Kiosks (029))-Deg1 (400d)														
A1319	Location 12(Outbd GV Kiosks (029))-Deg2 (480d)														
A1320	Location 12(Outbd GV Kiosks (029) Canopy)-Deg1 (400d)														
A1321	Location 12(Outbd GV Kiosks (029) Canopy)-Deg2 (480d)														
A1330	Location 13(Outbd Private Car Kiosks (030))-Deg1 (480d)														
A1340	Location 13(Outbd Private Car Kiosks (030))-Deg2 (550d)														
A1341	Location 13(Outbd Private Car Kiosks (030) Canopy)-Deg1 (480d)														
A1342	Location 13(Outbd Private Car Kiosks (030) Canopy)-Deg2 (550d)														
A1350	Location 14(Future-Outbd/Inbd Private Car Kiosks)-Deg1 (610d)														
A1370	Location 15(Inbd Traffic Control Kiosk (100))-Deg1 (400d)														
A1380	Location 15(Inbd Traffic Control Kiosk (100))-Deg2 (480d)														

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Hong Kong-Zhuhai-Macao Bridge
Hong Kong Boundary Crossing
Facilities - Automatic Vehicle
Clearance Support System (AVCSS)



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14-Nov-16

Revision
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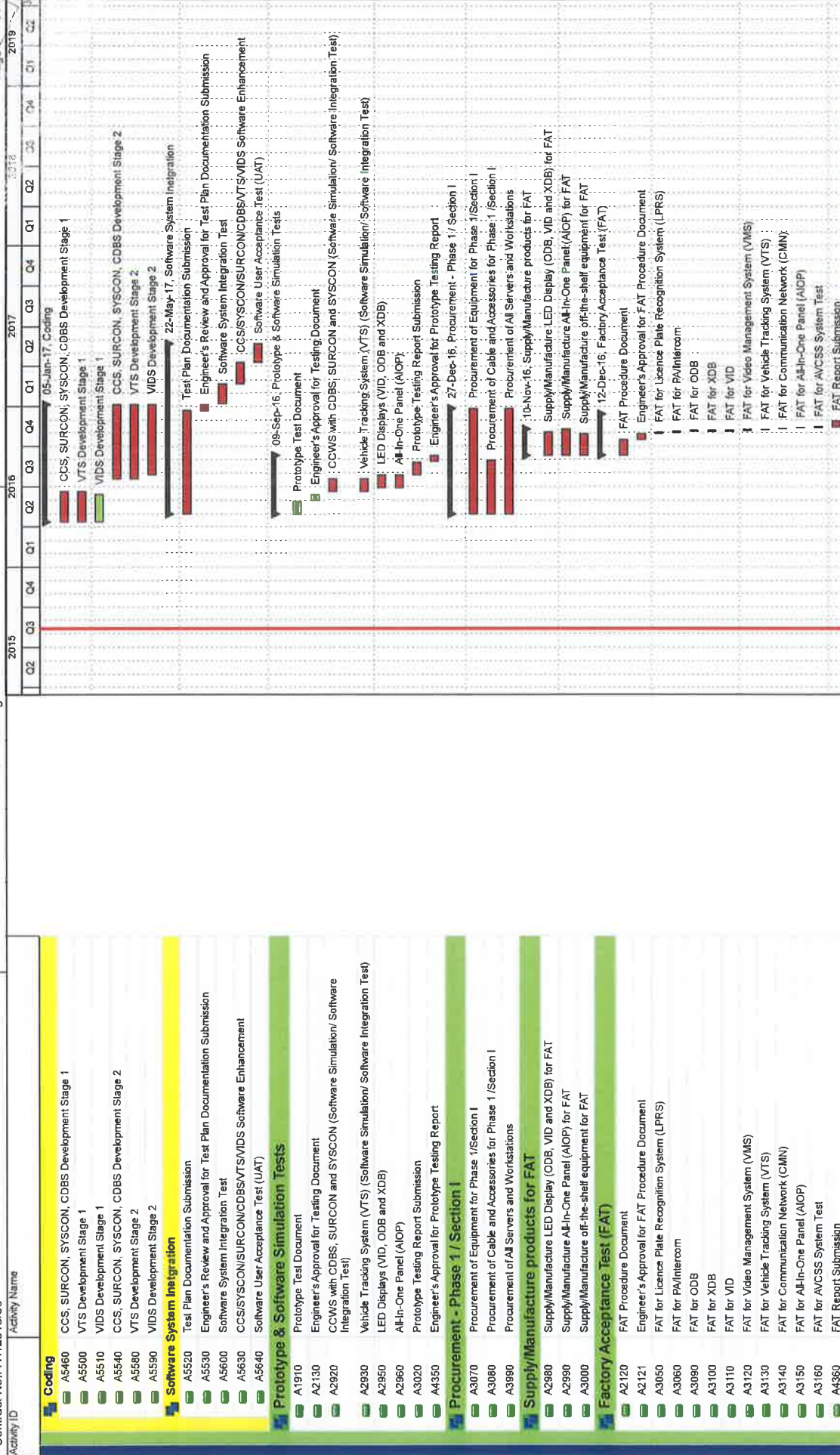
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Contract No.: HY/2013/06		Detail Work Programme												Page 5 of 14	
Activity ID	Activity Name	2015			2016			2017			2018			2019	
		Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3
A1390	Location 16(Outbd Traffic Control Kiosk (101))-Deg1 (400d)														
A1400	Location 16(Outbd Traffic Control Kiosk (101))-Deg2 (400d)														
A1410	Location 17(Inbd Private Car Exam Bldg(033))-Deg1 (-)														
A1420	Location 17(Inbd Private Car Exam Bldg(033))-Deg2 (550d)														
A1430	Location 18(Outbd Private Car Exam Bldg(024))-Deg1 (-)														
A1440	Location 18(Outbd Private Car Exam Bldg(024))-Deg2 (670d)														
A1450	Location 19(DOH Cargo Clearance Bldg(043))-Deg1 (-)														
A1460	Location 19(DOH Cargo Clearance Bldg(043))-Deg2 (550d)														
A1461	Underground Ducting between Inbd Cargo Exam Bldg (037) and DOH Cargo Clearance Bldg (043) and CUE														
A1462	Underground Ducting between Inbd Cargo Exam Bldg (037) and Inbd Vehicle Clearance Plaza														
A1463	Underground Ducting between CUE and Outbd Car Exam Bldg (023)														
A1464	Underground Ducting between Outbd Cargo Exam Bldg (023) and Outbd Vehicle Clearance Plaza														
A1465	Underground Ducting between CUE and Outbd Vehicle Clearance Plaza														
A1466	Underground Ducting between CUE and Inbd P. Car Annex (025) and Shuttle Bus Kiosks (006)														
A1467	Underground Ducting between PCB(001) and Inbd Coach Kiosks(010)														
A1468	Underground Ducting between CUE and Outbd PCA (032)														
A1478	Inbound Vehicle Clearance Plaza (Assume same as Location 3)														
A1488	Outbound Vehicle Clearance Plaza (Assume same as Location 4 degree 1 + 51 day)														
Interfaces Provisions															
A7000	Inbound VID foundation and mounting structure (assume same as Access date of Inbound Vehicle Clearance Plaza)														
A7010	Inbound VTS foundation and mounting poles (assume same as Access date of Inbound Vehicle Clearance Plaza)														
A7020	Inbound TLS foundation and mounting poles (assume same as Access date of Inbound Vehicle Clearance Plaza)														
A7030	Outbound VID foundation and mounting structure (assume same as Access date of Outbound Vehicle Clearance Plaza)														
A7040	Outbound VTS foundation and mounting poles (assume same as Access date of Outbound Vehicle Clearance Plaza)														
A7050	Outbound TLS foundation and mounting poles (assume same as Access date of Outbound Vehicle Clearance Plaza)														
WA4 Site Erection & Servicing															
A1740	Possession of Site														
A1750	Method Statement & Drawing														
A1760	Place Order to prepare materials														
A1770	Review, revise and approve method statement														
A1780	Equipment mobilization and construction material delivered to the site														
A1790	Set up the alignment and level of the u-channel														
A1800	Trial pit excavation														
A1801	Excavation for chain-link fence footing														
A4540	Underground Utility detection														
A4550	Delivery of asphalt and fencing materials														
A4560	Trimming and leveling soil surface for paving asphalt material														
A4570	Remove the vegetation and loose material on the soil surface by backhoe														
A4580	Set out the alignment and level of the u-channel														
Actual Level of Effort Actual Work Remaining Work Critical Remaining Work Milestone summary														Programme No: HZMB-DWP Data Date: 14-Aug-15	
Hong Kong-Zhuhai-Macao Bridge Hong Kong Boundary Crossing Facilities - Automatic Vehicle Clearance Support System (AVCSS)		ATATL												Date 14-Nov-16 Revision Rev. 0 Checked WC Approved LC	

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Actual Level of Effort

Actual Work

Remaining Work

Critical Remaining Work

Milestone summary

Hong Kong-Zhuhai-Macao Bridge

Hong Kong Boundary Crossing

Facilities - Automatic Vehicle

Clearance Support System (AVCSS)

ATATL

Date

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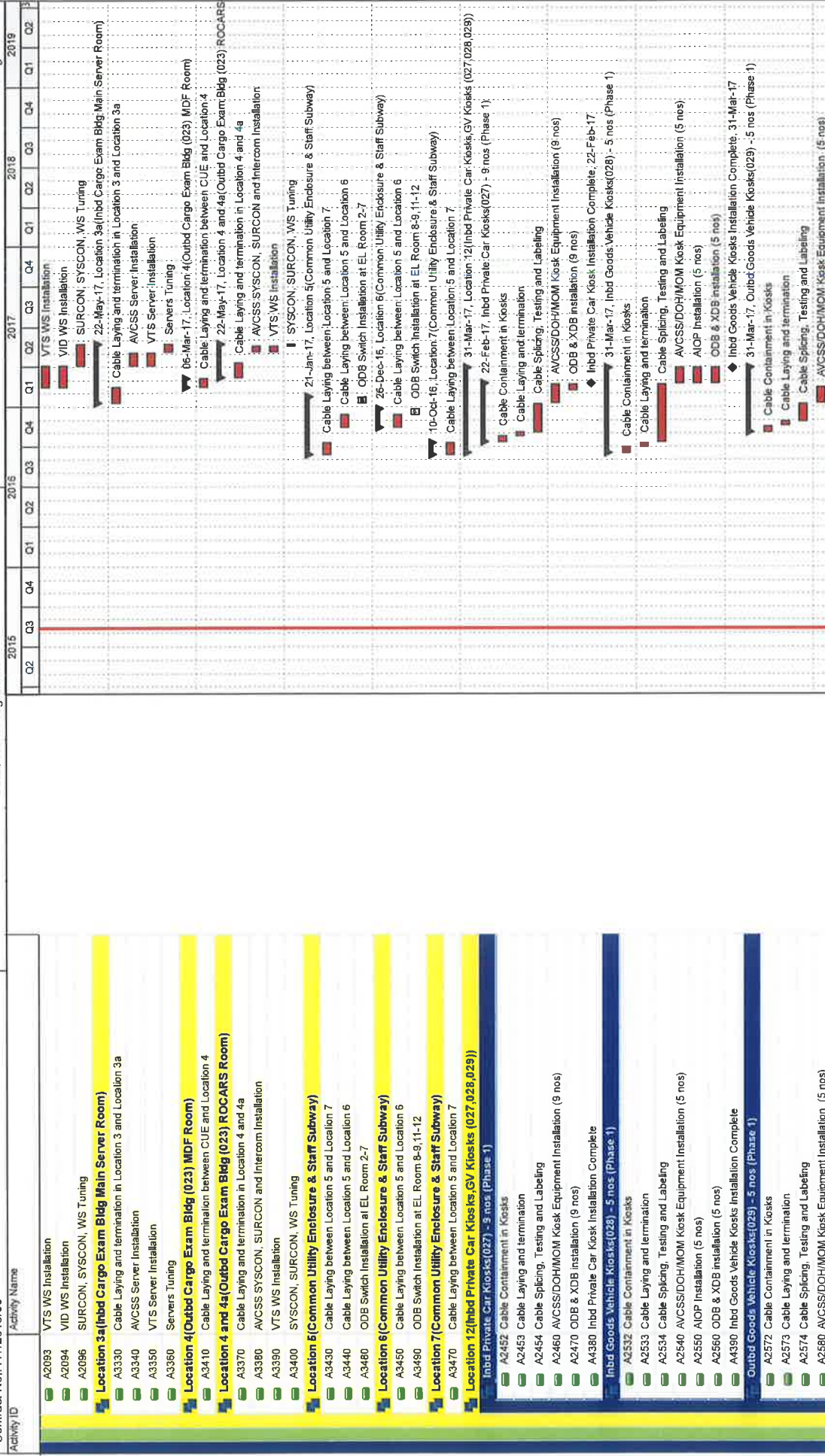
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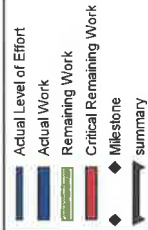
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Programme No.: HZMB-DWP

Data Date: 14-Aug-15



Hong Kong-Zhuhai-Macao Bridge
Hong Kong Boundary Crossing
Facilities - Automatic Vehicle
Clearance Support System (AVCSS)



Date
14-Nov-16

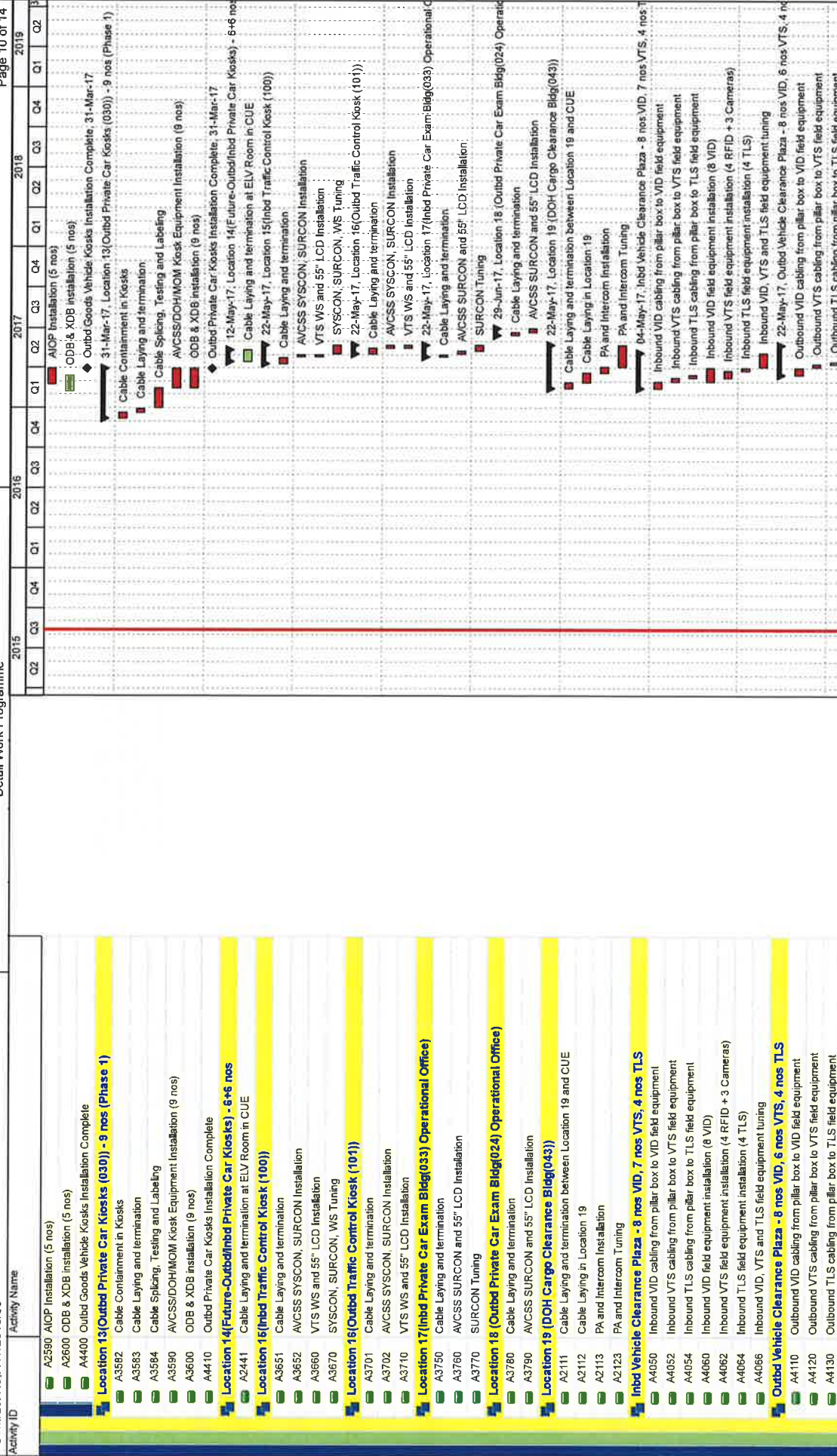
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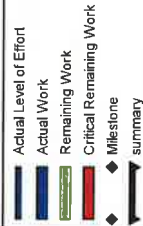
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Contract No.: HY2013/06

Detail Work Programme



Programme No.: HZMB-DWP
Data Date: 14-Aug-15

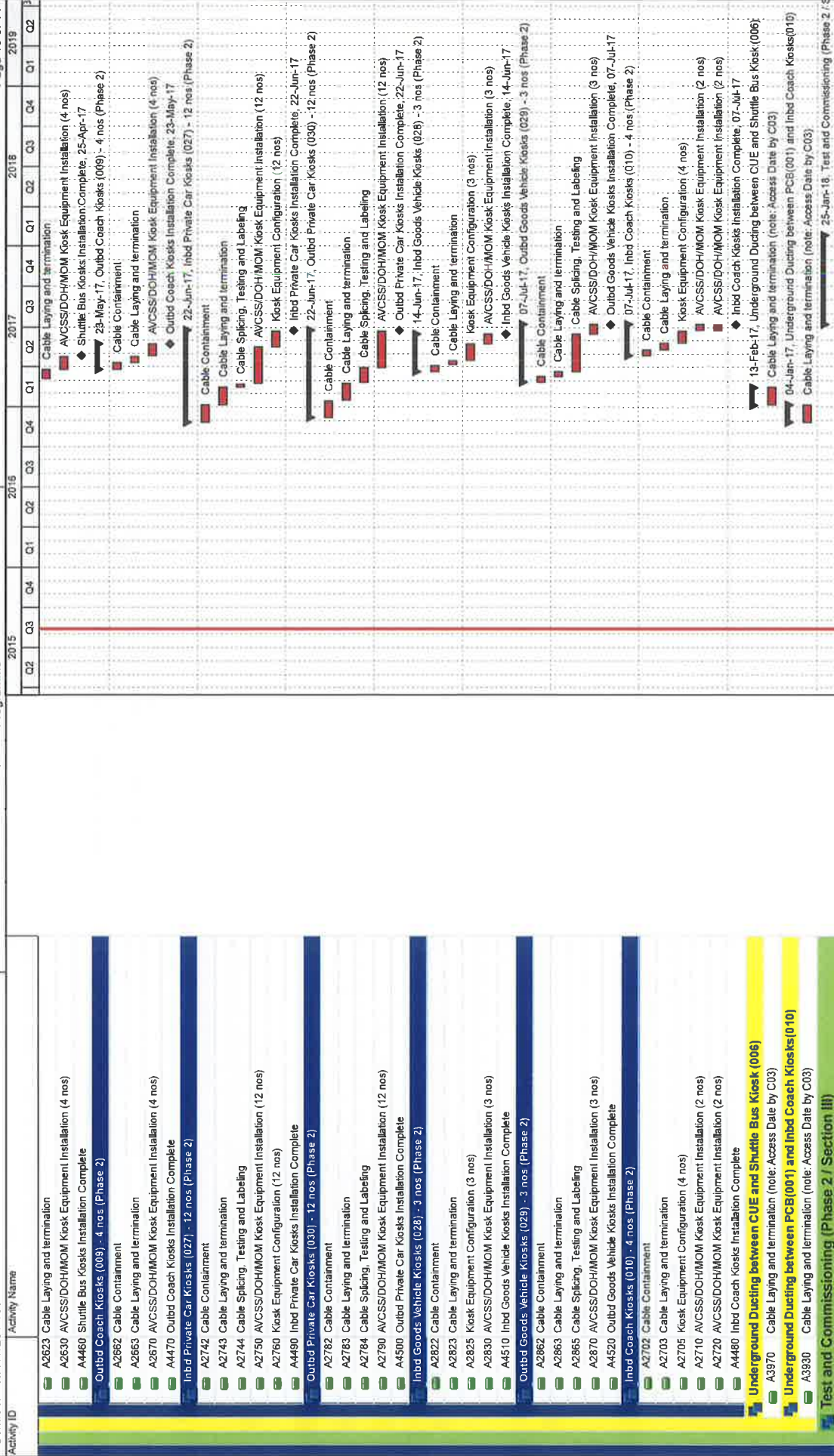


Hong Kong-Zhuhai-Macao Bridge
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Clearance Support System (AVCSS)



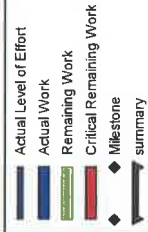
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Hong Kong-Zhuhai-Macao Bridge
Hong Kong Boundary Crossing
Facilities - Automatic Vehicle
Clearance Support System (AVCSS)



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MaterialLab

Report No.: 0165/15/ED/0836

Appendix D

Event / Action Plan

Appendix D –

Event / Action Plan for Air Quality and Noise Monitoring and Water Quality Monitoring and Ecological Monitoring

Event / Action Plan for Air Quality

Event	Action			
	ET	IEC	ER	Contractor
Action Level				
1. Exceedance for one sample	1. Identify source, investigate the causes of exceedance and propose remedial measures; 2. Inform IEC and ER; 3. Repeat measurement to confirm finding; 4. Increase monitoring frequency to daily.	1. Check monitoring data submitted by ET; 2. Check Contractor's working method.	1. Notify Contractor.	1. Rectify any unacceptable practice; 2. Amend working methods if appropriate.

Event	Action			
	ET	IEC	ER	Contractor
2. Exceedance for two or more consecutive samples	1. Identify source; 2. Inform IEC and ER; 3. Advise the ER on the effectiveness of the proposed remedial measures; 4. Repeat measurements to confirm findings; 5. Increase monitoring frequency to daily; 6. Discuss with IEC and Contractor on remedial actions required; 7. If exceedance continues, arrange meeting with IEC and ER; 8. If exceedance stops, cease additional monitoring.	1. Check monitoring data submitted by ET; 2. Check Contractor's working method; 3. Discuss with ET and Contractor on possible remedial measures; 4. Advise the ER on the effectiveness of the proposed remedial measures; 5. Supervise Implementation of remedial measures.	1. Confirm receipt of notification of failure in writing; 2. Notify Contractor; 3. Ensure remedial measures properly implemented.	1. Submit proposals for remedial to ER within 3 working days of notification; 2. Implement the agreed proposals; 3. Amend proposal if appropriate.

Event	Action			
	ET	IEC	ER	Contractor
Limit Level				
1. Exceedance for one sample	1. Identify source, investigate the causes of exceedance and propose remedial measures; 2. Inform ER, Contractor and EPD; 3. Repeat measurement to confirm finding; 4. Increase monitoring frequency to daily; 5. Assess effectiveness of Contractor's remedial actions and keep IEC, EPD and ER informed of the results.	1. Check monitoring data submitted by ET; 2. Check Contractor's working method; 3. Discuss with ET and Contractor on possible remedial measures; 4. Advise the ER on the effectiveness of the proposed remedial measures; 5. Supervise implementation of remedial measures.	1. Confirm receipt of notification of failure in writing; 2. Notify Contractor; 3. Ensure remedial measures properly implemented.	1. Take immediate action to avoid further exceedance; 2. Submit proposals for remedial actions to IEC within 3 working days of notification; 3. Implement the agreed proposals; 4. Amend proposal if appropriate.

Event	Action			
	ET	IEC	ER	Contractor
2. Exceedance for two or more consecutive samples	1. Notify IEC, ER, Contractor and EPD; 2. Identify source; 3. Repeat measurement to confirm findings; 4. Increase monitoring frequency to daily; 5. Carry out analysis of Contractor's working procedures to determine possible mitigation to be implemented; 6. Arrange meeting with IEC and ER to discuss the remedial actions to be taken; 7. Assess effectiveness of Contractor's remedial actions and keep IEC, EPD and ER informed of the results; 8. If exceedance stops, cease additional monitoring.	1. Discuss amongst ER, ET, and Contractor on the potential remedial actions; 2. Review Contractor's remedial actions whenever necessary to assure their effectiveness and advise the ER accordingly; 3. Supervise the implementation of remedial measures.	1. Confirm receipt of notification of failure in writing; 2. Notify Contractor; 3. In consultation with the IEC, agree with the Contractor on the remedial measures to be implemented; 4. Ensure remedial measures properly implemented; 5. 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.	1. Take immediate action to avoid further exceedance; 2. Submit proposals for remedial actions to IEC within 3 working days of notification; 3. Implement the agreed proposals; 4. Resubmit proposals if problem still not under control; 5. Stop the relevant portion of works as determined by the ER until the exceedances abated.

Event / Action Plan for Construction Noise Monitoring

Event	Action			
	ET	IEC	ER	Contractor
Action Level	1. Notify IEC and Contractor; 2. Identify source, investigate the causes of exceedance and propose remedial measures; 3. Report the results of investigation to the IEC, ER and Contractor; 4. Discuss with the Contractor and formulate remedial measures; 5. Increase monitoring frequency to check mitigation effectiveness.	1. Review the analysed results submitted by the ET; 2. Review the proposed remedial measures by the Contractor and advise the ER accordingly; 3. Supervise the implementation of remedial measures.	1. Confirm receipt of notification of failure in writing; 2. Notify Contractor; 3. Require Contractor to propose remedial measures for the analysed noise problem; 4. Ensure remedial measures are properly implemented.	1. Submit noise mitigation proposals to IEC; 2. Implement noise mitigation proposals.

Event	Action			
	ET	IEC	ER	Contractor
Limit Level	1. Inform IEC, ER, EPD and Contractor; 2. Identify source; 3. Repeat measurements to confirm findings; 4. Increase monitoring frequency; 5. Carry out analysis of Contractor's working procedures to determine possible mitigation to be implemented; 6. Inform IEC, ER and EPD the causes and actions taken for the exceedances; 7. Assess effectiveness of Contractor's remedial actions and keep IEC, EPD and ER informed of the results; 8. If exceedance stops, cease additional monitoring.	1. Discuss amongst ER, ET, and Contractor on the potential remedial actions; 2. Review Contractor remedial actions whenever necessary to assure their effectiveness and advise the ER accordingly; 3. Supervise the implementation of remedial measures.	1. Confirm receipt of notification of failure in writing; 2. Notify Contractor; 3. Require Contractor to propose remedial measures for the analysed noise problem; 4. Ensure remedial measures properly implemented; 5. 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.	1. Take immediate action to avoid further exceedance; 2. Submit proposals for remedial actions to IEC within 3 working days of notification; 3. Implement the agreed proposals; 4. Resubmit proposals if problem still not under control; 5. Stop the relevant portion of works as determined by the ER until the exceedance is abated.

Event / Action Plan for Water Quality

Event	ET Leader	IEC	ER	Contractor
Action level being exceeded by one sampling day	1. Repeat in situ measurement on next day of exceedance to confirm findings 2. Identify source(s) of impact 3. Inform IEC, contractor and ER 4. Check monitoring data, all plant, equipment and Contractor's working methods	1. Confirm receipt of notification of noncompliance in writing 2. Notify Contractor	1. Confirm receipt of notification of noncompliance in writing 2. Notify Contractor	1. Inform the ER and confirm notification of the noncompliance in writing 2. Rectify unacceptable practice 3. Amend working methods if appropriate
Action level being exceeded by two or more consecutive sampling days	1. Repeat in situ measurement to confirm findings 2. Identify source(s) of impact 3. Inform IEC, Contractor and ER 4. Check monitoring data, all plant, equipment and Contractor's working methods 5. Discuss mitigation measures with IEC, ER and Contractor 6. Ensure mitigation measures are implemented 7. Increase the monitoring frequency to daily until no exceedance of Action level 8. Repeat measurement on next day of exceedance to confirm findings	1. Check monitoring data submitted by ET and Contractor's working method 2. Discuss with ET and Contractor on possible remedial actions 3. Review the proposed mitigation measures submitted by Contractor and advise the ER accordingly 4. Assess the effectiveness of the implemented mitigation measures	1. Confirm receipt of notification of noncompliance in writing 2. Discuss with IEC on the proposed mitigation measures 3. Make agreement on mitigation measures to be implemented 4. Ensure mitigation measures are properly implemented 5. Assess the effectiveness of the implemented mitigation measures	1. Inform the Engineer and confirm notification of the noncompliance in writing 2. Rectify unacceptable practice 3. Check all plant and equipment and consider changes of working methods 4. Discuss with ET and IEC on possible remedial actions and propose mitigation measures to IEC and ER within 3 working days of notification 5. Implement the agreed mitigation measures 6. Amend working methods if appropriate

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

Event	ET Leader	IEC	ER	Contractor
Action Level	1. Repeat statistical data analysis to confirm findings; 2. Review all available and relevant data, including raw data and statistical analysis results of other parameters covered in the EM&A, to ascertain if differences are as a result of natural variation or previously observed seasonal differences; 3. Identify source(s) of impact; 4. Inform the IEC, ER/SOR and Contractor; 5. Check monitoring data. 6. Review to ensure all the dolphin protective measures are fully and properly implemented and advise on additional measures if necessary.	1. Check monitoring data submitted by ET and Contractor; 2. Discuss monitoring results and finding with the ET and the Contractor.	1. Discuss monitoring with the IEC and any other measures proposed by the ET; 2. 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.	1. Inform the ER/SOR and confirm notification of the non-compliance in writing; 2. Discuss with the ET and the IEC and propose measures to the IEC and the ER/SOR; 3. Implement the agreed measures.

Event	ET Leader	IEC	ER	Contractor
Limit Level	1. Repeat statistical data analysis to confirm findings; 2. Review all available and relevant data, including raw data and statistical analysis results of other parameters covered in the EM&A, to ascertain if differences are as a result of natural variation or previously observed seasonal differences; 3. Identify source(s) of impact; 4. Inform the IEC, ER/SOR and Contractor of findings; 5. Check monitoring data; 6. Repeat review to ensure all the dolphin protective measures are fully and properly implemented and advise on additional measures if necessary. 7. 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 modify the perimeter silt curtain or 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.	1. Check monitoring data submitted by ET and Contractor; 2. Discuss monitoring results and findings with the ET and the Contractor; 3. Attend the meeting to discuss with ET, ER/SOR and Contractor the necessity of additional dolphin monitoring and any other potential mitigation measures. 4. 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. 5. Supervise / Audit the implementation of additional monitoring and/or any other mitigation measures and advise ER/SOR the results and findings accordingly.	1. Attend the meeting to discuss with ET, IEC and Contractor the necessity of additional dolphin monitoring and any other potential mitigation measures. 2. 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. 3. Supervise the implementation of additional monitoring and/or any other mitigation measures.	1. Inform the ER/SOR and confirm notification of the non-compliance in writing; 2. Attend the meeting to discuss with ET, IEC and ER/SOR the necessity of additional dolphin monitoring and any other potential mitigation measures. 3. Jointly submit with ET to IEC a proposal of additional dolphin monitoring and/or any other mitigation measures when necessary. 4. Implement the agreed additional dolphin monitoring and/or any other mitigation measures.

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Report No.: 0165/15/ED/0836

Appendix E

Waste Flow Table



Monthly Summary of Waste Flow Table for 2017 (year)

Name of Person completing the Record: Marko Chan

Month	Actual Quantities of Inert C&D Materials Generated Monthly					Actual Quantities of Non-inert C&D Wastes Generated Monthly				
	Total Quantity Generated (in '000m ³)	Broken Concrete (see Note 1) (in '000m ³)	Reused in the Contract (in '000m ³)	Reused in other Projects (in '000m ³)	Disposed as Public Fill (in '000m ³)	Metals (in '000 Kg)	Paper/ cardboard packaging (in '000 Kg)	Plastics (see Note 2) (in '000 Kg)	Chemical Waste (in '000 Kg)	Others, e.g. general refuse (in '000m ³)
Jan	0.000	0	0	0	0.000	0	0	0	0	0.580
Feb	0.000	0	0	0	0.000	0	0	0	0	0.585
Mar	0.000	0	0	0	0.000	0	0	0	0	0.999
Apr	0.043	0	0	0	0.043	0	0	0	0	1.073
May	12.682	0	0	12.637	0.045	0	0	0	0	1.321
Jun	27.129	0	0	26.007	1.122	0	0	0	0	2.023
Jul										
Aug										
Sept										
Oct										
Nov										
Dec										
Total	39.854	0.000	0.000	38.644	1.210	0.000	0.000	0.000	0.000	6.581

Notes:

- (1) Broken concrete for recycling into aggregates.
- (2) Plastics refer to plastic bottles/containers, plastic sheets/foam from packaging material.

Monthly Summary of Excavated Marine Sediment for 2017 (year)

Month	Total Quantity of Excavated Marine Sediment Generated in '000m ³	Reused in this contract in '000m ³	Reused in other Projects in '000m ³	Disposed of at CMP in '000m ³
Jan	0.656	0.000	0.000	0.656
Feb	0.264	0.000	0.000	0.264
Mar	0.000	0.000	0.000	0.000
Apr	1.288	0.000	0.000	1.288
May	1.440	0.000	0.000	1.440
Jun	0.000	0.000	0.000	0.000
Jul				
Aug				
Sep				
Oct				
Nov				
Dec				
Total	3.648	0.000	0.000	3.648



ATAL Technologies Ltd.

Contract: HY/2013/06 HKBCF- Automatic Vehicle Clearance Support System

Location: Artificial Island of HKIAP (C3 Area)

Ver: 1st
Date: Jan 2017

Monthly Summary Waste Flow Table for 2017

Month	Inert C&D Waste disposal / 廢性廢物 (in tonnes) (see Note 1)				Non-inert C&D Waste disposal 非廢性廢物 (in tonnes)				Waste to be recycled and returned / 可再循環利用或回收的廢物												Total Quantity Generated 總生產量			
	Reused in the Work Package (e.g. backfilling) 再用於工程 (如回填)		Reused in other Projects 再用於其他工程		Inert Waste (e.g. soil, broken concrete, rubble, fill material etc.) 廢性廢物 (如泥, 石, 磚, 填 料等)		Others (e.g. general refuse, broken formwork etc) 其他 (如垃圾, 廢板枋等)		Metals 金屬				Plastic 塑膠				Paper/cardboard packaging 廢紙/包裝紙類						Chemical Waste 化學廢物	
	Est. Qty. 估計數量	Act. Qty. 實際數量	Est. Qty. 估計數量	Act. Qty. 實際數量	Est. Qty. 估計數量	Act. Qty. 實際數量	Est. Qty. 估計數量	Act. Qty. 實際數量	Est. Qty. 估計數量	Act. Qty. 實際數量	Est. Qty. 估計數量	Act. Qty. 實際數量	Est. Qty. 估計數量	Act. Qty. 實際數量	Est. Qty. 估計數量	Act. Qty. 實際數量	Est. Qty. 估計數量	Act. Qty. 實際數量	Est. Qty. 估計數量	Act. Qty. 實際數量	Est. Qty. 估計數量	Act. Qty. 實際數量		
January	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		
February	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		
March	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.005	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.002		
April	0.000	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.005	0.005		
May	0.000	0.000	0.000	0.000	0.000	0.000	0.020	0.020	0.020	0.020	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.020	0.020		
June	0.000	0.000	0.000	0.000	0.000	0.000	0.020	0.020	0.020	0.020	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.020	0.020	0.020		
July																								
August																								
September																								
October																								
November																								
December																								
Total	0.000	0.000	0.000	0.000	0.000	0.000	0.047	0.047	0.050	0.050	0.000	0.000	0.004	0.004	0.000	0.000	0.047	0.047	0.000	0.000	0.047	0.047		

Notes: (1) The quantities of C&D Materials, in tonne, was calculated by multiply the estimated volume, in m3, with the density of the soil, which is 1.5 gcm⁻³.

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The logo for MaterialLab, featuring the word "MaterialLab" in a bold, sans-serif font. The "Material" part is in a lighter weight, and the "Lab" part is in a bolder weight. The text is white and set against a dark rectangular background.

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Appendix F

Environmental Licenses and Permits

Appendix F - Environmental Permit / Licences Summary for Contract No. HY/2013/03

(update: 08/07/2017)

Item	Permit/Licence Registration	Permit No.	Work Area	Application Date	Issue Date	Valid Date		Status	Remark
						From	To		
1	Environmental Permit Pursuant to Environmental Impact Assessment Ordinance	EP-353/2009/K	HKBCF	24-Mar-16	11-Apr-16	11-Apr-16	Nil	Valid	
2	Notification Pursuant to Section 3(1) of The Air Pollution Control (Construction Dust) Regulation	Ref No. 387703	Main Site Area	15-Apr-15	15-Apr-15	15-Apr-15	Nil	Valid	
3	Notification Pursuant to Section 3(1) of The Air Pollution Control (Construction Dust) Regulation	Ref No. 387735	Works Area WA3	15-Apr-15	15-Apr-15	15-Apr-15	Nil	Valid	
4	Billing A/C for Construction Waste Disposal Pursuant to Section 6 & 9 of the Waste Disposal (Charges for Disposal of Construction waste) Regulation	A/C No. 7022228	Main Site Area, WA3 & 4	15-Apr-15	06-May-15	06-May-15	Nil	Valid	
5	Registration as Waste Producer Pursuant to Waste Disposal (Chemical Waste) (General) Regulation	5213-951-C1186-28	Main Site Area	28-Apr-15	01-Jun-15	01-Jun-15	Nil	Valid	
6	Registration as Waste Producer Pursuant to Waste Disposal (Chemical Waste) (General) Regulation	5213-974-C3597-03	Works Area WA4	28-Apr-15	01-Jun-15	01-Jun-15	Nil	Valid	
7	Water Discharge License Pursuant to Water Pollution Control Ordinance (Cap 358)	WT00022180-2015	Works Area WA3	29-Apr-15	04-Aug-15	03-Aug-15	31-Aug-20	Valid	
8	Water Discharge License Pursuant to Water Pollution Control Ordinance (Cap 358)	WT00025384-2016	Main Site Area	09-Mar-16	10-Nov-16	10-Nov-16	30-Sep-20	Valid	
9	Construction Noise Permit Pursuant to Section 8(6) of the Noise Control Ordinance	GW-RS0205-17	Main Site Area	01-Mar-17	15-Mar-17	19-Mar-17	18-Jun-17	Valid until 18-Jun-17	
10	Construction Noise Permit Pursuant to Section 8(6) of the Noise Control Ordinance	PP-RS00008-17	Box Culvert B	06-Apr-17	20-Apr-17	21-Apr-17	19-Jul-17	Valid	
11	Construction Noise Permit Pursuant to Section 8(6) of the Noise Control Ordinance	GW-RS0382-17	Main Site Area	10-Apr-17	25-Apr-17	27-Apr-17	24-Jul-17	Valid	
12	Construction Noise Permit Pursuant to Section 8(6) of the Noise Control Ordinance	GW-RS0516-17	Main Site Area	31-May-17	14-Jun-17	19-Jun-17	18-Sep-17	Valid	
13	Permit issued Under the Dumping at Sea Ordinance	EP/MD/18-018	East of Sha Chau (CMP Vd)	19-May-17	01-Jun-17	02-Jun-17	01-Jul-17	Valid until 01-Jul-17	
14	Specified Process License for Tar and Bitumen Works Pursuant to Section 14 of the Air Pollution Control Ordinance	L-15-039(1)	Temporary Asphalt Mixing Facility	05-Dec-16	16-Mar-17	16-Mar-17	15-Mar-19	Valid	

Environmental Permit / Licences Summary for Contract No. HY/2013/06 within the HY/2013/03 site works area

(update: 08/07/2017)

Item	Permit/Licence Registration	Permit No.	Work Area	Application Date	Issue Date	Valid Date		Status	Remark
						From	To		
1	Environmental Permit Pursuant to Environmental Impact Assessment Ordinance	EP-353/2009/K	HKBCF	24-Mar-16	11-Apr-16	11-Apr-16	Nil	Valid	
2	Billing A/C for Construction Waste Disposal Pursuant to Section 6 & 9 of the Waste Disposal (Charges for Disposal of Construction waste) Regulation	A/C No. 7023015	Main Site Area	07-Aug-15	20-Aug-15	20-Aug-15	Nil	Valid	
3	Registration as Waste Producer Pursuant to Waste Disposal (Chemical Waste) (General) Regulation	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	#
4	Construction Noise Permit Pursuant to Section 8(6) of the Noise Control Ordinance	GW-RS0452-17	HKBCF	4-May-17	18-May-17	1-June-17	30-Nov-17	Valid	

The Contractor of Contract No. HY/2013/06 was advised to register as a chemical waste producer when chemical waste is expected to generate for the foreseeable future from the operations.

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Appendix G

Implementation Schedule for Environmental Mitigation Measures (EMIS)

Appendix G – Implementation Schedule of Environmental Mitigation Measures (EMIS)

EIA Ref.	EM&A Log Ref.	Recommended Mitigation Measures	Location of the measures	Implementation Status
Air Quality				
S5.5.6.1	A1	1) The contractor shall follow the procedures and requirements given in the Air Pollution Control (Construction Dust) Regulation	All construction sites	V
S5.5.6.2	A2	2) Proper watering of exposed spoil should be undertaken throughout the construction phase: - 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; - Any dusty materials remaining after a stockpile is removed should be wetted with water and cleared from the surface of roads; - A stockpile of dusty material should not be extend beyond the pedestrian barriers, fencing or traffic cones. - The load of dusty materials on a vehicle leaving a construction site should be covered entirely by impervious sheeting to ensure that the dusty materials do not leak from the vehicle; - 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;	All construction sites	V
S5.5.6.2	A2	- 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 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	All construction sites	V
S5.5.6.2	A2	- Cement or dry PFA delivered in bulk 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	All construction sites	N/A

EIA Ref.	EM&A Log Ref.	Recommended Mitigation Measures	Location of the measures	Implementation Status
		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	A3	3) The Contractor should undertake proper watering on all exposed spoil (with at least 8 times per day) throughout the construction phase.	All construction sites	V
S5.5.6.4	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 the relevant latest Practice Notes issued by EPD.	All construction sites	V
S5.5.6.4	A5	5) Implement regular dust monitoring under EM&A programme during the construction stage.	Selected Representative dust monitoring station	V (Conducted by Contract No. HY/2010/02 and HY/2011/03)
S5.5.7.1	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	Selected Representative dust monitoring station	N/A
S5.5.2.7	A7	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	All construction sites	V
Construction Noise (Air borne)				
S6.4.10	N1	1) 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; - plant known to emit noise strongly in one direction, where possible, be orientated so that the noise is directed away from nearby NSRs;	All construction sites	V

EIA Ref.	EM&A Log Ref.	Recommended Mitigation Measures	Location of the measures	Implementation Status
		• silencers or mufflers on construction equipment should be properly fitted and maintained during the construction works; • mobile plant should be sited as far away from NSRs as possible and practicable; • material stockpiles, mobile container site office and other structures should be effectively utilised, where practicable, to screen noise from on-site construction activities.		
S6.4.11	N2	2) 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.	All construction sites	V
S6.4.12	N3	3) Install movable noise barriers (typically density@14kg/m acoustic mat or full enclosure close to noisy plants including compressor, generators, saw.	For plant items listed in Appendix 6D of the EIA report at all construction sites	N/A
S6.4.13	N4	4) Select "Quiet plants" which comply with the BS 5228 Part 1 or TM standards.	For plant items listed in Appendix 6D of the EIA report at all construction site	V
S6.4.14	N5	5) Sequencing operation of construction plants where practicable	All construction sites where practicable	V
S5.1	N6	6) Implement a noise monitoring under EM&A programme.	Selected representative noise monitoring station	V (Conducted by Contract No. HY/2010/02)
Sediment				
S7.3	S1	1) The requirements as recommended in ETWB TC 34/2002 Management of Dredged/Excavated Sediment shall be included in the Particular Specification as appropriate.	All construction sites	V
Waste Management (Construction Waste)				
S8.3.8	WM1	<u>Construction and Demolition Material</u> The 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; • Implement a trip-ticket system for each works contract to ensure that the disposal of C&D materials are properly documented and verified; and • Implement an enhanced Waste Management Plan similar to E7WBTC (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	All construction sites	V
S8.3.9-	WM2	<u>C&D Waste</u>	All construction	V

EIA Ref.	EM&A Log Ref.	Recommended Mitigation Measures	Location of the measures	Implementation Status
S8.3.11		- 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 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.	sites	
S8.2.12-S8.3.15	WM3	<u>Chemical Waste</u> - Chemical waste that is produced, as defined by Schedule 1 of the Waste Disposal (Chemical Waste) (General) Regulation, should be handled in accordance with the Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes. - Containers used for the storage of chemical wastes should be suitable for the substance they are holding, resistant to corrosion, maintained in a good condition, and securely closed; 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. - The storage area for chemical wastes should be clearly labeled and used solely for the storage of chemical waste; enclosed on at least 3 sides; have an impermeable floor and bunding of sufficient capacity to accommodate 110% of the volume of the largest container or 20 % of the total volume of waste stored in that area, whichever is the greatest; have adequate ventilation; covered to prevent rainfall entering; and arranged so that incompatible materials are adequately separated. - Disposal of chemical waste should be via a licensed waste collector; be to a facility licensed to receive chemical waste, such as the Chemical Waste Treatment Centre which also offers chemical waste collection service and can supply the necessary storage containers; or be to a reuser of the waste, under approval from the EPD.	All construction sites	V
S8.3.16	WM4	<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.	All construction sites	V
S8.3.17	WM5	<u>General Refuse</u> - 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.	All construction sites	V

EIA Ref.	EM&A Log Ref.	Recommended Mitigation Measures	Location of the measures	Implementation Status
		- 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. - Training should be provided to workers about the concepts of site cleanliness and appropriate waste management procedure, including reduction, reuse and recycling of wastes.		
Water Quality (Construction Phase)				
S9.11.1.7	W2	<u>Land Works</u> 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 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 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;	Land-based works area	V
S9.11.1.7	W2	- 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	Land-based works area	V

EIA Ref.	EM&A Log Ref.	Recommended Mitigation Measures	Location of the measures	Implementation Status
		- 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 off site disposal; - the contractors shall prepare an oil / chemical cleanup plan and ensure that leakages or spillages are contained and cleaned up immediately; - 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 stormwater system.		
S9.14	W3	Implement a water quality monitoring programme	Selected representative WQM stations	V (Conducted by Contract No. HY/2010/02)
Ecology (Construction Phase)				
S10.7	E4	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 standing freshwater	Land-based works areas	V
S10.7	E5	Good site practices, including strictly following the permitted works hours, using quieter machines where practicable, and avoiding excessive lightings during night time	Land-based works areas	V
S10.7	E6	- Dolphin Exclusion Zone - Dolphin watching plan	Marine works	V
S10.7	E7	- Decouple compressors and other equipment on working vessels - Proposal on design and implementation of acoustic decoupling measures applied during dredging and reclamation works - Avoidance of percussive piling	Marine works	V
S10.7	E8	- Control vessel speed - Skipper training - Predefined and regular routes for working vessels; avoid Brother Islands.	Marine Traffic	V
S10.10	E9	Vessel based dolphin monitoring	Northeast and Northwest Lantau	V (Conducted by Contract No. HY/2010/02)
Fisheries				
S11.7	F4	- Maritime Oil Spill Response Plan (MOSRP); - Contingency plan.	HKBCF	V
Landscape & Visual (Detailed Design Phase)				
S14.3.3.1	LV1	General design measures include: - Roadside planting and planting along the edge of the HKBCF Island is proposed; - Transplanting of mature trees in good health and amenity value where appropriate and reinstatement of areas disturbed during construction by compensatory	HKBCF	V

EIA Ref.	EM&A Log Ref.	Recommended Mitigation Measures	Location of the measures	Implementation Status
		- hydro-seeding and planting; - Protection measures for the trees to be retained during construction activities; - Optimizing the sizes and spacing of the bridge columns; - Fine-tuning the location of the bridge columns to avoid visually-sensitive locations; - Providing planting area around peripheral of HKBCF for tree planting screening effect; - Providing salt-tolerant native trees along the planter strip at affected seawall and newly reclaimed coastline; - For HKBCF, providing aesthetic architectural design on the related buildings (e.g. similar materials for PCB building facade to Airport buildings, roof planting and subtle materials for other facilities buildings and so on), and the related infrastructure (e.g. parapet planting and transparent cover for elevated footbridges) to provide harmonious atmosphere of the HKBCF; and - Fine-tuning the sizes of the structural members to minimize the bulkiness of buildings and adjustment of building arrangement to minimise disturbance to surrounding vegetation in the HKBCF.		
Landscape & Visual (Construction Phase)				
S14.3.3.3	LV2	Mitigate both Landscape and Visual Impacts G1. Grass-hydroseed bare soil surface and stock pile areas. G2. Add planting strip and automatic irrigation system if appropriate at some portions of bridge footbridge to screen bridge and traffic. G3. Not applicable as this is for HKLR. G4. For HKBCF, providing aesthetic architectural design on the related buildings (e.g. similar materials for PCB building facade to Airport buildings, roof planting and subtle materials for other facilities buildings and so on), and the related infrastructure (e.g. parapet planting and transparent cover for elevated footbridges) to provide harmonious atmosphere of the HKBCF G5. Vegetation reinstatement and upgrading to disturbed areas G6. Maximizing new tree shrub and other vegetation planting to compensate tree felled and vegetation removed G7. Providing planting area around peripheral of HKBCF for tree planting screening effect; G8. Plant salt-tolerant native and shrubs etc along the planter strip at affected seawall. G9. Reserve of loose natural granite rocks for re-use, Provide new coastline to adopt "natural-look" by means of using armour rocks in the form of natural rock materials and planting strip area accommodating screen buffer to enhance "natural-look" of the new coastline.	HKBCF	N/A
S14.3.3.3	LV3	<u>Mitigate Visual Impacts</u> 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.	HKBCF	N/A
EM&A				
S15.2.2	EM1	An Independent Environmental Checker needs to be employed as per the EM&A Manual	All construction sites	V
S15.5 – S15.6	EM2	1) An Environmental Team needs to be employed as per the EM&A Manual. 2) Prepare a systematic Environmental Management Plan to ensure effective implementation of the mitigation	All construction sites	V

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The logo for MaterialLab, featuring the word "MaterialLab" in a bold, sans-serif font. The "Material" part is in a lighter weight, and the "Lab" part is in a bolder weight. The logo is set against a dark rectangular background.

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Appendix H

Statistics on Environmental Complaints, Notification of Summons and Successful Prosecutions

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Appendix H –

Statistics on Environmental Complaints, Notifications of Summons and Successful Prosecutions

For Contract No. HY/2013/03

Reporting Period	Cumulative Statistics		
	Complaints	Notifications of Summons	Successful Prosecutions
This reporting period	2	0	0
From commencement date of construction to end of reporting month	10	0	0

For Contract No. HY/2013/06 within Contract No. HY/2013/03 works area

Reporting Period	Cumulative Statistics		
	Complaints	Notifications of Summons	Successful Prosecutions
This reporting period	0	0	0
From commencement date of construction to end of reporting month	0	0	0

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Appendix I

Environmental Site Inspection Schedule

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Contract No. HY/2013/03
HZMB HKBCF – Vehicle Clearance Plazas and Ancillary Buildings and Facilities
Weekly Environmental Site Inspection Schedule

Environmental Site Inspection Schedule for June 2017

June-2017						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
				1 Environmental Site Inspection	2	3
4	5	6	7	8 Environmental Site Inspection	9	10
11	12	13	14	15 Environmental Site Inspection	16	17
18	19	20	21	22 Environmental Site Inspection	23	24
25	26	27	28	29	30 Environmental Site Inspection	

Tentative Environmental Site Inspection Schedule for July 2017

July-2017						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
						1
2	3	4	5	6 Environmental Site Inspection	7	8
9	10	11	12	13 Environmental Site Inspection	14	15
16	17	18	19	20	21 Environmental Site Inspection	22
23	24	25	26	27 Environmental Site Inspection	28	29
30	31					

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Contract No. HY/2013/06 (within Contract No. HY/2013/03 works area)
HZMB HKBCF – Automatic Vehicle Clearance Support System
Weekly Environmental Site Inspection Schedule

Environmental Site Inspection Schedule for June 2017

June-2017						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
				1 Environmental Site Inspection	2	3
4	5	6	7	8 Environmental Site Inspection	9	10
11	12	13	14	15 Environmental Site Inspection	16	17
18	19	20	21	22 Environmental Site Inspection	23	24
25	26	27	28	29	30 Environmental Site Inspection	

Tentative Environmental Site Inspection Schedule for July 2017

July-2017						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
						1
2	3	4	5	6 Environmental Site Inspection	7	8
9	10	11	12	13 Environmental Site Inspection	14	15
16	17	18	19	20	21 Environmental Site Inspection	22
23	24	25	26	27 Environmental Site Inspection	28	29
30	31					