





## Contract No. 13/WSD/16

Mainlaying in Tseung Kwan O

## Monthly EM&A Report No. 74 (Period from 1 September to 30 September 2024)

September 2024 (Rev. 2)

	Prepared by:	Reviewed and Certified by:
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Position	Environmental Team Member	Environmental Team Leader
Signature		
Date:	22 October 2024	22 October 2024



Water Supplies Department New Works Branch Construction Division 11 Tai Yip Lane Kowloon Bay Kowloon Hong Kong

Your reference:

Our reference:

HKWSD201/50/110064

Date:

22 October 2024

Attention: Mr Henry Chan

BY POST

Dear Sirs

Quotation Ref. No. WQ/17/A071 Independent Environmental Checker for Water Supplies Department – Proposed Desalination Plant in TKO Area 137 for Contract No. 13/WSD/16 Verification of Monthly EM&A Report No. 74

We refer to emails of 18 and 22 October 2024 attaching Monthly EM&A Report No. 74 for the captioned project prepared by the ET.

We have no further comment and hereby verify the captioned report in accordance with Clause 3.5 of the Environmental Permit no. EP-503/2015/B.

Should you have any queries regarding the above, please do not hesitate to contact the undersigned or our Mr Louis Kwan 2618 2831.

Yours faithfully

ANEWR CONSULTING LIMITED

James Choi

Independent Environmental Checker

CPSJ/KSYL/thy

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Contract No. 13/WSD/16 Mainlaying in Tseung Kwan O Monthly EM&A Report





## **Revision History**

Rev.	DESCRIPTION OF MODIFICATION	DATE
1	1st Submission	18/10/2024
2	2 <sup>nd</sup> Submission	22/10/2024

### Contract No. 13/WSD/16 Mainlaying in Tseung Kwan O Monthly EM&A Report





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#### **EXECUTIVE SUMMARY**

#### **Introduction**

- A1. Penta-Ocean Concentric Joint Venture (POCJV) is contracted to carry out the Mainlaying in Tseung Kwan O under Contract No. 13/WSD/16 (hereinafter known as "the Project").
- A2. In accordance with the Environmental Monitoring and Audit (EM&A) Manual for the Project, EM&A works should be carried out by Environmental Team (ET), Acuity Sustainability Consulting Limited (ASCL), during the construction phase of the Project.
- A3. This is the 74<sup>th</sup> Monthly EM&A Report, prepared by ASCL, for the Project summarizing the monitoring results and audit findings of the EM&A programme at and around Tseung Kwan O (TKO) during the reporting period from 1 September to 30 September 2024.
- A4. The EM&A programme for this contract has covered environmental monitoring on construction noise level at selected NSRs and Contractor's environmental performance auditing in the aspects of construction dust, construction noise, water quality, waste management, landscape and visual and ecology.

#### Summary of Main Works Undertaken & Key Mitigation Measures Implemented

A5. Key works carried out in this reporting period for the Project included the followings:

Location	Construction activities carried in the reporting month
Wan Po Road and TKO Area 137	<ul> <li>Road pavement reinstatement</li> <li>Remaining works installation of accessories for completed chambers</li> </ul>
TKO Promenade (Stage 1 Landfill) & Po Yap Road Roundabout	<ul> <li>Road pavement reinstatement</li> <li>Remaining works installation of accessories for completed chambers</li> </ul>
HK Velodrome	<ul> <li>Road pavement reinstatement</li> <li>Remaining works installation of accessories for completed chambers</li> </ul>
Po Lam Road South / Ling Hong Road	<ul> <li>Road pavement reinstatement</li> <li>Remaining works installation of accessories for completed chambers</li> </ul>
Tsui Lam Road / Abandoned Road	<ul> <li>Road pavement reinstatement</li> <li>Remaining works installation of accessories for completed chambers</li> </ul>

- A6. The major environmental impacts brought by the above construction works include:
  - Construction dust and noise generation from road reinstatement and chambers construction;
  - Waste generation from the construction activities; and
  - Impact on water quality from construction activities
- A7. The key environmental mitigation measures implemented for the Project in this reporting period associated with the above construction works include:
  - Reduction of construction dust generation from road reinstatement and chambers construction;





- Reduction of noise from equipment and machinery on-site;
- Sorting and storage of general refuse and construction waste; and
- Treatment of wastewater through water treatment facilities before discharge

#### **Summary of Exceedance & Investigation & Follow-up**

- A8. Noise monitoring was scheduled in the reporting month for NSR4 Creative Secondary School on 2, 7, 13, 19 and 25 September 2024 as construction works were conducted within 300m to the noise sensitive receiver. No Action or Limit Level exceedance was recorded during the reporting period.
- A9. Water quality monitoring was carried out during the disinfection procedure. According to Water Supply Department, the discharge of dechlorinated effluent arranged on 13 19 December 2023 and TRC monitoring at the sampling locations (outlet of the Service Reservoir) was carried out during the discharge. The TRC for the discharge are recorded less than 0.1mg/L and all results are below the action level.
- A10. According to the Contractors, all pits or trenches were backfilled and undergo reinstatement. The landfill gas monitoring was ceased from February 2024.

#### **Complaint Handling and Prosecution**

A11. No environmental complaint was received in the reporting month. No notifications of summons and prosecution was received in the reporting month.

#### **Reporting Change**

A12. There were no changes reported that may affect the on-going EM&A programme.

#### Summary of Upcoming Key Issues and Key Mitigation Measures

A13. Key works in the next reporting month for the Project will include the followings:

Location	Construction activities to be carried out in next reporting month		
Wan Po Road and TKO Area 137	No construction activities		
TKO Promenade (Stage 1 Landfill) & Po Yap Road Roundabout	No construction activities		
HK Velodrome	No construction activities		
Po Lam Road South / Ling Hong Road	No construction activities		
Tsui Lam Road / Abandoned Road	No construction activities		





#### 1. BASIC PROJECT INFORMATION

#### 1.1. Background

The proposed Desalination Plant at Tseung Kwan O (DPTKO) will produce potable water with an initial capacity of 135 million liters per day (MLD), expandable to an ultimate capacity of 270 MLD in the future to provide a secure and alternative freshwater resource complying with the World Health Organization (WHO) standards. The plant will adopt the Seawater Reverse Osmosis (SWRO) technology, which dominates the market due to its reliability and progressive reduction in cost as the technology advances.

Pursuant to the Environmental Impact Assessment Ordinance (EIAO), the Director of Environmental Protection granted the Variation of Environmental Permit (No. EP-503/2015/B) and Further Environmental Permit (No. FEP-503/2015/B) to Water Supplies Department (WSD) for the Project on 3 April 2024.

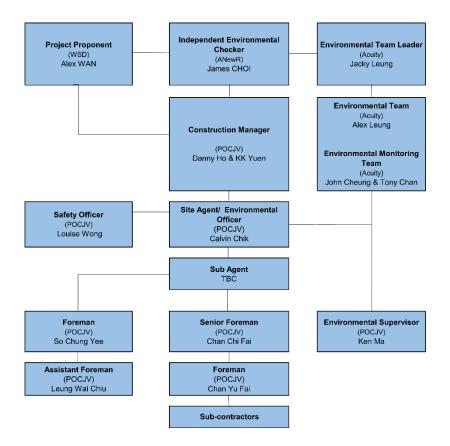
The scope of the Contract may be considered in brief, to consist of the laying of about 10 km long 1200 mm diameter freshwater mains and the associated works along the alignment of the Project as shown with the overall view in **Appendix B**.

#### 1.2. The Reporting Scope

This is the 74<sup>th</sup> Monthly EM&A Report for the Project which summarizes the key findings of the EM&A programme during the reporting period from 1 September to 30 September 2024.

#### **Project Organization**

The Project Organization structure for Construction Phase is presented in **Figure 1.1**.







#### **Figure 1.1 Project Organization Chart**

Contact details of the key personnel are presented in **Table 1.1** below:

Table 1.1 Contact details of the key personnel

Party	Position	Name	Telephone no.
Penta-Ocean - Concentric Joint Venture	Environmental Officer	Calvin Chik	9863 5630
Acuity Sustainability Consulting Limited	Environmental Team Leader	Jacky Leung	2698 6833
ANewR Consulting Limited	Independent Environmental Checker	James Choi	2618 2831

#### 1.3. Summary of Construction Works

Details of the major construction works undertaken in this reporting period are shown in **Table 1.2** and the construction works locations are shown in **Appendix B**. The construction programme is presented in **Appendix A**.

Table 1.2 Summary of the Construction Works Undertaken during the Reporting Month

Location	Construction activities carried out in the reporting month		
Wan Po Road and TKO Area 137	<ul> <li>Road pavement reinstatement</li> <li>Remaining works installation of accessories for completed chambers</li> </ul>		
TKO Promenade (Stage 1 Landfill) & Po Yap Road Roundabout	<ul> <li>Road pavement reinstatement</li> <li>Remaining works installation of accessories for completed chambers</li> </ul>		
HK Velodrome	<ul> <li>Road pavement reinstatement</li> <li>Remaining works installation of accessories for completed chambers</li> </ul>		
Po Lam Road South / Ling Hong Road	<ul> <li>Road pavement reinstatement</li> <li>Remaining works installation of accessories for completed chambers</li> </ul>		
Tsui Lam Road / Abandoned Road	<ul> <li>Road pavement reinstatement</li> <li>Remaining works installation of accessories for completed chambers</li> </ul>		

A summary of the valid permits, licences, and or notifications on environmental protection for this Project is presented in **Table 1.3**.

Table 1.3 Summary of the Status of Environmental Licence, Notification and Permit

Reference No.	Valid Period		Status	Remark	
Reference No.	From	То	Status	Kelliai K	
Environmental Permit					
EP-503/2015/B			Valid	N/A	
FEP-01/503/2015/B			Valid	N/A	





Reference No.	Valid Period		Status	Remark			
Reference No.	From	То	Status	Kemark			
Notification of Construc	Notification of Construction Works under the Air Pollution Control (Construction Dust) Regulation						
423775			Valid	N/A			
Chemical Waste Produc	Chemical Waste Producer Registration						
5213-839-P3287-01			Valid	N/A			
Billing Account for Disp	Billing Account for Disposal of Construction Waste						
A/C no.: 7029491			Valid	N/A			
Water Discharge Licence							
WT0002035-2023	16 Feb 2024	31 Dec 2028	Valid	N/A			

The status for all environmental aspects is presented **Table 1.4**.

Table 1.4 Summary of Status for Key Environmental Aspects under the EM&A Manual

Parameters	Status			
	Noise			
Baseline Monitoring	The baseline noise monitoring result has been reported in Baseline Monitoring Report and submitted to EPD under VEP Condition 3.4.			
Impact Monitoring	A justification of termination of the EM&A programme was submitted to the EPD by WSD on 7 October 2024 and currently awaiting EPD approval. The noise monitoring is expected to be ceased in October 2024.			
	Water			
Impact monitoring of disinfection procedure	Completed			
	Waste Management			
Mitigation Measures in Waste Management Plan	On-going			
	Landfill Gas			
Impact Monitoring	Ceased from February 2024			
	Environmental Audit			
Site Inspection	A justification of termination of the EM&A programme was submitted to the EPD by WSD on 7 October 2024 and currently awaiting EPD approval. The site inspection is expected to be ceased in October 2024.			

Other than the EM&A works by ET, regular environmental management meetings were conducted in order to enhance environmental awareness and closely monitor the environmental performance of the contractors.

The EM&A programme has been implemented in accordance with the recommendations presented in the approved EIA Report and the EM&A Manual. A summary of implementation status of the environmental mitigation measures for the construction phase of the Project during the reporting period is provided in **Appendix C**.





#### 2. Noise Monitoring

#### 2.1. Monitoring Requirements

To ensure no adverse noise impact, noise monitoring is recommended to be carried out within 300m radius from the nearby noise sensitive receivers (NSRs), during construction phase. The NSRs selected as monitoring station are (i) NSR4 – Creative Secondary School, (ii) NSR24 – PLK Laws Foundation College, and (iii) NSR31 – School of Continuing and Professional Studies – CUHK respectively.

Referring to EM&A Manual Section 4.1.2, the impact noise monitoring should be carried out at all the designated monitoring stations when there are project-related construction activities undertaken within a radius of 300m from the monitoring stations.

Impact monitoring for noise impact was conducted in the reporting month for NSR4 – Creative Secondary School on 2, 7, 13, 19 and 25 September 2024 as construction works were conducted within 300m to the noise sensitive receiver. Detailed monitoring results can be found in **Appendix G**.

#### 2.2. Noise Monitoring Parameters, Time, Frequency

Impact noise monitoring was conducted weekly in the reporting period between 0700-1900 on normal weekdays. Construction works will follow the requirements as stipulated in the valid CNPs if works have to be conducted in the restricted hours.

Construction noise level was measured in terms of the A-weighted equivalent continuous sound pressure level ( $L_{Aeq}$ ).  $L_{eq\;30min}$  was used as the monitoring parameter for the time period between 0700 and 1900 on normal weekdays. **Table 2.1** summarizes the monitoring parameters, frequency, and duration of the impact noise monitoring. The monitoring schedule is provided in **Appendix D**.

**Table 2.1 Noise Monitoring Parameters, Time, Frequency and Duration** 

Time	Frequency	Duration	Parameters
Daytime: 0700-1900	Once per week	$\begin{array}{c} \text{Continuously in} \\ L_{\text{eq 5min}}/L_{\text{eq 30min}} \text{(average of 6} \\ \text{consecutive } L_{\text{eq 5min}} \text{)} \end{array}$	L <sub>eq</sub> , L <sub>10</sub> & L <sub>90</sub>

#### 2.3. Noise Monitoring Locations

The monitoring locations should normally be made at a point 1m from the exterior of the NSRs building façade and be at a position 1.2m above the ground. A correction of +3dB(A) should be made to the free-field measurements.

According to the environmental findings detailed in the EIA report and Baseline Monitoring Report, the designated locations for the construction noise monitoring are listed in **Table 2.2** below.

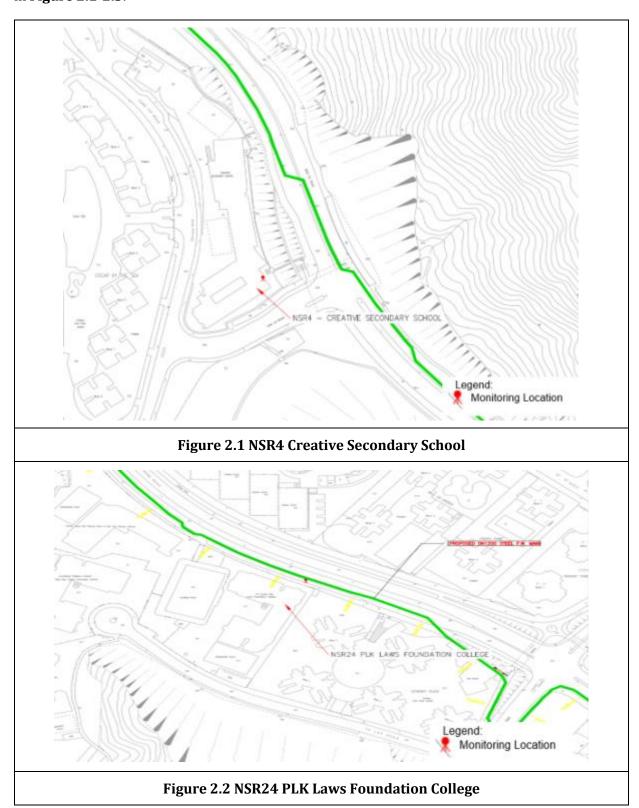
**Table 2.2 Noise Monitoring Location** 

NSR ID	Noise Sensitive Receivers	Monitoring Location	Position
NSR 4	Creative Secondary School	Roof Floor	1 m from facade
NSR 24	PLK Laws Foundation College	Pedestrian Road on Ground Floor	Free-field
NSR 31	School of Continuing and Professional Studies - CUHK	Roof Floor	1 m from facade



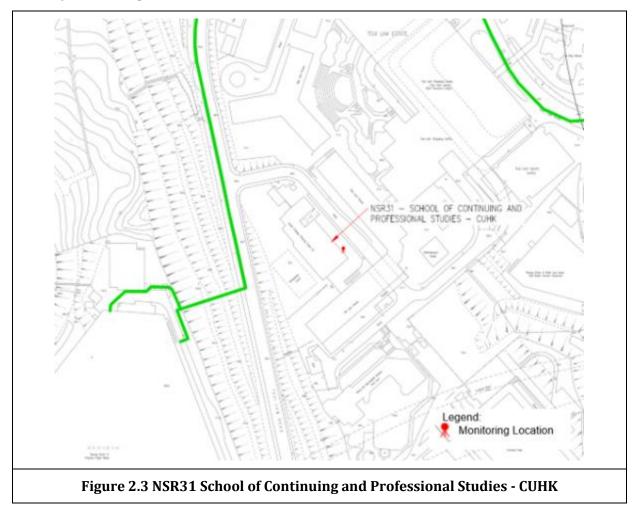


Three noise monitoring locations for impact monitoring at the nearby sensitive receivers are shown in **Figure 2.1-2.3**.









#### 2.4. Impact Monitoring Methodology

Integrated sound level meters were used for the noise monitoring. The meters were in compliance with the International Electrotechnical Commission Publications 651: 1979 (Type 1) and 804: 1985 (Type 1) specifications. Immediately prior to and following each noise measurement the accuracy of the sound level meters was checked using an acoustic calibrator generating a known sound pressure level at a known frequency. Measurements may be accepted as valid only if the calibration level before and after the noise measurements agree to within  $1.0 \, \mathrm{dB}(A)$ .

Calibration certificates of the instruments used are presented in **Appendix E**. Noise measurements were not made in the presence of fog, rain, wind with a steady speed exceeding 5 m/s or wind with gusts exceeding 10 m/s. The wind speed was checked with a portable wind speed meter capable of measuring the wind speed in m/s.

**Table 2.3 Impact Noise Monitoring Equipment** 

Equipment	Brand and Model	Serial Number	Date of Calibration	Expiry Date
Sound Level Meter	SVANTEK 971	C132261	27 Oct 2023	26 Oct 2024
Sound Level Meter Calibrator	RION NC-75	35124527	27 Oct 2023	26 Oct 2024
Pocket Wind Meter Anemometer	Kestrel 1000 Wind Meter	Nil	Nil	Nil





#### 2.5. Action and Limit Levels

The Action/Limit Levels are in line with the criteria of Practice Note for Professional Persons (ProPECC PN 2/93) "Noise from Construction Activities – Non-statutory Controls" and Technical Memorandum on Environmental Impact Assessment Process issued by HKSAR Environmental Protection Department ["EPD"] under the Environmental Impact Assessment Ordinance, Cap 499, S.16 are presented in **Table 2.4**.

Table 2.4 Action and Limit Levels for Noise

Time Period	Action Level	Limit Level (dB(A))	
0700-1900 on normal weekdays	When one documented complaint is received from any one of the noise sensitive receivers		
Notes: (a) Limits specified in the GW-TM and IND-TM for construction and operation noise, respectively.			

If exceedances are found during noise monitoring, the actions in accordance with the Event and Action Plan will be carried out according to **Appendix F**.

#### 2.6. Monitoring Results and Observations

Referring to EM&A Manual Section 4.1.2, impact monitoring for noise impact was scheduled weekly in the reporting month for NSR4 – Creative Secondary School on 2, 7, 13, 19 and 25 September 2024. Detailed monitoring results are presented in **Appendix G**.

No construction works were conducted within 300m radius of NSR24 and NSR31. Thus, no construction noise monitoring works was carried at these two locations in the reporting month.

No action or limit level exceedance was recorded for construction noise monitoring during the reporting period.





#### 3. WASTE MANAGEMENT

The waste generated from this Project includes inert construction and demolition (C&D) materials, and non-inert C&D materials. Non-inert C&D materials are made up of general refuse, vegetative wastes, and recyclable wastes such as plastics and paper/cardboard packaging waste. Steel materials generated from the project are also grouped into non-inert C&D materials as these materials were not disposed of with other inert C&D materials. With reference to relevant handling records and trip tickets of this Project, the quantities of different types of waste generated in the reporting month are summarised in **Table 3.1**. Details of cumulative waste management data are presented as a waste flow table in **Appendix H**.

Table 3.1 Quantities of waste generated from the Project

	Quantity					
				Non-inert C&D Materials		
Reporting period	Materials	Chemical Waste	Others, e.g., General Refuse disposed at Landfill (in '000m³)	Recycled materials		
(m 000	(in '000m <sup>3</sup> )	(in '000kg)		Paper/cardboard (in '000kg)	Plastics (in '000kg)	Metals (in '000kg)
September 2024	0.000	0.000	0.042	0.025	0.000	0.000





#### 4. LANDFILL GAS MONITORING

#### 4.1. Monitoring Requirement

In accordance with Section 11 of the EM&A Manual, monitoring of landfill gas is required for construction works within the 250m Consultation Zone. Part of the desalination plant and the indicative area of natural slope mitigation works fall within the SENT Landfill Extension Consultation Zone; and part of the 1,200 mm diameter fresh water mains along Wan Po Road falls within the SENT Landfill and SENT Landfill Extension Consultation Zones, TKO Stage II/III Restored Landfill and TKO Stage I Restored Landfill Consultation Zones.

#### 4.2. Monitoring Location

Monitoring of oxygen, methane, carbon dioxide and barometric pressure was performed for excavations at 1m depth or more within the Consultation Zone.

During construction of works within the consultation zones, excavations of 1m depth or more was monitored:

- At the ground surface before excavation commences;
- Immediately before any worker enters the excavation;
- At the beginning of each working day for the entire period when the excavation remains open; and
- Periodically through the working day whilst workers are in the excavation.

For excavations between 300mm and 1m deep, measurements should be carried out:

- Directly after the excavation has been completed; and
- Periodically whilst the excavation remains open.

The area required to be monitored for landfill gas in the reporting period are shown in **Figure 4.1** to **Figure 4.9**.





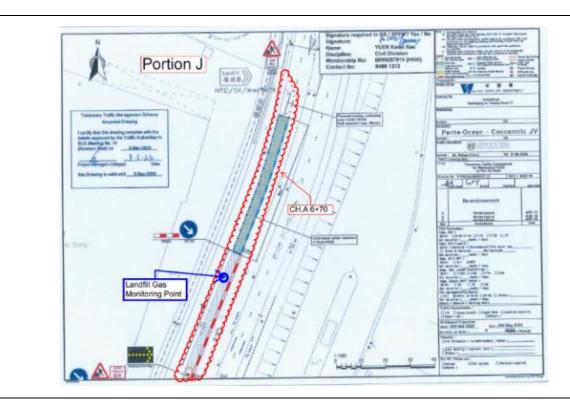


Figure 4.1 Monitoring Location - CH.A 6+70

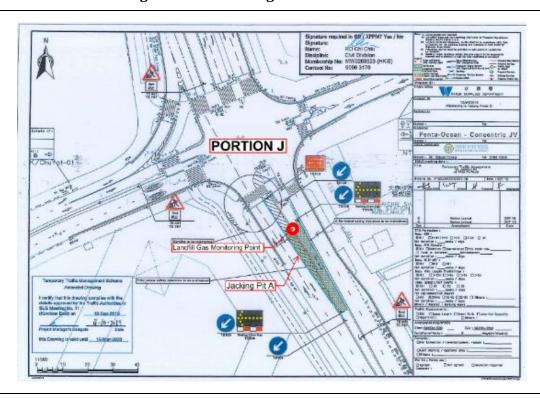


Figure 4.2 Monitoring Location - CH.A 13+50 ~ 14+00 (Pit A)





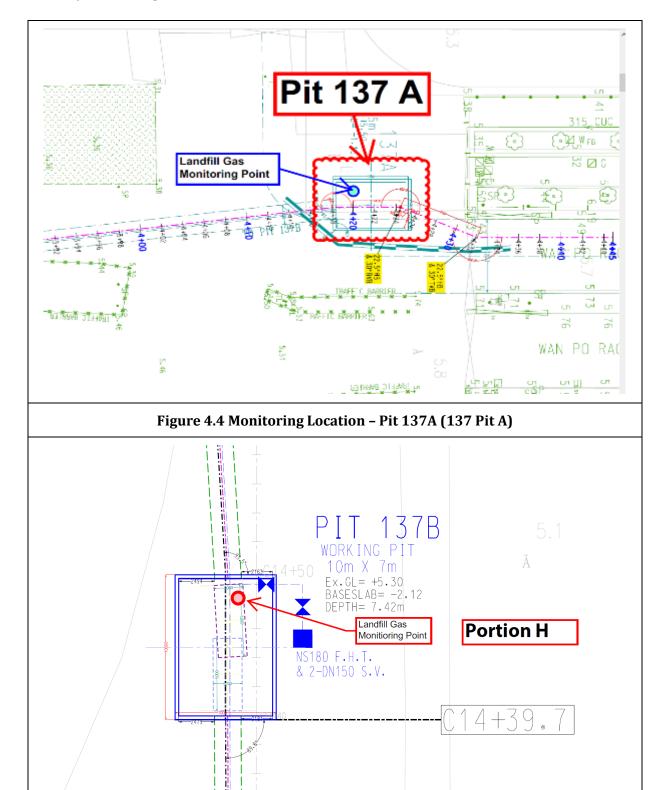


Figure 4.5 Monitoring Location - Pit 137B (137 Pit B)





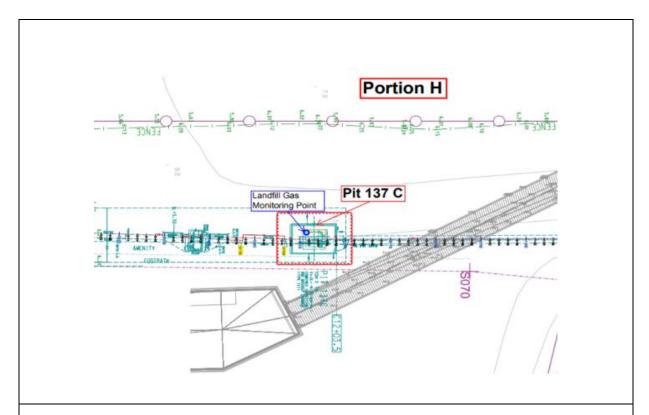


Figure 4.6 Monitoring Location - Pit 137C (137 Pit C)

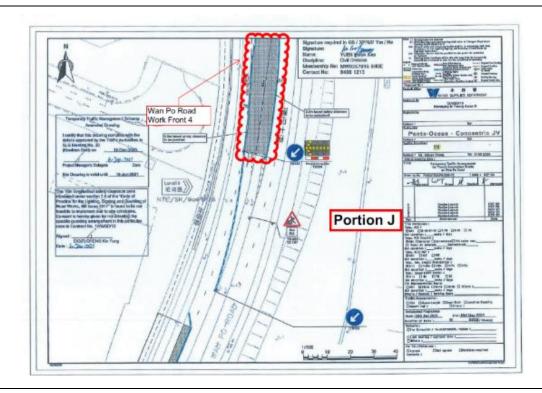


Figure 4.7 Monitoring Location - Wan Po Road 4





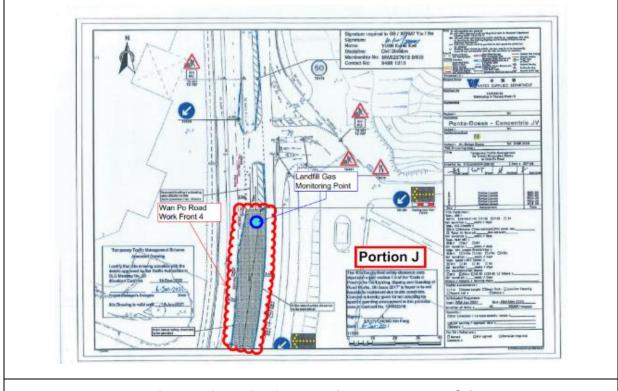


Figure 4.8 Monitoring Location - Wan Po Road 5





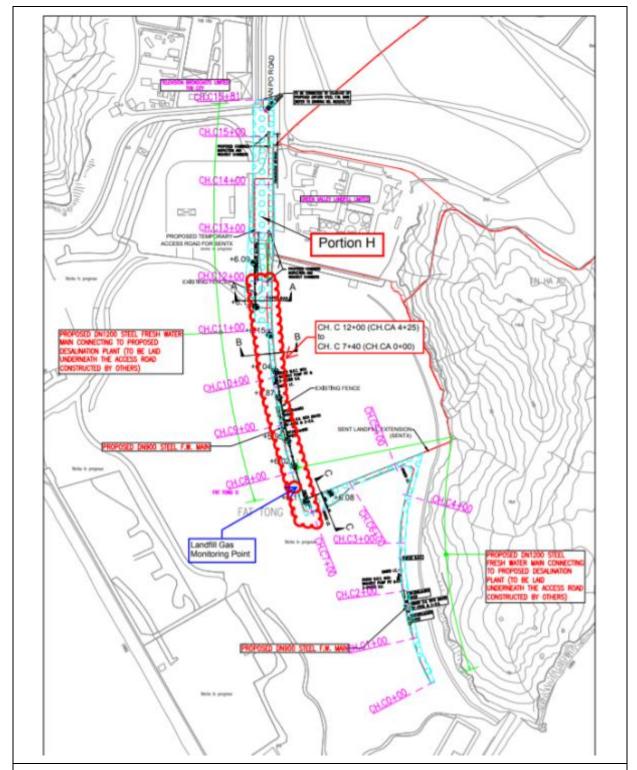


Figure 4.9 Monitoring Location -CH.CA 0+00 to CH.CA 04+25 (CH.C 7+40 ~ 12+00)





#### 4.3. Monitoring Parameters

Landfill Gas monitoring was carried out to identify any migration between the landfill and the Project and to ensure the safety of the construction, operation and maintenance personnel working on-site, visitors and any other person within the Project area.

The following parameters were monitored:

- Methane.
- Oxygen.
- Carbon Dioxide.
- Barometric Pressure.

#### 4.4. Action and Limit Level

Action and Limit Level are provided in **Table 4.1**.

Table 4.1 Action and Limit Level for Landfill Gas Monitoring Equipment

Parameters	Action Level	Limit Level
Oxygen (O <sub>2</sub> )	<19% 02	<19% 02
Methane (CH <sub>4</sub> )	>10% LEL	>20% LEL
Carbon Dioxide (CO <sub>2</sub> )	>0.5% CO <sub>2</sub>	>1.5% CO <sub>2</sub>

#### 4.5. Monitoring Equipment

Landfill Gas monitoring was carried out using intrinsically safe, portable multi-gas monitoring instruments. The gas monitoring equipment is:

- Complying with the Landfill Gas Hazard Assessment Guidance Note as intrinsically safe;
- Capable of continuous barometric pressure and gas pressure measurements;
- Normally operated in diffusion mode unless required for spot sampling, when it should be capable of operating by means of an aspirator or pump;
- Having low battery, fault and over range indication incorporated;
- Capable of storing monitoring data, and shall be capable of being down-loaded directly;
- Measure in the following ranges:

methane	0-100% Lower Explosion Limit (LEL) and 0-100% v/v;
oxygen	0-25% v/v;
carbon dioxide	0-5% v/v; and
barometric pressure	mBar (absolute)

alarm (both audibly and visually) in the event that the concentrations of the following are exceeded:

methane	>10% LEL;
oxygen	<19% by volume; and
carbon dioxide	>0.5% by volume
barometric pressure	mBar (absolute)

Monitoring Equipment used in the reporting period are summarised in **Table 5.2**. The Landfill Gas monitoring equipment calibration certificate is presented in **Appendix I**.





Table 5.2 Landfill Gas Monitoring Equipment

Equipment	Brand and Model	Calibration Expiry Date
Portable Gas Detector		
CO2 Analyzer		

#### 4.6. Monitoring Results

According to the Contractors, all pits or trenches were backfilled and undergo reinstatement. No landfill gas monitoring was carried out by the Registered Safety Officer of the Contractor at the excavation locations. The landfill gas monitoring was ceased from February 2024.

Table 4.3 Action and Limit Levels and Event and Action Plan for LFG Hazard

Parameters	Level	Action
Oxygen $(O_2)$	Action Level $< 19\% O_2$	Ventilate trench/void to restore $O_2$ to > 19%
Oxygen (O2)		Stop works
	Limit Level $< 19\% O_2$	Evacuate personnel/prohibit entry
		Increase ventilation to restore $O_2$ to > 19%
		Post "No Smoking" signs
	Action Level >10% LEL	Prohibit hot works
Methane (CH <sub>4</sub> )		Increase ventilation to restore CH <sub>4</sub> to <10% LEL
		Stop works
	Limit Level >20% LEL	Evacuate personnel/prohibit entry
		Increase ventilation to restore CH <sub>4</sub> to<10% LEL
Carbon Dioxide	Action Level >0.5% CO <sub>2</sub>	Ventilate to restore $CO_2$ to $< 0.5\%$
$(CO_2)$		Stop works
(002)	Limit Level >1.5% CO <sub>2</sub>	Evacuate personnel / prohibit entry
		Increase ventilation to restore $CO_2$ to $<0.5\%$





## 5. SUMMARY OF EXCEEDANCE, COMPLAINTS, NOTIFICATION OF SUMMONS AND PROSECUTIONS

The Environmental Complaint Handling Procedure is shown in below **Figure 5.1**:

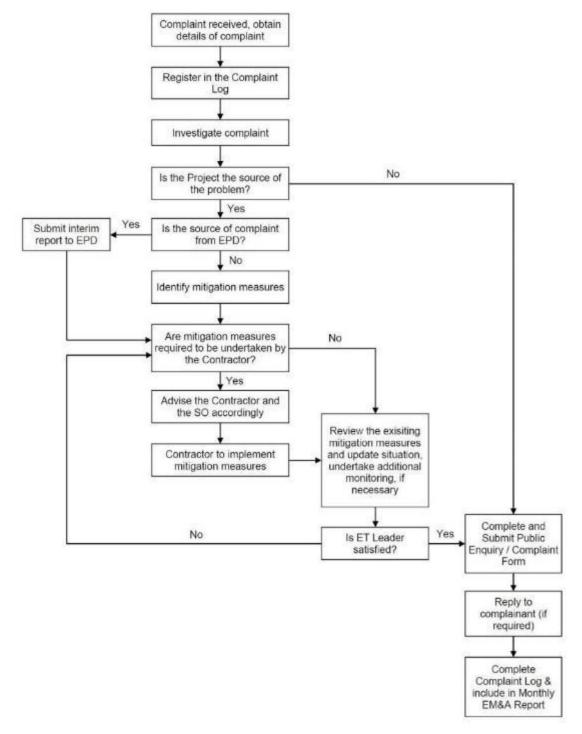


Figure 5.1 Environmental Complaint Handling Procedure





Impact monitoring for noise impact was scheduled in the reporting month for NSR4 – Creative Secondary School on 2, 7, 13, 19 and 25 September 2024 was construction works were conducted within 300m to the noise sensitive receiver. Detailed monitoring results can be found in **Appendix G**. No action or limit levels exceedance was recorded in the reporting period.

According to the Contractors, all pits or trenches were backfilled and undergo reinstatement. No landfill gas monitoring was carried out by the Registered Safety Officer of the Contractor at the excavation locations. The landfill gas monitoring was ceased from February 2024.

No environmental complaint was received in the reporting period. No notification of summons and prosecution was received in the reporting period.

Statistics on complaints and regulatory compliance are summarized in **Appendix K**.





#### 6. EM&A SITE INSPECTION

Site inspections were carried out on a weekly basis to monitor the implementation of proper environmental pollution control and mitigation measures under the Contract. In the reporting period, site inspections were carried out on 5, 12, 19 and 26 September 2024 at the site portions list in **Table 6.1** below. One joint site inspection with IEC was carried out on 26 September 2024.

**Table 6.1 Site Inspection Record** 

Date	Inspected Site Portion	Time
05 September 2024	Portion J	09:30 - 10:30
12 September 2024	Portion J	09:30 - 10:30
19 September 2024	Portion J	09:30 - 10:30
26 September 2024	Portion J	09:30 - 10:30

Minor deficiencies were observed during weekly site inspections. Key observations during the site inspections are summarized in **Table 6.2**.

**Table 6.2 Site Observations** 

Date	Environmental Observations	Follow-up Status
05 September	No major environmental deficiency was	N.A.
2024	observed during site inspection.	N.A.
12 September	No major environmental deficiency was	N.A.
2024	observed during site inspection.	N.A.
19 September	No major environmental deficiency was	N.A.
2024	observed during site inspection.	N.A.
26 September	The chemical containers should be placed	The chemical containers have
2024	in the drip tray.	been removed.

According to the EIA Study Report, Environmental Permit, contract documents and EM&A Manual, the mitigation measures detailed in the documents should be implemented as much as practical during the reporting period. An updated Implementation Status of Environmental Mitigation Measures (EMIS) is provided in **Appendix C**.

Site inspection proforma of the reporting period is provided in **Appendix L**.





#### 7. FUTURE KEY ISSUES

Key works that will be anticipated in the next reporting period for the Project are shown in **Table 7.1**.

Table 7.1. Key works for the next reporting month

Location	Construction activities to be carried out in next reporting month
Wan Po Road and TKO Area 137	No construction activities
TKO Promenade (Stage 1 Landfill) & Po Yap Road Roundabout	No construction activities
HK Velodrome	No construction activities
Po Lam Road South / Ling Hong Road	No construction activities
Tsui Lam Road / Abandoned Road	No construction activities

According to WSD and contractor information, all remaining work under the contract has been fully completed and that no power mechanical equipment was adopted on the site. No significant adverse environmental impacts are anticipated.





#### 8. CONCLUSION AND RECOMMENDATIONS

This is the 74<sup>th</sup> monthly Environmental Monitoring and Audit (EM&A) Report presenting the EM&A works undertaken during the period from 1 September to 30 September 2024 in accordance with the EM&A Manual and the requirement under EP-503/2015/B and FEP-01/503/2015/B.

Impact monitoring for noise impact was scheduled in the reporting month for NSR4 – Creative Secondary School on 2, 7, 13, 19 and 25 September 2024 construction works were conducted within 300m to the noise sensitive received. No action and limit level exceedance for construction noise monitoring was recorded in the reporting period.

Water quality monitoring was carried out during the disinfection procedure. According to Water Supply Department, the discharge of dechlorinated effluent arranged on 13 – 19 December 2023 and TRC monitoring at the sampling locations (outlet of the Service Reservoir) was carried out during the discharge. The TRC for the discharge are recorded less than 0.1mg/L and all results are below the action level.

According to the Contractors, all pits or trenches were backfilled and undergo reinstatement. No landfill gas monitoring was carried out by the Registered Safety Officer of the Contractor at the excavation locations. The landfill gas monitoring was ceased from February 2024.

Weekly environmental site inspections were conducted during the reporting month. Observations and Recommendation were made during site inspection, Contractor was reminded that sedimentation facilities shall be provided on site to remove silt particles from runoff before discharge and to meet the requirements of the TM standard under the WPCO.

According to the environmental site inspections performed in the reporting month, the contractor is reminded to pay attention on maintaining site tidiness, water treatment facilities, and proper materials storage.

No environmental complaint was received in the reporting month. No notification of summons and prosecution was received in the reporting month.

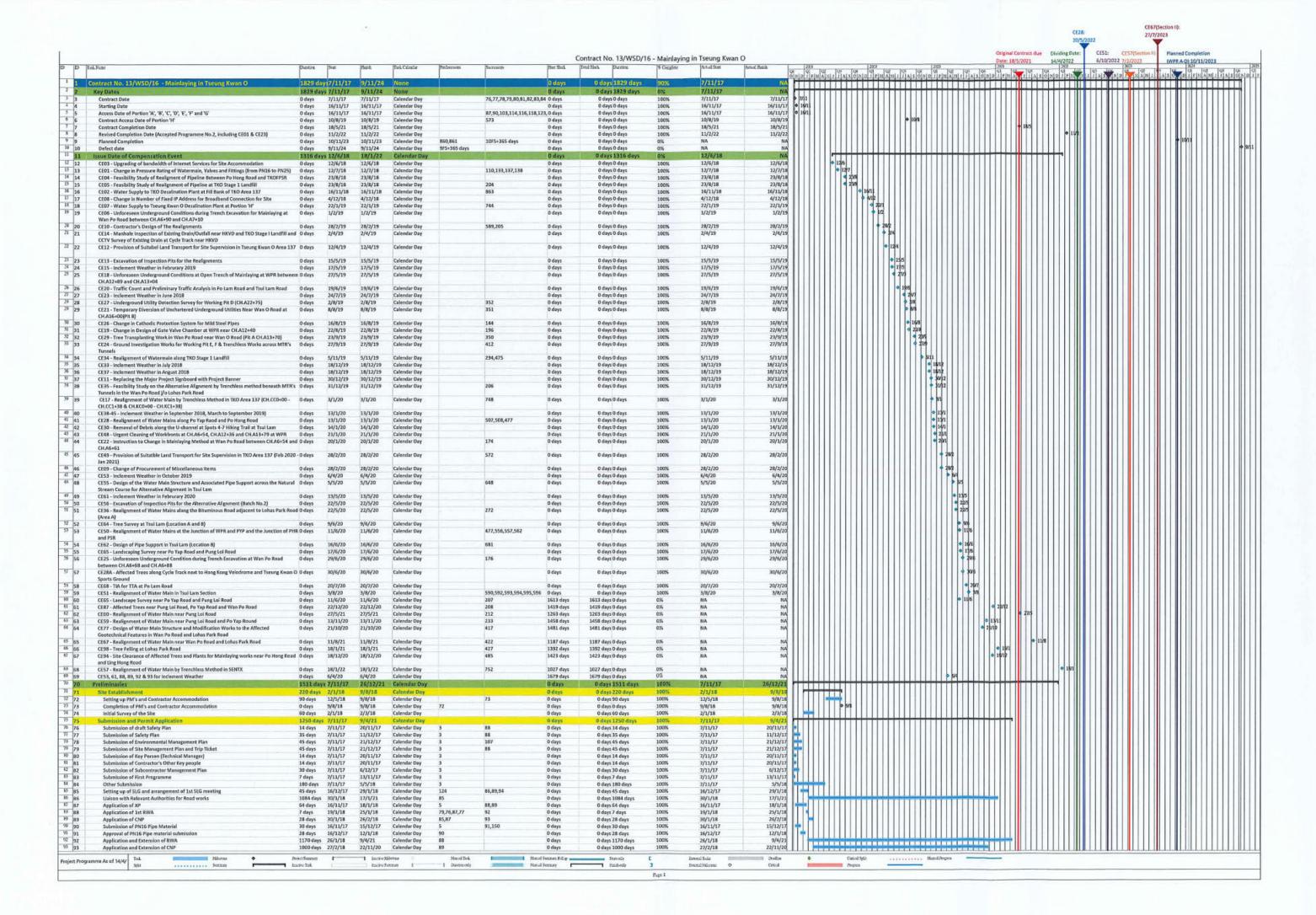
The ET will keep track on the construction works to confirm compliance of environmental requirements and the proper implementation of all necessary mitigation measures.

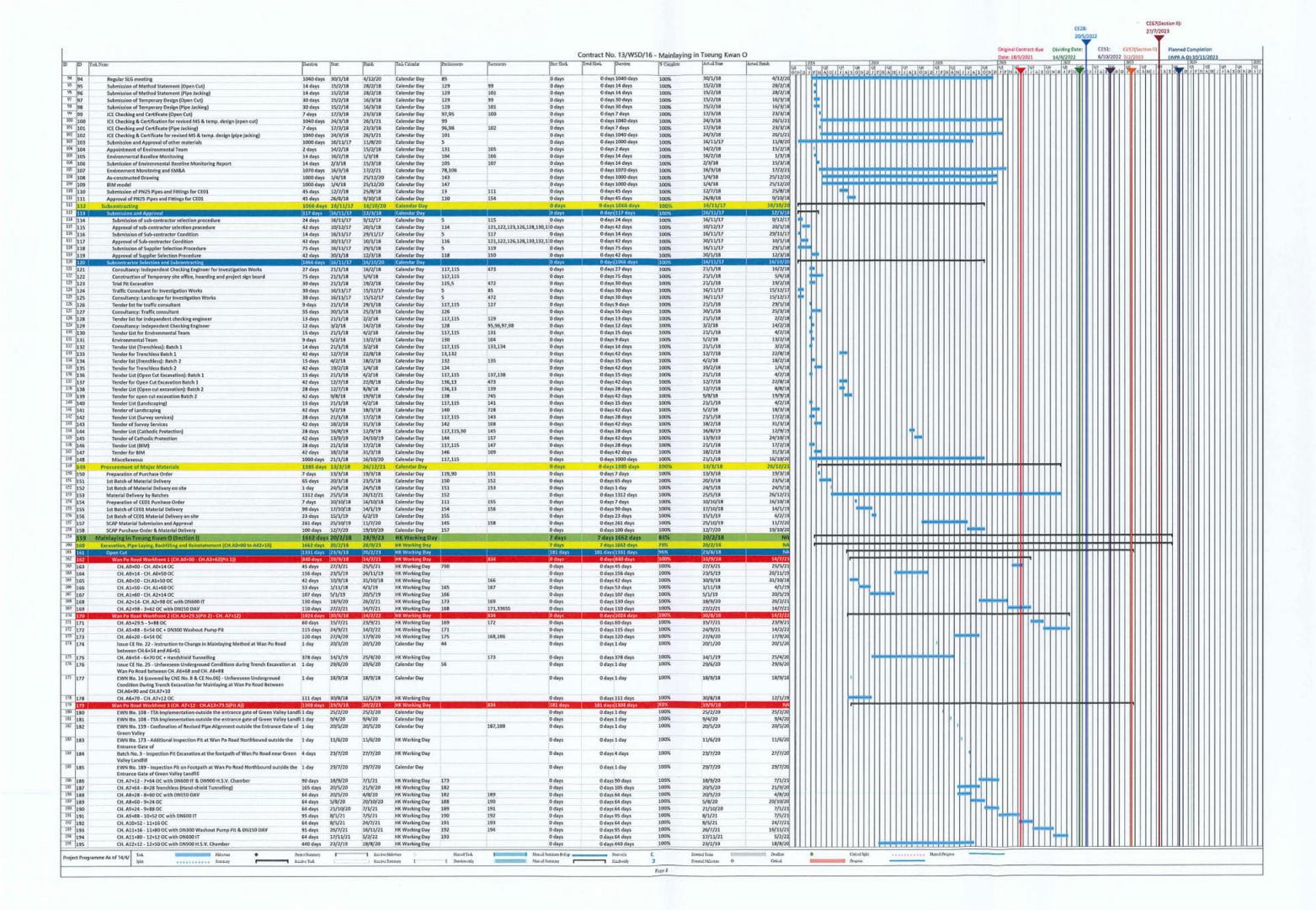


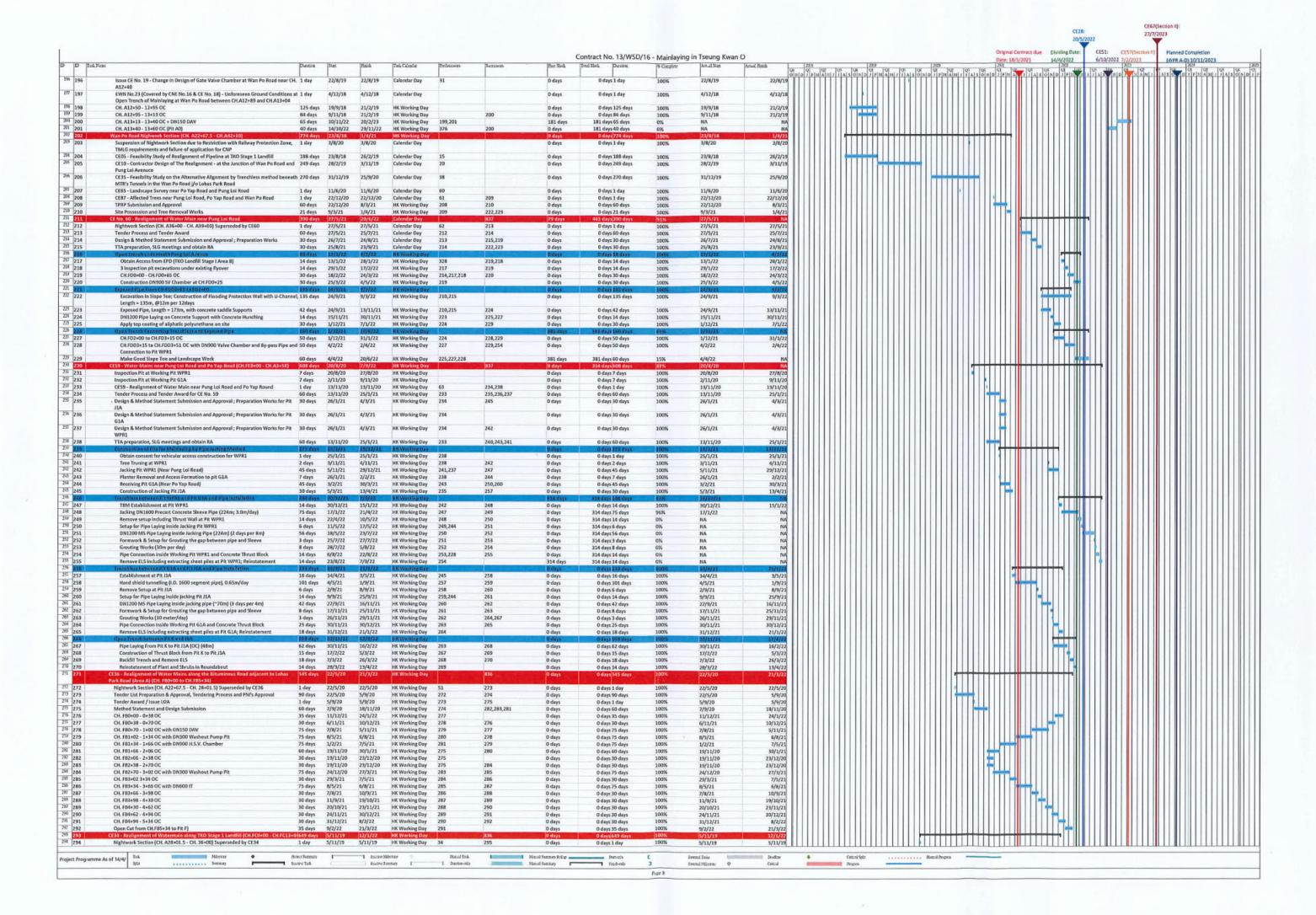


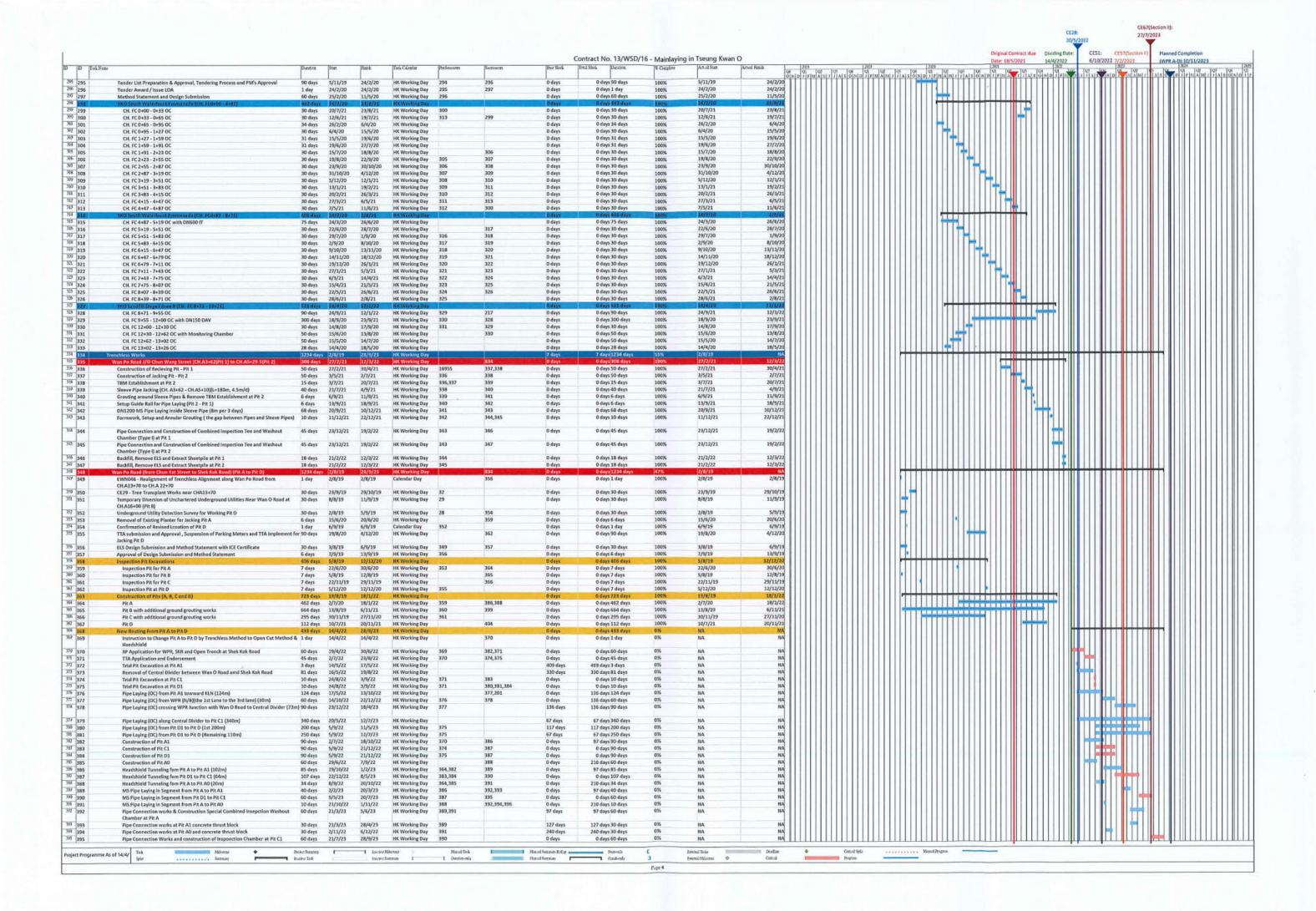
# Appendix A

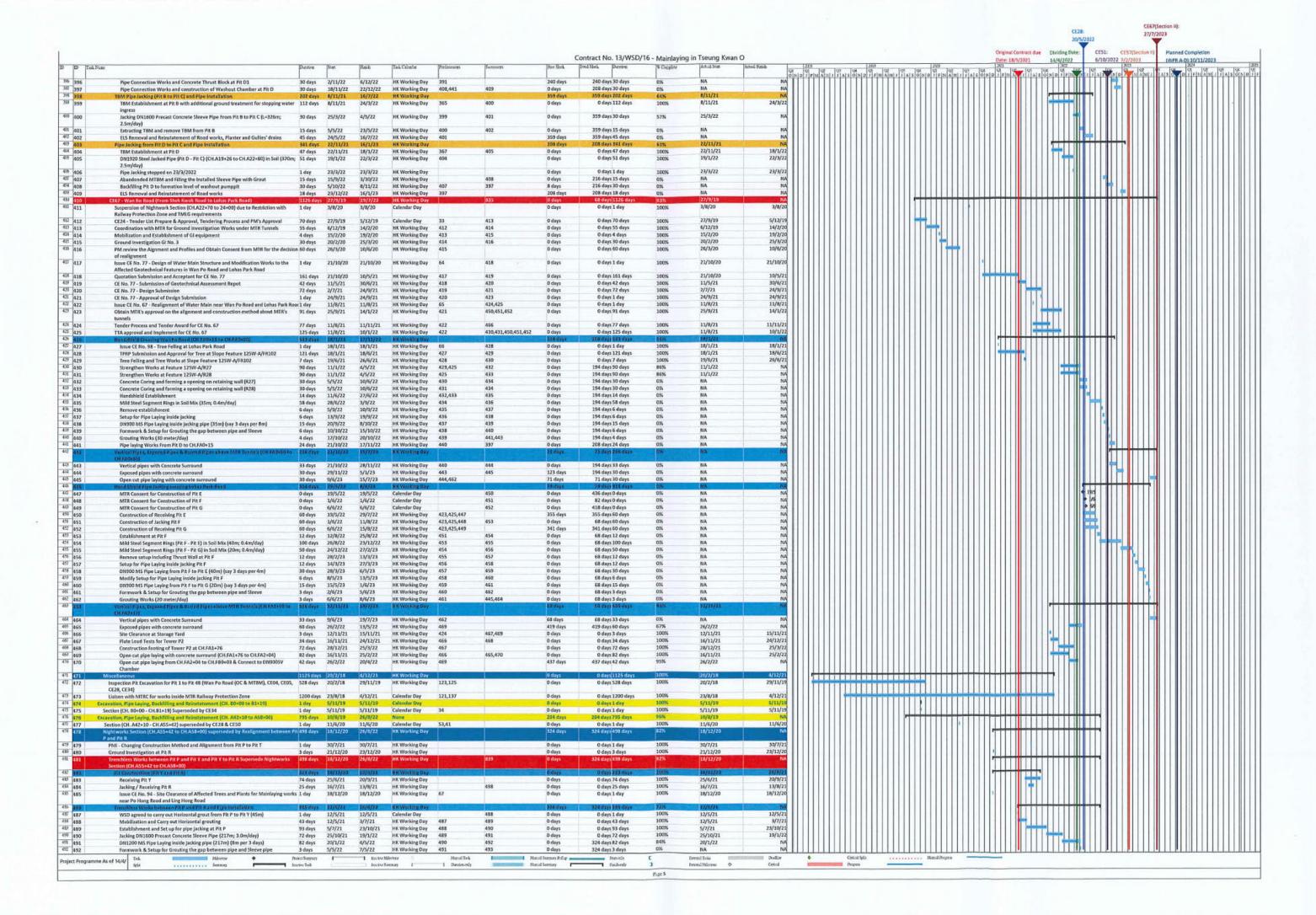
**Construction Programme** 

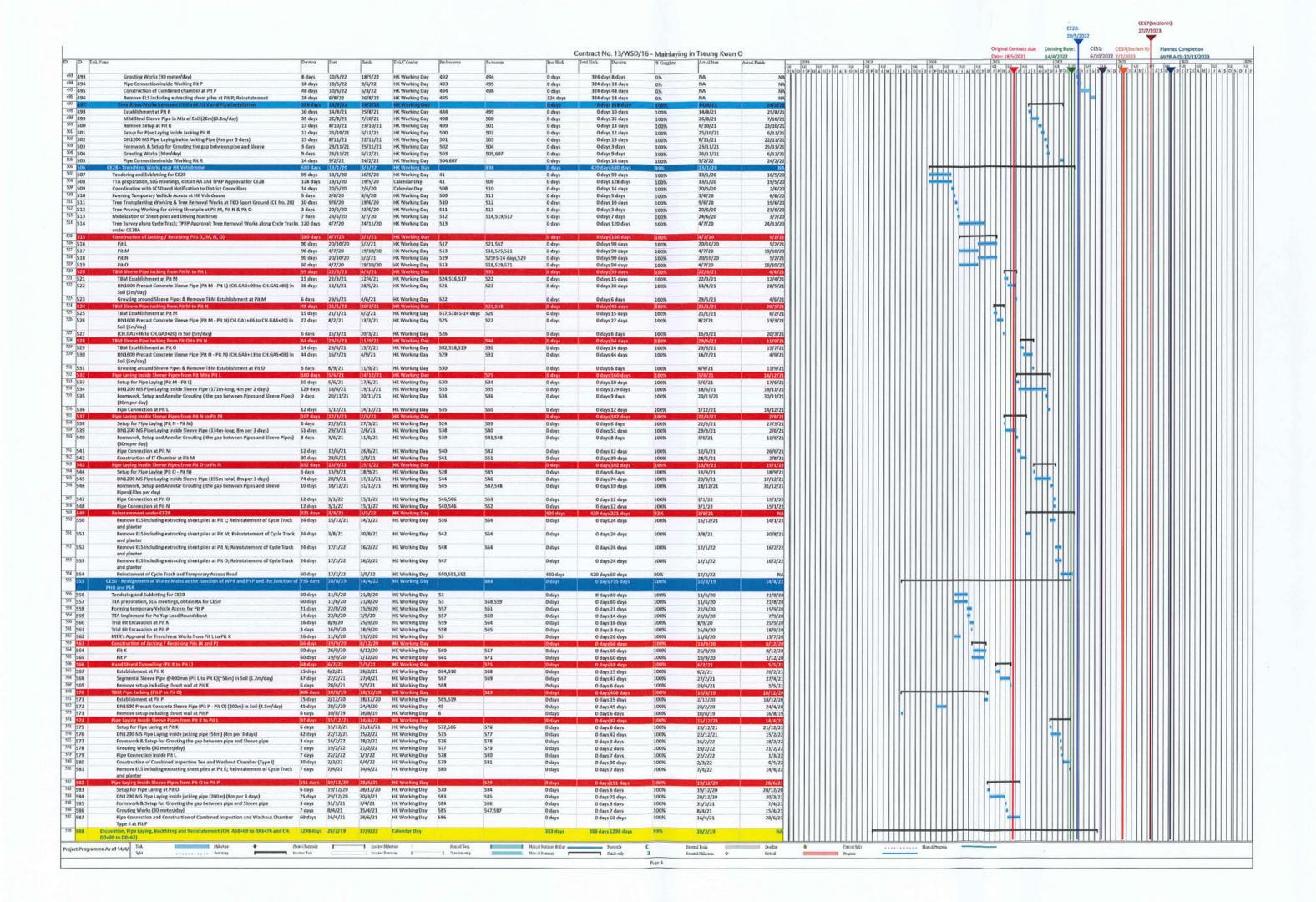


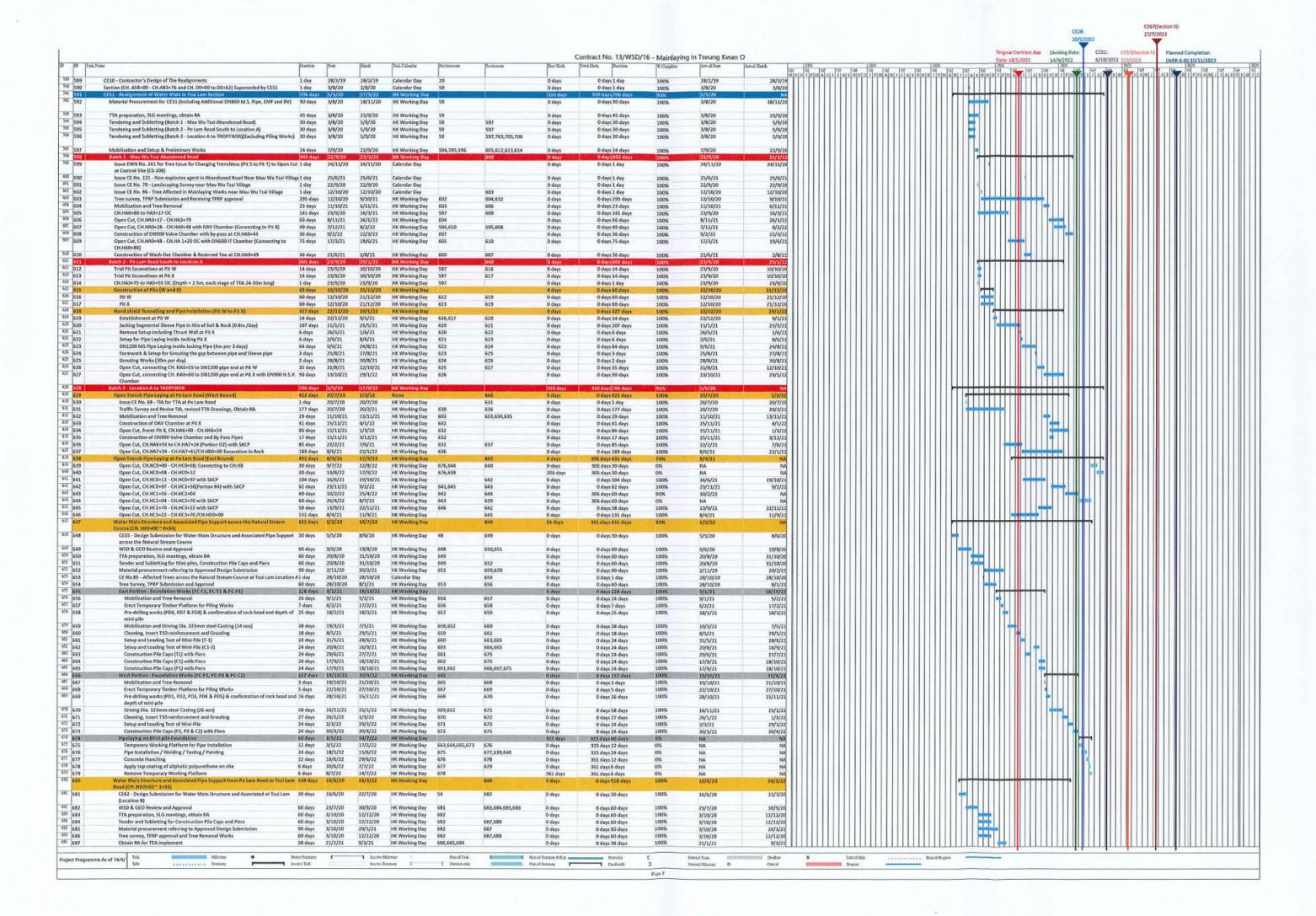


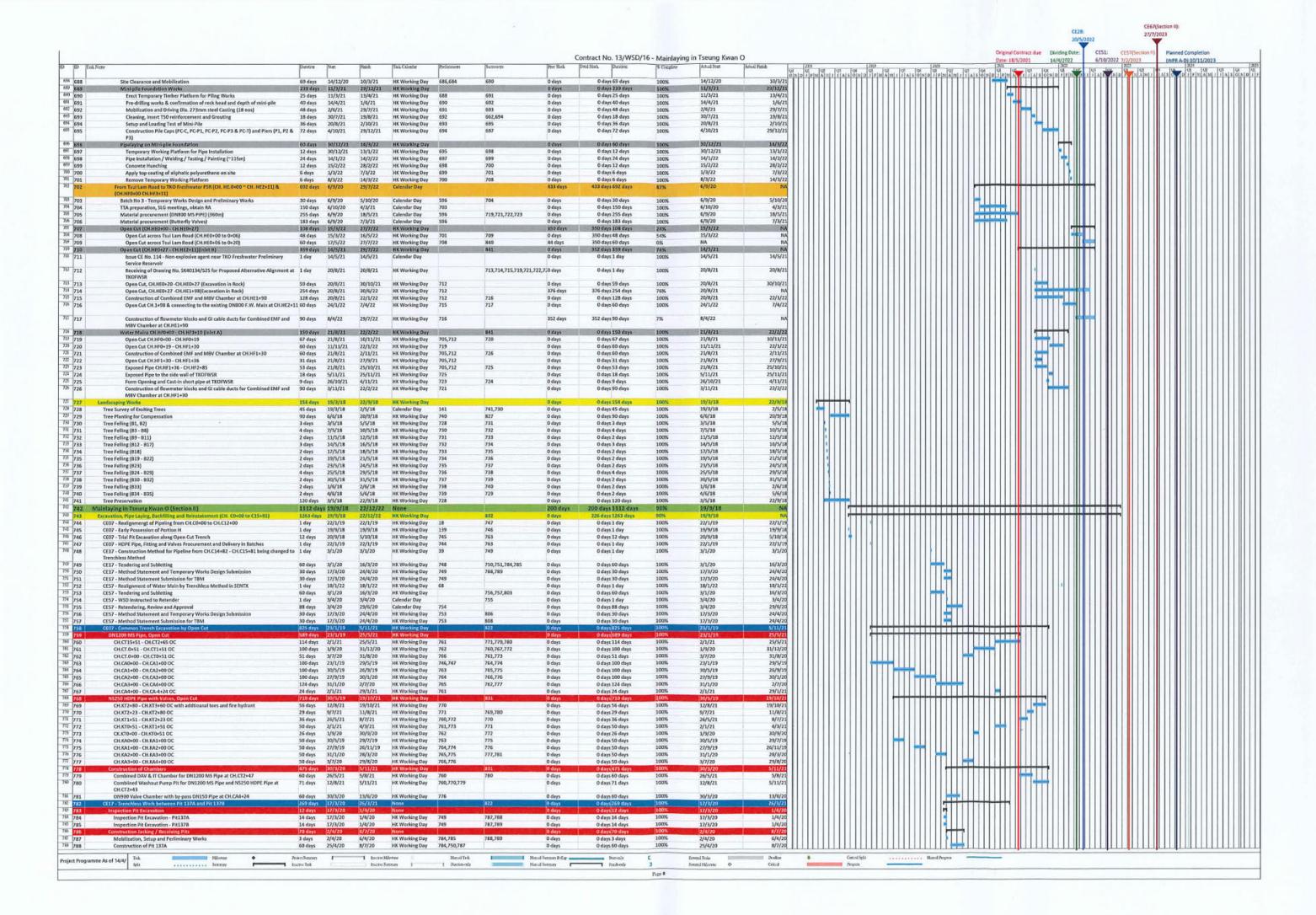


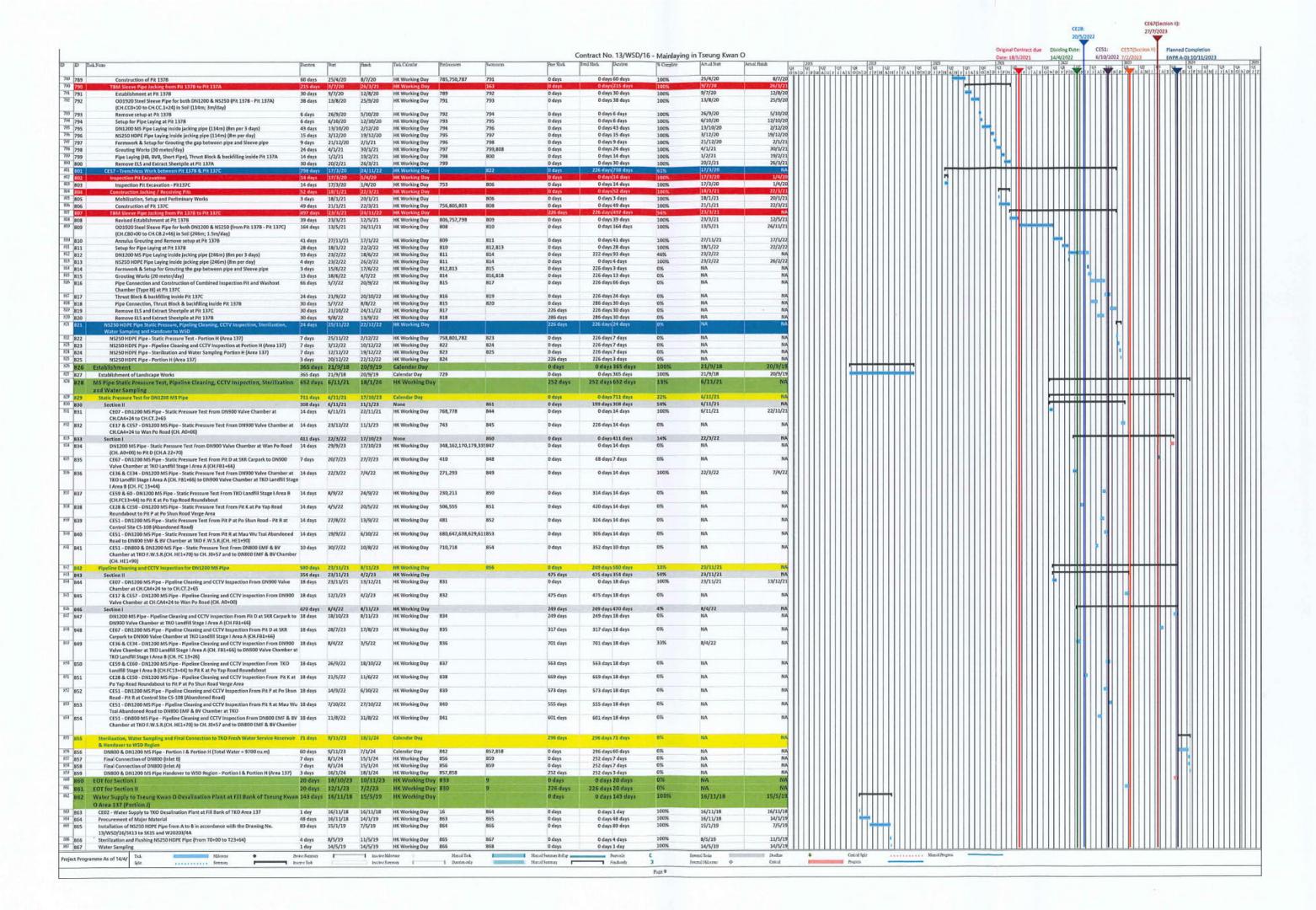


















## Appendix B

Overview of Mainlaying in Tseung Kwan O





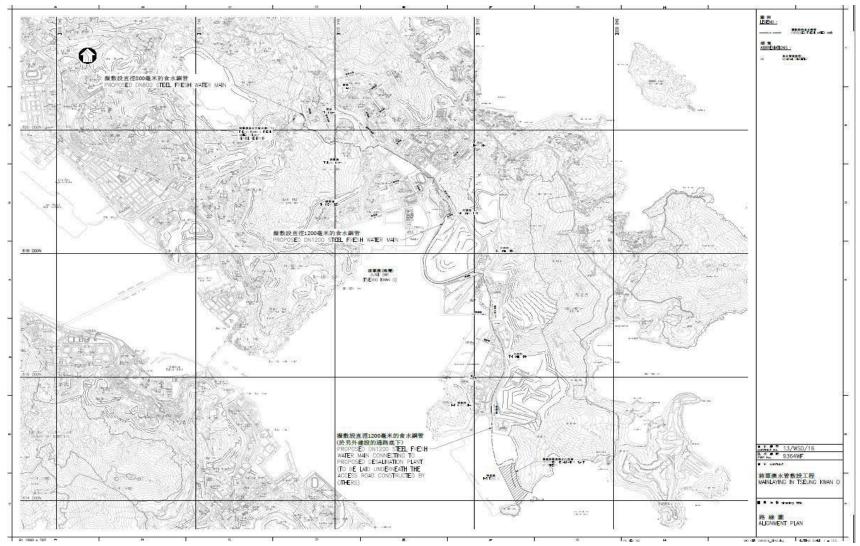


Figure B1. Overview of Mainlaying in TKO





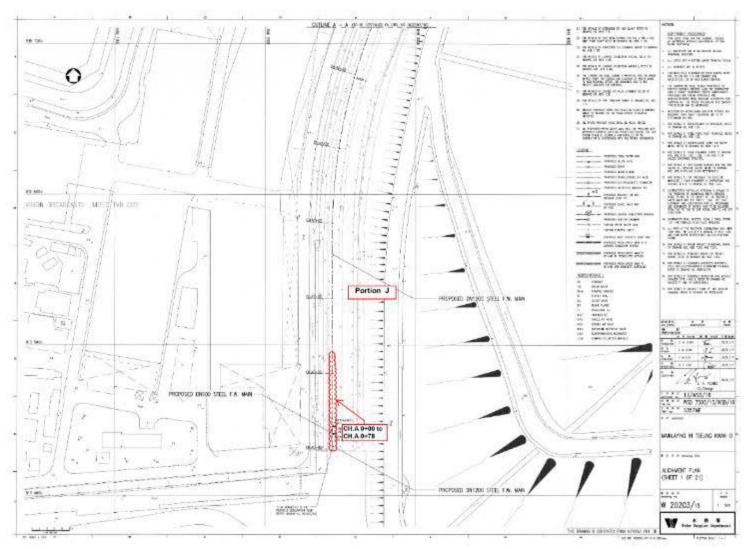


Figure B2. Location Plan for Portion J - CH.A 0+00 to CH.A 0+78





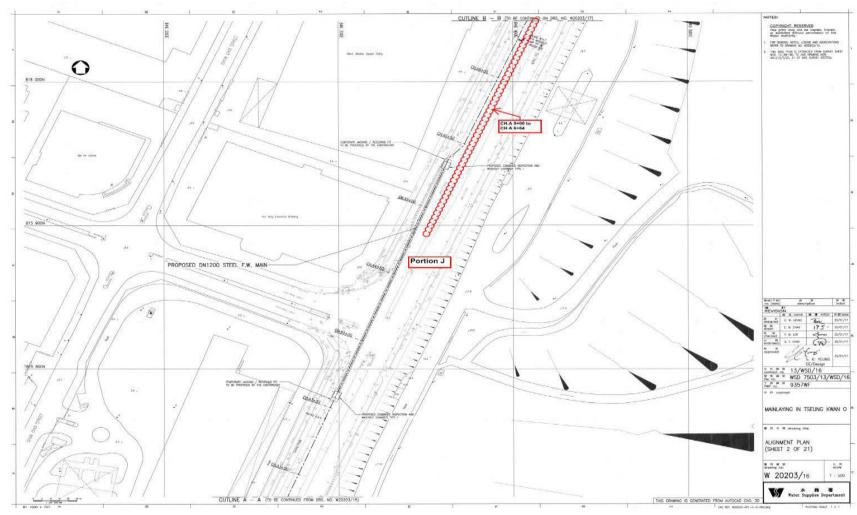


Figure B3. Location Plan for Portion J - CH.A 5+00 to CH.A 6+64





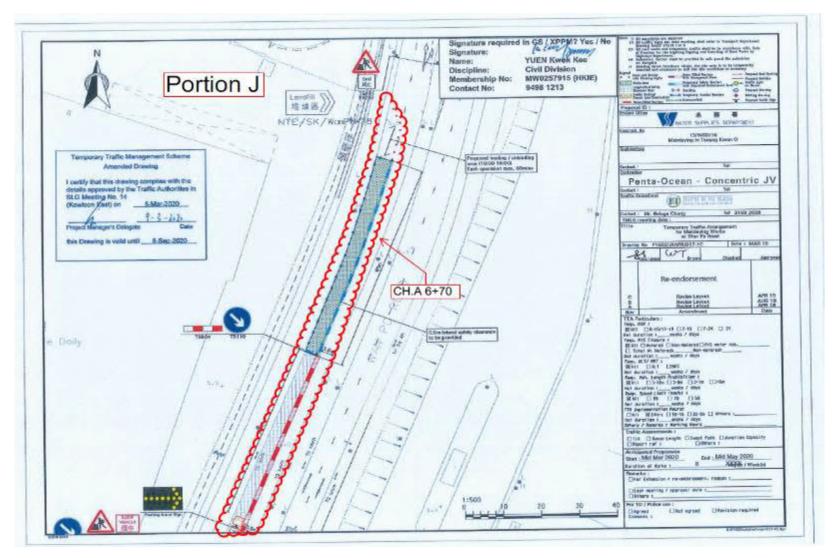


Figure B4. Location Plan for Portion J - CH.A 6+70





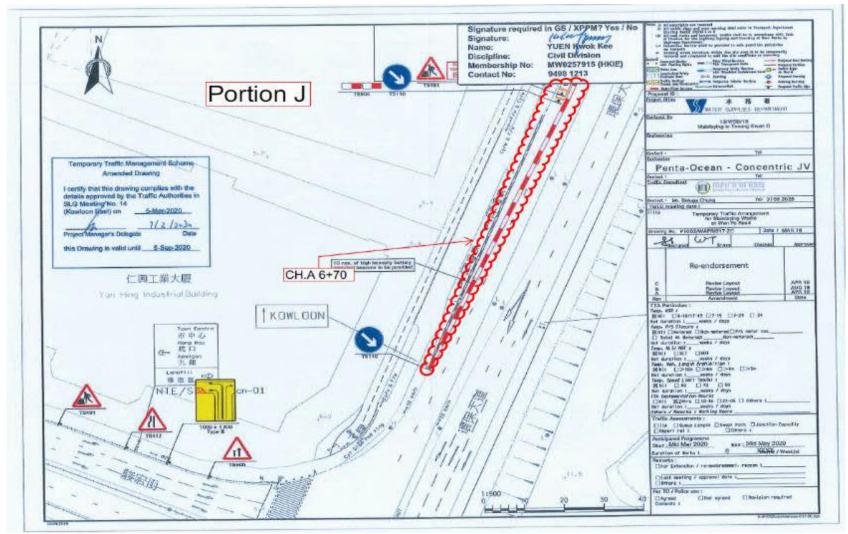


Figure B5. Location Plan for Portion J - CH.A 6+70





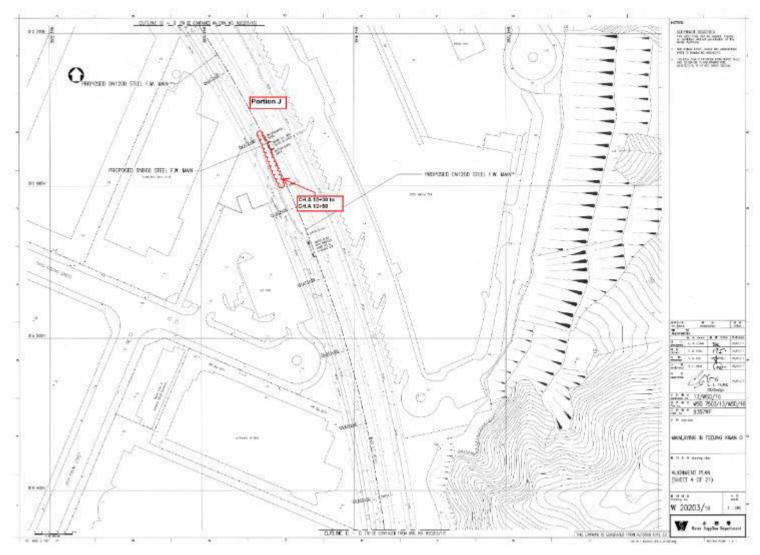


Figure B6. Location Plan for Portion J - CH.A 12+30 to CH.A 12+50

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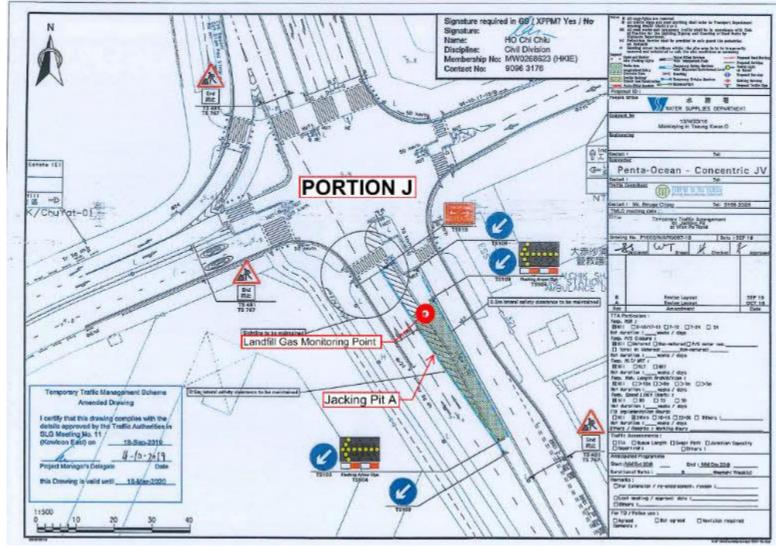


Figure B7. Location Plan for Portion J – CH. A13+50 to CH.A 14+00 (Pit A)





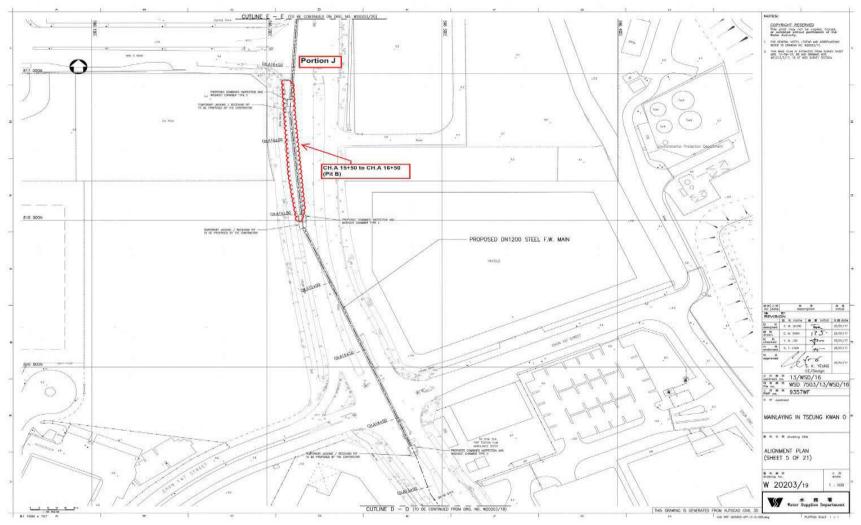


Figure B8. Location Plan for Portion J – CH. A15+50 to CH.A 16+50 (Pit B)





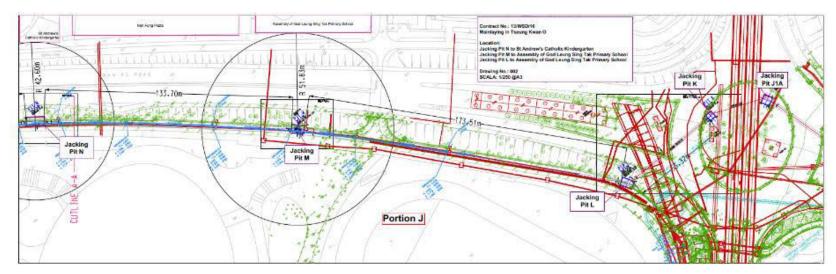


Figure B8a. Location Plan for Portion J – Pit L-M-N, K, J1A

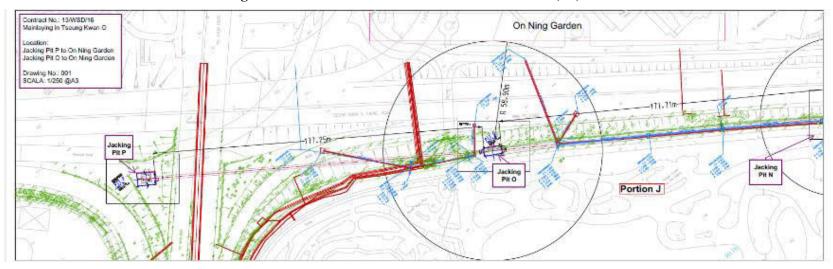


Figure B8b. Location Plan for Portion  $J-Pit\ N-O-P$ 





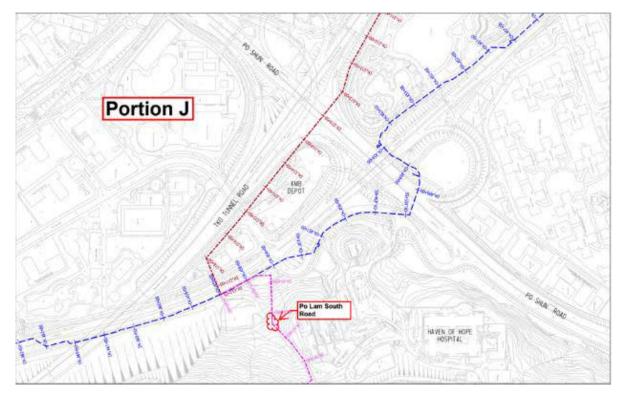


Figure B9a. Location Plan for Mau Wu Tsai 1

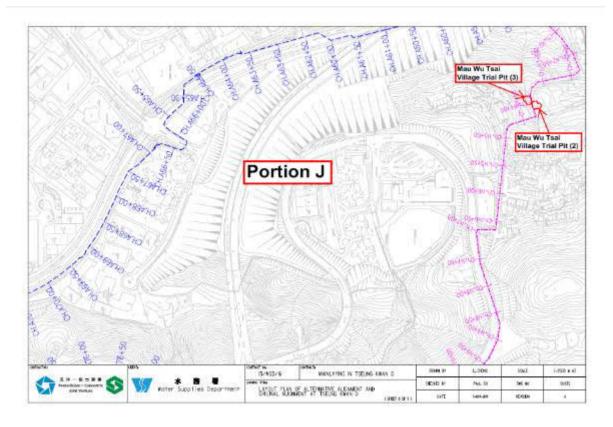


Figure B9b. Location Plan for Mau Wu Tsai 2 & 3





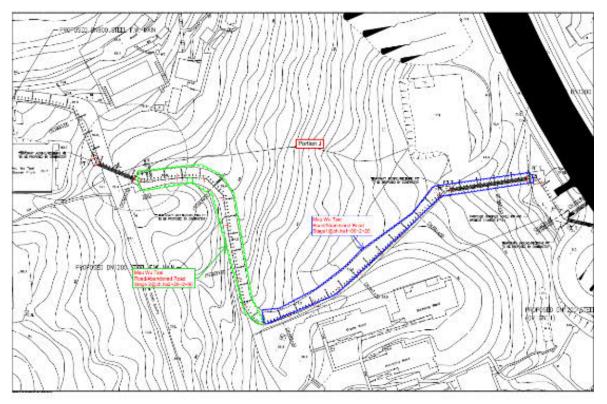


Figure B9c. Abandoned Mau Wu Tsai Road



Figure B10. Monitoring Location – Po Lam South Road





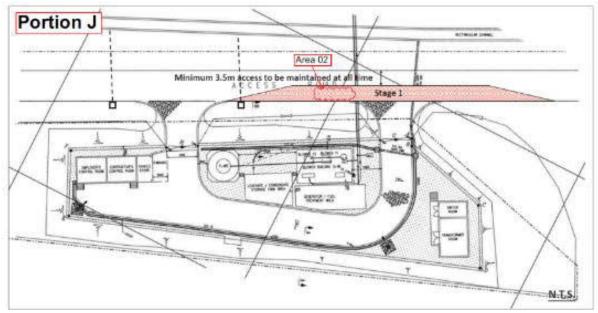


Figure B11. Monitoring Location – Area A02

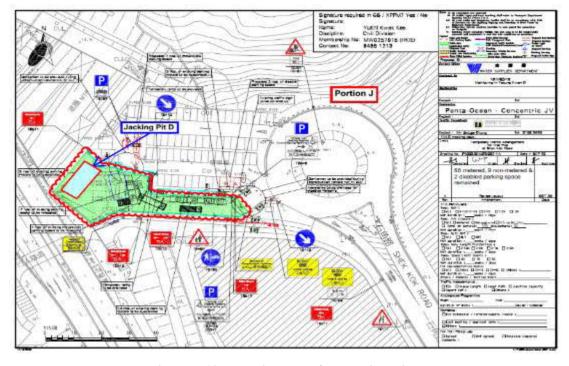


Figure B12. Location Plan for Jacking Pit D





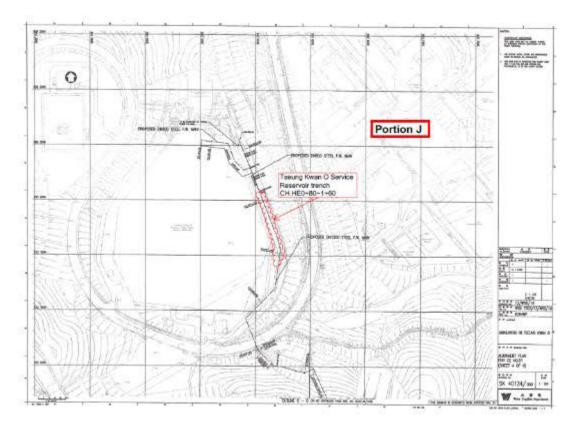


Figure B13. Location Plan for CH.HE0+80-1+60

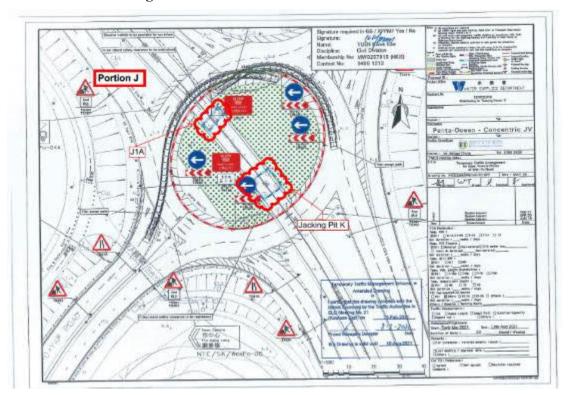


Figure B14. Location Plan for Pit K





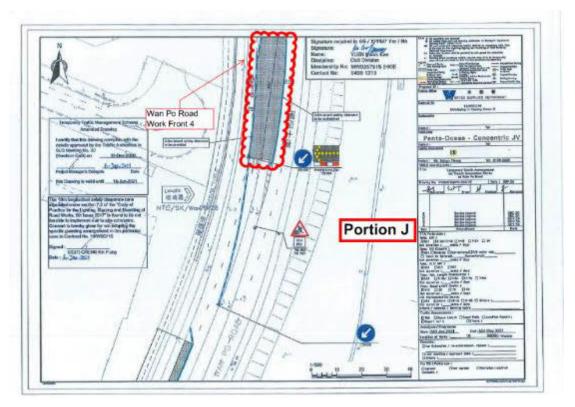


Figure B15. Location Plan for Wan Po Road 4

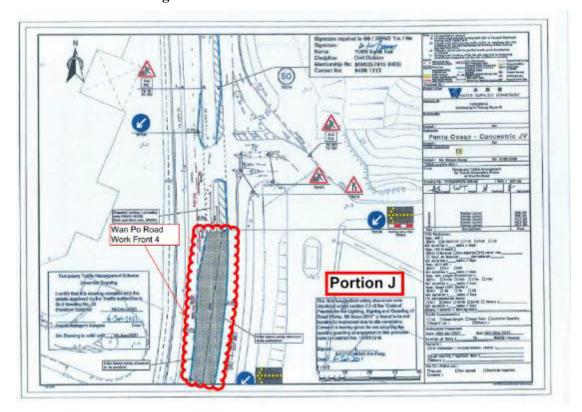


Figure B16. Location Plan for Wan Po Road 4





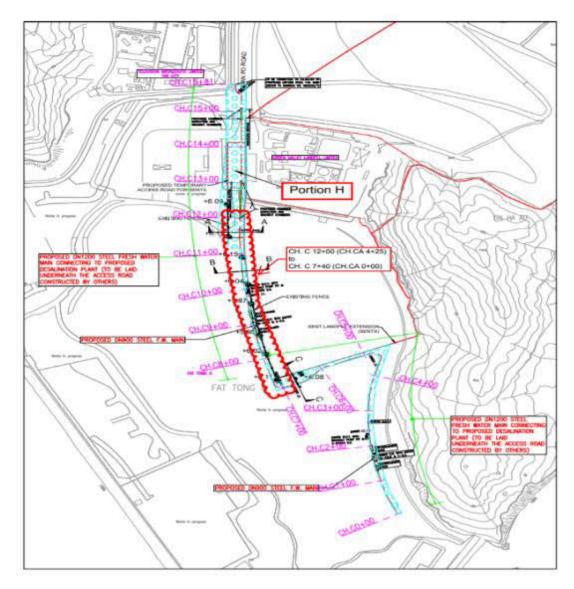


Figure B17. Location Plan for Portion H– CH.C 7+40~CH.C 12+00 (CH.CA 0+00 ~ CH.CA4+25)





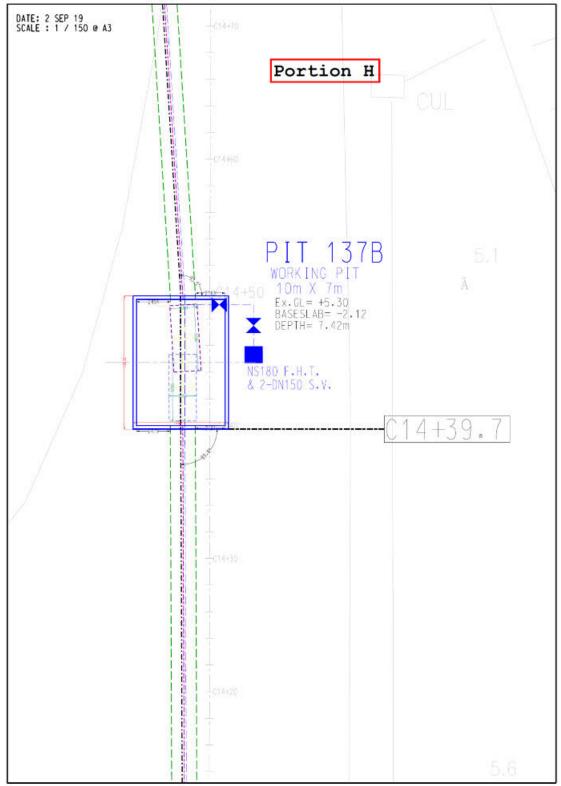


Figure B18. Location Plan for Portion H- Pit 137B





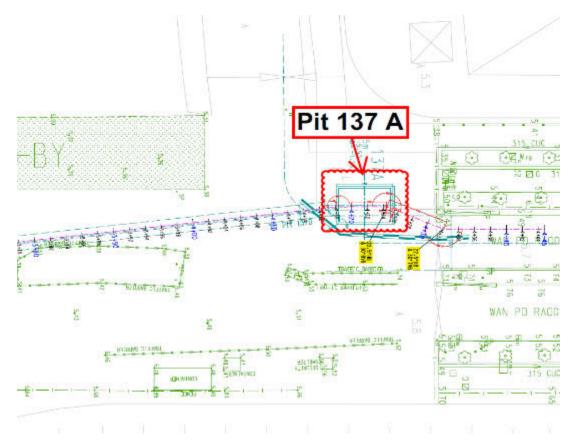


Figure B19. Location Plan for Portion H- Pit 137A

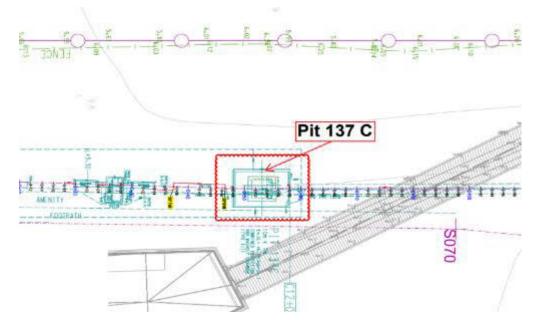


Figure B20. Location Plan for Portion H- Pit 137C





## Appendix C

Summary of Implementation Status of Environmental Mitigation





EIA	Recommended Environmental Protection Measures/	Objectives of the recommended measures &	Implementation	Imp	olementa Stage	ation	Implementation	Relevant Legislation &
Reference	Mitigation Measures	main concerns to address	Agent	D	C	О	status	Guidelines
Air Quality								
S4.8.1	Impervious dust screen or sheeting will be provided to enclose scaffolding from the ground floor level of building for construction of superstructure of the new buildings.	Land site/ During Construction	Contractor(s)		<b>✓</b>		N/A	Air Pollution Control (Construction Dust)
S4.8.1	Impervious sheet will be provided for skip hoist for material transport.	Land site/ During Construction, particularly dry season	Contractor(s)		<b>*</b>		N/A	
S4.8.1	The area where dusty work takes place should be sprayed with water or a dust suppression chemical immediately prior to, during and immediately after dusty activities as far as practicable.	Land site/ During Construction	Contractor(s)		<b>✓</b>		Implemented	
S4.8.1	All dusty materials should be sprayed with water or a dust suppression chemical immediately prior to any loading, unloading or transfer operation.	Land site/ During Construction	Contractor(s)		<b>√</b>		Implemented	
S4.8.1	Dropping heights for excavated materials should be controlled to a practical height to minimize the fugitive dust arising from unloading.	Land site/ During Construction	Contractor(s)		<b>√</b>		Implemented	
S4.8.1	During transportation by truck, materials should not be loaded to a level higher than the side and tail boards and should be dampened or covered before transport.	Land site/ During Construction	Contractor(s)		<b>✓</b>		Implemented	
S4.8.1	Wheel washing device should be provided at the exits of the work sites. Immediately before leaving a construction site, every vehicle shall be washed to remove any dusty material from its body and wheels as far as practicable.	Land site/ During Construction	Contractor(s)		<b>√</b>		Implemented	
S4.8.1	Road sections between vehicle-wash areas and vehicular entrance will be paved.	Land site/ During Construction	Contractor(s)		1		N/A	
S4.8.1	Hoarding of not less than 2.4m high from ground level will be provided along the length of the Project Site boundary.	Land site/ During construction	Contractor(s)	✓	<b>*</b>		Implemented	





EIA	Recommended Environmental Protection Measures/	Objectives of the recommended measures &	Implementation	Imp	olementa Stage	ation	Implementation	Relevant Legislation &
Reference	Mitigation Measures	main concerns to address	Agent	D	C	О	status	Guidelines
S4.8.1	Haul roads will be kept clear of dusty materials and will be sprayed with water so as to maintain the entire road surface wet at all times.	Land site/ During construction	Contractor(s)		<b>√</b>		Implemented	
S4.8.1	Temporary stockpiles of dusty materials will be either covered entirely by impervious sheets or sprayed with water to maintain the entire surface wet all the time.	Land site/ During construction	Contractor(s)		<b>√</b>		Implemented	Air Pollution Control (Construction Dust)
S4.8.1	Stockpiles of more than 20 bags of cement, dry pulverised fuel ash and dusty construction materials will be covered entirely by impervious sheeting sheltered on top and 3-sides.	Land site/ During construction	Contractor(s)		<b>√</b>		Implemented	
S4.8.1	All exposed areas will be kept wet always to minimize dust emission.	Land site/ During construction	Contractor(s)		<b>√</b>		Implemented	
S4.8.1	Ultra-low-Sulphur diesel (ULSD) will be used for all construction plant on-site, as defined as diesel fuel containing not more than 0.005% Sulphur by weight) as stipulated in Environment, Transport and Works Bureau Technical Circular (ETWB-TC(W)) No 19/2005 on Environmental Management on Construction Sites.	Land site/ During construction/ During Operation	Contractor(s)		<b>✓</b>	<b>√</b>	Implemented	Environment, Transport and Works Bureau Technical Circular (ETWB-TC(W)) No 19/2005 on Environmental Management on Construction Sites
S4.8.1	The engine of the construction equipment during idling will be switched off.	Land site/ During construction	Contractor(s)		✓		Implemented	-
S4.8.1	Concrete batching plant will be required on site. control measures recommended in the Guidance Note on a Best Practicable Means for Cement Works (Concrete Batching Plant) (BPM 3/2 (93)) will be implemented. The control measures recommended in the Guidance Note on a Best Practicable Means for Cement Works (Concrete Batching Plant) (BPM 3/2 (93)) will be implemented.	Land site/ During construction	Contractor(s)		<b>✓</b>		N/A	Guidance Note on a Best
S4.8.1	Regular maintenance of construction equipment deployed on-site will be conducted to prevent black smoke emission.	Land site/ During construction	Contractor(s)		<b>√</b>		Implemented	-





EIA Reference	Recommended Environmental Protection Measures/	Objectives of the recommended measures &	Implementation	Imp	lementa Stage	ation	Implementation	Relevant Legislation & Guidelines
	Mitigation Measures	main concerns to address	Agent	D	С	0	status	
S4.10	To ensure proper implementation of the recommended dust mitigation measures and good construction site practices during the construction phase, environmental site audits on weekly basis is recommended throughout the construction period.	construction	Contractor(s)/ (ET & IEC)		✓		Implemented	-





EIA	Recommended Environmental Protection Measures/	Objectives of the recommended measures &	Implementation	Impl	lementa Stage	tion	Implementation	Relevant Legislation &
Reference	Mitigation Measures	main concerns to address	Agent	D	C	0	status	Guidelines
Noise								
S5.7	Only well-maintained plant will be operated on-site and plant will be serviced regularly during the construction phase.	All area/ During construction	Contractor(s)		<b>✓</b>		Implemented	A Practical Guide for the Reduction of Noise from Construction Works,
S5.7	Silencers or mufflers on construction equipment will be utilised and will be properly maintained during the construction phase.	Noise control/ During construction	Contractor(s)		<b>✓</b>		N/A	_
S5.7	Mobile plant, if any, will be sited as far away from NSRs as possible.	Noise control/ During construction	Contractor(s)		<b>√</b>		Implemented	
S5.7	Machines and plant (such as trucks) that may be in intermittent use will be shut down between work periods or will be throttled down to a minimum.	Noise control/ During construction	Contractor(s)		<b>√</b>		Implemented	
S5.7	Plants known to emit noise strongly in one direction will, wherever possible, be orientated so that the noise is directed away from the nearby NSRs.	Noise control/ During construction	Contractor(s)		<b>√</b>		Implemented	
S5.7	Material stockpiles and other structures will be effectively utilised, wherever practicable, in screening noise from on-site construction activities.	Noise control/ During construction	Contractor(s)		<b>√</b>		N/A	
S5.7	Use of Quite Powered Mechanical Equipment (QPME).	Noise control/ During construction	Contractor(s)		<b>√</b>		Implemented	
S5.7	Movable noise barriers of 3m in height with skid footing should be used and located within a few metres of stationary plant and mobile plant such that the line of sight to the NSR is blocked by the barriers. The length of the barrier should be at least five times greater than its height. The noise barrier material should have a superficial surface density of at least 7 kg m <sup>-2</sup> and have no openings or gaps.	Noise control/ During construction	Contractor(s)		<b>✓</b>		N/A	
S5.7	The noise insulating sheet should be deployed such that there would be no opening or gaps on the joints.	Noise control/ During construction	Contractor(s)		1		N/A	
S5.7	Construction activities (e.g. excavation/shoring, reinstatement (asphalt), and pipe jacking) will be planned and carried out in sequence, such that items of PME proposed for these activities will not be operated simultaneously.	Noise control/ During construction	Contractor(s)		<b>✓</b>		Implemented	





EIA	Recommended Environmental Protection Measures/	Objectives of the recommended measures &	Implementation	Impl	ementa Stage	tion	Implementation	Relevant Legislation &
Reference	Mitigation Measures	main concerns to address	Agent	D	C	0	status	Guidelines
S5.7	PMEs will not be used at the works areas near educational institutions with residual impact (i.e. the "influence area" within a radius of 40m) during school hours in order to reduce impact to the educational institutions.	Noise control / During construction	Contractor(s)		<b>✓</b>		Implemented	-
S5.7	Noise enclosures or acoustic sheds would be used to cover stationary PME such as generators.  Portable/Movable noise enclosure made of material with superficial surface density of at least 7 kg m <sup>-2</sup> may be used for screening the noise from operation of the saw/groover, concrete.	Noise control/ Pre- construction/ During construction	Contractor(s)	<b>✓</b>	•		N/A	-
S5.9	Saw cutting pavement, breaking up of pavement, excavation /shoring, pipe laying, backfilling, reinstatement (concrete) and pipe jacking shall be scheduled outside the examination period.	Noise control/ Pre- construction/ During construction	Contractor(s)	<b>√</b>	<b>*</b>		Implemented	-
S5.9	In view the duration of noise exceedance at Creative Secondary School, PLK Laws Foundation College, TKO Kei Tak Primary School and School of Continuing and Professional Studies-CUHK is limited to 8 weeks, the construction work in the influence areas near the four schools shall be scheduled during long school holidays (e.g. summer holiday, Easter holiday or Christmas holiday, etc.) as far as practicable. Scheduling the construction work for the four schools.	Noise control/ Pre- construction/ During construction	Contractor(s)	*	•		Implemented	-
S5.10	A noise monitoring programme shall be implemented for the construction phase.	During construction phase	ET		✓		Implemented	-
S5.10	The effectiveness of on-site control measures could also be evaluated through the regular site audits.	All facilities/ During construction	Contractor(s)/ ET & IEC		1		Implemented	-





EIA	Recommended Environmental Protection Measures/	Objectives of the recommended measures &	Implementation	Impl	ementa Stage	tion	Implementation	Relevant Legislation &			
Reference	Mitigation Measures	main concerns to address	Agent	D	C	0	status	Guidelines			
Water Qua	Vater Quality										
S6.9	Silt removal facilities such as silt traps or sedimentation facilities will be provided to remove silt particles from runoff to meet the requirements of the TM standard under the WPCO. The design of silt removal facilities will be based on the guidelines provided in ProPECC PN 1/94. All drainage facilities and erosion and sediment control structures will be inspected on a regular basis and maintained to confirm proper and efficient operation at all times and particularly during rainstorms. Deposited silt and grit will be removed regularly.	Land site & drainage/ During construction	Contractor(s)		•		Implemented observation	ProPECC PN 1/94 TM Standard under the WPCO			
S6.9	Earthworks to form the final surfaces will be followed up with surface protection and drainage works to prevent erosion caused by rainstorms.	Land site & drainage/ During construction	Contractor(s)		<b>√</b>		Implemented	-			
S6.9	Appropriate surface drainage will be designed and provided where necessary.	Land site & drainage/ During construction	Contractor(s)		<b>1</b>		Implemented	-			
S6.9	The precautions to be taken at any time of year when rainstorms are likely together with the actions to be taken when a rainstorm is imminent or forecasted and actions to be taken during or after rainstorms are summarised in Appendix A2 of ProPECC PN 1/94.	Land site & drainage/ During construction	Contractor(s)		<b>✓</b>		Implemented	ProPECC PN 1/94			
S6.9	Oil interceptors will be provided in the drainage system where necessary and regularly emptied to prevent the release of oil and grease into the storm water drainage system after accidental spillages.	Land site & drainage/ During construction	Contractor(s)		<b>√</b>		N/A	-			
S6.9	Temporary and permanent drainage pipes and culverts provided to facilitate runoff discharge, if any, will be adequately designed for the controlled release of storm flows.	Land site & drainage/ During construction	Contractor(s)		✓		N/A	-			
S6.9	The temporary diverted drainage, if any, will be reinstated to the original condition when the construction work has finished or when the temporary diversion is no longer required.	Land site & drainage/ During construction	Contractor(s)		✓		N/A	-			





EIA Reference	Recommended Environmental Protection Measures/ Mitigation Measures	Mitigation Measures recommended measures & Agent Stage		1	Implementation status	Relevant Legislation & Guidelines		
S6.9	Appropriate numbers of portable toilets shall be provided by a licensed contractor to serve the construction workers over the construction site to prevent direct disposal of sewage into the water environment.	Land site & drainage/ During construction	Contractor(s)	D	<b>€</b>	0	Implemented	-
S6.9 and S6.12	The sterilization water should be dechlorinated with total residual chlorine (TRC) level below 1 mg/L before discharge to public sewer. In situ testing of TRC should also be conducted for the discharge of chlorinated water for pipeline disinfection to ensure sufficient dechlorination before discharge to public sewer.	Sterilization of water mains prior to commissioning	Contractor(s)		<b>√</b>	<b>√</b>	Implemented	Technical Memorandum for Effluents Discharged into Drainage and Sewerage Systems Inland and Coastal Waters
S6.9	The cleaning and flushing water should also be treated and desilted to the relevant discharge requirement stipulated in TM-DSS before discharging.	Sterilization of water mains prior to commissioning	Contractor(s)		<b>√</b>	<b>√</b>	N/A	
S6.9	Site drainage should be well maintained, and good construction practices should be observed to ensure that oil, fuels, solvents and other chemicals are managed, stored and handled properly and do not enter the nearby water streams.	Land site & drainage/ During construction/ During operation	Contractor(s)		<b>✓</b>	<b>√</b>	Implemented	-
S6.12	Regular site inspections will be carried out in order to confirm that regulatory requirements are being met and that contractors are implementing the standard site practice and mitigation measures as proposed to reduce potential impacts to water quality.	During construction	Contractor(s)/ ET & IEC		<b>✓</b>		Implemented	-





EIA	Recommended Environmental Protection Measures/	Objectives of the recommended measures &	Implementation	Imp	lementa Stage	ation	Implementation	Relevant Legislation &
Reference	Mitigation Measures	main concerns to address	Agent	D	C	0	Status	Guidelines
Waste Mar								
S8.5	Nomination of approved personnel to be responsible for standard site practices, arrangements for collection and effective disposal to an appropriate facility of all wastes generated at the site.	Contract mobilization/ During construction	Contractor(s)		✓		Implemented after observation	-
S8.5	Training of site personnel in proper waste management and chemical handling procedures. Training will be provided to workers on the concepts of site cleanliness and appropriate waste management procedures, including waste reduction, reuse and recycling at the beginning of the construction works.	Contract mobilization/ During construction	Contractor(s)		•		Implemented	-
S8.5	Provision of sufficient waste disposal points and regular collection for disposal.	All area/ During construction/ During operation	Contractor(s)		<b>✓</b>	<b>✓</b>	Implemented	DEVB TC(W) No. 8/2010, Enhanced Specification for Site Cleanliness and Tidiness.
S8.5	Appropriate measures to reduce windblown litter and dust transportation of waste by either covering trucks or by transporting wastes in enclosed containers.	All area/ During construction	Contractor(s)		<b>✓</b>		Implemented	DEVB TC(W) No. 8/2010, Enhanced Specification for Site Cleanliness and Tidiness.
S8.5	A waste management plan (WMP) as stated in the "ETWB TC(W) No. 19/2005, Environmental Management on Construction Sites" for the amount of waste generated, recycled and disposed of (including the disposal sites) will be established and implemented during the construction phase as part of the Environmental Management Plan (EMP). The Contractor will be required to prepare the EMP and submits it to the Architect/ Engineer under the Contract for approval prior to implementation.	All area/ During construction	Contractor(s)		•		Implemented	ETWB TC(W) No. 19/2005, Environmental Management on Construction Sites
S8.5	Separation of chemical wastes for special handling and appropriate treatment at the Chemical Waste Treatment Centre at Tsing Yi.	All area/ During construction	Contractor(s)		✓		N/A.	Chapters 2 & 3 Code of Practice on the Packaging, Labelling & Storage of Chemical Wastes published under the Waste Disposal Ordinance (Cap 354), Section 35





EIA	Recommended Environmental Protection Measures/	Objectives of the recommended measures &	Implementation	Imp	olementa Stage	ation	Implementation	Relevant Legislation &
Reference	Mitigation Measures	main concerns to address	Agent	D	C	0	Status	Guidelines
S8.5	Regular cleaning and maintenance programme for drainage systems, sumps and oil interceptors.	Land site/ During construction	Contractor(s)		<b>√</b>		Implemented	Waste Disposal Ordinance (Cap 354)
S8.5	A recording system for the amount of wastes generated/ recycled and disposal sites. The trip- ticket system will be included as one of the contractual requirements and implemented by the contractor(s).	Land site/ During construction	Contractor(s)		<b>√</b>		Implemented	DEVB TC(W) No. 6/2010, Trip Ticket System for Disposal of Construction & Demolition Materials
S8.5	Segregation and storage of different types of waste in different containers, skips or stockpiles to enhance reuse or recycling of material and their proper disposal.	Land site/ During construction/ During operation	Contractor(s)		<b>√</b>		Implemented	WBTC 32/92, The Use of Tropical Hard Wood on Construction Site
S8.5	Encourage collection of aluminium cans and wastepaper by individual collectors during construction with separate labelled bins provided to segregate these wastes from other general refuse by the workforce.	Land site/ During construction	Contractor(s)		<b>✓</b>		Implemented	ETWB TCW No. 33/2002, Management of Construction and Demolition Material Including Rock
S8.5	Any unused chemicals and those with remaining functional capacity will be recycled as far as possible.	Land site/ During construction	Contractor(s)		✓		N/A	-
S8.5	Use of reusable non-timber formwork to reduce the amount of C&D materials.	All areas/ During construction	Contractor(s)		<b>√</b>		N/A	WBTC 32/92, The Use of Tropical Hard Wood on Construction Site
S8.5	Prior to disposal of construction waste, wood, steel and other metals will be separated to the extent practical, for re-use and/or recycling to reduce the quantity of waste to be disposed of to landfill.	All areas/ During construction	Contractor(s)		<b>√</b>		Implemented	DEVB TC(W) No. 6/2010, Trip Ticket System for Disposal of Construction & Demolition Materials
S8.5	Proper storage and site practices to reduce the potential for damage or contamination of construction materials.	All areas/ During construction	Contractor(s)		<b>√</b>		Implemented	-
S8.5	Plan and stock construction materials carefully to reduce amount of waste generated and avoid unnecessary generation of waste.	All areas/ During construction	Contractor(s)		1		Implemented	-
S8.5	The management of dredged/ excavated sediment management requirement from ETWB TC(W) No. 34/2002 will be incorporated in the Specification of the Contract Documents.	Marine works/ During construction	WSD/ Contractor(s)		<b>√</b>		Implemented	ETWB TC(W) No. 34/2002 and Dumping at Sea Ordinance (DASO)





EIA	Recommended Environmental Protection Measures/	Objectives of the recommended measures &	Implementation	Imp	olementa Stage	ation	Implementation	Relevant Legislation &
Reference	Mitigation Measures	main concerns to address	Agent	D	C	О	Status	Guidelines
S8.5	The contractor will open a billing account with EPD in accordance with the Waste Disposal (Charges for Disposal of Construction Waste) Regulation for the payment of disposal charges.	Contract mobilisation/ During construction	Contractor(s)		<b>√</b>		Implemented	Cap 354N Waste Disposal (Charges for Disposal of Construction Waste) Regulation
S8.5	A trip-ticket system will be established in accordance with DEVB TC(W) No. 6/2010 to monitor the reuse of surplus excavated materials off-site and disposal of construction waste and general refuse at transfer facilities/landfills, and to control fly-tipping.	Contract mobilisation/ During construction	Contractor(s)		<b>✓</b>		Implemented	DEVB TC(W) No. 6/2010, Trip Ticket System for Disposal of Construction & Demolition Materials
S8.5	The project proponent will also conduct regular inspection of the waste management measures implemented on site as described in the Waste Management Plan.	All area/ During construction	Contractor(s)/ ET & IEC		<b>√</b>		Implemented	ETWB TC(W) No. 19/2005, Environmental Management on Construction Sites
S8.5	A recording system (similar to summary table as shown in Annex 5 and Annex 6 of Appendix G of ETWB TC(W) No. 19/2005) for the amount of waste generated, recycled and disposed of (including the disposal sites) will be established during the construction phase.	All area/ During construction	Contractor(s)		<b>√</b>		Implemented	Annex 5 and Annex 6 of Appendix G of ETWB TC(W) No. 19/2005
S8.5	Inert C&D materials (public fill) will be reused within the Project as far as practicable.	All area/ During construction	Contractor(s)		1		Implemented	-
S8.5	Public fill and construction waste shall be segregated and stored in different containers or skips to facilitate reuse or recycling of materials and their proper disposal.	All area/ During construction	Contractor(s)		<b>*</b>		Implemented	-
S8.5	Specific areas of the work site will be designated for such segregation and storage if immediate use is not practicable.	All area/ During construction	Contractor(s)		<b>√</b>		Implemented	-
S8.5	To reduce the potential dust and water quality impacts of site formation works, C&D materials will be wetted as quickly as possible to the extent practice after filling.	All area/ During construction	Contractor(s)		<b>√</b>		Implemented	Air Pollution Control (Construction Dust) Regulation (Cap 311R); WPCO (Cap 358)
S8.5	Open stockpiles of excavated/ fill materials or construction wastes on-site should be covered with tarpaulin or similar fabric.	Land site/ During Construction, particularly dry season	Contractor(s)		<b>√</b>		Implemented	Air Pollution Control (Construction Dust) Regulation (Cap 311R)





EIA	Recommended Environmental Protection Measures/	Objectives of the recommended measures &	Implementation	Imp	olementa Stage	ation	Implementation	Relevant Legislation &
Reference	Mitigation Measures	main concerns to address	Agent	D	C	0	Status	Guidelines
S8.5	Chemical waste container shall be suitable for the substance they are holding, resistant to corrosion, maintained in a good condition, and securely closed.	All area/ During construction/ During operation	Contractor(s)/ WSD		<b>√</b>	✓	Implemented after observation	Waste Disposal (Chemical Waste) (General) Regulation; Code of Practice on the Packaging,
S8.5	Chemical waste container shall have a capacity of less than 450 L unless the specifications have been approved by the EPD.	All area/ During construction/ During operation	Contractor(s)/ WSD		✓	<b>√</b>	Implemented	Handling and Storage of Chemical Wastes
S8.5	A label in English and Chinese shall be displayed on the chemical container in accordance with instructions prescribed in Schedule 2 of the Regulations.	All area/ During construction/ During operation	Contractor(s)/ WSD		✓	<b>√</b>	Implemented	
S8.5	Storage areas for chemical waste shall be enclosed on at least 3 sides.	All area/ During construction/ During operation	Contractor(s)/ WSD		<b>√</b>	✓	Implemented	
S8.5	Storage areas for chemical waste shall have an impermeable floor and bunding, of capacity to accommodate 110% of the volume of the largest container or 20% by volume of the chemical waste stored in that area, whichever is the greatest.	All area/ During construction/ During operation	Contractor(s)/ WSD		<b>√</b>	<b>✓</b>	Implemented	
S8.5	Storage areas for chemical waste shall have adequate ventilation.	All area/ During construction/ During operation	Contractor(s)/ WSD		<b>V</b>	<b>*</b>	Implemented	
S8.5	Storage areas for chemical waste shall be covered to prevent rainfall entering (water collected within the bund must be tested and disposed of as chemical waste, if necessary).	All area/ During construction/ During operation	Contractor(s)/ WSD		<b>√</b>	<b>√</b>	Implemented	
S8.5	Storage areas for chemical waste shall be arranged so that incompatible materials are appropriately separated.	All area/ During construction/ During operation	Contractor(s)/ WSD		<b>√</b>	<b>√</b>	Implemented	
S8.5	General refuse will be stored in enclosed bins or compaction units separately from construction and chemical wastes.	All area/ During construction/ During operation	Contractor(s)/ WSD		1	1	Implemented	
S8.5	Adequate number of waste containers will be provided to avoid over-spillage of waste.	All area/ During construction/ During operation	Contractor(s)/ WSD		<b>√</b>	<b>✓</b>	Implemented	DEVB TC(W) No. 8/2010 Enhanced Specification for Site Cleanliness and Tidiness.





EIA	Recommended Environmental Protection Measures/	Objectives of the recommended measures &	Implementation	Imp	lementa Stage	ation	Implementation	Relevant Legislation &
Reference	Mitigation Measures	main concerns to address	Agent	D	C	О	Status	Guidelines
S8.5	A reputable waste collector will be employed by the Contractor to remove general refuse from the site, separately from construction and chemical wastes, on a daily basis to minimise odour, pest and litter impacts.	All area/ During construction/ During operation	Contractor(s)/ WSD		<b>✓</b>	<b>✓</b>	Implemented	-
S8.5	Recycling bins will be provided at strategic locations within the Site to facilitate recovery of recyclable materials (including aluminium can, waste paper, glass bottles and plastic bottles) from the Site. Materials recovered will be sold for recycling.	All area/ During construction/ During operation	Contractor(s)/ WSD		~	~	Implemented	-
S8.5	To avoid any odour and litter impact, accurate number of portable toilets will be provided for workers on-site.	All area/ During construction	Contractor(s)		✓		Implemented	-
S8.5	The burning of refuse on construction sites is prohibited by law.	All area/ During construction	Contractor(s)		✓		Implemented	Air Pollution Control Ordinance (Cap 311)
S8.7	To facilitate monitoring and control over the contractors' performance on waste management, a waste inspection and audit programme will be implemented throughout the construction phase.	All facilities/ During construction	ET/ IEC		✓		Implemented	-





EIA Reference	Recommended Environmental Protection Measures/ Mitigation Measures	Objectives of the recommended measures & main concerns to address	Implementation Agent	Implementation Stage			Implementation	Relevant Legislation &
				D	C	О	Status	Guidelines
Ecology								
S9.7	Erect fences along the boundary of the works area before the commencement of works to prevent vehicle movements and encroachment of personnel onto adjacent areas.	All area/ During construction	Contractor(s)		<b>✓</b>		Implemented	-
S9.7	Regularly check the work site boundaries to ensure that they are not breached, and that damage does not occur to surrounding areas.	All area/ During construction	Contractor(s)/ Environmental Team (ET)		<b>√</b>		Implemented	-
S9.7	Avoid any damage and disturbance, particularly those caused by filling and illegal dumping, to the surrounding habitats through proper management of waste disposal.	All area/ During construction	Contractor(s)		<b>*</b>		Implemented	-
S9.7	Reinstate temporarily affected areas, particularly the habitats of plantation and shrubland-grassland immediately after completion of construction works, through on-site tree/shrub planting. The tree/shrub species will be chosen with reference to those in the surrounding area.	All area/ During construction	Contractor(s)		✓		N/A	-





EIA Reference	Recommended Environmental Protection Measures/ Mitigation Measures	Objectives of the recommended measures & main concerns to address	Implementation Agent	Imj	plement Stage		Implementation Status	Relevant Legislation & Guidelines
				D	C	О		
Landscap								
S11.10	The construction area and area allowed for temporary structures, such as the contractor's office, will be minimized to a practical minimum. (MM1)	All area/ Detailed design/ During construction/ During operation	WSD/ Contractor(s)	N/A	N/A	N/A	Not applicable for this project	-
S11.10	At the detailed design stage, the design team will seek to minimize the landscape footprint of the Project and above ground facilities, while satisfying all other requirements. (MM2)	All area/ Detailed design/ During construction/ During operation	WSD/ Contractor(s)	N/A	N/A	N/A	Not applicable for this project	-
S11.10	Design principles will be adopted to take into account the surrounding area, particularly Clear Water Bay Country Park behind and the nearby waterfront, with due consideration given to:  - roadside planting;  - aesthetic treatment of all structures;  - vertical greening;  - screen planting along application site; and  - landscape enhancement with amenity planting where practical including planting along the edge (site boundary) fence with native shrubs where feasible to reduce their visual impact and blend them into the surrounding landscape.(MM3)	All area/ Detailed design/ During construction/ During operation	WSD/ Contractor(s)	N/A	N/A	N/A	Not applicable for this project	-
S11.10	All trees within the Project Site or the potential slope mitigation works area will be carefully protected during construction according to DEVB TCW No. 10/2013 – Tree Preservation (MM4)	All area/ Detailed design/ During construction/ During operation	WSD/ Contractor(s)	✓	✓	✓	Implemented after observation	ETWB TCW No. 3/2006 - Tree Preservation.
S11.10	Trees within the Site unavoidably affected by the works will be transplanted where necessary and practical. For trees that need to be felled, compensatory planting will be provided to the satisfaction of relevant Government departments.  A compensatory tree planting proposal including locations of tree compensation will be submitted to seek relevant government department's approval, in accordance with DEVB TC(W) No. 10/2013. (MM5)	All area/ Detailed design/ During construction/ During operation	WSD/ Contractor(s)	N/A	N/A	N/A	Not applicable for this project	DEVB TC(W) No. 10/2013





EIA Reference	Recommended Environmental Protection Measures/ Mitigation Measures	Objectives of the recommended measures & main concerns to address	Implementation Agent	Implementation Stage D C O			Implementation Status	Relevant Legislation & Guidelines
Landfill Ga	as Hazard			ע	C	U		
S12.7	During all works, safety procedures should be implemented to minimise the risks of fires and explosions, asphyxiation of workers and toxicity effects resulting from contact with contaminated soil and groundwater.	All area/ Detailed design/ During construction/ During operation	Contractor(s)	✓	✓	✓	Implemented	-
S12.7	During trenching and excavation as well as creation of confined spaces at near to or below ground level, precautions should be clearly laid down and rigidly Gas detection equipment and appropriate breathing apparatus should be available and used when entering confined spaces or trenches deeper than 1 metre.	All area/ Detailed design/ During construction/ During operation	Contractor(s)	•	<b>√</b>	✓	Implemented	
S12.7	The Contractor should make the workers are aware of potential hazards of working in confined spaces (any chamber, manhole or culvert which is large enough to permit access to personnel). Such work in confined spaces is controlled by the Factories and Industrial Undertakings (Confined Spaces) Regulations of the Factories and Industrial Undertakings Ordinance. Following the Safety Guide to Working in Confined Spaces ensures compliance with the above regulations.	All area/ Detailed design/ During construction/ During operation	Contractor(s)	~	<b>√</b>	<b>✓</b>	Implemented	
S12.7	Safety officers, specifically trained with regard to landfill gas and leachate related hazards and the appropriate actions to take in adverse circumstances, should be present on the site throughout the works, in particular, when works are undertaken below grade.	All area/ Detailed design/ During construction/ During operation	Contractor(s)	<b>√</b>	✓	<b>✓</b>	Implemented	
S12.7	All personnel who work on site and all visitors to the site should be made aware of the possibility of ignition of gas in the vicinity of the works, the possible presence of contaminated water and the need to avoid physical contact with it.	All area/ Detailed design/ During construction/ During operation	Contractor(s)	<b>*</b>	<b>√</b>	•	Implemented	
S12.7	Monitoring for landfill gas should be undertaken in all excavations, manholes, chambers (particularly during pipe jacking) and any confined spaces through the use of an intrinsically safe portable instrument, appropriately calibrated and capable of measuring the concentrations	All area/ Detailed design/ During construction/ During operation	Contractor(s)	<b>✓</b>	<b>✓</b>	<b>✓</b>	Implemented	





	of methane. carbon dioxide and oxygen.					1	
S12.7	Monitoring frequency and areas to be monitored should be specified prior to commencement of groundwork, either by the Safety Officer, or by an appropriately qualified person. All measurements should be recorded and documented.	All area/ Detailed design/ During construction/ During operation	Contractor(s)	<b>✓</b>	<b>✓</b>	✓	Implemented
S12.7	Proceed drilling with adequate care and precautions against the potential hazards which may be encountered.	All area/ Detailed design/ During construction/ During operation	Contractor(s)	<b>√</b>	<b>√</b>	<b>√</b>	Implemented
S12.7	Prior to the commencement of the site works, the drilling contractor should devise a 'method-of- working' statement covering all normal and emergency procedures (including but not limited to number of operatives, experience and special skills of operatives, normal method of operations, emergency procedures, supervisors' responsibilities, storage and use of safety equipment, safety procedures and signs, barriers and guarding). The site supervisor and all operatives must be familiar with this statement.	All area/ During construction/ During operation	Contractor(s)	•	•	•	Implemented
S12.7	Where below ground service entries are necessary to the Incoming Switchgear Room, 132 kV Substation and Chlorine Store (I) and (II), the entry point should be sealed to prevent gas entry. In addition, any below grade cable trenches entering the Incoming Switchgear Room and 132 kV Substation can become the pathway for landfill gas and hence grilled metal covers should be used.	All area/ Detailed design/ During construction/ During operation	Contractor(s)	<b>✓</b>	<b>✓</b>	<b>✓</b>	N/A
S12.7	It is recommended regular landfill gas monitoring should be carried out at the Incoming Switchgear Room, 132 kV Substation and Chlorine Store (I) and (II). The monitoring frequency will be monthly for the first year of operation. If the monitoring results show no sign of landfill gas migration, reduce the monitoring frequency to once every six months.	All area/ Detailed design/ During construction/ During operation	Contractor(s)	<b>✓</b>	•	<b>✓</b>	N/A
S12.7	The manholes and utility pits within the Project Site and along the fresh water mains. Each manhole/ utility pit should be monitored with two measurements (at mid depth and base). Each measurement should be monitored for a minimum of 10 minutes. A steady reading and peak reading should be recorded at each manhole/ utility pit	All area/ Detailed design/ During construction/ During operation	Contractor(s)	<b>*</b>	<b>✓</b>	~	Implemented

#### Contract No. 13/WSD/16 Mainlaying in Tseung Kwan O Monthly EM&A Report





	and for each measurement. The need for venting the manhole/ utility pit and further monitoring will be reviewed after the initial monitoring.							
S12.7	All construction, operation and maintenance personnel working on-site as well as visitors should be made aware of the hazards of landfill gas and its possible presence on-site. This should be achieved through a combination of posting warning signs in prominent places and also by access to detailed information on landfill gas hazards and the designs and procedural means by which these hazards are being minimized on-site.	-	Contractor(s)	<b>√</b>	<b>√</b>	<b>√</b>	Implemented	





### Appendix D

Impact Monitoring Schedule of the Reporting Month

# Environmental Monitoring Schedule (September 2024)

Sun	Mon	Tue	Wed	Thu	Fri	Sat
1	Impact Noise Monitoring	3	4	5	6	Impact Noise Monitoring
8	9	10	11	12	Impact Noise Monitoring	14
15	16	17	18	Impact Noise Monitoring	20	21
22	23	24	Impact Noise Monitoring	26	27	28
The schedule may be changed due to unforese	30					

The schedule may be changed due to unforeseen circumstances (adverse weather, etc.)





### Appendix E

Noise Monitoring Equipment Calibration Certificate

### Certificate of Calibration

for

Description:

Sound Level Calibrator

Manufacturer:

RION

Type No.:

NC-75

Serial No.:

35124527

#### Submitted by:

Customer:

Acuity Sustainability Consulting Limited

Address:

Unit E, 12/F, Ford Glory Plaza,

Nos. 37-39 Wing Hong Street,

Cheung Sha Wan, Kowloon,

Hong Kong

Upon receipt for calibration, the instrument was found to be:

**✓** Within

☐ Outside

the allowable tolerance.

The test equipments used for calibration are traceable to National Standards via:

- The Government of The Hong Kong Special Administrative Region Standard & Calibration Laboratory

Date of receipt: 19 October 2023

Date of calibration: 27 October 2023

Date of NEXT calibration: 26 October 2024

Calibrated by:

Calibration Technician

Certified by:

Mr. Ng Yan Wa Laboratory Manager

Date of issue: 27 October 2023

Certificate No.: APJ23-090-CC002

Page 1 of 2



#### 1. Calibration Precautions:

- The unit-under-test (UUT) was allowed to stabilize in the laboratory for over 24 hours, and switched on to warm up for over 10 minutes before the commencement of the test.
- The results presented are the mean of 3 measurements at each calibration point.

#### 2. Calibration Specifications:

Calibration check

#### 3. Calibration Conditions:

Air Temperature:	24.4 °C
Air Pressure:	1013 hPa
Relative Humidity:	65.4 %

#### 4. Calibration Equipment:

Test Equipment	Type	Serial No.	Calibration Report Number	Traceable to
Multifunction Calibrator	B&K 4226	2288467	AV220061	HOKLAS
Sound Level Meter	RION NA-28	30721812	AV220120	HOKLAS

#### 5. Calibration Results

#### 5.1 Sound Pressure Level

Nominal value	Accept lower level dB	Accept upper level	Measured value
dB		dB	dB
94.0	93.6	94.4	94.0

#### Note:

The values given in this certification only related to the values measured at the time of the calibration.



Certificate No.: APJ23-090-CC002

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### Certificate of Calibration

for

Description:

Sound Level Meter

Manufacturer:

SVANTEK

Type No.:

SVAN 971 (Serial No.: C132261)

Microphone:

SV 7052E (Serial No.: 79778)

Preamplifier:

SVANTEK SV-18 (Serial No.:97276)

Submitted by:

Customer:

Acuity Sustainability Consulting Limited

Address:

Unit E, 12/F, Ford Glory Plaza,

Nos. 37-39 Wing Hong Street,

Cheung Sha Wan, Kowloon, Hong Kong

Upon receipt for calibration, the instrument was found to be:

✓ Within (31.5Hz – 4kHz)

Outside

the allowable tolerance.

The test equipment used for calibration are traceable to National Standards via:

- The Government of The Hong Kong Special Administrative Region Standard & Calibration Laboratory

Date of receipt: 19 October 2023

Date of calibration: 27 October 2023

Date of NEXT calibration: 26 October 2024

Calibrated by:

Calibration Technician

Certified by:

Mr. Ng Yan Wa Laboratory Manager

Date of issue: 27 October 2023

Certificate No.: APJ23-091-CC006

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Homepage: http://www.aa-lab.com E-mail:inquiry@aa-lab.com



#### 1. Calibration Precaution:

- The unit-under-test (UUT) was allowed to stabilize in the laboratory for over 24 hours, and switched on to warm up for over 10 minutes before the commencement of the test.
- The results presented are the mean of 3 measurements at each calibration point.

#### 2. Calibration Conditions:

Air Temperature:

22.6°C

Air Pressure:

1016 hPa

Relative Humidity:

65.3 %

#### 3. Calibration Equipment:

Type

Serial No.

Calibration Report Number

Traceable to

**Multifunction Calibrator** 

B&K 4226

2288467

AV220061

**HOKLAS** 

#### 4. Calibration Results

Sound Pressure Level

Reference Sound Pressure Level

Sett	ing of Ur	nit-under-t	est (UUT)	App	lied value	UUT Reading,	IEC 61672 Class 1
Range, dB	Freq. V	Veighting	Time Weighting	Level, dB	Frequency, Hz	dB	Specification, dB
25-124.9	dBA	SPL	Fast	94	1000	94.0	±0.4

#### Linearity

Sett	ing of Uni	t-under-t	est (UUT)	App	lied value	UUT Reading,	IEC 61672 Class 1
Range, dB	Freq. W	eighting	Time Weighting	Level, dB	Frequency, Hz	dB	Specification, dB
				94		94.0	Ref
25-124.9	dBA	BA SPL	Fast	104	1000	104.0	±0.3
				114		114.0	±0.3

#### Time Weighting

Setting of Unit-under-test (UUT)				Applied value		UUT Reading,	IEC 61672 Class 1
Range, dB	Freq. W	eighting	Time Weighting	Level, dB	Frequency, Hz	dB	Specification, dB
25-124.9	JD A	dBA SPL	Fast	94	1000	94.0	Ref
23-124.9	UDA SPL	SPL	Slow			94.0	±0.3

Certificate No.: APJ23-091-CC006

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#### Frequency Response

Linear Response

Set	ting of	Unit-under-t	est (UUT)	Арр	lied value	UUT Reading,	IEC 61672 Class
Range, dB	Freq.	Weighting	Time Weighting	Level, dB	Frequency, Hz	dB	Specification, dB
			Fast	94	31.5	94.4	±2.0
	JD CDI				63	94.3	±1.5
		SPL			125	94.2	±1.5
25-124.9					250	94.1	±1.4
23-124.9	dB				500	94.1	±1.4
					1000	94.0	Ref
					2000	93.8	±1.6
					4000	93.3	±1.6

A-weighting

Set	ting of Unit-under-	test (UUT)	App	lied value	UUT Reading,	IEC 61672 Class 1 Specification, dB
Range, dB	Freq. Weighting	Time Weighting	Level, dB	Frequency, Hz	dB	
		Fast	94	31.5	55.1	-39.4 ±2.0
				63	68.1	-26.2 ±1.5
				125	78.1	-16.1 ±1.5
25-124.9	dBA SPL			250	85.5	-8.6 ±1.4
23-124.9	UDA SEL			500	90.8	-3.2 ±1.4
				1000	94.0	Ref
				2000	95.0	+1.2 ±1.6
				4000	94.3	+1.0 ±1.6

C-weighting

Se	tting of U	nit-under-	test (UUT)	App	lied value	UUT Reading,	IEC 61672 Class	
Range, dB	Freq. W	eighting/	Time Weighting	Level, dB	Frequency, Hz	dB	Specification, dB	
					31.5	91.4	-3.0 ±2.0	
					63	93.4	-0.8 ±1.5	
			Fast	94	125	94.0	-0.2 ±1.5	
25 124 0	dBC	SPL			250	94.1	-0.0 ±1.4	
25-124.9	abc				500	94.1	-0.0 ±1.4	
					1000	94.0	Ref	
					2000	93.6	-0.2 ±1.6	
					4000	92.5	-0.8 ±1.6	

Certificate No.: APJ23-091-CC006



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#### 5. Calibration Results Applied

The results apply to the particular unit-under-test only. All calibration points are within manufacture's specification as IEC 61672 Class 1.

Uncertainties of Applied Value:

94 dB	31.5 Hz	± 0.10
	63 Hz	± 0.10
	125 Hz	± 0.05
	250 Hz	± 0.05
	500 Hz	± 0.05
	1000 Hz	± 0.05
	2000 Hz	± 0.05
	4000 Hz	± 0.05
104 dB	1000 Hz	± 0.05
114 dB	1000 Hz	± 0.05

The uncertainties are evaluated for a 95% confidence level.

#### Note:

The values given in this certification only related to the values measured at the time of the calibration and any uncertainties quoted will not allow for the equipment long-term drift, variations with environmental changes, vibration and shock during transportation, overloading, mis-handling, or the capability of any other laboratory to repeat the calibration. (A+A)\*L shall not be liable for any loss or damage resulting from the use of the equipment.

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### Appendix F

Event / Action Plan for Noise Exceedance





#### **Event and Action Plan for Construction Noise Monitoring**

Event	Action								
	ET	1	EC	ER		Cor	itractor		
Action Level			submitted by the ET		Confirm receipt of Notification of Exceedance in writing     Require Contractor to propose remedial measures for the analysed noise problem     Ensure remedial measures are properly implemented		Submit noise mitigation proposals, if required, to the IEC and ER     Implement noise mitigation proposals.		
mit Level		1. Notify IEC, ER, EPD and Contractor 2. Identify the source(s) of impact by reviewing all the relevant monitoring data and the corresponding construction activities. Exceedances should also be confirmed by immediate verification in the field as far as practical. 3. Repeat measurement to confirm findings 4. Increase monitoring frequency 5. Carry out analysis of Contractor's working procedures to determine possible mitigation to be implemented inform IEC, ER and EPD the cause & actions taken for the exceedances 7. Assess effectiveness of Contractor's remedial actions and keep IEC, EPD a ER informed of the results 8. If exceedance stops, cease additional monitoring.		2. 3. 4. 5.	Confirm receipt of notification of exceedance in writing Notify Contractor Require Contractor to propose remedial measures for the analyzed noise problem Ensure remedial measures are properly implemented If exceedance continuous, consider what portion of the work is responsible and instruct the Contractor to stop that portion of work until the exceedance is aborted	2. Id	Take immediate action to avoid furthe exceedance dentify practicable measures to minimize the noise impact. Submit proposals for remedial actions to ER within three working days of notification implement the agreed proposals desubmit proposal if problem still no under control top the relevant portion of works as determined by the ER until the exceedance is abated		





### Appendix G

Noise Monitoring Data





Table G1 Summary of Noise Monitoring Result

					Leq-5min	, dB(A)			$L_{eq-30min}$	L <sub>10-30mins</sub> ,	L <sub>90-30mins</sub>	Limit	
Date	Time	Weather	Reading (1)	Reading (2)	Reading (3)	Reading (4)	Reading (5)	Reading (6)	dB(A)	dB(A)	dB(A)	Level, dB(A)*	Noise Meter
02/09/2024	10:05 - 10:35	Fine	67.9	68.0	68.8	68.3	67.9	68.3	68.2	71.4	66.0	70.0	SVANTEK 971
07/09/2024	11:00 - 11:30	Fine	67.4	64.5	66.8	65.2	66.9	65.2	66.1	69.9	62.9	70.0	SVANTEK 971
13/09/2024	10:00 - 10:30	Fine	65.3	66.8	65.5	67.3	68.3	68.9	67.2	71.0	64.2	70.0	SVANTEK 971
19/09/2024	10:05 - 10:35	Fine	67.2	65.0	64.2	65.3	66.9	65.2	65.8	70.9	62.5	70.0	SVANTEK 971
25/09/2024	10:00 - 10:30	Fine	68.2	68.5	68.1	68.5	68.9	67.0	68.2	71.0	62.9	70.0	SVANTEK 971

<sup>\*</sup>The Limit Level for education institutions is 65 dB(A) during examination period.





### Appendix H

Waste Flow Table





#### **Appendix H - Waste Flow Table**

	Ac	ctual Quantitie	es of Inert C&D	Materials Ger	nerated Month	ıly	Actual	Quantities of N	on-C&D Wast	es Generated l	Monthly
Month	Total Quantity Generated	Hard Rock and Large Broken Concrete	Reused in the Contract	Reused in other Project	Disposed as Public Fill	Imported Fill	Metals	Paper / Cardboard packaging	Plastics	Chemical Waste	Other, e.g., general refuse
	(in '000m <sup>3</sup> )	(in '000m <sup>3</sup> )	(in '000m <sup>3</sup> )	(in '000m <sup>3</sup> )	(in '000m <sup>3</sup> )	(in '000m <sup>3</sup> )	(in'000kg)	(in'000kg)	(in'000kg)	(in'000kg)	(in '000m3)
Jan 2024	0.280	0.000	0.264		0.016	0.029		0.061			0.003
Feb 2024	0.135	0.000	0.135		0.000	0.010		0.042			0.002
Mar 2024	0.313	0.000	0.020		0.293	0.000		0.023			0.001
Apr 2024	0.119	0.000	0.030		0.089	0.028		0.031			0.002
May 2024	0.099	0.000	0.021		0.078	0.015		0.025			0.003
Jun 2024	0.462	0.000	0.035		0.427	0.030		0.041			0.004
Sub-total	1.408	0.000	0.505	0.000	0.903	0.112	0.000	0.223	0.000	0.000	0.015
Jul 2024	0.029	0.029	0.000		0.000	0.000		0.021			0.005
Aug 2024	0.110	0.000	0.000		0.110	0.000		0.030			0.090
Sep 2024	0.000	0.000	0.000		0.000	0.000		0.025			0.042
Oct 2024											
Nov 2024											
Dec 2024											
Total	1.547	0.000	0.505	0.000	1.013	0.112	0.000	0.299	0.000	0.000	0.152

#### Notes:

Total quantity Generated only refers to the actual Quantitates of inert C&D materials generated monthly excluding those that will be recycled (Hard rock & large broken concrete, reused in contract and reused in another contract). Imported fill will not be included in total quantity generated as those C&D materials are not generated from this project.

<sup>2)</sup> The waste flow table shall also include C&D materials that are specified in the Contract to be imported for use at the Site.

<sup>3)</sup> Plastics refer to plastic bottles/containers, plastic sheets/foam from packaging materials.





### Appendix I

Landfill Gas Monitoring Equipment Calibration Certificate

#### Contract No. 13/WSD/16 Mainlaying in Tseung Kwan O Monthly EM&A Report





According to the Contractors, all pits or trenches were backfilled and undergo reinstatement. The landfill gas monitoring was ceased from February 2024.





### Appendix J

Landfill Gas Monitoring Data

#### Contract No. 13/WSD/16 Mainlaying in Tseung Kwan O Monthly EM&A Report





According to the Contractors, all pits or trenches were backfilled and undergo reinstatement. The landfill gas monitoring was ceased from February 2024.





### Appendix K

Complaint Log and Regulatory Compliance Proforma





#### Table K-1 Statistical Summary of Environmental Complaints

Reporting Period	Environmental Complaint Statistics						
Reporting 1 eriou	Frequency	Cumulative	Complaint Nature				
1 – 30 September 2024	0	5	N/A				

#### <u>Table K-2 Statistical Summary of Environmental Summons</u>

Reporting Period	Environmental Summons Statistics						
	Frequency	Cumulative	Details				
1 – 30 September 2024	0	0	N/A				

#### <u>Table K-3</u> Statistical Summary of Environmental Prosecution

Donovting Poriod	Environmental Prosecution Statistics						
Reporting Period	Frequency	Cumulative	Details				
1 – 30 September 2024	0	0	N/A				





### Appendix L

Site Inspection Proforma





#### WEEKLY ENVIRONMENTAL INSPECTION CHECKLIST

Inspection D	Contractor: Calvin Chik	WSD: _ IEC:	T.C Lau	<u> </u>			
Inspection Ti	ime:						
Weather Condition	Sunny Fine Overcast Drizzle Rain	Stor	rm	Hazy			
Temperatur	The State St	Lov	W				
Wind	Calm Light Breeze Strong						
		N/A	Yes	No		Remarks	
0.00 Ger	neral	14/11	103	110		Cinarks	
0.01 Is	the current Environmental Permit displayed conspicuously at all vehicle site strances/exits for public's information at any time?		<b>√</b>				
1.00 Cor	nstruction Dust						_
	re dusty materials, such as excavated materials, building debris and construction aterials, and exposed earth surface properly covered to prevent dust emission?		<b>√</b>				
1.02 Ar	re screenings, enclosures, water spraying, or vacuum cleaning devices provided to dusty						
	onstruction works for dust suppression?		✓				
1.03 Aı	re fumes or smoke emitting plants or construction activities shielded by a screen?		<b>√</b>				
1.04 Aı	re wheel-washing facilities with high-pressure water jets provided at all sites exits?	<b>√</b>					
1.05 Is	wheel-washing provided to all vehicles leaving the site?	<b>√</b>					
1.06 Aı	re road section near the site exit free from dusty material?		<b>√</b>				
	re all main haul roads inside the site paved or sprayed with water to minimize dust nission during vehicle movement?		<b></b>				
	re water spraying provided immediately prior to any loading or transfer of dusty						_
	aterials?	<b>√</b>					
	re covers provided to all dump trucks carrying dusty materials when entering and leaving e site?		<b>√</b>				
1.10 Aı	re the working areas for uprooting of trees, shrubs, or vegetation or the removal of						
bo	oulders, poles, pillars sprayed with water to maintain the entire surface wet?		✓				
1.11 Is sit	exposed earth properly treated within six months after the last construction activity on the?		<b>√</b>				
1.12 Do	oes the operation of plants on site free form dark smoke emission?		<b>√</b>				
1.13 Aı	re vehicles travelling at speed not exceeding 15km/hr within the site?	$\overline{\Box}$	<b></b>				_
	re stock of more than 20 bags of cement or day PFA covered or sheltered on top and 3 des?		<b>√</b>				_
	re de-bagging, batching and mixing processes of bagged cement carried out in sheltered		<b>√</b>				_
	re hoardings of at least 2.4m high provided along the site boundary adjoining areas						_
	cessible by the public?	<b>√</b>					
1.17 Is	open burning prohibited?						
					_		=





		N/A	Yes	No	Remarks
2.00	Construction Noise (Airborne)	<b>—</b>			
2.01	Are quiet plants adopted on site?		✓		
2.02	Are the PMEs operating on site well-maintained to minimize the generation of excessive				
	noise?		<b>√</b>		
2.03	Are plants throttled down or turned off when not in use?		<b>√</b>		
2.04	Are the plants known to emit noise strongly in one direction oriented to face away from	ļ ,			
	NSRs?		✓		
2.05	Are moveable barriers provided to screen NSRs from plant or noisy operations?	<b>√</b>			
2.06	Are silencers, mufflers and enclosures provided to plants?		<b>√</b>		
2.07	Are the hoods, cover panels and inspection hatches of PMEs closed during operation?		<b>√</b>		
2.08	Are purposely-built site hoarding construction with appropriate materials provided along				
	the site boundary?				
2.09	Are noisy operation properly scheduled to minimize exposure and cumulative impacts to nearby sensitive receivers?	<b>J</b>			
2.10	· · · · · · · · · · · · · · · · · · ·				
	Are valid noise emission label(s) affixed to all hand-held breakers operating on site?	<u></u>			
2.11	Are valid noise emission label(s) affixed to all air compressors operating on site?	<b>✓</b>			
2.12	Are all construction noise permit(s) applied for percussive piling work?	<b>√</b>			
2.13	Are construction noise permit(s) applied for general construction works during restricted				
	hours?		✓		
2.14	Are valid construction noise permit(s) displayed at all vehicular exits?		<b>✓</b>		
3.00	Water Quality				
3.01	Is effluent discharge license obtained for wastewater discharge from site?	<b>✓</b>			
3.02	Is effluent discharged according to the effluent discharge license?	<b>√</b>			
3.03	Is wastewater discharge from site properly treated prior to discharge?	<b>V</b>			
3.04	Are perimeter channels provided to intercept storm runoff from outside the site?	<b>√</b>			
3.05	Are sand/silt removal facilities such as sand/silt traps and sediment basins provided to				
	remove sand/silt particles from runoff?	<b>✓</b>			
3.06	Is surface runoff diverted to sedimentation facilities?	<b>✓</b>			
3.07	Is the drainage system properly maintained?		<b>√</b>		
3.08	Are construction works carefully programmed to minimize soil excavation works during				
	rainy seasons?		<b>√</b>		
3.09	Are exposed soil surface protected by paving as soon as possible to reduce the potential of				
	soil erosion?	<b>✓</b>			
3.10	Are temporary access roads protected by crushed gravel?	<b>√</b>			
3.11	Is transh aveguation avoided in the wat season as for as practicable, or if recessor.				
	Is trench excavation avoided in the wet season as far as practicable, or if necessary, backfilled in short sections after excavation?		$\sqrt{}$		
		ı ——			





		N/A	Yes	No	Remarks
3.12	Are exposed slope surface properly protected?	<b>✓</b>			
3.13	Are open stockpiles of construction materials on site covered by tarpaulin or similar fabric				
	during construction?	V			
3.14	Is runoff from wheel-washing facilities avoided?	<b>✓</b>			
3.15	Is oil leakage or spillage prevented?		<b>√</b>		
3.16	Are there any measures to prevent the release of oil and grease into the storm drainage				
	system?		$\checkmark$		
3.17	Are the oil interceptors/ grease traps properly maintained?		<b>√</b>		
3.18	Are debris and rubbish generated on site collected, handled and disposed of properly to				
	avoid them entering the streams?		$\checkmark$		
3.19	Are all fuel tanks and storage areas provided with locks and be sited on sealed areas, within				
	bunds of capacity equal to 110% of the storage capacity of the largest tank?		<b>√</b>		
3.20	Are tanks, containers, storage area bunded and the locations locked as far as possible from				
	the sensitive watercourse and stormwater drains?		<b>√</b>		
3.21	Are sufficient chemical toilets provided on site to handle sewage from construction work				
	force?	V			
3.22	Are sewage disposal and toilet maintenance of the portable chemical toilets provided by				
	the licensed contractors?	V			
3.23	Is concrete washing water properly collected and treated prior to discharge?	<b>√</b>			
4.00	Waste Management				
4.01	Is a trip-ticket system implemented to monitor the disposal of C&D and solid wastes at				
	public filling facilities and landfills?		<b>√</b>		-
4.02	Is a recording system implemented to record the amount of wastes generated, recycled and				
	disposed of?		<b>✓</b>		
4.03	Is chemical waste separated from other waste and collected by a licensed chemical waste				
	collector?		V		
4.04	Are trip tickets for chemical waste disposal available for inspection?		<b>√</b>		
4.05	Is chemical waste reused and recycled on site as far as practicable?		<b>√</b>		
4.06	Are all containers for chemical waste properly labelled?		<b>√</b>		
4.07	Is drip tray provided for chemical storage?		<b>✓</b>		
4.08	Is chemical waste storage area used solely for storage of chemical waste and properly		<b>/</b>		
	labelled?				-
4.09	Are incompatible chemical wastes stored in different areas?		<b>√</b>		
4.10	Is the chemical waste storage area enclosed on at least 3 sides and adequately ventilated?		<b>✓</b>		
4.11	Is an impermeable floor and bunding, of capacity to accommodate 110% of the volume of				
	the largest container or of 20% by volume of the chemical waste stored in that area,				
	whichever is the greatest, provide?		<b>L</b>		
4.12	Is a routine cleaning and maintenance programme implemented for drainage systems,				
	sump pits, and oil interceptors?		✓		-





		N/A	Yes	No	Remarks
4.13	Are sufficient general refuse disposal/collection points provided on site?		<b>√</b>		
4.14	Is general refuse disposed of properly and regularly?		<b>√</b>		
4.15	Are appropriate measures adopted to minimize windblown litter and dust during				
	transportation of waste?		<b>✓</b>		
4.16	Are individual collectors for aluminum cans, plastic bottles and packaging material and				
	office paper provided to encourage waste segregation?		<b>✓</b>		
4.17	Are C&D wastes sorted on site?		<b>√</b>		
4.18	Are C&D waste disposed of properly?		<b>√</b>		
4.19	Are unused C&D materials or chemicals recycled or reused to reduce the quantity of				
	waste?		<b>✓</b>		
4.20	Are public fill and C&D waste reuse on site as far as practicable to avoid disposal off-site?		<b>√</b>		
4.21	Are the construction materials stored properly to minimize the potential for damage or				
	contamination?		<u> </u>		
4.22	Is a dumping license obtained to deliver public fill to public filling areas?		<b>✓</b>		
5.00	Landscape and Visual				
5.01	Are Is site hoarding provided?	<b>✓</b>			
5.02	Are vegetation disturbance minimized or soil protected to reduce potential soil erosion?		<b>√</b>		
5.03	Is construction light oriented away from the sensitive receivers?		<b>√</b>		
5.04	Is grass hydroseeding provided to slopes as soon as the completion of works?		<b>√</b>		
5.05	Are damages to trees outside site boundary due construction works avoided?		<b>√</b>		
5.06	Are excavation works carried out manually instead of machinery operation within 2.5m				
	vicinity of any preserved trees?	<b>✓</b>			
5.07	Are the retained and transplanted tree(s) properly protected and in good conditions?		<b>√</b>		
5.08	Are surgery works carried out for damaged trees?	<b>√</b>			
6.00	Ecology				
6.01	Is site runoff properly treated to prevent any silly runoff?	<b>✓</b>			
6.02	Are silt trap installed and well-maintained?	<b>√</b>			
6.03	Are stockpiles properly covered to avoid generating silty runoff?	<b>✓</b>			
6.04	Are construction works restricted to works area which are clearly defined?		<b>√</b>		
7.00	Overall				
7.01	Is the EM&A properly implemented in general?		✓		



# aurecon

nark / Obse	rvation(s) /	Recommendation and	l Non-compli	iance(s) of Week	ly Site Inspection			
Site	e Insp	pection D	ate:	5 Se	202	J.f		
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					-			
				ı				
Signatu	res:		<del></del>					
ET	1 ,	Contractor's		WSD's		IEC's		
Represe	ntative	Representativ	/e	Representati	ve	Representa	ntive	
	100.	( )m	J ,	1/1				
(Name:	Toby Wa	Wame:Cal	vin Ohile	(Name: 7.	Lan )	(Name:	)	<u></u>





#### WEEKLY ENVIRONMENTAL INSPECTION CHECKLIST

Inspection Date: 12 September 2024  Inspected by: ET: Toby Wan  Contractor: Calvin Chik	w <sub>SD:</sub> W.S Chan iec:
nspection Time: 5.30 Weather	
Condition Sunny Fine Overcast Drizzle Rain	Storm
Temperature 29 C Humidity High Moderate	e Low
Wind Light Breeze Strong	
	N/A Yes No Remarks
0.00 General	
0.01 Is the current Environmental Permit displayed conspicuously at all vehicle site entrances/exits for public's information at any time?	
1.00 Construction Dust	
1.01 Are dusty materials, such as excavated materials, building debris and construction materials, and exposed earth surface properly covered to prevent dust emission?	
1.02 Are screenings, enclosures, water spraying, or vacuum cleaning devices provided to dusty	
construction works for dust suppression?	
Are fumes or smoke emitting plants or construction activities shielded by a screen?	
1.04 Are wheel-washing facilities with high-pressure water jets provided at all sites exits?	
1.05 Is wheel-washing provided to all vehicles leaving the site?	✓ □ □
1.06 Are road section near the site exit free from dusty material?	
1.07 Are all main haul roads inside the site paved or sprayed with water to minimize dust emission during vehicle movement?	
1.08 Are water spraying provided immediately prior to any loading or transfer of dusty	
materials?	
1.09 Are covers provided to all dump trucks carrying dusty materials when entering and leaving the site?	
1.10 Are the working areas for uprooting of trees, shrubs, or vegetation or the removal of	
boulders, poles, pillars sprayed with water to maintain the entire surface wet?	
1.11 Is exposed earth properly treated within six months after the last construction activity on	
site?	
1.12 Does the operation of plants on site free form dark smoke emission?	
1.13 Are vehicles travelling at speed not exceeding 15km/hr within the site?	
1.14 Are stock of more than 20 bags of cement or day PFA covered or sheltered on top and 3 sides?	
1.15 Are de-bagging, batching and mixing processes of bagged cement carried out in sheltered	
areas?	
1.16 Are hoardings of at least 2.4m high provided along the site boundary adjoining areas	<u> </u>
accessible by the public?	
1.17 Is open burning prohibited?	
1	<u> </u>





		N/A	Yes	No	Remarks
2.00	Construction Noise (Airborne)	<b>—</b>			
2.01	Are quiet plants adopted on site?		✓		
2.02	Are the PMEs operating on site well-maintained to minimize the generation of excessive				
	noise?		✓		
2.03	Are plants throttled down or turned off when not in use?		<b>√</b>		
2.04	Are the plants known to emit noise strongly in one direction oriented to face away from				
	NSRs?		✓		
2.05	Are moveable barriers provided to screen NSRs from plant or noisy operations?	<b>√</b>			
2.06	Are silencers, mufflers and enclosures provided to plants?		<b>√</b>		
2.07	Are the hoods, cover panels and inspection hatches of PMEs closed during operation?		<b>√</b>		
2.08	Are purposely-built site hoarding construction with appropriate materials provided along				
	the site boundary?			Ш	
2.09	Are noisy operation properly scheduled to minimize exposure and cumulative impacts to nearby sensitive receivers?	<b>√</b>			
2.10	Are valid noise emission label(s) affixed to all hand-held breakers operating on site?	<b>V</b>			
2.11	Are valid noise emission label(s) affixed to all air compressors operating on site?	<b>_</b>			
2.12	Are all construction noise permit(s) applied for percussive piling work?	<b>√</b>			
2.13	Are construction noise permit(s) applied for general construction works during restricted	<b></b>			
	hours?		$\checkmark$		
2.14	Are valid construction noise permit(s) displayed at all vehicular exits?		<b>√</b>		
3.00	Water Quality				
3.01	Is effluent discharge license obtained for wastewater discharge from site?	lacksquare			
3.02	Is effluent discharged according to the effluent discharge license?	<b>√</b>			
3.03	Is wastewater discharge from site properly treated prior to discharge?	<b>V</b>			
3.04	Are perimeter channels provided to intercept storm runoff from outside the site?	<b>√</b>			
3.05	Are sand/silt removal facilities such as sand/silt traps and sediment basins provided to				
	remove sand/silt particles from runoff?	<b>✓</b>			
3.06	Is surface runoff diverted to sedimentation facilities?	<b>✓</b>			
3.07	Is the drainage system properly maintained?		<b>√</b>		
3.08	Are construction works carefully programmed to minimize soil excavation works during				<u> </u>
	rainy seasons?		<b>√</b>		
3.09	Are exposed soil surface protected by paving as soon as possible to reduce the potential of				
	soil erosion?	<b>✓</b>			
3.10	Are temporary access roads protected by crushed gravel?	<b>√</b>			
3.11	Is trench excavation avoided in the wet season as far as practicable, or if necessary,				
	backfilled in short sections after excavation?		<b>√</b>		
		i ——			





		N/A	Yes	No	Remarks
3.12	Are exposed slope surface properly protected?	<b>✓</b>			
3.13	Are open stockpiles of construction materials on site covered by tarpaulin or similar fabric				
	during construction?	V			
3.14	Is runoff from wheel-washing facilities avoided?	<b>✓</b>			
3.15	Is oil leakage or spillage prevented?		<b>√</b>		
3.16	Are there any measures to prevent the release of oil and grease into the storm drainage				
	system?		$\checkmark$		
3.17	Are the oil interceptors/ grease traps properly maintained?		<b>√</b>		
3.18	Are debris and rubbish generated on site collected, handled and disposed of properly to				
	avoid them entering the streams?		$\checkmark$		
3.19	Are all fuel tanks and storage areas provided with locks and be sited on sealed areas, within				
	bunds of capacity equal to 110% of the storage capacity of the largest tank?		<b>√</b>		
3.20	Are tanks, containers, storage area bunded and the locations locked as far as possible from				
	the sensitive watercourse and stormwater drains?		<b>√</b>		
3.21	Are sufficient chemical toilets provided on site to handle sewage from construction work				
	force?	V			
3.22	Are sewage disposal and toilet maintenance of the portable chemical toilets provided by				
	the licensed contractors?	V			
3.23	Is concrete washing water properly collected and treated prior to discharge?	<b>√</b>			
4.00	Waste Management				
4.01	Is a trip-ticket system implemented to monitor the disposal of C&D and solid wastes at				
	public filling facilities and landfills?		<b>√</b>		-
4.02	Is a recording system implemented to record the amount of wastes generated, recycled and				
	disposed of?		<b>✓</b>		
4.03	Is chemical waste separated from other waste and collected by a licensed chemical waste				
	collector?		V		
4.04	Are trip tickets for chemical waste disposal available for inspection?		<b>√</b>		
4.05	Is chemical waste reused and recycled on site as far as practicable?		<b>√</b>		
4.06	Are all containers for chemical waste properly labelled?		<b>√</b>		
4.07	Is drip tray provided for chemical storage?		<b>✓</b>		
4.08	Is chemical waste storage area used solely for storage of chemical waste and properly		<b>/</b>		
	labelled?				-
4.09	Are incompatible chemical wastes stored in different areas?		<b>√</b>		
4.10	Is the chemical waste storage area enclosed on at least 3 sides and adequately ventilated?		<b>✓</b>		
4.11	Is an impermeable floor and bunding, of capacity to accommodate 110% of the volume of				
	the largest container or of 20% by volume of the chemical waste stored in that area,				
	whichever is the greatest, provide?		<b>L</b>		
4.12	Is a routine cleaning and maintenance programme implemented for drainage systems,				
	sump pits, and oil interceptors?		✓		-





		N/A	Yes	No	Remarks
4.13	Are sufficient general refuse disposal/collection points provided on site?		<b>√</b>		
4.14	Is general refuse disposed of properly and regularly?		<b>√</b>		
4.15	Are appropriate measures adopted to minimize windblown litter and dust during				
	transportation of waste?		<b>✓</b>		
4.16	Are individual collectors for aluminum cans, plastic bottles and packaging material and				
	office paper provided to encourage waste segregation?		<b>✓</b>		
4.17	Are C&D wastes sorted on site?		<b>✓</b>		
4.18	Are C&D waste disposed of properly?		<b>√</b>		
4.19	Are unused C&D materials or chemicals recycled or reused to reduce the quantity of				
	waste?		<b>✓</b>		
4.20	Are public fill and C&D waste reuse on site as far as practicable to avoid disposal off-site?		<b>√</b>		
4.21	Are the construction materials stored properly to minimize the potential for damage or				
	contamination?		<b>✓</b>		
4.22	Is a dumping license obtained to deliver public fill to public filling areas?		<b>✓</b>		
5.00	Landscape and Visual				
5.01	Are Is site hoarding provided?	<b>✓</b>			
5.02	Are vegetation disturbance minimized or soil protected to reduce potential soil erosion?		<b>√</b>		
5.03	Is construction light oriented away from the sensitive receivers?		<b>√</b>		
5.04	Is grass hydroseeding provided to slopes as soon as the completion of works?		<b>√</b>		
5.05	Are damages to trees outside site boundary due construction works avoided?		<b>√</b>		
5.06	Are excavation works carried out manually instead of machinery operation within 2.5m				
	vicinity of any preserved trees?	<b>✓</b>			
5.07	Are the retained and transplanted tree(s) properly protected and in good conditions?		<b>√</b>		
5.08	Are surgery works carried out for damaged trees?	<b>√</b>			
6.00	Ecology				
6.01	Is site runoff properly treated to prevent any silly runoff?	<b>✓</b>			
6.02	Are silt trap installed and well-maintained?	<b>✓</b>			
6.03	Are stockpiles properly covered to avoid generating silty runoff?	<b>✓</b>			
6.04	Are construction works restricted to works area which are clearly defined?		<b>✓</b>		
7.00	Overall	$\lfloor - \rfloor$			
7.01	Is the EM&A properly implemented in general?		✓		



# aurecon

Remark / Observation(s) / Reco	mmendation and Non-complia	ance(s) of Weekly Site Inspection	on:	
Site Inspect	ion Date =	12 Sep 2024		
No major obs	pervation was f	ound during site	c inspection.	
				İ
Signatures:				
ET Representative	Contractor's Representative		IEC's Representative	,
(Name: Toby Wan)	(Name: Calvia Chil)	(Name: V, S, Cham)	(Name: )	





#### WEEKLY ENVIRONMENTAL INSPECTION CHECKLIST

Inspection Date: 19 September 2024 Inspected by: ET: Toby Wan Contractor: Calvin Chik	WSD: IEC:
tilspection Time.	
Weather  Condition  Sunny  Fine  Overcast  Drizzle  Rain  Temperature  30   C  Humidity  High  ✓ Moderate	Storm Hazy
Wind Calm Light Breeze Strong	LUW
	N/A Yes No Remarks
0.00 General	
0.01 Is the current Environmental Permit displayed conspicuously at all vehicle site entrances/exits for public's information at any time?	
1.00 Construction Dust	
1.01 Are dusty materials, such as excavated materials, building debris and construction materials, and exposed earth surface properly covered to prevent dust emission?	
1.02 Are screenings, enclosures, water spraying, or vacuum cleaning devices provided to dusty	
construction works for dust suppression?	
Are fumes or smoke emitting plants or construction activities shielded by a screen?	
Are wheel-washing facilities with high-pressure water jets provided at all sites exits?	
Is wheel-washing provided to all vehicles leaving the site?	
1.06 Are road section near the site exit free from dusty material?	✓ □ □
1.07 Are all main haul roads inside the site paved or sprayed with water to minimize dust emission during vehicle movement?	
1.08 Are water spraying provided immediately prior to any loading or transfer of dusty	
materials?	
1.09 Are covers provided to all dump trucks carrying dusty materials when entering and leaving the site?	✓ □ □
1.10 Are the working areas for uprooting of trees, shrubs, or vegetation or the removal of	
boulders, poles, pillars sprayed with water to maintain the entire surface wet?	
1.11 Is exposed earth properly treated within six months after the last construction activity on site?	
1.12 Does the operation of plants on site free form dark smoke emission?	
1.13 Are vehicles travelling at speed not exceeding 15km/hr within the site?	
1.14 Are stock of more than 20 bags of cement or day PFA covered or sheltered on top and 3 sides?	
1.15 Are de-bagging, batching and mixing processes of bagged cement carried out in sheltered areas?	
1.16 Are hoardings of at least 2.4m high provided along the site boundary adjoining areas	<del>                                     </del>
accessible by the public?	✓ □ □ <u> </u>
1.17 Is open burning prohibited?	✓ □ □ □





		N/A	Yes	No	Remarks
2.00	Construction Noise (Airborne)				
2.01	Are quiet plants adopted on site?	✓			
2.02	Are the PMEs operating on site well-maintained to minimize the generation of excessive				
	noise?	<b>✓</b>			
2.03	Are plants throttled down or turned off when not in use?	<b>√</b>			
2.04	Are the plants known to emit noise strongly in one direction oriented to face away from				
	NSRs?	✓			
2.05	Are moveable barriers provided to screen NSRs from plant or noisy operations?	<b>✓</b>			-
2.06	Are silencers, mufflers and enclosures provided to plants?	<b>✓</b>			
2.07	Are the hoods, cover panels and inspection hatches of PMEs closed during operation?	<b>✓</b>			
2.08	Are purposely-built site hoarding construction with appropriate materials provided along the site boundary?	<b>✓</b>			
2.09	Are noisy operation properly scheduled to minimize exposure and cumulative impacts to				
	nearby sensitive receivers?				
2.10	Are valid noise emission label(s) affixed to all hand-held breakers operating on site?	<b>√</b>			
2.11	Are valid noise emission label(s) affixed to all air compressors operating on site?	<b>✓</b>			
2.12	Are all construction noise permit(s) applied for percussive piling work?	<b>√</b>			
2.13	Are construction noise permit(s) applied for general construction works during restricted				
	hours?	✓			
2.14	Are valid construction noise permit(s) displayed at all vehicular exits?	<b>✓</b>			-
3.00	Water Quality				
3.01	Is effluent discharge license obtained for wastewater discharge from site?	<b>✓</b>		Ш	
3.02	Is effluent discharged according to the effluent discharge license?	<b>√</b>			
3.03	Is wastewater discharge from site properly treated prior to discharge?	<b>✓</b>			
3.04	Are perimeter channels provided to intercept storm runoff from outside the site?	<b>✓</b>			
3.05	Are sand/silt removal facilities such as sand/silt traps and sediment basins provided to				
_	remove sand/silt particles from runoff?	<b>✓</b>			
3.06	Is surface runoff diverted to sedimentation facilities?	<b>✓</b>			
3.07	Is the drainage system properly maintained?		<b>√</b>		
3.08	Are construction works carefully programmed to minimize soil excavation works during				
	rainy seasons?				
3.09	Are exposed soil surface protected by paving as soon as possible to reduce the potential of				
	soil erosion?	<b>√</b>			
3.10	Are temporary access roads protected by crushed gravel?	<b>✓</b>			
3.11	Is trench excavation avoided in the wet season as far as practicable, or if necessary,				
	backfilled in short sections after excavation?	<b>√</b>			



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		N/A	Yes	No	Remarks
3.12	Are exposed slope surface properly protected?	<b>✓</b>			
3.13	Are open stockpiles of construction materials on site covered by tarpaulin or similar fabric				
	during construction?	<b>✓</b>			
3.14	Is runoff from wheel-washing facilities avoided?	<b>✓</b>			
3.15	Is oil leakage or spillage prevented?	<b>√</b>			
3.16	Are there any measures to prevent the release of oil and grease into the storm drainage				
	system?	<b>✓</b>			
3.17	Are the oil interceptors/ grease traps properly maintained?	<b></b>			
3.18	Are debris and rubbish generated on site collected, handled and disposed of properly to				
	avoid them entering the streams?		$\checkmark$		
3.19	Are all fuel tanks and storage areas provided with locks and be sited on sealed areas, within				
	bunds of capacity equal to 110% of the storage capacity of the largest tank?				
3.20	Are tanks, containers, storage area bunded and the locations locked as far as possible from				
	the sensitive watercourse and stormwater drains?				
3.21	Are sufficient chemical toilets provided on site to handle sewage from construction work				
	force?	lacksquare			
3.22	Are sewage disposal and toilet maintenance of the portable chemical toilets provided by				
	the licensed contractors?	<b>✓</b>			
3.23	Is concrete washing water properly collected and treated prior to discharge?	<b>√</b>			
4.00	Waste Management				
4.01	Is a trip-ticket system implemented to monitor the disposal of C&D and solid wastes at				
	public filling facilities and landfills?		<b>V</b>		
4.02	Is a recording system implemented to record the amount of wastes generated, recycled and				
	disposed of?		<b>V</b>		
4.03	Is chemical waste separated from other waste and collected by a licensed chemical waste		./		
	collector?				
4.04	Are trip tickets for chemical waste disposal available for inspection?		<b>√</b>		
4.05	Is chemical waste reused and recycled on site as far as practicable?		<b>√</b>		
4.06	Are all containers for chemical waste properly labelled?		<b>√</b>		
4.07	Is drip tray provided for chemical storage?		<b>✓</b>		
4.08	Is chemical waste storage area used solely for storage of chemical waste and properly		<b>√</b>		
	labelled?				
4.09	Are incompatible chemical wastes stored in different areas?		<b>✓</b>		
4.10	Is the chemical waste storage area enclosed on at least 3 sides and adequately ventilated?		<b>√</b>		
4.11	Is an impermeable floor and bunding, of capacity to accommodate 110% of the volume of				
	the largest container or of 20% by volume of the chemical waste stored in that area,				
	whichever is the greatest, provide?		<b>√</b>		
4.12	Is a routine cleaning and maintenance programme implemented for drainage systems,				
	sump pits, and oil interceptors?		✓		





		N/A	Yes	No	Remarks
4.13	Are sufficient general refuse disposal/collection points provided on site?		<b>√</b>		
4.14	Is general refuse disposed of properly and regularly?		<b>√</b>		
4.15	Are appropriate measures adopted to minimize windblown litter and dust during				
	transportation of waste?		<b>√</b>		
4.16	Are individual collectors for aluminum cans, plastic bottles and packaging material and				
	office paper provided to encourage waste segregation?		<b>√</b>		
4.17	Are C&D wastes sorted on site?		<b>√</b>		
4.18	Are C&D waste disposed of properly?		<b>√</b>		
4.19	Are unused C&D materials or chemicals recycled or reused to reduce the quantity of				
	waste?		$\checkmark$		-
4.20	Are public fill and C&D waste reuse on site as far as practicable to avoid disposal off-site?		<b>√</b>		
4.21	Are the construction materials stored properly to minimize the potential for damage or				
	contamination?		✓		
4.22	Is a dumping license obtained to deliver public fill to public filling areas?		<b>✓</b>		
5.00	Landscape and Visual				
5.01	Are Is site hoarding provided?	✓			
5.02	Are vegetation disturbance minimized or soil protected to reduce potential soil erosion?		<b>√</b>		
5.03	Is construction light oriented away from the sensitive receivers?		<b>√</b>		
5.04	Is grass hydroseeding provided to slopes as soon as the completion of works?		<b>√</b>		
5.05	Are damages to trees outside site boundary due construction works avoided?		<b>√</b>		
5.06	Are excavation works carried out manually instead of machinery operation within 2.5m				
	vicinity of any preserved trees?	<b>✓</b>			
5.07	Are the retained and transplanted tree(s) properly protected and in good conditions?		<b>√</b>		
5.08	Are surgery works carried out for damaged trees?	<b>√</b>			
6.00	Ecology				
6.01	Is site runoff properly treated to prevent any silly runoff?	✓			
6.02	Are silt trap installed and well-maintained?	<b>√</b>			
6.03	Are stockpiles properly covered to avoid generating silty runoff?	<b>✓</b>			
6.04	Are construction works restricted to works area which are clearly defined?		<b>√</b>		
7.00	Overall				
7.01	Is the EM&A properly implemented in general?		<b>√</b>		



## aurecon

Remark	: / Observat	ion(s) / Reco	mmendation and N	on-compliar	nce(s) of Week	ly Site Inspect	ion:		
آک	te ins	pedion	Date: 1	9 Sei	0 2024				
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•	No	maio	observ	cation	Has	for a		\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	
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Si	ignatures:	<del> </del>	<del> </del>						
E'			Contract		Webl.		TE CI		
	epresentat	iye′	Contractor's Representative		WSD's Representativ	re	IEC's Representative		
	4		<u> </u>		•		•		
7	James 7.	<u> </u>	Name: 5	0:1=	(NTowns:		(A.L.		
(P	Vame: 70h.	· hlam	(Name: CALI	n (hlt	uvame:	)	(Name:	)	





#### WEEKLY ENVIRONMENTAL INSPECTION CHECKLIST

Inspection Date: 26 September 2024  Inspected by: ET: Toby Wan  Contractor: Calvin Chik	W.S Chan Alex Chan
uspection time	
Weather  Condition Sunny ✓ Fine Overcast Drizzle Rain  Temperature 31 C Humidity High ✓ Moderate	Storm Hazy
Temperature 3 1 °C Humidity High ✓ Moderate  Wind Calm Light Breeze Strong	e LLow
	N/A Yes No Remarks
0.00 General	
0.01 Is the current Environmental Permit displayed conspicuously at all vehicle site entrances/exits for public's information at any time?	
1.00 Construction Dust	
1.01 Are dusty materials, such as excavated materials, building debris and construction materials, and exposed earth surface properly covered to prevent dust emission?	
1.02 Are screenings, enclosures, water spraying, or vacuum cleaning devices provided to dusty	<u> </u>
construction works for dust suppression?	
1.03 Are fumes or smoke emitting plants or construction activities shielded by a screen?	
1.04 Are wheel-washing facilities with high-pressure water jets provided at all sites exits?	
1.05 Is wheel-washing provided to all vehicles leaving the site?	✓ □ □
1.06 Are road section near the site exit free from dusty material?	✓
1.07 Are all main haul roads inside the site paved or sprayed with water to minimize dust	
emission during vehicle movement?	
1.08 Are water spraying provided immediately prior to any loading or transfer of dusty materials?	✓ □ □
1.09 Are covers provided to all dump trucks carrying dusty materials when entering and leaving the site?	
1.10 Are the working areas for uprooting of trees, shrubs, or vegetation or the removal of	
boulders, poles, pillars sprayed with water to maintain the entire surface wet?	
1.11 Is exposed earth properly treated within six months after the last construction activity on site?	
1.12 Does the operation of plants on site free form dark smoke emission?	
1.13 Are vehicles travelling at speed not exceeding 15km/hr within the site?	
1.14 Are stock of more than 20 bags of cement or day PFA covered or sheltered on top and 3 sides?	
1.15 Are de-bagging, batching and mixing processes of bagged cement carried out in sheltered areas?	
1.16 Are hoardings of at least 2.4m high provided along the site boundary adjoining areas accessible by the public?	
1.17 Is open burning prohibited?	





		N/A	Yes	No	Remarks
2.00	Construction Noise (Airborne)				
2.01	Are quiet plants adopted on site?	✓			
2.02	Are the PMEs operating on site well-maintained to minimize the generation of excessive				
	noise?	<b>✓</b>			
2.03	Are plants throttled down or turned off when not in use?	<b>√</b>			
2.04	Are the plants known to emit noise strongly in one direction oriented to face away from				
	NSRs?	✓			
2.05	Are moveable barriers provided to screen NSRs from plant or noisy operations?	<b>✓</b>			-
2.06	Are silencers, mufflers and enclosures provided to plants?	<b>✓</b>			
2.07	Are the hoods, cover panels and inspection hatches of PMEs closed during operation?	<b>✓</b>			
2.08	Are purposely-built site hoarding construction with appropriate materials provided along the site boundary?	<b>✓</b>			
2.09	Are noisy operation properly scheduled to minimize exposure and cumulative impacts to				
	nearby sensitive receivers?				
2.10	Are valid noise emission label(s) affixed to all hand-held breakers operating on site?	<b>√</b>			
2.11	Are valid noise emission label(s) affixed to all air compressors operating on site?	<b>✓</b>			
2.12	Are all construction noise permit(s) applied for percussive piling work?	<b>√</b>			
2.13	Are construction noise permit(s) applied for general construction works during restricted				
	hours?	✓			
2.14	Are valid construction noise permit(s) displayed at all vehicular exits?	<b>✓</b>			-
3.00	Water Quality				
3.01	Is effluent discharge license obtained for wastewater discharge from site?	<b>✓</b>		Ш	
3.02	Is effluent discharged according to the effluent discharge license?	<b>√</b>			
3.03	Is wastewater discharge from site properly treated prior to discharge?	<b>✓</b>			
3.04	Are perimeter channels provided to intercept storm runoff from outside the site?	<b>✓</b>			
3.05	Are sand/silt removal facilities such as sand/silt traps and sediment basins provided to				
_	remove sand/silt particles from runoff?	<b>✓</b>			
3.06	Is surface runoff diverted to sedimentation facilities?	<b>✓</b>			
3.07	Is the drainage system properly maintained?		<b>√</b>		
3.08	Are construction works carefully programmed to minimize soil excavation works during				
	rainy seasons?				
3.09	Are exposed soil surface protected by paving as soon as possible to reduce the potential of				
	soil erosion?	<b>√</b>			
3.10	Are temporary access roads protected by crushed gravel?	<b>✓</b>			
3.11	Is trench excavation avoided in the wet season as far as practicable, or if necessary,				
	backfilled in short sections after excavation?	<b>√</b>			





		N/A	Yes	No	Remarks
3.12	Are exposed slope surface properly protected?	<b>√</b>			
3.13	Are open stockpiles of construction materials on site covered by tarpaulin or similar fabric				
	during construction?	lacksquare			
3.14	Is runoff from wheel-washing facilities avoided?	<b>√</b>			
3.15	Is oil leakage or spillage prevented?	<b>✓</b>			
3.16	Are there any measures to prevent the release of oil and grease into the storm drainage				
	system?	<b>✓</b>			
3.17	Are the oil interceptors/ grease traps properly maintained?	<b>✓</b>			
3.18	Are debris and rubbish generated on site collected, handled and disposed of properly to				
	avoid them entering the streams?		✓		
3.19	Are all fuel tanks and storage areas provided with locks and be sited on sealed areas, within				
	bunds of capacity equal to 110% of the storage capacity of the largest tank?	✓			
3.20	Are tanks, containers, storage area bunded and the locations locked as far as possible from	<b> </b>			
	the sensitive watercourse and stormwater drains?	✓			
3.21	Are sufficient chemical toilets provided on site to handle sewage from construction work				
	force?	✓			
3.22	Are sewage disposal and toilet maintenance of the portable chemical toilets provided by				
	the licensed contractors?	✓			
3.23	Is concrete washing water properly collected and treated prior to discharge?	<b>√</b>			
4.00	Waste Management				
4.00 4.01	Waste Management  Is a trip-ticket system implemented to monitor the disposal of C&D and solid wastes at				
			<b>✓</b>		
	Is a trip-ticket system implemented to monitor the disposal of C&D and solid wastes at		<b>✓</b>		
4.01	Is a trip-ticket system implemented to monitor the disposal of C&D and solid wastes at public filling facilities and landfills?		✓ ✓		
4.01	Is a trip-ticket system implemented to monitor the disposal of C&D and solid wastes at public filling facilities and landfills?  Is a recording system implemented to record the amount of wastes generated, recycled and		✓ ✓		
4.01	Is a trip-ticket system implemented to monitor the disposal of C&D and solid wastes at public filling facilities and landfills?  Is a recording system implemented to record the amount of wastes generated, recycled and disposed of?		✓ ✓ ✓		
4.01	Is a trip-ticket system implemented to monitor the disposal of C&D and solid wastes at public filling facilities and landfills?  Is a recording system implemented to record the amount of wastes generated, recycled and disposed of?  Is chemical waste separated from other waste and collected by a licensed chemical waste		✓ ✓ ✓		
4.01	Is a trip-ticket system implemented to monitor the disposal of C&D and solid wastes at public filling facilities and landfills?  Is a recording system implemented to record the amount of wastes generated, recycled and disposed of?  Is chemical waste separated from other waste and collected by a licensed chemical waste collector?		✓ ✓ ✓ ✓		
4.01 4.02 4.03	Is a trip-ticket system implemented to monitor the disposal of C&D and solid wastes at public filling facilities and landfills?  Is a recording system implemented to record the amount of wastes generated, recycled and disposed of?  Is chemical waste separated from other waste and collected by a licensed chemical waste collector?  Are trip tickets for chemical waste disposal available for inspection?  Is chemical waste reused and recycled on site as far as practicable?		✓ ✓ ✓ ✓		
4.01 4.02 4.03 4.04 4.05 4.06	Is a trip-ticket system implemented to monitor the disposal of C&D and solid wastes at public filling facilities and landfills?  Is a recording system implemented to record the amount of wastes generated, recycled and disposed of?  Is chemical waste separated from other waste and collected by a licensed chemical waste collector?  Are trip tickets for chemical waste disposal available for inspection?		I I		
4.01 4.02 4.03 4.04 4.05	Is a trip-ticket system implemented to monitor the disposal of C&D and solid wastes at public filling facilities and landfills?  Is a recording system implemented to record the amount of wastes generated, recycled and disposed of?  Is chemical waste separated from other waste and collected by a licensed chemical waste collector?  Are trip tickets for chemical waste disposal available for inspection?  Is chemical waste reused and recycled on site as far as practicable?  Are all containers for chemical waste properly labelled?  Is drip tray provided for chemical storage?		✓ ✓ ✓ ✓ ✓		Obs.1
4.01 4.02 4.03 4.04 4.05 4.06	Is a trip-ticket system implemented to monitor the disposal of C&D and solid wastes at public filling facilities and landfills?  Is a recording system implemented to record the amount of wastes generated, recycled and disposed of?  Is chemical waste separated from other waste and collected by a licensed chemical waste collector?  Are trip tickets for chemical waste disposal available for inspection?  Is chemical waste reused and recycled on site as far as practicable?  Are all containers for chemical waste properly labelled?		✓ ✓ ✓ ✓ ✓		Obs.1
4.01 4.02 4.03 4.04 4.05 4.06 4.07	Is a trip-ticket system implemented to monitor the disposal of C&D and solid wastes at public filling facilities and landfills?  Is a recording system implemented to record the amount of wastes generated, recycled and disposed of?  Is chemical waste separated from other waste and collected by a licensed chemical waste collector?  Are trip tickets for chemical waste disposal available for inspection?  Is chemical waste reused and recycled on site as far as practicable?  Are all containers for chemical waste properly labelled?  Is drip tray provided for chemical storage?		✓ ✓ ✓ ✓ ✓ ✓		Obs.1
4.01 4.02 4.03 4.04 4.05 4.06 4.07	Is a trip-ticket system implemented to monitor the disposal of C&D and solid wastes at public filling facilities and landfills?  Is a recording system implemented to record the amount of wastes generated, recycled and disposed of?  Is chemical waste separated from other waste and collected by a licensed chemical waste collector?  Are trip tickets for chemical waste disposal available for inspection?  Is chemical waste reused and recycled on site as far as practicable?  Are all containers for chemical waste properly labelled?  Is drip tray provided for chemical storage?  Is chemical waste storage area used solely for storage of chemical waste and properly				Obs.1
4.01 4.02 4.03 4.04 4.05 4.06 4.07	Is a trip-ticket system implemented to monitor the disposal of C&D and solid wastes at public filling facilities and landfills?  Is a recording system implemented to record the amount of wastes generated, recycled and disposed of?  Is chemical waste separated from other waste and collected by a licensed chemical waste collector?  Are trip tickets for chemical waste disposal available for inspection?  Is chemical waste reused and recycled on site as far as practicable?  Are all containers for chemical waste properly labelled?  Is drip tray provided for chemical storage?  Is chemical waste storage area used solely for storage of chemical waste and properly labelled?		✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓		Obs.1
4.01 4.02 4.03 4.04 4.05 4.06 4.07 4.08	Is a trip-ticket system implemented to monitor the disposal of C&D and solid wastes at public filling facilities and landfills?  Is a recording system implemented to record the amount of wastes generated, recycled and disposed of?  Is chemical waste separated from other waste and collected by a licensed chemical waste collector?  Are trip tickets for chemical waste disposal available for inspection?  Is chemical waste reused and recycled on site as far as practicable?  Are all containers for chemical waste properly labelled?  Is drip tray provided for chemical storage?  Is chemical waste storage area used solely for storage of chemical waste and properly labelled?  Are incompatible chemical wastes stored in different areas?		✓ ✓ ✓ ✓ ✓ ✓ ✓		Obs.1
4.01 4.02 4.03 4.04 4.05 4.06 4.07 4.08 4.09	Is a trip-ticket system implemented to monitor the disposal of C&D and solid wastes at public filling facilities and landfills?  Is a recording system implemented to record the amount of wastes generated, recycled and disposed of?  Is chemical waste separated from other waste and collected by a licensed chemical waste collector?  Are trip tickets for chemical waste disposal available for inspection?  Is chemical waste reused and recycled on site as far as practicable?  Are all containers for chemical waste properly labelled?  Is drip tray provided for chemical storage?  Is chemical waste storage area used solely for storage of chemical waste and properly labelled?  Are incompatible chemical wastes stored in different areas?  Is the chemical waste storage area enclosed on at least 3 sides and adequately ventilated?				Obs.1
4.01 4.02 4.03 4.04 4.05 4.06 4.07 4.08 4.09	Is a trip-ticket system implemented to monitor the disposal of C&D and solid wastes at public filling facilities and landfills?  Is a recording system implemented to record the amount of wastes generated, recycled and disposed of?  Is chemical waste separated from other waste and collected by a licensed chemical waste collector?  Are trip tickets for chemical waste disposal available for inspection?  Is chemical waste reused and recycled on site as far as practicable?  Are all containers for chemical waste properly labelled?  Is drip tray provided for chemical storage?  Is chemical waste storage area used solely for storage of chemical waste and properly labelled?  Are incompatible chemical wastes stored in different areas?  Is the chemical waste storage area enclosed on at least 3 sides and adequately ventilated?  Is an impermeable floor and bunding, of capacity to accommodate 110% of the volume of				Obs.1
4.01 4.02 4.03 4.04 4.05 4.06 4.07 4.08 4.09	Is a trip-ticket system implemented to monitor the disposal of C&D and solid wastes at public filling facilities and landfills?  Is a recording system implemented to record the amount of wastes generated, recycled and disposed of?  Is chemical waste separated from other waste and collected by a licensed chemical waste collector?  Are trip tickets for chemical waste disposal available for inspection?  Is chemical waste reused and recycled on site as far as practicable?  Are all containers for chemical waste properly labelled?  Is drip tray provided for chemical storage?  Is chemical waste storage area used solely for storage of chemical waste and properly labelled?  Are incompatible chemical wastes stored in different areas?  Is the chemical waste storage area enclosed on at least 3 sides and adequately ventilated?  Is an impermeable floor and bunding, of capacity to accommodate 110% of the volume of the largest container or of 20% by volume of the chemical waste stored in that area,				Obs.1





		N/A	Yes	No	Remarks
4.13	Are sufficient general refuse disposal/collection points provided on site?		<b>√</b>		
4.14	Is general refuse disposed of properly and regularly?		<b>√</b>		
4.15	Are appropriate measures adopted to minimize windblown litter and dust during				
	transportation of waste?		<b>√</b>		
4.16	Are individual collectors for aluminum cans, plastic bottles and packaging material and				
	office paper provided to encourage waste segregation?		<b>√</b>		
4.17	Are C&D wastes sorted on site?		<b>√</b>		
4.18	Are C&D waste disposed of properly?		<b>√</b>		
4.19	Are unused C&D materials or chemicals recycled or reused to reduce the quantity of				
	waste?		$\checkmark$		-
4.20	Are public fill and C&D waste reuse on site as far as practicable to avoid disposal off-site?		<b>√</b>		
4.21	Are the construction materials stored properly to minimize the potential for damage or				
	contamination?		✓		
4.22	Is a dumping license obtained to deliver public fill to public filling areas?		<b>✓</b>		
5.00	Landscape and Visual				
5.01	Are Is site hoarding provided?	✓			
5.02	Are vegetation disturbance minimized or soil protected to reduce potential soil erosion?		<b>√</b>		
5.03	Is construction light oriented away from the sensitive receivers?		<b>√</b>		
5.04	Is grass hydroseeding provided to slopes as soon as the completion of works?		<b>√</b>		
5.05	Are damages to trees outside site boundary due construction works avoided?		<b>√</b>		
5.06	Are excavation works carried out manually instead of machinery operation within 2.5m				
	vicinity of any preserved trees?	<b>✓</b>			
5.07	Are the retained and transplanted tree(s) properly protected and in good conditions?		<b>√</b>		
5.08	Are surgery works carried out for damaged trees?	<b>√</b>			
6.00	Ecology				
6.01	Is site runoff properly treated to prevent any silly runoff?	✓			
6.02	Are silt trap installed and well-maintained?	<b>√</b>			
6.03	Are stockpiles properly covered to avoid generating silty runoff?	<b>✓</b>			
6.04	Are construction works restricted to works area which are clearly defined?		<b>√</b>		
7.00	Overall				
7.01	Is the EM&A properly implemented in general?		<b>√</b>		



## aurecon

	Contract No.: 1	3/WSD/16 Mainlaying	in Tseung Kwan O	
Remark / Observation	(s) / Recommendation and Non-co	ompliance(s) of Weekly Site Ir	aspection:	
Site Inspe	ection Date: 26	Sep 2024		
obs (.	The chemical placed in the	l containers he drip trav	should be	<del>chewed</del>
3				
				·
·				
	,			
Signatures:				
ET Representative	Contractor's Representative	WSD's Representative	IEC's Representative	
_ Just	(Omn	Sy	<b>JL</b>	
(Name: Toby)	Wan) (Name: Calvin (	(Name: W.S. Chan	) (Name: Alex Ch	M





Observation(s)	Follow-up Action
Observation - Item 1	
Observed on 26 September 2024	Rectified by the Contractor on 18 October 2024
The chemical containers should be placed inside the drip tray.	The chemical containers have been removed.





### Appendix M

# Proactive Environmental Protection Proforma





#### **Proactive Environmental Protection**

Reporting Period	Activity	Major Environmental Impact	Environmental Mitigation Measure
1- 30 September 2024	<ul> <li>Road pavement reinstatement,</li> <li>Remaining works installation of accessories for completed chambers</li> </ul>	- Construction dust - Noise generation; - Construction waste - Impact of water quality - Ecology	<ul> <li>Dust suppression by regular wetting and water spraying</li> <li>Reduction of noise from equipment and machinery on-site</li> <li>Sorting and storage of general refuse and construction waste</li> <li>Chemical shall be stored properly with drip tray.</li> <li>Treatment of water with water treatment facilities before discharge.</li> <li>Rainwater pumped from trench should be discharged via waster water treatment facilities.</li> <li>Retained tree shall be carefully protected and tree protect zone should be established.</li> </ul>





### Appendix N

# Impact Monitoring Schedule of Next Reporting Month

#### Contract No. 13/WSD/16 Mainlaying in Tseung Kwan O Monthly EM&A Report





According to WSD and contractor information, all remaining work under the contract has been fully completed and that no power mechanical equipment was adopted on the site. No construction works were conducted within 300m radius of NSR4, NSR24 and NSR31. Thus, no construction noise monitoring works will be scheduled for the next reporting month.





## Appendix O

Academic Calendar (s)

#### **Creative Secondary School Calendar 2024-2025**

								e Secondary School Calendar 2024-2025
	Sun	Mon	Tue	Wed	Thu	Fri		Particulars/Remarks
August	11	12	13	14	15	16	17	12-14/8 F1 Bridging Program; 15/8 F1 & F5 Orientation Program; 16/8 Whole School Assembly
	18	19A	20B	21C	22D	23E	24	19/8 The first day of School year
	25	26F	27G	28A	29B	30C	31	30/08 PTA New Parents Orientation and Welcome Party
September	1	2D	3E	4F	5G	6A	7	
	8	9B	10C	11D	12E	13F	14	13/09 Swimming Gala
	15	16G	17A	18	19B	20C	21	18/9 The day following Chinese Mid-Autumn Festival
	22	23D	24E	25F	26G	27A	28	
	29	30						30/9 Staff Development Day 1
October			1	2B	3C	4D	5	1/10 National Day
	6	7E	8F	9G	10A	11	12	11/10 Chung Yeung Festival
	13	14	15	16	17	18	-	14-18/10 Term Break
	20	21B		23D			26	22-26/10 Hangzhou Exchange Programme
	27			30B				31/10 Univeristy Fair
November						1	2	1/11 The 2nd PD day
110 VOIIIDOI	3	4D	5E	6F	7G	8A	9	
	10	11B		13D		-		16/11 Creative Showcase (Open Day)
	17			20A		_		18/11 The Monday following Creative Showcase (Open Day); 22/11 F3 and F4 Options Evening
				27F	28	29		28-29/11 3 way conferences
Docombor	24	25D 2G	26E 3A	4B	<b>5</b> C	6		6/12 Sports Day (Day 1); 2/12 - 19/12 F5 Assessment weeks
December	1							
	8	9D	10E		12G		<u> </u>	13/12 Sports Day (Day 2)
	15	16A		18C		_		19/12 Winter Arts Showcase (Celebrating Cultural Diversity)
	22	23	24	25	26	27	28	25/12 Christmas Day; 26/12 The first weekday following Christmas Day
	29	30	31					23/12-4/1 School Christmas Holiday
January				1	2	3		1/1 New Year's Day
	5	6E	7F	8G	9A	-		6/1 - 16/1 F6 HKDSE Mock Exam; 6/1 - 17/1 F6 IBDP Mock Exam
	12	13C		15E			18	
	19	20A	21B	22C	23D	24	25	
	26	27	28	29	30	31		29-31/1 Lunar New Year; 27/1-5/2 School New Year Holiday
February							<u>1</u>	
	<u>2</u>	3	4	<u>5</u>	6E	7F	8	
	9	10G	11A	12B	13C	14D	15	
	16	17E	18F	19G	20A	21B	22	
	23	24C	25D	26E	27F	28G		
March							1	
	2	ЗА	4B	5C	6D	7E	8	7/3 HKDSE last school day
	9	10F	11G	12A	13B	14C	15	
	16			19F			_	
	23	24	25	26	27	28		24-28/3 Creative Week
		31B						
April	-	0.2	1C	2D	3E	4	5	4/4 Ching Ming Festival; 2/4 - 8/4 HKDSE exams (core subjects); 3/4 IBDP last school day
· · · · · ·	6	7F	8G	9A		11C	12	
	13	14D			17	18		18/4 Good Friday; 19/4 The day following Good Friday
	20	21	22	23	24	25		21/4 Easter Monday
	27	28F	29G		<u> </u>	20	20	28/4 - 21/5 IBDP exams 29/4, 30/4 F3 TSA oral assessment
May					1	2B	3	1/5 Labour Day
,	4	5	6C	7D	8E	9F	_	5/5 Buddha's Birthday; 6/5 - 21/5 F5 IBDP Exam
				14B		-		
	18			21G				19/5 - 29/5 F5 DSE Final Exam; 21/5 - 29/5 F4 Final Exam
	25			28E		30		31/5 Tuen Ng Festival; 30/5 Staff Development Day 3
June	1	2G	3A	_	5C	6		6/6 Form 6 Graduation
June				4B 11F			-	9/6 Form 3 Graduation
	8	9D						
	15			18D			<del>1</del> — —	19/6 - 20/6 F3 TSA written assessment
	22		24A	25B	26C	27	28	
<u> </u>	29	30						
July			1	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	1/7 Hong Kong Special Administrative Region Establishment Day
	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	<u>11</u>	<u>12</u>	
	<u>13</u>	<u>14</u>	<u>15</u>	<u>16</u>	<u>17</u>	<u>18</u>	_	16/7 HKDSE result release (Tentative)
	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	
	<u>27</u>	28	<u>29</u>	<u>30</u>	<u>31</u>			
August						<u>1</u>	<u>2</u>	
	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	
	10	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>	16	
	17	<u>18</u>	19	20	<u>21</u>	22	23	
					_			

