

### Contract No. HY/2012/08 Tuen Mun – Chek Lap Kok Link – Northern Connection Sub-sea Tunnel Section

Seventy-ninth Monthly Environmental Monitoring & Audit (EM&A) Report

11 June 2020

#### **Environmental Resources Management**

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#### Environmental Resources Management

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Client:		Project N	0:		
DBJV		021233	0		
Summary:		Date:			
		11 June	2020		
		Approved	by:		
This document presents the Seventy-ninth Monthly EM&A Report for Tuen Mun – Chek Lap Kok Link Northern Connection Sub-sea Tunnel Section.			lifi		
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		Dr Jasn ET Leade	0		
	79 <sup>th</sup> Monthly EM&A Report	VAR	JN	CAR	11/06/20
Revision	Description	Ву	Checked	Approved	Date
This report has been prepared by Environmental Resources Management the trading name of 'ERM Hong-Kong, Limited', with all reasonable skill, care and diligence within the terms of the Contract with the client, incorporating our General Terms and Conditions of Business and taking account of the resources devoted to it by agreement with the client. We disclaim any responsibility to the client and others in respect of any matters outside the scope of the above.		Put	ernal	Certificate	5 18001:2007 No. OHS 515956 BS 001 : 2008 e No. FS 32515





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12 June 2020

By Fax (2293 6300) and By Post

AECOM Asia Co. Ltd. Supervising Officer Representative's Office No.8 Mong Fat Street, Tuen Mun, New Territories, Hong Kong

Attention: Mr. Roger Man

Dear Mr. Man,

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

#### Contract No. HY/2012/08 TM-CLKL – Northern Connection Sub-sea Tunnel Section 79<sup>th</sup> Monthly EM&A Report for May 2020 (EP-354/2009/D)

Reference is made to the Monthly EM&A Report for May 2020 (ET's ref.: "0212330\_79th Monthly EM&A\_20200611.doc") certified by the ET Leader and provided to us via e-mail on 11 June 2020.

Please be informed that we have no adverse comments on the captioned Report. We write to verify the captioned submission in accordance with Condition 4.4 of EP-354/2009/D.

Thank you for your attention. Please do not hesitate to contact the undersigned or the ENPO Leader Mr. Y. H. Hui should you have any queries.

Yours sincerely,

Manson Yeung Independent Environmental Checker Tuen Mun – Chek Lap Kok Link

c.c.

HyD	Mr. Patrick Ng			
HyD	Mr. Andy Ho			
AECOM	Mr. Conrad Ng			
ERM	Dr. Jasmine Ng			
DBJV	Mr. Bryan Lee			
Internal: DY, YH, ENPO Site				

(By Fax: 3188 6614) (By Fax: 3188 6614) (By Fax: 3922 9797) (By Fax: 2723 5660) (By Fax: 2293 7499)

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#### EXECUTIVE SUMMARY

Under *Contract No. HY/2012/08*, Dragages – Bouygues Joint Venture (DBJV) is commissioned by the Highways Department (HyD) to undertake the design and construction of the Northern Connection Sub-sea Tunnel Section of the Tuen Mun – Chek Lap Kok Link Project (TM-CLK Link Project) while AECOM Asia Company Limited was appointed by HyD as the Supervising Officer. For implementation of the environmental monitoring and audit (EM&A) programme under the Contract, ERM-Hong Kong, Limited (ERM) has been appointed as the Environmental Team (ET) in accordance with *Environmental Permit No. EP-354/2009/A*. Ramboll Hong Kong Ltd. was employed by HyD as the Independent Environmental Checker (IEC) and Environmental Project Office (ENPO). Subsequent applications for variation of environmental permits (VEP), *EP-354/2009/B*, *EP-354/2009/C* and *EP-354/2009/D*, were granted on 28 January 2014, 10 December 2014 and 13 March 2015, respectively.

The construction phase of the Contract commenced on 1 November 2013 and will tentatively be completed in 2020. The impact monitoring of the EM&A programme, including air quality, water quality, marine ecological monitoring and environmental site inspections, were commenced on 1 November 2013.

This is the Seventy-ninth Monthly EM&A report presenting the EM&A works carried out during the period from 1 to 31 May 2020 for the *Contract No. HY/2012/08 Northern Connection Sub-sea Tunnel Section* (the "Contract") in accordance with the Updated EM&A Manual of the TM-CLK Link Contract. As informed by the Contractor, major activities in the reporting period included:

#### Land-based Works

- Road & Drainage works Portion S-A, S-B & S-C and Northern Landfall;
- UU installation Portion S-A, S-B & S-C and Northern Landfall.

A summary of monitoring and audit activities conducted in the reporting period is listed below:

24-hour TSP Monitoring	10 sessions
1-hour TSP Monitoring	10 sessions
Impact Dolphin Monitoring	2 sessions
Joint Environmental Site Inspection	4 sessions

#### Implementation of Marine Mammal Exclusion Zone

No marine works were undertaken during the reporting period, therefore, daily 250 m marine mammal exclusion zone monitoring was not undertaken during the reporting period.

#### Summary of Breaches of Action/Limit Levels

#### Breaches of Action and Limit Levels for Air Quality

No exceedance was recorded in the air quality monitoring of this reporting month.

#### Breaches of Action and Limit Levels for Dolphin Monitoring

Whilst one (1) Limit Level exceedance was observed for the quarterly dolphin monitoring data between March and May 2020, no unacceptable impact from the construction activities of the TM-CLKL Northern Connection Sub-sea Tunnel Section on Chinese White Dolphins was noticeable from general observations. Due to monthly variation in dolphin occurrence within the survey area, it would be more appropriate to draw conclusion on whether any unacceptable impacts on dolphins have been detected in relation to the construction activities of this Contract in the quarterly EM&A reports, where comparison on distribution, group size and encounter rates of dolphins between the quarterly impact monitoring period and baseline monitoring period will be made.

#### Environmental Complaints, Non-compliance & Summons

No non-compliance with EIA recommendations, EP conditions and other requirements associated with the construction of this Contract was recorded in this reporting period.

No environmental complaint was received in this reporting period.

No environmental summons was received in this reporting period.

#### **Reporting Change**

There was no reporting change in the reporting period.

#### Upcoming Works for the Next Reporting Month

Works to be undertaken in the next monitoring period of June 2020 include the following:

#### Land-based Works

- Road & Drainage works Portion S-A, S-B & S-C and Northern Landfall;
- UU installation Portion S-A, S-B & S-C and Northern Landfall.

#### Future Key Issue

Potential environmental impacts arising from the above upcoming construction activities in the next reporting month of June 2020 are mainly associated with dust and waste management issues.

#### 1.1 BACKGROUND

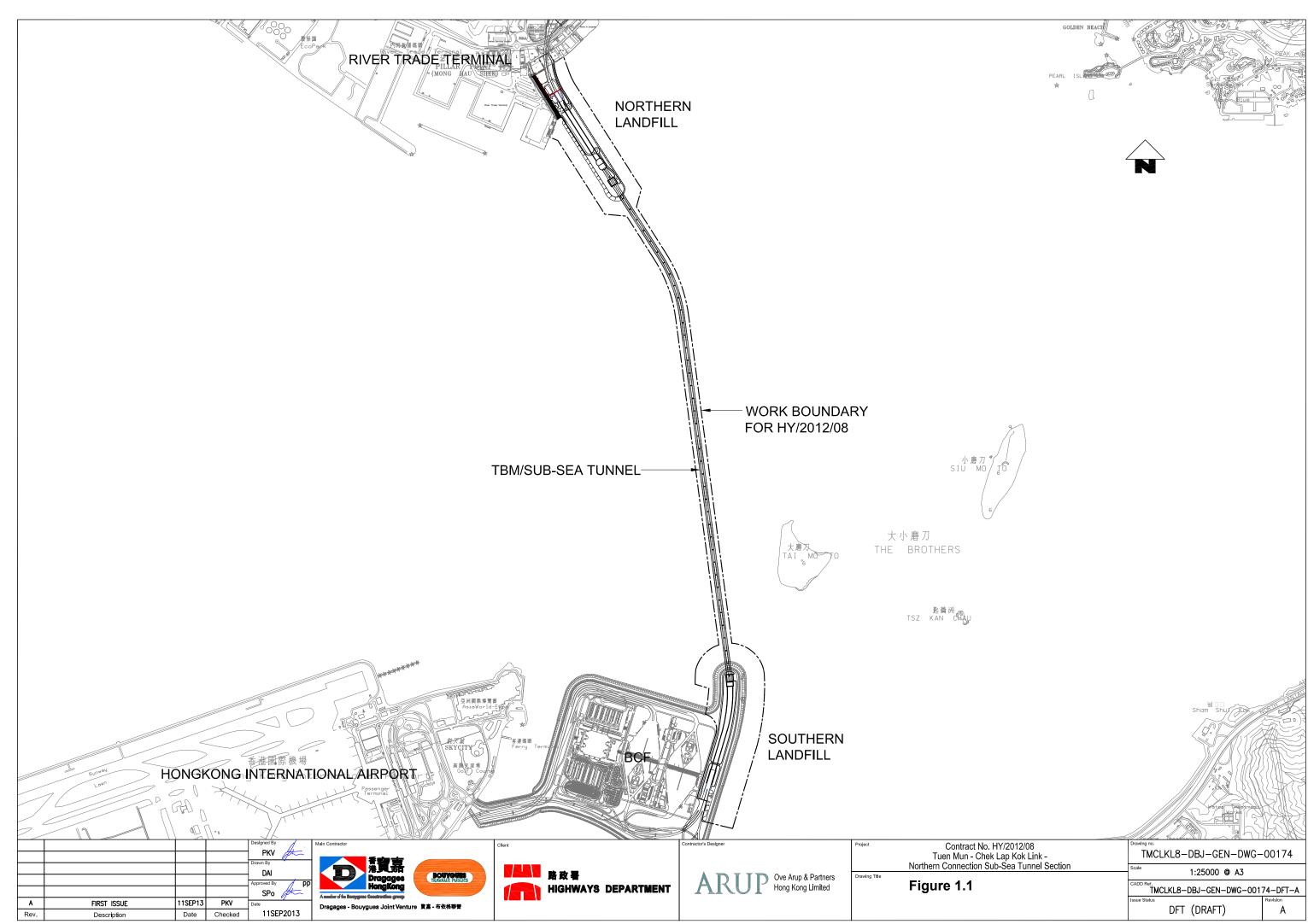
According to the findings of the Northwest New Territories (NWNT) Traffic and Infrastructure Review conducted by the Transport Department, Tuen Mun Road, Ting Kau Bridge, Lantau Link and North Lantau Highway would be operating beyond capacity after 2016. This forecast has been based on the estimated increase in cross boundary traffic, developments in the Northwest New Territories (NWNT), and possible developments in North Lantau, including the Airport developments, the Lantau Logistics Park (LLP) and the Hong Kong – Zhuhai – Macao Bridge (HZMB). In order to cope with the anticipated traffic demand, two new road sections between NWNT and North Lantau – Tuen Mun – Chek Lap Kok Link (TM-CLKL) and Tuen Mun Western Bypass (TMWB) are proposed.

An Environmental Impact Assessment (EIA) of TM-CLKL (the Project) was prepared in accordance with the EIA Study Brief (No. ESB-175/2007) and the *Technical Memorandum of the Environmental Impact Assessment Process (EIAO-TM*). The EIA Report was submitted under the Environmental Impact Assessment Ordinance (EIAO) in August 2009. Subsequent to the approval of the EIA Report (EIAO Register Number AEIAR-146/2009), an Environmental Permit (EP-354/2009) for TM-CLKL was granted by the Director of Environmental Protection (DEP) on 4 November 2009, and EP variation (VEP) (EP-354/2009/A) was issued on 8 December 2010. Subsequent applications for variation of environmental permits (VEPs), *EP-354/2009/B, EP-354/2009/C* and *EP-354/2009/D*, were granted on 28 January 2014, 10 December 2014 and 13 March 2015, respectively.

Under *Contract No. HY/2012/08*, Dragages – Bouygues Joint Venture (DBJV) is commissioned by the Highways Department (HyD) to undertake the design and construction of the Northern Connection Sub-sea Tunnel Section of TM-CLKL while AECOM Asia Company Limited was appointed by HyD as the Supervising Officer. For implementation of the environmental monitoring and audit (EM&A) programme under the Contract, ERM-Hong Kong, Limited (ERM) has been appointed as the Environmental Team (ET). Ramboll Hong Kong Ltd. was employed by HyD as the Independent Environmental Checker (IEC) and Environmental Project Office (ENPO).

Layout of the Contract components is presented in Figure 1.1.

The construction phase of the Contract commenced on 1 November 2013 and will tentatively be completed in 2020. The impact monitoring phase of the EM&A programme, including air quality, water quality, marine ecological monitoring and environmental site inspections, were commenced on 1 November 2013.



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#### 1.2 SCOPE OF REPORT

This is the Seventy-ninth Monthly EM&A Report under the *Contract No. HY*/2012/08 *Tuen Mun* – *Chek Lap Kok Link* – *Northern Connection Sub-sea Tunnel Section.* This report presents a summary of the environmental monitoring and audit works in May 2020.

#### 1.3 ORGANIZATION STRUCTURE

The organization structure of the Contract is shown in *Appendix A*. The key personnel contact names and contact details are summarized in *Table 1.1* below.

	Position	Name	Telephone	Fax
Highways Department	Engr 24/SD	Ken T.M. Cheng	2762 4062	3188 6614
SOR (AECOM Asia Company Limited)	Chief Resident Engineer	Roger Man	2293 6388	2293 6300
ENPO / IEC (Ramboll Hong Kong Ltd.)	ENPO Leader	Y.H. Hui	3465 2850	3465 2899
(	IEC	Dr. F.C. Tsang	3465 2851	3465 2899
		Manson Yeung (1)	9700 6767	3465 2899
Contractor (Dragages – Bouygues Joint Venture)	Deputy Environmental Manager	Bryan Lee	2293 7323	2293 7499
	24-hour hotline		2293 7330	
ET (ERM-HK)	ET Leader	Jasmine Ng	2271 3311	2723 5660

#### Table 1.1Contact Information of Key Personnel

(1) The role and responsibilities as the IEC of the Contract has been taken up by Mr Manson Yeung instead of Dr. F.C. Tsang since 18 May 2020

#### 1.4 SUMMARY OF CONSTRUCTION WORKS

The construction phase of this Contract was commenced on 1 November 2013. The construction programme is shown in *Appendix B*.

As per DBJV's information, details of major construction works carried out in this reporting period are summarized in *Table 1.2*.

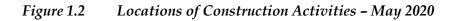
The general layout plan of the site showing the detailed works areas is shown in *Figure 1.2*. The Environmental Sensitive Receivers in the vicinity of the Contract are shown in *Figure 1.3*.

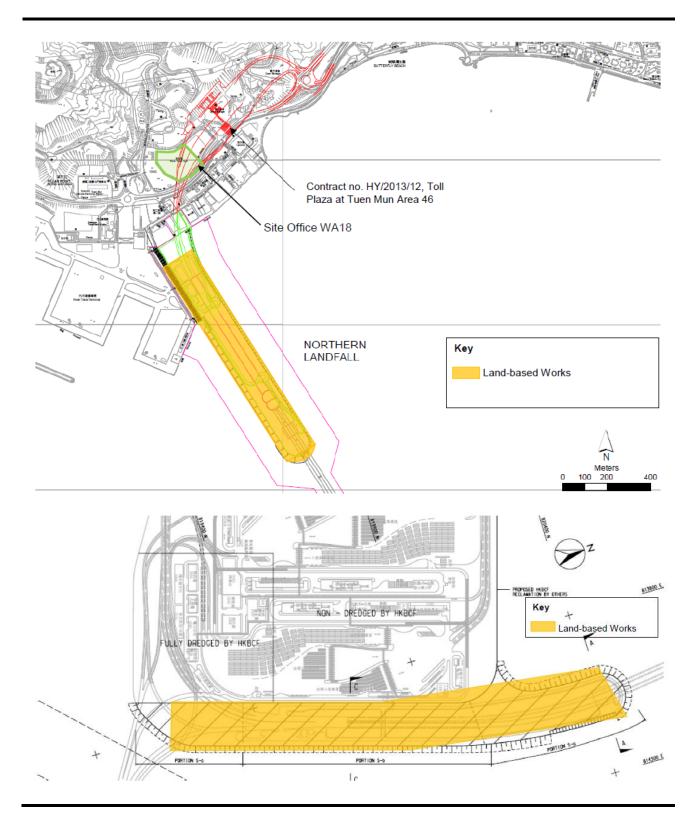
The implementation schedule of environmental mitigation measures is presented in *Appendix C*.

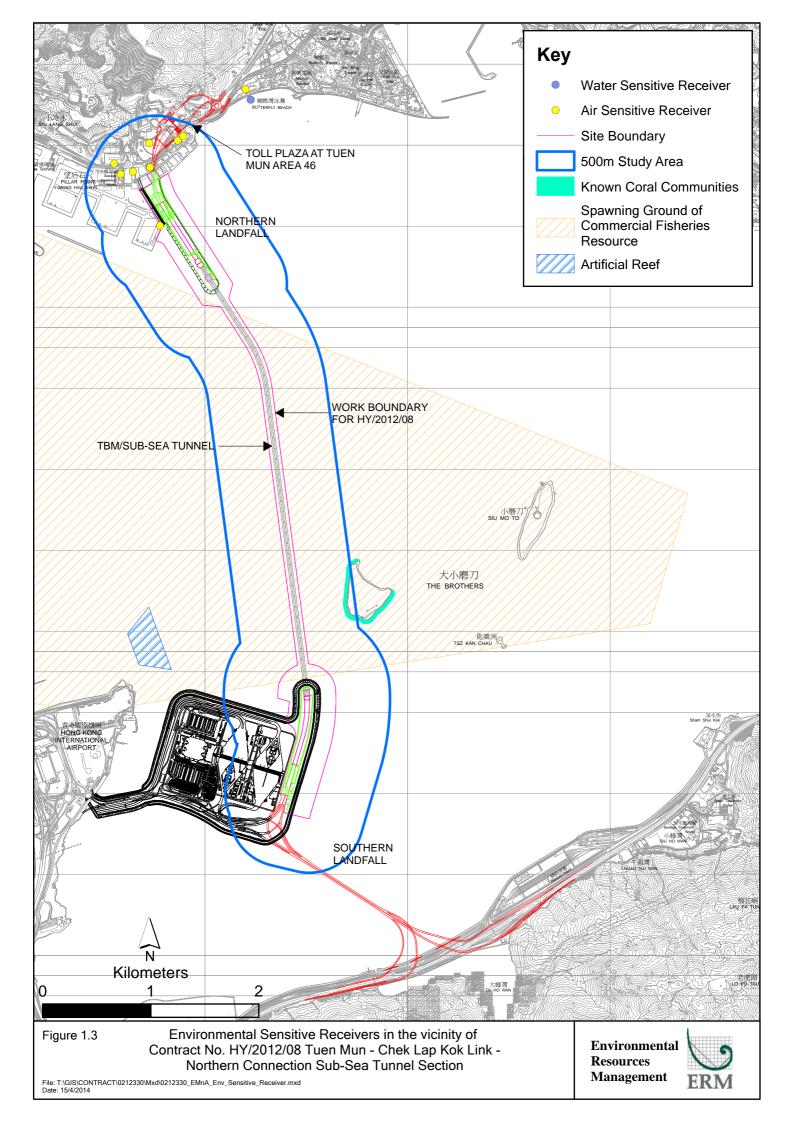
#### Table 1.2Summary of Construction Activities Undertaken during the Reporting Period

Construction Activities Undertaken		
Land-based Work	5	
• Road & I	Prainage works – Portion S-A, S-B & S-C and Northern Landfall;	

• UU installation - Portion S-A, S-B & S-C and Northern Landfall.







2

The EM&A programme required environmental monitoring for air quality, water quality and marine ecology as well as environmental site inspections for air quality, noise, water quality, waste management, marine ecology and landscape and visual impacts. The EM&A requirements and related findings for each component are summarized in the following sections

#### 2.1 AIR QUALITY

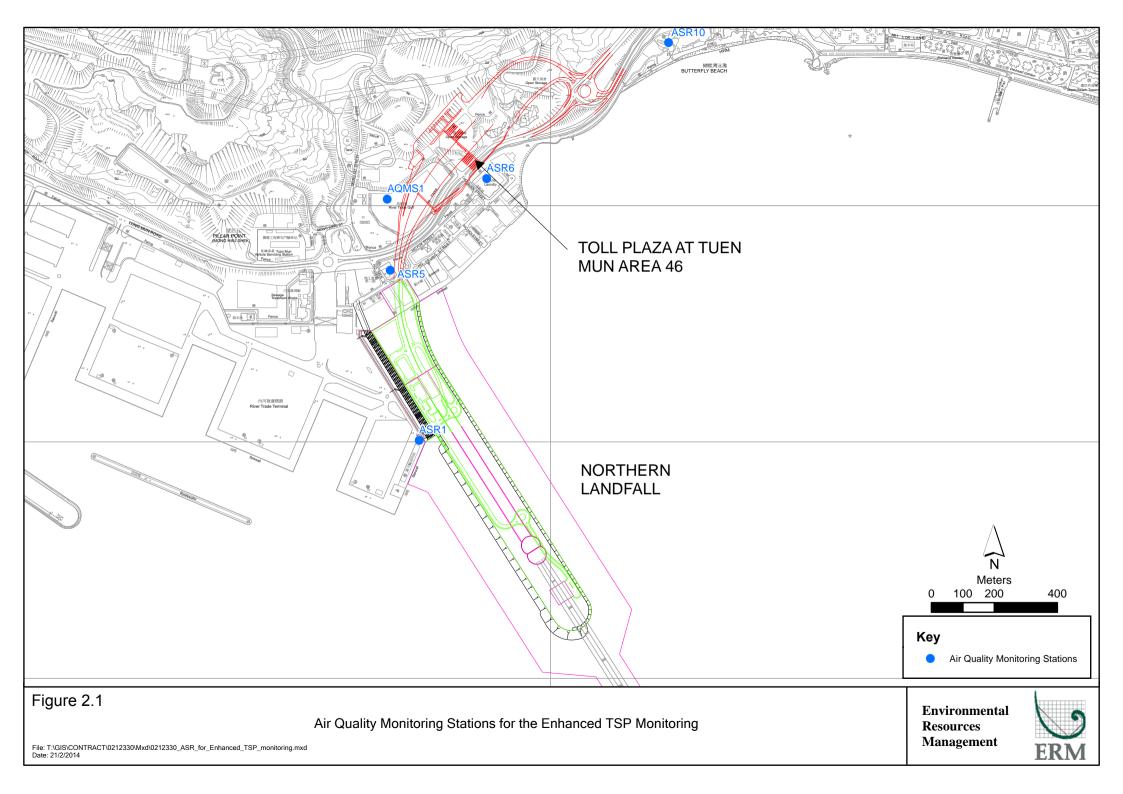
#### 2.1.1 Monitoring Requirements and Equipment

In accordance with the Updated EM&A Manual and the Enhanced TSP Monitoring Plan, impact 1-hour TSP monitoring was conducted three (3) times every six (6) days and impact 24-hour TSP monitoring was carried out once every six (6) days when the highest dust impact was expected. 1-hr and 24hr TSP monitoring frequency was increased to three times per day every three days and daily every three days, respectively, as excavation works for launching shaft commenced on 24 October 2014.

High volume samplers (HVSs) were used to carry out the 1-hour and 24-hour TSP monitoring on 2, 5, 8, 11, 14, 17, 20, 23, 26 and 29 May 2020 at the five (5) air quality monitoring stations in accordance with the requirements stipulated in the Updated EM&A Manual (*Figure 2.1; Table 2.1*). Wind meter was installed at the rooftop of ASR5 for logging wind speed and wind direction. Details of the equipment deployed are provided in *Table 2.2*. Copies of the calibration certificates for the equipment are presented in *Appendix E*.

<b>Monitoring Station</b>	Monitoring Dates	Location	Description	Parameters & Frequency
ASR1	2, 5, 8, 11, 14, 17, 20,	Tuen Mun	Office	TSP monitoring
	23, 26 and 29 May	<b>Fireboat Station</b>		1-hour Total Suspended
	2020			Particulates (1-hour TSP,
ASR5		Pillar Point Fire	Office	$\mu$ g/m <sup>3</sup> ), 3 times in every 6 days
		Station		• 24-hour Total Suspended
				Particulates (24-hour TSP,
AQMS1		Previous River	Bare ground	$\mu$ g/m <sup>3</sup> ), daily for 24-hour in
		Trade Golf		every 6 days
				Enhanced TSP monitoring
ASR6		Butterfly Beach	Office	(commenced on 24 October 2014)
		Laundry		• 1-hour Total Suspended
				Particulates (1-hour TSP,
ASR10		Butterfly Beach	Recreational	$\mu$ g/m <sup>3</sup> ), 3 times in every 3 days
		Park	uses	• 24-hour Total Suspended
				Particulates (24-hour TSP,
				$\mu$ g/m <sup>3</sup> ), daily for 24-hour in
				every 3 days

## Table 2.1Locations of Impact Air Quality Monitoring Stations and Monitoring Dates<br/>in this Reporting Period



Equipment	Brand and Model
High Volume Sampler (1-hour TSP and 24-hour TSP)	Tisch Environmental Mass Flow Controlled Total Suspended Particulate (TSP) High Volume Sampler (Model No. TE-5170)
Wind Meter	Davis (Model: Vantage Pro 2 (S/N: AS160104014)
Wind Anemometer for calibration	Lutron (Model No. AM-4201)

#### 2.1.2 Action & Limit Levels

The Action and Limit Levels of the air quality monitoring is provided in *Appendix D*. The Event and Action plan is presented in *Appendix J*.

#### 2.1.3 Monitoring Schedule for the Reporting Month

The schedule for air quality monitoring in May 2020 is provided in Appendix F.

1-hour TSP at ASR1 on 14 and 17 May 2020 and 24-hour TSP at ASR1 on 2, 11, 14 and 17 May 2020 were suspended due to power shortage.

#### 2.1.4 *Results and Observations*

The monitoring results for 1-hour TSP and 24-hour TSP are summarized in *Tables 2.3* and 2.4, respectively. Detailed impact air quality monitoring results and graphical presentations are presented in *Appendix G*.

#### Table 2.3Summary of 1-hour TSP Monitoring Results in this Reporting Period

Station	Average (µg/m³)	Range (µg/m³)	Action Level (μg/m³)	Limit Level (µg/m³)
ASR1	97	13 - 230	331	500
ASR5	152	62 - 308	340	500
AQMS1	95	14 - 167	335	500
ASR6	128	58 - 258	338	500
ASR10	72	30 - 160	337	500

#### Table 2.4Summary of 24-hour TSP Monitoring Results in this Reporting Period

Station	Average (µg/m³)	Range (µg/m³)	Action Level (μg/m³)	Limit Level (µg/m³)
ASR1	44	35 - 59	213	260
ASR5	75	51 - 123	238	260
AQMS1	51	38 - 68	213	260
ASR6	59	30 - 91	238	260
ASR10	36	19 - 49	214	260

The weather condition during the monitoring period varied from sunny to cloudy. The major dust sources in the reporting period included construction activities under the Contract as well as nearby traffic emissions.

A total of 10 1-hour TSP and 24-hour TSP monitoring were undertaken in this reporting month. No exceedances of 1-hour and 24-hour TSP Monitoring were recorded in the air quality monitoring of this reporting month.

Meteorological information collected at the ASR5, including wind speed and wind direction, is provided in *Appendix H*.

#### 2.2 WATER QUALITY MONITORING

Post-construction water quality monitoring was completed on 11 April 2020. According to the EM&A Manual, Operational Phase Monitoring on water quality monitoring shall be performed monthly during the first year of Project operation. The proposal for operational phase monitoring on water quality monitoring was approved by EPD on 19 May 2020. The schedule for operational phase monitoring on water quality monitoring in June 2020 is provided in *Appendix F*.

2.3 DOLPHIN MONITORING

#### 2.3.1 Monitoring Requirements

Impact dolphin monitoring is required to be conducted by a qualified dolphin specialist team to evaluate whether there have been any effects on the dolphins. In order to fulfil the EM&A requirements and make good use of available resources, Contract No. HY/2012/08 has taken over the responsibility for implementation of dolphin monitoring from HZMB HKLR Contract No. HY/2011/03 since October 2019.

#### 2.3.2 Monitoring Equipment

Table 2.5 summarises the equipment used for the impact dolphin monitoring.

Table 2.5Dolphin Monitoring Equipment

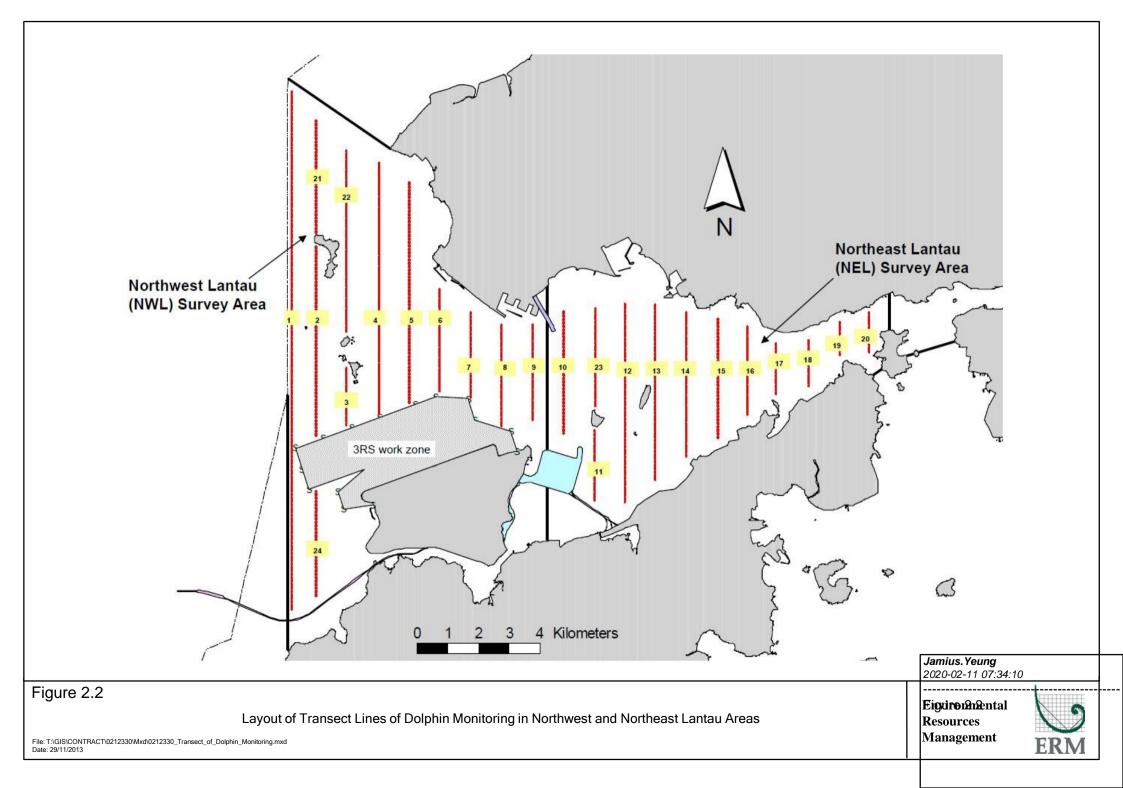
Equipment	Model
Global Positioning System (GPS)	Garmin 18X-PC
	Geo One Phottix
Camera	Nikon D90 300m 2.8D fixed focus
	Nikon D90 20-300m zoom lens
Laser Binocular	Infinitor LRF 1000
Marine Binocular	Bushell 7 x 50 marine binocular with compass and reticules
Vessel for Monitoring	65 foot single engine motor vessel with viewing platform 4.5m above water level

#### 2.3.3 Monitoring Parameter, Frequencies & Duration

Dolphin monitoring should cover all transect lines in Northeast Lantau (NEL) and the Northwest Lantau (NWL) survey areas twice per month throughout the entire construction period. The monitoring data should be compatible with, and should be made available for, long-term studies of small cetacean ecology in Hong Kong. In order to provide a suitable long-term dataset for comparison, identical methodology and line transects employed in baseline dolphin monitoring was followed in the impact dolphin monitoring.

#### 2.3.4 Monitoring Location

The impact dolphin monitoring was carried out in the NEL and NWL along the line transect as depicted in *Figure 2.2*. The co-ordinates of all transect lines are shown in *Table 2.6* below.



	Line No.	Easting	Northing		Line No.	Easting	Northing
1	Start Point	804671	815456	13	Start Point	816506	819480
1	End Point	804671	831404	13	End Point	816506	824859
2	Start Point	805476	820800*	14	Start Point	817537	820220
2	End Point	805476	826654	14	End Point	817537	824613
3	Start Point	806464	821150*	15	Start Point	818568	820735
3	End Point	806464	822911	15	End Point	818568	824433
4	Start Point	807518	821500*	16	Start Point	819532	821420
4	End Point	807518	829230	16	End Point	819532	824209
5	Start Point	808504	821850*	17	Start Point	820451	822125
5	End Point	808504	828602	17	End Point	820451	823671
6	Start Point	809490	822150*	18	Start Point	821504	822371
6	End Point	809490	825352	18	End Point	821504	823761
7	Start Point	810499	822000*	19	Start Point	822513	823268
7	End Point	810499	824613	19	End Point	822513	824321
8	Start Point	811508	821123	20	Start Point	823477	823402
8	End Point	811508	824254	20	End Point	823477	824613
9	Start Point	812516	821303	21	Start Point	805476	827081
9	End Point	812516	824254	21	End Point	805476	830562
10	Start Point	813525	821176	22	Start Point	806464	824033
10	End Point	813525	824657	22	End Point	806464	829598
11	Start Point	814556	818853	23	Start Point	814559	821739
11	End Point	814556	820992	23	End Point	814559	824768
12	Start Point	815542	818807	24*	Start Point	805476*	815900*
12	End Point	815542	824882	24*	End Point	805476*	819100*

#### Table 2.6Impact Dolphin Monitoring Line Transect Co-ordinates

Remarks: The coordinates of several starting and ending points have been revised due to the presence of a work zone to the north of the airport platform with intense construction activities in association with the construction of the third runway expansion for the Hong Kong International Airport. Co-ordinates in red and marked with asterisk are revised co-ordinates of transect line.

#### 2.3.5 Action & Limit Levels

The Action and Limit levels of impact dolphin monitoring are shown in *Appendix D*. The Event and Action plan is presented in *Appendix J*.

#### 2.3.6 Monitoring Schedule for the Reporting Month

Dolphin monitoring was carried out on 5, 12, 18 and 25 May 2020.

#### 2.3.7 Results & Observations

A total of 254.93 km of survey effort was collected, with 100% of the total survey effort being conducted under favourable weather conditions (i.e. Beaufort Sea State 3 or below with good visibility) in May 2020. Among the two areas, 94.00 km and 160.93 km of survey effort were collected from NEL and NWL survey areas, respectively. The total survey effort conducted on primary and secondary lines were 188.20 km and 66.73 km respectively. The survey efforts are summarized in *Appendix I*.

No Chinese White Dolphin sighting was recorded during the two sets of surveys in May 2020.

No dolphin sighting was made in the proximity of the TM-CLKL alignment.

The southern end of transect line no. 8 was not travelled on 5 and 18 May 2020 during the dolphin monitoring due to the presence of construction boats along the transect line. Part of the transect line was not travelled due to safety concerns.

Encounter rates of Chinese White Dolphins are deduced from the survey effort and on-effort sighting data made under favourable conditions (Beaufort 3 or below) in May 2020 with the results present in *Tables 2.7* and *2.8*.

#### Table 2.7Individual Survey Event Encounter Rates

		Encounter rate (STG)	Encounter rate (ANI)
		(no. of on-effort dolphin	(no. of dolphins from all on-
		sightings per 100 km of	effort sightings per 100 km of
		survey effort)	survey effort)
		Primary Lines Only	Primary Lines Only
NEL	Set 1: May 5th / 12th	0.0	0.0
INEL	Set 2: May 18th / 25th	0.0	0.0
NWL	Set 1: May 5th / 12th	0.0	0.0
INVVL	Set 2: May 18th / 25th	0.0	0.0

Note: Dolphin Encounter Rates are deduced from the Two Sets of Surveys (Two Surveys in Each Set ) in May 2020 in Northeast (NEL) and Northwest Lantau (NWL)

#### Table 2.8Monthly Average Encounter Rates

	(no. of on-ef sightings per 10	rate (STG) fort dolphin 00 km of survey ort)	Encounter rate (ANI) (no. of dolphins from all on- effort sightings per 100 km of survey effort)		
	Primary Lines Only	5		Both Primary and Secondary Lines	
Northeast Lantau	0.0	0.0	0.0	0.0	

Northwest Lantau 0.9	0.0	0.0	0.0
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Note: Overall dolphin encounter rates (sightings per 100 km of survey effort) from all four surveys are conducted in May 2020 on primary lines only as well as both primary lines and secondary lines in Northeast and Northwest Lantau.

Whilst one (1) Limit Level exceedance was observed for the quarterly dolphin monitoring data between March and May 2020, no unacceptable impact from the construction activities of the TM-CLKL Northern Connection Sub-sea Tunnel Section on Chinese White Dolphins was noticeable from general observations. Due to monthly variation in dolphin occurrence within the survey area, it would be more appropriate to draw conclusion on whether any unacceptable impacts on dolphins have been detected in relation to the construction activities of this Contract in the quarterly EM&A reports, where comparison on distribution, group size and encounter rates of dolphins between the quarterly impact monitoring period and baseline monitoring period will be made.

According to the EM&A Manual, Operational Phase Monitoring on dolphin monitoring shall be undertaken based upon the frequency of forty-eight, oneday survey events at a frequency of 2 per month over a period of 24 months following cessation of the construction. The proposal for operational phase monitoring on dolphin monitoring was approved by EPD on 19 May 2020. The schedule for operational phase monitoring on dolphin monitoring in June 2020 is provided in *Appendix F*.

#### 2.3.8 Implementation of Marine Mammal Exclusion Zone

No marine works were undertaken during the reporting period, therefore, daily 250 m marine mammal exclusion zone monitoring was not undertaken during the reporting period.

#### 2.4 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 month, four (4) site inspections were carried out on 6, 13, 20 and 27 May 2020.

Key observations and recommendations during the site inspections in this reporting period are summarized in *Table 2.9*.

Table 2.9	Specific Observations and Recommendations during the Weekly Site
	Inspection in this Reporting Month

Inspection Date	Observations	<b>Recommendations/ Remarks</b>
6 May 2020	<ul><li>Northern Landfall (Pumpsum)</li><li>Chemical should be placed in drip tray.</li><li>Accumulated residuals were observed on site.</li></ul>	<ul> <li>Northern Landfall (Pumpsum)</li> <li>The Contractor was reminded to place the chemical in drip tray.</li> <li>The Contractor was reminded to keep better housekeeping.</li> </ul>
13 May 2020	Carpark <ul> <li>Residuals were observed on site.</li> </ul>	Carpark <ul> <li>The Contractor was reminded to keep better housekeeping.</li> </ul>
20 May 2020	<ul><li>South Ventilation Building</li><li>Accumulated residuals were observed on site.</li></ul>	<ul><li>South Ventilation Building</li><li>The Contractor was reminded to clear accumulated residuals.</li></ul>
27 May 2020	<ul><li>Box Culvert</li><li>NRMM label was in green color instead of blue.</li></ul>	<ul><li>Box Culvert</li><li>The Contractor was reminded to replace the NRMM label.</li></ul>

The Contractor has rectified all of the observations as identified during environmental site inspections in the reporting month.

#### 2.5 WASTE MANAGEMENT STATUS

The Contractor had submitted application form for registration as chemical waste producer under the Contract. Sufficient numbers of receptacles were available for general refuse collection and sorting.

Wastes generated during this reporting period included mainly construction wastes (inert and non-inert). Reference has been made to the waste flow table prepared by the Contractor (*Appendix L*). The quantities of different types of wastes are summarized in *Table 2.10*.

#### Table 2.10Quantities of Different Waste Generated in the Reporting Month

Month/Year	Inert Construction	Inert Construction	Non-inert Construction	Recyclable Materials <sup>(c)</sup> (kg)	Chemical Wastes (kg)	Marine Sediment (m <sup>3</sup> )		
	Waste <sup>(a)</sup> (tonnes)	Waste Re- used (tonnes)	Waste <sup>(b)</sup> (tonnes)			Category L	Category M (M <sub>p</sub> & M <sub>f</sub> )	Mixed (L+M)
May 2020	7,015	0	536	6,740	600	0	0	0
Notos:								

Notes:

(a) Inert construction wastes include hard rock and large broken concrete, and materials disposed as public fill.

(b) Non-inert construction wastes include general refuse disposed at landfill.

(c) Recyclable materials include metals, paper, cardboard, plastics, timber and others.

The Contractor was advised to properly maintain on site C&D materials and waste collection, sorting and recording system, dispose of C&D materials and wastes at designated ground and maximize reuse/ recycle of C&D materials and wastes. The Contractor was also reminded to properly maintain the site tidiness and dispose of the wastes accumulated on site regularly and properly.

For chemical waste containers, the Contractor was reminded to treat properly and store temporarily in designated chemical waste storage area on site in accordance with the Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes.

#### 2.6 Environmental Licenses and Permits

The status of environmental licensing and permit is summarized in *Table* 2.11 below.

License/ Permit	License or Permit No.	Date of Issue	Date of Expiry	License/ Permit Holder	Remarks
Environmental Permit	EP-354/2009/D	13 March 2015	Throughout the Contract	HyD	Application for VEP on 3 March 2015 to
					supersede EP-354/2009/C
Construction Dust	435068	27 June 2018	Throughout the Contract	DBJV	Northern Landfall
Notification					
Construction Devi	425505	10 1 1 0010	The state of the Constant		
Construction Dust Notification	435505	12 July 2018	Throughout the Contract	DBJV	Southern Landfall
Notification					
Chemical Waste	5213-422-D2516-02	18 January 2017	Throughout the Contract	DBJV	Northern Landfall
Registration		·			
Chemical Waste	5213-951-D2591-01	25 May 2016	Throughout the Contract	DBJV	Southern Landfall
Registration					
Construction Waste	7018108	28 August 2013	Throughout the Contract	DBJV	Waste disposal in Contract No. HY/2012/08
Disposal Account					
Waste Water Discharge	WT00031435-2018	2 August 2018	31 August 2023	DBJV	Southern Landfall
License					
Waste Water Discharge	WT00034060-2019	25 July 2019	30 June 2024	DBJV	Northern Landfall (4 Discharge Point)
License					
Construction Noise Permit	GW-RW0181-20	29 April 2020	14 October 2020	DBJV	Urmston Road in front of Pillar Point
Construction Noise Permit	GW-RS1137-19	26 December 2019	5 June 2020	DBJV	Southern Landfall
Construction Noise Permit	GW-RW0144-20	14 April 2020	31 August 2020	DBJV	WA23 Tsing Yi Storage Area

#### Table 2.11Summary of Environmental Licensing and Permit Status

Notes:

HyD = Highways Department

DBJV = Dragages – Bouygues Joint Venture

VEP = Variation of Environmental Permit

#### 2.7 IMPLEMENTATION STATUS OF ENVIRONMENTAL MITIGATION MEASURES

In response to the site audit findings, the Contractors carried out all corrective actions.

A summary of the Implementation Schedule of Environmental Mitigation Measures (EMIS) is presented in *Appendix C*. The necessary mitigation measures relevant to this Contract were implemented properly.

# 2.8 SUMMARY OF EXCEEDANCES OF THE ENVIRONMENTAL QUALITY PERFORMANCE LIMIT

No exceedances of 1-hour and 24-hour TSP Monitoring were recorded in the air quality monitoring of this reporting month.

Whilst one (1) Limit Level exceedance was observed for the quarterly dolphin monitoring data between March and May 2020, no unacceptable impact from the construction activities of the TM-CLKL Northern Connection Sub-sea Tunnel Section on Chinese White Dolphins was noticeable from general observations.

Cumulative statistics are provided in *Appendix K*.

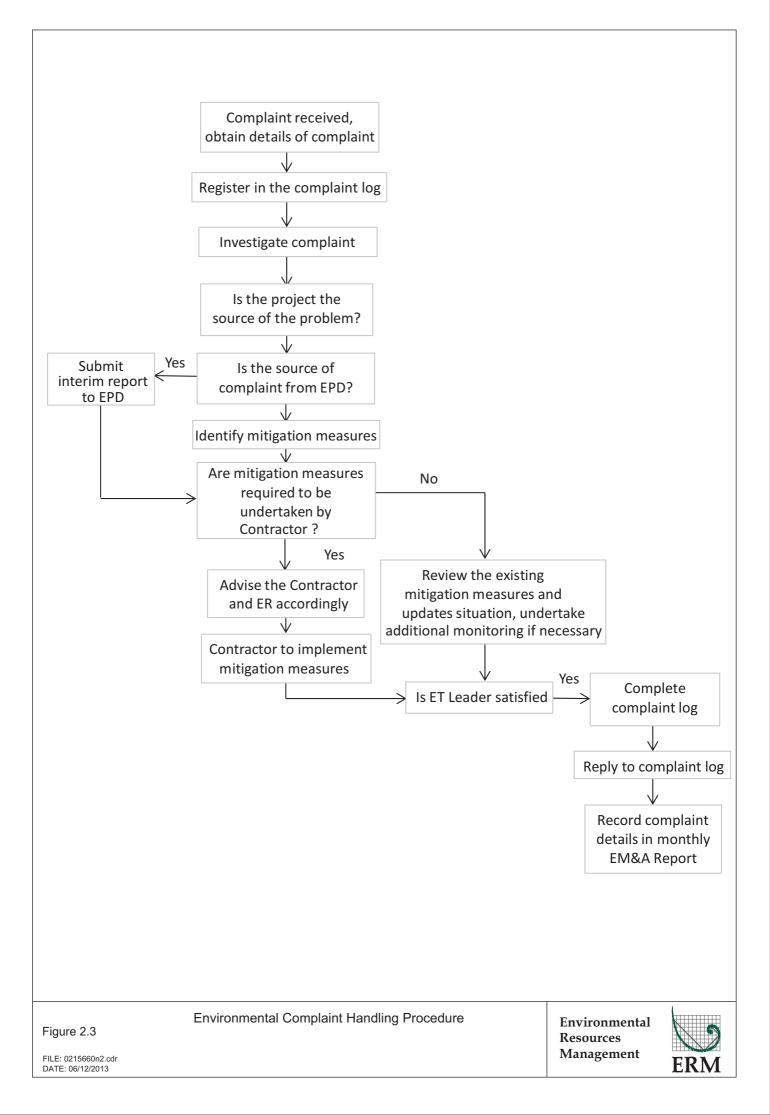
#### 2.9 SUMMARY OF COMPLAINTS, NOTIFICATION OF SUMMONS AND SUCCESSFUL PROSECUTIONS

The Environmental Complaint Handling Procedure is provided in Figure 2.3.

No environmental complaint was received in this reporting period.

No environmental summons was received in this reporting period.

Statistics on complaints, notifications of summons and successful prosecutions are summarized in *Appendix K*.



#### 3.1 CONSTRUCTION ACTIVITIES FOR THE COMING MONTH

As informed by the Contractor, the major works for the Contract in June 2020 are summarized in *Table 3.1*.

#### Table 3.1Construction Works to Be Undertaken in the Coming Month

W	orks to be undertaken
La	nd-based Works

- Road & Drainage works Portion S-A, S-B & S-C and Northern Landfall;
- UU installation Portion S-A, S-B & S-C and Northern Landfall.

#### 3.2 KEY ISSUES FOR THE COMING MONTH

Potential environmental impacts arising from the above upcoming construction activities in the next reporting month of June 2020 are mainly associated with dust and waste management issues.

#### 3.3 MONITORING SCHEDULE FOR THE COMING MONTH

The tentative schedule for environmental monitoring in June 2020 is provided in *Appendix F*.

#### 4 CONCLUSIONS AND RECOMMENDATIONS

#### 4.1 CONCLUSIONS

This Seventy-ninth Monthly EM&A Report presents the findings of the EM&A activities undertaken during the period from 1 to 31 May 2020, in accordance with the Updated EM&A Manual and the requirements of EP-354/2009/D.

Air quality (including 1-hour TSP and 24-hour TSP) and dolphin monitoring were carried out in this reporting month.

No exceedances of 1-hour and 24-hour TSP Monitoring were recorded in the air quality monitoring of this reporting month.

No Chinese White Dolphin sighting was recorded during the two sets of surveys in May 2020. Whilst one (1) Limit Level exceedance was observed for the quarterly dolphin monitoring data between March and May 2020, no unacceptable impact from the construction activities of the TM-CLKL Northern Connection Sub-sea Tunnel Section on Chinese White Dolphins was noticeable from general observations.

Environmental site inspection was carried out four (4) times in May 2020. Remedial actions recommended for the deficiencies identified during the site audits were properly implemented by the Contractor.

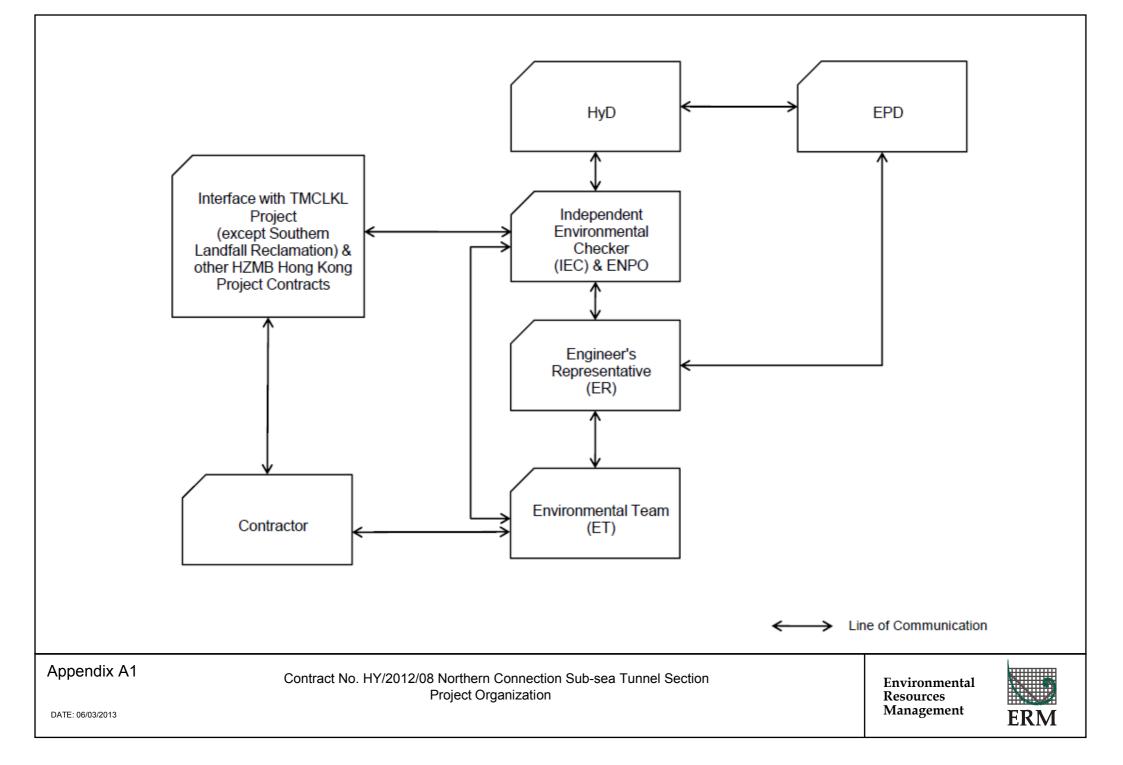
No non-compliance event was recorded during the reporting period.

No environmental complaint was received in this reporting period.

No environmental summons was received in this reporting period.

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

Project Organization for Environmental Works



Appendix B

Construction Programme

#	Activity Name	Orig Dur	Start	Finish	2019 2020 November December January February March April May June
1			<i>c</i> :		03 1 17 2 01 0 15 2 29 0 12 1 26 0 09 1 23 01 0 15 2 29 0 12 1 26 0 10 1 21
	TMCLKL Northern Connection Sub-sea Tunr	nel Sec	tion		
2	Contract Key Dates				
3	[KD-2c] Stage 2c Completion - Remaining TSS & TSA [KD-2d] Stage 2d Completion - MHS C&C Tunnel	0		30-Nov-19* 15-Jan-20*	♥ [KD-2c] Stage 2c Completion - Remaining TSS & TSA ♥ [KD-2d] Stage 2d Completion - MHS C&C Tunnel
5	[KD-3a] Stage 3a Completion - NLF UU/At-grade Provision	0		24-Feb-20*	▼ [ND-24] Clage 2d Completion - NLF UU/At-grade Provision
6	[KD-3b] Stage 3b Completion - NLF Provision for CLP, LV & ELV	0		30-Oct-19*	[KD-3b]Stage 3b Completion -NLF Provision for CLP, LV & ELV
7	[KD-3c] Stage 3c Completion - SLF UU & At-grade works provision	0		14-May-20*	▼ [KD-3 <mark>2</mark> ]Stage 3¢ Con
8	[KD-3d] Stage 3d Completion - SLF Provision for CLP, LV & ELV	0		08-Feb-20* 21-Nov-19*	♥ [KD-3d] Stage 3d Completion - SLF Provision for CLP, V & ELV
9 10	[KD-3f] Stage 3f Achievement - NLS/NAR - provide access [KD-3g] Stage 3g Completion - SVS Tunnel	0		21-Nov-19* 03-Nov-19*	▼ [KD-3f] Stage 3f Achievement - NLS/NAR - provide access [KD-3g] Stage 3g Completion - SVS Tunnel
11	[KD-3h] Stage 3h Completion - SVS Ventilation Duct	0		03-Feb-20*	▼ [KD-3h] Stage 3h Completion - \$VS Ventilation Duct
12	[KD-3i] Stage 3i Completion - South Approach Ramp	0		01-Dec-19*	🛡 [KD-3i] Stage 3i Completion - South Approach Ramp
13	[KD-8] Section 1 Completion - NLF Reclamation & Seawall	0		16-Jan-20*	♥ [KD-8] Section 1:Completion - NLF Reclamation & Seawall:
14	[KD-9] Section 2 Completion - Tunnels and Approach Ramp	0		05-May-20*	TrKD-9]Section 2 Completi
15 16	[KD-10] Section 3A Completion - SVB [KD-12] Section 4 Completion - SLFAt-grade Road	0		30-Sep-19* 14-May-20*	In 3A Completion + SV/B
17	[KD-13] Section 5 Completion - Preservation and Protection of Trees	-		14-May-20*	KD-13]Section 5 Co
18	Portion Handover Dates				
19	N10 (excl Tunnel) - Handover	0		11-Dec-19*	◆ N10 (excl Tuninef) - Handover
20	N11A-Handover	0		30-Nov-19*	♦ N11A-Handøver
21 22	N11B - Handover N13C, D, E, F, G, H, I - Handover	0		30-Nov-19* 07-Apr-20*	◆ N11B - Handover ◆ N13C,D,E, F,G, H, I - Handover
22	N13U, Jii, Ki & Kii - Handover for E&M Contractscope	0		30-Nov-19*	♦ N13Ji, Ji, Ki & Kii - Handover for E&M Contractscope
20	N14B - Handover	0		07-Apr-20*	◆ N14B - Handover
25	N13B - Handover	0		07-Apr-20	♦ :N13B - Handover
26	North Approach Ramp KD-3f				
27	KD-3f-DBJV Forecast (01Sep19)	0		19-Nov-19	▼ KD-3f - DBJV Forecast (01Sep19)
28 29	[KD-3f]-EOTO 1-30 CurrentDate KD-3f - Required Date for C4 Access	0		19-Nov-19* 02-Dec-19*	<ul> <li>♥ [KD-3f]-EOTO 1+30 Current Date</li> <li>♥ KD-3f - Required Date for C4 Access</li> </ul>
30	North Approach Ramp	0		02-Dec-19	
31	Internal Structure				
32	Parapet grouting works	12	27-Aug-19A	09-Sep-19	
33	Parapet installation @ Bay 9 (part 1 precast)	4	10-Sep-19	13-Sep-19	Bay 9 (part 1 precast)
34	Utility Ladder modification	12 6	16-Sep-19	28-Sep-19	odification of Beams
35 36	Breaking of Beams In-situ Parapet@ Bay 9 (Utility ladder location)	3	30-Sep-19 09-Oct-19	08-Oct-19 11-Oct-19	arapet@Bay9(Utility.ladder.location)
37	Road divertion to ML03 side	0	00 000 10	02-Oct-19*	n to ML03 side
38	ML02 side Sub-base backfilling	6	03-Oct-19	10-Oct-19	te Sub-base backfilling
39	Parapet installation (Central location)	28	11-Oct-19	12-Nov-19	Parapetinstallation (Central location)
40 41	Backfilling & slab topping	6	13-Nov-19	19-Nov-19	📮 Backfilling & slab topping
41	Sign Gantry Procurement & Fabrication of Sign Gantry	41	05-Sep-19*	25-Oct-19	rocurement & Fabrication of Sign Gantry
43	Delivery of Sign Gantry to Site	1	26-Oct-19	26-Oct-19	pelivery of Sign Gantry to Site
44	Installation of Sign Gantry Beam (ML02 & ML03)	6	28-Oct-19	02-Nov-19	Installation of Sign Gantry Beam (ML02 & NL03)
45	North Launching Shaft KD-3f				
46	[KD-3f]-DBJV Forecast(01Sep19)	0		19-Nov-19	♥ [KD-3f]-DBJV Forecast(01Sep19)
47 48	[KD-3f]- EOTO 1-30 Current Date [KD-3f]- Required Date for C4 Access	0		19-Nov-19* 02-Dec-19*	
40	North Launching Shaft	0		02-Dec-19	▼ [AD-Si]+ Required Date for 04 Access
50	Thermal Barrier (Wall + OHVD Soffit + above OHVD)	70	22-Jul-19A	14-Oct-19	al Barrier (Wal) + OHVD Soffit + above OHVD)
51	VO72 - lead time	31	15-Oct-19	19-Nov-19	VO72 - lead time
52	Remaining North Reclamation KD-8				
53	[KD-8] - EOTO 1-30 Current Date	0		16-Jan-20*	♥ [KD-8] - EOTO 1-30 Current Date
54	[KD-8] - DBJV Forecast (01 Sep 19)	0		16-Jan-20	▼ [KD-8] - DBJV Forecast(01 Sep 19)
55 56	Vertical Seawall Access received from C4	0	l l	28-Oct-19*	Access received from C4
57	Remaining Rubber Fender (VO79)	38	29-Oct-19	11-Dec-19	Remaining Rubber Fender (VØ79)
58	Remaining Marine Facilities	12	12-Dec-19	27-Dec-19	Remaining Marine Facilities
59	Zone A Bay 65 to Bay 67	7	23-Oct-19	30-Oct-19	Zone A Bay 65 to Bay 67
<u>60</u>	Zone A Bay 68 to Bay 70	7	31-Oct-19 08-Nov-19	07-Nov-19 14-Nov-19	Zone A Bay 68 to Bay 70
61 62	Zone A Bay 71 to Bay 72 Sloping Seawall	Ö	00-1107-19	14-1107-19	C Zone A Bay 71 to Bay 72
63	Sloping Seawall coping	75	02-Sep-19	30-Nov-19	Sloping Seawall coping
64	Remaining Vertical Seawall coping (Westside)	34	23-Oct-19	30-Nov-19	Remaining Mertical Seawall coping (Westside)
65	Removal, Backfilling & Compaction				
66	NAR & NLS Backfilling and Formation	51	01-Aug-19A	•	ackfilling and Formation
67 68	Zone A Fire Proofing factory dismantling	21	15-Oct-19* 08-Nov-19	07-Nov-19	Zone A Fire Proofing factory dismantling
68 69	Zone A Fire Proofing factory compaction Surcharge removal at Zone B (STPArea)	30 30	08-Nov-19 11-Nov-19*	12-Dec-19 14-Dec-19	Zone A Fire Proofing factory compacton Surcharge removal at Zone B (STP Area)
70	Zone B (STPArea) compaction (if needed)	12	16-Dec-19	31-Dec-19	Zone B (STPArea) compaction (if needed)
71	Zone C Gantry 2 & 3 removed	0		15 <b>-N</b> ov-19*	◆ Zone C Gantry 2 & 3 removed
72	Zone C Gantry 2 & 3 slab breaking & removal	12	16-Nov-19	29-Nov-19	Zone C Garitry 2 & 3 slab breaking & removal
73 74	Zone C Gantry 2 & 3 Compaction Overall	18	30-Nov-19	20-Dec-19	Zone C Gantry 2 & 3 Compaction
75	Sloping Seawall Echo Sounding survey	0		31-Oct-19*	Sloping Seawall Echo Sounding survey
76	Sloping Seawall Remedial works (if needed)	12	31-Oct-19	13-Nov-19	Sloping Seawall Remedial works (if needed)
77	Sloping Seawall Final Echo Sounding survey	0		13-Nov-19	♦ Sloping Seawall Final Echo Sounding survey
78	Vertical seawall defect rectification	88	02-Oct-19	16-Jan-20	Vértical seawall defect rectification
79	NLF Demobilization & At-grade works	1 - 1	,		
80 81	KD-3b - EOTO 1-30 Current Date KD-3b - DBJV Forecast (01 Sep 19)	0		29-Oct-19* 29-Oct-19*	KD-3b- EOTO 1-30 CurrentDate KD-3b- DBJV Forecast(01 Sep 19)
		-			
Page 1 of 8		LKL No	rthern Conne	ection Sub-	sea lunnel Section 建醇克 GFeb-18 RevLAC WYU
Data Date:	01-Sep-19	De	tailed Works	Programm	ne Rev. K Dragages BOUYDES OF AND Rev. WYU
	Progress Milestone			-	Hong Kong         11-Nor-19         Rev.K         SPa         WYu           A member of the Bourgues Construction group         22-Jan-20         Rev.K1         SPa         WYu
	Progress Bar	١٢	ree Months	Rulling Pro	gramme Dragages - Bouygues Joint Venture 寶嘉 - 布依格聯盟

#	Activity Name	Orig	Start	Finish	2019 2020 November December January February March April May June
				01.5	<u> 03  1  17  2  01  0  15  2  29  0  12  1  26  0  09  1  23 01  0  15  2  29  0  12  1  26  0  10  1  24  3  07  1  21  1</u>
82 83	KD-3b - Required Date for C4 Access	0		31-Oct-19* 24-Feb-20*	KD-3b - Required Date for C4 Access
83 84	KD-3a - EOTO 1-30 Current Date KD-3a - DBJV Forecast (01 Sep 19)	0		24-Feb-20* 24-Feb-20	♥ KD-3a - EOTO 1-30 Current Date ♥ KD-3a - DBJV Forecast (01 \$ep 19)
85	Wearing Course	115	12-Sep-19*	03-Feb-20	Wearing Course
86	Requirement				
87	Overall EVAProvision - DBJV Estimation	0		25-Nov-19*	◆ Overall EVAProvision - DBJV Estimation
88	Portion N12 & Portion N6B				
89	CLP Substation - Prepare for CLP Consent for de-energization		02-Sep-19	27-Dec-19	CLP Substation - Prepare for CLP Consent for de-energization
90 91	CLP Substation - De-energization CLP Substation - Dismantling & Removal	24 85	28-Dec-19 30-Jan-20	29-Jan-20 02-Jun-20	CLP Substation - De-energization
91	VO-009 Temporary Protection Barrier - Dismantling & Remova		30-Jan-20 30-Jan-20	25-Mar-20	VO-009 Temporary Protection Barrier - Dismar
93	Provision for Utilities - Portion N12 & N6B	133	15-Apr-19A	25-Sep-19	ties- Portion N12 & N6B
94	NPO5 (ML03)				
95	Subbase / Kerb / Cable Duct Provision	25	02-Sep-19	02-Oct-19	erb /Cable Duct Provision
96	Road Base 1stLayer	2	03-Oct-19	04-Oct-19	1stLayer
97 98	Road Base 2nd Layer Base Course	18 18	22-Nov-19 18-Dec-19	12-Dec-19 10-Jan-20	Road Base 2nd Layer Base Course
99	Wearing Course	12	16-Jan-20	01-Feb-20	
100	NPO5 (ML02) + NP05 (MD)				
101	Concrete Road breaking	6	07-Sep-19	13-Sep-19	hg
102	UU & Formation	30	05-Oct-19	09-Nov-19	UU& Formation
103 104	Subbase / Kerb / Cable Duct Provision Road Base 1stLayer	6 2	11-Nov-19 18-Nov-19	16-Nov-19 19-Nov-19	Subbase / Kerb / Cable DuctProvision
104	Road Base 2nd Layer	18	25-Nov-19	14-Dec-19	Road base isiLayer
106	Base Course	18	20-Dec-19	13-Jan-20	Base Course
107	Wearing Course	12	17-Jan-20	03-Feb-20	
108	Portion N6	1 1	00.0	67 G	
109	Road Base 2nd Layer Base Course	16 18	08-Oct-19* 26-Oct-19	25-Oct-19 15-Nov-19	bad Base 2nd Layer
110 111	Base Course Wearing Course	18	26-Oct-19 16-Nov-19	15-Nov-19 06-Dec-19	
112	Retaining Wall A	10		20010	
113	Subbase / Kerb / Cable Duct Provision	11	02-Oct-19*	15-Oct-19	ise / Kerb / Cable Duct Provision
114	Road Base 1stLayer	3	16-Oct-19	18-Oct-19	d Base 1stLayer
115	Road Base 2nd Layer	18	19-Oct-19	08-Nov-19	
116 117	Base Course Wearing Course	18 18	09-Nov-19 30-Nov-19	29-Nov-19 20-Dec-19	Base Course
118	North Launching Shaft	10	30-1404-13	20-Dec-19	
119	Provision for Utilities - NLS	48	05-Aug-19A	30-Sep-19	Jülities - NLS
120	Roundabout at NLS		Ū	·	
121	UU & Formation	18	05-Oct-19	26-Oct-19	JU & Formation
122	Subbase / Kerb / Cable Duct Provision	6	28-Oct-19	02-Nov-19	Subbase / Kerb / Cable Duct Provision
123 124	Road Base 1stLayer	2	04-Nov-19 06-Nov-19	05-Nov-19 26-Nov-19	Road Base 1stLayer
124	Road Base 2nd Layer Base Course	18 18	27-Nov-19	17-Dec-19	Road Base 2nd Layer Base Course
126	Wearing Course	18	18-Dec-19	10-Jan-20	
127	Carpark				
128	UU & Formation	15	21-Oct-19	06-Nov-19	UU& Formation
129	Subbase / Kerb / Cable Duct Provision	12	07-Nov-19	20-Nov-19	Subbase / Kerb / Cable Duct Provision
130 131	Road Base 1stLayer Road Base 2nd Layer	2 18	21-Nov-19 23-Nov-19	22-Nov-19 13-Dec-19	Road Base 1stLayer     Road Base 2nd Layer
132	Base Course	18	14-Dec-19	07-Jan-20	Base Course
133	Wearing Course	18	08-Jan-20	31-Jan-20	weapor Course
134	Retaining Wall A to B				
135	Subbase / Kerb / Cable Duct Provision	32	09-Sep-19	18-Oct-19	pase /Kerb/Cable Duct Provision
136 137	Road Base 1stLayer Road Base 2nd Layer	4	19-Oct-19 24-Oct-19	23-Oct-19 13-Nov-19	ad Base 1stLayer Road Base 2nd Layer
137	Base Course	18	14-Nov-19	04-Dec-19	Road Base Zild Laye
139	Wearing Course	18	05-Dec-19	27-Dec-19	weang Course
140	NPO3				
141	UU & Formation	20	19-Oct-19	11-Nov-19	UU& Formation
142 143	Subbase / Kerb / Cable Duct Provision Road Base 1stLayer	10 2	12-Nov-19 23-Nov-19	22-Nov-19 25-Nov-19	Subbase / Kerb / Cable Duct Provision
143	Road Base Isi Layer Road Base 2nd Layer	18	23-Nov-19 26-Nov-19	16-Dec-19	Road Base 1st Layer
145	Base Course	18	17-Dec-19	09-Jan-20	Base Course
146	Wearing Course	16	10-Jan-20	31-Jan-20	
147	Sloping Seawall				
148	Workshop 14-9	1 1	0.0		
149 150	UU & Formation Subbase / Kerb / Cable Duct Provision	127	06-May-19A 08-Oct-19	05-Oct-19 15-Oct-19	ation ase / Kerb / Cable Duct Provision
150	Road Base 1stLayer	2	16-Oct-19	15-Oct-19 17-Oct-19	Base 1 Kerd / Caple Luct Provision
152	Road Base 2nd Layer	18	18-Oct-19	07-Nov-19	Road Base 2nd Layer
153	Base Course	18	08-Nov-19	28-Nov-19	Base Course
154	Wearing Course	18	29-Nov-19	19-Dec-19	
155	Workshop 9-1	407	07-Jun-19A	15 0-140	
156 157	UU & Formation Subbase / Kerb / Cable Duct Provision	107 8	07-Jun-19A 16-Oct-19	15-Oct-19 24-Oct-19	ormation ubbase /Kerb / Cable Duct Provision
157	Road Base 1stLayer	3	25-Oct-19	24-Oct-19 28-Oct-19	Road Base 1stLayer
159	Road Base 2nd Layer	18	29-Oct-19	18-Nov-19	Road Base 2rid Layer
160	Base Course	18	19-Nov-19	09-Dec-19	Base Course
161	Wearing Course	18	10-Dec-19	02-Jan-20	- wearing Colurse
162	Outfall C 1/2		10 1-140	01.01112	
163 164	UU & Formation Subbase / Kerb / Cable Duct Provision	86 6	10-Jul-19A 22-Oct-19	21-Oct-19 28-Oct-19	& Formation Subbase /Kerb / Cable DuctProvision
Page 2 of 8		MCLKL No	rthern Conne	ection Sub-	sea lunnel Section #容嘉 #容嘉 / / RevH / WYu / / / / / / / / / / / / / / / / / / /
Data Date:	01-Sep-19  Planned Milestone Key Date	De	tailed Works	Programm	ne Rev. K Dragages Rev.J WYU
	Progress Milestone			-	Hong Kong A merber of the Bourgues Construction group A merber of
	Progress Bar	Th	ree Months	Rolling Pro	gramme Dragages - Bouygues Joint Venture 寶嘉 - 布依格聯盟

#	Activity Name	Orig	Start	Finish	2019 2020
		Dur			November         December         January         February         March         April         May         June           103         1         17         2         01         0         12         1         26         0         09         1         23         01         0         12         1         26         0         101         1         24         3         07         1         21         1         26         0         101         1         24         3         107         1         121         1         126         0         101         1         24         3         107         1         121         1         126         0         101         1         124         3         107         1         121         1         126         0         101         1         124         3         107         1         121         1         126         0         101         1         124         3         107         1         121         1         126         0         101         1         124         3         107         1         121         1         126         10         101         1         124 </th
165	Road Base 1stLayer	2	29-Oct-19	30-Oct-19	Road Base 1stLayer
166	Road Base 2nd Layer	14	26-Nov-19	11-Dec-19	Road Base 2nd Layer
167	Base Course	14	16-Dec-19	03-Jan-20	Base Course
168	Wearing Course	12	07-Jan-20	20-Jan-20	
169	Outfall C 2/2	40	00 No. 40	45 No. 40	
170 171	UU & Formation Subbase / Kerb / Cable Duct Provision	12 6	02-Nov-19 16-Nov-19	15-Nov-19 22-Nov-19	UU & Formation
171	Road Base 1stLayer	2	23-Nov-19	22-Nov-19 25-Nov-19	Subbase /Kerb/Cable DuctProvision Road Base 1st Layer
172	Road Base 2nd Layer	14	28-Nov-19	13-Dec-19	Road Base 2nd Layer
174	Base Course	14	17-Dec-19	04-Jan-20	Base Course
175	Wearing Course	12	08-Jan-20	21-Jan-20	
176	Precast Segment Yard				
177	Roundabout/G4				
178	Subbase / Kerb / Cable Duct Provision	24	02-Sep-19	30-Sep-19	tb /Cable Duct Provision
179	Road Base 1stLayer	2	02-Oct-19	03-Oct-19	1stLayer
180	Road Base 2nd Layer	18	04-Oct-19	25-Oct-19	bad Base 2nd Layer
181 182	Base Course	18 18	26-Oct-19 16-Nov-19	15-Nov-19 06-Dec-19	Base Course
183	Wearing Course NVS & STP (Portion N7 Interface)	10	10-1107-19	06-Dec-19	
184	North Ventilation Building				
185	Subbase / Kerb / Cable Duct Provision	9	02-Sep-19	11-Sep-19	DuctProvision
185	Road Base 1stLayer	2	12-Sep-19	13-Sep-19	
187	Road Base 2nd Layer	18	23-Oct-19	12-Nov-19	Road Base 2nd Layer
188	Base Course	18	13-Nov-19	03-Dec-19	Base Course
189	Wearing Course	18	04-Dec-19	24-Dec-19	
190	FSD/CEDD				
191	Subbase / Kerb / Cable Duct Provision	18	02-Sep-19	23-Sep-19	Cable DuctProvision
192 193	Road Base 1stLayer Road Base 2nd Layer	2 18	24-Sep-19	25-Sep-19 18-Oct-19	ayer d Base 2nd Layer
193 194	Base Course	18	26-Sep-19 19-Oct-19	18-Oct-19 08-Nov-19	Base Course
194	Wearing Course	18	09-Nov-19	29-Nov-19	
196	Northern Landfall - Overall				
197	Street Furniture & Road Marking	2	04-Feb-20	24-Feb-20	Sireet Furniture & Road Marking
198	Remaining Internal Structure KD-2c				
199	[KD-2c] - EOTO 1-30 Current Date	0		30-Nov-19*	▼ [KD-2c]-EOTO1-30 CurrentDate
200	[KD-2c]-ML02 DBJV Forecast(01Sep19)	0		31-Oct-19	[KD-2c]-ML02 DBJV Forecast(01Sep19)
201	[KD-2c]-ML02 Required Date for C4 Access	0		31-Oct-19*	[KD-2c]-ML02 Required Date for C4 Access
202	[KD-2c] - Required Date for C4 Access	0		30-Nov-19*	♥ [KD-2c]-Required Date for C4 Access
203	[KD-2c]-ML03 DBJV Forecast(01Sep19)	0		30-Nov-19	♥ [KD-2c]-ML03 DBJV Forecast(01Sep19)
204	ML02 TSS				
205	ML02 TSS CP13-SVS - Thermal Barrier Wall	47	22-Jul-19A	13-Sep-19	β-Thermal Bamer/Wall
206 207	VO72 - lead time	12	16-Sep-19	28-Sep-19	ne i i i i i i i i i i i i i i i i i i i
	ML02 SVS	26	27 Aug 10 A	26 San 10	
208 209	ML02 SVS - Water Leakage 1 month (TBC) ML02 SVS - Thermal Barrier above OHVD	26 6	27-Aug-19A 25-Oct-19	26-Sep-19 31-Oct-19	nter Leakage 1month (TBC) ML02 SVS - Thermal Barrier above OHVD
210	ML02 SVS - Memai Banel above On VD	12	18-Sep-19*	02-Oct-19	Parapet
211	ML02 SVS - Walkway corbel	6	03-Oct-19	10-Oct-19	/S-Walkway corbel
212	ML02 SVS - Thermal Barrier OHVD Soffit	6	11-Oct-19	17-Oct-19	SVS - Thermal Barrier OHVD Soffit
213	ML02 SVS - Thermal Barrier Wall	6	18-Oct-19	24-Oct-19	L02 SVS - Thermal Barrier Wall
214	VO72 - lead time	6	25-Oct-19	31-Oct-19	V072-lead time
215	ML02 TSA				
216	ML02 TSA - Thermal Barrier Wall	18	02-Sep-19	23-Sep-19	mat Barrier Wall
217 218	ML02 TSA - Thermal Barrier above OHVD ML02 TSA - Thermal Barrier OHVD Soffit	18 24	24-Sep-19 24-Sep-19	16-Oct-19 23-Oct-19	TSA - Thermal Barrier above OHVD L02 TSA - Thermal Barrier OHVD Soffit
210	VO72 - lead time	10	24-Sep-19 24-Oct-19		
219	ML03 TSS	10		1.1.07 10	
221	ML03 TSS Entrance - Remaining OHVD	17	20-Aug-19A	07-Sep-19	maining OHVP
222	ML03 TSS CP11-SVS - Thermal Barrier OHVD Soffit	19	17-Sep-19		S CP11-SVS - Thermal Barrier OHVD Soffit
223	VO72 - lead time	12	11-Oct-19		O72 - lead time
224	ML03 TSS CP11-SVS - Thermal Barrier Wall	30	19-Aug-19A	•	SVS - Thermal Barrier Wall
225	ML03 TSS CP13-SVS - Thermal Barrier above OHVD	18	11-Oct-19	31-Oct-19	ML03 TSS CP13-SVS - Thermal Barrier above OHVD
226	ML03 SVS		00.955 10	10.0 10	
227 228	ML03 SVS - ISSG Crossing Removal of props after ISSG Crossing	9	09-Sep-19 20-Sep-19	19-Sep-19 26-Sep-19	prossing ps after ISSG Crossing
228	ML03 SVS - Weathertight	0	20-0eh-19	26-Sep-19 27-Sep-19*	eathertight
230	ML03 SVS - Parapet	6	23-Oct-19	29-Oct-19	ML03 SV\$ - Parapet
231	ML03 SVS - Walkway corbel	6	30-Oct-19	05-Nov-19	☐ ML03 SV\$-Walkway corbel
232	ML03 SVS - Thermal Barrier above OHVD	9	20-Nov-19	29-Nov-19	ML03 SVS - Thermal Banier above OHVD
233	ML03 SVS - Thermal Barrier OHVD Soffit	6	06-Nov-19		ML03 SV\$ - Thermal Barrier OHVD Soffit
234	ML03 SVS - Thermal Barrier Wall	6	13-Nov-19	19-Nov-19	ML03 SVS - Thermal Barrier Wall
235 236	VO72 - lead time ML03 SVS - Water Leakage 1month (TBC)	10 26	20-Nov-19 28-Sep-19	30-Nov-19 30-Oct-19	ML03;SVS - Water Leakage 1month (TBC)
236	ML03 SVS - Water Leakage Tmonin (TBC)	20	20-0eh-19	JU-UU-19	
238	ML03 TSA - Corbel installation	93	21-May-19A	07-Sep-19	lation
239	ML03 TSA - Coldennistallation ML03 TSA - Parapetinstallation	29	27-Aug-19A		Parapetinstallation
240	ML03 TSA - Walkway installation	30	02-Sep-19	09-Oct-19	A - Walkway installation
241	ML03 TSA-OHVD slab	11	20-Sep-19	03-Oct-19	OHVD slab
242	ML03 TSA-OHVD slab stitching	6	04-Oct-19	11-Oct-19	SA-OHVD slab stiching
243	ML03 TSA - Thermal Barrier Wall	24	02-Oct-19	30-Oct-19	ML03 TSA - Thermal Barrier Wall
244 245	ML03 TSA - Thermal Barrier - OHVD Soffit VO72 - lead time	24 12	21-Oct-19 18-Nov-19	16-Nov-19 30-Nov-19	ML03 TSA - Thermal Barrier - OHVD Soffit
245	VO/2 - lead time ML03 TSA - Thermal Barrier above OHVD	12	18-Nov-19 18-Nov-19	30-Nov-19 30-Nov-19	VO/2 - lead time ML03 TSA - Thermal Barrier above OHVD
		12			
Page 3 of 8	B Planned Bar	MCLKL No	rthern Conn	ection Sub-	sea Tunnel Section 香館吉 香館古 日間 日間 日間 日間 日間 日間 日間 日間
Data Date:	01-Sep-19	De	tailed Works	Programm	e Rev. K
	Key Date     Key Date     Progress Milestone	De		si ioyiailiili	e Rev. K Dragoges HongKong A melia of the Bourgeus Construction group
	Progress Bar	Tł	ree Months	Rolling Pro	

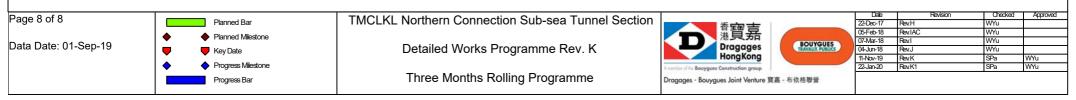
#	Activity Name	Orig Dur	Start	Finish	2019 2020 November December January February March April May June
0.47					03] 1  17] 2 01] 0  15] 2  29] 0  12  1  26  0  09  1  23 01  0  15  2  29  0  12  1  26  0  10  1  24  3  07  1  21
247 248	Remaining OHVD slab installation + ISSG Removal ML03 TSA - Thermal Barrier Wall/OHVD Soffit - In-situ OHVD locati	6 ( 6	02-Dec-19 09-Dec-19	07-Dec-19 14-Dec-19	Remaining OHVD slab installation + ISSG Removal ML03 TSA - Thermal Barrier Wall/OHVD Soffit - In-situ OHVD location
249	VO72 - lead time - In-situ OHVD location	3	16-Dec-19	14-Dec-19	□ VQ72-lead time - In-situ OHVD location
250	Tunnel Roadworks				
251	[KD-9] Section 2 Completion - Tunnels and Approach Ramp	0		05-May-20	▼ [KD-9]Sec <mark>t</mark> ion 2 ¢ompleti
252	[KD-9]-EOTO 1-30 Current Date	0		05-May-20*	▼ [KD-9]+EOTO 1-30 ¢urre
253	North Approach Ramp & North Launching Shaft	00		40 D - 40	
254 255	ML02 Pavement-Road Base + Base Course ML03 Pavement-Road Base + Base Course	38 83	28-Oct-19* 27-Aug-19A	10-Dec-19 04-Dec-19	ML02 Pavement - Road Base + Base Course ML03 Pavement - Road Base + Base Course
256	ML02 + ML03 Pavement - Final Layer	18	04-Jan-20	24-Jan-20	MLOZ + MLO3 Pavement∔ Final Layer
257	Overall North Approach Ramp Road Marking	8	29-Jan-20	25-Feb-20	Overall North Approach Ramp Road Marking
258	North Approach Tunnel to North Ventilation Shaft				
259 260	ML03 Pavement-Road Base + Base Course ML02 Pavement-Road Base + Base Course	72 50	30-Sep-19* 04-Nov-19*	24-Dec-19 03-Jan-20	ML03 Pavement - Road Base + Base Course
261	ML02 + ML03 Pavement - Final Layer	7	29-Jan-20	18-Feb-20	
262	Overall North Approach Tunnel Road Marking	19	19-Feb-20	17-Mar-20	Overall North Approach Tunnel Road Marking
263	Sub-sea Tunnel				
264	ML02 Pavement - NVS to CP33 Base Course	21	14-Oct-19*	06-Nov-19	ML02 Pavement - NVS to CP33 Base Course
265 266	ML03 Pavement - CP13 to SVS Base Course ML02 Pavement - CP13 to SVS Base Course	18 18	05-Dec-19 11-Dec-19	27-Dec-19 03-Jan-20	ML03 Pavement - CP13 to SVS Base Course ML02 Pavement - CP13 to SVS Base Course
267	ML02 + ML03 Pavement-Final Layer	18	04-Jan-20	24-Jan-20	MIC2 + MI
268	Overall Sub-sea Tunn el Road Marking	8	29-Jan-20	25-Feb-20	Overall Sub-sea Tunnel:Road Marking
269	MHS TBM Tunnel, Cut & Cover & South Approach Ran		04 1 55		
270 271	MHS ML02 & ML03 TBM Tunnel MHS C&C Tunnel and Approach Ramp	25 31	04-Jan-20 19-Feb-20	18-Feb-20 31-Mar-20	Mile Mile 2 division for the metal and Approve the formed and Approv
271	Tunnel Road Marking	24	01-Apr-20	05-May-20	Tunnel Road Matking
273	ML02 South Ventilation Shaft				
274	[KD-3g]-EOTO 1-30 CurrentDate	0		03-Nov-19*	▼ [KD-3g]- EOTO 1-30 CurrentDate
275	[KD-3h]-EOTO 1-30 Current Date	0		03-Feb-20*	
276 277	[KD-3g]-ML02 DBJV Forecast (01Sep19) [KD-3g]- Required date for C4 Access	0		31-Oct-19 31-Oct-19*	[KD-3g]-ML02 DBJV Forecast (01Sep19) [KD-3g]- Required date for C4 Access
278	[KD-3h]- ML03 DBJV Forecast (01Sep19)	0		31-Jan-20	[KD-3h]-ML03 DBJV Forecast (01Sep19)
279	[KD-3h] - Required date for C4 Access	0		03-Feb-20*	♥ [KD-3h] - Required date for C4 Access
280	ML02 SVS Structure				
281 282	Above Tunnel Vent Duct Walls between B1>DF	30	27-Aug-19A	02-Oct-19	
283	Backfilling to -0.65mPD	12	02-Sep-19		
284	Dwall opening between B1/DF	12	17-Sep-19	30-Sep-19	p between B1/DF
285	DF Slab 1.85mPD	9	03-Oct-19	14-Oct-19	b 1.85mPD
286 287	E&M Platform (15 out of 15) Walls between above Duct Roof	6	15-Oct-19 15-Oct-19	21-Oct-19 17-Oct-19	M Platform (15 out of 15) between above Duct Roof
288	Shaft Top Slab 4.1mPD	12	18-Oct-19	31-Oct-19	Shaft Top Slab 4.1mPD
289	Backfilling to 3.5mPD	12	01-Nov-19	14-Nov-19	Backfilling to 3.5mPD
290	Remove ML02 SVS Capping Beam	12 6	15-Nov-19	28-Nov-19	Rémove ML02 SVS Capping Beam
291 292	Backfilling to 5.5mPD Movement Joint Fabrication (Omega Seal)	136	29-Nov-19 21-Jun-19A	05-Dec-19 30-Nov-19	Backfilling to 5.5mPD Movement Joint Fabrication (Omega Seal)
293	Movement Joint Design Approval (Durasteel)	0		16-Sep-19*	ign Approval (Durasteel)
294	Movement Joint Fabrication (Durasteel)	75	17-Sep-19	14-Dec-19	Movement Joint Fabrication (Durasteel)
295 296	Movement Joint Installation (Part 1) Movement Joint Installation (Part 2)	35 32	02-Dec-19 16-Dec-19	14-Jan-20 24-Jan-20	Movement Joint Installation (Part 1)
297	Demobilization	6	29-Jan-20	04-Feb-20	
298	RPE Inspection for Air Leakage Test	3	29-Jan-20	31-Jan-20	RPE Inspection for Air Leakage Test
299	Air Leakage Test Report	4	01-Feb-20	07-Feb-20	Air Leakage Test Report
300 301	ML03 South Ventilation Shaft [KD-3g]-EOTO 1-30 Current Date	0		02 Nov 10*	
301	[KD-3h]-EOTO 1-30 Current Date	0		02-N0V-19 03-Feb-20*	♥ [KD-3g]+E0TO 1-30 CurrentDate ♥ [KD-3h]-E0TO 1+30 CurrentDate
303	[KD-3g]-ML03 DBJV Forecast (01Sep19)	0		31-Jan-20	♥ [KD-3g]-ML03 DBJV Forecast (01 Sep19)
304	[KD-3g] - Required date for C4 Access	0		01-Feb-20*	♥ [KD-3g] - Required date for C4 Access
305 306	[KD-3h]-ML03 DBJV Forecast(01Sep19) [KD-3h]- Required date for C4 Access	0		31-Jan-20 01-Feb-20*	♥ [KD-3h]-ML03 DBJV Forecast(01Sep19) ♥ [KD-3h]+Required date for C4 Access
307	ML03 SVS Structure	0		UTH 60-20	
308	Above Tunnel Vent Duct				
309	WestVentDuctWall-11.45 > -9.95mPD	23	28-Aug-19A	•	Vall-11.45 > -9.95mPD
310 311	WestVentDuctWall -9.95 > -6.95mPD	18 30	25-Sep-19 18-Oct-19	17-Oct-19 21-Nov-19	VeritDuctWall -9.95 > -6.95mPD
311 312	West Vent Duct Wall -6.95 > -0.65mPD South, East & North Vent Duct Wall -31.7 > -27.2mPD	21	18-Oct-19 27-Aug-19A	21-Nov-19 20-Sep-19	WestVentDuctWall-6.95 > -0.65 mPD
313	South, East& North DuctWall -27.2 > -22.7mPD	10	21-Sep-19	•	8. North Duct Wall -27.2 > -22.7 mPD
314	South, East & North Duct Wall -22.7 > -18.2mPD	14	04-Oct-19		uth, East& North DuctWall -22,7 > -18.2mPD
315 316	South, East & North Duct Wall -18.2 > -13.7mPD Vent Duct Slab @ -22.3mPD	14 5	22-Oct-19 07-Nov-19	06-Nov-19	
316	South, East & North Duct Wall -13.7 > -11.45mPD	5 12	07-Nov-19 07-Nov-19	12-Nov-19 20-Nov-19	VentDuctSlab @, -22.3mPD South, East& North DuctWall -13.7 > +11.45mPD
318	Internal Wall from -37.5 to -33.2mPD	6	20-Sep-19*	26-Sep-19	m -37.5 to -33.2mPD
319	VentDuctSlab @ -32.1mPD	6	27-Sep-19	04-Oct-19	ab@-32.1mPD
320 321	Internal Wall from -33.2 to -28.9mPD Internal Wall from -28.9 to -22.65mPD	6	05-Oct-19 14-Oct-19	12-Oct-19 19-Oct-19	Wall from -33.2 to -28.9 mPD hal Wall from -28.9 to -22.65 mPD
322	Internal Wall from -22.65 to -18.35mPD	8	20-Nov-19	28-Nov-19	Internal Wall from -22.65 to -18.35mPD
323	Internal Wall from -18.35 to -13.5mPD	12	29-Nov-19	10-Dec-19	Internal Wall from -18.35 to -13.5mPD
324	VentDuctSlab @ -11.45mPD Internal Wall from -13.5 to -7.5mPD	4	11-Dec-19	14-Dec-19 21-Dec-19	□ VentDuctSlab @ -11.45mPD □ Internal Wall from -13.5 to -7.5mPD
325 326	B2 Slab and Wall -9.95mPD/-8.1mPD	10	15-Dec-19 22-Dec-19	21-Dec-19 31-Dec-19	B2/Slab and Wa∥ from 13.5 to -/ 5mPD
327	B2 slab at-7.1mPD	16	01-Jan-20	16-Jan-20	B2 slab at-7;1mPD
328	South & East-11.45 to -9.7mPD	15	21-Nov-19	05-Dec-19	South & East-11.45 to -9.7mPD
Page 4 of 8	B Planned Bar TMC	LKL No	rthern Conn	ection Sub-	sea Tunnel Section
Data Date:	Planned Milestone		-		▲ で 帯 費 嘉 演 ま 一 こ の で に い に い し 、 い い し 、 い し 、 い し 、 、 い し 、 、 、 、 、 、 、 、 、 、 、 、 、
	U1-Sep-19 Vicesone Key Date	De	tailed Works	s Programm	Pe Rev. K Dragages HongKong
	Progress Bar	Th	ree Months	Rolling Pro	
L					

State       But State Resum Add 20 (40 PD       0       000000000000000000000000000000000000	#	Activity Name	Orig	Start	Finish	2019     2020       November     December     January     February     March     April     May     June
State         Fact All Landson         J         Durants         Index of the state of th	220			00 Dec 40	11 Dec 10	
State         Water in a first in			<b>0</b> <b>7</b>			
SSE b         BI Soc Soc March (Part) b         C			3			
No.         BP / MA 2 * 1.4 climits         BP / MA 2 * 1.4 climits         BP / MA 2 * 1.4 climits           State         BP / MA 2 * 1.4 climits         BP / MA 2 * 1.4 climits         BP / MA 2 * 1.4 climits           State         BP / MA 2 * 1.4 climits         BP / MA 2 * 1.4 climits         BP / MA 2 * 1.4 climits           State         BP / MA 2 * 1.4 climits         BP / MA 2 * 1.4 climits         BP / MA 2 * 1.4 climits           State         BP / MA 2 * 1.4 climits         BP / MA 2 * 1.4 climits         BP / MA 2 * 1.4 climits           State         BP / MA 2 * 1.4 climits         BP / MA 2 * 1.4 climits         BP / MA 2 * 1.4 climits           State         BP / MA 2 * 1.4 climits         BP / MA 2 * 1.4 climits         BP / MA 2 * 1.4 climits           State         BP / MA 2 * 1.4 climits         BP / MA 2 * 1.4 climits         BP / MA 2 * 1.4 climits           State         BP / MA 2 * 1.4 climits         BP / MA 2 * 1.4 climits         BP / MA 2 * 1.4 climits           State         BP / MA 2 * 1.4 climits         BP / MA 2 * 1.4 climits         BP / MA 2 * 1.4 climits           State         BP / MA 2 * 1.4 climits         BP / MA 2 * 1.4 climits         BP / MA 2 * 1.4 climits           State         BP / MA 2 * 1.4 climits         BP / MA 2 * 1.4 climits         BP / MA 2 * 1.4 climits           State         BP / MA 2 * 1.4 climit	332		6	01-Jan-20	06-Jan-20	
195         Nr. Stat. abs:// The Stat. S			7	07-Jan-20		
Spec         Dustry of a visit at 1 per up for a 1 and 1 a			4			———————————————————————————————————————
Status         Backbardt og und 10 /m Ch 41 - PD         2         2-2-1-10         Exhaustion         Status         Status <thstatus< th=""> <thstatus< th="">         Statu</thstatus<></thstatus<>			4			
State         Variance constraints (Suffer)         U         II Set 19         Delete 19         Market 20			25			— i i i i i i i i i i i i i i i i i i i
NUM       Produce is as in the intervent of the int						
St.         Ded Cost   Law An 0         #         6 Accost         11 Accost         # I Accost		_	7	16-Dec-19	22-Dec-19	
S20       PEC impact micro (lange of micro)       0       0 and of starse         S20       Answer (lange of micro)       0       0 (lange of micro)       0 (lange of micro)         S20       Macro (lange of micro)       0       0 (lange of micro)       0 (lange of micro)       0 (lange of micro)         S20       Macro (lange of micro)       0       0 (lange of micro)       0 (lange of micro)       0 (lange of micro)         S20       Macro (lange of micro)       0       0 (lange of micro)       0 (lange of micro)       0 (lange of micro)         S20       Macro (lange of micro)       0       0 (lange of micro)       0 (la	340	SVS Strengthening Beam	12	23-Dec-19	03-Jan-20	SVS Strengthening Beam
South         Proceeder i downer         0						
State         Monema Cast of and and Drug Seel         100         254.0-56.0         Monema Cast of and and Drug Seel         Monema Cast of and and Drug Seel           State         Monema Cast of and and Drug Seel         Processor         Monema Cast of and and Drug Seel         Monema Cast of and and Drug Seel           State         Monema Cast of and and Drug Seel         Monema Cast of and and Drug Seel         Monema Cast of and and Drug Seel           State         State         Other Seel         Monema Cast of and and Drug Seel         Monema Cast of and and Drug Seel           State         State         State         State         State         Monema Cast of and and Drug Seel           State						
Sec.         Moment Lan Base (Lange Ageneral Lange Ageneral Lang			-			— 16 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1
Monetaber (Larger)         If (Larger)         I (Larger)         It (Larger) <thit (larger)<="" th=""></thit>				21-Juli-13A		———————————————————————————————————————
Socie         Bourding to Soft Dig to Soft One         9         Orich Actor         Bourding to Soft Dig to Soft One           Socie         Bourding to Soft Dig to Soft One         1         Bourding to Soft One         1<				17-Sep-19		
Mail       Sector	347	Movement Joint Installation	29	01-Feb-20	29-Feb-20	Movement Joint Installation
North         Bucktrag v=ficine*//         1         1         1         1         0 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>						
South Ventilation Building KD-10           South Ventilation Status         South Ventilation Status           South Ventilation Status         South Ventilation Status           South Ventilation Status         South Ventilation Status         Ventilation Status           South Ventilation Status         Ventilation Status         Ventilation Status           South Ventilation Status						
Sol         COUND - MARK Solution         0         155-00         Count of the second solution           350         COUND - COUND - COUND - COUND - Second - COUND -			3	ro-war-20	∠u-iviar-20	
333       IA: 00 ⊂ 2010 300 current Date       0       100 ←					30-Sen-10	
SH         Artivit         Total Table         Total Table <thtotal table<="" th=""> <thtotal table<="" th=""> <thtotal tab<="" td=""><td></td><td></td><td>-</td><td></td><td>•</td><td></td></thtotal></thtotal></thtotal>			-		•	
Solu         Solution         Pice Advisor         Pice Advisor         Pice Advisor           Solution Advisor         B2         Solution Advisor         B2         Solution Advisor         B2           Solution Advisor         B2         Solution A					<b>F '</b>	
Style         Style         Factor         #         Style         St	355		79	20-Jun-19A	21-Sep-19	
358         Stee -2FADPF         27         29-0x-164         356-01         P         Operatorial standing (MPF         1         0			85		•	
1900         Outeral cutatoring/ADVF         51         OutCot1         Council autocing/ADVF           301         SVE-borns Succes         0         OutCot1         T-OutP         SVE-borns Succes           301         SVE-borns Succes         0         OutCot1         T-OutP         SVE-borns Succes           302         SVE-borns Succes         0         OutCot1         T-OutP         SVE-borns Succes           302         SVE-borns Succes         0         OutCot1         T-OutP         SVE-borns Succes           303         SVE-borns Succes         0         OutCot1         T-OutP         Fourable/costs         Fourable/costs           304         SVE-borns Succes         0         SVE-borns         Fourable/costs         Fourable/costs         Fourable/costs           305         Fourable/costs         0         SVE-borns         Fourable/costs         Fourable/costs         Fourable/costs           306         Fourable/costs         0         SVE-borns         Fourable/costs         F				-		
300         594-bot Shuman         00         020401         100-b1         595-bot shuman         1				-		
State       State <t< td=""><td></td><td>-</td><td></td><td></td><td></td><td>SVB-Roof Structure</td></t<>		-				SVB-Roof Structure
Std       906-RoudzAccess for IF       0       00-Sep10*       Processor IF       1 <th1< td=""><td></td><td></td><td></td><td></td><td></td><td></td></th1<>						
SH4         SH6         Provide Judget Perune Rooms         0         30-56         SH6         Provide Judget States         0         30-56         SH6         Provide Judget States         0         30-56         0         30-56         0         30-56         0         30-56         0         30-56         0         30-56         0         30-56         0         30-56         0         30-56         0         30-56         0         30-56         0         30-56         0         30-56         0         30-56         0         30-56         10-56         30-56         10-56         30-56         10-56         10-56	362	SVB - Provide Access for GF	0		04-Sep-19*	
366       Protection Fundaces       0       30-8,0+19       Fundaces       1			-			
300         Productive Triands (K2,cd)         0         11-0c-19*         Product (K1-0)-bit (Access)           900         (M2-3)-EGO(1-32, Ouen Tune) (K2,cd)         0         350, access (K1-0)         0         30, access (K1-0)         0 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>						
997         MHS Cut-and-cover Turnet KO-2d         ■           998         (PD24)-Equipred table for CA Access         0         95 Jun 20*         (PD24)-Equipred table for CA Access         0         95 Jun 20*         (PD24)-Equipred table for CA Access         0         90 Jun 20*         (PD24)-Equipred table for CA Access         (PD2			•		•	
98         (PC24)=C0132 CametObe         0         15-ban-20*         ♥ (PC24)=C01/32 CametObe           390         (PC24)=C01/32 CametObe         0         300-ban-20*         ♥ (PC24)=C01/32 CametObe           371         MER CACTINNES Received Strept         0         300-ban-20*         ♥ (PC24)=C01/42 CametObe           372         MER CACTINNES Received Strept         0         300-ban-20*         ♥ (PC24)=C01/42 CametObe           372         MER CACTINNES Received Strept         0         300-ban-20*         ₩ (PC24)=C01/42 CametObe           373         Value Conto         22         00-Aug10A         03-Ban-20*         ₩ (PC24)=C01/42 CametObe           374         Well         -         -         -         -         -           375         Well         -         -         -         -         -           375         Well         - </td <td></td> <td></td> <td>Ũ</td> <td></td> <td>11 200 10</td> <td></td>			Ũ		11 200 10	
390       I/C 2d-j. Pupued date for CAAceses       0       30Lm-20*       I/C 2d-j. Pupued date for CAAceses         370       MLS CAC Turnel Backfilling       0       30Lm-20*       I/C 2d-j. Pupued date for CAAceses       I/C 2d-j. Pupued date for CAAceses         370       MLS CAC Turnel Backfilling-Cd 13L Cat 01       183       10.4u-90       I/C 2d-j. Pupued for CAAceses         371       MLS CAC Turnel Backfilling-Cd 13L Cat 01       183       10.4u-90       I/C 2d-j. Pupued for CAAceses         372       MLS CAC Turnel Backfilling-Cd 13L Cat 01       183       10.4u-90       I/C 2d-j. Pupued for CAAceses         373       Tordeel Formworks       I/C 2d-j. Pupued for CAAceses       I/C 2d-j. Pupued for CAAceses       I/C 2d-j. Pupued for CAAceses         374       Tordeel Formworks       I/C 2d-j. Pupued for CAAceses       I/C 2d-j. Pupued for CAAceses       I/C 2d-j. Pupued for CAAceses         375       Tordeel Formworks       I/C 2d-j. Pupued for CAAceses       I/C 2d-j. Pupued for CAAceses       I/C 2d-j. Pupued for CAAceses         376       Tordeel Formworks       I/C 2d-j. Pupued for CAAceses         386       Torsels formworks       I/C 2d-j. Pupued for CAAceses       I/C 2d-j. Pupued for CAAceses       I/C 2d-j. Pupued for CAAceses       I/C 2d-j. Pu	368		0		15-Jan-20*	▼ [KD-2d] - EOTO 1-32 CurrentDate
371 772 773 774 775 776         MHS CAC Durwel Eackfilling: South MHS Cut-and-cover KD-2d         MHS CAC Turmel-BaceBirgs, C South MHS Cut-and-cover KD-2d           372 776         Transler Formworks         10 Jul-19A         03-Sep-19         Also SC Turmel-BaceBirgs, C Sep State           373 777         Transler Formworks         10 Jul-19A         16-Sep-19         Also Sc Turmel-BaceBirgs, C Sep State           374 777         Transler Formworks         10 Jul-19A         16-Sep-19         Also Sc Turmel-BaceBirgs, C Sep State           375 376         Transler Formworks         11 Jul-19A         16-Sep-19         Also Sc Turmel-BaceBirgs, C Sep State         Also Sc Turmel-BaceBirgs, C Sep State           380 381 382 383 384 385 385 386 386 386 386 386 386 386 386 386 386	369		0		30-Jan-20*	
372 373 374 375 376 377 377 377 377 377 377 377 377 378 380 380 380 381 382 383 383 383 383 383 383 383 383 384 385 384 385 384 385 385 385 385 385 385 385 385 385 385			0		30-Jan-20	[KD-2d] - DBJV Forecast (01 Sep 19)
973         South MIS Cut-and-cover KD-2d           Vial         Traviel of formworks           376         Wall - Coll 0         22         09-Aug 19A         03-8ep 19           377         Traviel of formworks         40         31-Jul 19A         16-8ep 19           378         Wall - Coll 0         22         109-Aug 19A         03-8ep 19           378         Traviel of formworks         40         31-Jul 19A         16-8ep 19           380         Top Slab 5         15         25-8ep 19         14-04-019           382         Top Slab 5         15         25-8ep 19         14-04-019           383         Top Slab 6         10         19-New 19         12-New 19           384         Top Slab 7         15         01-New 19         12-New 19           385         Top Slab 7         15         01-New 19         12-New 19           386         Top Slab 7         15         01-New 19         12-New 19           387         Top Slab 7         12-8ep 19         12-New 19         10-New 19           388         Top Slab 11         21         12-8ep 19         10-New 19           389         Top Slab 11         21         12-8ep 19         10-Ne 19						
342         Wail         343         77xxx bir formworks           378         Wail 2-Cal 8         22         09-Aug 19A,         03-Sep-19           377         Tradional formworks         40         31-Jul 19A         16-Sep-19           378         Wail 2-Cal 8         40         31-Jul 19A         16-Sep-19           378         Tradional formworks         16         22-Sep-19         14-Cacl 9           380         Tradional formworks         15         12-Sep-19         14-Cacl 9           381         Top Sisks 7         15         01-New 19         12-New 19           383         Top Sisks 7         15         01-New 19         12-New 19           384         Top Sisks 6         15         05-Sep-19         24-Sep-19           385         Top Sisks 6         15         15-Sop 19         24-Sep-19           386         Top Sisks 10         22         25-Sep-19         02-Aur 19           398         Top Sisks 11         21         12-Sep-19         02-Aur 19           399         Top Sisks 10         22         25-Sep-19         02-Aur 19           399         Top Sisks 11         21         22-Sep-19         02-Aur 19           399			183	10-Jul-19A	07-Mar-20	MHS C&C Tunnel - Backfilling - Cell 13 t Cell 01
979 370 370 370 370 370 370 370 370 370 370						
1970         Well 9-Coll 6         22         09-Aug-18A         03-Sep-19           1977         Tradiabal formoxis         40         31-Jui 18A         16-Sep-19           1979         Tradiabal formoxis         20         12-Aug-19A         05-Sep-19           1970         Table formoxis         15         25-Sep-19         14-Sep-19           1980         Top Slab 5         15         25-Sep-19         14-Sep-19           1981         Top Slab 5         15         25-Sep-19         14-Sep-19           1982         Top Slab 7         15         01-Sep-19         Top Slab 7           1983         Top Slab 7         15         01-Sep-19         Top Slab 7           1984         Top Slab 7         15         05-Sep-19         Top Slab 7           1985         Top Slab 7         Stab 7         Top Slab 7           1986         Top Slab 7         Stab 7         Stab 7           1995         Top Slab 7         Stab 7         Stab 7           1						
379 379 379 370 370 380 381 382 383 384 385 385 386 385 386 386 386 386 386 387 386 386 387 386 386 387 388 386 386 387 388 386 386 387 388 386 387 388 388 388 388 388 388 388 388 388			22	09-Aug-19A	03-Sep-19	
1979         Top Slab           380         Tracellor Formworks           381         Top Slab 3         22         12 Aug-19A         05 Slap 19           382         Top Slab 3         15         25 Slap 19         14 Oct 19           383         Top Slab 7         15         01 Nov 19         18 Auve 19           384         Top Slab 7         15         01 Nov 19         18 Auve 19           385         Top Slab 7         15         01 Nov 19         18 Auve 19           385         Top Slab 7         15         01 Nov 19         17 Auve 19           386         Top Slab 7         15         05 Nov 19         Top Slab 7           387         Top Slab 6         15         15 Oct 19         Top Slab 1           388         Top Slab 10         26         17 Oct 19         Top Slab 10         Top Slab 12           392         Top Slab 12         30         27 Sep -19         02 Auve 19         Top Slab 10         Top Slab 12           392         Top Slab 12         30         27 Sep -19         02 Auve 19         Top Slab 10         Top Slab 12         30           392         Top Slab 12         30         27 Sep -19         02 Auve 19         70 Cot						
1900 381 70p Slab 3       100 10 Power 10p Slab 5       12 12 Aug-16A       05 Sep-19 14 Oct 19 14 Aoct 19 14 Aoct 19 15 10 Power 10 P			40	31-Jul-19A	16-Sep-19	
381         Top Stab 3         22         12Augr10A         05-Sep-19         14Oct 19         16           382         Top Stab 5         15         25-Sep-19         14Oct 19         16           383         Top Stab 7         15         01-Nov-19         16-Nov-19         Top Stab 7           384         Top Stab 7         15         01-Nov-19         16-Nov-19         Top Stab 7           385         Top Stab 4         15         06-Sep-19         24-Sep-19         Top Stab 7           387         Top Stab 4         15         06-Sep-19         24-Sep-19         Top Stab 7           388         Top Stab 1         21         12-Sep-19         94-Oct 19         11           380         Top Stab 10         26         17-Oct 19         15-Adv-19         Top Stab 19           381         Top Stab 14         31         12-Aug-17A         17-Sep-19         Top Stab 12           382         Top Stab 14         31         12-Aug-17A         17-Sep-19         Top Stab 12           382         Top Stab 12         30         27-Sep-19         07-Oct 19         Stockree           383         Portel Stockree         24         18-Sep-19         17-Oct 19         Stockree						
383       Top Slab 7       15       01-Nov-19       18-Nov-19       Top Slab 7         384       Top Slab 7       Top Slab 7       Top Slab 7       Top Slab 7         385       Top Slab Traveler dismating       12       30-Nov-19       32-Nov-19       Top Slab Traveler dismating         386       Top Slab 7         387       Top Slab 6       15       06-Sep-19       24-Sep-19       Top Slab 1       Top Slab 1         388       Top Slab 10       26       15       16-Nov-19       11       Top Slab 1         390       Top Slab 10       26       17-Oc419       17-Oc419       17-Os510       Top Slab 12         392       Top Slab 14       31       12-Nov-19       17-Os919       Top Slab 12         392       Top Slab 2       18       19-Oc419       17-Oc419       17-Oc419         394       Portu Stuckne       24       18-Sep-19       Oc4No19       Stuckne         395       OH/O2       20       29-Aug-16A       21-Sep-19       Stuckne         396       OH/O2       20       29-Aug-16A       21-Sep-19       OH/O2         397       OH/O2       20			22	12-Aug-19A	05-Sep-19	
384       Top Slab 8       10       19 Abv/19       28 Abv/19       Top Slab 8       1         386       Top Slab 1       12       30 Abv/19       13 Oec19       Top Slab 1         387       Top Slab 4       15       06 Acgr-19       24 Acgr-19       Top Slab 5         388       Top Slab 4       15       06 Acgr-19       24 Acgr-19       Top Slab 5         388       Top Slab 1       21       12 Sep-19       09 Act 19       Top Slab 5         389       Top Slab 10       26       17 Occ19       15 Nov 19       Top Slab 10         391       Top Slab 10       26       17 Occ19       15 Nov 19       Top Slab 12         392       Top Slab 10       26       17 Occ19       15 Nov 19       Top Slab 12         392       Top Slab 12       30       27 Sep-19       02 Abv-19       Top Slab 12         393       Top Slab 14       31       12 Aug-19A       17 Sep Slab 12       10 Sep Slab 14         393       OHVD 2       20       29 Aug-19A       17 Sep Slab 19       VC4         394       OHVD 3       12       23 Sep 19       12 Ochov-19       VC4         404       OHVD 6       12       09 Ochr19       10 Ochr05 <td>382</td> <td>Top Slab 5</td> <td>15</td> <td>25-Sep-19</td> <td>14-Oct-19</td> <td></td>	382	Top Slab 5	15	25-Sep-19	14-Oct-19	
386       Top Slab Traveler dismating       12       30-Nov-19       32-Be-19       Top Slab Traveler dismating       1       1         386       Top Slab 4       18       06-Sep-19       24-Sep-19       Top Slab 7       Top Slab 7 <td></td> <td></td> <td></td> <td></td> <td></td> <td>— 1</td>						— 1
386       Top Slab 4       15       06-Sep-19       24-Sep-19       Top Slab 5         387       Top Slab 6       15       15-Oct 19       11       Top Slab 5         389       Top Slab 11       21       12-Sep-19       09-Oct 19       11         10       Top Slab 12       30       27-Sep-19       02-Avor 19       1       Top Slab 12         10       Top Slab 12       30       27-Sep-19       02-Avor 19       1       Top Slab 12         10       Top Slab 12       30       27-Sep-19       02-Avor 19       1       Top Slab 12         10       Top Slab 14       31       12-Avgr 19A       17-Sep-19       1       Top Slab 12         10       Stab 9       18       19-Oct 19       17-Oct 19       Structure       1       Top Slab 12         303       Top Slab 12       15       32-Sep-19       02-Avor 19       1       Top Slab 13         303       Top Slab 12       10       11-Avgr 19A       17-Sep-19       Top Slab 14       1         303       OHVO       12       23-Sep-19       02-Avor 19       VD-VD       0+VD 05         304       OHVO 2       20       29-Avgr 19A       21-Sep-19       0+VD 05 <td>-</td> <td></td> <td></td> <td></td> <td></td> <td></td>	-					
387       Top Slab 6       15       15-Oct 19       31-Oct 19       Top Slab 8         388       Top Slab 10       21       12-Sep-19       09-Oct 19       11         390       Top Slab 10       26       17-Oct 19       10-Nov19       Top Slab 10         391       Top Slab 10       26       17-Oct 19       17-Dr Slab 12       Top Slab 10         392       Top Slab 14       31       12-Aug 19A       17-Sep-19       Top Slab 12         393       Top Slab 14       31       12-Aug 19A       17-Sep-19       Top Slab 12         393       Top Slab 14       31       12-Aug 19A       17-Sep-19       Structure         396       OHVD 2       20       29-Aug 19A       17-Sep-19       Structure         396       OHVD 3       12       23-Sep-19       08-Ocu 19       VD4         400       OHVD 4       12       29-Ocu 19       27-Ocu 19       VD4         400       OHVD 5       12       23-Ocu 19       06-Ocu 19       OHVD5         0HVD 6       12       04-Ocu 19       27-Ocu 19       0HVD5       0HVD5         0HVD 7       12       24-Ocu 19       0HVD5       0HVD5       0HVD5         0HVD 8						
388         Traditional Formworks           390         Top Slab 10         26         17.0ct 19         11         Top Slab 10         Top Slab 10         Top Slab 10         Top Slab 10         Top Slab 12         30         27.8ep.19         02.Nov.19         Top Slab 12         Top Slab 12 </td <td></td> <td></td> <td></td> <td>•</td> <td></td> <td>Top Stab 6</td>				•		Top Stab 6
380       Top Slab 10       26       17-Oct.19       15-Nov-19       Top Slab 10       1       17-Op Slab 12         392       Top Slab 12       30       27-Sep.19       02-Nov-19       Top Slab 12         393       Top Slab 14       31       12-Aug-19A       17-Sep.19       17-Dp Slab 12         393       Top Slab 14       31       12-Aug-19A       17-Sep.19       17-Dp Slab 12         394       Top Slab 14       31       12-Aug-19A       17-Sep.19       18       19-Oct.19         395       Top Slab 14       31       12-Aug-19A       17-Sep.19       18       19-Oct.19         396       OHVD       0HVD       12       20       29-Aug-19A       21-Sep-19       15         396       OHVD2       20       29-Aug-19A       21-Sep-19       NO4       12       14-Dec.19       27-Sep.19       NO4         397       OHVD3       12       23-Sep-19       08-Oct.19       OHVD5       0HVD5       0HVD5       0HVD5         400       OHVD6       12       06-Nov-19       12-Oct.19       0HVD5       0HVD5       0HVD5       0HVD5       0HVD7       0HVD5       0HVD7       0HVD5       0HVD7       0HVD6       0HVD7       0H		Traditional Formworks				
381       Top Slab 12       30       27-Sep-19       02-Nov-19       Top Slab 12         192       Top Slab 9       18       19-Oct19       06-Nov-19       Top Slab 9         393       Portal Shucture       24       18-Sep-19       Top Slab 9       Shucture         396       OH/D       0       06-Nov-19       Top Slab 9       Shucture       Shucture         396       OH/D2       20       29-Aug-19A       21-Sep-19       Shucture       Shucture         0H/D2       20       29-Aug-19A       21-Sep-19       Shucture       No       Shucture         0H/D2       20       29-Aug-19A       21-Sep-19       Shucture       No       Shucture         0H/D3       12       23-Sep-19       80-Oct19       No/4       No/4       No/4         0H/D4       12       09-Oct19       No/4       OH/D5       OH/D6       OH/D7         0H/D3       12       20-Nov-19       19-Nov-19       OH/D6       OH/D7       OH/D6         0H/D12       20       20-L91       06-Nov-19       19-Nov-19       OH/D6       OH/D6         0H/D12       25       28-Aug-19A       26-Sep-19       0H-No-19       OH/D6       OH/D6       OH/						
382       Top Slab 14       31       12-Aug-19A       17-Sep-19       Top Slab 9         393       Portal Structure       24       18-Sep-19       08-Nov-19       Top Slab 9         396       OHVD       24       18-Sep-19       17-Oct-19       Structure         396       OHVD 2       20       29-Aug-19A       21-Sep-19       OHVD2         0HVD 3       12       23-Sep-19       08-Oct-19       VD4         0HVD 4       12       09-Oct-19       22-Oct-19       VD4         0HVD 5       12       23-Oct-19       05-Nov-19       OHVD5         0HVD 6       12       09-Oct-19       05-Nov-19       OHVD7         0HVD 7       12       23-Oct-19       05-Nov-19       OHVD7         0HVD 8       10       14-Dec-19       27-Dec-19       OHVD7         0HVD 8       10       14-Dec-19       27-Dec-19       OHVD7         0HVD 12       25       28-Aug-19A       28-Sep-19       0HVD7         0HVD 13       21       23-Sep-19       18-Oct-19       D13         0HVD 10       21       24-Aug-19A       18-Sep-19       D13         0HVD 10       21       24-Aug-19A       18-Sep-19       D						
393       Top Slab 9       18       19-Oct-19       08-Nov-19       Top Slab 9         394       OHVD       24       18-Sep-19       17-Oct-19       Structure         396       OHVD       24       18-Sep-19       17-Oct-19       Structure         396       OHVD       24       18-Sep-19       17-Oct-19       Structure         397       OHVD       20       29-Aug-19A       21-Sep-19       Structure         397       OHVD2       20       29-Aug-19A       21-Sep-19       OHVD3         398       OHVD3       12       23-Oct-19       02-Oct-19       VD4         401       OHVD5       12       23-Oct-19       05-Nov-19       OHVD5         401       OHVD6       12       20-Aug-19       05-Nov-19       OHVD6         0HVD7       12       20-Aug-19       05-Nov-19       OHVD7       OHVD7         403       OHVD8       10       14-Dec-19       27-Occ-19       OHVD8       OHVD8         405       Tastificinel formworks       0       0-Ovt-19       0-Ovt-19       OHVD8 isb Traveler dismatling       0       0         405       OHVD12       25       28-Aug-19A       28-Sep-19       18-Oct-19 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>						
394       Portal Structure       24       18-Sep-19       17-Oct-19       Structure         395       Traveller Formworks         396       OHVD       20       29-Aug-19A       21-Sep-19       Structure         397       OHVD2       20       29-Aug-19A       21-Sep-19       B8-Oct-19       VD4         398       OHVD3       12       23-Sep-19       08-Oct-19       VD4       VD4         400       OHVD6       12       29-Oct-19       22-Oct-19       VD4       VD4         401       OHVD6       12       20-Oct-19       20-OHVD6       OHVD6       OHVD6         0HVD6       12       20-Nov-19       03-Dec-19       OHVD6       OHVD7       OHVD8         0HVD8       10       14-Dec-19       27-Dec-19       OHVD8       OHVD8       OHVD8         0HVD12       25       28-Aug-19A       28-Sep-19       DHVD3 iab Traveler dismating       OHVD8         0HVD13       21       23-Sep-19       18-Oct-19       DHVD iab Traveler dismating       OHVD8         0HVD13       21       23-Sep-19       18-Oct-19       D13       OHVD8       OHVD10         0HVD13       21       23-Sep-19       18-Oct-19       D13 </td <td></td> <td></td> <td></td> <td>-</td> <td></td> <td>Top Slab 9</td>				-		Top Slab 9
396       17aveller Formworks         397       398         397       0HVD 2       20       29-Aug-19A       21-Sep-19         398       0HVD 3       12       23-Sep-19       08-Oct 19         399       0HVD 4       12       09-Oct 19       22-Oct 19         400       0HVD 5       12       23-Oct 19       05-Nov 19       0-HVD 5         0HVD 6       12       06-Nov 19       19-Nov 19       0-HVD 5         0HVD 7       12       20-Nov 19       03-Dec 19       0-HVD 5         0HVD 8       10       14-Dec 19       27-Dec 19       0-HVD 8         0HVD 8       10       14-Dec 19       27-Dec 19       0-HVD 8         0HVD 12       25       28-Aug-19A       26-Sep-19       0-HVD 8         0HVD 13       21       23-Sep-19       18-Oct 19       0-HVD 13         0HVD 10       21       24-Aug-19A       18-Sep-19       0-HVD 19         0HVD 10       21       24-Aug-19A       18-Sep-19       0-HVD 19         0HVD 10       0       0       07-Dec 19*       Cell 12 Backfilled       18-Oct 19         0ata Date: 01-Sep-19       0       0       07-Dec 19*       Cell 12 Backfilled						—li i i i l i i i i l i i i l i i i i i
397       397       20       29-Aug-19A       21-Sep-19       08-Oct-19         398       OHVD3       12       23-Sep-19       08-Oct-19       VD4         399       OHVD4       12       09-Oct-19       22-Oct-19       VD4         400       OHVD5       12       23-Oct-19       05-Nov-19       12-Oct-19       VD4         401       OHVD6       12       23-Oct-19       05-Nov-19       12-Oct-Nov-19       05-Nov-19         402       OHVD6       12       20-Nov-19       03-Dec-19       0-HVD5       0-HVD6         0HVD7       0HVD7       12       20-Nov-19       03-Dec-19       0-HVD7       0-HVD8         0HVD8       10       14-Dec-19       27-Dec-19       0-HVD8       0-HVD8       0-HVD8         0HVD12       25       28-Aug-19A       26-Sep-19       0-HVD8       0-HVD8       0-HVD8         0HVD13       21       23-Sep-19       18-Oct-19       0-HVD8       0-HVD8       0-HVD8         0HVD13       21       23-Sep-19       18-Oct-19       0-HVD8       0-HVD8       0-HVD8         0HVD19       18       26-Sep-19       18-Oct-19       0-HVD8       0-HVD8       0-HVD8       0-HVD8 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>						
398       OH/D3       12       23-Sep-19       08-Oct 19       22-Oct 19       VD4         399       OH/D4       12       09-Oct 19       22-Oct 19       VD4         400       OH/D5       12       23-Oct 19       OH/D5         401       OH/D6       12       06-Nov-19       19-Nov-19       OH/D5         402       OH/D7       12       20-Nov-19       03-Dec-19       OH/D6         403       OH/D8       10       14-Dec-19       27-Dec-19       OH/D7         0H/D8       10       14-Dec-19       27-Dec-19       OH/D6       OH/D7         405       OH/D12       25       28-Aug-19A       26-Sep-19       OH/D7       OH/D Slab Traveler dismating         406       OH/D13       21       23-Sep-19       18-Sep-19       D13       OH/D Slab Traveler dismating       Image: Colored stable traveler dismating         406       OH/D10       21       24-Aug-19A       18-Sep-19       D13       Image: Colored stable traveler dismating       Image: Colored stable traveler dismating         410       Backfilling       Image: Colored stable traveler dismating				20 4	01.0 10	
399       OHVD4       12       09-Oct-19       22-Oct-19       VD4         400       OHVD5       12       23-Oct-19       05-Nov-19       OHVD5         401       OHVD6       12       06-Nov-19       19-Nov-19       OHVD6         401       OHVD7       12       20-Nov-19       03-Dec-19       OHVD6         403       OHVD7       12       20-Nov-19       03-Dec-19       OHVD7         403       OHVD8       10       14-Dec-19       27-Dec-19       OHVD8         0HVD slab Traveler dismatling       7       28-Dec-19       06-Jan-20       OHVD slab Traveler dismatling         405       Traditional Fornworks       0HVD 12       25       28-Aug-19A       26-Sep-19         0HVD 13       21       23-Sep-19       18-Oct-19       D13       0HVD 10         0HVD9       18       26-Sep-19       18-Oct-19       D13         410       Cell 12 Backfilled       0       07-Dec-19*       Cell 12 Backfilled         411       Cell 12 Backfilled       0       07-Dec-19*       Cell 12 Backfilled       Decender         9ate 5 of 8       Parmed Bar       Planet Bar       Planet Bar       Detailed Works Programme Rev. K       Decender       Decone </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>						
400       OHVD 5       12       23-Oct 19       05-Nov-19       OHVD 5         401       OHVD 6       12       06-Nov-19       19-Nov-19       OHVD 5         402       OHVD 7       12       20-Nov-19       03-Dec-19       OHVD 7         403       00       14-Dec-19       27-Dec-19       OHVD 7         403       00       14-Dec-19       27-Dec-19       OHVD 7         404       0HVD slab Traveler dismatling       7       28-Dec-19       0HVD 7         405       0HVD 12       25       28-Aug-19A       26-Sep-19         406       0HVD 13       21       23-Sep-19       18-Oct 19         0HVD 10       21       24-Aug-19A       18-Sep-19       D13         0HVD 10       21       24-Aug-19A       18-Sep-19       D13         0HVD 10       21       24-Aug-19A       18-Sep-19       D9         410       Backfilling       0       07-Dec-19*       Cell 12 Backfillied         411       Cell 12 Backfilled       0       07-Dec-19*       Cell 12 Backfillied         Page 5 of 8       Parmed Bar       Parmed Bar       Detailed Works Programme Rev. K       CBE 8       Rev://         0HA075       Parmed Mea				•		
401       OHVD6       12       06-Nov-19       19-Nov-19       0HVD6         402       OHVD7       12       20-Nov-19       03-Dec-19       0HVD7         403       OHVD8       10       14-Dec-19       27-Dec-19       0HVD7         404       OHVD8       10       14-Dec-19       27-Dec-19       0HVD8         404       OHVD 12       25       28-Aug-19A       26-Sep-19       0HVD 5lab Travefer dismating         406       OHVD 12       25       28-Aug-19A       26-Sep-19       18         407       OHVD 13       21       23-Sep-19       18-Oct-19       D13         0HVD 10       21       24-Aug-19A       18-Sep-19       D13         0HVD 9       18       26-Sep-19       18-Oct-19       D9         410       Cell 12 Backfilled       0       07-Dec-19*						
403       0HVD8       10       14-Dec.19       27-Dec.19         404       0HVD slab Traveler dismatting       7       28-Dec.19       06-Jan-20         405       0HVD 12       25       28-Aug.19A       26-Sep.19       0HVD slab Traveler dismatting         406       0HVD 13       21       23-Sep.19       18-Oct.19       D13         408       0HVD 9       18       26-Sep.19       D13         409       0HVD 9       18       26-Sep.19       D13         410       Cell 12 Backfilled       0       07-Dec.19*       • Cell 12 Backfilled         410       Page 5 of 8       • Panned Mastore       • Cell 12 Backfilled       • Cell 12 Backfilled         0ata Date: 01-Sep.19       • Panned Mastore       • Detailed Works Programme Rev. K       • Cell 12 Backfilled       • Panned Mastore	401		12		19-Nov-19	OHVD/6
404       0HVD slab Traveler dismatting       7       28-Dec.19       06-Jan-20         405       0HVD slab Traveler dismatting       0HVD slab Traveler dismatting       0HVD slab Traveler dismatting         406       0HVD 12       25       28-Aug.19A       26-Sep.19         407       0HVD 13       21       23-Sep.19       18-Oct.19       D13         408       0HVD 10       21       24-Aug.19A       18-Sep.19       D13         409       0HVD 9       18       26-Sep.19       D9       D13         410       Cell 12 Backfilled       0       07-Dec.19*       0       Cell 12 Backfilled         411       Cell 12 Backfilled       0       07-Dec.19*       0       Cell 12 Backfilled         Page 5 of 8       Planned Bar       Planned Bar       Planned Mestone       Detailed Works Programme Rev. K       Image: Sep: Sep: Sep: Sep: Sep: Sep: Sep: Se			12			
405       Traditional Formworks         406       OHVD 12       25       28-Aug-19A       26-Sep-19         407       OHVD 13       21       23-Sep-19       18-Oct-19       D13         408       OHVD 10       21       24-Aug-19A       18-Sep-19       D9         409       OHVD 10       21       24-Aug-19A       18-Sep-19       D9         409       OHVD 10       21       24-Aug-19A       18-Sep-19       D9         410       Backfilling       0       07-Dec-19* <ul> <li>Cell 12 Backfilled</li> <li>O</li> <li>O7-Dec-19*</li> <li>Cell 12 Backfilled</li> </ul> <ul> <li>Planned Bar</li> <li>Planned Miestone</li> <li>Planned Miestone</li> <li>Planned Miestone</li> <li>Planned Miestone</li> <li>Detailed Works Programme Rev. K</li> <li>Detailed Works Programme Rev. K</li> <li>Detailed Works Programme Rev. K</li> </ul> <ul> <li>Data Date: 01-Sep-19</li> <li>Marce</li> <li>Marc</li></ul>	402	OHVD7		1/LDec-10		— i i i i   i i i i   i i i i i i i   i i i i   i i i i   i i i i   i i i   i i i   i i i   i i i   i i i   i i i   i i i   i   i i i     i i i     i i i
406       0HVD 12       25       28-Aug-19A       26-Sep-19       0         407       0HVD 13       21       23-Sep-19       18-Oct-19       0       13         408       0HVD 10       21       24-Aug-19A       18-Sep-19       0       13         409       0HVD 9       18       26-Sep-19       18-Oct-19       0       0         410       Backfilling       0       07-Dec-19*       ◆ Cell 12 Backfilled       0       0         411       Cell 12 Backfilled       0       07-Dec-19*       ◆ Cell 12 Backfilled       0       0         Page 5 of 8       Planned Mestone       Planned Mestone       Detailed Works Programme Rev. K       Image: Northern Rev. K       Image: Northern Rev. K       Image: Northern Rev. K	402 403	OHVD7 OHVD8	10		06_ lan 20	
407       0HVD 13       21       23-Sep-19       18-Oct-19       D13         408       0HVD 10       21       24-Aug-19A       18-Sep-19       D9         409       0HVD 9       18       26-Sep-19       18-Oct-19       D9         410       Backfilling       0       07-Dec-19*       • Cell 12 Backfilled       • Cell 12 Backfilled         411       Cell 12 Backfilled       0       07-Dec-19*       • Cell 12 Backfilled       • Cell 12 Backfilled         Page 5 of 8       Planed Bar       • Planed Miestone       • Planed Miestone       • Detailed Works Programme Rev. K       • Cell 12 Backfilled         Data Date: 01-Sep-19       • Rev Date       Detailed Works Programme Rev. K       • Cell 12 Backfilled       • Cell 12 Backfilled	402 403 404	OHVD 7 OHVD 8 OHVD slab Traveler dismatling	10		06-Jan-20	
409       OHVD 9       18       26-Sep-19       18-Oct-19       D9         410       Backfilling       Cell 12 Backfilled       0       07-Dec-19*       € Cell 12 Backfilled         411       Cell 12 Backfilled       0       07-Dec-19*       € Cell 12 Backfilled       E Particular         Page 5 of 8       Page 5 of 8       Panned Bar       TMCLKL Northern Connection Sub-sea Tunnel Section       Detailed Works Programme Rev. K       E Particular       E Particular         Data Date: 01-Sep-19       € Key Date       Detailed Works Programme Rev. K       E Particular       E Particular       E Particular	402 403 404 405	OHVD 7 OHVD 8 OHVD slab Traveler dismatling Traditional Formworks	10 7	28-Dec-19		
410       Backfilling         411       Cell 12 Backfilled       0       07-Dec-19*       € Cell 12 Backfilled         Page 5 of 8       Planned Bar       TMCLKL Northern Connection Sub-sea Tunnel Section         Data Date: 01-Sep-19       Planned Miestone       Detailed Works Programme Rev. K	402 403 404 405 406	OHVD 7 OHVD 8 OHVD slab Traveler dismatling Traditional Formworks OHVD 12	10 7 25	28-Dec-19 28-Aug-19A	26-Sep-19	
411       Cell 12 Backfilled       0       07-Dec-19*       ◆ Cell 12 Backfilled         Page 5 of 8       Planned Bar       TMCLKL Northern Connection Sub-sea Tunnel Section       Detailed Works Programme Rev. K         Data Date: 01-Sep-19       ♥ Key Date       Detailed Works Programme Rev. K	402 403 404 405 406 407 408	OHVD 7 OHVD 8 OHVD slab Traveler dismatting Traditional Formworks OHVD 12 OHVD 13 OHVD 10	10 7 25 21 21	28-Dec-19 28-Aug-19A 23-Sep-19 24-Aug-19A	26-Sep-19 18-Oct-19 18-Sep-19	D13
Page 5 of 8       Planned Bar         Data Date: 01-Sep-19       Planned Miestone         Control of the state       Control of the state         Detailed Works Programme Rev. K       Control of the state	402 403 404 405 406 407 408 409	OHVD 7 OHVD 8 OHVD slab Traveler dismatling Traditional Formworks OHVD 12 OHVD 13 OHVD 10 OHVD 9	10 7 25 21 21	28-Dec-19 28-Aug-19A 23-Sep-19 24-Aug-19A	26-Sep-19 18-Oct-19 18-Sep-19	D13
Page 5 01 8       Planned Bar       I MICLKL Northern Connection Sub-sea Tunnel Section         Data Date: 01-Sep-19       Planned Miestone       Detailed Works Programme Rev. K	402 403 404 405 406 407 408 409 410	OHVD 7 OHVD 8 OHVD slab Traveler dismatling Traditional Formworks OHVD 12 OHVD 13 OHVD 10 OHVD 9 Backfilling	10 7 25 21 21 18	28-Dec-19 28-Aug-19A 23-Sep-19 24-Aug-19A	26-Sep-19 18-Oct-19 18-Sep-19 18-Oct-19	D9
Data Date: 01-Sep-19           Data Date: 01-Sep-19         Key Date         Detailed Works Programme Rev. K         Dragages         Bouygues	402 403 404 405 406 407 408 409 410 411	OHVD 7 OHVD 8 OHVD slab Traveler dismatling Traditional Formworks OHVD 12 OHVD 13 OHVD 10 OHVD 9 Backfilling Cell 12 Backfilled	10 7 25 21 21 18 0	28-Dec-19 28-Aug-19A 23-Sep-19 24-Aug-19A 26-Sep-19	26-Sep-19 18-Oct-19 18-Sep-19 18-Oct-19 07-Dec-19*	D 13 D9 ♦ Cell 12 Backfilléd
HongKong	402 403 404 405 406 407 408 409 410 411	OHVD 7 OHVD 8 OHVD slab Traveler dismatling Traditional Formworks OHVD 12 OHVD 13 OHVD 10 OHVD 9 Backfilling Cell 12 Backfilled	10 7 25 21 21 18 0	28-Dec-19 28-Aug-19A 23-Sep-19 24-Aug-19A 26-Sep-19	26-Sep-19 18-Oct-19 18-Sep-19 18-Oct-19 07-Dec-19*	D 13 D 13 D 9 ● Cell 12 Backfilled -sea Tunnel Section 章寶喜
	402 403 404 405 406 407 408 409 410 411 Page 5 of 8	OHVD 7 OHVD 8 OHVD slab Traveler dismatting Traditional Formworks OHVD 12 OHVD 13 OHVD 10 OHVD 9 Backfilling Cell 12 Backfilled Planned Bar ◆ Planned Miestone	10 7 25 21 21 18 0 TMCLKL Nor	28-Dec-19 28-Aug-19A 23-Sep-19 24-Aug-19A 26-Sep-19	26-Sep-19 18-Oct-19 18-Sep-19 18-Oct-19 07-Dec-19* ection Sub-	P13     P13
Progress Bar         Three Months Rolling Programme         Drogages - Bouygues Joint Venture 實畫 - 布依格聯盟	402 403 404 405 406 407 408 409 410 411 Page 5 of 8	OHVD 7         OHVD 8         OHVD slab Traveler dismatting         Traditional Formworks         OHVD 12         OHVD 13         OHVD 10         OHVD 9         Backfilling         Cell 12 Backfilled         O1-Sep-19         Planned Miestone <ul> <li>Progress Miestone</li> <li>Progress Miestone</li> </ul>	10 7 25 21 21 18 0 TMCLKL Not	28-Dec-19 28-Aug-19A 23-Sep-19 24-Aug-19A 26-Sep-19 rthern Connection tailed Works	26-Sep-19 18-Oct-19 18-Sep-19 18-Oct-19 07-Dec-19* ection Sub-	D13 D9 D9 Cell 12 Backfilled -sea Tunnel Section he Rev. K

#	Activity Name	Orig	Start	Finish	2019 2020 November December January February March April May June
412	Cell 11 Backfilled	0		07-Dec-19*	03 1 17 2 01 0 15 2 29 0 12 1 26 0 09 1 23 01 0 15 2 29 0 12 1 26 0 10 1 21 21 20 0 10 1 24 3 07 1 21 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
412	Cell 10 Backfilled	0		11-Jan-20*	
414	Cell 9 Backfilled	0		11-Jan-20*	◆ Cell 9 Backfilled
415	Cell 8 Backfilled	0		18-Jan-20*	
416	Cell 7 Backfilled	0		18-Jan-20*	◆ Cell 7 Backfilled
417	Cell 6 Backfilled	0		08-Feb-20*	◆ Cell 6 Backfilled
418 419	Cell 5 Backfilled Cell 4 Backfilled	0		22-Feb-20* 22-Feb-20*	◆ Cell 5 Backfilled ◆ Cell 4 Backfilled
419	Cell 3 Backfilled	0		22-Feb-20*	♦ Cell 3 Backfilled
421	Cell 2 Backfilled	0		07-Mar-20*	♦ Cell 2 Backfilled
422	Cell 1 Backfilled	0		07-Mar-20*	◆ Cell 1 Backfilled
423	Parapet Installation				
424	ParapetML03 - Cell 2	18	04-Oct-19		arapetML03 -Cell2
425	ParapetML03 - Cell 3	18	16-Oct-19	05-Nov-19	
426 427	ParapetML03 - Cell 4 ParapetML03 - Cell 5	18	30-Oct-19 13-Nov-19	19-Nov-19 03-Dec-19	ParapetML03 - Cell 4
428	ParapetML03 - Cell 6	7	04-Dec-19	11-Dec-19	ParapetML03 - Cell 6
429	ParapetML03 - Cell 7	7	12-Dec-19	19-Dec-19	ParapetML03 -Cel 7
430	ParapetML03 - Cell 8	7	07-Jan-20	14-Jan-20	Parapet ML03 - Cell 8
431	ParapetML02 - Cell 2	18	22-Oct-19	11-Nov-19	ParapetML02-Cell 2
432 433	Parapet ML02 - Cell 3 Parapet ML02 - Cell 4	18	26-Oct-19 30-Oct-19	15-Nov-19 19-Nov-19	ParapetML02-Cell 3 ParapetML02-Cell 4 ParapetML02-Cell 4
433	ParapetML02 - Cell 4 ParapetML02 - Cell 5	18	30-Oct-19 13-Nov-19	19-Nov-19 03-Dec-19	ParapetML02 - Cell 4
435	ParapetML02 - Cell 6	7	04-Dec-19	11-Dec-19	Parapet ML02 - Cell 6
436	ParapetML02 - Cell 7	7	12-Dec-19	19-Dec-19	ParapetML02-Cel 7
437	ParapetML02 - Cell 8	7	07-Jan-20	14-Jan-20	Parapet ML02 - Cell 8
438	Parapet ML02 & ML03 - Cell 13	18	25-Oct-19	14-Nov-19	ParapetML02 & ML03 - Cell 13
439 440	Parapet ML02 & ML03 - Cell 12 Parapet ML02 & ML03 - Cell 11	18 18	11-Nov-19 25-Nov-19	30-Nov-19 14-Dec-19	ParapetML02 & ML03 - Cell 12 ParapetML02 & ML03 - Cell 11
440	Parapet ML02 & ML03 - Cell 10	18	09-Dec-19	31-Dec-19	Parapet/ML02 & ML03 + Cell 10
442	Parapet ML02 & ML03 - Cell 9	18	23-Dec-19	15-Jan-20	ParapetML02 & ML03 - Cell 9
443	Thermal Barrier (Wall + OHVD Soffit)	i . 1	07.1		
444 445	FP ML03 - Cell 2 (by scaffolding) FP ML03 - Cell 3 (by scaffolding)	8	07-Nov-19 15-Nov-19	14-Nov-19 22-Nov-19	FP ML03 - Cell 2 (by scaffolding) FP ML03 - Cell 3 (by scaffolding)
445	FP ML03 - Cell 4 (by scaffolding)	8	23-Nov-19	30-Nov-19	FP ML03 - Cell 4 (by scaffolding)
447	FP ML03 - Cell 5 (by scaffolding)	8	04-Dec-19	11-Dec-19	FP.MLQ3 - Cell 5 (by scaffolding)
448	FP ML03 - Cell 6 (by scaffolding)	8	12-Dec-19	19-Dec-19	FP ML03 - Cell 6 (by scaffolding)
449	FP ML03 - Cell 7 (by scaffolding)	8	20-Dec-19	27-Dec-19	FP ML03 - Cell 7 (by scaffolding)
450 451	FP ML03 - Cell 8 (by scaffolding) ML03 - VO72 Lead time	8	15-Jan-20 23-Jan-20	22-Jan-20 28-Jan-20*	FP ML03 - Cell 8 (by/scaffolding)
452	FP ML02 - Cell 2 (by platform + scaffolding)	8	12-Nov-19	19-Nov-19	FPML02 + Cell 2 (by platform + scaffolding)
453	FP ML02 - Cell 3 (by platform + scaffolding)	8	20-Nov-19	27-Nov-19	FP ML02 - Cell 3 (by platform + scaffolding)
454	FP ML02 - Cell 4 (by platform + scaffolding)	8	28-Nov-19	05-Dec-19	FP ML02 - Cell 4 (by platform + scaffolding)
455	FP ML02 - Cell 5 (by platform + scaffolding)	8	06-Dec-19	13-Dec-19	FP ML02 - Cell 5 (by platform + scaffolding)
456 457	FP ML02 - Cell 6 (by platform + scaffolding) FP ML02 - Cell 7 (by platform + scaffolding)	8	14-Dec-19 22-Dec-19	21-Dec-19 29-Dec-19	FP ML02 - Cell 6 (by platform + scaffolding) FP ML02 - Cell 7 (by platform + scaffolding)
458	FP ML02 - Cell 8 (by platform + scaffolding)	8	15-Jan-20	29-Dec-19 22-Jan-20	FF ML02 - Cell 8 (by platform + scaffolding)
459	ML02 - VO72 Lead time	7	23-Jan-20	29-Jan-20*	ML02-VO72 Lead time
460	FP ML02 & ML03 - Cell 13 no OHVD	12	15-Nov-19	26-Nov-19	FP/ML02 & ML03 - Cell 13 no OHVD
461	FP ML02 & ML03 - Cell 12	8	01-Dec-19	08-Dec-19	FP MLQ2 & MLO3-Cell 12
462 463	FP ML02 & ML03 - Cell 11 FP ML02 & ML03 - Cell 10	8	15-Dec-19 01-Jan-20	22-Dec-19 08-Jan-20	FP ML02 & ML03 - Cell 11
464	FP ML02 & ML03 - Cell 9	8	16-Jan-20	23-Jan-20	FP ML02 & ML03 - Cell 9
465	ML02 & ML03 - VO72 Lead time	7	24-Jan-20	30-Jan-20*	ML02 & ML03 - VO72 Lead time
466	Thermal Barrier (above OHVD)		07.1	10.11	
467 468	FP ML02 & ML03 - Cell 2 FP ML02 & ML03 - Cell 3	6	07-Nov-19 13-Nov-19	12-Nov-19 18-Nov-19	FP ML02 & ML03 - Cell 2     FP ML02 & ML03 - Cell 3
469	FP ML02 & ML03 - Cell 4	6	19-Nov-19	24-Nov-19	FP ML02 & ML03- Cell 4
470	FP ML02 & ML03 - Cell 5	6	25-Nov-19	30-Nov-19	FP ML02 & ML03 - Cell 5
471	FP ML02 & ML03 - Cell 6	6	01-Dec-19	06-Dec-19	FP ML02 & ML03 -Cell 6
472	FP ML02 & ML03 - Cell 7	6	07-Dec-19	12-Dec-19	
473 474	FP ML02 & ML03 - Cell 8 FP ML02 & ML03 - Cell 12	6	28-Dec-19 27-Nov-19	02-Jan-20 02-Dec-19	
474	FP ML02 & ML03 - Cell 12 FP ML02 & ML03 - Cell 11	6	03-Dec-19	02-Dec-19 08-Dec-19	
476	FP ML02 & ML03 - Cell 10	6	09-Dec-19	14-Dec-19	🗖 FP ML02 & ML03 - Се II 10
477	FP ML02 & ML03 - Cell 9	6	15-Dec-19	20-Dec-19	E FP ML02 & ML03 - Cell 9
478	Cell 1 Interface				
479 480	SCC Section + Headwall Base slab connection Cell 1 / 2 + backfilling	26	26-Aug-10A	20-Sep-10	ion Cell 1/2 + þaokfilling
480	Base slab connection cell 172 + backhilling Base slab at Headwall	7	31-Oct-19	-	Base slab at Headwall
482	Wall Kicker	3	07-Nov-19	09-Nov-19	
483	Tympanum waterproofing spray + Membrane	15	26-Sep-19	10-Oct-19	im waterproofing spray + Membrane
484 485	ML03 Wali ML02 Wali	21 17	21-Sep-19 27-Sep-19	11-Oct-19 13-Oct-19	Vall Vall
485	ML02 VVali ML03 OHVD slab	25	12-Oct-19	05-Nov-19	ML03 OHVD slab
487	ML02 OHVD slab	24	14-Oct-19	06-Nov-19	ML02OHVDslab
488	Wall at Headwall location	8	16-Nov-19	23-Nov-19	WallatHeadwalllocation
489	OHVD slab at Headwall location	8	24-Nov-19	01-Dec-19	
490 491	ML02 & ML03 Top slab ML02 & ML03 Falsework dismantling	54 8	06-Nov-19 30-Dec-19	29-Dec-19 06-Jan-20	ML02 & ML03 Top slab
491	Transition Structure	0		55 Jun-20	
493	Preparation works	36	19-Aug-19A	30-Sep-19	orkş
494	Tympanum waterproofing	20	01-Oct-19	20-Oct-19	ipanum waterproofing
495	Base slab	10	21-Oct-19	30-Oct-19	Base slab
Page 6 of 8	Planned Bar	TMCLKL Nor	thern Conne	ection Sub-s	sea Tunnel Section
Data Date:	01 Sop 10				進費嘉 進費嘉
	VI-Sep-19 Vice Key Date	De	ailed Works	rogramm	HongKong 11-bb/-19 Rev.K SPa WY/u
	Progress Bar	Th	ree Months	Rolling Pro	
L					I

#	Activity Name	Orig Dur	Start	Finish	2019 2020 November December January February March April May June
406	Wall Kicker	3	31-Oct-19	02-Nov-19	03 1 17 2 01 0 15 2 29 0 12 1 26 0 09 1 23 01 0 15 2 29 0 12 1 26 0 09 1 23 01 0 15 2 29 0 12 1 26 0 10 1 24 3 07 1 21 3 00 1 00 100 00
496 497	Wall	9	07-Nov-19	15-Nov-19	
498	ML02 OHVD slab at Transition Structure	3	02-Dec-19	04-Dec-19	□ ML02/OHVDslab at Transition Structure
<mark>499</mark>	ML03 OHVD slab at Transition Structure	5	08-Dec-19	12-Dec-19	ML03 ΦHVD slab at Transition Structure
500	Top slab	19	02-Dec-19	20-Dec-19	Top Slab
501 502	Internal Structure Parapet installation (ML02 & ML03)	12	07-Jan-20	18-Jan-20	Parapetinstallation (ML02 & ML03)
502	FP ML02 & ML03 - Wall + OHVD Soffit + Above OHVD	6	19-Jan-20	24-Jan-20	FP ML02 & ML03 - Wall + OHVD Soffit + Above OHVD
504	VO72 - Lead Time	6	25-Jan-20	30-Jan-20*	VO72-Lead Time
505	MHS Approach Ramp KD-3i				
506	[KD-3i]-DBJV Forecast(01Sep19)	0		30-Nov-19	♥ [KD-3i]-DBJV Forecast(01Sep19)
507	[KD-3i] - EOTO 1-32 Current Date	0		01-Dec-19*	▼ [KD-3i]-EOTO1-32 CurrentDate
508 509	[KD-3i] - Required Date for C4 Access	0		31-Dec-19*	♥ [KD-3i]- Required Date for C4 Access
509	South Approach R amp RC Structure				
510	Waterprofing, Backfilling & Compaction	217	11-Mar-19A	30-Nov-19	Waterprrofing, Backfilling & Compaction
512	Portion N11A,B, N13K,J - Handover	0		30-Nov-19	Portion N11A,B, N13K,J - Haridover
513	Internal Structure				
514	SAR Parapet (East & West) Type SAR-1 to 3	40	02-Aug-19A		& West) Type SAR-1 to 3
515 516	Cell 14/15 Parapet (East & West) Type SAR-4 SAR Parapet (Middle) Type SAR-5	18 30	19-Sep-19 12-Oct-19	11-Oct-19 15-Nov-19	5 Parapet (East & West) Type SAR-4 SARParapet (Middle) Type SAR-5
510	De-mobilization	13	12-00-19 16-Nov-19	30-Nov-19	
518	Sign Gantry				
519	Procurement & Fabrication of Sign Gantry ML03 side	28	05-Dec-19*	09-Jan-20	Procurement & Fabrication of Sign Gantry ML03 side
520	Delivery of Sign Gantry ML03 side	1	10-Jan-20	10-Jan-20	I Delivery of Sign Gantry ML03 side
521 522	Installation of Sign Gantry ML03 side Procurement & Fabrication of Sign Gantry ML02 side	<u> </u>	11-Jan-20 18-Dec-19*	11-Jan-20 18-Feb-20	Installation of Sign Gantry ML03 side
522	Installation of Sign Gantry Beam ML02 side	0	18-Dec-19" 19-Feb-20	18-Feb-20 19-Feb-20	I Installation of Sign Ganity ML02 side
524	Installation of Sign Gantry Beam ML03 side	0	20-Feb-20	20-Feb-20	I Installation of Sign Gantry Beam ML03 side
525	Southern Landfall - Surface				
526	[KD-3d] - EOTO 1-30 Current Date	0		08-Feb-20*	♥ [KD-3d] - EOTO 1-30 CurrentDate
527	[KD-3d]-DBJV Forecast(01Sep19)	0		08-Feb-20	♥ [KD-3d] DBJV Forecast(01Sep19)
528 529	[KD-3c] - EOTO 1-30 Current Date [KD-3c] - DBJV Forecast (01Sep19)	0		14-May-20* 01-Sep-19	▼ [KD-3 :]-EOTO 1-30
530	HKBCF Seawall Modification (schedule TBC)	0		01-Sep-19	pepilo)
531	HKBCF Vertical Seawall - place Armour Rock	81	26-Aug-19A	30-Nov-19	HKBCF Verlical Seawall - place Armour Rock
532	UU / At-grade works		, i i i i i i i i i i i i i i i i i i i		
533	South Road & Drain				
534	South Ventilation Building - Provision for FSI				
535		0		06 Esh 20	
536 537	SVB - FNO completion - DBJV Estimation SVB - Water Connection - DBJV Estimation	0		06-Feb-20 07-Feb-20	◆ SVB - FNO completion - DBJV Estimation ◆ SVB - Water Connection - DBJV Estimation
538	SVB - EVAprovision - DBJV Estimation	0		20-Feb-20	◆ SVB -EVA provision - DBJV Estimation
539	SVB - FSI - DBJV Estimation	0		02-Mar-20	◆ \$VB - FSI-DBµV Estimation
540	CLP 11kV				
541 542	CLP 11kV duct & draw pit-West-Cell 9>1 CLP 11kV duct & draw pit-West-Cell 1>SVS	51 24	18-Jul-19A 17-Sep-19	16-Sep-19 16-Oct-19	wpit-West-Cell 9>1 1kV duct& drawpit-West-Cell 1>\$VS
543	CLP 11kV duct& draw pit-SVS/SVB	24	17-Oct-19	13-Nov-19	CLP 11kV duct & draw pit-\$V\$ / \$V\$
544	Drainage				
<mark>545</mark>	Drainage & outfall connection - West - SVS / SVB	30	20-Aug-19A	•	II connection - West - SVS / SVB
546 547	Drainage & outfall connection - West - Cell 1>SVS	30	25-Sep-19 01-Nov-19	31-Oct-19 05-Dec-19	Drainage & outfall connection - West-Cell 1>SVS
547	Drainage & outfall connection - West - SAR>Cell 9 Drainage & outfall connection - West - Cell 9>1	30	01-Nov-19 06-Dec-19	13-Jan-20	Drainage & outfall connection - West-SAR>Cell 9 Drainage & outfall connection - West- Cell 9>1 Drainage & outfall connection - West- Cell 9>1
549	Watermain				
550	Watermain - West - SV S/SVB	24	02-Oct-19*	30-Oct-19	Watermain - West-SVS/SVB
551	Watermain - West - Cell 1>SVS	18	01-Nov-19	21-Nov-19	Watermain - West- Cell 1>SVS
552 553	Watermain - West - SAR>Cell 9 Watermain - West - Cell 9>1	24	22-Nov-19 20-Dec-19	19-Dec-19 17-Jan-20	Watermain - West - SAR>Cell 9
554	Watermain - Connection	13	18-Jan-20	07-Feb-20	Watermain - Connection
555	LV/ELV				
556	LV/ELV Duct-West-SVS/SVB	24	02-Oct-19*	30-Oct-19	LV/ELV Duct-West-SVS/SVB
557 558	LV/ELV Duct - West-Cell 1>SVS LV/ELV Duct - West-Cell 9>1	24	31-Oct-19 28-Nov-19	27-Nov-19 27-Dec-19	LV/ELV Duct - West- Cell 1>SVS
559	LV/ELV Duct - West - Cell 9 1	24	28-Dec-19	27-Dec-19 22-Jan-20	LV/ELV Duct - West - Cell 9 I
560	Provision for FNO		-		
561	FNO Installation - SVS/SVB	18	02-Oct-19	23-Oct-19	VO Installation SVS/SVB
562	FNO Installation - Cell 1>SVS	18	31-Oct-19	20-Nov-19	FNO Installation + Cell 1>SVS
563 564	FNO Installation - SAR>Cell 9 FNO Installation - Cell 9>1	21	28-Nov-19 23-Dec-19	21-Dec-19 17-Jan-20	FNO installation - SAR>Cell 9
565	FNO Commissioning for SVB	13	18-Jan-20	06-Feb-20	FNO Commisioning for SVB
566	Gully / Kerb / Pavement				
567	Gully/Kerb-West-SVS/SVB	24	24-Oct-19*	20-Nov-19	Gully /Kerb - West - SVS/SVB
568 569	Gully/Kerb - West - Cell 1>SVS	24	21-Nov-19	18-Dec-19 22-Jan-20	Guilly/Kerb - West - Cell 1>SV\$
569 570	Gully/Kerb - West - Cell 9>1 Gully/Kerb - West - SAR>Cell 9	9	23-Dec-19 23-Jan-20	22-Jan-20 22-Feb-20	Gully/Kerb - West - Cell 9>1
571	Pavement-West-SVS/SVB	24	21-Nov-19	18-Dec-19	Pavement-West-\$VS/SVB
572	Pavement-West-Cell 1>SVS	24	19-Dec-19	18-Jan-20	Pavement-West-Cell 1>SVS
573	Pavement-West-Cell 9>1	9	23-Jan-20	22-Feb-20	Pavement-West-Cell9>1
574 575	Pavement-West-SAR>Cell 9 Satellite Control Building and Kiosk - Provision for FSI	23	24-Feb-20	21-Mar-20	Pavement-West-SAR>Çell9
575 576	Satellite Control Building and Klosk - Provision for FSI Requirement				╋╌╞╌╞╌╞╌╞╴╞╴╡╴╡╴╡╴╡ <mark>╴</mark> ╪╴╪╌╞╌╞╶╞╶╞╶╞╶╡╴╡╴╡╴╡╴╡╴┊╴╞╶╞╶╞╶╞╴╞╴╴╡╴ <mark>┨╴</mark> ╴╴╴
577	SCB - 11kV Route Provision - DBJV Estimation	0		08-Feb-20	SCB - 11kV Route Provision - DBJV Estimation
578	SCB - Provision for ELV / Power Cable - DBJV Estimation	n O		08-Feb-20	SCB - Provision for ELV / Power Cable DBJV Estimation
Page 7 of 8	B Planned Bar	TMCI KL No	rthern Conn	ection Sub-	sea Tunnel Section
	Planned Milestone				推寶嘉 港賀嘉
Data Date:		De	tailed Works	s Programm	Prograges HongKong Dragages Ho
	Progress Milestone     Progress Bar	TI	nree Months	Rolling Pro	A number of the Bourgues Construction group         Z2-Jan-20         Rev.K1         SPa         WYu           gramme         Drogages - Bourgues Joint Venture 寶嘉 - 布依格聯盟
				-	

#	Activit	y Name	Orig	Start	Finish	2019 2020
	/ 10411		Dur	CLIT		November December January February March April May June
579		SCB - Water Connection - DBJV Estimation	0		06-Mar-20	03 1 17 2 01 0 15 2 29 0 12 1 26 0 09 1 23 01 0 15 2 29 0 12 1 26 0 10 1 21 21 20 0 12 1 26 0 10 1 24 3 07 1 21 3 ◆ SCB - Water Connection - DBJV Estimation
580		SCB - FNO completion - DBJV Estimation	0		24-Mar-20	SCB - FNO completion - DBJV Listimation
581		SCB - EVA provision - DBJV Estimation	0		27-Mar-20	SCB - EVAprovision - DBJV Estimation
582		SCB & Kiosk - FSI - DBJV Estimation	0		31-Mar-20	SCB & Kiosk -FSI - DBJV Estimation
583		Interface Activities				
584		Cell 12 Backfilled for Access - DBJV Estimation (01-Sep-19)	0		07-Dec-19*	Cell 12 Backfilled for Access - DBJV Estimation (01-Sep-19)
585		CLP 11kV				
586		CLP 11kV duct& draw pit-Ramp F Crossing	21	16-Dec-19*	11-Jan-20	CLP 11 kV duct& draw pit-Ramp F Crossing
587		CLP 11kV duct & draw pit at SAR entrance - construction	18	13-Jan-20	08-Feb-20	CLP:11kV duct& draw pitat SAR entrance - construction
588		Drainage				
589		Drainage & outfall connection - SCB	23	07-Jan-20	06-Feb-20	Drainage & outfall connection - SCB
<mark>590</mark>		Watermain		i		
591		Watermain - SCB	17	14-Jan-20	10-Feb-20	Watermain - SCB
592		Watermain connection - SCB	10	11-Feb-20	06-Mar-20	Watermáin conhectiori - \$CB
593		LV/ELV	1.5			
594		LV/ELV Provision - SCB & Kiosk	18	13-Jan-20	08-Feb-20	LV/ELV Provision - SCB & Kiask
595		Provision for FNO	0	07 D 40		
596		FNO Access - East - Cell 13 Crossing	0	07-Dec-19	00 1 00	FNOAccess - East- Cell 13 Crossing
597 598		FNO Installation - East- SCB>Cell 13	38	07-Dec-19	23-Jan-20 24-Feb-20	FNO installation - East - SCB>Cell 13
598		FNO Installation - East - Cell 13 Crossing FNO Commissioning - SCB	8 25	24-Jan-20 25-Feb-20	24-Feb-20 24-Mar-20	FNO Commissioning - SCB
600		Gully/Kerb/Pavement	25	20-FeD-20	24-11/121-20	
601		Gully/Kerb-SCB	24	25-Feb-20	23-Mar-20	Gully/Kerb-SCB
602		Pavement-SCB	24	24-Mar-20	24-Apr-20	Pavement-SCB
603		Remaining - East - SCB to C1	27	24-101-20	24-7401-20	
604					•	
605		Drainage & outfall connection - SCB	24	06-Dec-19	06-Jan-20	Drainage & outfall connection - SCB
606		Watermain				
607		Watermain connection - SCB	30	20-Dec-19	30-Jan-20	Watermain connection - SCB
608		CLP 132kV				
609		132kV Cable Installation - East - C1>SAR	23	07-Jan-20	06-Feb-20	132kV Cable Installation - East - C1>SAR
610		Provision for FNO				
611		FNO Installation - East - C1>SCB	30	17-Dec-19	24-Jan-20	FNO Installation - East-C1>SCB
612		Gully / Kerb / Pavement				
613		Gully/Kerb-East-C1>SCB	8	24-Jan-20	25-Feb-20	Gully/Kerb-East-C1>SCB
614		Pavement-East-C1>SCB	18	02-Mar-20	24-Mar-20	Pavement-East+C1>SCB
615		Remaining - East - Cell 13 to SVB				
616		Interface Activities				
<mark>617</mark>		SCC Cell 13-9 Structure Completion - DBJV Estimation (01-Sep	0		15-Nov-19	SCC Cell 13-9 Structure Completion - DBJV Estimation (01-Sep-19)
<mark>618</mark>		SCC Site Setup demobilization	19	16-Nov-19	07-Dec-19	SCC Site Setup demobilization
619		SCC Structure Completion - DBJV Estimation (01-Sep-19)	0		29-Nov-19	SCC Structure Completion - DBJV Estimation (01-Sep-19)
620		SCC Site Setup demobilization	24	30-Nov-19	30-Dec-19	
621		Cell 13 Backfilled - DBJV Estimation (01-Sep-19)	0	44 1 00	07-Dec-19*	◆ Cell 13 Backfilled - DBJV Estimation (01-Sep-19)
622		Amenities demobilization - DBJV Estimation	17	14-Jan-20	14-Feb-20	Amenities demobilization -DBJV Estimation
623		CLP 11kV	24	07 Dec 10	07 lon 20	
624 625		CLP 11kV duct & draw pit-SCB > Cell 14 CLP 11kV duct & draw pit-Cell 13 Crossing	24 22	07-Dec-19 08-Jan-20	07-Jan-20 07-Feb-20	CLP 11kV duct& draw pit-SCB > Cell 14
625		Drainage	22	00-Jan-20	07-Feb-20	
627		Drainage & outfall connection - East - SAR>Cell 9	26	09-Dec-19	10-Jan-20	Drainage & butfall connection - East - SAR>Cell 9
627		Drainage & outfall connection - East- Cell 9>1	20 19	11-Jan-20	13-Feb-20	Drainage & outfall connection - East- SAR-Cell 9
629		Drainage & outfall connection - East- Cell 3-1	15	14-Feb-20	12-Mar-20	Drainage & outfail connection - East- Amenities
630		Gully/Kerb/Pavement	10			
631		Gully/Kerb - East - SAR>Cell 9	19	11-Jan-20	11-Feb-20	<mark></mark>
632		Gully/Kerb - East-Cell 9>1	15	14-Feb-20	12-Mar-20	Guily / Kerb - East - Cell 9>1
633		Gully/Kerb - East-Amenities	24	13-Mar-20	14-Apr-20	Gully /Kerb - East - Amenities
634		Pavement-East-SAR>Cell 9	15	14-Feb-20	12-Mar-20	Pavement-East-SAR>Cell9
635		Pavement-East-Cell 9>1	24	13-Mar-20	14-Apr-20	Pavement-East-Cell9>1
636		Pavement-East-Amenities	24	15-Apr-20	14-May-20	Pavement-East-Am
637		As-built				
638		NewActivity	1	02-Sep-19	02-Sep-19	
		····y				<u>p</u>



Appendix C

Environmental Mitigation and Enhancement Measure Implementation Schedules

EIA Reference	EM&A Manual	Environmental Protection Measures	Location/ Timing	Implementation Agent	Relevant Standard or Requirement	Imj	plementa Stages	tion	Status *
	Reference					D	С	0	
Air Quality 4.8.1	3.8	An effective watering programme of twice daily watering with complete coverage, is estimated to reduce by 50%. This is recommended for all areas in order to reduce dust levels to a minimum;	construction period	Contractor	TMEIA Avoid smoke impacts and disturbance		Y		✓
4.8.1	3.8	Watering of the construction sites in Lantau for 8 times/day and in Tuen Mun for 12 times/day to reduce dust emissions by 87.5% and 91.7% respectively and shall be undertaken.		Contractor	TMEIA Avoid dust generation		Y		~
4.8.1	3.8	The Contractor shall, to the satisfaction of the Engineer, install effective dust suppression measures and take such other measures as may be necessary to ensure that at the Site boundary and any nearby sensitive receiver, dust levels are kept to acceptable levels.	construction period	Contractor	TMEIA Avoid dust generation		Y		~
4.8.1	3.8	The Contractor shall not burn debris or other materials on the works areas.	All areas / throughout construction period	Contractor	TMEIA Avoid dust generation		Y		1
4.8. 1	3.8	In hot, dry or windy weather, the watering programme shall maintain all exposed road surfaces and dust sources wet.	All unpaved haul roads / throughout construction period in hot, dry or windy weather	Contractor	TMEIA Avoid smoke impacts and disturbance		Y		✓
4.8.1	3.8	Where breaking of oversize rock/concrete is required, watering shall be implemented to control dust. Water spray shall be used during the handling of fill material at the site and at active cuts, excavation and fill sites where dust is likely to be created.	construction period	Contractor	TMEIA Avoid dust generation		Y		~
4.8.1	3.8	Open dropping heights for excavated materials shall be controlled to a maximum height of 2m to minimise the fugitive dust arising from unloading.		Contractor	TMEIA Avoid dust generation		Y		V
4.8.1	3.8	During transportation by truck, materials shall not be loaded to a level higher than the side and tail boards, and shall be dampened or covered before transport.		Contractor	TMEIA Avoid dust generation		Y		~
4.8.1	3.8	Materials having the potential to create dust shall not be loaded to a level higher than the side and tail boards, and shall be covered by a clean tarpaulin. The tarpaulin shall be properly secured and shall extend at least 300mm over the edges of the side and tail boards.	construction period	Contractor	TMEIA Avoid dust generation		Y		~
4.8.1	3.8	No earth, mud, debris, dust and the like shall be deposited on public roads. Wheel washing facility shall be usable prior to any earthworks excavation activity on the site.		Contractor	TMEIA Avoid dust		Y		~

Legend: D=Design, C=Construction, O=Operation

EIA Reference	Manual	Environmental Protection Measures	Location/ Timing	Implementation Agent	Relevant Standard or Requirement	1		1	
	Reference					D	С	0	
4.8.1	3.8	Areas of exposed soil shall be minimised to areas in which works have been completed shall be restored as soon as is practicable.		Contractor	TMEIA Avoid dust generation		Y		•
4.8.1	3.8	All stockpiles of aggregate or spoil shall be enclosed or covered and water applied in dry or windy condition.	All areas / throughout construction period	Contractor	TMEIA Avoid dust generation		Y		~
4.11	Section 3	EM&A in the form of 1 hour and 24 hour dust monitoring and site audit.	All representative existing ASRs / throughout construction period	Contractor	EM&A Manual		Y		~
WATER QUAI Marine Works (See									
6.1	Annex A	Construction of seawalls to be advanced by at least 200m before the main reclamation dredging and filling can commence. The protection by advanced seawall is a dynamic process depending on the progress of the construction activities and the stage when such protection could be realised is illustrated in Figure 6.2a and detailed in Appendix D6a. The part of the works where such measures can be undertaken for the majority of the time includes the following locations:	and backfilling works	Contractor	TM-EIAO		Y		N/A
Figure 6.2a Appendix D6a		- TM-CLKL northern reclamation;							
6.1	-	a maximum of 50% public fill to be used for all seawall filling below +2.5mPD for TM-CLKL southern and northern landfalls.	TM-CLKL seawall filling	Contractor	TM-EIAO		Y		N/A

Legend: D=Design, C=Construction, O=Operation

EIA Reference	Manual	Environmental Protection Measures	Location/ Timing	Implementation Agent	Relevant Standard or Requirement	Imp	olementat Stages	tion	Status *
	Reference					D	С	0	
6.1	-	a maximum of 30% public fill to be used for reclamation filling below +2.5mPD for TM-CLKL southern landfall	TM-CLKL southern landfall reclamation filling	Contractor	TM-EIAO		Y		N/A
6.1	-	a maximum of 100% public fill to be used for reclamation filling below +2.5mPD for TM-CLKL northern landfall	TM-CLKL northern landfall reclamation filling	Contractor	TM-EIAO		Y		N/A
6.1		Use of cage type silt curtains round allgrab dredgers during the HKBCF, HKLR and TM-CLKL southern reclamation works.	All areas dredging works	Contractor	TM-EIAO		Y		N/A
	Annex C	A layer of floating type silt curtain will be applied when dredging and reclamation works are being undertaken at Portion N-a as shown in Figure 1.1 of Annex C of the EM&A Manual.		Contractor	TM-EIAO		Y		N/A
6.1	-	Trailer suction hopper dredgers shall not allow mud to overflow.	All areas/ throughout construction period	Contractor	Marine Fill Committee Guidelines. DASO permit conditions.		Y		N/A
6.1		The use of Lean Material Overboard (LMOB) systems shall be prohibited.	All areas/ throughout construction period	Contractor	Marine Fill Committee Guidelines. DASO permit conditions.		Y		N/A

Legend: D=Design, C=Construction, O=Operation

EIA Reference	EM&A Manual Reference	Environmental Protection Measures	Location/ Timing	Implementation Agent	Relevant Standard or Requirement	Imp D	olementa Stages C	tion O	Status *
6.1	Annex A	For other parts of the reclamation works construction of seawalls to be advanced by at least 200m before the main reclamation dredging and filling can commence. It should be noted that the protection by advanced seawall is a dynamic process depending on the progress of the construction activities and the stage when such protection could be realised is illustrated in Figure 6.2b and detailed in Appendices D6b. The part of the works where such measures can be undertaken for the majority of the time includes the following locations:	Portion D of HKBCF and HKLR	Contractor	TM-EIAO		Y	0	N/A
Figure 6.2b Appendix D6b		<ul> <li>TM-CLKL northern reclamation;</li> <li>Reclamation filling for Portion D of HKBCF; Reclamation filling for FSD berth of HKBCF; and</li> <li>Reclamation dredging and filling for Portion 1 of HKLR;</li> </ul>	;						
6.1	-	The filling material for the other parts of the works are the same as Sequence A;	All other areas/backfilling works	Contractor	TM-EIAO		Y		N/A
6.1	5.7	Cage type silt curtain (with steel enclosure) shall be used for grab dredgers working in the site of HKBCF and TM- CLKL southern reclamation. Cage type silt curtains will be applied round all grab dredgers at other works area.	grab dredging	Contractor	TM-EIAO		Y		N/A
6.1	Annex A	A layer of floating type silt curtain will be applied around all works as defined in Appendix D6b.	All areas/ through out marine works	Contractor	TM-EIAO		Y		N/A
6.1	-	TM-CLKL northern landfall: - Reclamation filling shall not proceed until at least 200m section of leading seawall at both the east and west sides of the reclamation are formed above +2.5 mPD, except for 100m gaps for marine access;	1	Contractor	TM-EIAO		Y		N/A
General Marine W	orks	•	•						
6.1	-	Use of TBM for the construction of the submarine tunnel.	Tunnel works / Construction phase	Contractor	TM-EIAO		Y		N/A
6.1	-	Export dredged spoils from NWWCZ.	All areas as much as possible / dredging activities	Contractor	DASO Permit conditions		Y		N/A
6.1	-	Where public fill is proposed for filling below +2.5mPD, the fine content in the public fill will be controlled to 25%		Contractor	TM-EIAO		Y		N/A

Legend: D=Design, C=Construction, O=Operation

EIA Reference	EM&A Manual	Environmental Protection Measures	Location/ Timing	Implementation Agent	Relevant Standard or Requirement	Imj	plementa Stages	tion	Status *
	Reference					D	C	0	
6.1	-	Where sand fill is proposed for filling below +2.5mPD, the fine content in the sand fill will be controlled to 5%.	All areas/ backfilling works	Contractor	TM-EIAO		Y		N/A
6.1	-	Mechanical grabs shall be designed and maintained to avoid spillage and should seal tightly while being lifted.	All areas/ throughout construction period	Contractor	Marine Fill Committee Guidelines. DASO permit conditions.		Ŷ		N/A
6.1	-	Barges and hopper dredgers shall have tight fitting seals to their bottom openings to prevent leakage of material.	All areas/ throughout construction period	Contractor	Marine Fill Committee Guidelines. DASO permit conditions.		Y		N/A
6.1	-	Any pipe leakages shall be repaired quickly. Plant should not be operated with leaking pipes.	All areas/ throughout construction period	Contractor	Marine Fill Committee Guidelines. DASO permit conditions.		Y		N/A
6.1	-	Loading of barges and hoppers shall be controlled to prevent splashing of dredged material to the surrounding water. Barges or hoppers shall not be filled to a level which will cause overflow of materials or pollution of water during loading or transportation.	construction period	Contractor	Marine Fill Committee Guidelines. DASO permit conditions.		Ŷ		N/A
6.1	-	Excess material shall be cleaned from the decks and exposed fittings of barges and hopper dredgers before the vessel is moved.	All areas/ throughout construction period	Contractor	Marine Fill Committee Guidelines. DASO permit conditions.		Y		N/A
6.1	-	Adequate freeboard shall be maintained on barges to reduce the likelihood of decks being washed by wave action;	All areas/ throughout construction period	Contractor	Marine Fill Committee Guidelines. DASO permit conditions.		Ŷ		N/A
6.1	-	All vessels shall be sized such that adequate clearance is maintained between vessels and the sea bed at all states of the tide to ensure that undue turbidity is not generated by turbulence from vessel movement or propeller wash.	construction period	Contractor	Marine Fill Committee Guidelines. DASO permit conditions.		Y		N/A

Legend: D=Design, C=Construction, O=Operation

EIA Reference	EM&A Manual	Environmental Protection Measures	Location/ Timing	Implementation Agent	Relevant Standard or Requirement	Imj	plementa Stages	tion	Status *
	Reference					D	C	0	
6.1	-	The works shall not cause foam, oil, grease, litter or other objectionable matter to be present in the water within and adjacent to the works site.		Contractor	Marine Fill Committee Guidelines. DASO permit conditions.		Y		N/A
6.1	5.2	Silt curtain shall have proved effectiveness from the producer and shall be fully maintained throughout the works by the contractor.	All areas/ throughout construction period	Contractor	TM-EIAO		Y		N/A
6.1	-	The daily maximum production rates shall not exceed those assumed in the water quality assessment.	All areas/ throughout construction period	Contractor	TM-EIAO		Y		N/A
6.1	-	The dredging and filling works shall be scheduled to spread the works evenly over a working day.	All areas/ throughout construction period	Contractor	TM-EIAO		Y		N/A
Land Works		•					-		•
6.1	-	Wastewater from temporary site facilities should be controlled to prevent direct discharge to surface or marine waters.	All areas/ throughout construction period	Contractor	TM-EIAO		Y		<b>√</b>
6.1	-	Sewage effluent and discharges from on-site kitchen facilities shall be directed to Government sewer in accordance with the requirements of the WPCO or collected for disposal offsite. The use of soakaways shall be avoided.	construction period	Contractor	TM-EIAO		Y		4
6.1	-	Storm drainage shall be directed to storm drains via adequately designed sand/silt removal facilities such as sand traps, silt traps and sediment basins. Channels, earth bunds or sand bag barriers should be provided on site to properly direct stormwater to such silt removal facilities. Catchpits and perimeter channels should be constructed in advance of site formation works and earthworks.	All areas/ throughout construction period	Contractor	TM-EIAO		Y		~
6.1	-	Silt removal facilities, channels and manholes shall be maintained and any deposited silt and grit shall be removed regularly, including specifically at the onset of and after each rainstorm.	. 0	Contractor	TM-EIAO		Y		~
6.1	-	Temporary access roads should be surfaced with crushed stone or gravel.	All areas/ throughout construction period	Contractor	TM-EIAO		Y		~
6.1	-	Rainwater pumped out from trenches or foundation excavations should be discharged into storm drains via silt removal facilities.	All areas/ throughout construction period	Contractor	TM-EIAO		Y		<b>√</b>
6.1	-	Measures should be taken to prevent the washout of construction materials, soil, silt or debris into any drainage system.	All areas/ throughout construction period	Contractor	TM-EIAO		Y		

EIA Reference	Manual	Environmental Protection Measures	Location/ Timing	Implementation Agent	Relevant Standard or Requirement	Imp	lementa Stages	tion	Status *
	Reference					D	С	0	
6.1	-	Open stockpiles of construction materials (e.g. aggregates and sand) on site should be covered with tarpaulin or similar fabric during rainstorms.	construction period	Contractor	TM-EIAO		Y		1
6.1	5.8	Manholes (including any newly constructed ones) should always be adequately covered and temporarily sealed so as to prevent silt, construction materials or debris from getting into the drainage system, and to prevent storm run-off from getting into foul sewers.	construction period	Contractor	TM-EIAO		Y		~
6.1	-	Discharges of surface run-off into foul sewers must always be prevented in order not to unduly overload the foul sewerage system.		Contractor	TM-EIAO		Y		~
6.1	-	All vehicles and plant should be cleaned before they leave the construction site to ensure that no earth, mud or debris is deposited by them on roads. A wheel washing bay should be provided at every site exit.	construction period	Contractor	TM-EIAO		Y		~
6.1	-	Wheel wash overflow shall be directed to silt removal facilities before being discharged to the storm drain.	All areas/ throughout construction period	Contractor	TM-EIAO		Y		~
6.1	-	Section of construction road between the wheel washing bay and the public road should be surfaced with crushed stone or coarse gravel.	All areas/ throughout construction period	Contractor	TM-EIAO		Y		~
6.1	-	Wastewater generated from concreting, plastering, internal decoration, cleaning work and other similar activities, shall be screened to remove large objects.	All areas/ throughout construction period	Contractor	TM-EIAO		Y		√
6.1	-	Vehicle and plant servicing areas, vehicle wash bays and lubrication facilities shall be located under roofed areas. The drainage in these covered areas shall be connected to foul sewers via a petrol interceptor in accordance with the requirements of the WPCO or collected for off site disposal.	construction period	Contractor	TM-EIAO		Y		N/A
6.1	-	The Contractor shall prepare an oil / chemical cleanup plan and ensure that leakages or spillages are contained and cleaned up immediately.		Contractor	TM-EIAO		Ŷ		~

Legend: D=Design, C=Construction, O=Operation

EIA Reference	EM&A Manual	Environmental Protection Measures	Location/ Timing	Implementation Agent	Relevant Standard or Requirement	Imp	olementa Stages	tion	Status *
	Reference					D	С	0	
6.1	-	Waste oil should be collected and stored for recycling or disposal, in accordance with the Waste Disposal Ordinance.	All areas/ throughout construction period	Contractor	TM-EIAO Waste Disposal Ordinance		Y		~
6.1	-	All fuel tanks and chemical storage areas should be provided with locks and be sited on sealed areas. The storage areas should be surrounded by bunds with a capacity equal to 110% of the storage capacity of the largest tank.	construction period	Contractor	TM-EIAO		Y		~
6.1	-	Surface run-off from bunded areas should pass through oil/grease traps prior to discharge to the stormwater system.	All areas/ throughout construction period	Contractor	TM-EIAO		Y		~
6.1	-	Roadside gullies to trap silt and grit shall be provided prior to discharging the stormwater into the marine environment. The sumps will be maintained and cleaned at regular intervals.		Design Consultant/ Contractor	TM-EIAO	Y		Y	~
6.1	Section 5	All construction works shall be subject to routine audit to ensure implementation of all EIA recommendations and good working practice.	All areas/ throughout construction period	Contractor	EM&A Manual		Ŷ		~
Water Quality Mor	nitoring		•						
6.1	Section 5	Water quality monitoring shall be undertaken for suspended solids, turbidity, and dissolved oxygen. Nutrients and metal parameters shall also be measured for Mf sediment operations (only HKBCF and HKLR required handling of Mf sediment) during baseline, backfilling and post construction period. One year operation phase water quality monitoring at designated stations.	as defined in EM&A Manual, Section 5/ Before, through-out	Contractor	EM&A Manual		Y	Y	Post- constructio n water quality monitoring was completed on 11 April 2020.
ECOLOGY									
8.14	6.3	Specification for and implement pre, during and post construction dolphin abundance monitoring.	All Areas/Detailed Design/ during construction works/post construction	Design Consultant/ Contractor	TMEIA	Y	Y	Y	

Legend: D=Design, C=Construction, O=Operation

EIA Reference	EM&A Manual Reference	Aanual	Location/ Timing	Implementation Agent	Relevant Standard or Requirement	Stages			Status *
						D	С	0	
8.14	6.3,6.5	Specification and implementation of 250m dolphin exclusion zone.	All dredging and reclamation areas/Detailed Design/during all reclamation and dredging works	Design Consultant/ Contractor	TMEIA	Y	Y		×
8.15	6.3, 6.5	Specification and deployment of an artificial reef of an area of 3,600m2 in an area where fishing activities are prohibited.	Area of prohibited fishing activities/Detailed Design/towards end of construction period	TM-CLKL/ HKBCF Design Consultant/TM- CLKL/ HKBCF Contractor	TMEIA	Y		Y	N/A. To be implemente d by AFCD.
8.14	6.3, 6.5	Specification and implementation of marine vessel control specifications	All areas/Detailed Design/during construction works	Design Consultant/ Contractor	TMEIA	Y	Y		~
8.14	6.3, 6.5	Design and implementation of acoustic decoupling methods for dredging and reclamation works	All areas/ Detailed Design/during dredging and reclamation works	Design Consultant/ Contractor	TMEIA	Y	Y		<b>`</b>
8.15	6.3, 6.4	Pre-construction phase survey and coral translocation	Detailed Design/Prior to construction	Design Consultant/ Contractor	TMEIA	Y	Y		~
8.15	6.5	Audit coral translocation success	Post translocation	Contractor	TMEIA		Y	1	<ul> <li>✓</li> </ul>
7.13	6.5	The loss of habitat shall be supplemented by enhancement planting in accordance with the landscape mitigation schedule.	All areas / As soon as accessible	Contractor	TMEIA		Y		N/A
7.13	6.5	Spoil heaps shall be covered at all times.	All areas / Throughout construction period	Contractor	TMEIA		Y		~
7.13	6.5	Avoid damage and disturbance to the remaining and surrounding natural habitat	All areas / Throughout construction period	Contractor	TMEIA		Y		<b>√</b>
7.13	6.5	Placement of equipment in designated areas within the existing disturbed land	All areas / Throughout construction period	Contractor	TMEIA		Y		✓
7.13	6.5	Disturbed areas to be reinstated immediately after completion of the works.	All areas / Throughout construction period	Contractor	TMEIA		Y		<b>√</b>
7.13	6.5	Construction activities should be restricted to the proposed works boundary.	All areas / Throughout construction period	Contractor	TMEIA		Y		✓

Legend: D=Design, C=Construction, O=Operation

EIA Reference	Manual	Ianual	Location/ Timing	Implementation Agent	Relevant Standard or Requirement	Imj	plementa Stages	tion	Status *
	Reference					D	С	0	
10.9	7.6	The colour and shape of the toll control buildings, ventilation building and administration building shall adopt a design which could blend it into the vicinity elements, and the details will be developed in detailed design stage (DM2)	All areas/detailed design	Design Consultant	TMEIA	Y			N/A
10.9	7.6	Aesthetic design of the viaduct, retaining wall and other structures will be developed under ACABAS submission (DM5)	All areas/detailed design	Design Consultant	TMEIA	Y			N/A
10.9	7.6	Screening of construction works by hoardings around works area in visually unobtrusive colours, to screen works (CM5)	All areas/detailed design/ during construction/post construction	Design Consultant/ Contractor	TMEIA	Y	Y		~
10.9	7.6	Control night-time lighting and glare by hooding all lights (CM6)	All areas/detailed design/ during construction	Design Consultant/ Contractor	TMEIA	Y	Y		N/A
10.9	7.6	Ensure no run-off into water body adjacent to the Project Area (CM7)	All areas/detailed design/ during construction	Design Consultant/ Contractor	TMEIA	Y	Y		1
10.9	7.6	Avoidance of excessive height and bulk of buildings and structures (CM8)	All areas/detailed design/ during construction	Design Consultant/ Contractor	TMEIA	Y	Y		1
10.9	7.6	Aesthetically pleasing design (visually unobtrusive and non- reflective) as regard to the form, material and finishes shall be incorporated to all buildings, engineering structures and associated infrastructure facilities (OM5)	All areas/detailed design/ during construction / during operation	Design Consultant/ Contractor	TMEIA	Y	Y	Y	N/A
10.9	7.6	Avoidance of excessive height and bulk of buildings and structures (OM6)	All areas/detailed design/ during construction / during operation	Design Consultant/ Contractor	TMEIA	Y	Y	Y	N/A
WASTE									
12.6		The Contractor shall identify a coordinator for the management of waste.	Contract mobilisation	Contractor	TMEIA		Y		4
12.6		The Contractor shall prepare and implement a Waster Management Plan which specifies procedures such as a ticketing system, to facilitate tracking of loads and to ensure that illegal disposal of wastes does not occur, and protocols for the maintenance of records of the quantities of wastes generated, recycled and disposed. A recording system for the amount of waste generated, recycled and disposed (locations) should be established.		Contractor	TMEIA, Works Branch Technical Circular No. 5/99 for the Trip-ticket System for Disposal of Construction and Demolition Material		Y		

EIA Reference	EM&A Manual	Environmental Protection Measures	Location/ Timing	Implementation Agent	Relevant Standard or Requirement	Imj	plementa Stages	tion	Status *
	Reference					D	С	0	
12.6		The Contractor shall apply for and obtain the appropriate licenses for the disposal of public fill, chemical waste and effluent discharges.	Contract mobilisation	Contractor	TMEIA, Land (Miscellaneous Provisions) Ordinance (Cap 28); Waste Disposal Ordinance (Cap 354); Dumping at Sea Ordinance (Cap 466); Water Pollution Control Ordinance.		Y		~
12.6	8.1	Training shall be provided to workers about the concepts of site cleanliness and appropriate waste management procedures including waste reduction, reuse and recycling.		Contractor	TMEIA		Y		<b>~</b>
12.6	8.1	The extent of cutting operation should be optimised where possible. Earth retaining structures and bored pile walls should be proposed to minimise the extent of cutting.		Contractor	TMEIA		Y		~
12.6	8.1	The surplus surcharge should be transferred to a fill bank	Reclamation areas / after surcharge works	Contractor	TMEIA		Y		N/A
12.6	8.1	Rock armour from the existing seawall should be reused on the new sloping seawall as far as possible	All areas / throughout construction period	Contractor	TMEIA		Y		~
12.6	8.1	The site and surroundings shall be kept tidy and litter free.	All areas / throughout construction period	Contractor	TMEIA		Y		\$
12.6	8.1	No waste shall be burnt on site.	All areas / throughout construction period	Contractor	TMEIA		Y		~
12.6	8.1	Provisions to be made in contract documents to allow and promote the use of recycled aggregates where appropriate.	Detailed Design	Design Consultant	TMEIA	Y			~
12.6	8.1	The Contractor shall be prohibited from disposing of C&D materials at any sensitive locations. The Contractor should propose the final disposal sites in the EMP and WMP for approval before implementation.	construction period	Contractor	TMEIA		Y		×

Legend: D=Design, C=Construction, O=Operation

EIA Reference	EM&A Manual	Environmental Protection Measures	Location/ Timing	Implementation Agent	Relevant Standard or Requirement	Imp	lementa Stages	tion	Status *
	Reference					D	С	0	1
12.6	8.1	Stockpiled material shall be covered by tarpaulin and /or watered as appropriate to prevent windblown dust/ surface run off.	All areas / throughout construction period	Contractor	TMEIA		Y		✓
12.6	8.1	Excavated material in trucks shall be covered by tarpaulins to reduce the potential for spillage and dust generation.	All areas / throughout construction period	Contractor	TMEIA		Y		~
12.6	8.1	Wheel washing facilities shall be used by all trucks leaving the site to prevent transfer of mud onto public roads.	All areas / throughout construction period	Contractor	TMEIA		Y		1
12.6	8.1	Dredged marine mud shall be disposed of in a gazetted marine disposal ground under the requirements of the Dumping at Seas Ordinance.		Contractor	TMEIA		Y		~
12.6	8.1	Standard formwork or pre-fabrication should be used as far as practicable so as to minimise the C&D materials arising. The use of more durable formwork/plastic facing for construction works should be considered. The use of wooden hoardings should be avoided and metal hoarding should be used to facilitate recycling. Purchasing of construction materials should avoid over-ordering and wastage.	construction period	Contractor	TMEIA		Y		~
12.6	8.1	The Contractor should recycle as many C&D materials (this is a waste section) as possible on-site. The public fill and C&D waste should be segregated and stored in separate containers or skips to facilitate the reuse or recycling of materials and proper disposal. Where practicable, the concrete and masonry should be crushed and used as fill materials. Steel reinforcement bar should be collected for use by scrap steel mills. Different areas of the sites should be considered for segregation and storage activities.	construction period	Contractor	TMEIA		Y		
12.6	8.1	All falsework will be steel instead of wood.	All areas / throughout construction period	Contractor	TMEIA		Y		1

Legend: D=Design, C=Construction, O=Operation

EIA Reference	Manual	Manual	Location/ Timing	Implementation Agent	Relevant Standard or Requirement	Imj	plementa Stages	tion	Status *
	Reference					D	С	0	
12.6	8.1	Chemical waste producers should register with the EPD. Chemical waste should be handled in accordance with the Code of Practice on the Packaging, Handling and Storage of Chemical Wastes as follows: <i>f</i> suitable for the substance to be held, resistant to corrosion, maintained in good conditions and securely closed; <i>f</i> Having a capacity of <450L unless the specifications have been approved by the EPD; and w Chinese according to the instructions prescribed in Schedule 2 of the Regulations. <i>f</i> Clearly labelled and used solely for the storage of chemical wastes; <i>f</i> Enclosed with at least 3 sides; <i>f</i> Impermeable floor and bund with capacity to accommodate 110% of the volume of the largest container or 20% by volume of the chemical waste stored in the area, whichever is greatest; <i>f</i> Adequate ventilation; <i>f</i> Sufficiently covered to prevent rainfall entering (water collected within the bund must be tested and disposed of as chemical waste, if necessary); and <i>f</i> Incompatible materials are adequately separated.	construction period	Contractor	TMEIA		Y		<>
12.6	8.1	1	All areas / throughout construction period	Contractor	TMEIA		Y		~
12.6	8.1	Adequate numbers of portable toilets should be provided for on site workers. Portable toilets should be maintained in reasonable states, which will not deter the workers from utilising them.	All areas / throughout	Contractor	TMEIA		Y		
12.6	8.1	Night soil should be regularly collected by licensed collectors.	All areas / throughout construction period	Contractor	TMEIA		Y		N/A

EIA Reference	EM&A Manual	Environmental Protection Measures	Location/ Timing	Implementation Agent	Relevant Standard or Requirement	Stages			Status *
	Reference					D	С	0	
12.6	8.1	General refuse arising on-site should be stored in enclosed bins or compaction units separately from C&D and chemical wastes. Sufficient dustbins shall be provided for storage of waste as required under the Public Cleansing and Prevention of Nuisances By laws. In addition, general refuse shall be cleared daily and shall be disposed of to the nearest licensed landfill or refuse transfer station. Burning of refuse on construction sites is prohibited.	construction period	Contractor	TMEIA		Y		<>
12.6	8.1	All waste containers shall be in a secure area on hardstanding;	All areas / throughout construction period	Contractor	TMEIA		Y		<b>~</b>
12.6	8.1	Training shall be provided to workers about the concepts of site cleanliness and appropriate waste management procedure, including waste reduction, reuse and recycling.		Contractor	TMEIA		Y		-
12.6	8.1	Office wastes can be reduced by recycling of paper if such volume is sufficiently large to warrant collection. Participation in a local collection scheme by the Contractor should be advocated. Waste separation facilities for paper, aluminium cans, plastic bottles, etc should be provided on-site.	construction period	Contractor	TMEIA		Y		
12.6	Section 8	EM&A of waste handling, storage, transportation, disposal procedures and documentation through the site audit programme shall be undertaken.		Contractor	EM&A Manual		Y		
CULTURAL H	ERITAGE								
11.8	Section 9	EM&A in the form of audit of the mitigation measures	All areas / throughout construction period	Highways Department	EIAO-TM		Y		N/A

\* Remarks:

✓ Compliance of Mitigation Measures

<> Compliance of Mitigation but need improvement

x Non-compliance of Mitigation Measures

▲ Non-compliance of Mitigation Measures but rectified by Contractor

Δ Deficiency of Mitigation Measures but rectified by Contractor

N/A Not Applicable in Reporting Period

Legend: D=Design, C=Construction, O=Operation

Appendix D

Summary of Action and Limit Levels

Parameters	Action	Limit
24 Hour TSP Level in µg/m <sup>3</sup>	ASR1 = 213	260
	ASR5 = 238	
	AQMS1 = 213	
	ASR6 = 238	
	ASR10 = 214	
1 Hour TSP Level in $\mu g / m^3$	ASR1 = 331	500
C C	ASR5 = 340	
	AQMS1 = 335	
	ASR6 = 338	
	ASR10 = 337	

# Table D1Action and Limit Levels for 1-hour and 24-hour TSP

# Table D2Action and Limit Levels for Impact Dolphin Monitoring

	North Lan	tau Social Cluster			
	NEL	NWL			
Action Level	STG < 70% of baseline &	STG < 70% of baseline &			
	ANI < 70% of baseline	ANI < 70% of baseline			
Limit Level	[STG < 40% of baseli	[STG < 40% of baseline & ANI < 40% of baseline]			
		and			
	STG < $40\%$ of baselin	ne & ANI < 40% of baseline			
Notes:					
1. STG means quar	terly encounter rate of number of dolp	phin sightings, which is <b>6.00</b> i			
NEL and 0.95 in	NWL during the baseline monitoring	marriad			

2. ANI means quarterly encounter rate of total number of dolphins, which is **22.19 in NEL** and **44.66 in NWL** during the baseline monitoring period

3. For North Lantau Social Cluster, AL will be trigger if NEL or NWL fall below the criteria; LL will be triggered if both NEL and NWL fall below the criteria.

# Table D3Derived Value of Action Level (AL) and Limit Level (LL)

	North Lanta	ı Social Cluster		
	NEL NWI			
Action Level	STG < 4.2 & ANI< 15.5	STG < 6.9 & ANI < 31.3		
Limit Level	NEL = [STG <	2.4 & ANI <8.9]		
	á	and		
	NWL = [STG < 3.9 & ANI <17.9]			

Appendix E

Copies of Calibration Certificates for Air Quality Monitoring

Location Calibrated by Date	:	ASR 5 P.F.Yeung 08/04/2020
Sampler		TE 5170
Model Serial Number	:	TE-5170 S/N 0816
Calibration Orifice and Standar	d Calibrat	ion Relationship
Serial Number	:	2454
Service Date	:	18 February 2020
Slope (m)	:	2.07134
Intercept (b)	:	-0.04091
Correlation Coefficient(r)	:	0.99999
Standard Condition		
Pstd (hpa)	:	1013
Tstd (K)	:	298.18
Calibration Condition		
Pa (hpa)	:	1016
Ta(K)	:	298

Resi	stance Plate	dH [green liquid]	Z	X=Qstd	IC	Y
		(inch water)		(cubic meter/min)	(chart)	(corrected)
1	18 holes	12.0	3.469	1.695	55	55.08
2	13 holes	9.5	3.087	1.510	50	50.07
3	10 holes	6.8	2.612	1.281	44	44.07
4	7 holes	4.6	2.148	1.057	37	37.05
5	5 holes	2.5	1.583	0.784	28	28.04

Notes:Z=SQRT{dH(Pa/Pstd)(Tstd/Ta)}, X=Z/m-b, Y(Corrected Flow)=IC\*{SQRT(Pa/Pstd)(Tstd/Ta)}

Sampler Calibration Relationship (Linear Regression)

Slope(m):29.595

Intercept(b):5.420

Correlation Coefficient(r): 0.9986

Checked by: Magnum Fan

Location Calibrated by Date	: :	ASR10 P.F.Yeung 08/04/2020
Sampler		
Model	:	TE-5170
Serial Number	:	S/N 8162
Calibration Orifice and Standar	d Calibra	tion Relationship
Serial Number	:	2454
Service Date	:	18 February 2020
Slope (m)	:	2.07134
Intercept (b)	:	-0.04091
Correlation Coefficient(r)	:	0.99999
Standard Condition		
Pstd (hpa)	:	1013
Tstd (K)	:	298.18
Calibration Condition		
Pa (hpa)	:	1016
Ta(K)	:	298

Resi	stance Plate	dH [green liquid]	Ζ	X=Qstd	IC	Y
		(inch water)		(cubic meter/min)	(chart)	(corrected)
1	18 holes	11.4	3.381	1.652	54	54.08
2	13 holes	9.2	3.038	1.486	50	50.07
3	10 holes	6.5	2.553	1.252	45	45.07
4	7 holes	4.4	2.101	1.034	37	37.05
5	5 holes	2.2	1.485	0.737	27	27.04

Notes:Z=SQRT{dH(Pa/Pstd)(Tstd/Ta)}, X=Z/m-b, Y(Corrected Flow)=IC\*{SQRT(Pa/Pstd)(Tstd/Ta)}

Sampler Calibration Relationship (Linear Regression)

Slope(m):29.613

Intercept(b): <u>6.169</u>

Correlation Coefficient(r): 0.9943

Checked by: Magnum Fan

Location Calibrated by Date	: :	AQMS1 P.F.Yeung 08/04/2020
Sampler Model	:	TE-5170
Serial Number		S/N 1253
Calibration Orifice and Stand	ard Calibration	
Serial Number	:	2454
Service Date	:	18 February 2020
Slope (m)	:	2.07134
Intercept (b)	:	-0.04091
Correlation Coefficient(r)	:	0.99999
Standard Condition		
Pstd (hpa)	:	1013
Tstd (K)	:	298.18
Calibration Condition		
Pa (hpa)	:	1016
Ta(K)	:	298

Resi	stance Plate	dH [green liquid]	Z	X=Qstd	IC	Y
		(inch water)		(cubic meter/min)	(chart)	(corrected)
1	18 holes	12.0	3.469	1.695	54	54.08
2	13 holes	9.2	3.038	1.486	50	50.07
3	10 holes	6.6	2.573	1.262	44	44.07
4	7 holes	4.4	2.101	1.034	36	36.05
5	5 holes	2.4	1.551	0.769	28	28.04

Notes:Z=SQRT{dH(Pa/Pstd)(Tstd/Ta)}, X=Z/m-b, Y(Corrected Flow)=IC\*{SQRT(Pa/Pstd)(Tstd/Ta)}

Sampler Calibration Relationship (Linear Regression)

Slope(m):28.778

Intercept(b):6.516

Correlation Coefficient(r): 0.9955

Checked by: Magnum Fan

Location Calibrated by Date	: : :	ASR 1 P.F.Yeung 08/04/2020
Sampler		<b>TE 5170</b>
Model Serial Number	:	TE-5170 S/N 0146
Serial Number	•	5/IN 0140
Calibration Orifice and Standard O	Calibratio	n Relationship
Serial Number	:	2454
Service Date	:	18 February 2020
Slope (m)	:	2.07134
Intercept (b)	:	-0.04091
Correlation Coefficient(r)	:	0.99999
<u>Standard Condition</u> Pstd (hpa) Tstd (K)	:	1013 298.18
T Stu (K)	·	290.10
Calibration Condition		
Pa (hpa)	:	1016
Ta(K)	:	298

Resi	stance Plate	dH [green liquid]	Z	X=Qstd	IC	Y
		(inch water)		(cubic meter/min)	(chart)	(corrected)
1	18 holes	11.6	3.411	1.666	52	52.08
2	13 holes	9.0	3.004	1.470	48	48.07
3	10 holes	6.7	2.592	1.271	43	43.06
4	7 holes	4.4	2.101	1.034	35	35.05
5	5 holes	2.2	1.485	0.737	27	27.04

Notes:Z=SQRT{dH(Pa/Pstd)(Tstd/Ta)}, X=Z/m-b, Y(Corrected Flow)=IC\*{SQRT(Pa/Pstd)(Tstd/Ta)}

Sampler Calibration Relationship (Linear Regression)

Slope(m):27.603

Intercept(b):6.950

Correlation Coefficient(r): 0.9971

Checked by: Magnum Fan

Location Calibrated by Date	: : :	ASR 6 P.F.Yeung 08/04/2020
<u>Sampler</u> Model Serial Number	:	TE-5170 S/N 3957
Calibration Orifice and Standard C	alibration	n Relationship
Service Date Slope (m)	:	2454 18 February 2020 2.07134
Intercept (b) Correlation Coefficient(r)	: :	-0.04091 0.99999
<u>Standard Condition</u> Pstd (hpa) Tstd (K)	:	1013 298.18
Calibration Condition Pa (hpa) Ta(K)	:	1016 298

Resi	stance Plate	dH [green liquid]	Z	X=Qstd	IC	Y
		(inch water)		(cubic meter/min)	(chart)	(corrected)
1	18 holes	11.8	3.440	1.681	54	54.08
2	13 holes	9.2	3.038	1.486	49	49.07
3	10 holes	6.4	2.534	1.243	45	45.07
4	7 holes	4.5	2.124	1.045	38	38.06
5	5 holes	2.4	1.551	0.769	30	30.04

Notes:Z=SQRT{dH(Pa/Pstd)(Tstd/Ta)}, X=Z/m-b, Y(Corrected Flow)=IC\*{SQRT(Pa/Pstd)(Tstd/Ta)}

Sampler Calibration Relationship (Linear Regression)

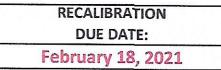
Slope(m):26.126

Intercept(b): 10.743

Correlation Coefficient(r): 0.9935

Checked by: Magnum Fan





nmental Certificate of Calibration

			Calibration	Certificatio	a Informat	ion		
Cal. Date:	February 18, 2020 Rootsr		meter S/N:	eter S/N: 438320		294	°К	
Operator:	Jim Tisch				Pa:	753.1	mm Hg	
Calibration	Model #:	TE-5025A	Calil	prator S/N:	2454		-	
		Vol. Init	Vol. Final	ΔVol.	ΔTime	ΔΡ	ΔН	1
	Run	(m3)	(m3)	(m3)	(min)	(mm Hg)	(in H2O)	
	1	1	2	1	1.4190	3.2	2.00	]
	2	3	4	1	1.0100	6.4	4.00	
	3	5	6	1	0.9020	7.9	5.00	
	4	7	8	1	0.8600	8.8	5.50	
	5	9	10	1	0.7110	12.7	8.00	
			Ľ	Data Tabulat	tion			]
	Vstd	Qstd	$\sqrt{\Delta H \left(\frac{Pa}{Pstd}\right)}$	)( <u>Tstd</u> ) Ta)		Qa	$\sqrt{\Delta H(Ta/Pa)}$	
	(m3)	(x-axis)	(y-ax	is)	Va	(x-axis)	(y-axis)	
	1.0001	0.7048	1.41	73	0.9958	0.7017	0.8836	
	0.9959	0.9860	2.004	14	0.9915	0.9817	1.2496	
	0.9939	1.1019	2.243	10	0.9895	1.0970	1.3971	
Y	0.9927	1.1543	2.350	04	0.9883	1.1492	1.4653	
1	0.9875	1.3889	2.834	47	0.9831	1.3828	1.7672	
		m= 2.07134		NOT 1 N 101	QA	m=	1.29704	
		b=	b= -0.04091 r= 0.99999			b=	-0.02551	
		r=				r=	0.99999	
				Calculation				
	and the second se		/Pstd)(Tstd/Ta	a)	Va= \DVol((Pa-\DP)/Pa)			21. j. 24.
	Qstd=	Qstd= Vstd/ATime				<b>Qa=</b> Va/ΔTime		
			For subsequ	ent flow rat	e calculation	ns:	-	
	Qstd=	1/m (( √∆H(·	Pa <u>(</u> Tstd Pstd Ta	))-b)	Qa=	1/m ((√∆H	(Ta/Pa))-b)	
•	Standard	Conditions	]					
Tstd	298.15	°K		Г		RECAI	IBRATION	
Pstd:		mm Hg		ľ				
All		ley	(12.0)				nual recalibratio	Concernent date permissione a
		er reading (in					egulations Part	
		eter reading ( perature (°K)	(mm Hg)				Reference Meth	
		essure (mm	Hg)				ended Particulat	
b: intercept		cooure (milli	18/		the	e Atmosphe	re, 9.2.17, page	30
m: slope								

Tisch Environmental, Inc. 145 South Miami Avenue Village of Cleves, OH 45002



輝創工程有限公司

Sun Creation Engineering Limited

**Calibration & Testing Laboratory** 

# Certificate of Calibration 校正證書

Certificate No. : C193443 證書編號

ITEM TESTED Description / 儀 Manufacturer / 準 Model No. / 型助 Serial No. / 編號 Supplied By / 委	醫名稱 : 製造商 : 記 :	<ul> <li>Job No. / 序引編號: IC19</li> <li>Anemometer</li> <li>Lutron</li> <li>AM-4201</li> <li>AF.27513</li> <li>Envirotech Services Co.</li> <li>Room 113, 1/F, My Loft, 9 F</li> <li>New Territories, Hong Kong</li> </ul>	loi Wing Road, Tuen N	of Receipt / 收件日期: fun,	21 June 2019
<b>TEST CONDIT</b> Temperature / 溫 Line Voltage / 霍	度: (2	試條件 23 ± 2)℃ -	Relative H	umidity / 相對濕度 :	(50 ± 25)%
TEST SPECIFI Calibration check		/ 測試規範		E in the standard framework in the standar	
DATE OF TES	S / 測試結	果			
The results are d	etailed in th ent used for	icular unit-under-test only. he subsequent page(s). calibration are traceable to Na GmbH, Germany	tional Standards via :		
Tested By 測試	:	T F Lee Assistant Engineer			
Certified By 核證	: _	Um Um Of H C Chan	Date of Issue 簽發日期	: 5 July 2	2019

The test equipment used for calibration are traceable to the Nation Standards as specified in this certificate. This certificate shall not be reproduced except in full, without the prior written approval of this laboratory. 本證書所載校正用之測試器材均可溯源全國際標準。局部復印本證書需先獲本實驗所書面批准。

Engineer



輝創工程有限公司

Sun Creation Engineering Limited Calibration & Testing Laboratory

# Certificate of Calibration 校正證書

Certificate No.: C193443 證書編號

- 1. The unit-under-test (UUT) was allowed to stabilize in the laboratory for over 12 hours before the commencement of the test.
- 2. The results presented are the mean of 10 measurements at each calibration point.
- 3. Test equipment :

Equipment ID	Description	Certificate No.
CL386	Multi-function Measuring Instrument	S16493

- 4. Test procedure : MA130N.
- 5. Results :

Air Velocity

Applied	UUT	Measured Correction			
Value	Reading	Value Measurement Uncertainty			
(m/s)	(m/s)			Coverage Factor	
2.0	1.8	+0.2	0.2	2.0	
4.0	3.8	+0.2	0.3	2.0	
6.0	5.8	+0.2	0.3	2.0	
8.1	7.9	+0.2	0.3	2.0	
10.1	10.0	+0.1	0.4	2.0	

Remarks : - The Measured Corrections are defined as :

Value = Applied Value - UUT Reading

- The expanded uncertainties are for a level of confidence of 95 %.

Note :

Only the original copy or the laboratory's certified true copy is valid.

The values given in this Certificate only relate to the values measured at the time of the test and any uncertainties quoted will not include allowance for the equipment long term drift, variations with environment changes, vibration and shock during transportation, overloading, mis-handling, or the capability of any other laboratory to repeat the measurement. Sun Creation Engineering Limited shall not be liable for any loss or damage resulting from the use of the equipment.

The test equipment used for calibration are traceable to the Nation Standards as specified in this certificate. This certificate shall not be reproduced except in full, without the prior written approval of this laboratory.

本證書所載校正用之測試器材均可溯源至國際標準。局部複印本證書需先獲本實驗所書面批准。

# **ENVIROTECH SERVICES CO.**

Date of Calibration : 30 December 2019	_
Brand of Test Meter: Davis	_
Model: Vantage Pro 2 ( s/n: AS160104014)	_
Location : Roof of Tuen Mun Firestation	_
Procedures :	
1. Wind Still Test: The wind speed sensor was hold by hand	until it keep still
2.Wind Speed Test: The wind meter was on-site calibrated again	inst the Anemometer
3. Wind Direction Test : The wind meter was on-site calibrated ag	inst the marine compass at four directions
Results:	

### Wind Still Test

Wind Speed (m/s) 0.00

### Wind Speed Test

Davis (m/s)	Anemometer (m/s)
3.1	3.3
2.6	2.8
1.4	1.2

#### Wind Direction Test

Davis (o)	Marine Compass (o)		
271	270		
0	0		
89	90		
179	180		

Calibrated by:

Aa

Checked by : Fat

Yeung Ping Fai (Technical Officer)

Ho Kam Fat (Senior Technical Officer)

# **Calibration Report of Wind Meter**

Appendix F

EM&A Monitoring Schedules

## HY/2012/08 - Tuen Mun - Chek Lap Kok Link Northern Connection Sub-sea Tunnel Section Tentative Air Quality Impact Monitoring Schedule - May 2020

Air quality monitoring stations: ASR1, ASR5, ASR6, ASR10, AQMS1

				<u> </u>		
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
					01-May	
						1-hour TSP - 3 times
						24-hour TSP - 1 time
00 Ман	04 Мак	05 Мак		07 Мак		Impact AQM
03-May	04-May	05-May	06-May	07-May		09-May
		1-hour TSP - 3 times			1-hour TSP - 3 times	
		24-hour TSP - 1 time			24-hour TSP - 1 time	
		Impact AQM			Impact AQM	
10-May		12-May	13-May		15-May	16-May
	1-hour TSP - 3 times			1-hour TSP - 3 times		
	24-hour TSP - 1 time			24-hour TSP - 1 time		
	Impact AQM			Impact AQM		
17-May	18-May	19-May		21-May	22-May	
1-hour TSP - 3 times			1-hour TSP - 3 times			1-hour TSP - 3 times
24-hour TSP - 1 time			24-hour TSP - 1 time			24-hour TSP - 1 time
Impact AQM			Impact AQM			Impact AQM
24-May	25-May	26-May	27-May	28-May		30-May
		1-hour TSP - 3 times			1-hour TSP - 3 times	
		24-hour TSP - 1 time			24-hour TSP - 1 time	
		Impact AQM			Impact AQM	
31-May						

## HY/2012/08 - Tuen Mun - Chek Lap Kok Link Northern Connection Sub-sea Tunnel Section Tentative Air Quality Impact Monitoring Schedule - June 2020

Air quality monitoring stations: ASR1, ASR5, ASR6, ASR10, AQMS1

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	01-Jun	02-Jun	03-Jun	04-Jun	05-Jun	06-Jun
	1-hour TSP - 3 times			1-hour TSP - 3 times		
	24-hour TSP - 1 time			24-hour TSP - 1 time		
	Import AOM					
07-Jun	Impact AQM 08-Jun	09-Jun	10-Jun	Impact AQM 11-Jun	12-Jun	13-Jun
1-hour TSP - 3 times	UO-JUII	09-3011	1-hour TSP - 3 times	I I-Juli	12-Juli	1-hour TSP - 3 times
24-hour TSP - 1 time			24-hour TSP - 1 time			24-hour TSP - 1 time
Impact AQM			Impact AQM			Impact AQM
14-Jun	15-Jun		17-Jun	18-Jun		20-Jun
		1-hour TSP - 3 times			1-hour TSP - 3 times	
		24-hour TSP - 1 time			24-hour TSP - 1 time	
		Impact AQM			Impact AQM	
21-Jun	22-Jun	23-Jun	24-Jun		26-Jun	27-Jun
	1-hour TSP - 3 times			1-hour TSP - 3 times		
	24-hour TSP - 1 time			24-hour TSP - 1 time		
	Impact AOM			Impact AOM		
28-Jun	Impact AQM 29-Jun	30-Jun		Impact AQM		
1-hour TSP - 3 times	29-5011	30-30H				
24-hour TSP - 1 time						
Impact AQM						

The schedule is subject to agreement from the EPD on the monitoring times. The schedule will be revised after reviewing the progress of the construction works or due to adverse (safety, weather etc) conditions.

# HY/2012/08 - Tuen Mun - Chek Lap Kok Link Northern Connection Sub-sea Tunnel Section Tentative Impact Dolphin Monitoring Survey Monitoring Schedule - May 2020

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
					01-May	02-May
03-May	04-May		06-May	07-May	08-May	09-May
		Impact Dolphin Monitoring				
10-May	11-May		13-May	14-May	15-May	16-May
		Impact Dolphin Monitoring				
17-May	18-May	19-May	20-May	21-May	22-May	23-May
	Impact Dolphin Monitoring					
24-May	25-May	26-May	27-May	28-May	29-May	30-May
	Impact Dolphin Monitoring					
31-May						

## HY/2012/08 - Tuen Mun - Chek Lap Kok Link Northern Connection Sub-sea Tunnel Section Tentative Operational Phase Dolphin Monitoring Survey Monitoring Schedule - June 2020

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	01-Jun		03-Jun	04-Jun	05-Jun	06-Jun
		Operational Phase				
		Dolphin Monitoring				
07-Jun	08-Jun	09-Jun	10-Jun	11-Jun	12-Jun	13-Jun
		Operational Phase				
		Dolphin Monitoring				
14-Jun	15-Jun	16-Jun	17-Jun	18-Jun	19-Jun	20-Jun
		Operational Phase Dolphin Monitoring				
21-Jun	22-Jun	23-Jun	24-Jun	25-Jun	26-Jun	27-Jun
		Operational Phase Dolphin Monitoring				
28-Jun	29-Jun	30-Jun				

The schedule is subject to agreement from the EPD on the monitoring times. The schedule will be revised in view of adverse(safety,weather etc) conditions.

## HY/2012/08 - Tuen Mun - Chek Lap Kok Link - Northern Landfall Operational Phase Marine Water Quality Monitoring (WQM) Schedule (June 2020)

Sunday	Monday		Wednesday			Saturday
Sunday	1-Jun	2-Jun	3-Jun		5-Jun	6-Jun
		2-3011	5-5411	4-3011	<u> </u>	0-5411
7-Jun	8-Jun	9-Jun	10-Jun	11-Jun	12-Jun	13-Jun
14-Jun	15-Jun	16-Jun	17-Jun	18-Jun	19-Jun	20-Jun
04 hus	00 hu	00 h.m	04 has	05 has	00 hu	07. hu
21-Jun	22-Jun	23-Jun	24-Jun	25-Jun	26-Jun	27-Jun
			ebb tide 13:26 - 16:56			
			ebb tide 13:26 - 16:56 flood tide 6:15 - 9:45			
28-Jun	29-Jun	30-Jun				

The schedule is subject to agreement from the EPD on the monitoring times. The schedule will be revised in view of adverse(safety, weather etc) conditions.

Appendix G

Impact Air Quality Monitoring Results

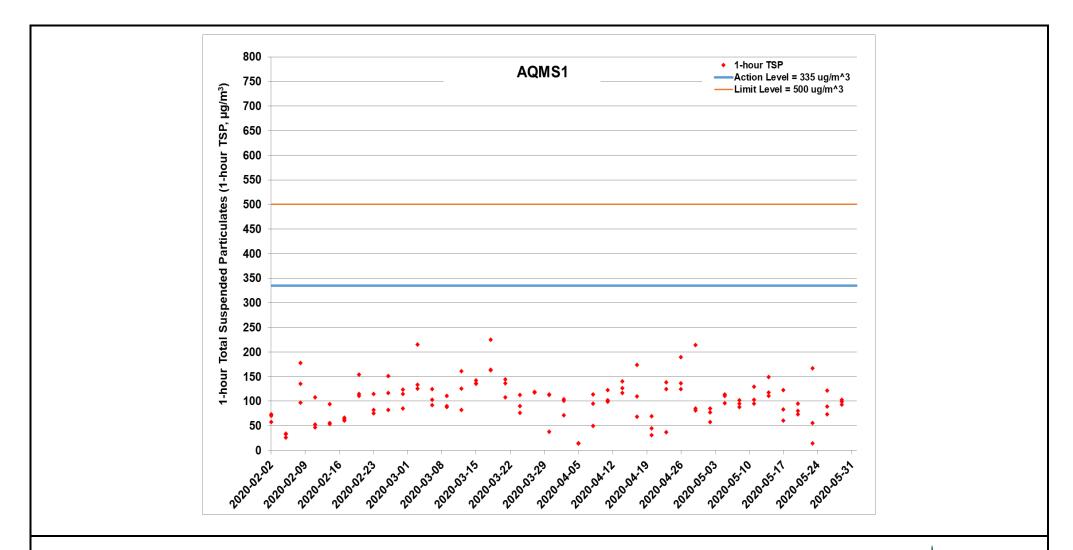


Figure G.1 Impact Monitoring – 1-hour Total Suspended Particulates (µg/m<sup>3</sup>) at AQMS1 between 1 February 2020 and 31 May 2020 during impact monitoring period. The weather conditions during the monitoring period varied from sunny to cloudy. Major land-based construction activities included: Road and Drainage Works at Northern Landfall and Southern Landfall, UU installation at Northern Landfall and Southern Landfall and Fireboard installation in Tunnel (1/2/2020 – 31/5/2020)



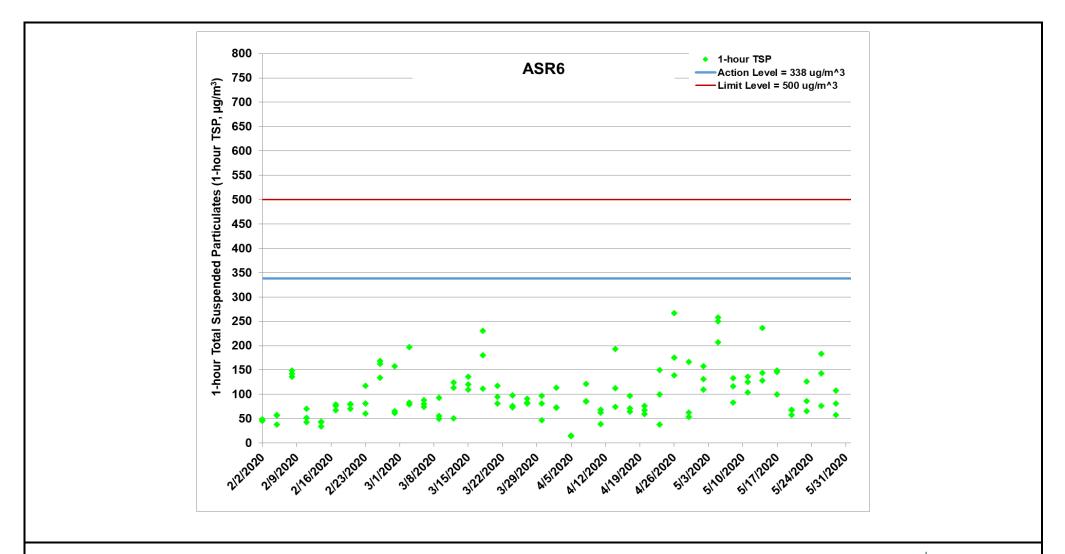


Figure G.2 Impact Monitoring – 1-hour Total Suspended Particulates ( $\mu$ g/m<sup>3</sup>) at ASR6 between 1 February 2020 and 31 May 2020 during impact monitoring period. The weather conditions during the monitoring period varied from sunny to cloudy. Major land-based construction activities included: Road and Drainage Works at Northern Landfall and Southern Landfall, UU installation at Northern Landfall and Southern Landfall and Fireboard installation in Tunnel (1/2/2020 – 31/5/2020)



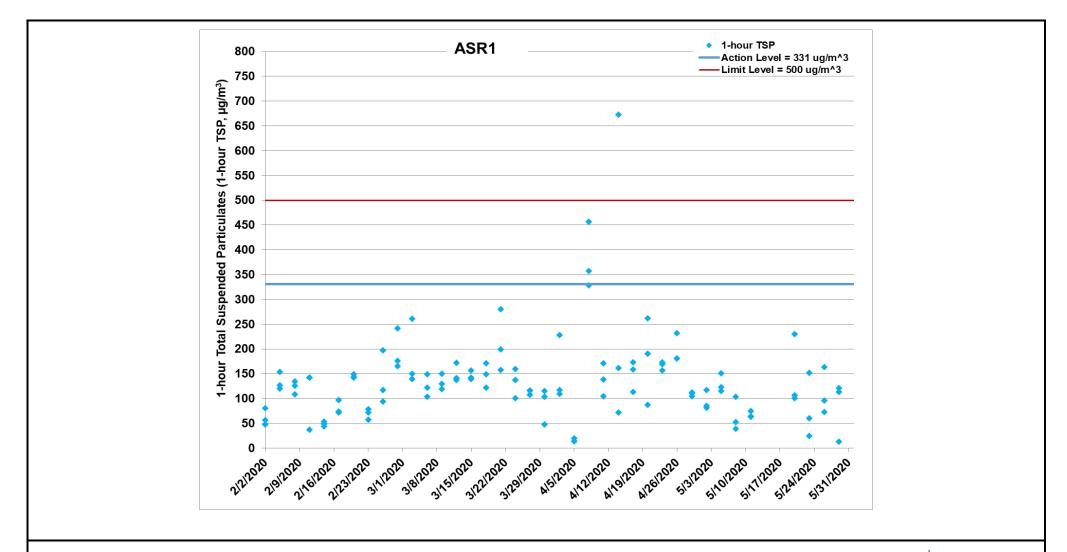


Figure G.3 Impact Monitoring – 1-hour Total Suspended Particulates ( $\mu$ g/m<sup>3</sup>) at ASR1 between 1 February 2020 and 31 May 2020 during impact monitoring period. The weather conditions during the monitoring period varied from sunny to cloudy. Major land-based construction activities included: Road and Drainage Works at Northern Landfall and Southern Landfall, UU installation at Northern Landfall and Southern Landfall and Fireboard installation in Tunnel (1/2/2020 – 31/5/2020)



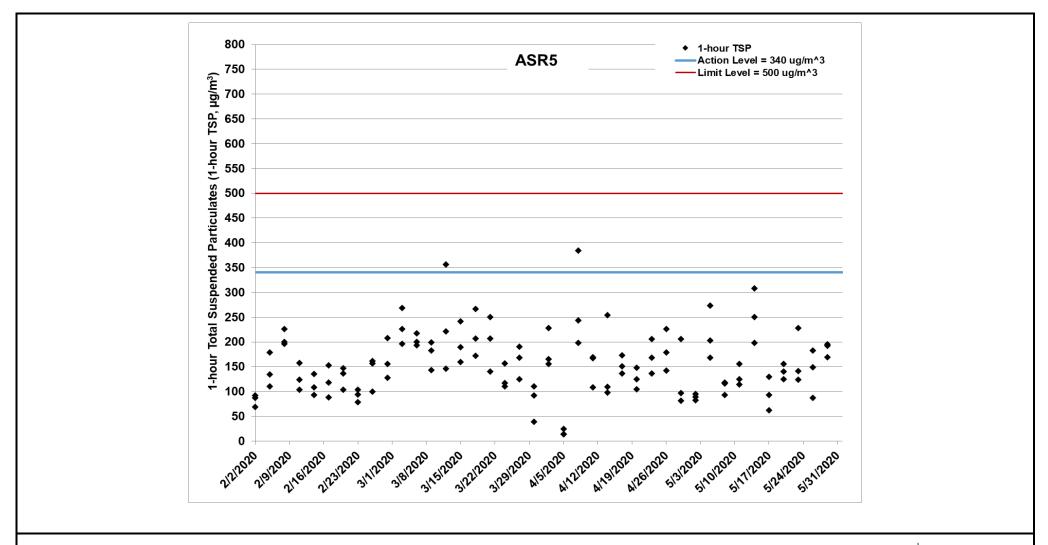


Figure G.4 Impact Monitoring – 1-hour Total Suspended Particulates ( $\mu$ g/m<sup>3</sup>) at ASR5 between 1 February 2020 and 31 May 2020 during impact monitoring period. The weather conditions during the monitoring period varied from sunny to cloudy. Major land-based construction activities included: Road and Drainage Works at Northern Landfall and Southern Landfall, UU installation at Northern Landfall and Southern Landfall and Fireboard installation in Tunnel (1/2/2020 – 31/5/2020)



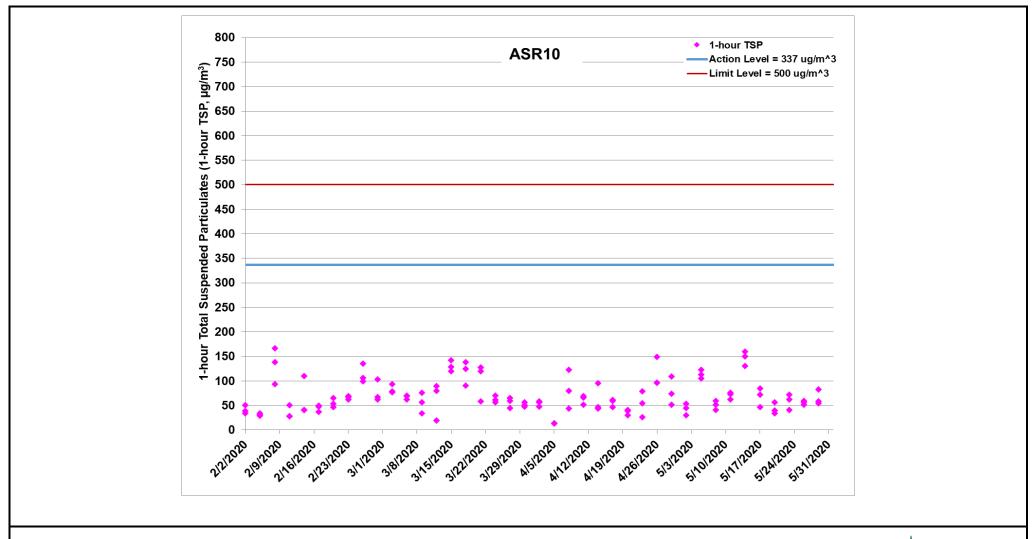
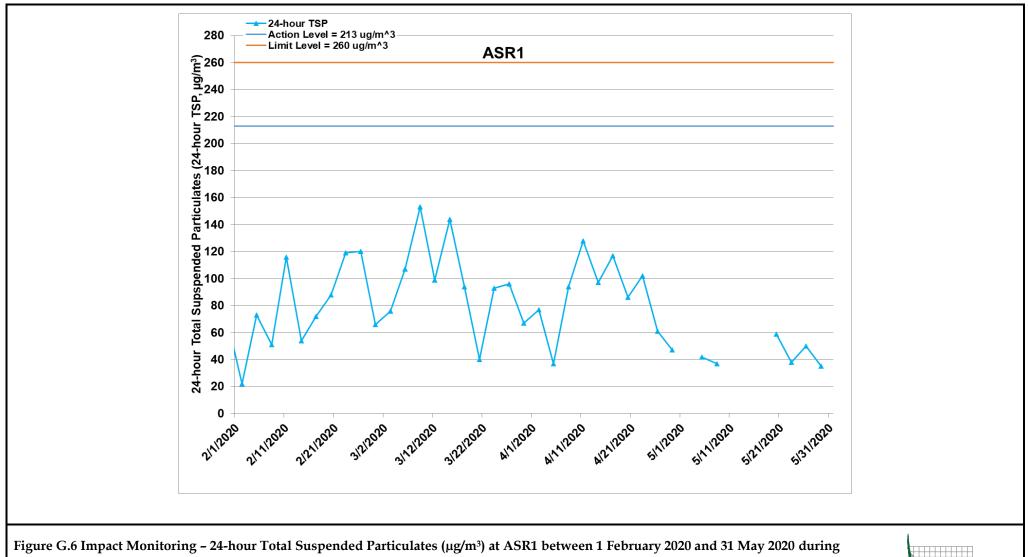


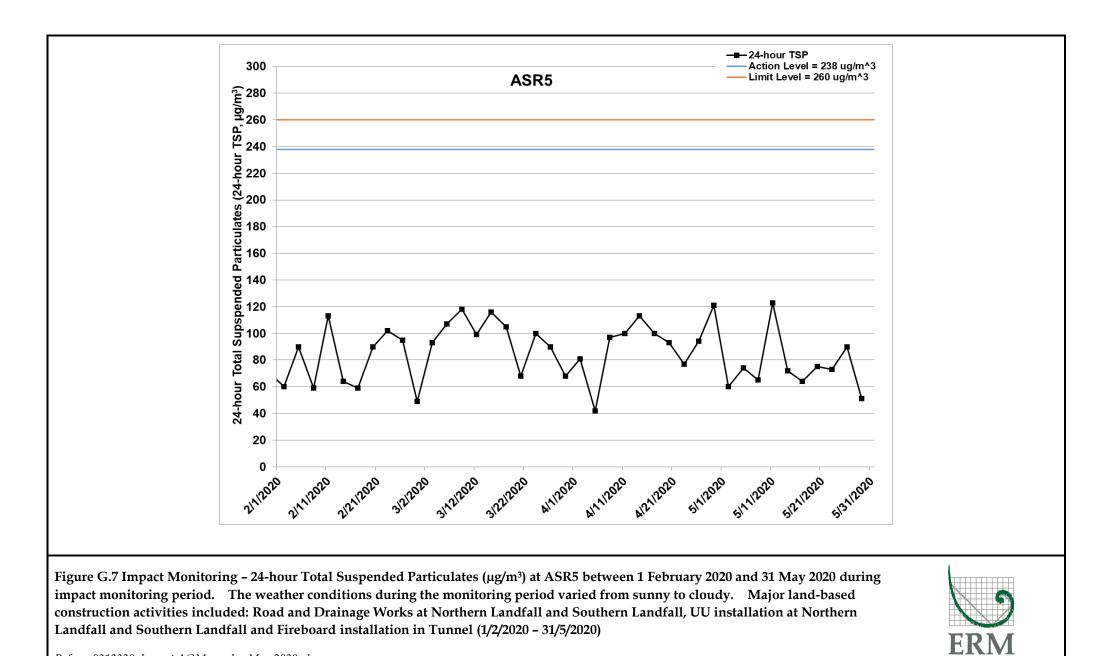
Figure G.5 Impact Monitoring – 1-hour Total Suspended Particulates ( $\mu$ g/m<sup>3</sup>) at ASR10 between 1 February 2020 and 31 May 2020 during impact monitoring period. The weather conditions during the monitoring period varied from sunny to cloudy. Major land-based construction activities included: Road and Drainage Works at Northern Landfall and Southern Landfall, UU installation at Northern Landfall and Southern Landfall and Fireboard installation in Tunnel (1/2/2020 – 31/5/2020)





impact monitoring period. The weather conditions during the monitoring period varied from sunny to cloudy. Major land-based construction activities included: Road and Drainage Works at Northern Landfall and Southern Landfall, UU installation at Northern Landfall and Southern Landfall and Fireboard installation in Tunnel (1/2/2020 – 31/5/2020)

ERM



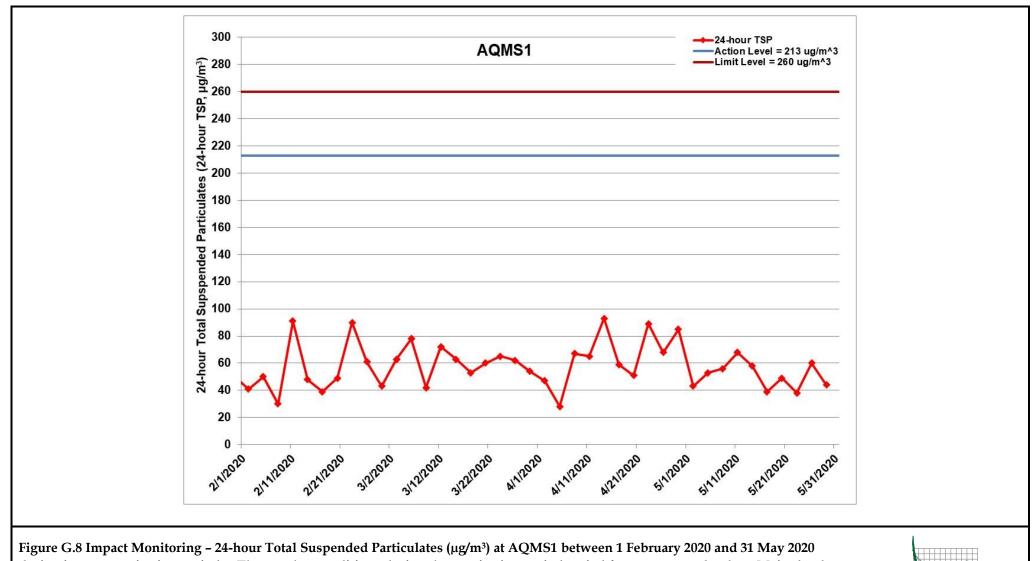


Figure G.8 Impact Monitoring – 24-hour Total Suspended Particulates (μg/m<sup>3</sup>) at AQMS1 between 1 February 2020 and 31 May 2020 during impact monitoring period. The weather conditions during the monitoring period varied from sunny to cloudy. Major land-based construction activities included: Road and Drainage Works at Northern Landfall and Southern Landfall, UU installation at Northern Landfall and Southern Landfall and Fireboard installation in Tunnel (1/2/2020 – 31/5/2020)

ERM

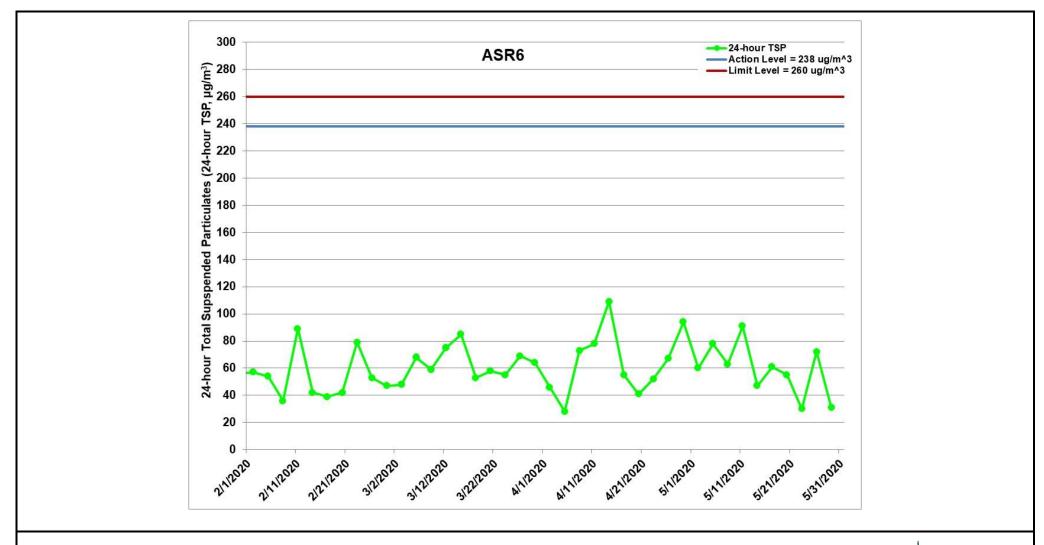
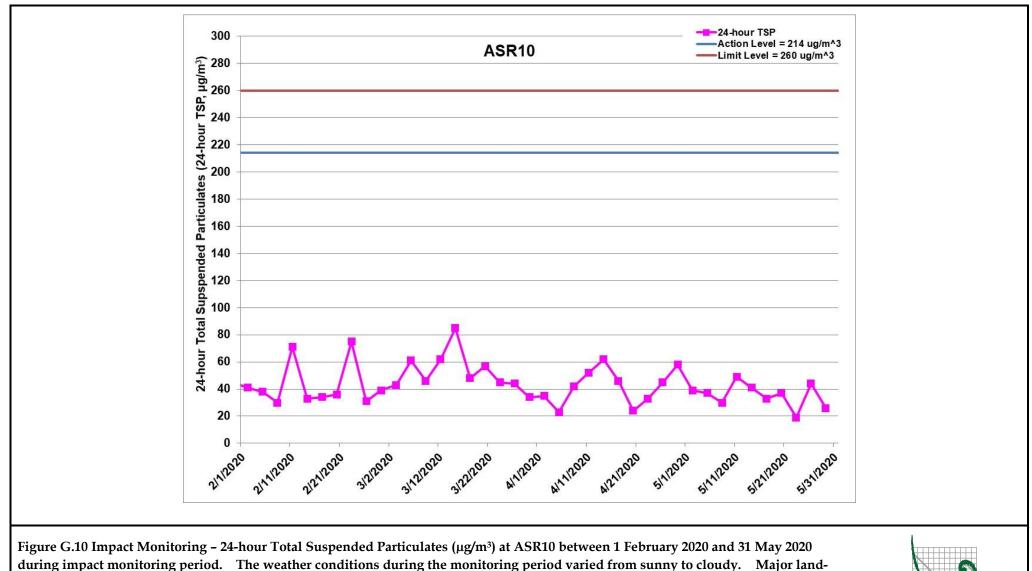


Figure G.9 Impact Monitoring – 24-hour Total Suspended Particulates (μg/m<sup>3</sup>) at ASR6 between 1 February 2020 and 31 May 2020 during impact monitoring period. The weather conditions during the monitoring period varied from sunny to cloudy. Major land-based construction activities included: Road and Drainage Works at Northern Landfall and Southern Landfall, UU installation at Northern Landfall and Southern Landfall and Fireboard installation in Tunnel (1/2/2020 – 31/5/2020)





based construction activities included: Road and Drainage Works at Northern Landfall and Southern Landfall, UU installation at Northern Landfall and Southern Landfall and Fireboard installation in Tunnel (1/2/2020 – 31/5/2020)

ERM

Project	Contract	Date	Station	Weather	Start time	Parameters	Results	units
TMCLKL	HY/2012/08	2020-05-02	ASR10	Sunny	13:12	1-hour TSP	45	ug/m3
TMCLKL	HY/2012/08	2020-05-02	ASR10	Sunny	14:14	1-hour TSP	30	ug/m3
TMCLKL	HY/2012/08	2020-05-02	ASR10	Sunny	15:16	1-hour TSP	54	ug/m3
TMCLKL	HY/2012/08	2020-05-02	ASR6	Sunny	13:23	1-hour TSP	158	ug/m3
TMCLKL	HY/2012/08	2020-05-02	ASR6	Sunny	14:25	1-hour TSP	110	ug/m3
TMCLKL	HY/2012/08	2020-05-02	ASR6	Sunny	15:27	1-hour TSP	131	ug/m3
TMCLKL	HY/2012/08	2020-05-02	ASR5	Sunny	13:35	1-hour TSP	82	ug/m3
TMCLKL	HY/2012/08	2020-05-02	ASR5	Sunny	14:37	1-hour TSP	89	ug/m3
TMCLKL	HY/2012/08	2020-05-02	ASR5	Sunny	15:39	1-hour TSP	95	ug/m3
TMCLKL	HY/2012/08	2020-05-02	ASR1	Sunny	13:46	1-hour TSP	81	ug/m3
TMCLKL	HY/2012/08	2020-05-02	ASR1	Sunny	14:48	1-hour TSP	85	ug/m3
TMCLKL	HY/2012/08	2020-05-02	ASR1	Sunny	15:50	1-hour TSP	117	ug/m3
TMCLKL	HY/2012/08	2020-05-02	AQMS1	Sunny	13:57	1-hour TSP	58	ug/m3
TMCLKL	HY/2012/08	2020-05-02	AQMS1	Sunny	14:59	1-hour TSP	77	ug/m3
TMCLKL	HY/2012/08	2020-05-02	AQMS1	Sunny	16:01	1-hour TSP	85	ug/m3
TMCLKL	HY/2012/08	2020-05-05	ASR10	Sunny	13:13	1-hour TSP	123	ug/m3
TMCLKL	HY/2012/08	2020-05-05	ASR10	Sunny	14:15	1-hour TSP	105	ug/m3
TMCLKL	HY/2012/08	2020-05-05	ASR10	Sunny	15:17	1-hour TSP	113	ug/m3
TMCLKL	HY/2012/08	2020-05-05	ASR6	Sunny	13:24	1-hour TSP	258	ug/m3
TMCLKL	HY/2012/08	2020-05-05	ASR6	Sunny	14:26	1-hour TSP	207	ug/m3
TMCLKL	HY/2012/08	2020-05-05	ASR6	Sunny	15:28	1-hour TSP	250	ug/m3
TMCLKL	HY/2012/08	2020-05-05	ASR5	Sunny	13:37	1-hour TSP	273	ug/m3
TMCLKL	HY/2012/08	2020-05-05	ASR5	Sunny	14:39	1-hour TSP	168	ug/m3
TMCLKL	HY/2012/08	2020-05-05	ASR5	Sunny	15:41	1-hour TSP	203	ug/m3
TMCLKL	HY/2012/08	2020-05-05	ASR1	Sunny	13:48	1-hour TSP	123	ug/m3
TMCLKL	HY/2012/08	2020-05-05	ASR1	Sunny	14:50	1-hour TSP	115	ug/m3
TMCLKL	HY/2012/08	2020-05-05	ASR1	Sunny	15:52	1-hour TSP	151	ug/m3
TMCLKL	HY/2012/08	2020-05-05	AQMS1	Sunny	13:59	1-hour TSP	111	ug/m3
TMCLKL	HY/2012/08	2020-05-05	AQMS1	Sunny	15:01	1-hour TSP	96	ug/m3
TMCLKL	HY/2012/08	2020-05-05	AQMS1	Sunny	16:03	1-hour TSP	114	ug/m3
TMCLKL	HY/2012/08	2020-05-08	ASR10	Sunny	8:20	1-hour TSP	41	ug/m3

Project	Contract	Date	Station	Weather	Start time	Parameters	Results	units
TMCLKL	HY/2012/08	2020-05-08	ASR10	Sunny	9:22	1-hour TSP	59	ug/m3
TMCLKL	HY/2012/08	2020-05-08	ASR10	Sunny	10:24	1-hour TSP	52	ug/m3
TMCLKL	HY/2012/08	2020-05-08	ASR6	Sunny	8:30	1-hour TSP	83	ug/m3
TMCLKL	HY/2012/08	2020-05-08	ASR6	Sunny	9:32	1-hour TSP	133	ug/m3
TMCLKL	HY/2012/08	2020-05-08	ASR6	Sunny	10:34	1-hour TSP	117	ug/m3
TMCLKL	HY/2012/08	2020-05-08	ASR5	Sunny	8:41	1-hour TSP	118	ug/m3
TMCLKL	HY/2012/08	2020-05-08	ASR5	Sunny	9:43	1-hour TSP	116	ug/m3
TMCLKL	HY/2012/08	2020-05-08	ASR5	Sunny	10:45	1-hour TSP	93	ug/m3
TMCLKL	HY/2012/08	2020-05-08	ASR1	Sunny	8:53	1-hour TSP	52	ug/m3
TMCLKL	HY/2012/08	2020-05-08	ASR1	Sunny	9:55	1-hour TSP	39	ug/m3
TMCLKL	HY/2012/08	2020-05-08	ASR1	Sunny	10:57	1-hour TSP	104	ug/m3
TMCLKL	HY/2012/08	2020-05-08	AQMS1	Sunny	9:04	1-hour TSP	88	ug/m3
TMCLKL	HY/2012/08	2020-05-08	AQMS1	Sunny	10:06	1-hour TSP	95	ug/m3
TMCLKL	HY/2012/08	2020-05-08	AQMS1	Sunny	11:08	1-hour TSP	102	ug/m3
TMCLKL	HY/2012/08	2020-05-11	ASR10	Sunny	8:18	1-hour TSP	73	ug/m3
TMCLKL	HY/2012/08	2020-05-11	ASR10	Sunny	9:22	1-hour TSP	62	ug/m3
TMCLKL	HY/2012/08	2020-05-11	ASR10	Sunny	10:24	1-hour TSP	76	ug/m3
TMCLKL	HY/2012/08	2020-05-11	ASR6	Sunny	8:28	1-hour TSP	104	ug/m3
TMCLKL	HY/2012/08	2020-05-11	ASR6	Sunny	9:30	1-hour TSP	136	ug/m3
TMCLKL	HY/2012/08	2020-05-11	ASR6	Sunny	10:32	1-hour TSP	125	ug/m3
TMCLKL	HY/2012/08	2020-05-11	ASR5	Sunny	8:39	1-hour TSP	125	ug/m3
TMCLKL	HY/2012/08	2020-05-11	ASR5	Sunny	9:41	1-hour TSP	156	ug/m3
TMCLKL	HY/2012/08	2020-05-11	ASR5	Sunny	10:43	1-hour TSP	114	ug/m3
TMCLKL	HY/2012/08	2020-05-11	ASR1	Sunny	8:50	1-hour TSP	64	ug/m3
TMCLKL	HY/2012/08	2020-05-11	ASR1	Sunny	9:52	1-hour TSP	63	ug/m3
TMCLKL	HY/2012/08	2020-05-11	ASR1	Sunny	10:54	1-hour TSP	75	ug/m3
TMCLKL	HY/2012/08	2020-05-11	AQMS1	Sunny	9:02	1-hour TSP	95	ug/m3
TMCLKL	HY/2012/08	2020-05-11	AQMS1	Sunny	10:04	1-hour TSP	130	ug/m3
TMCLKL	HY/2012/08	2020-05-11	AQMS1	Sunny	11:06	1-hour TSP	103	ug/m3
TMCLKL	HY/2012/08	2020-05-14	ASR10	Sunny	8:.05	1-hour TSP	131	ug/m3
TMCLKL	HY/2012/08	2020-05-14	ASR10	Sunny	9:07	1-hour TSP	160	ug/m3

Project	Contract	Date	Station	Weather	Start time	Parameters	Results	units
TMCLKL	HY/2012/08	2020-05-14	ASR10	Sunny	10:09	1-hour TSP	150	ug/m3
TMCLKL	HY/2012/08	2020-05-14	ASR6	Sunny	8:16	1-hour TSP	128	ug/m3
TMCLKL	HY/2012/08	2020-05-14	ASR6	Sunny	9:18	1-hour TSP	144	ug/m3
TMCLKL	HY/2012/08	2020-05-14	ASR6	Sunny	10:20	1-hour TSP	236	ug/m3
TMCLKL	HY/2012/08	2020-05-14	ASR5	Sunny	8:27	1-hour TSP	308	ug/m3
TMCLKL	HY/2012/08	2020-05-14	ASR5	Sunny	9:29	1-hour TSP	198	ug/m3
TMCLKL	HY/2012/08	2020-05-14	ASR5	Sunny	10:31	1-hour TSP	250	ug/m3
TMCLKL	HY/2012/08	2020-05-14	AQMS1	Sunny	8:52	1-hour TSP	111	ug/m3
TMCLKL	HY/2012/08	2020-05-14	AQMS1	Sunny	9:54	1-hour TSP	118	ug/m3
TMCLKL	HY/2012/08	2020-05-14	AQMS1	Sunny	10:56	1-hour TSP	149	ug/m3
TMCLKL	HY/2012/08	2020-05-17	ASR10	Sunny	8:11	1-hour TSP	85	ug/m3
TMCLKL	HY/2012/08	2020-05-17	ASR10	Sunny	9:13	1-hour TSP	72	ug/m3
TMCLKL	HY/2012/08	2020-05-17	ASR10	Sunny	10:15	1-hour TSP	47	ug/m3
TMCLKL	HY/2012/08	2020-05-17	ASR6	Sunny	8:23	1-hour TSP	146	ug/m3
TMCLKL	HY/2012/08	2020-05-17	ASR6	Sunny	9:25	1-hour TSP	149	ug/m3
TMCLKL	HY/2012/08	2020-05-17	ASR6	Sunny	10:27	1-hour TSP	100	ug/m3
TMCLKL	HY/2012/08	2020-05-17	ASR5	Sunny	8:34	1-hour TSP	130	ug/m3
TMCLKL	HY/2012/08	2020-05-17	ASR5	Sunny	9:36	1-hour TSP	93	ug/m3
TMCLKL	HY/2012/08	2020-05-17	ASR5	Sunny	10:38	1-hour TSP	62	ug/m3
TMCLKL	HY/2012/08	2020-05-17	AQMS1	Sunny	8:50	1-hour TSP	123	ug/m3
TMCLKL	HY/2012/08	2020-05-17	AQMS1	Sunny	9:52	1-hour TSP	83	ug/m3
TMCLKL	HY/2012/08	2020-05-17	AQMS1	Sunny	10:54	1-hour TSP	61	ug/m3
TMCLKL	HY/2012/08	2020-05-20	ASR10	Cloudy	8:10	1-hour TSP	40	ug/m3
TMCLKL	HY/2012/08	2020-05-20	ASR10	Cloudy	9:12	1-hour TSP	34	ug/m3
TMCLKL	HY/2012/08	2020-05-20	ASR10	Cloudy	10:14	1-hour TSP	56	ug/m3
TMCLKL	HY/2012/08	2020-05-20	ASR6	Cloudy	8:20	1-hour TSP	68	ug/m3
TMCLKL	HY/2012/08	2020-05-20	ASR6	Cloudy	9:22	1-hour TSP	58	ug/m3
TMCLKL	HY/2012/08	2020-05-20	ASR6	Cloudy	10:24	1-hour TSP	67	ug/m3
TMCLKL	HY/2012/08	2020-05-20	ASR5	Cloudy	8:32	1-hour TSP	156	ug/m3
TMCLKL	HY/2012/08	2020-05-20	ASR5	Cloudy	9:34	1-hour TSP	125	ug/m3
TMCLKL	HY/2012/08	2020-05-20	ASR5	Cloudy	10:26	1-hour TSP	140	ug/m3

Project	Contract	Date	Station	Weather	Start time	Parameters	Results	units
TMCLKL	HY/2012/08	2020-05-20	ASR1	Cloudy	8:44	1-hour TSP	230	ug/m3
TMCLKL	HY/2012/08	2020-05-20	ASR1	Cloudy	9:46	1-hour TSP	101	ug/m3
TMCLKL	HY/2012/08	2020-05-20	ASR1	Cloudy	10:48	1-hour TSP	106	ug/m3
TMCLKL	HY/2012/08	2020-05-20	AQMS1	Cloudy	8:55	1-hour TSP	80	ug/m3
TMCLKL	HY/2012/08	2020-05-20	AQMS1	Cloudy	9:57	1-hour TSP	73	ug/m3
TMCLKL	HY/2012/08	2020-05-20	AQMS1	Cloudy	10:59	1-hour TSP	95	ug/m3
TMCLKL	HY/2012/08	2020-05-23	ASR10	Cloudy	8:00	1-hour TSP	41	ug/m3
TMCLKL	HY/2012/08	2020-05-23	ASR10	Cloudy	9:02	1-hour TSP	62	ug/m3
TMCLKL	HY/2012/08	2020-05-23	ASR10	Cloudy	10:04	1-hour TSP	72	ug/m3
TMCLKL	HY/2012/08	2020-05-23	ASR6	Cloudy	8:10	1-hour TSP	86	ug/m3
TMCLKL	HY/2012/08	2020-05-23	ASR6	Cloudy	9:12	1-hour TSP	126	ug/m3
TMCLKL	HY/2012/08	2020-05-23	ASR6	Cloudy	10:14	1-hour TSP	65	ug/m3
TMCLKL	HY/2012/08	2020-05-23	ASR5	Cloudy	8:23	1-hour TSP	141	ug/m3
TMCLKL	HY/2012/08	2020-05-23	ASR5	Cloudy	9:25	1-hour TSP	228	ug/m3
TMCLKL	HY/2012/08	2020-05-23	ASR5	Cloudy	10:27	1-hour TSP	124	ug/m3
TMCLKL	HY/2012/08	2020-05-23	ASR1	Cloudy	8:35	1-hour TSP	60	ug/m3
TMCLKL	HY/2012/08	2020-05-23	ASR1	Cloudy	9:37	1-hour TSP	24	ug/m3
TMCLKL	HY/2012/08	2020-05-23	ASR1	Cloudy	10:39	1-hour TSP	152	ug/m3
TMCLKL	HY/2012/08	2020-05-23	AQMS1	Cloudy	8:47	1-hour TSP	14	ug/m3
TMCLKL	HY/2012/08	2020-05-23	AQMS1	Cloudy	9:49	1-hour TSP	167	ug/m3
TMCLKL	HY/2012/08	2020-05-23	AQMS1	Cloudy	10:51	1-hour TSP	56	ug/m3
TMCLKL	HY/2012/08	2020-05-26	ASR10	Sunny	8:02	1-hour TSP	59	ug/m3
TMCLKL	HY/2012/08	2020-05-26	ASR10	Sunny	9:04	1-hour TSP	52	ug/m3
TMCLKL	HY/2012/08	2020-05-26	ASR10	Sunny	10:06	1-hour TSP	56	ug/m3
TMCLKL	HY/2012/08	2020-05-26	ASR6	Sunny	08:13	1-hour TSP	76	ug/m3
TMCLKL	HY/2012/08	2020-05-26	ASR6	Sunny	09:15	1-hour TSP	143	ug/m3
TMCLKL	HY/2012/08	2020-05-26	ASR6	Sunny	10:17	1-hour TSP	183	ug/m3
TMCLKL	HY/2012/08	2020-05-26	ASR5	Sunny	8:25	1-hour TSP	87	ug/m3
TMCLKL	HY/2012/08	2020-05-26	ASR5	Sunny	9:27	1-hour TSP	149	ug/m3
TMCLKL	HY/2012/08	2020-05-26	ASR5	Sunny	10:29	1-hour TSP	183	ug/m3
TMCLKL	HY/2012/08	2020-05-26	ASR1	Sunny	8:38	1-hour TSP	163	ug/m3

Project	Contract	Date	Station	Weather	Start time	Parameters	Results	units
TMCLKL	HY/2012/08	2020-05-26	ASR1	Sunny	9:40	1-hour TSP	96	ug/m3
TMCLKL	HY/2012/08	2020-05-26	ASR1	Sunny	10:42	1-hour TSP	73	ug/m3
TMCLKL	HY/2012/08	2020-05-26	AQMS1	Sunny	8:50	1-hour TSP	122	ug/m3
TMCLKL	HY/2012/08	2020-05-26	AQMS1	Sunny	9:52	1-hour TSP	73	ug/m3
TMCLKL	HY/2012/08	2020-05-26	AQMS1	Sunny	10:54	1-hour TSP	89	ug/m3
TMCLKL	HY/2012/08	2020-05-29	ASR10	Sunny	8:11	1-hour TSP	83	ug/m3
TMCLKL	HY/2012/08	2020-05-29	ASR10	Sunny	9:13	1-hour TSP	55	ug/m3
TMCLKL	HY/2012/08	2020-05-29	ASR10	Sunny	10:15	1-hour TSP	58	ug/m3
TMCLKL	HY/2012/08	2020-05-29	ASR6	Sunny	8:22	1-hour TSP	108	ug/m3
TMCLKL	HY/2012/08	2020-05-29	ASR6	Sunny	9:24	1-hour TSP	81	ug/m3
TMCLKL	HY/2012/08	2020-05-29	ASR6	Sunny	10:26	1-hour TSP	58	ug/m3
TMCLKL	HY/2012/08	2020-05-29	ASR5	Sunny	8:34	1-hour TSP	169	ug/m3
TMCLKL	HY/2012/08	2020-05-29	ASR5	Sunny	9:36	1-hour TSP	192	ug/m3
TMCLKL	HY/2012/08	2020-05-29	ASR5	Sunny	10:38	1-hour TSP	195	ug/m3
TMCLKL	HY/2012/08	2020-05-29	ASR1	Sunny	8:45	1-hour TSP	113	ug/m3
TMCLKL	HY/2012/08	2020-05-29	ASR1	Sunny	9:47	1-hour TSP	13	ug/m3
TMCLKL	HY/2012/08	2020-05-29	ASR1	Sunny	10:49	1-hour TSP	121	ug/m3
TMCLKL	HY/2012/08	2020-05-29	AQMS1	Sunny	8:57	1-hour TSP	103	ug/m3
TMCLKL	HY/2012/08	2020-05-29	AQMS1	Sunny	9:59	1-hour TSP	99	ug/m3
TMCLKL	HY/2012/08	2020-05-29	AQMS1	Sunny	11:01	1-hour TSP	93	ug/m3
TMCLKL	HY/2012/08	2020-05-02	ASR10	Sunny	16:18	24-hour TSP	39	ug/m3
TMCLKL	HY/2012/08	2020-05-02	ASR6	Sunny	16:29	24-hour TSP	60	ug/m3
TMCLKL	HY/2012/08	2020-05-02	ASR5	Sunny	16:41	24-hour TSP	60	ug/m3
TMCLKL	HY/2012/08	2020-05-02	AQMS1	Sunny	17:03	24-hour TSP	43	ug/m3
TMCLKL	HY/2012/08	2020-05-05	ASR10	Sunny	16:19	24-hour TSP	37	ug/m3
TMCLKL	HY/2012/08	2020-05-05	ASR6	Sunny	16:30	24-hour TSP	78	ug/m3
TMCLKL	HY/2012/08	2020-05-05	ASR5	Sunny	16:43	24-hour TSP	74	ug/m3
TMCLKL	HY/2012/08	2020-05-05	ASR1	Sunny	16:54	24-hour TSP	42	ug/m3
TMCLKL	HY/2012/08	2020-05-05	AQMS1	Sunny	17:05	24-hour TSP	53	ug/m3
TMCLKL	HY/2012/08	2020-05-08	ASR10	Sunny	11:26	24-hour TSP	30	ug/m3
TMCLKL	HY/2012/08	2020-05-08	ASR6	Sunny	11:36	24-hour TSP	63	ug/m3

Project	Contract	Date	Station	Weather	Start time	Parameters	Results	units
TMCLKL	HY/2012/08	2020-05-08	ASR5	Sunny	11:47	24-hour TSP	65	ug/m3
TMCLKL	HY/2012/08	2020-05-08	ASR1	Sunny	11:59	24-hour TSP	37	ug/m3
TMCLKL	HY/2012/08	2020-05-08	AQMS1	Sunny	12:10	24-hour TSP	56	ug/m3
TMCLKL	HY/2012/08	2020-05-11	ASR10	Sunny	11:26	24-hour TSP	49	ug/m3
TMCLKL	HY/2012/08	2020-05-11	ASR6	Sunny	11:34	24-hour TSP	91	ug/m3
TMCLKL	HY/2012/08	2020-05-11	ASR5	Sunny	11:45	24-hour TSP	123	ug/m3
TMCLKL	HY/2012/08	2020-05-11	AQMS1	Sunny	12:08	24-hour TSP	68	ug/m3
TMCLKL	HY/2012/08	2020-05-14	ASR10	Sunny	11:11	24-hour TSP	41	ug/m3
TMCLKL	HY/2012/08	2020-05-14	ASR6	Sunny	11:22	24-hour TSP	47	ug/m3
TMCLKL	HY/2012/08	2020-05-14	ASR5	Sunny	11:33	24-hour TSP	72	ug/m3
TMCLKL	HY/2012/08	2020-05-14	AQMS1	Sunny	11:58	24-hour TSP	58	ug/m3
TMCLKL	HY/2012/08	2020-05-17	ASR10	Sunny	11:17	24-hour TSP	33	ug/m3
TMCLKL	HY/2012/08	2020-05-17	ASR6	Sunny	11:29	24-hour TSP	61	ug/m3
TMCLKL	HY/2012/08	2020-05-17	ASR5	Sunny	11:40	24-hour TSP	64	ug/m3
TMCLKL	HY/2012/08	2020-05-17	AQMS1	Sunny	11:56	24-hour TSP	39	ug/m3
TMCLKL	HY/2012/08	2020-05-20	ASR10	Cloudy	11:16	24-hour TSP	37	ug/m3
TMCLKL	HY/2012/08	2020-05-20	ASR6	Cloudy	11:26	24-hour TSP	55	ug/m3
TMCLKL	HY/2012/08	2020-05-20	ASR5	Cloudy	11:38	24-hour TSP	75	ug/m3
TMCLKL	HY/2012/08	2020-05-20	ASR1	Cloudy	11:50	24-hour TSP	59	ug/m3
TMCLKL	HY/2012/08	2020-05-20	AQMS1	Cloudy	12:01	24-hour TSP	49	ug/m3
TMCLKL	HY/2012/08	2020-05-23	ASR10	Cloudy	11:06	24-hour TSP	19	ug/m3
TMCLKL	HY/2012/08	2020-05-23	ASR6	Cloudy	11:16	24-hour TSP	30	ug/m3
TMCLKL	HY/2012/08	2020-05-23	ASR5	Cloudy	11:29	24-hour TSP	73	ug/m3
TMCLKL	HY/2012/08	2020-05-23	ASR1	Cloudy	11:41	24-hour TSP	38	ug/m3
TMCLKL	HY/2012/08	2020-05-23	AQMS1	Cloudy	11:53	24-hour TSP	38	ug/m3
TMCLKL	HY/2012/08	2020-05-26	ASR10	Sunny	11:08	24-hour TSP	44	ug/m3
TMCLKL	HY/2012/08	2020-05-26	ASR6	Sunny	11:19	24-hour TSP	72	ug/m3
TMCLKL	HY/2012/08	2020-05-26	ASR5	Sunny	11:31	24-hour TSP	90	ug/m3
TMCLKL	HY/2012/08	2020-05-26	ASR1	Sunny	11:44	24-hour TSP	50	ug/m3
TMCLKL	HY/2012/08	2020-05-26	AQMS1	Sunny	11:56	24-hour TSP	60	ug/m3
TMCLKL	HY/2012/08	2020-05-29	ASR10	Sunny	11:17	24-hour TSP	26	ug/m3

Project	Contract	Date	Station	Weather	Start time	Parameters	Results	units
TMCLKL	HY/2012/08	2020-05-29	ASR6	Sunny	11:28	24-hour TSP	31	ug/m3
TMCLKL	HY/2012/08	2020-05-29	ASR5	Sunny	11:40	24-hour TSP	51	ug/m3
TMCLKL	HY/2012/08	2020-05-29	ASR1	Sunny	11:51	24-hour TSP	35	ug/m3
TMCLKL	HY/2012/08	2020-05-29	AQMS1	Sunny	12:03	24-hour TSP	44	ug/m3

Appendix H

## Meteorological Data

		Aeteorological Data for Impact Monitoring i	
Date (yy-mm-dd)	Time (24hrs)	Average of Wind Speed (m/s)	Average of Wind Direction(degree)
20/05/02	0:00	0.9	52
20/05/02	1:00	1.3	55
20/05/02	2:00	0.9	58
20/05/02	3:00	0.9	36
20/05/02	4:00	0.9	15
20/05/02	5:00	0	14
20/05/02	6:00	0	86
20/05/02	7:00	0.4	59
20/05/02	8:00	0.9	77
20/05/02	9:00	0.9	55
20/05/02	10:00	0.9	62
20/05/02	11:00	1.3	141
20/05/02	12:00	2.2	205
20/05/02	13:00	2.2	194
20/05/02	14:00	2.2	195
20/05/02	15:00	2.7	206
20/05/02	16:00	2.2	213
20/05/02	17:00	1.3	197
20/05/02	18:00	1.3	94
20/05/02	19:00	1.8	72
20/05/02	20:00	0.9	63
20/05/02	21:00	0.9	77
20/05/02	22:00	0.9	58
20/05/02	23:00	0.9	79
20/05/03	0:00	0.4	43
20/05/03	1:00	0	35
20/05/03	2:00	0	24
20/05/03	3:00	0	323
20/05/03	4:00	0	209
20/05/03	5:00	0.4	205
20/05/03	6:00	0.4	266
20/05/03	7:00	0	168
20/05/03	8:00	0.4	271
20/05/03	9:00	2.2	199
20/05/03	10:00	2.7	199
20/05/03	11:00	2.7	191
20/05/03	12:00	3.1	205
		3.1	
20/05/03	13:00		192
20/05/03	14:00	2.2	196
20/05/03	15:00	0.9	263
20/05/03	16:00	1.8	202
20/05/03	17:00	0.4	267
20/05/03	18:00	0.4	281
20/05/03	19:00	1.3	75
20/05/03	20:00	1.3	58
20/05/03	21:00	0.9	74
20/05/03	22:00	0.4	301
20/05/03	23:00	0.4	290
20/05/05	0:00	0.4	205
20/05/05	1:00	0.4	215
20/05/05	2:00	1.3	171
20/05/05	3:00	0	220
20/05/05	4:00	0.4	218
20/05/05	5:00	0.9	185
20/05/05	6:00	0.4	174
20/05/05	7:00	0.9	181

20/05/05	8:00	1.8	207
20/05/05	9:00	2.2	206
20/05/05	10:00	1.8	199
20/05/05	11:00	1.3	290
20/05/05	12:00	1.3	268
20/05/05	13:00	2.2	242
20/05/05	14:00	2.7	195
20/05/05	15:00	2.2	223
20/05/05	16:00	1.8	229
20/05/05	17:00	2.2	198
20/05/05	18:00	3.1	194
20/05/05	19:00	2.7	193
20/05/05	20:00	2.7	193
	21:00	0.9	248
	22:00	1.3	205
	23:00	2.2	193
	0:00	1.3	200
20/05/06	1:00	0.4	253
	2:00	0.4	274
	3:00	0.4	278
20/05/06	4:00	0.9	269
	5:00	0	125
20/05/06	6:00	0	84
20/05/06	7:00	0.4	46
20/05/06	8:00	0.9	97
20/05/06	9:00	0.4	90
20/05/06	10:00	0.4	35
20/05/06	11:00	1.3	125
20/05/06	12:00	2.2	211
20/05/06	13:00	2.2	194
20/05/06	14:00	2.7	206
20/05/06	15:00	2.7	197
20/05/06	16:00	2.7	213
20/05/06	17:00	2.7	211
20/05/06	18:00	2.7	212
20/05/06	19:00	1.8	207
20/05/06	20:00	0.4	187
20/05/06	21:00	0.9	127
20/05/06	22:00	0.9	114
20/05/06	23:00	1.3	133
20/05/08	0:00	1.8	133
20/05/08	1:00	1.8	126
	2:00	1.3	126
20/05/08	3:00	0.9	162
	4:00	0.9	128
	5:00	0.4	168
	6:00	0.9	127
20/05/08	7:00	0.9	139
	8:00	1.3	127
	9:00	0.9	153
20/05/08	10:00	1.3	90
20/05/08	11:00	1.3	134
20/05/08	12:00	1.8	145
20/05/08	13:00	1.8	130
20/05/08	14:00	1.8	164
20/05/08	15:00		234
20/05/08	16:00	2.7	214
20/05/08	17:00	2.7	201
20/03/00	17.00	2.1	201

20/05/08	18:00	1.8	159
20/05/08		1.8	167
	19:00		
20/05/08	20:00	0.4	150
20/05/08	21:00	0.9	131
20/05/08	22:00	1.3	145
20/05/08	23:00	1.3	131
20/05/09	0:00	0.9	149
20/05/09	1:00	0.4	139
20/05/09	2:00	0	210
20/05/09	3:00	0.4	250
20/05/09	4:00	0.4	250
20/05/09	5:00	0.4	234
20/05/09	6:00	0.4	225
20/05/09	7:00	0.4	179
20/05/09	8:00	0.9	194
20/05/09	9:00	1.8	210
20/05/09	10:00	0.9	87
20/05/09	11:00	0.9	100
20/05/09	12:00	2.2	207
20/05/09	13:00	1.8	206
20/05/09	14:00	2.2	212
20/05/09	15:00	2.2	195
20/05/09	16:00	1.8	201
20/05/09	17:00	1.3	128
20/05/09	18:00	0.9	133
20/05/09	19:00	1.3	140
20/05/09	20:00	0.9	141
20/05/09	21:00	0.9	135
20/05/09	22:00	0.9	134
20/05/09	23:00	0.4	149
20/05/11	0:00	0	275
20/05/11	1:00	0.4	99
20/05/11	2:00	0.9	143
20/05/11	3:00	0.4	303
20/05/11	4:00	0	83
20/05/11	5:00	0	101
20/05/11	6:00	0	75
20/05/11	7:00	0	84
20/05/11	8:00	0.4	225
20/05/11	9:00	0.9	233
20/05/11	10:00	1.3	195
20/05/11	11:00	1.3	264
20/05/11	12:00	2.2	200
20/05/11	13:00	1.8	226
20/05/11	14:00	1.8	212
20/05/11	15:00	1.3	220
20/05/11	16:00	1.3	261
20/05/11	17:00	0.9	74
20/05/11	18:00	1.3	61
20/05/11	19:00	0.9	59
20/05/11	20:00	0.9	59
20/05/11	20:00	0.4	276
20/05/11	22:00	3.6	344
20/05/11	23:00	1.8	313
20/05/12	0:00	0.9	34
20/05/12	1:00	0.4	23
20/05/12	2:00	0.4	281
20/05/12	3:00	0.9	267

20/05/12	4:00	0.4	306
20/05/12	4:00 5:00	0.4	200
20/05/12	6:00 7:00	0	165
20/05/12			201
20/05/12	8:00	0	221
	9:00	0	241
20/05/12		0.9	138
20/05/12	11:00	1.3	199
20/05/12	12:00	1.8	192
20/05/12	13:00	1.8	281
20/05/12	14:00	1.8	263
20/05/12	15:00		278
20/05/12	16:00	2.2	281
20/05/12	17:00	1.3	265
20/05/12			281
20/05/12		0.4	100
20/05/12		0.4	66
20/05/12	21:00	0	17
20/05/12	22:00	0	4
20/05/12	23:00	0	334
20/05/14		3.1	79
20/05/14	1:00		59
20/05/14	2:00	2.7	75
20/05/14	3:00	1.8	77
20/05/14	4:00		50
20/05/14	5:00		61
20/05/14	6:00	1.8	79
20/05/14	7:00		94
20/05/14	8:00		63
20/05/14	9:00		95
20/05/14			99
20/05/14			93
20/05/14	12:00		83
20/05/14		3.1	101
20/05/14			87
20/05/14	15:00		98
20/05/14	16:00		84
20/05/14	17:00		98
20/05/14	18:00		82
20/05/14	19:00		85
20/05/14	20:00		80
20/05/14			89
20/05/14	22:00		88
20/05/14	23:00		95
20/05/15	0:00	2.7	87
20/05/15	1:00	1.8	84
20/05/15	2:00		90
20/05/15	3:00		90
20/05/15	4:00		90
20/05/15	5:00	1.3	89
20/05/15			69
20/05/15	7:00		97
20/05/15	8:00	1.8	100
20/05/15	9:00		92
20/05/15	10:00	1.8	101
20/05/15	11:00		86
20/05/15	12:00		84
20/05/15	13:00		91
		<b>I</b>	

20/05/15	14.00	2.7	20
20/05/15	14:00	2.7	80
20/05/15	15:00	3.1	133
20/05/15	16:00	3.1	125
20/05/15	17:00	2.7	105
20/05/15	18:00	3.1	110
20/05/15	19:00	2.2	99
20/05/15	20:00	2.2	101
20/05/15	21:00	1.8	91
20/05/15	22:00	1.3	80
20/05/15	23:00	1.3	86
20/05/17	0:00	0	82
20/05/17	1:00	0	81
20/05/17	2:00	0.9	81
20/05/17	3:00	0.9	110
20/05/17	4:00	0	60
20/05/17	5:00	0	3
20/05/17	6:00	0	326
20/05/17	7:00	0	305
20/05/17	8:00	0.4	143
20/05/17	9:00	0.9	133
20/05/17	10:00	1.8	228
20/05/17	11:00	2.2	192
20/05/17 20/05/17	12:00	1.8	192
20/05/17	13:00	1.3	199
20/05/17	14:00	2.7	191
20/05/17	15:00	1.3	298
20/05/17	16:00	1.3	250
20/05/17	17:00	0.9	273
20/05/17	18:00	0.9	276
20/05/17	19:00	1.8	202
	20:00	1.8	218
	21:00	1.8	210
20/05/17	22:00	0.9	89
20/05/17	23:00	1.8	303
20/05/18	0:00	2.7	325
20/05/18	1:00	0.4	290
20/05/18	2:00	0.4	209
20/05/18	3:00	0	305
20/05/18	4:00	0	321
20/05/18	5:00	0.4	78
20/05/18	6:00	0.9	50
20/05/18	7:00	1.3	79
20/05/18	8:00	0.9	66
20/05/18	9:00	1.3	192
20/05/18	10:00	1.8	273
20/05/18	11:00	1.8	281
20/05/18	12:00	0.4	281
20/05/18	13:00	1.3	88
20/05/18	14:00	1.8	92
20/05/18	15:00	1.8	84
20/05/18	16:00	1.3	83
20/05/18	17:00	0.9	279
20/05/18	18:00	0.9	86
20/05/18	19:00	0.9	63
		1.3	71
20/05/18	20:00		
	21:00	0.4	15
20/05/18	22:00	0.4	28
20/05/18	23:00	0	34

20/05/20	0:00	0.9	43
20/05/20	1:00	0.9	80
20/05/20	2:00	0.4	82
20/05/20	3:00		
20/05/20	4:00	0.4	49 48
	5:00	0	45
20/05/20		0	56
20/05/20	6:00 7:00	0.4	
20/05/20	8:00		34 96
20/05/20			
20/05/20	9:00		85
20/05/20	10:00		82 90
20/05/20	11:00	3.1	84
20/05/20	12:00	2.7	
20/05/20	13:00		99
20/05/20	14:00		93
20/05/20	15:00		88
20/05/20	16:00		98
20/05/20	17:00		95
20/05/20	18:00	3.1	79
20/05/20	19:00		97
20/05/20	20:00	3.6	82
	21:00		84
20/05/20	22:00		93
20/05/20	23:00		98
20/05/21	0:00	1.8	101
20/05/21	1:00		97
20/05/21	2:00		81
20/05/21	3:00	0.4	267
20/05/21	4:00	0.4	3
20/05/21	5:00	0.9	358
			46
20/05/21			54
20/05/21	8:00	0.9	55
	9:00	1.3	55
20/05/21	10:00	0.9	56
20/05/21	11:00		41
20/05/21	12:00	0.9	55
20/05/21	13:00	0.9	47
20/05/21	14:00	2.2	213
20/05/21	15:00	4	203
20/05/21	16:00	3.6	191
20/05/21	17:00	0.9	213
20/05/21	18:00	0	214
20/05/21	19:00	1.3	194
20/05/21	20:00	1.3	202
20/05/21	21:00	1.3	209
20/05/21	22:00	2.2	211
20/05/21	23:00	2.2	191
20/05/23	0:00	0	17
20/05/23	1:00	0	52
20/05/23	2:00	0	38
20/05/23	3:00	0.9	59
20/05/23	4:00	0.9	86
20/05/23	5:00	1.8	83
20/05/23	6:00		86
20/05/23	7:00		98
20/05/23	8:00		93
	9:00		97

0.00000	10.00		0.5
20/05/23	10:00	2.2	95
20/05/23	11:00	1.3	95
20/05/23	12:00	1.3	81
20/05/23	13:00	1.3	100
20/05/23	14:00	0.9	84
20/05/23	15:00	1.3	99
20/05/23	16:00	1.3	97
20/05/23	17:00	1.3	86
20/05/23	18:00	2.2	80
20/05/23	19:00	2.2	83
20/05/23	20:00	2.7	89
20/05/23	21:00	2.7	86
20/05/23	22:00	2.2	84
20/05/23	23:00	2.7	88
20/05/24	0:00	2.2	94
20/05/24	1:00	1.8	93
20/05/24	2:00	1.3	35
20/05/24	3:00	0.9	37
20/05/24	4:00	0.9	55
20/05/24	5:00	0.9	28
20/05/24	6:00	0.9	55
20/05/24	7:00	0.9	74
20/05/24	8:00	0.9	70
20/05/24	9:00	1.3	
			87
20/05/24	10:00	1.3	96
20/05/24	11:00	0.9	133
20/05/24	12:00	0.9	145
20/05/24	13:00	0.9	86
20/05/24	14:00	1.3	145
20/05/24	15:00	1.3	86
20/05/24	16:00	1.3	83
20/05/24	17:00	1.8	135
20/05/24	18:00	0.9	58
20/05/24	19:00	1.3	91
20/05/24	20:00	1.8	86
20/05/24	21:00	1.8	94
20/05/24	22:00	2.2	84
20/05/24	23:00	2.2	93
20/05/26	0:00	1.3	67
20/05/26	1:00	0.9	63
20/05/26	2:00	0.4	39
20/05/26	3:00	0	339
20/05/26	4:00	0	343
20/05/26	5:00	0	272
20/05/26	6:00	0	280
20/05/26	7:00	0	199
20/05/26	8:00	0	148
20/05/26	9:00	0.4	146
20/05/26	10:00	1.8	235
20/05/26	11:00	1.8	236
20/05/26	12:00	1.3	217
20/05/26	13:00	1.8	221
20/05/26	14:00	1.3	269
20/05/26	15:00	0.9	290
		0.9	
20/05/26	16:00		282
20/05/26	17:00	0	50
20/05/26	18:00	0.9	273
20/05/26	19:00	0.9	276

20/05/26	20:00	0.4	288
20/05/26	20:00	0.4	294
20/05/26	22:00	0	2
20/05/26	23:00	0.4	276
	0:00	0	318
20/05/27	1:00	0.4	317
		0	288
20/05/27 20/05/27	2:00 3:00		
	4:00	0	312 311
20/05/27			
20/05/27	5:00	0.4	314
20/05/27	6:00	0	267
20/05/27	7:00	0	47
20/05/27	8:00	0	130
20/05/27	9:00	0.4	83
20/05/27	10:00	0.4	127
20/05/27	11:00	0.9	136
20/05/27	12:00	1.3	228
20/05/27	13:00	0.9	159
20/05/27	14:00	0.9	218
20/05/27	15:00	0.9	113
20/05/27	16:00	1.8	264
20/05/27	17:00	1.8	261
20/05/27	18:00	1.3	259
20/05/27	19:00	0.9	263
20/05/27	20:00	0.9	317
20/05/27	21:00		31
20/05/27	22:00	0.4	28
20/05/27	23:00	0.9	23
20/05/29	0:00		83
20/05/29	1:00		97
20/05/29	2:00		84
20/05/29	3:00		73
20/05/29	4:00		93
20/05/29	5:00	1.3	97
20/05/29	6:00	0.9	96
20/05/29	7:00	1.8	83
20/05/29	8:00	1.8	84
20/05/29	9:00	1.8	87
20/05/29	10:00	1.8	95
20/05/29	11:00	2.2	114
20/05/29	12:00	2.7	136
20/05/29	13:00	2.7	116
20/05/29	14:00	2.7	101
20/05/29	15:00	2.7	132
20/05/29	16:00	2.7	112
20/05/29	17:00	1.8	100
20/05/29	18:00	0.9	86
20/05/29	19:00	0.9	74
20/05/29	20:00	1.8	128
20/05/29	21:00	0.9	77
20/05/29	22:00	0.9	77
20/05/29	23:00		91
20/05/30	0:00	0.9	59
20/05/30	1:00	1.3	139
20/05/30	2:00	0.4	122
20/05/30	3:00	0.4	138
20/05/30	4:00	0.4	309
20/05/30	5:00	0.9	5
	2.00		~

20/05/30	6:00	2.2	293
20/05/30	7:00	1.3	297
20/05/30	8:00	1.3	283
20/05/30	9:00	0.9	287
20/05/30	10:00	0.4	271
20/05/30	11:00	0.4	195
20/05/30	12:00	0.4	39
20/05/30	13:00	0.9	75
20/05/30	14:00	0.9	41
20/05/30	15:00	0.9	80
20/05/30	16:00	0.9	77
20/05/30	17:00	0.4	39
20/05/30	18:00	0.4	71
20/05/30	19:00	0.4	62
20/05/30	20:00	0.9	42
20/05/30	21:00	0.9	44
20/05/30	22:00	0.4	14
20/05/30	23:00	0.4	346
k			

Appendix I

Impact Dolphin Monitoring Survey

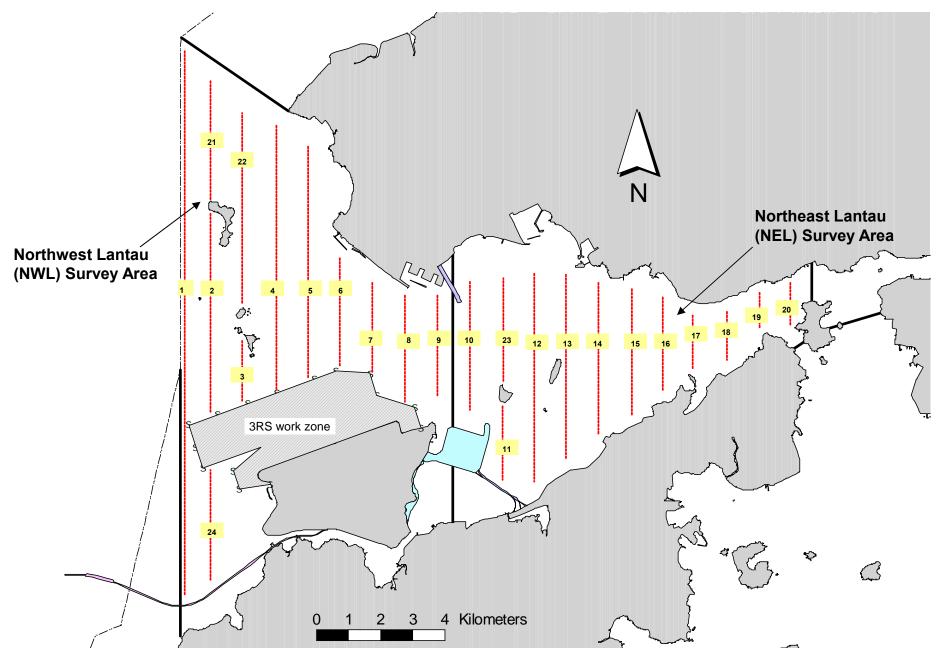


Figure 1. Transect Line Layout in Northwest and Northeast Lantau Survey Areas

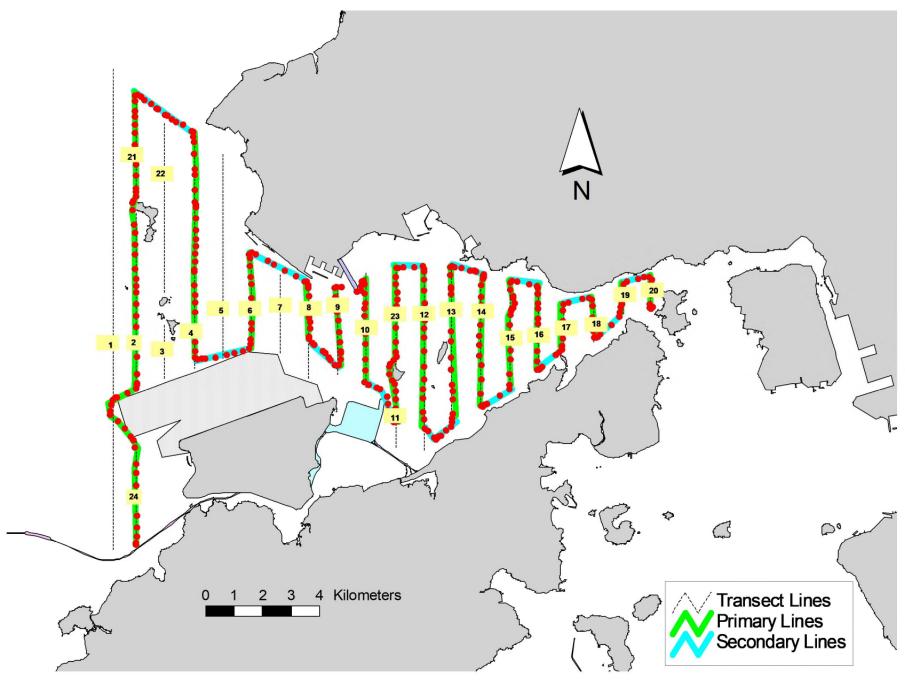


Figure 2. Survey Route on May 5th, 2020

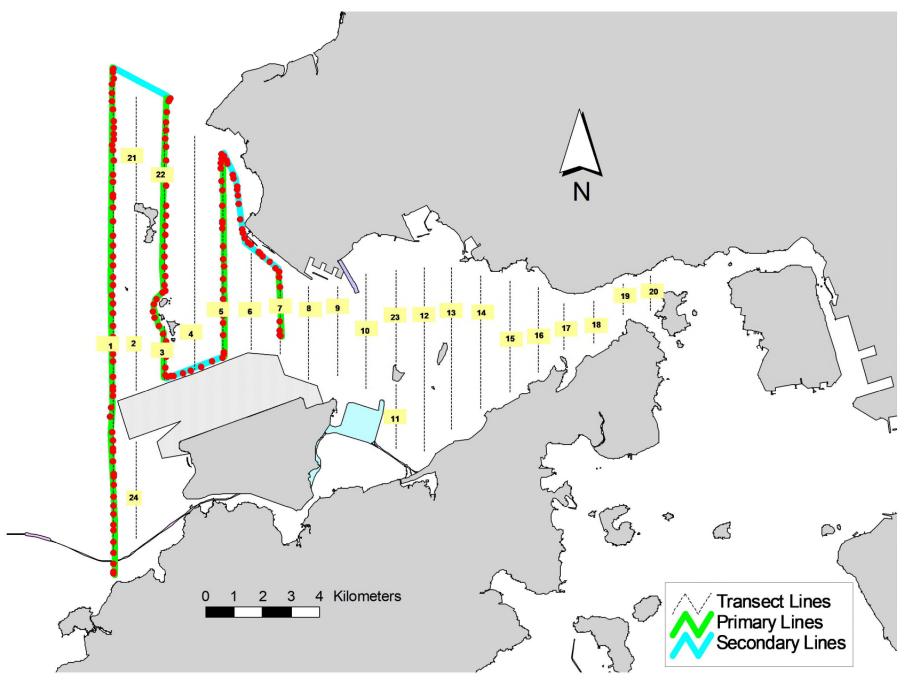


Figure 3. Survey Route on May 12th, 2020

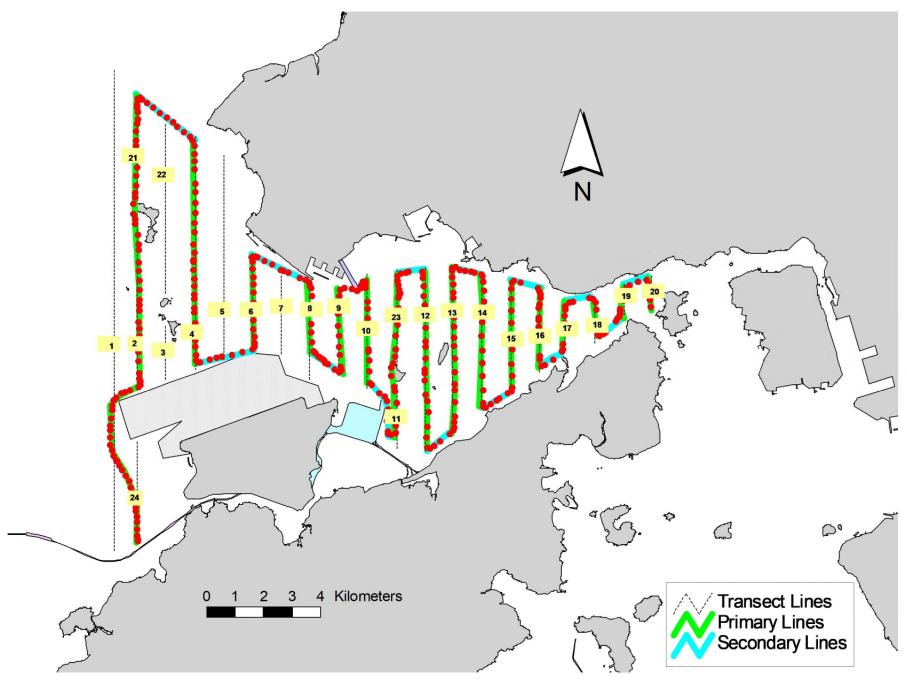


Figure 4. Survey Route on May 18th, 2020

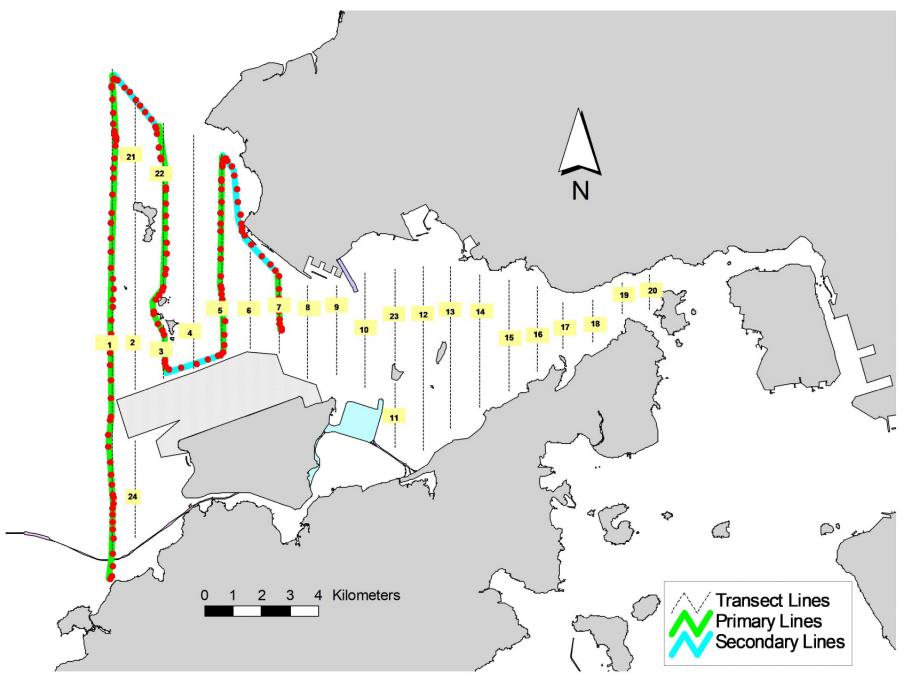


Figure 5. Survey Route on May 25<sup>th</sup>, 2020

## Appendix I. TMCLKL Survey Effort Database (May 2020)

(Abbreviations: BEAU = Beaufort Sea State; P = Primary Line Effort; S = Secondary Line Effort)

DATE	AREA	BEAU	EFFORT	SEASON	VESSEL	TYPE	P/S
5-May-20	NW LANTAU	2	7.25	SPRING	STANDARD36826	TMCLKL	Р
5-May-20	NW LANTAU	3	20.75	SPRING	STANDARD36826	TMCLKL	Р
5-May-20	NW LANTAU	3	11.20	SPRING	STANDARD36826	TMCLKL	S
5-May-20	NE LANTAU	2	24.87	SPRING	STANDARD36826	TMCLKL	Р
5-May-20	NE LANTAU	3	9.60	SPRING	STANDARD36826	TMCLKL	Р
5-May-20	NE LANTAU	2	9.29	SPRING	STANDARD36826	TMCLKL	S
5-May-20	NE LANTAU	3	3.34	SPRING	STANDARD36826	TMCLKL	S
12-May-20	NW LANTAU	2	32.61	SPRING	STANDARD36826	TMCLKL	Р
12-May-20	NW LANTAU	2	6.74	SPRING	STANDARD36826	TMCLKL	S
12-May-20	NW LANTAU	3	1.85	SPRING	STANDARD36826	TMCLKL	S
18-May-20	NW LANTAU	1	1.50	SPRING	STANDARD36826	TMCLKL	Р
18-May-20	NW LANTAU	2	9.00	SPRING	STANDARD36826	TMCLKL	Р
18-May-20	NW LANTAU	3	16.13	SPRING	STANDARD36826	TMCLKL	Р
18-May-20	NW LANTAU	2	5.20	SPRING	STANDARD36826	TMCLKL	S
18-May-20	NW LANTAU	3	7.27	SPRING	STANDARD36826	TMCLKL	S
18-May-20	NE LANTAU	1	6.72	SPRING	STANDARD36826	TMCLKL	Р
18-May-20	NE LANTAU	2	23.97	SPRING	STANDARD36826	TMCLKL	Р
18-May-20	NE LANTAU	3	4.22	SPRING	STANDARD36826	TMCLKL	Р
18-May-20	NE LANTAU	1	3.53	SPRING	STANDARD36826	TMCLKL	S
18-May-20	NE LANTAU	2	8.46	SPRING	STANDARD36826	TMCLKL	S
25-May-20	NW LANTAU	1	1.31	SPRING	STANDARD36826	TMCLKL	Р
25-May-20	NW LANTAU	2	26.44	SPRING	STANDARD36826	TMCLKL	Р
25-May-20	NW LANTAU	3	3.83	SPRING	STANDARD36826	TMCLKL	Р
25-May-20	NW LANTAU	2	9.85	SPRING	STANDARD36826	TMCLKL	S

Appendix J

Event and Action Plan

## Event and Action Plan for Impact Air Monitoring

			Action				
	ET (a)		IEC (a)		SOR (a)		Contractor(s)
Action Level Exceedance							
1. 2. 3. 4. 5. 6.	Identify the source. Repeat measurement to confirm finding. If two consecutive measurements exceed Action Level, the exceedance is then confirmed. Inform the IEC and the SOR. Investigate the cause of exceedance and check Contractor's working procedures to determine possible mitigation to be implemented. If the exceedance is confirmed to be Project related after investigation, increase monitoring frequency to daily. Discuss with the IEC and the Contractor on remedial actions required.	1. 2. 3. 4.	Check monitoring data submitted by the ET. Check the Contractor's working method. If the exceedance is confirmed to be Project related after investigation, discuss with the ET and the Contractor on possible remedial measures. Advise the SOR on the effectiveness of the proposed	1. 2. 3.	Confirm receipt of notification of failure in writing. Notify the Contractor. Ensure remedial measures properly implemented.	1. 2. 3.	Rectify any unacceptable practice Amend working methods if appropriate If the exceedance is confirmed to be Project related, submit proposals for remedial actions to IEC within 3 working days of notification Implement the agreed
7. 8.	If exceedance continues, arrange meeting with the IEC and the SOR. If exceedance stops, cease additional monitoring,	5.	remedial measures. Supervise implementation of remedial measures.			5.	proposals Amend proposal if appropriate

ET (a)IEC (a)Limit Level Exceedance1.Identify the source.1.Check monitoring data submitted by the ET.1.2.Repeat measurement to confirm finding. If two consecutive measurements exceed Limit Level, the exceedance is then confirmed.2.Check Contractor's working method.1.3.Inform the IEC, the SOR, the DEP and the Contractor.3.If the exceedance is confirmed to be Project implemented.3.If the exceedance is contractor on possible mitigation to be implemented.3.If the exceedance is contractor on possible remedial measures.3.5.If the exceedance is confirmed to be Project related after investigation, increase4.Advise the SOR on the effectiveness of the proposed4.	SOR (a)Contractor(s)Confirm receipt of notification of failure in writing.1.Take immediate action to avoid further exceedance.Notify the Contractor. If the exceedance is2.If the exceedance is confirmed to be Projection
<ol> <li>Identify the source.</li> <li>Repeat measurement to confirm finding. If two consecutive measurements exceed Limit Level, the exceedance is then confirmed.</li> <li>Inform the IEC, the SOR, the DEP and the Contractor.</li> <li>Investigate the cause of exceedance and check Contractor's working procedures to determine possible mitigation to be implemented.</li> <li>If the exceedance is confirmed to be Project related after investigation, increase</li> <li>Advise the SOR on the effectiveness of the proposed 4.</li> </ol>	notification of failure in writing.to avoid further exceedance.Notify the Contractor.2.If the exceedance is
<ol> <li>Repeat measurement to confirm finding. If two consecutive measurements exceed Limit Level, the exceedance is then confirmed.</li> <li>Inform the IEC, the SOR, the DEP and the Contractor.</li> <li>Investigate the cause of exceedance and check Contractor's working procedures to determine possible mitigation to be implemented.</li> <li>If the exceedance is confirmed to be Project related after investigation, increase</li> <li>Advise the SOR on the effectiveness of the proposed 4.</li> </ol>	notification of failure in writing.to avoid further exceedance.Notify the Contractor.2.If the exceedance is
<ul> <li>monitoring frequency to daily.</li> <li>carry out analysis of the Contractor's working procedures to determine possible mitigation to be implemented.</li> <li>Arrange meeting with the IEC and the SOR to discuss the remedial actions to be taken.</li> <li>Assess effectiveness of the Contractor's remedial actions and keep the IEC, the DEP</li> </ul>	In the exceedance isconfirmed to be Projectrelated afterrelated after investigation, in consultation with the IEC, agree with the Contractor on the remedial measures to be implemented.related afteragree with the Contractor on the remedial measures to be implemented.actions to IEC within working days of notification.Ensure remedial measures are properly implemented.Implement the agreed proposals.If exceedance continues, work is responsible and instruct the Contractor to stop that activity of work until the exceedance is abated.Amend proposal if appropriate.until the exceedance is abated.stop the relevant activity of work until the exceedance

Note: (a) ET – Environmental Team; IEC – Independent Environmental Checker; SOR – Supervising Officer's Representative

## Event/Action Plan for Impact Dolphin Monitoring

EVENT		ACTION								
	ET	IEC	SOR	Contractor						
Action Level	<ol> <li>Repeat statistical data analysis to confirm findings;</li> <li>Review all available and relevant data, including raw data and statistical analysis results of other parameters covered in the EM&amp;A, to ascertain if differences are as a result of natural variation or previously observed seasonal differences;</li> <li>Identify source(s) of impact;</li> <li>Inform the IEC, SOR and Contractor;</li> <li>Check monitoring data.</li> <li>Review to ensure all the dolphin protective measures are fully and properly implemented and advise on additional measures if necessary.</li> </ol>	<ol> <li>Check monitoring data submitted by ET and Contractor;</li> <li>Discuss monitoring results and finding with the ET and the Contractor.</li> </ol>	<ol> <li>Discuss monitoring with the IEC and any other measures proposed by the ET;</li> <li>If SOR is satisfied with the proposal of any other measures, SOR to signify the agreement in writing on the measures to be implemented.</li> </ol>	<ol> <li>Inform the SOR and confirm notification of the non-compliance in writing;</li> <li>Discuss with the ET and the IEC and propose measures to the IEC and the SOR;</li> <li>Implement the agreed measures.</li> </ol>						
Limit Level	<ol> <li>Repeat statistical data analysis to confirm findings;</li> <li>Review all available and relevant data, including raw data and statistical analysis results of other parameters covered in the EM&amp;A, to ascertain if differences are as a result of natural variation or previously observed seasonal differences;</li> </ol>	<ol> <li>Check monitoring data submitted by ET and Contractor;</li> <li>Discuss monitoring results and findings with the ET and the Contractor;</li> <li>Attend the meeting to discuss with ET, SOR and</li> </ol>	<ol> <li>Attend the meeting to discuss with ET, IEC and Contractor the necessity of additional dolphin monitoring and any other potential mitigation measures.</li> <li>If SOR is satisfied with the</li> </ol>	<ol> <li>Inform the SOR and confirm notification of the non-compliance in writing;</li> <li>Attend the meeting to discuss with ET, IEC and SOR the necessity of additional dolphin monitoring and any other</li> </ol>						

EVENT		ACTION		
	ET	IEC	SOR	Contractor
	<ol> <li>Identify source(s) of impact;</li> <li>Inform the IEC, SOR and Contractor of findings;</li> <li>Check monitoring data;</li> <li>Repeat review to ensure all the dolphin protective measures are fully and properly implemented and advise on additional measures if necessary.</li> <li>If ET proves that the source of impact is caused by any of the construction activity by the works contract, ET to arrange a meeting to discuss with IEC, SOR and Contractor the necessity of additional dolphin monitoring and/or any other potential mitigation measures (e.g., consider to control/temporarily stop relevant construction activity etc.) and submit to IEC a proposal of additional dolphin monitoring and/or mitigation measures where necessary.</li> </ol>	<ul> <li>Contractor the necessity of additional dolphin monitoring and any other potential mitigation measures.</li> <li>4. Review proposals for additional monitoring and any other mitigation measures submitted by ET and Contractor and advise SOR of the results and findings accordingly.</li> <li>5. Supervise / Audit the implementation of additional monitoring and/or any other mitigation measures and advise SOR the results and findings accordingly.</li> </ul>	<ul> <li>proposals for additional dolphin monitoring and/or any other mitigation measures submitted by ET and Contractor and verified by IEC, SOR to signify the agreement in writing on such proposals and any other mitigation measures.</li> <li>3. Supervise the implementation of additional monitoring and/or any other mitigation measures.</li> </ul>	<ul> <li>potential mitigation measures.</li> <li>3. Jointly submit with ET to IEC a proposal of additional dolphin monitoring and/or any other mitigation measures when necessary.</li> <li>4. Implement the agreed additional dolphin monitoring and/or any other mitigation measures.</li> </ul>

Note: ET – Environmental Team, IEC – Independent Environmental Checker, SOR – Supervising Officer's Representative

Appendix K

Cumulative Statistics on Exceedances, Complaints, Notifications of Summons and Successful Prosecutions

#### Table K1Cumulative Statistics on Exceedances

Parameters	Level of Exceedance	Total No. recorded in this reporting month	Total No. recorded since Contract commencement
1-hr TSP	Action	0	109
	Limit	0	13
24-hr TSP	Action	0	10
	Limit	0	4
Water Quality	Action	0	167
	Limit	0	19
Impact Dolphin	Action	0	11
Monitoring	Limit	1	19

# Table K2Cumulative Statistics on Complaints, Notifications of Summons and<br/>Successful Prosecutions

<b>Reporting Period</b>	Cumulative Statistics						
	Complaints	Notifications of	Successful				
	-	Summons	Prosecutions				
This Reporting Month (May 2020)	0	0	0				
Total No. received since Contract commencement	17	1	0				

ENVIRONMENTAL RESOURCES MANAGEMENT

Appendix L

Waste Flow Table



#### **Monthly Summary Waste Flow Table** Name of Department:

HvD

## Contract No. / Works Order No.: <u>HY/2012/08</u>

Monthly Summary Waste Flow Table for <u>May 2020</u> [to be submitted not later than the 15<sup>th</sup> day of each month following reporting month] (All quantities shall be rounded off to 3 decimal places.)

	ľ	Monthly Break-down of <u>Inert</u> Construct	ion & Demolition Materia	als (i.e. Public Fill Materials	)
Month	(a)=(b)+(c)+(d)+(e) Total Quantity Generated	(b) Hard Rock and Large Broken Concrete	(c) Reused in the Contract	(d) Reused in other Projects	(e) Disposed of as Public Fill
	(in '000 ton)	(in '000 ton)	(in '000 ton)	(in '000 ton)	(in '000 ton)
Sub-total	3008.812	0.000	336.902	889.467	1782.443
Jan-2020	174.69	0.000	0.000	0.000	174.69
Feb-2020	1.455	0.000	0.000	0.000	1.455
Mar-2020	3.252	0.000	0.000	0.000	3.252
Apr-2020	4.200	0.000	0.000	0.000	4.200
May-2020	7.015	0.000	0.000	0.000	7.015
Jun-2020					
Half Year Sub-total					
Jul-2020					
Aug-2020					
Sep-2020					
Oct-2020					
Nov-2020					
Dec-2020					
Project Total Quantities	3199.424	0.000	336.902	889.467	1973.055



			Actu	al Quantities of <u>N</u>	<u>Non-inert</u> Cons	truction Waste	Generated Mon	thly	
Month	Me	etals	Paper/ cardbo	oard packaging		stics Note 3)	Chemic	al Waste	Others, e.g. General Refuse disposed at Landfill
	(in '0	000kg)	(in '(	)00kg)	(in '0	000kg)	(in '0	000kg)	(in '000ton)
	generated	recycled	generated	recycled	generated	recycled	generated	Disposed	generated
Sub-total	9890.77	9890.77	14.64	14.64	16.84	16.84	85.807	85.807	21.943
Jan-2020	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.54
Feb-2020	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.349
Mar-2020	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.226
Apr-2020	22.14	22.14	1.30	1.30	0.00	0.00	6.40	6.40	0.521
May-2020	6.2	6.2	0.54	0.54	0.00	0.00	0.6	0.6	0.536
Jun-2020									
Half Year Sub-total									
Jul-2020									
Aug-2020									
Sep-2020									
Oct-2020									
Nov-2020									
Dec-2020									
Project Total Quantities	9919.11	9919.11	16.48	16.48	16.84	16.84	92.608	92.608	27.115



Forecast of Total Quantities of Construction and Demolition Materials to be Generated from the Contract*							
Total Quantity Generated	ty Generated Hard Rock and Large Broken Concrete Reused in the Contract Reused in other Projects Disposed of as Public						
(in '000 ton)	(in '000 ton)	(in '000 ton)	(in '000 ton)	(in '000 ton)			
3200.000	0.000	350.000	1000.000	2000.000			

Forecast of Total Quantities of Construction and Demolition Materials to be Generated from the Contract*							
Metals	Paper/ cardboard packaging	Plastics (see Note 3)	Chemical Waste	General Refuse disposed of at Landfill			
(in '000kg)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000 ton)			
10000.00	20.00	18.00	95.00	30.000			

Notes:

(1) The performance targets are given in the **ER Appendix 8J Clause 14** and the EM & A Manual(s).

(2) The waste flow table shall also include C&D materials to be imported for use at the Site.

(3) Plastics refer to plastic bottles/containers, plastic sheets/foam from packaging material.

(4) The Contractor shall also submit the latest forecast of the total amount of C&D materials expected to be generated from the Works, together with a breakdown of the nature where the amount of C&D materials expected to be generated from the Works is equal to or exceeding 50,000 m<sup>3</sup>. (**ER Part 8 Clause 8.8.5 (d)** (**ii**) refers).