



Development at West Kowloon Cultural District

Monthly Environmental Monitoring and Audit
(EM&A) Report for February 2020

3 March 2020

Mott MacDonald
3/F International Trade
Tower
348 Kwun Tong Road
Kwun Tong
Kowloon
Hong Kong

T +852 2828 5757
mottmac.hk

Development at West Kowloon Cultural District

**Monthly Environmental Monitoring and Audit
(EM&A) Report for February 2020**

3 March 2020

This Monthly EM&A Report has been reviewed and certified by the Environmental Team Leader (ETL) and verified by the Independent Environmental Checker (IEC).

Certified by:



CK Wu
Environmental Team Leader (ETL)
West Kowloon Cultural District Authority

Date

12 MARCH 2020

Verified by:



Helen Cochrane
Independent Environmental Checker (IEC)
Meinhardt Infrastructure & Environment Ltd

Date

12 March 2020

Contents

Executive summary	1
1 Introduction	4
1.1 Background	4
1.2 Project Organisation	4
1.3 Environmental Status in the Reporting Period	5
1.4 Summary of EM&A Requirements	6
2 Impact Monitoring Methodology	8
2.1 Introduction	8
2.2 Air Quality	8
2.2.1 Monitoring Parameters, Frequency and Duration	8
2.2.2 Monitoring Locations	8
2.2.3 Monitoring Equipment	8
2.2.4 Monitoring Methodology	9
2.3 Noise	11
2.3.1 Monitoring Parameters, Frequency and Duration	11
2.3.2 Monitoring Location	11
2.3.3 Monitoring Equipment	11
2.3.4 Monitoring Methodology	11
2.4 Landscape and Visual	12
2.4.1 Monitoring Program	12
3 Monitoring Results	13
3.1 Impact Monitoring	13
3.2 Air Quality Monitoring	13
3.2.1 1-hour TSP	13
3.2.2 24-hour TSP	13
3.3 Noise Monitoring	14
3.4 Landscape and Visual Impact	14
4 Environmental Site Inspection	15
4.1 Site Inspection	15
4.1.1 M+ Museum	15
4.1.2 Lyric Theatre Complex	16
4.2 Advice on the Solid and Liquid Waste Management Status	17
4.2.1 M+ Museum	17
4.2.2 Lyric Theatre Complex	17
4.3 Status of Environmental Licenses and Permits	18
4.3.1 M+ Museum	18

4.3.2	Lyric Theatre Complex	18
4.4	Recommended Mitigation Measures	19
4.4.1	M+ Museum	19
4.4.2	Lyric Theatre Complex	19
5	Compliance with Environmental Permit	20
6	Report in Non-compliance, Complaints, Notification of Summons and Successful Prosecutions	21
6.1	Record on Non-compliance of Action and Limit Levels	21
6.2	Record on Environmental Complaints Received	21
6.3	Record on Notifications of Summons and Successful Prosecution	21
7	Future Key Issues	22
7.1	Construction Works for the Coming Month(s)	22
7.1.1	M+ Museum	22
7.1.2	Lyric Theatre Complex	22
7.2	Key Issues for the Coming Month	23
7.2.1	M+ Museum	23
7.2.2	Lyric Theatre Complex	23
7.3	Monitoring Schedule for the Coming Month	23
8	Conclusions and Recommendations	24
8.1	Conclusions	24
8.2	Recommendations	24
Figure 1	Site Layout Plan and Monitoring Stations	25
Appendices		26
A.	Project Organisation	27
B.	Tentative Construction Programme	28
C.	Action and Limit Levels for Construction Phase	29
D.	Event and Action Plan for Air Quality, Noise, Landscape and Visual Impact	30
E.	Monitoring Schedule	31
F.	Calibration Certifications	32

G. Graphical Plots of the Monitoring Results	33
H. Meteorological Data Extracted from Hong Kong Observatory	34
I. Waste Flow table	35
J. Environmental Mitigation Measures – Implementation Status	36
K. Cumulative Statistics on Complaints, Notifications of Summons and Successful Prosecutions	37

Executive summary

Mott MacDonald Hong Kong Limited (MMHK) was commissioned to undertake the Environmental Team (ET) services (including environmental monitoring and audit (EM&A)) for the construction of M+ Museum Main Works (Contract No.: CC/2015/3A/022) and Lyric Theatre Complex including the Foundation Works (Contract No.: CC/2015/3A/014), L1 Contract (Contract No. CC/2017/3A/030) and L2 Contract (Contract No. CC/2017/3A/031) at West Kowloon Cultural District (WKCD) (The Project) as part of the WKCD development. The Project Proponent is the West Kowloon Cultural District Authority (WKCDA). The construction works and EM&A programme for M+ Museum and Lyric Theatre Complex commenced on 31 October 2015 and 1 March 2016 respectively.

The overall works for the WKCD fall under two separate categories of Designated Project (DP) of the Environmental Impact Assessment Ordinance (EIAO), namely an “engineering feasibility study of urban development projects with a study area covering more than 20 ha or involving a total population of more than 100 000” (Item 3 of Schedule 3) and “an underpass more than 100m in length under the built areas” (Item A.9, Part I, Schedule 2). An Environmental Permit No. EP-453/2013/B (EP) was issued with respect to the “Underpass Road and Austin Road Flyover Serving the West Kowloon Cultural District” which specifically includes the abovementioned category of DP under Item A.9, Part I, Schedule 2 of the EIAO.

This Monthly EM&A Report presents the monitoring works at M+ Museum and Lyric Theatre Complex (L1 and L2 Contract) from 1 February to 29 February 2020.

Exceedance of Action and Limit Levels

There was no breach of Action or Limit levels for Air Quality (1-hour TSP and 24-hour TSP) and Noise in this reporting month.

Implementation of Mitigation Measures

Construction phase weekly site inspections were carried out on 4, 11, 18 and 25 February 2020 for M+ Museum and 5, 12, 19 and 26 February 2020 for Lyric Theatre Complex (L1 and L2 Contract) to confirm the implementation measures undertaken by the Contractors in the reporting month. The outcomes are presented in Section 4 and the status of implementation of mitigation measures in the site is shown in **Appendix J**.

Landscape and visual impact inspections were conducted as part of the abovementioned weekly site inspections during the reporting month. No adverse comment on landscape and visual aspects was made during these inspections.

Record of Complaints

No environmental complaint was recorded in the reporting month.

Record of Notifications of Summons and Successful Prosecutions

No notifications of summons and successful prosecutions were recorded in the reporting month.

Future Key Issues

The major site works for M+ Museum scheduled to be commissioned in the coming month include:

- Structure
 - M+ Podium: Structural works completed
 - CSF RF: Structural works completed
 - RDE RF: Structural works completed
- Facade
 - Installation of panels on M+ tower completed
 - Installation of panels on RDE completed
- MEP
 - BEL, ELV, BFS, BPD, BME works from B2 to 16/F of M+
 - BEL, ELV, BFS, BPD, BME works from G/F to 15/F of RDE
 - MEP works at CSF building majority finished
- ABWF
 - Floor screed for plant room area and corridor area, wall plastering, raised floor, timber finishes works - M+ G/F – 3/F
 - Blockwork plaster, paint/sealer, plaster, drywall subframe, Front of house work wall plastering work up to M+ 16/F
 - Steel platform, plastering, Artwall/drywall stud erection, False ceiling sub-frame installation of RDE up to 15/F
 - ABWF works at CSF building from 1/F to 8/F majority finished
- Other
 - Paving works & landscaping works (soil mix) at M+ Podium 3/F
 - Paving works at M+ 1/F, G/F & B1/F

The major site works for L1 scheduled to be commissioned in the coming month include:

- Excavation work at Main Cofferdam
- Drainage work (PIW works)
- Extended basement structure construction of Area 06 and Main Cofferdam

The major site works for L2 scheduled to be commissioned in the coming month include:

- Visual Mock Up
 - VMU interior work
- LTC construction
 - VIS Installation
 - B2 construction
 - B2U/F and B1L/F construction
 - Formwork
 - Reinforcement work
 - Concrete work
- Extended Basement
 - BS installation (south B2)

Potential environmental impacts due to the construction activities, including air quality, noise, water quality, waste, landscape and visual, will be monitored or reviewed. The recommended environmental mitigation measures shall be implemented on site and regular inspections as required will be carried out to ensure that the environmental conditions are acceptable.

1 Introduction

1.1 Background

Mott MacDonald Hong Kong Limited (MMHK) was commissioned to undertake the Environmental Team (ET) services (including environmental monitoring and audit (EM&A)) for the construction of M+ Museum Main Works (Contract No.: CC/2015/3A/022) and Lyric Theatre Complex including the Foundation Works (Contract No.: CC/2015/3A/014), L1 Contract (Contract No. CC/2017/3A/030) and L2 Contract (Contract No. CC/2017/3A/031) at West Kowloon Cultural District (WKCD) (The Project) as part of the WKCD development. The Project Proponent is the West Kowloon Cultural District Authority (WKCDA). The construction works and EM&A programme for M+ Museum and Lyric Theatre Complex commenced on 31 October 2015 and 1 March 2016 respectively.

The overall works for the WKCD fall under two separate categories of Designated Project (DP) of the Environmental Impact Assessment Ordinance (EIAO), namely an “engineering feasibility study of urban development projects with a study area covering more than 20 ha or involving a total population of more than 100 000” (Item 3 of Schedule 3) and “an underpass more than 100m in length under the built areas” (Item A.9, Part I, Schedule 2). An Environmental Permit No. EP-453/2013/B (EP) was issued with respect to the “Underpass Road and Austin Road Flyover Serving the West Kowloon Cultural District” which specifically includes the abovementioned category of DP under Item A.9, Part I, Schedule 2 of the EIAO. The captioned projects include part of the abovementioned underpass road located within the site boundary also falls under this same category.

The M+ Museum development aims to provide an iconic presence for the M+ Museum, semi-transparent vertical plane, housing education facilities, a public restaurant and museum offices. At ground and lower levels, generous access will be provided to the park and other West Kowloon Cultural District facilities, alongside a public resource centre, theatres, retail and dining, and back-of-house functions.

The 1,200-seat Lyric Theatre Complex will be Hong Kong’s first world-class facility for dance performances, including ballet, contemporary and Chinese dance forms. In the run up to the opening of further major performing arts venues in the WKCD, it will also be used for a wide variety of performing arts events including drama, opera and musical performances. The Lyric Theatre Complex will act as a platform for Hong Kong’s leading arts organisations and be a new major venue to show programmes from Asia and worldwide.

The Monthly EM&A Report is prepared in accordance with the Condition 3.4 of the Environmental Permit No. EP-453/2013/B. This Monthly EM&A Report presents the monitoring works at M+ Museum and Lyric Theatre Complex (L1 and L2 Contract) from 1 February to 29 February 2020. The purpose of this report is to summarise the findings in the EM&A of the project over the reporting period.

1.2 Project Organisation

The organisation chart and lines of communication with respect to the on-site environmental management structure together with the contact information of the key personnel are shown in **Appendix A**.

1.3 Environmental Status in the Reporting Period

During the reporting period, construction works at M+ Museum undertaken include:

- Structure
 - M+ Podium: Structural works completed
 - CSF RF: Structural works completed
 - RDE RF: Structural works completed
- Facade
 - Installation of panels on M+ tower completed
 - Installation of panels on RDE completed
- MEP
 - BEL, ELV, BFS, BPD, BME works from B2 to 16/F of M+
 - BEL, ELV, BFS, BPD, BME works from G/F to 15/F of RDE
 - BEL, ELV, BFS, BPD, BME works from G/F to 8/F of CSF
- ABWF
 - Block wall erection, Floor screed for plant room area and corridor area, wall plastering, raised floor & dry wall work up to M+ G/F - 3/F
 - Blockwork plaster, paint/sealer, plaster, drywall subframe, Front of house work wall plastering work up to M+ 16/F
 - Steel platform, plastering, Artwall/drywall stud erection, False ceiling sub-frame installation of RDE up to 15/F
 - ABWF works at CSF building from 1/F to 8/F majority finished
- Other
 - Paving works & landscaping works (soil mix) at M+ Podium 3/F
 - Paving works at M+ 1/F, G/F & B1/F

During the reporting period, construction works at L1 undertaken include:

- Excavation work at Main Cofferdam
- Drainage work (PIW works)
- Extended basement structure construction of Area 06 and Main Cofferdam

During the reporting period, construction works at L2 undertaken include:

- Visual Mock Up
 - Install VMU
- LTC construction
 - VIS installation
 - B2 construction
 - B2U/F and B1L/F construction
- Extended Basement
 - Builder's works in extended basement (south)
 - BS installation (south B2)

The Construction Works Programme of M+ Museum and Lyric Theatre Complex (L1 and L2 Contract) is provided in **Appendix B**. A layout plan of the Project is provided in **Figure 1**. Please refer to **Table 4.4**, **Table 4.5** and **Table 4.6** on the status if the environmental licenses.

1.4 Summary of EM&A Requirements

The EM&A programme requires environmental monitoring of air quality, noise, landscape and visual as specified in the approved EM&A Manual.

A summary of impact EM&A requirements is presented in **Table 1.1**.

Table 1.1: Summary of Impact EM&A Requirements

Parameter	Descriptions	Locations	Frequencies
Air Quality	24-Hour TSP	AM1 - International Commerce Centre	At least once every 6 days
	1-Hour TSP	AM1 - International Commerce Centre	At least 3 times every 6 days
	24-Hour TSP	AM2B - 1st Floor of Gammon's Site Office	At least once every 6 days
	1-Hour TSP	AM2B - 1st Floor of Gammon's Site Office	At least 3 times every 6 days
Noise	L _{eq} , 30 minutes	NM1A - International Commerce Centre	Weekly
Landscape & Visual	Monitor implementation of proposed mitigation measures during the construction stage	As described in Table 9.1 and 9.2 of the EM&A Manual	Bi-weekly

Given that the Project covers only a small part of the whole WKCD area (i.e. M+ Museum, Lyric Theatre Complex and respective portions of underpass road), it was proposed that the EM&A programme for the Project should only require 1 noise monitoring station and 2 air quality monitoring stations located closest to the Project area. Currently, the works under the captioned project are confined in the western part of the WKCD site. Therefore, only the monitoring stations AM1, AM2 and NM1 were set up. Other monitoring locations are too far away (i.e. AM3 to AM5 and NM2 to NM5) are not included in this EM&A programme until the construction of the corresponding area commences.

The Harbourside management office formally rejected our proposal of setting up air quality and noise monitoring equipment on its premises at the podium level of Tower 1 (AM2/NM1) on 10 November 2015. Alternative noise monitoring location was identified at The Arch (NM2), however The Arch management office formally rejected our proposal of setting up noise monitoring equipment on its premises on 23 November 2015. Nevertheless, suitable air quality monitoring location at AM2 was identified on the ground floor in front of The Harbourside Tower 1, which is at the same location as that of baseline monitoring for consistency. No management approval is required at the ground floor for conducting the air monitoring. However, the electricity supply at AM2 was suspended from 31 August 2016 and was no longer available. In order to have a more secure electricity supply, an alternative air monitoring location (AM2A) was identified at Austin Road West opposite to The Harbourside Tower 1, which is close to Lyric Theatre Complex site entrance. This alternative air monitoring location was approved by EPD on 28 September 2016. Due to works programme, the air monitoring location AM2A has been relocated to the alternative monitoring location AM2B at the 1st floor of Gammon's site office, which was approved by EPD on 21 February 2019. Meanwhile, the opportunity of setting up the air monitoring location at The Harbourside is being explored. Noise monitoring at G/F of Harbourside will not be representative.

Approval from the management office of the International Commerce Centre has been granted on 29 February 2016 for conducting noise monitoring at the alternative noise monitoring location identified at the podium floor (NM1A) which is free from screening to the construction activities. Therefore, 2 air quality monitoring stations and 1 noise impact monitoring station were confirmed for the impact monitoring.

The Environmental Quality Performance Limits for air quality and noise are shown in **Appendix C**.

The Event and Action Plan for air quality, construction noise, landscape and visual are shown in **Appendix D**.

The EM&A programme followed the recommended mitigation measures in the EM&A Manual. The EM&A requirements as well as the summary of implementation status of the environmental mitigation measures are provided in **Appendix J**.

2 Impact Monitoring Methodology

2.1 Introduction

For air quality and noise, the monitoring methodology, including the monitoring locations, monitoring equipment used, monitoring parameters, and frequency and duration etc., for air quality and noise are detailed in this Section. The environmental monitoring schedules for the reporting period and the tentative monitoring Schedule for the coming month are provided in **Appendix E**.

For landscape and audit impact, the relevant EM&A monitoring requirements and details are also presented in this Section.

2.2 Air Quality

2.2.1 Monitoring Parameters, Frequency and Duration

Table 2.1 summarizes the monitoring parameters, frequency and duration of the TSP monitoring.

Table 2.1: Air Quality Monitoring Parameters, Frequency and Duration

Parameter	Frequency	Duration
24-hour TSP	At least once in every six-days	24 hours
1-hour TSP	At least 3 times every six-days	60 minutes

2.2.2 Monitoring Locations

Currently, the works under the captioned project are confined in the western part of the WKCD site. Therefore, only the monitoring stations AM1 and AM2B were set up at the proposed locations in accordance with updated EM&A Manual. Location of the monitoring station is given in **Table 2.2** and shown in **Figure 1**.

Table 2.2: Air Quality Monitoring Station

Monitoring Station	Location
AM1	International Commerce Centre (ICC)
AM2B	1st Floor of Gammon's Site Office

2.2.3 Monitoring Equipment

Continuous 24-hour TSP air quality monitoring was conducted using High Volume Sampler (HVS) (Model: TE-5170) located at the designated monitoring station. The HVS meets all the requirements stated in of the EM&A Manual. Portable direct reading dust meter was used to carry out the 1-hour TSP monitoring. **Table 2.3** summarizes the equipment used in the impact air quality monitoring. Copies of the calibration certificates for the HVS, calibration kit and portable dust meters are attached in **Appendix F**.

Table 2.3: TSP Monitoring Equipment

Equipment	Model
24-hour TSP monitoring	
High Volume Sampler	TE-5170 (Serial No.: 0767 and 8919)

Equipment	Model
Calibrator	TE-5025A (Orifice I.D.: 2454)
1-hour TSP monitoring	
Portable direct reading dust meter	Sibata LD-3B (Serial No.: 456668 and 276019)

Calibration of the HVS (five point calibration) using Calibration Kit was carried out every two months. The HVS calibration orifice will be calibrated annually. Calibration certificate of the TE-5025A Calibration Kit and the HVS are provided in **Appendix F**

The 1-hour TSP monitoring should be determined periodically (e.g. annually) by the HVS to check the validity and accuracy of the results measured by direct reading method.

2.2.4 Monitoring Methodology

24-hour TSP Monitoring

Installation

The HVS was installed at the site boundary. The following criteria were considered in the installation of the HVS.

- A horizontal platform with appropriate support to secure the sampler against gusty wind was provided.
- The distance between the HVS and any obstacles, such as buildings, was at least twice the height that the obstacle protrudes above the HVS.
- A minimum of 2 metres separation from walls, parapets and penthouse was required for rooftop sampler.
- A minimum of 2 metres separation from any supporting structure, measured horizontally was required.
- No furnace or incinerator flues or building vent were nearby.
- Airflow around the sampler was unrestricted.
- The sampler has been more than 20 metres from any drip line.
- Permission was obtained to set up the sampler and to obtain access to the monitoring station.
- A secured supply of electricity is needed to operate the sampler.

Preparation of Filter Papers

- Glass fibre filters were labelled and sufficient filters that were clean and without pinholes were selected.
- The filters used are specified to have a minimum collection efficiency of 99 percent for 0.3 μm (DOP) particles.
- All filters were equilibrated in the conditioning environment for 24 hours before weighing. The conditioning environment temperature was around 25 °C and not variable by more than ± 3 °C with relative humidity (RH) < 50% and was not variable by more than ± 5 %. A convenient working RH was 40%. All preparation of filters was done by Hong Kong Laboratory Accreditation Scheme (HOKLAS) accredited laboratory.

Field Monitoring Procedures

- The power supply was checked to ensure the HVS works properly.
- The filter holder and the area surrounding the filter were cleaned.

- The filter holder was removed by loosening the four bolts and a new filter, with stamped number upward, on a supporting screen was aligned carefully.
- The filter was properly aligned on the screen so that the gasket formed an airtight seal on the outer edges of the filter.
- The swing bolts were fastened to hold the filter holder down to the frame. The pressure applied should be sufficient to avoid air leakage at the edges.
- The shelter lid was closed and was secured with the aluminium strip.
- The HVS was warmed-up for about 5 minutes to establish run-temperature conditions.
- A new flow rate record sheet was set into the flow recorder.
- The flow rate of the HVS was checked and adjusted at around 1.3 m³/min. The range specified in the EM&A Manual was between 0.6-1.7 m³/min.
- The programmable timer was set for a sampling period of 24 hours, and the starting time, weather condition and the filter number were recorded.
- The initial elapsed time was recorded.
- At the end of sampling, the sampled filter was removed carefully and folded in half length so that only surfaces with collected particulate matter were in contact.
- It was then placed in a clean plastic envelope and sealed.
- All monitoring information was recorded on a standard data sheet.
- Filters were sent to a Hong Kong Laboratory Accreditation Scheme (HOKLAS) accredited laboratory for analysis.

Maintenance and Calibration

- The HVS and its accessories are maintained in good working condition, such as replacing motor brushes routinely and checking electrical wiring to ensure a continuous power supply.
- HVSs were calibrated upon installation and thereafter at bi-monthly intervals. The calibration kits were calibrated annually.
- Calibration records for HVS and calibration kit are shown in **Appendix F**.

1-hour TSP Monitoring

Field Monitoring

The measuring procedures of the 1-hour dust meter are in accordance with the Manufacturer's Instruction Manual as follows:

- Turn the power on.
- Close the air collecting opening cover.
- Push the "TIME SETTING" switch to [BG].
- Push "START/STOP" switch to perform background measurement for 6 seconds.
- Turn the knob at SENSI ADJ position to insert the light scattering plate.
- Leave the equipment for 1 minute upon "SPAN CHECK" is indicated in the display.
- Push "START/STOP" switch to perform automatic sensitivity adjustment. This measurement takes 1 minute.
- Pull out the knob and return it to MEASURE position.
- Setting time period of 1 hour for the 1-hour TSP measurement.
- Push "START/STOP" to start the 1-hour TSP measurement.
- Regular checking of the time period setting to ensure monitoring time of 1 hour.

Maintenance and Calibration

- The 1-hour dust meter would be checked at 3-month intervals and calibrated at 1-year intervals throughout all stages of the air quality monitoring.
- Calibration records for direct dust meters are shown in **Appendix F**.

Weather Condition

- Meteorological data extracted from Hong Kong Observatory for the reporting month is provided in **Appendix H**.

2.3 Noise

2.3.1 Monitoring Parameters, Frequency and Duration

Table 2.4 summarizes the monitoring parameters, frequency and duration of noise monitoring. The noise in A-weighted levels L_{eq} , L_{10} and L_{90} are recorded in a 30-minute interval between 0700 and 1900 hours.

Table 2.4: Noise Monitoring Parameters, Period and Frequency

Time Period	Parameters	Frequency
Daytime on normal weekdays (0700-1900 hours)	L_{eq} (30 min), L_{90} (30 min) & L_{10} (30 min)	Once every week

2.3.2 Monitoring Location

Currently, the works under the captioned project are confined in the western part of the WKCD site. Therefore, only the monitoring station NM1A was set up at the proposed location in accordance with updated EM&A Manual. Location of the monitoring station is given in **Table 2.5** and shown in **Figure 1**.

Table 2.5: Noise Monitoring Station

Monitoring Station	Location
NM1A	International Commerce Centre (ICC)

2.3.3 Monitoring Equipment

Integrating Sound Level Meter was used for noise monitoring. It was a Type 1 sound level meter capable of giving a continuous readout of the noise level readings including equivalent continuous sound pressure level (L_{Aeq}) and percentile sound pressure level (L_x). They comply with International Electrotechnical Commission Publications 651:1979 (Type 1) and 804:1985 (Type 1). **Table 2.6** summarizes the noise monitoring equipment model being used.

Table 2.6: Noise Monitoring Equipment

Monitoring Station	Equipment Model			
	Integrating Meter	Sound	Level	Calibrator
NM1A	Rion NL-52 (Serial No. 00175561)			LARSON DAVIS CAL200 (Serial No. 11333)

2.3.4 Monitoring Methodology

Field Monitoring

- The microphone of the Sound Level Meter was set at least 1.2 m above the ground.
- Free Field measurement was made at the monitoring locations.
- The battery condition was checked to ensure the correct functioning of the meter.
- Parameters such as frequency weighting, the time weighting and the measurement time were set as follows:
 - frequency weighting: A
 - time weighting: Fast
 - time measurement: 30 minutes intervals (between 0700-1900 on normal weekdays)
- Prior to and after each noise measurement, the meter was calibrated using a Calibrator for 94 dB at 1 kHz. If the difference in the calibration level before and after measurement was more than 1 dB, the measurement would be considered invalid and has to be repeated after re-calibration or repair of the equipment.
- During the monitoring period, the L_{eq} , L_{10} and L_{90} were recorded. In addition, any site observations and noise sources were recorded on a standard record sheet.
- A correction of +3dB(A) was made to the free field measurements.

Maintenance and Calibration

- The microphone head of the sound level meter and calibrator is cleaned with soft cloth at quarterly intervals.
- The sound level meter and calibrator are sent to the supplier or HOKLAS laboratory to check and calibrate at yearly intervals.
- Calibration records are shown in **Appendix F**.

Weather Condition

- Meteorological data extracted from Hong Kong Observatory for the reporting month is provided in **Appendix H**.

2.4 Landscape and Visual

2.4.1 Monitoring Program

Table 2.7 details the monitoring program (as proposed in the WKCD EIA report) for landscape and visual impact during the construction phase.

Table 2.7: Monitoring Program for Landscape and Visual Impact during Construction Phase

Stage	Monitoring Task	Frequency	Report	Approval
Construction	Monitor implementation of proposed mitigation measures during the construction stage.	Bi-weekly	ET to report on Contractor's compliance	Counter-signed by IEC

During the landscape and visual impact monitoring, any changes in relation to the landscape and visual amenity should be monitored with reference to the baseline conditions of the site. In addition, mitigation measures were proposed in the WKCD EIA report to minimise the landscape and visual impacts during the construction phase. The proposed mitigation measures as shown in Table 9.1 and Table 9.2 of the EM&A Manual should be checked for proper implementation.

3 Monitoring Results

3.1 Impact Monitoring

Construction impact monitoring for air quality, noise and landscape and visual impact was undertaken in compliance with the EM&A Manual during the reporting month.

3.2 Air Quality Monitoring

3.2.1 1-hour TSP

Results of 1-hour TSP at the monitoring location AM1 and AM2B are summarised in **Table 3.1**. Graphical plots of the monitoring results are shown in **Appendix G**.

Table 3.1: Summary of 1-hour TSP monitoring results

Monitoring Station	Monitoring Date	Start Time	1-hour TSP ($\mu\text{g}/\text{m}^3$)			Range ($\mu\text{g}/\text{m}^3$)	Action Level ($\mu\text{g}/\text{m}^3$)	Limit Level ($\mu\text{g}/\text{m}^3$)
			1st Result	2nd Result	3rd Result			
AM1	05-Feb-20	13:14	24	30	28	24-82	273.7	500
	11-Feb-20	8:10	67	74	82			
	17-Feb-20	8:07	25	27	26			
	22-Feb-20	13:12	32	30	35			
	28-Feb-20	13:07	32	41	49			
AM2B	05-Feb-20	13:28	35	41	45	35-83	274.2	500
	11-Feb-20	8:23	68	75	83			
	17-Feb-20	8:22	35	36	39			
	22-Feb-20	13:26	64	70	60			
	28-Feb-20	13:22	59	66	67			

3.2.2 24-hour TSP

Results of 24-hour TSP at the monitoring location AM1 and AM2B are summarised in **Table 3.2**. Graphical plots of the monitoring results are shown in **Appendix G**.

Table 3.2: Summary of 24-hour TSP monitoring results

Monitoring Station	Monitoring Date	Start Time	Monitoring Results ($\mu\text{g}/\text{m}^3$)	Range ($\mu\text{g}/\text{m}^3$)	Action Level ($\mu\text{g}/\text{m}^3$)	Limit Level ($\mu\text{g}/\text{m}^3$)
AM1	05-Feb-20	8:12	15	7-24	143.6	260
	11-Feb-20	8:08	15			
	17-Feb-20	8:05	14			
	22-Feb-20	8:10	24			
	28-Feb-20	8:05	7			
AM2B	05-Feb-20	8:26	27	27-62	151.1	260
	11-Feb-20	8:21	41			
	17-Feb-20	8:19	38			
	22-Feb-20	8:24	62			
	28-Feb-20	8:20	38			

No exceedance of 1-hour and 24-hour TSP (Action or Limit Level) was recorded in the reporting period.

3.3 Noise Monitoring

The construction noise monitoring results at the monitoring location NM1A are summarized in **Table 3.3**. Graphical plots of the monitoring data and the station set-up of a free-field measurement are shown in **Appendix G**.

Table 3.3: Summary of noise monitoring results during normal weekdays

Monitoring Date	Start Time	End Time	L _{eq} (30 mins)*, dB(A)	Limit Level for L _{eq} (dB(A))
05-Feb-20	10:30	11:00	69	
11-Feb-20	10:25	10:55	68	
17-Feb-20	10:26	10:56	68	75
28-Feb-20	10:26	10:56	68	

Remarks:

* +3dB (A) correction was applied to free-field measurement.

No exceedance (Action/Limit Level) of construction noise was recorded in the reporting period. No noise related environmental complaint was received during the reporting period and noise levels recorded during the monitoring period were below 75 dB(A).

3.4 Landscape and Visual Impact

Landscape and visual impact inspections were conducted as part of the weekly site inspections on 4 and 18 February 2020 for M+ Museum, and 12 and 26 February 2020 for Lyric Theatre Complex (L1 and L2 Contract) during the reporting month. As reviewed by the registered Landscape Architect, no adverse comment on landscape and visual aspects was made during these inspections.

The landscape and visual mitigation measures were implemented during the reporting period. The summary of implementation status of the environmental mitigation measures is provided in **Appendix J**.

4 Environmental Site Inspection

4.1 Site Inspection

4.1.1 M+ Museum

Construction phase weekly site inspections were carried out on 4, 11, 18 and 25 February 2020. The joint site inspection with IEC, ET, ER and Contractor was held on 18 February 2020. All observations have been recorded in the site inspection checklist and passed to the Contractor together with the appropriate recommended mitigation measures where necessary.

The key observations from the site inspections and associated recommendations are summarized in **Table 4.1**.

Table 4.1: Summary of Site Inspections and Recommendations for M+ Museum

Inspection Date	Parameter	Observation / Recommendation	Contactor's Responses / Action(s) Undertaken	Close-out (Date)
04-Feb-20	Water Quality	The contractor was reminded to store the chemical in a designated area.	The chemical has been removed.	05-Feb-20
04-Feb-20	Water Quality	Effluent quality of wetsep was checked. It was found visually clear when comparing with standard solution and within proper pH range.	N/A	N/A
11-Feb-20	Noise Impact	Breaker was observed without noise-insulating fabric at Gate no.1. The contractor was reminded to provide noise-insulating fabric to reduce noise impact.	The contractor has provided noise-insulating fabric for the breaker.	11-Feb-20
11-Feb-20	Water Quality	Effluent quality of wetsep was checked. It was found visually clear when comparing with standard solution and within proper pH range.	N/A	N/A
18-Feb-20	Water Quality	Effluent quality of wetsep was checked. It was found visually clear when comparing with standard solution and within proper pH range.	N/A	N/A
25-Feb-20	Air Quality	No enclosure was observed during cement mixing work at façade storage yard. The contractor was reminded to provide mitigation measure to prevent emission of fugitive dust.	The contractor has provided enclosures for the cement mixing work.	25-Feb-20
25-Feb-20	Water Quality	Effluent quality of wetsep was checked. It was found visually clear when comparing with standard	N/A	N/A

Inspection Date	Parameter	Observation / Recommendation	Contactor's Responses / Action(s) Undertaken	Close-out (Date)
		solution and within proper pH range.		

4.1.2 Lyric Theatre Complex

Construction phase weekly site inspections were carried out on 5, 12, 19 and 26 February 2020 (L1 and L2 Contract). The joint site inspection with IEC, ET, ER and Contractor was held on 19 February 2020. All observations have been recorded in the site inspection checklist and passed to the Contractor together with the appropriate recommended mitigation measures where necessary.

The key observations from the site inspections and associated recommendations are summarized in **Table 4.2** and **Table 4.3**.

Table 4.2: Summary of Site Inspections and Recommendations for L1

Inspection Date	Parameter	Observation / Recommendation	Contactor's Responses / Action(s) Undertaken	Close-out (Date)
05-Feb-20	Water Quality	The contractor was reminded to enhance prevention measure at the water discharge outlet.	The contractor has removed some soils next to the discharge point and soil near the discharge point is covered by tarpaulin sheet.	08-Feb-20
12-Feb-20	Water Quality	The contractor was reminded to clean the algae in Wetsep #1 and increase the Wetsep cleaning frequency for Wetsep #6.	The contractor has cleaned the algae in Wetsep #1 and increased the Wetsep cleaning frequency for Wetsep #6.	17-Feb-20
19-Feb-20	Air Quality	Discolour NRMM label was observed. The contractor was reminded to replace a clear label with correct colour.	The contractor has replaced a clear NRMM label with correct colour.	26-Feb-20
19-Feb-20	Air Quality	Stockpile was observed without cover. The contractor was reminded to cover it with impervious sheeting.	The contractor has covered the stockpile with impervious sheeting.	19-Feb-20
19-Feb-20	Water Quality	The contractor was reminded to remove the algae at Wetsep #2 to keep good quality of discharge water.	The contractor has removed the algae in Wetsep #2.	26-Feb-20
26-Feb-20	Air Quality	The unpaved part of the road was reminded to spray with water to prevent emission of fugitive dust.	The contractor has provided water spraying for the unpaved part of the road.	27-Feb-20

Table 4.3: Summary of Site Inspections and Recommendations for L2

Inspection Date	Parameter	Observation / Recommendation	Contactor's Responses / Action(s) Undertaken	Close-out (Date)
/	/	/	/	/

No key observations from the site inspections and associated recommendations for L2 in the reporting month.

4.2 Advice on the Solid and Liquid Waste Management Status

The Contractors have been registered as a chemical waste producer for the Project. Construction and demolition (C&D) material sorting will be carried out on site. A sufficient number of receptacles were available for general refuse collection.

4.2.1 M+ Museum

As advised by the Contractor, 0.0 tonnes, 289.45 tonnes, 221.85 tonnes, 44.08 tonnes of inert C&D material were disposed of as public fill to Chai Wan Public Fill Barging Point, Fill Bank at Tuen Mun Area 38, Fill Bank at Tseung Kwan O Area 137 and Sorting Facilities at Tseung Kwan O Area 137 respectively, while 333.2 tonnes of general refuse were disposed of at SENT landfill. 22.1 tonnes of metals, 1.7 tonne of paper/cardboard packaging, 0.0 tonne of plastic and 280.0 tonnes of timber were collected by recycling contractors in the reporting month. 0.0 tonne of inert C&D materials was reused on site. 144.0 tonnes of inert C&D materials were reused in other projects. 0.0 tonne of chemical waste was collected by licensed contractors in the reporting period.

The cumulative waste generation records for M+ Museum are shown in **Appendix I**.

4.2.2 Lyric Theatre Complex

As advised by the L1 Contractor, 7,874.58 tonnes and 8,947.69 tonnes of inert C&D material were disposed of as public fill to Tseung Kwan O Area 137 Public Fill and Tuen Mun Area 38 Public Fill respectively, while 66.3 tonnes of general refuse were disposed of at SENT and WENT landfill. 232.2 tonnes of metals, 0.0 tonne of paper/cardboard packaging, 0.0 tonne of plastic and 0.0 tonne of timber was collected by recycling contractors in the reporting month. 0.0 tonne of inert C&D materials was reused on site. 0.0 tonnes of inert C&D materials were reused in other projects and 0.0 tonnes of inert C&D materials were imported for reuse at site. 0.0 tonnes of inert C&D materials were disposed to sorting facility and 0.0 tonne of chemical waste was collected by licensed contractors in the reporting period.

As advised by the L2 Contractor, 0.0 tonnes of inert C&D material was disposed of as public fill, and 0.0 tonnes of general refuse was disposed to landfill. 0.0 tonnes of metals, 0.0 tonne of paper/cardboard packaging, 0.0 tonne of plastic and 0.0 tonne of timber was collected by recycling contractors in the reporting month. 0.0 tonne of inert C&D materials was reused on site. 0.0 tonnes of inert C&D materials were reused in other projects and 0.0 tonnes of inert C&D materials were imported for reuse at site. 0.0 tonnes of inert C&D materials were disposed to sorting facility and 0.0 tonne of chemical waste was collected by licensed contractors in the reporting period.

The actual amounts of different types of waste generated by the activities of construction works at Lyric Theatre Complex (L1 and L2 Contract) in the reporting month are shown in **Appendix I**.

4.3 Status of Environmental Licenses and Permits

The environmental permits, licenses, and/or notifications on environmental protection for this Project which were valid during the period are summarised in **Table 4.4** and **Table 4.5** and **Table 4.6**.

4.3.1 M+ Museum

Table 4.4: Status of Environmental Submissions, Licenses and Permits for M+ Museum

Permit / License No. / Notification / Reference No.	Valid Period		Status	Remarks
	From	To		
Chemical Waste Producer Registration				
WPN5213-217-G2347-53	04-Oct-18	--	Valid	--
Billing Account Construction Waste Disposal				
7031993	03-Oct-18	--	Account Active	--
Construction Noise Permit				
GW-RE0973-19	10-Dec-19	26-May-20	Valid	
Wastewater Discharge License				
WT-00033363-2019	21-Mar-19	31-Mar-24	Valid	--
WT-00035338-2019	20-Jan-20	31-Jan-25	Valid	--
Notification under Air Pollution Control (Construction Dust) Regulation				
437339	12-Sep-18	--	Notified	--

4.3.2 Lyric Theatre Complex

Table 4.5: Status of Environmental Submissions, Licenses and Permits for L1

Permit / License No. / Notification / Reference No.	Valid Period		Status	Remarks
	From	To		
Chemical Waste Producer Registration				
WPN5213-217-G2347-39	17-Feb-16	--	Valid	--
Billing Account Construction Waste Disposal				
7029925	22-Jan-18	--	Account Active	--
Billing Account Vessel Disposal				
7033007	2-Dec-19	2-Mar-20	Account Active	--
Construction Noise Permit				
GW-RE0833-19	22-Oct-19	9-Apr-20	Valid	
Wastewater Discharge License				
WT-00030694-2018	11-Apr-18	30-Apr-23	Valid	--
Notification under Air Pollution Control (Construction Dust) Regulation				
429708	16-Jan-18	--	Notified	--

Table 4.6: Status of Environmental Submissions, Licenses and Permits for L2

Permit / License No. / Notification / Reference No.	Valid Period		Status	Remarks
	From	To		
Chemical Waste Producer Registration				

Permit / License No. / Notification / Reference No.	Valid Period		Status	Remarks
	From	To		
WPN5213-217-G2347-39	17-Feb-16	--	Valid	This license/permit is share with L1
Billing Account Construction Waste Disposal				
7032787	02-Jan-19	--	Account Active	--
Construction Noise Permit				
GW-RE0833-19	22-Oct-19	9-Apr-20	Valid	This license/permit is share with L1
Wastewater Discharge License				
WT-00030694-2018	11-Apr-18	30-Apr-23	Valid	This license/permit is share with L1
Notification under Air Pollution Control (Construction Dust) Regulation				
448474	27-Aug-19	--	Notified	--

4.4 Recommended Mitigation Measures

The EM&A programme followed the recommended mitigation measures in the EM&A Manual. The EM&A requirements as well as the summary of implementation status of the environmental mitigation measures are provided in **Appendix J**. In particular, the following mitigation measures were brought to attention during the site inspections:

4.4.1 M+ Museum

Water Quality

- Oils and fuels should be stored in designated area which have pollution prevention facilities.

Noise Quality

- Noise insulating fabric should be adopted for certain PME. The fabric should be lapped such that there are no openings or gaps on the joints.

Air Quality

- Enclosures should be provided when work processes are likely to generate dust.

4.4.2 Lyric Theatre Complex

L1

Water Quality

- Channels, earth bunds or sand bag barriers should be provided to prevent untreated waste water discharge to the discharge outlet.
- Ensure proper and efficient operation of the wastewater treatment facilities.

Air Quality

- All NRMMs should be affixed with the requisite/exemption labels.
- Dusty materials should be covered entirely by impervious sheeting.
- Unpaved parts of the road should be sprayed with water to keep the surface wet.

5 Compliance with Environmental Permit

The status of the required submission under the EP during the reporting period is summarized in **Table 5.1**.

Table 5.1: Status of Submissions under the Environmental Permit

EP Condition	Submission	Submission Date
Condition 3.4	Monthly EM&A Report for December 2019	14 February 2020

6 Report in Non-compliance, Complaints, Notification of Summons and Successful Prosecutions

6.1 Record on Non-compliance of Action and Limit Levels

There was no breach of Action or Limit Levels for Air Quality and Noise monitoring in the reporting month.

6.2 Record on Environmental Complaints Received

No environmental complaint was received in the reporting month.

The cumulative statistics on complaints were provided in **Appendix K**.

6.3 Record on Notifications of Summons and Successful Prosecution

No notifications of summons or successful prosecutions were received this month. The cumulative statistics on notifications of summons and successful prosecutions were provided in **Appendix K**.

7 Future Key Issues

7.1 Construction Works for the Coming Month(s)

7.1.1 M+ Museum

The major site works for M+ Museum scheduled to be commissioned in the coming month include:

- Structure
 - M+ Podium: Structural works completed
 - CSF RF: Structural works completed
 - RDE RF: Structural works completed
- Facade
 - Installation of panels on M+ tower completed
 - Installation of panels on RDE completed
- MEP
 - BEL, ELV, BFS, BPD, BME works from B2 to 16/F of M+
 - BEL, ELV, BFS, BPD, BME works from G/F to 15/F of RDE
 - MEP works at CSF building majority finished
- ABWF
 - Floor screed for plant room area and corridor area, wall plastering, raised floor, timber finishes works - M+ G/F – 3/F
 - Blockwork plaster, paint/sealer, plaster, drywall subframe, Front of house work wall plastering work up to M+ 16/F
 - Steel platform, plastering, Artwall/drywall stud erection, False ceiling sub-frame installation of RDE up to 15/F
 - ABWF works at CSF building from 1/F to 8/F majority finished
- Other
 - Paving works & landscaping works (soil mix) at M+ Podium 3/F
 - Paving works at M+ 1/F, G/F & B1/F

7.1.2 Lyric Theatre Complex

The major site works for L1 scheduled to be commissioned in the coming month include:

- Excavation work at Main Cofferdam
- Drainage work (PIW works)
- Extended basement structure construction of Area 06 and Main Cofferdam

The major site works for L2 scheduled to be commissioned in the coming month include:

- Visual Mock Up
 - VMU interior work
- LTC construction

- VIS Installation
- B2 construction
- B2U/F and B1L/F construction
- Formwork
- Reinforcement work
- Concrete work
- Extended Basement
 - BS installation (south B2)

7.2 Key Issues for the Coming Month

7.2.1 M+ Museum

Key issues to be considered in the coming month include:

- Generation of dust from construction works;
- Noise impact from operating equipment and machinery on-site;
- Generation of site surface runoffs and wastewater from activities on-site;
- Management of stockpiles and slopes, particularly on rainy days;
- Sorting, recycling, storage and disposal of general refuse and construction waste; and
- Management of chemicals and avoidance of oil spillage on-site.

7.2.2 Lyric Theatre Complex

Key issues to be considered in the coming month include:

- Generation of dust from construction works;
- Noise impact from operating equipment and machinery on-site;
- Generation of site surface runoffs and wastewater from activities on-site;
- Management of stockpiles and slopes, particularly on rainy days;
- Sorting, recycling, storage and disposal of general refuse and construction waste; and
- Management of chemicals and avoidance of oil spillage on-site.

7.3 Monitoring Schedule for the Coming Month

The environmental site inspection and environmental monitoring will be continued in the coming month. Impact monitoring for air quality and noise in accordance with the approved EM&A Manual has commenced since 31 October 2015 and 5 March 2016 respectively. The tentative monitoring schedule for the coming month is shown in the **Appendix E**.

8 Conclusions and Recommendations

8.1 Conclusions

The EM&A programme as recommended in the EM&A Manual has been undertaken since the construction of M+ Museum main works commenced on 31 October 2015, and the construction of Lyric Theatre Complex commenced on 1 March 2016.

Monitoring of air quality and noise with respect to the Projects is underway. In particular, the 1-hour TSP, 24-hour TSP, noise level (as L_{eq} , 30 minutes) under monitoring have been checked against established Action and Limit levels. There was no breach of Action and Limit Levels for 1-hour TSP, 24-hour TSP and noise in the reporting month.

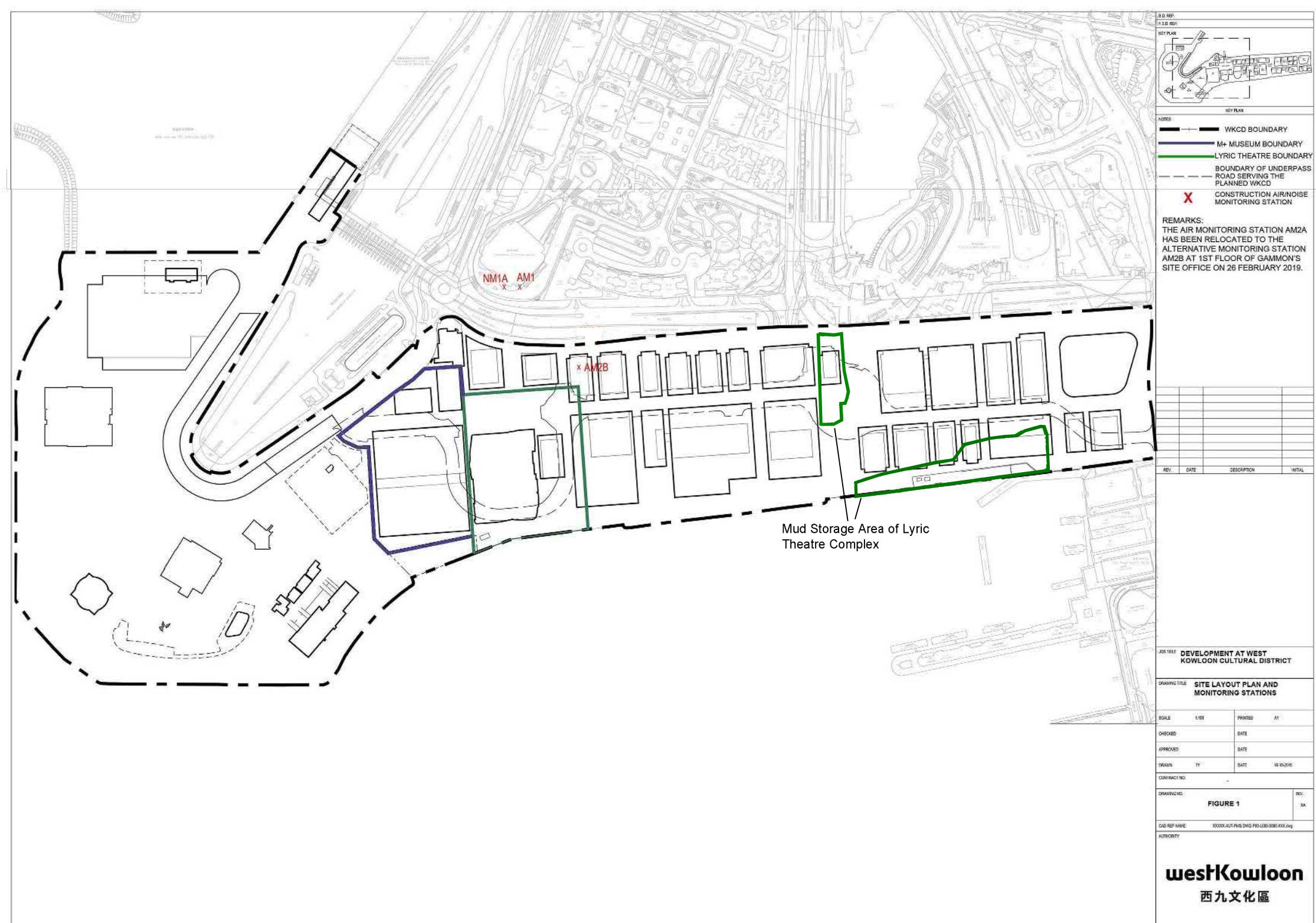
No environmental complaint was recorded in the reporting month. No notifications of summons or successful prosecutions were received during the reporting month.

Weekly construction phase site inspections and bi-weekly landscape and visual impact inspections were conducted during the reporting month as required. It was observed that the Contractors had implemented all possible and feasible mitigation measures to mitigate the potential environmental impacts during construction phase works.

8.2 Recommendations

Potential environmental impacts due to the construction activities, including air quality, noise, water quality, waste, landscape and visual, will be monitored or reviewed. The recommended environmental mitigation measures shall be implemented on site and regular inspections as required will be carried out to ensure that the environmental conditions are acceptable.

Figure 1 Site Layout Plan and Monitoring Stations



westKowloon
西九文化區

Appendices

- A. Project Organisation
- B. Tentative Construction Programme
- C. Action and Limit Levels for Construction Phase
- D. Event and Action Plan for Air Quality, Noise, Landscape and Visual Impact
- E. Monitoring Schedule
- F. Calibration Certifications
- G. Graphical Plots of the Monitoring Results
- H. Meteorological Data Extracted from Hong Kong Observatory
- I. Waste Flow table
- J. Environmental Mitigation Measures – Implementation Status
- K. Cumulative Statistics on Complaints, Notifications of Summons and Successful Prosecutions

A. Project Organisation

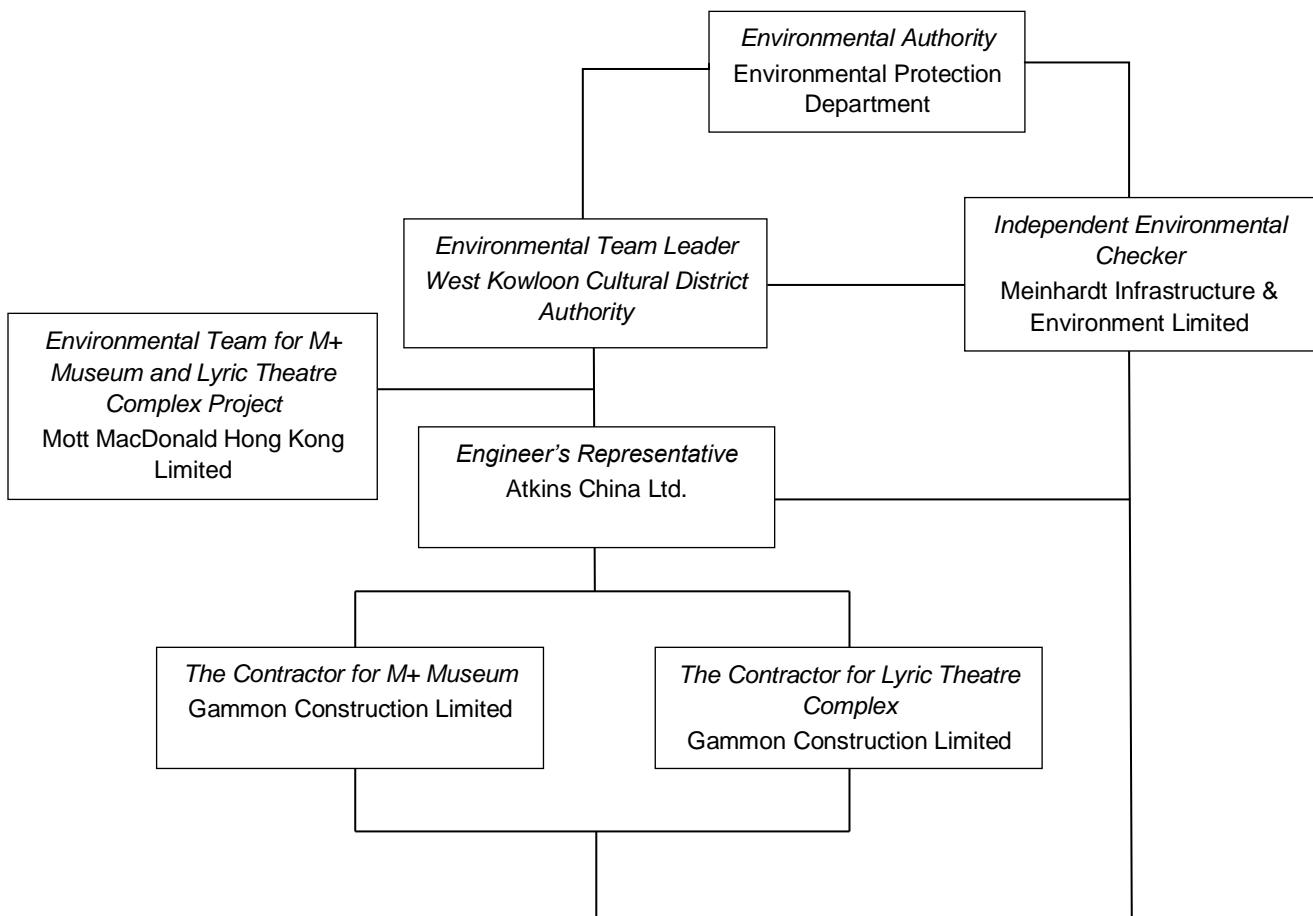


Table A-1: Contact information

Company Name	Role	Name	Telephone
Atkins China Ltd.	Assistant Resident Engineer	Ms. Gloria Lui	5506 6361
Meinhardt Infrastructure & Environment Limited	Independent Environmental Checker	Ms. Helen Cochrane	2859 1734
Gammon Construction Limited (M+ Museum)	Environmental Manager	Mr. Andy Leung	9489 0035
Gammon Construction Limited (L1)	Environmental Manager	Ms. Sammie Chan	9864 4296
Gammon Construction Limited (L2)	Environmental Manager	Mr. Ivan Chiu	9416 1664
Mott MacDonald Hong Kong Ltd.	Contractor's Environmental Team Leader	Mr. Thomas Chan	2828 5757
West Kowloon Cultural District Authority	Senior Project Manager (Safety, Health and Environment)	Mr. C.K. Wu	5506 9178

B. Tentative Construction Programme

M+ Museum



**CMWP Rev. 0_12 - Remaining On-Site Works (12th Update DD:
31Jan20)**

Date	Revision	Checked	Approved
01-Feb-19	CMWP Rev. 0 - Approved Master Programme	NS	BG
10-Feb-20	CMWP Rev.0_12 - 12th Update (dd: 31Jan20)	RJM	BG

CMWP - M Target Project Remaining Works Programme_12th Progress Update (DD: 31Jan2020)

ID	Activity	RD	BL Start	BL Finish	Fcast / Actual Start	Fcast / Actual Finish	BL Fin Var	Sch %	Curr %	2020								
										Qtr 1				Qtr 2				
										Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
7913	POD_GF_Z02a_FoH Toilet - Door / Ironmong	2	23-Oct-19	24-Oct-19	13-Mar-20	14-Mar-20	-113	100%	0%									
Toilet Lobby/Vestibule																		
7940	POD_GF_Z02a_FoH Toilet - MEP 1st fix	5	26-Feb-19	11-Mar-19	18-Nov-19 A	07-Feb-20	-270	100%	70%									
7935	POD_GF_Z02a_FoH Toilet - MEP 2nd fix	6	14-Mar-19	20-Mar-19	15-Jan-20 A	13-Feb-20	-267	100%	47%									
7939	POD_GF_Z02a_FoH Toilet - Ceiling rods	3	22-Feb-19	25-Feb-19	03-Feb-20	05-Feb-20	-280	100%	0%									
7934	POD_GF_Z02a_FoH Toilet - Ceiling grids	2	12-Mar-19	13-Mar-19	08-Feb-20	10-Feb-20	-270	100%	0%									
7936	POD_GF_Z02a_FoH Toilet - Ceiling finishes (Plywood backing for Timber fin)	4	11-Jul-19	15-Jul-19	12-Feb-20	15-Feb-20	-173	100%	0%									
7937	POD_GF_Z02a_FoH Toilet - MEP final fix	6	16-Jul-19	22-Jul-19	14-Feb-20	20-Feb-20	-171	100%	0%									
7938	POD_GF_Z02a_FoH Toilet - Floor concrete pavers	3	03-Sep-19	05-Sep-19	21-Feb-20	24-Feb-20	-135	100%	0%									
7936a	POD_GF_Z02a_FoH Toilet - Ceiling finishes (Timber)	4			22-Apr-20*	25-Apr-20	0%	0%										
7942	POD_GF_Z02a_FoH Toilet - Wall finishes (Timber)	6	06-Sep-19	12-Sep-19	28-Apr-20	05-May-20	-188	100%	0%									
7957	POD_GF_Z02b_BoH - B-wall/Dry wall, tie-bolt holes, plaster, screed, sealer	3	01-Apr-19	29-Apr-19	08-Jul-19 A	05-Feb-20	-227	100%	70%									
7944	POD_GF_Z02b_BoH - MEP 1st fix	4	04-May-19	15-Jun-19	16-Sep-19 A	06-Feb-20	-189	100%	80%									
7950	POD_GF_Z02b_BoH - Doors & Ironmong	4	09-Aug-19	15-Aug-19	23-Dec-19 A	07-Feb-20	-139	100%	40%									
7946	POD_GF_Z02b_BoH - MEP 2nd fix	7	20-Jun-19	11-Jul-19	03-Feb-20	10-Feb-20	-171	100%	0%									
7947	POD_GF_Z02b_BoH - Ceiling finishes (meta panel, board + fabric panels)	6	12-Jul-19	18-Jul-19	11-Feb-20	17-Feb-20	-171	100%	0%									
7949	POD_GF_Z02b_BoH - Wall finishes (paint, fabric panels)	6	19-Jul-19	25-Jul-19	14-Feb-20	20-Feb-20	-168	100%	0%									
7953	POD_GF_Z02b_BoH - MEP final fix	9	26-Jul-19	05-Aug-19	18-Feb-20	27-Feb-20	-165	100%	0%									
7951	POD_GF_Z02b_BoH - Floor finishes (sealer, carpet)	3	06-Aug-19	08-Aug-19	28-Feb-20	02-Mar-20	-165	100%	0%									
7971	POD_GF_Z3/3a/3b_FoH/BoH All Other Finishes (blkout curtain)/Make Good & Clean	24	10-Sep-19	10-Oct-19	09-Jul-20	05-Aug-20	-244	100%	0%									
Museum Shop No.1 (GF-1MF) - POD_GF_Z03 & GF_Z3a																		
8912	POD_GF_Z03 & Z03a_FoH - MEP 2nd fix	6	22-Jul-19	17-Aug-19	21-Oct-19 A	10-Feb-20	-139	100%	80%									
7963	POD_GF_Z03 & Z03a_FoH - Doors & Ironmong	2	22-Jul-19	23-Jul-19	23-Dec-19 A	04-Feb-20	-156	100%	50%									
8913	POD_GF_Z03 & Z03a_FoH - MEP final fix	12	19-Aug-19	31-Aug-19	04-Feb-20	17-Feb-20	-133	100%	0%									
7968	POD_GF_Z03b_BoH - Lift Lob & Fire Control Rm Final fins. (W_paint, door/ iron; F	6	26-Jul-19	08-Aug-19	19-Aug-19 A	08-Feb-20	-146	100%	75%									
7972	POD_GF_Z03b_BoH - Lug/Gen Storage 2 & Cor Builders Wrks	3	15-Apr-19	06-May-19	15-Jul-19 A	05-Feb-20	-222	100%	50%									
7974	POD_GF_Z03b_BoH - Lug/Gen Storage 2 & Corr final finishes (Timber @ G-1-012)	30	20-Aug-19	24-Sep-19	16-Jun-20	22-Jul-20	-244	100%	0%									
7976	POD_GF_Z03b_BoH - Baby Care Rm Bldrs Wrks/Dwall incl. concealed MEP condu	3	15-Apr-19	27-Apr-19	09-Dec-19 A	05-Feb-20	-228	100%	90%									
7979	POD_GF_Z03b_BoH - Baby Care Rm & Lob MEP 2nd & final fix	6	19-Jul-19	19-Aug-19	13-Jan-20 A	08-Feb-20	-137	100%	43%									
7977	POD_GF_Z03b_BoH - Baby Care Rm final finishes	30	20-Aug-19	24-Sep-19	10-Feb-20	14-Mar-20	-137	100%	0%									
8183	POD_GF_Z07_FoH Lob - Ceiling & wall sealer	3	23-Mar-19	06-Apr-19	29-Jul-19 A	05-Feb-20	-246	100%	75%									
8793	POD_GF_Z07_FoH Lob - MEP 2nd fix & final fix (after Pisa ceramic tube walls)	6	22-Jul-19	16-Sep-19	11-Nov-19 A	15-Feb-20	-120	100%	90%									
9541	POD_GF_Z07_FoH Lob - Install Metal Balustrade	5	24-Oct-19	20-Nov-19	18-Nov-19 A	08-Feb-20	-60	100%	90%									
8187	POD_GF_Z07_FoH Lob - Lay screwing/w/proof/insulation/final screed	18	09-Mar-19	11-Jun-19	12-Dec-19 A	22-Feb-20	-207	100%	30%									
8207	POD_GF_Z07_FoH Lob - Lay PC concrete planks	24	09-Sep-19	06-Nov-19	16-Dec-19 A	04-Mar-20	-93	100%	30%									
8189a	POD_GF_Z07_FoH Lob - Install security shutters	6			23-Dec-19 A	12-Feb-20	0	0%	37%									
8186	POD_GF_Z07_FoH Lob - All Other Finishes / Make Good & Clean	18	21-Nov-19	11-Dec-19	20-Feb-20	11-Mar-20	-69	100%	0%									
8798	POD_GF_Z08_Ext - Ceiling & wall sealer	5	25-May-19	19-Jun-19	03-May-19 A	07-Feb-20	-187	100%	95%									
8797	POD_GF_Z08_Ext - Patching-up tie bolt holes	7	18-May-19	08-Jun-19	15-Jul-19 A	10-Feb-20	-198	100%	95%									
8800	POD_GF_Z08_Ext - Floor concrete planks & Drains	18	18-May-19	20-Aug-19	24-Sep-19 A	28-Feb-20	-153	100%	37%									
8802	POD_GF_Z08_Ext - Install Balustrade	9	03-Jul-19	03-Oct-19	12-Dec-19 A	18-Feb-20	-108	100%	90%									
8808	POD_GF_Z08_Ext - MEP final fix @ floor level	24	07-Aug-19	03-Sep-19	15-Jan-20 A	03-Mar-20	-144	100%	30%									
8801	POD_GF_Z08_Ext - All Other Finishes / Make Good & Clean	24	19-Sep-19	18-Oct-19	12-Feb-20	10-Mar-20	-114	100%	0%									
8817	POD_GF_Z04_Ext - MEP 1st & 2nd fix (floor/ steps)	9	25-Jul-19	19-Sep-19	05-Nov-19 A	21-Feb-20	-122	100%	80%									
8810	POD_GF_Z04_Ext - C/S bedding, W/proof/screed & rail post/kickplate for balustrad</td																	

CMWP - M Target Project Remaining Works Programme_12th Progress Update (DD: 31Jan2020)

ID	Activity	RD	BL Start	BL Finish	Fcast / Actual Start	Fcast / Actual Finish	BL Fin Var	Sch %	Curr %	2020							
										Qtr 1				Qtr 2			
										Jan	Feb	Mar	Apr	May	Jun	Jul	Aug
Gallery 12 & 13, Open Gallery, Harbour View Gallery 2 and Gallery Circ. - POD_L2_Z03a (S26)																	
8574	POD_L2_Z03a_FoH - MEP 1st fix	3	27-Apr-19	24-Jun-19	25-Mar-19 A	05-Feb-20	-181	100%	95%								
8575	POD_L2_Z03a_FoH - MEP 2nd fix (partly)	6	15-Jul-19	10-Aug-19	08-Apr-19 A	08-Feb-20	-144	100%	90%								
8576	POD_L2_Z03a_FoH - Dry Wall Frame & Board (one side)	2	20-May-19	17-Jun-19	21-Jun-19 A	04-Feb-20	-186	100%	95%								
8579	POD_L2_Z03a_FoH - Dry Wall MEP Services/Conduits MEP 1st fix	3	18-Jun-19	16-Jul-19	19-Aug-19 A	06-Feb-20	-164	100%	90%								
8575a	POD_L2_Z03a_FoH - MEP 2nd fix	3			06-Nov-19 A	08-Feb-20	0%	90%									
8580a	POD_L2_Z03a_FoH - Ceiling board	6			21-Oct-19 A	11-Feb-20	0%	50%									
8575b	POD_L2_Z03a_FoH - MEP Final Fix	12			03-Feb-20	15-Feb-20	0%	0%									
8581	POD_L2_Z03a_FoH - Close Dry Wall / Board	3	23-Nov-19	17-Dec-19	14-Oct-19 A	10-Feb-20	-38	100%	95%								
8583	POD_L2_Z03a_FoH - Raised floor pedestal	6	22-Jul-19	27-Aug-19	16-Dec-19 A	12-Feb-20	-133	100%	50%								
8584	POD_L2_Z03a_FoH - Underfloor MEP 1st fix	7	05-Aug-19	23-Sep-19	19-Dec-19 A	14-Feb-20	-113	100%	70%								
9641	POD_L2_Z03a_FoH - Underfloor MEP 2nd fix	9	24-Sep-19	23-Oct-19	21-Dec-19 A	17-Feb-20	-91	100%	50%								
8585	POD_L2_Z03a_FoH - Raised floor panels incl. cut-outs	12	24-Oct-19	09-Nov-19	24-Dec-19 A	19-Feb-20	-78	100%	30%								
8580	POD_L2_Z03a_FoH - MEP final fix (in Raised Floor)	14	28-Oct-19	23-Nov-19	27-Dec-19 A	21-Feb-20	-68	100%	15%								
8572	POD_L2_Z03a_FoH - Door/ 2nos. SR3 O'S Doors / Ironmong	9	11-Nov-19	16-Nov-19	30-Dec-19 A	22-Feb-20	-75	100%	10%								
8577a	POD_L2_Z03a_FoH - Flr finishes (resilient layer, ply base)	14			22-Feb-20	09-Mar-20	0%	0%									
9686	POD_L2_Z03a_FoH - Install Roller Blinds	12	11-Feb-20	24-Feb-20	27-Mar-20	10-Apr-20	-39	0%	0%								
8587	POD_L2_Z03a_FoH - Ceiling finishes (insulation/acoustic plaster, Timber at Circ/Pa	30	06-Dec-19	07-Feb-20	22-Apr-20	27-May-20	-92	89.13%	0%								
8578	POD_L2_Z03a_FoH - Wall finishes (paint/Timber @ Circ/passage only)	36	20-Jan-20	25-Mar-20	29-Apr-20	10-Jun-20	-64	10%	0%								
8577	POD_L2_Z03a_FoH - Flr finishes (timber) + fir grilles	30	29-Feb-20	09-Apr-20	21-May-20	24-Jun-20	-64	0%	0%								
8590	POD_L2_Z03a_FoH - Facade timber mullion capping	12	10-Apr-20	23-Apr-20	11-Jun-20	24-Jun-20	-52	0%	0%								
BoH Internal - POD_L2_Z03b																	
8619	POD_L2_Z03b_BoH - MEP 2nd fix	3	03-Jun-19	24-Jun-19	10-Jun-19 A												

CMWP - M Target Project Remaining Works Programme_12th Progress Update (DD: 31Jan2020)

ID	Activity	RD	BL Start	BL Finish	Fcast / Actual Start	Fcast / Actual Finish	BL Fin Var	Sch %	Curr %	2020								
										Qtr 1		Qtr 2		Qtr 3				
										Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
6895	POD_B1_GW - Pisa Inner Glass Museum Caffe (B1_Z08) (Pisa 08-02) Oct_UPD: E	8	04-May-19	15-Jun-19	13-Jan-20 A	11-Feb-20	-193	100%	35%									
6895a	POD_B1_GW - Pisa Outer Glass Museum Caffe (B1_Z08) (Pisa 08-02) Oct_UPD: I	12			13-Jan-20 A	15-Feb-20		0%	35%									
7191a	POD_B1_GW - E+G/3+ Pisa Glass (North Entrance) (Pisa: 08-05) - Oct_UPD: EF 7i	4			21-Jan-20 A	06-Feb-20		0%	35%									
G/F to 1/M Soffit - Glass Walls, Columns & Walls Ceramic Cladding																		
Priority 1 - Atrium/Circ_Box & Cer_Tubes (MEP Plenum Voids)																		
Installation																		
8599	POD_GF_Z07_P1 - Pisa Install 1st Fix (shared access with MEP)	2	16-Apr-19	16-May-19	13-May-19 A	04-Feb-20	-212	100%	99%									
1001	POD_GF_Z07_P1 - G/M/8-13 Pisa Glass & Tube Walls (ACC 16Oct)	4	08-Jul-19	17-Aug-19	19-Aug-19 A	07-Feb-20	-137	100%	81%									
8596	POD_GF_Z07_P1 - B/G/8-13 Pisa Balance Glass & Tube Walls (ACC 19Oct)	9	08-Jun-19	20-Jul-19	16-Sep-19 A	12-Feb-20	-165	100%	83%									
8935	POD_GF_Z07_P1 - AE/9-11 Pisa Install Ceramic Tube Learning Centre (ACC 21 Se)	4	29-Jul-19	07-Sep-19	07-Oct-19 A	07-Feb-20	-119	100%	90%									
8946	POD_GF_Z07_P1 - AM/1-7 Pisa Glass & Tube Walls (ACC 19Oct)	5	17-May-19	28-Jun-19	26-Oct-19 A	07-Feb-20	-179	100%	74%									
8335	POD_GF_Z07_P1 - B/G/8-13 Pisa Lecture Theatre/Wshops Install Glass (ACC 9Ox)	4	06-Aug-19	17-Sep-19	03-Dec-19 A	06-Feb-20	-111	100%	90%									
Priority 2 - External Glass; Cer_Tubes (MEP Jet Nozzles)																		
Installation																		
9874	POD_GF_Z07_P2 - Pisa (all P2 areas) - Install 1st Fix (shared access with MEP)	6	08-May-19	06-Jun-19	15-Jun-19 A	08-Feb-20	-198	100%	83%									
8558	POD_GF_Z07_P2 - Pisa (all P2 areas) - Install Ceramic Tube Wall (ACC 26Nov)	6	29-Jun-19	10-Aug-19	16-Sep-19 A	12-Feb-20	-147	100%	74%									
8945	POD_GF_Z07_P2 - GM/8-13 Pisa - Install Glass Wall (ACC 26Nov) OctUPD: EF 6D	4	08-Jun-19	20-Jul-19	11-Nov-19 A	12-Feb-20	-165	100%	90%									
10111	POD_GF_Z07_P2 - BG/8-13 Pisa - Install Glass Wall (LC area) (ACC 18Nov) OctUF	5			06-Jan-20 A	07-Feb-20		0%	81%									
10109	POD_GF_Z07_P2 - AM/1-7 Pisa - Install Windows (3 off) (ACC 4Nov) OctUPD: EF 5	12			03-Feb-20	15-Feb-20		0%	0%									
Priority 3 - Decorative Walls & Dry Fix																		
Installation																		
9884	POD_GF_Z07_P3 - AM/1-7 Pisa - Ext. & Decorative Walls (ACC 5Dec) OctYPD: EF	7	30-Apr-19	13-Jun-19	01-Aug-19 A	10-Feb-20	-195	100%	88%									
9885	POD_GF_Z07_P3 - GM/8-13 Pisa - Ext. & Decorative Walls (ACC 2Dec) OctUPD: E	9	23-Apr-19	05-Jun-19	23-Sep-19 A	12-Feb-20	-203	100%	82%									
9886	POD_GF_Z07_P3 - BG/8-13 Pisa - Ext. & Decorative Walls (ACC 30Nov) OctUP: EI	9	18-May-19	29-Jun-19	04-Nov-19 A	12-Feb-20	-182	100%	81%									
2/F - Glass With Pre-cast Concrete Mullions																		
8603	POD_L2_Z04a_GW - BF/11-13 Pisa Install East GW	3	03-Jul-19	30-Jul-19	01-Oct-19 A	05-Feb-20	-151	100%	94%									
8953	POD_L2_Z04a_GW - BF/11-13 Pisa Install West GW	3	14-Aug-19	10-Sep-19	01-Oct-19 A	05-Feb-20	-115	100%	94%									
Corrugated Aluminum Perf. Panels & Pre-Cast Concrete Tubes																		
1228	POD_GF - Set Out & Install Angle Supports/Panels/Louvres - Type AAngle 186-En	12	16-Aug-19	04-Nov-19	27-Jul-19 A	25-Feb-20	-88	100%	80%									
1229	POD_GF - Set Out & Install Angle Supports/Panels/Louvres - Type B C way GL_A	20	28-Jun-19	13-Sep-19	09-Sep-19 A	25-Feb-20	-129	100%	80%									
1225	POD_GF - Set Out & Install Angle Supports/Panels/Louvres - Type C GL_1_H	20	10-Apr-19	22-May-19	21-Oct-19 A	25-Feb-20	-225	100%	79.99%									
1226	POD_GF - Set Out & Install Angle Supports/Panels/Louvres - Type C G_LH_F	20	23-May-19	27-Jun-19	21-Oct-19 A	25-Feb-20	-195	100%	79.98%									
1230	POD_GF - Set Out & Install Angle Supports/Panels/Louvres - Type B C way GL_H	20	16-Sep-19	05-Nov-19	21-Oct-19 A	25-Feb-20	-87	100%	79.99%									
1227	POD_GF - Set Out & Install Angle Supports/Panels/Louvres - Type A/C GL_F_angl	20	19-Jul-19	05-Sep-19	18-Nov-19 A	25-Feb-20	-136	100%	79.99%									
1231	POD_GF - Set Out & Install Angle Supports/Panels/Louvres - Type A/C wayGL_A-E	12	06-Nov-19	24-Dec-19	08-Jan-20 A	27-Feb-20	-47	100%	79.99%									
9780	POD_GF - Install Pre-Cast Concrete Tube at West (A+3-7)	24	23-Aug-19	20-Sep-19	03-Feb-20*	29-Feb-20	-128	100%	0%									
Vertical Transportation																		
Lifts																		
9333	POD_LT07 - Passenger Lift (B2 - 3F) - Lift Pit/Shft/Machine Room MEP 1st, 2nd &	12	11-Apr-19	21-Jun-19	23-Jul-19 A	15-Feb-20	-192	100%	82%									
9341	POD_LT08 - Passenger Lift (B2 - 2F) - Lift Pit/Shft/Machine Room MEP 1st, 2nd &	12	11-Apr-19	21-Jun-19	23-Jul-19 A	15-Feb-20	-192	100%	82%									
9323	POD_LT19 - Passenger/disabled Lift (B1 - GF) - Lift Pit/Shft/Machine Room MEP	4	27-May-19	06-Aug-19	16-Aug-19 A	06-Feb-20	-146	100%	98%									
9327	POD_LT22 - Passenger/disabled Lift (GF - 3F) - Lift Installation MEP 1st, 2nd & Fin	12	04-Jun-19	14-Aug-19	18-Nov-19 A	15-Feb-20	-147	100%	68%									
Fireman's Lifts																		
8950	POD_LT12_FS - Firemanpassenger/disabled Lift (B2-2F) - Lift Pit/Shft/Machine Rn	4	26-Mar-19	05-Jun-19	16-Aug-19 A	06-Feb-20	-197	10										

ID	Activity	RD	BL Start	BL Finish	Fcast/ Actual Start	Fcast/ Actual Finish	BL Fin Var	Sch %	Curr %	2020							
										Qtr 1				Qtr 2			
										Jan	Feb	Mar	Apr	May	Jun	Jul	Aug
9249	POD_ST71 - Wall Dust Sealer	26	20-Jul-19	19-Aug-19	23-Mar-20	22-Apr-20	-199	100%	0%								
9251	POD_ST71 - Stair Nosing Tile	13	14-Aug-19	28-Aug-19	27-Mar-20	11-Apr-20	-182	100%	0%								
9252	POD_ST71 - All Other Finishes / Make Good & Clean	12	22-Aug-19	04-Sep-19	13-Mar-20	25-Apr-20	-188	100%	0%								
9176	POD_ST30-31-32-33 - MEP 1st fix, 2nd fix	12	06-Aug-19	17-Sep-19	16-Sep-19 A	15-Feb-20	-119	100%	45%								
9178	POD_ST30-31-32-33 - Permanent Hand Rail	13	24-Sep-19	10-Oct-19	21-Oct-19 A	17-Feb-20	-102	100%	90%								
9174	POD_ST30-31-32-33 - Ceiling Dust Sealer	26	23-Jul-19	21-Aug-19	02-Mar-20*	31-Mar-20	-179	100%	0%								
9177	POD_ST30-31-32-33 - Wall Dust Sealer	26	31-Aug-19	02-Oct-19	09-Mar-20	08-Apr-20	-151	100%	0%								
9180	POD_ST30-31-32-33 - All Other Finishes (DOOR) / Make Good & Clean	12	05-Oct-19	19-Oct-19	28-Mar-20	11-Apr-20	-140	100%	0%								
9184	POD_ST73 - MEP 1st fix, 2nd fix	12	14-Aug-19	25-Sep-19	16-Sep-19 A	15-Feb-20	-112	100%	82.5%								
9186	POD_ST73 - Permanent Hand Rail	13	03-Oct-19	18-Oct-19	08-Feb-20	22-Feb-20	-100	100%	0%								
9183	POD_ST73 - Floor W/proof Screed	26	07-Aug-19	05-Sep-19	16-Mar-20*	15-Apr-20	-178	100%	0%								
9182	POD_ST73 - Ceiling Dust Sealer	26	31-Jul-19	29-Aug-19	19-Mar-20*	18-Apr-20	-187	100%	0%								
9185	POD_ST73 - Wall Dust Sealer	26	09-Sep-19	11-Oct-19	26-Mar-20	25-Apr-20	-159	100%	0%								
9187	POD_ST73 - Stair Nosing Tile	13	05-Oct-19	21-Oct-19	31-Mar-20	15-Apr-20	-142	100%	0%								
9188	POD_ST73 - All Other Finishes / Make Good & Clean	12	15-Oct-19	28-Oct-19	16-Apr-20	29-Apr-20	-148	100%	0%								
9192	POD_ST74 - MEP 1st fix, 2nd fix	12	03-Aug-19	13-Sep-19	16-Sep-19 A	15-Feb-20	-121	100%	82.5%								
9194	POD_ST74 - Permanent Hand Rail	13	21-Sep-19	08-Oct-19	13-Feb-20	27-Feb-20	-113	100%	0%								
9191	POD_ST74 - Floor W/proof Screed	26	27-Jul-19	26-Aug-19	09-Mar-20*	08-Apr-20	-181	100%	0%								
9190	POD_ST74 - Ceiling Dust Sealer	26	20-Jul-19	19-Aug-19	12-Mar-20*	11-Apr-20	-190	100%	0%								
9193	POD_ST74 - Wall Dust Sealer	26	29-Aug-19	28-Sep-19	19-Mar-20	18-Apr-20	-162	100%	0%								
9195	POD_ST74 - Stair Nosing Tile	13	24-Sep-19	10-Oct-19	24-Mar-20	08-Apr-20	-145	100%	0%								
9196	POD_ST74 - All Other Finishes / Make Good & Clean	12	03-Oct-19	17-Oct-19	09-Apr-20	22-Apr-20	-151	100%	0%								
9200	POD_ST34 - MEP 1st fix, 2nd fix	12	03-Aug-19	13-Sep-19	02-Sep-19 A	15-Feb-20	-121	100%	45%								
9202	POD_ST34 - Permanent Hand Rail	13	21-Sep-19	08-Oct-19	18-Nov-19 A	17-Feb-20	-104	100%	90%								
9198	POD_ST34 - Ceiling Dust Sealer	26	20-Jul-19	19-Aug-19	12-Mar-20*	11-Apr-20	-190	100%	0%								
9201	POD_ST34 - Wall Dust Sealer	26	29-Aug-19	28-Sep-19	19-Mar-20	18-Apr-20	-162	100%	0%								
9204	POD_ST34 - All Other Finishes / Make Good & Clean	12	03-Oct-19	17-Oct-19	09-Apr-20	22-Apr-20	-151	100%	0%								
9208	POD_ST72 - MEP 1st fix, 2nd fix	12	03-Aug-19	13-Sep-19	09-Sep-19 A	15-Feb-20	-121	100%	75%								
9210	POD_ST72 - Permanent Hand Rail	13	21-Sep-19	08-Oct-19	15-Feb-20	29-Feb-20	-115	100%	0%								
9207	POD_ST72 - Floor W/proof Screed	26	27-Jul-19	26-Aug-19	16-Mar-20*	15-Apr-20	-187	100%	0%								
9206	POD_ST72 - Ceiling Dust Sealer	26	20-Jul-19	19-Aug-19	19-Mar-20*	18-Apr-20	-196	100%	0%								
9209	POD_ST72 - Wall Dust Sealer	26	29-Aug-19	28-Sep-19	26-Mar-20	25-Apr-20	-168	100%	0%								
9211	POD_ST72 - Stair Nosing Tile	13	24-Sep-19	10-Oct-19	31-Mar-20	15-Apr-20	-151	100%	0%								
9212	POD_ST72 - All Other Finishes / Make Good & Clean	12	03-Oct-19	17-Oct-19	16-Apr-20	29-Apr-20	-157	100%	0%								
9216	POD_ST75 - MEP 1st fix, 2nd fix	12	20-May-19	02-Jul-19	03-Feb-20	15-Feb-20	-184	100%	0%								
9219	POD_ST75 - Stair Nosing Tile	13	11-Jul-19	25-Jul-19	03-Feb-20	17-Feb-20	-165	100%	0%								
9218	POD_ST75 - Permanent Hand Rail	13	09-Jul-19	23-Jul-19	15-Feb-20	29-Feb-20	-178	100%	0%								
9215	POD_ST75 - Floor W/proof Screed	26	13-May-19	12-Jun-19	19-Mar-20*	18-Apr-20	-253	100%	0%								
9214	POD_ST75 - Ceiling Dust Sealer	26	06-May-19	04-Jun-19	23-Mar-20*	22-Apr-20	-262	100%	0%								
9217	POD_ST75 - Wall Dust Sealer	26	15-Jun-19	16-Jul-19	30-Mar-20	29-Apr-20	-234	100%	0%								
9220	POD_ST75 - All Other Finishes / Make Good & Clean	12	19-Jul-19	01-Aug-19	20-Apr-20	04-May-20	-223	100%	0%								
9224	POD_ST16 - MEP 1st fix, 2nd fix	12	05-Jun-19	18-Jul-19	14-Oct-19 A	15-Feb-20	-170	100%	75%								
9222	POD_ST16 - Ceiling Dust Sealer	26	22-May-19	21-Jun-19	09-Mar-20*	08-Apr-20	-236	100%	0%								
9225	POD_ST16 - Wall Dust Sealer	26	03-Jul-19	01-Aug-19	16-Mar-20	15-Apr-20	-208	100%	0%								
9228	POD_ST16 - All Other Finishes (DOOR) / Make Good & Clean	12	05-Aug-19	17-Aug-19	09-Apr-20	22-Apr-20	-200	100%	0%								
9232	POD_ST09 - MEP 1st fix, 2nd fix	9	20-May-19	02-Jul-19	26-Apr-19 A	12-Feb-20	-181	100%	90%								
9230	POD_ST09 - Ceiling Dust Sealer	26	06-May-19	04-Jun-19	09-Mar-20*	08-Apr-20	-250	100%	0%								
9233	POD_ST09 - Wall Dust Sealer	26	15-Jun-19	16-Jul-19	16-Mar-20	15-Apr-20	-222	100%	0%								
9236	POD_ST09 - All Other Finishes (DOOR) / Make Good & Clean	12	19-Jul-19	01-Aug-19	06-Apr-20	18-Apr-20	-211	100%	0%					</			

ID	Activity	RD	BL Start	BL Finish	Fcast / Actual Start	Fcast / Actual Finish	BL Fin Var	Sch %	Curr %	2020								
										Qtr 1				Qtr 2				
										Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10072	POD_ST79 - Wall Dust Sealer	26	23-Sep-19	24-Oct-19	12-Mar-20	11-Apr-20	-136	100%	0%									
10075	POD_ST79 - All Other Finishes / Make Good & Clean	12	28-Oct-19	09-Nov-19	01-Apr-20	15-Apr-20	-125	100%	0%									
10081	POD_ST24 - Permanent Hand Rail	13	21-Jun-19	06-Jul-19	04-Nov-19 A	17-Feb-20	-181	100%	90%									
10083	POD_ST24 - All Other Finishes / Make Good & Clean	12	03-Jul-19	16-Jul-19	18-Nov-19 A	22-Apr-20	-228	100%	50.01%									
10079	POD_ST24 - MEP 1st fix, 2nd fix	12	03-May-19	14-Jun-19	03-Feb-20	15-Feb-20	-198	100%	0%									
10077	POD_ST24 - Ceiling Dust Sealer	26	18-Apr-19	18-May-19	12-Mar-20*	11-Apr-20	-267	100%	0%									
10080	POD_ST24 - Wall Dust Sealer	26	29-May-19	28-Jun-19	19-Mar-20	18-Apr-20	-239	100%	0%									
10091	POD_ST56B - All Other Finishes / Make Good & Clean	12	12-Nov-19	25-Nov-19	25-Nov-19 A	22-Apr-20	-118	100%	50.01%									
10087	POD_ST56B - MEP 1st fix, 2nd fix	12	11-Sep-19	25-Oct-19	03-Feb-20*	15-Feb-20	-88	100%	0%									
10085	POD_ST56B - Ceiling Dust Sealer	26	28-Aug-19	27-Sep-19	12-Mar-20	11-Apr-20	-157	100%	0%									
10088	POD_ST56B - Wall Dust Sealer	26	10-Oct-19	08-Nov-19	19-Mar-20	18-Apr-20	-129	100%	0%									
Testing & Commissioning																		
HVAC																		
7564	POD_MEPM_Wild_Air - Pipes Flushing w/ Water Sample Test (Excl. Cinema Areas C1)	14	06-Nov-19	22-Nov-19	26-Oct-19 A	21-Feb-20	-69	100%	90%									
7568	POD_MEPM_Wild_Air - AHU SAT & LMCP SAT	9	02-Nov-19	03-Dec-19	26-Oct-19 A	12-Feb-20	-53	100%	80%									
7569	POD_MEPM_Wild_Air - Start Up AHU @ Each Level	12	03-Dec-19	17-Dec-19	30-Nov-19 A	15-Feb-20	-44	100%	30%									
7570	POD_MEPM_Wild_Air - Air Flow Test	24	17-Dec-19	16-Jan-20	07-Feb-20	05-Mar-20	-36	100%	0%									
7572	POD_MEPM_Wild_Air - Air System Balancing	60	07-Feb-20	11-May-20	21-Mar-20*	01-Jun-20	-19	0%	0%									
7571	POD_MEPM_Wild_Air - AHU Performance Test	15	16-Jan-20	07-Feb-20	15-May-20*	01-Jun-20	-97	62.96%	0%									
Electrical & Controls																		
9469	POD_EL - Test non-FSD Lifts w/ Permanent Power (9 nos)	24	15-Aug-19	11-Sep-19	02-Sep-19 A	29-Feb-20	-135	100%	80%									
7585	POD_EL - Power & Distribution Insulation/Polarity Checks	42	26-Nov-19	09-Jan-20	13-Nov-19 A	23-Mar-20	-57	100%	50%									
9468	POD_EL - Test FSD Lifts w/ Permanent Power (4 nos)	22	13-Sep-19	21-Sep-19	19-Nov-19 A	27-Feb-20	-126	100%	74.99%									
7586	POD_EL - Power & Distribution Functional Components Test	48	03-Dec-19	16-Jan-20	21-Nov-19 A	30-Mar-20	-57	100%	35%									
9470	POD_EL - Test Escalators w/ Permanent Power for ES01 to 06, ES11 to 12	28	02-Nov-19	29-Nov-19	03-Mar-20	30-Mar-20	-80	100%	50%									
7580	POD_EL - Lighting & Control T&C	36	17-Dec-19	07-Feb-20	25-Feb-20	07-Apr-20	-51	87.65%	0%									
7583	POD_EL - AV Systems Test	36	17-Dec-19	07-Feb-20	25-Feb-20	07-Apr-20	-51	87.65%	0%									
9540	POD_EL - Test Escalators w/ Permanent Power for ES 03 to 06, ES11 to 14 (High L	24	02-Nov-19	29-Nov-19	03-Mar-20	30-Mar-20	-95	100%	0%									
7577	POD_EL - UPS T&C	24	02-Jan-20	07-Feb-20	10-Mar-20	07-Apr-20	-51	81.48%	0%									
7584	POD_EL - BMS Systems Test	24	02-Jan-20	07-Feb-20	10-Mar-20	07-Apr-20	-51	81.48%	0%									
Plumbing & Drainage																		
1195	POD_P&D - Hydraulic Tests P&D	30	08-Oct-19	02-Dec-19	25-Sep-19 A	23-Mar-20	-87	100%	80%									
1197	POD_P&D - Equipment Test & Pumps Rotation Checks	36	05-Nov-19	02-Dec-19	04-Nov-19 A	25-Mar-20	-89	100%	30%									
Fire Services																		
1196	POD_FS - FS Hydraulic Test Pipe Works	42	11-Oct-19	05-Dec-19	28-Sep-19 A	26-Mar-20	-87	100%	70%									
7587	POD_FS - FS Power & Controls Insulation/Continuity/Polarity Checks	36	24-Oct-19	05-Dec-19	22-Oct-19 A	25-Mar-20	-87	100%	60%									
7589	POD_FS - Staircases Pressurisation Test	21	05-Nov-19	17-Dec-19	05-Dec-19 A	26-Feb-20	-53	100%	30%									
AUDIT	POD_FS - Auditorium Air Flow Test	18	02-Dec-19	21-Dec-19	06-Feb-20	26-Feb-20	-48	100%	0%									
POD_L2	POD_FS - L2 Galleries and Lobby Air Flow Test (*assume temp doors/windows, if late	30	02-Dec-19	07-Jan-20	08-Feb-20	13-Mar-20	-50	100%	0%									
7595	POD_FS - Gas Flooding Test	18	14-Nov-19	05-Dec-19	13-Feb-20	04-Mar-20	-69	100%	0%									
ATRIUM	POD_FS - Atrium & Circulation Box Air Flow Test (*assume temp doors/windows, if late)	36	02-Dec-19	14-Jan-20	17-Feb-20	28-Mar-20	-57	100%	0%									
9293	POD_FS - Fire Shutters & Smoke Curtains Test (*2 shifts)	24	07-Nov-19	05-Dec-19	17-Feb-20	16-Mar-20	-78	100%	0%									
7594	POD_FS - Smoke Extraction Test	36	08-Feb-20	21-Feb-20	02-Mar-20	13-Apr-20	-43	0%	0%									
7592	POD_FS - AFA Devices Loop & Function Test (*2 shifts)	24	21-Nov-19	19-Dec-19	18-Mar-20	16-Apr-20	-92	100%	0%									
7590	POD_FS - Sprinkler & Pre-action System Test (*2 shifts)	24	21-Nov-19	19-Dec-19	19-Mar-20	17-Apr-20	-93	100%	0%									
7596	POD_FS - Integrated Systems Test & Hot Smoke Test (w FSD)	12	08-Feb-20	21-Feb-20	11-May-20	23-May-20	-77	0%	0%									
M+TOWER																		

CMWP - M Target Project Remaining Works Programme_12th Progress Update (DD: 31Jan2020)

ID	Activity	RD	BL Start	BL Finish	Fcast / Actual Start	Fcast / Actual Finish	BL Fin Var	Sch %	Curr %	2020								
										Qtr 1				Qtr 2				
										Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
3451	TW_L6_Z03_Toilet - Wall finishes (tiling)	12	17-Oct-19	01-Nov-19	14-Oct-19 A	15-Feb-20	-82	100%	80%	<div style="width: 80%; background-color: #ff0000; height: 10px;"></div>	<div style="width: 100%; background-color: #ff0000; height: 10px;"></div>	<div style="width: 0%; background-color: #ff0000; height: 10px;"></div>						
3442	TW_L6_Z03_Toilet - Ceiling Rods/ Grids	2	06-Jul-19	10-Jul-19	11-Nov-19 A	04-Feb-20	-167	100%	70%	<div style="width: 70%; background-color: #ff0000; height: 10px;"></div>	<div style="width: 100%; background-color: #ff0000; height: 10px;"></div>	<div style="width: 0%; background-color: #ff0000; height: 10px;"></div>						
3447	TW_L6_Z03_Toilet - Door Frame	2	20-Jun-19	21-Jun-19	06-Jan-20 A	04-Feb-20	-182	100%	70%	<div style="width: 70%; background-color: #ff0000; height: 10px;"></div>	<div style="width: 100%; background-color: #ff0000; height: 10px;"></div>	<div style="width: 0%; background-color: #ff0000; height: 10px;"></div>						
3443	TW_L6_Z03_Toilet - Close ceiling (board) incl. Cut-Outs	5	01-Aug-19	07-Aug-19	03-Feb-20	07-Feb-20	-146	100%	0%	<div style="width: 0%; background-color: #ff0000; height: 10px;"></div>	<div style="width: 0%; background-color: #ff0000; height: 10px;"></div>	<div style="width: 0%; background-color: #ff0000; height: 10px;"></div>	<div style="width: 0%; background-color: #ff0000; height: 10px;"></div>	<div style="width: 0%; background-color: #ff0000; height: 10px;"></div>	<div style="width: 0%; background-color: #ff0000; height: 10px;"></div>	<div style="width: 0%; background-color: #ff0000; height: 10px;"></div>	<div style="width: 0%; background-color: #ff0000; height: 10px;"></div>	<div style="width: 0%; background-color: #ff0000; height: 10px;"></div>
3477	TW_L6_Z03_Toilet - Ceiling Finishes (painting)	4	08-Aug-19	12-Aug-19	06-Feb-20	10-Feb-20	-144	100%	0%	<div style="width: 0%; background-color: #ff0000; height: 10px;"></div>	<div style="width: 0%; background-color: #ff0000; height: 10px;"></div>	<div style="width: 0%; background-color: #ff0000; height: 10px;"></div>	<div style="width: 0%; background-color: #ff0000; height: 10px;"></div>	<div style="width: 0%; background-color: #ff0000; height: 10px;"></div>	<div style="width: 0%; background-color: #ff0000; height: 10px;"></div>	<div style="width: 0%; background-color: #ff0000; height: 10px;"></div>	<div style="width: 0%; background-color: #ff0000; height: 10px;"></div>	<div style="width: 0%; background-color: #ff0000; height: 10px;"></div>
3441	TW_L6_Z03_Toilet - All Other Finishes / Make Good & Clean	12	05-Nov-19	18-Nov-19	21-Feb-20	05-Mar-20	-84	100%	0%	<div style="width: 0%; background-color: #ff0000; height: 10px;"></div>	<div style="width: 0%; background-color: #ff0000; height: 10px;"></div>	<div style="width: 0%; background-color: #ff0000; height: 10px;"></div>	<div style="width: 0%; background-color: #ff0000; height: 10px;"></div>	<div style="width: 0%; background-color: #ff0000; height: 10px;"></div>	<div style="width: 0%; background-color: #ff0000; height: 10px;"></div>	<div style="width: 0%; background-color: #ff0000; height: 10px;"></div>	<div style="width: 0%; background-color: #ff0000; height: 10px;"></div>	<div style="width: 0%; background-color: #ff0000; height: 10px;"></div>
3440	TW_L6_Z03_Toilet - Door / Ironmong	2	09-Nov-19	11-Nov-19	26-Feb-20	27-Feb-20	-84	100%	0%	<div style="width: 0%; background-color: #ff0000; height: 10px;"></div>	<div style="width: 0%; background-color: #ff0000; height: 10px;"></div>	<div style="width: 0%; background-color: #ff0000; height: 10px;"></div>	<div style="width: 0%; background-color: #ff0000; height: 10px;"></div>	<div style="width: 0%; background-color: #ff0000; height: 10px;"></div>	<div style="width: 0%; background-color: #ff0000; height: 10px;"></div>	<div style="width: 0%; background-color: #ff0000; height: 10px;"></div>	<div style="width: 0%; background-color: #ff0000; height: 10px;"></div>	<div style="width: 0%; background-color: #ff0000; height: 10px;"></div>
Level 7																		
ABWF & MEP Works																		
Raised Floor Area (Offices, Concourse, Lobbies) - TW_L7_Z01																		
3373	TW_L7_Z01_RF.Area - MEP final fix (excl. offices)	6	18-Jul-19	31-Jul-19	12-Aug-19 A	08-Feb-20	-153	100%	90%	<div style="width: 90%; background-color: #ff0000; height: 10px;"></div>	<div style="width: 100%; background-color: #ff0000; height: 10px;"></div>	<div style="width: 0%; background-color: #ff0000; height: 10px;"></div>						
3396	TW_L7_Z01_RF.Area - Final floor finishes (timber flooring)	20	05-Sep-19	28-Sep-19	01-Jun-20	23-Jun-20	-217	100%	0%	<div style="width: 0%; background-color: #ff0000; height: 10px;"></div>	<div style="width: 100%; background-color: #ff0000; height: 10px;"></div>	<div style="width: 0%; background-color: #ff0000; height: 10px;"></div>						
3419	TW_L7_Z01_RF.Area - Bamboo Capping	6	30-Sep-19	08-Oct-19	24-Jun-20	02-Jul-20	-217	100%	0%	<div style="width: 0%; background-color: #ff0000; height: 10px;"></div>	<div style="width: 100%; background-color: #ff0000; height: 10px;"></div>	<div style="width: 0%; background-color: #ff0000; height: 10px;"></div>						
3397	TW_L7_Z01_RF.Offices - Glass Partition & Doors/Ironmong	9	27-Sep-19	08-Oct-19	08-Jul-19 A	12-Feb-20	-100	100%	60%	<div style="width: 60%; background-color: #ff0000; height: 10px;"></div>	<div style="width: 100%; background-color: #ff0000; height: 10px;"></div>	<div style="width: 0%; background-color: #ff0000; height: 10px;"></div>						
3395	TW_L7_Z01_RF.Offices - MEP 2nd & final fix (offices)	6	29-Aug-19	11-Sep-19	12-Aug-19 A	08-Feb-20	-117	100%	70%	<div style="width: 70%; background-color: #ff0000; height: 10px;"></div>	<div style="width: 100%; background-color: #ff0000; height: 10px;"></div>	<div style="width: 0%; background-color: #ff0000; height: 10px;"></div>						
3400	TW_L7_Z01_RF.Offices - Wall Painting	15	13-Sep-19	19-Sep-19	09-Sep-19 A	19-Feb-20	-120	100%	70%	<div style="width: 70%; background-color: #ff0000; height: 10px;"></div>	<div style="width: 100%; background-color: #ff0000; height: 10px;"></div>	<div style="width: 0%; background-color: #ff0000; height: 10px;"></div>						
4250	TW_L7_Z01_RF.Offices - Fixed Furniture	6	02-Oct-19	09-Oct-19	24-Jun-20	02-Jul-20	-216	100%	0%	<div style="width: 0%; background-color: #ff0000; height: 10px;"></div>	<div style="width: 100%; background-color: #ff0000; height: 10px;"></div>	<div style="width: 0%; background-color: #ff0000; height: 10px;"></div>						
3401	TW_L7_Z01_RF.Area - All Other Finishes / Make Good & Clean	12	02-Oct-19	16-Oct-19	24-Jun-20	09-Jul-20	-216	100%	0%	<div style="width: 0%; background-color: #ff0000; height: 10px;"></div>	<div style="width: 100%; background-color: #ff0000; height: 10px;"></div>	<div style="width: 0%; background-color: #ff0000; height: 10px;"></div>						
BoH Plant Rooms, Corridors & Lift Lobbies - TW_L7_Z02																		
3427	TW_L7_Z02_BoH - Close Dry Wall	2	17-May-19	23-May-19	08-Jul-19 A	04-Feb-20	-206	100%	95%	<div style="width: 95%; background-color: #ff0000; height: 10px;"></div>	<div style="width: 100%; background-color: #ff0000; height: 10px;"></div>	<div style="width:						

CMWP - M Target Project Remaining Works Programme_12th Progress Update (DD: 31Jan2020)

ID	Activity	RD	BL Start	BL Finish	Fcast / Actual Start	Fcast / Actual Finish	BL Fin Var	Sch %	Curr %	2020								
										Qtr 1				Qtr 2				
										Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
3233	TW_L10_Z03_Toilet - Dry Wall Closing Board	1	05-Jul-19	09-Jul-19	22-Jul-19 A	03-Feb-20	-167	100%	95%									
3203	TW_L10_Z03_Toilet - MEP 2nd fix	3	13-Aug-19	02-Sep-19	25-Jul-19 A	06-Feb-20	-123	100%	97%									
3205	TW_L10_Z03_Toilet - MEP final fix	9	16-Sep-19	21-Sep-19	21-Oct-19 A	13-Feb-20	-113	100%	50%									
3209	TW_L10_Z03_Toilet - Sanitary ware & fittings	20	22-Nov-19	28-Nov-19	21-Oct-19 A	26-Feb-20	-68	100%	20%									
3204	TW_L10_Z03_Toilet - Door Frame	2	24-Jul-19	25-Jul-19	11-Nov-19 A	04-Feb-20	-154	100%	70%									
3199	TW_L10_Z03_Toilet - Ceiling Rods/ Grids	4	08-Aug-19	12-Aug-19	03-Feb-20	06-Feb-20	-141	100%	0%									
3200	TW_L10_Z03_Toilet - Close ceiling (board) inc. Cut-Outs	6	03-Sep-19	09-Sep-19	03-Feb-20	08-Feb-20	-119	100%	0%									
3196	TW_L10_Z03_Toilet - Dry Wall Frame & Board - DR63 (external)	12	26-Jul-19	08-Aug-19	03-Feb-20*	15-Feb-20	-152	100%	0%									
3208	TW_L10_Z03_Toilet - Wall finishes (tiling)	14	06-Nov-19	21-Nov-19	04-Feb-20	19-Feb-20	-68	100%	0%									
3234	TW_L10_Z03_Toilet - Ceiling Finishes (painting)	4	10-Sep-19	13-Sep-19	07-Feb-20	11-Feb-20	-117	100%	0%									
3198	TW_L10_Z03_Toilet - All Other Finishes / Make Good & Clean	12	25-Nov-19	07-Dec-19	22-Feb-20	06-Mar-20	-68	100%	0%									
3197	TW_L10_Z03_Toilet - Door / Ironmong	2	29-Nov-19	30-Nov-19	27-Feb-20	28-Feb-20	-68	100%	0%									
Level 11																		
ABWF & MEP Works																		
Raised Floor Area (Offices, Concourse, Lobbies) - TW_L11_Z01																		
4505	TW_L11_Z01_RF.Area - MEP 1st fix	3	26-Feb-19	23-Apr-19	16-Apr-19 A	05-Feb-20	-232	100%	91%									
4506	TW_L11_Z01_RF.Area - MEP 2nd fix	9	02-Jul-19	22-Jul-19	15-Jul-19 A	14-Feb-20	-166	100%	83%									
3183	TW_L11_Z01_RF.Area - MEP 1st fix (Lighting Conduits)	2	08-Nov-18	14-Nov-18	23-Sep-19 A	04-Feb-20	-359	100%	90%									
4508	TW_L11_Z01_RF.Area - MEP final fix (except offices)	12	23-Jul-19	05-Aug-19	04-Nov-19 A	18-Feb-20	-157	100%	20%									
4507	TW_L11_Z01_RF.Area - Extend Drippers & Install Ceiling Grids (except offices)	9	24-Apr-19	06-May-19	03-Feb-20	12-Feb-20	-228	100%	0%									
3184	TW_L11_Z01_RF.Area - Close ceiling (slat ceiling) (excl. offices)	18	23-Jul-19	29-Jul-19	01-Jun-20	20-Jun-20	-267	100%	0%									
3154	TW_L11_Z01_RF.Area - Final floor finishes (timber flooring)	17	11-Sep-19	02-Oct-19	29-Jun-20	18-Jul-20	-235	100%	0%									
3177	TW_L11_Z01_RF.Area - Bamboo Capping	6	03-Oct-19	10-Oct-19	20-Jul-20	25-Jul-20	-235	100%	0%									
3501	TW_L11_Z01_RF.Area - Bamboo Planks Finish on Wall & Ceiling	4	03-Oct-19	09-Oct-19	20-Jul-20	24-Jul-20	-235	100%	0%									
3158	TW_L11_Z01_RF.Offices - Wall Painting	30	16-Sep-19	20-Sep-19	18-Sep-19 A	07-Mar-20	-134	100%	70%		<img alt="Timeline bar from							

ID	Activity	RD	BL Start	BL Finish	Fcast / Actual Start	Fcast / Actual Finish	BL Fin Var	Sch %	Curr %	2020								
										Qtr 1				Qtr 2				
										Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
3669	TW_L13_Z03_Toilet - Dry Wall Closing Board	8	29-May-19	06-Jun-19	21-Jan-20 A	11-Feb-20	-200	100%	80%									
3660	TW_L13_Z03_Toilet - Door Frame	2	19-Jun-19	20-Jun-19	06-Feb-20	07-Feb-20	-186	100%	0%									
3654	TW_L13_Z03_Toilet - All Other Finishes / Make Good & Clean	12	09-Dec-19	21-Dec-19	21-Feb-20	05-Mar-20	-55	100%	0%									
3653	TW_L13_Z03_Toilet - Door / Ironmong	2	13-Dec-19	14-Dec-19	26-Feb-20	27-Feb-20	-55	100%	0%									
BoH Kitchen - TW_L13_Z04																		
3631	TW_L13_Z04_Kitchen - MEP 1st fix	6	01-Apr-19	15-Apr-19	02-May-19 A	08-Feb-20	-242	100%	92%									
3832	TW_L13_Z04_Kitchen - Wall & Floor Tiles	15	04-May-19	16-May-19	04-Nov-19 A	19-Feb-20	-226	100%	60%									
3765	TW_L13_Z04_Kitchen - MEP 2nd fix	12	18-Apr-19	25-Apr-19	11-Nov-19 A	15-Feb-20	-240	100%	99%									
3628	TW_L13_Z04_Kitchen - MEP final Fix	21	21-May-19	24-May-19	23-Dec-19 A	28-Feb-20	-226	100%	10%									
3831	TW_L13_Z04_Kitchen - Ceiling Paint	4	16-May-19	21-May-19	20-Feb-20	25-Feb-20	-226	100%	0%									
4136	TW_L13_Z04_Kitchen - All Other Finishes (DOOR) / Make Good & Clean	6	21-May-19	28-May-19	28-Feb-20	06-Mar-20	-229	100%	0%									
Level 14																		
ABWF & MEP Works																		
FoH Areas (Offices, Concourse & Lobbies) - TW_L14_Z01																		
3793	TW_L14_Z01_FoH - MEP 1st fix	3	26-Feb-19	23-Apr-19	02-May-19 A	05-Feb-20	-232	100%	90%									
3798	TW_L14_Z01_FoH - MEP 2nd fix	5	24-Apr-19	15-May-19	15-Jul-19 A	07-Feb-20	-216	100%	90%									
3799	TW_L14_Z01_FoH - MEP final fix	9	21-Aug-19	03-Sep-19	23-Dec-19 A	12-Feb-20	-127	100%	20%									
3791	TW_L14_Z01_FoH - Ceiling Sealer	3	08-Dec-18	14-Dec-18	03-Feb-20*	05-Feb-20	-334	100%	0%									
3801	TW_L14_Z01_FoH - Wall finishes (painting or sealer)	5	28-Aug-19	02-Sep-19	08-Feb-20	13-Feb-20	-129	100%	0%									
3803	TW_L14_Z01_FoH - All Other Finishes / Make Good & Clean	12	02-Sep-19	17-Sep-19	25-Feb-20	09-Mar-20	-139	100%	0%									
BoH Plant Rooms, Corridors & Lift Lobbies - TW_L14_Z02																		
3594	TW_L14_Z02_BoH - MEP 1st fix	3	13-Apr-19	18-May-19	06-May-19 A	06-Feb-20	-212	100%	90%									
3596	TW_L14_Z02_BoH - MEP 2nd fix	4	03-Aug-19	23-Aug-19	22-Jul-19 A	08-Feb-20	-133	100%	90%									
3593	TW_L14_Z02_BoH - Wall & Ceiling Sealer	3	06-Apr-19	11-Apr-19	12-Aug-19 A	05-Feb-20	-242	100%	5%									
3597	TW_L14_Z02_BoH - Door Frame & Plastering of Perimeter Edges	6	20-May-19	28-May-19	16-Sep-19 A	08-Feb-20	-206	100%	57%									
3592	TW_L14_Z02_BoH - Misc Metal Works / Access Panels	12	24-Aug-19	30-Aug-19	14-Oct-19 A	15-Feb-20	-133	100%	67%									
3606	TW_L14_Z02_BoH - MEP final fix	9	11-Sep-19	18-Sep-19	23-Dec-19 A	14-Feb-20	-117	100%	20%									
3590	TW_L14_Z02_BoH - Door / Ironmong / Hose Reel Cabs	6	24-Aug-19	04-Sep-19	06-Jan-20 A	12-Feb-20	-126	100%	70%									
3603	TW_L14_Z02_BoH - Wall Plastering/ Rendering	6	29-Mar-19	15-Apr-19	03-Feb-20*	08-Feb-20	-242	100%	0%									
3604	TW_L14_Z02_BoH - Wall Epoxy/Emulsion Paint	7	24-Aug-19	10-Sep-19	05-Feb-20	12-Feb-20	-121	100%	0%									
3595	TW_L14_Z02_BoH - Seal Wall Opening	6	20-May-19	25-May-19	07-Feb-20	13-Feb-20	-212	100%	0%									
3600	TW_L14_Z02_BoH - Lobbies & Corr Close ceiling (board) incl. Cut-Outs	10	24-Aug-19	04-Sep-19	10-Feb-20	20-Feb-20	-133	100%	0%									
3591	TW_L14_Z02_BoH - All Other Finishes / Make Good & Clean	12	13-Sep-19	27-Sep-19	14-Feb-20	27-Feb-20	-120	100%	0%									
3602	TW_L14_Z02_BoH - Floor sealer	2	19-Sep-19	20-Sep-19	15-Feb-20	17-Feb-20	-117	100%	0%									
Toilets (FoH & BoH) - TW_L14_Z03																		
3691	TW_L14_Z03_Toilet - MEP 1st fix Ceiling	3	01-Jun-19	29-Jun-19	02-May-19 A	08-Feb-20	-179	100%	90%									
3687	TW_L14_Z03_Toilet - Dry Wall Frame & One Side Board	3	15-May-19	27-May-19	16-Sep-19 A	05-Feb-20	-204	100%	80%									
3678	TW_L14_Z03_Toilet - Seal Wall Opening	4	09-Apr-19	11-Apr-19	14-Oct-19 A	10-Feb-20	-246	100%	60%									
3677	TW_L14_Z03_Toilet - MEP 1st fix Dry Wall	3	28-May-19	11-Jun-19	04-Nov-19 A	07-Feb-20	-194	100%	90%									
3688	TW_L14_Z03_Toilet - MEP 1st fix Block Wall	2	29-Mar-19	08-Apr-19	04-Nov-19 A	04-Feb-20	-244	100%	90%									
3679	TW_L14_Z03_Toilet - MEP 2nd fix	11	22-Jul-19	10-Aug-19	11-Nov-19 A	14-Feb-20	-149	100%	90%									
3681	TW_L14_Z03_Toilet - MEP final fix	12	28-Aug-19	03-Sep-19	16-Dec-19 A	18-Feb-20	-132	100%	10%									
3685	TW_L14_Z03_Toilet - Sanitary ware & fittings	20	04-Dec-19	12-Dec-19	23-Dec-19 A	25-Feb-20	-55	100%	20%									
3689	TW_L14_Z03_Toilet - Dry Wall Closing Board	8	12-Jun-19	20-Jun-19	08-Feb-20	17-Feb-20	-194	100%	0%									
3680	TW_L14_Z03_Toilet - Door Frame	2	02-Jul-19	03-Jul-19	10-Feb-20	11-Feb-20	-179	100%	0%									
3674	TW_L14_Z03_Toilet - All Other Finishes / Make Good &																	

ID	Activity	RD	BL Start	BL Finish	Fcast / Actual Start	Fcast / Actual Finish	BL Fin Var	Sch %	Curr %	2020								
										Qtr 1			Qtr 2			Qtr 3		
										Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
4166	TW_L16_Z04_Kitchen - All Other Finishes (DOOR) / Make Good & Clean	24	03-Aug-19	10-Aug-19	20-Nov-19 A	07-Mar-20	-169	100%	95%									
4164	TW_L16_Z04_Kitchen - MEP final fix	18	03-Aug-19	07-Aug-19	23-Dec-19 A	29-Feb-20	-166	100%	20%									
4165	TW_L16_Z04_Kitchen - Ceiling Paint	6	23-May-19	30-May-19	20-Feb-20	26-Feb-20	-220	100%	0%									
Level RF																		
ABWF & MEP Works - TW_RF_Z01 & RF_Z02																		
4222	TW_RF_Z01 & RF_Z02 - Builders Works Plant Rooms	4	29-Mar-19	13-May-19	01-May-19 A	06-Feb-20	-218	100%	80%									
4223	TW_RF_Z01 & RF_Z02 - MEP 1st fix Plant Rooms & Service Trenches	7	27-Apr-19	03-Jul-19	06-May-19 A	10-Feb-20	-179	100%	87%									
4224	TW_RF_Z01 & RF_Z02 - MEP 2nd Fix Plant Rooms & Service Trenches	12	03-Jul-19	14-Aug-19	20-May-19 A	15-Feb-20	-148	100%	88%									
4225	TW_RF_Z01 - MEP final fix Plant Rooms	15	14-Aug-19	11-Sep-19	23-Sep-19 A	19-Feb-20	-127	100%	40%									
3833	TW_RF_Z01 & Z02 - All Other Finishes (DOOR) / Make Good & Clean	30	23-Sep-19	09-Oct-19	03-Jun-19 A	07-Mar-20	-121	100%	83%									
EWS (External Wall System)																		
M+ Tower LED System																		
Installation, T&C																		
77771	TW_LED - Ceiling at Office Areas (L4 to L16) PSU, enclosure box, Epix converter)	24	01-Nov-19	04-Jan-20	01-Nov-19 A	29-Feb-20	-41	100%	19.98%									
111142	TW_LED - MEP Rooms (L3/5/7/9/11/13/15) AOM/MCMB Panels	12	01-Nov-19	30-Nov-19	01-Nov-19 A	15-Feb-20	-57	100%	19.95%									
111143	POD_TW_LED - Riser & Connection to B2 (fibre optic, connns to Ethernet, B2 AOM,	20	03-Dec-19	15-Jan-20	09-Dec-19 A	07-Mar-20	-38	100%	50%									
111139	TW_LED - ELV Rooms (L5/7/9/11/13/15) Cabling, RJ45, EQP rack, Ethernet Switch	20	05-Dec-19	15-Jan-20	11-Dec-19 A	07-Mar-20	-38	100%	50%									
111145	POD_LED - B2 Cntrl Room Works (HDMI/DVI/DLCE-FX2/Monitors)	12	31-Dec-19	14-Jan-20	03-Feb-20	15-Feb-20	-21	100%	0%									
111162	TW_LED - GCL Property Manag Room (B2-1-026) Power ON Checks, ESSW...	6	20-Dec-19	27-Dec-19	03-Feb-20	08-Feb-20	-29	100%	0%									
111164	TW_LED - GCL Dismantle Temp FS Hydrant Pipe, Enlarge Opening at Western ST	10	16-Dec-19	27-Dec-19	03-Feb-20	13-Feb-20	-33	100%	0%									
111157	TW_LED - ST West Conceal Conduit & Cable Remedial Works	30	28-Dec-19	10-Feb-20	14-Feb-20	19-Mar-20	-33	76.67%	0%									
111155	TW_LED - Lighting Rectification Works	42	11-Feb-20	30-Mar-20	30-Mar-20	19-May-20	-41	0%	0%									
T&C																		
111148	TW_LED - Ad Hoc Connection Test (AOM Checks, Light on floor/facade)	42	20-Dec-19	17-Feb-20	17-Feb-20	06-Apr-20	-41	69.05%	0%									
111149	TW_LED - Planned Integrated Connection Test (AOM, Light on floor/facade)	30	18-Feb-20	23-Mar-20	07-Apr-20	12-May-20	-41	0%	0%									
111151	TW_LED - T&C with Consultant Pre-Check (ad hoc)	30	18-Feb-20	23-Mar-20	07-Apr-20	12-May-20	-41	0%	0%									
111152	TW_LED - T&C with Consultant Planned & Final Inspection (BMU required)	18	24-Mar-20	14-Apr-20	13-May-20	02-Jun-20	-41	0%	0%									
Install EWS (External Wall System - Facade)																		
3834	TW_EWS - All Other Finishes / Make Good & Clean	30	04-Jul-19	29-Aug-19	01-Jul-19 A	17-Mar-20	-161	100%	25.01%									
3764	TW_EWS - Install Anciliaries @ Roof (flushings/cladding/cable connections/balustra	32	04-Jul-19	15-Aug-19	01-Oct-19 A	10-Mar-20	-167	100%	79.96%									
Vertical Transportation																		
Lifts																		
6436	TW_LT03/04 Central - Staff Lifts (B2F - 13F) - Builders Works	12	18-May-19	18-Jun-19	10-Dec-19 A	15-Feb-20	-195	100%	75%									
6533	TW_LT03/04 Central - Staff Lifts (B2F - 13F) - Lift Pit/Shft/Machine Rm MEP 1st, 2	26	19-Jun-19	28-Aug-19	26-Dec-19 A	03-Mar-20	-149	100%	21									

CMWP - M Target Project Remaining Works Programme_12th Progress Update (DD: 31Jan2020)													2020								
ID	Activity	RD	BL Start	BL Finish	Fcast / Actual Start	Fcast / Actual Finish	BL Fin Var	Sch %	Curr %	Qtr 1			Qtr 2			Qtr 3			Qtr 4		
										Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
5431	CSF_L1_Z01_FoH - All Other Finishes / Make Good & Clean	18	13-Aug-19	26-Aug-19	13-Dec-19 A	24-Feb-20	-144	100%	29.99%												
5432	CSF_L1_Z01_FoH - Floor Sealer	10	13-Aug-19	17-Aug-19	11-Feb-20*	21-Feb-20	-150	100%	0%												
Corridors with Suspended Ceilings - CSF_L1_Z02																					
5445	CSF_L1_Z02_Corr - All Other Finishes (DOOR) / Make Good & Clean	10	06-Aug-19	12-Aug-19	24-Jun-19 A	15-Feb-20	-149	100%	90.02%												
5443	CSF_L1_Z02_Corr - MEP final fix	4	02-Aug-19	08-Aug-19	29-Jul-19 A	06-Feb-20	-144	100%	96.03%												
5442	CSF_L1_Z02_Corr - Floor Sealer	3	02-Aug-19	05-Aug-19	11-Feb-20*	13-Feb-20	-153	100%	0%												
BOH (GL B'B+; 5'6" & G.L. F, 4'+5') - CSF_L1_Z03																					
5459	CSF_L1_Z03_Boh - All Other Finishes (DOOR) / Make Good & Clean	4	17-Jun-19	22-Jun-19	18-Nov-19 A	06-Feb-20	-183	100%	92.02%												
AHU Room - CSF_L1_Z04																					
5474	CSF_L1_Z04_AHU - Floor Sealer	10	04-May-19	06-May-19	17-Jun-19 A	13-Feb-20	-229	100%	80.02%												
5475	CSF_L1_Z04_AHU - All Other Finishes (DOOR) / Make Good & Clean	12	03-May-19	09-May-19	26-Aug-19 A	15-Feb-20	-228	100%	90.02%												
Level 2																					
ABWF & MEP Works																					
FoH Areas (Storages, Offices, Lift Lobby etc) - CSF_L2_Z01																					
11579	CSF_L2_Z01_FoH - Museum Storage System (2 Items) Installation	30				11-Jun-20	17-Jul-20		0%	0%											
11584	CSF_L2_Z01_FoH - Mobile Screen Installation	31				08-Jul-20	12-Aug-20		0%	0%											
5683	CSF_L2_Z01_FoH - Doors/Ironmong	2	26-Aug-19	31-Aug-19	24-Jun-19 A	04-Feb-20	-122	100%	90.02%												
5680	CSF_L2_Z01_FoH - MEP final fix	6	19-Aug-19	31-Aug-19	29-Jul-19 A	08-Feb-20	-126	100%	98.01%												
5686	CSF_L2_Z01_FoH - Wall finishes (painting or sealer)	4	03-Aug-19	24-Aug-19	28-Oct-19 A	06-Feb-20	-130	100%	94.99%												
5687	CSF_L2_Z01_FoH - All Other Finishes / Make Good & Clean	8	26-Aug-19	07-Sep-19	14-Dec-19 A	20-Feb-20	-130	100%	39.99%												
5689	CSF_L2_Z01_FoH - Floor Sealer	4	26-Aug-19	30-Aug-19	12-Feb-20*	17-Feb-20	-135	100%	0%												
Corridors with Suspended Ceilings - CSF_L2_Z02																					
5701	CSF_L2_Z02_Corr - All Other Finishes (DOOR) / Make Good & Clean	12	07-Aug-19	13-Aug-19	24-Jun-19 A	17-Feb-20	-149	100%	90.02%												
5700	CSF_L2_Z02_Corr - Floor Sealer	3	03-Aug-19	06-Aug-19	12-Feb-20*	14-Feb-20	-153	100%	0%												
BOH (GL B'B+; 5'6" & G.L. F, 4'+5') - CSF_L2_Z03																					
5710	CSF_L2_Z03_Boh - All Other Finishes (DOOR) / Make Good & Clean	6	03-Aug-19	09-Aug-19	19-Nov-19 A	08-Feb-20	-145	100%	80.02%												
AHU Room - CSF_L2_Z04																					
5723	CSF_L2_Z04_AHU - Floor Sealer	11	23-Apr-19	24-Apr-19	24-Jun-19 A	14-Feb-20	-239	100%	80.02%												
5724	CSF_L2_Z04_AHU - All Other Finishes (DOOR) / Make Good & Clean	12	22-Apr-19	27-Apr-19	24-Jun-19 A	17-Feb-20	-238	100%	90.02%												
Level 3																					
ABWF & MEP Works																					
FoH Areas (Storages, Offices, Lift Lobby etc) - CSF_L3_Z01																					
11581	CSF_L3_Z01_FoH - Museum Storage System (2 Items) Installation	30				11-Jun-20	17-Jul-20		0%	0%											
5627	CSF_L3_Z01_FoH - Mobile Screen Installation	2	13-Aug-19	19-Aug-19	09-Sep-19 A	04-Feb-20	-133	100%	95.02%												
5632	CSF_L3_Z01_FoH - Doors/Ironmong	12	13-Aug-19	17-Aug-19	09-Sep-19 A	15-Feb-20	-145	100%	75%												
5631	CSF_L3_Z01_FoH - All Other Finishes / Make Good & Clean	12	13-Aug-19	26-Aug-19	07-Feb-20	20-Feb-20	-141	100%	0%												
Corridors with Suspended Ceilings - CSF_L3_Z02																					
5636	CSF_L3_Z02_Corr - MEP final fix	2	03-Aug-19	09-Aug-19	29-Jul-19 A	04-Feb-20	-141	100%	98.03%												
5643	CSF_L3_Z02_Corr - Floor Sealer	3	03-Aug-19	06-Aug-19	13-Feb-20*	15-Feb-20	-154	100%	0%												
5644	CSF_L3_Z02_Corr - All Other Finishes (DOOR) / Make Good & Clean	6	07-Aug-19	13-Aug-19	13-Feb-20	19-Feb-20	-151	100%	0%												
BOH (GL B'B+; 5'6" & G.L. F, 4'+5') - CSF_L3_Z03																					
5654	CSF_L3_Z03_Boh - All Other Finishes (DOOR) / Make Good & Clean	6	20-Jul-19	2																	

ID	Activity	RD	BL Start	BL Finish	Fcast / Actual Start	Fcast / Actual Finish	BL Fin Var	Sch %	Curr %	2020																
										Qtr 1				Qtr 2												
										Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep								
ABWF & MEP Works																										
FoH Areas (RDE, Passenger Lift Lobbies & Terrace) - RDE_L2_Z01										20	10-May-19	06-Jun-19	01-Apr-19 A	25-Feb-20	-212	100%	90.94%									
4780	RDE_L2_Z01_FoH - MEP 2nd fix									18	27-Jun-19	04-Jul-19	03-Feb-20*	22-Feb-20	-188	100%	0%									
4796	RDE_L2_Z01_FoH - Terrace Balustrade (base frame & glass)									18			03-Feb-20	22-Feb-20		0%	0%									
4779	RDE_L2_Z01_FoH - MEP 1st fix (Part 2) (after material hoist closure)									18			03-Feb-20	22-Feb-20		0%	0%									
4781	RDE_L2_Z01_FoH - MEP final fix									18	24-Sep-19	16-Oct-19	19-Feb-20	10-Mar-20	-116	100%	0%									
4785	RDE_L2_Z01_FoH - Floor Sealer									4	17-Oct-19	22-Oct-19	11-Mar-20	16-Mar-20	-116	100%	0%									
4782	RDE_L2_Z01_FoH - All Other Finishes / Make Good & Clean									12	15-Oct-19	29-Oct-19	14-Apr-20	27-Apr-20	-146	100%	0%									
BoH Plant Rooms, Corridors, FS & Service Lift Lobbies - RDE_L2_Z02										10	18-Mar-19	02-Apr-19	19-Nov-18 A	13-Feb-20	-256	100%	88%									
4758	RDE_L2_Z02_BoH - Wet Trades (plaster/screed/C&W_sealer/undercoat)									12	03-Jul-19	23-Jul-19	01-Apr-19 A	15-Feb-20	-166	100%	85.53%									
4753	RDE_L2_Z02_BoH - MEP 2nd fix									48	24-Jul-19	30-Jul-19	01-Aug-19 A	30-Mar-20	-197	100%	84.02%									
4750	RDE_L2_Z02_BoH - Misc Metal Works / Access Panels									16	03-Jul-19	09-Jul-19	01-Aug-19 A	20-Feb-20	-182	100%	88.02%									
4752	RDE_L2_Z02_BoH - Seal Wall Opening									18	03-Jul-19	09-Jul-19	16-Sep-19 A	22-Feb-20	-184	100%	63.01%									
4754	RDE_L2_Z02_BoH - Door Frame & Plastering of Perimeter Edges									20	24-Jul-19	01-Aug-19	23-Sep-19 A	26-Feb-20	-167	100%	29.99%									
4748	RDE_L2_Z02_BoH - Door / Ironmong / Hose Reel Cabs									12	24-Jul-19	01-Aug-19	23-Sep-19 A	19-Feb-20	-161	100%	44.01%									
4756	RDE_L2_Z02_BoH - Lobbies & Cor Close ceiling (board) incl. Cut-Outs									52	02-Aug-19	06-Aug-19	11-Nov-19 A	02-Apr-20	-194	100%	31.95%									
4759	RDE_L2_Z02_BoH - Wall epoxy/ emulsion paint final coat									54	06-Aug-19	07-Aug-19	25-Nov-19 A	06-Apr-20	-195	100%	31.01%									
4760	RDE_L2_Z02_BoH - MEP final fix									12	30-Sep-19	15-Oct-19	17-Feb-20	29-Feb-20	-109	100%	0%									
4749	RDE_L2_Z02_BoH - All Other Finishes / Make Good & Clean									5	09-Oct-19	22-Oct-19	22-Apr-20	27-Apr-20	-151	100%	0%									
Toilets - RDE_L2_Z03										6	03-Jun-19	27-Jun-19	04-Mar-19 A	08-Feb-20	-181	100%	92%									
4777	RDE_L2_Z03_Toilet - MEP 1st fix Ceiling									14	17-Jul-19	30-Jul-19	01-Apr-19 A	19-Feb-20	-163	100%	52%									
4767	RDE_L2_Z03_Toilet - MEP 2nd fix									52	19-Sep-19	27-Sep-19	17-Jun-19 A	02-Apr-20		100%	23%									
4773	RDE_L2_Z03_Toilet - Cubicle partitions & sanitary ware & fittings									4			18-Nov-19 A	06-Feb-20		0%	54%									
10023	RDE_L2_Z03_Toilet - Dry Wall Frame & One Side Board									12			03-Feb-20	15-Feb-20		0%	0%									
10024	RDE_L2_Z03_Toilet - MEP 1st fix Dry Wall									36			03-Feb-20	14-Mar-20		0%	0%									
4772a	RDE_L2_Z03_Toilet - Conc flr curing, polishing & install protection									5	11-Jul-19	16-Jul-19	10-Feb-20	14-Feb-20	-171	100%	0%									
4764	RDE_L2_Z03_Toilet - Ceiling Rods/ Grids									3	11-Dec-18	13-Dec-18	10-Feb-20	12-Feb-20	-341	100%	0%									
4766	RDE_L2_Z03_Toilet - Seal Wall Opening									2	28-Jun-19	29-Jun-19	10-Feb-20	11-Feb-20	-181	100%	0%									
10025	RDE_L2_Z03_Toilet - Dry Wall Closing Board									6			14-Feb-20	20-Feb-20		0%	0%									
4765	RDE_L2_Z03_Toilet - Close ceiling (board) incl. Cut-Outs									8	31-Jul-19	08-Aug-19	15-Feb-20	24-Feb-20	-159	100%	0%									
4769	RDE_L2_Z03_Toilet - MEP final fix									6	24-Sep-19	30-Sep-19	25-Feb-20	02-Mar-20	-121	100%	0%									
4776	RDE_L2_Z03_Toilet - Ceiling finishes final coat									3	09-Aug-19	12-Aug-19	25-Feb-20	27-Feb-20	-159	100%	0%									
4772	RDE_L2_Z03_Toilet - Finishes Walls									14	02-Sep-19	18-Sep-19	11-Mar-20	26-Mar-20	-152	100%	0%									
4762	RDE_L2_Z03_Toilet - Door / Ironmong									2	28-Sep-19	30-Sep-19	02-Apr-20	03-Apr-20	-149	100%	0%									
4763	RDE_L2_Z03_Toilet - All Other Finishes / Make Good & Clean									6	02-Oct-19	09-Oct-19	21-Apr-20	27-Apr-20	-162	100%	0%									
Kitchen - RDE_L2_Z04										4	10-May-19	16-May-19	01-Apr-19 A	06-Feb-20	-214	100%	97.03%									
4790	RDE_L2_Z04_Kitchen - MEP 2nd fix									20	24-Sep-19	30-Sep-19	12-Aug-19 A	25-Feb-20	-116	100%	42.01%									
4795	RDE_L2_Z04_Kitchen - Install door & ironmongery / Make Good & Clean									3	24-Sep-19	26-Sep-19	15-Feb-20	18-Feb-20	-113	100%	0%									
4778	RDE_L2_Z04_Kitchen - MEP final fix																									
Level 3										ABWF & MEP Works																
FoH Areas (RDE, Passenger Lift Lobbies & Terrace) - RDE_L3_Z01										24	10-May-19	06-Jun-19	01-Apr-19 A	29-Feb-20	-216	100%	75.07%									
4830	RDE_L3_Z01_FoH - MEP 2nd fix									18			03-Feb-20	22-Feb-20		0%	0%									
4829a	RDE_L3_Z01_FoH - MEP 1st fix (Part 2) (after material hoist closure)									48	24-Jul-19	30-Jul-19	01-Aug-19 A	28-Mar-20	-196	100%	91.02%									
4831	RDE_L3_Z01_FoH - MEP final fix									16	03-Jul-19	09-Jul-19	01-Aug-19 A	20-Feb-20	-182	100%	92.52%									
4835	RDE_L3_Z01_FoH - Floor Sealer									4	17-Oct-19	22-Oct-19	13-Mar-20	18-Mar-20	-118	100%	0%									
4832	RDE_L3_Z01_FoH - All Other Finishes / Make Good &																									

ID	Activity	RD	BL Start	BL Finish	Fcast/ Actual Start	Fcast/ Actual Finish	BL Fin Var	Sch %	Curr %	2020								
										Qtr 1		Qtr 2		Qtr 3				
										Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
4917	RDE_L5_Z03_Toilet - Door Frame	2	05-Jul-19	06-Jul-19	03-Feb-20*	04-Feb-20	-170	100%	0%									
4911	RDE_L5_Z03_Toilet - Door / Ironmong	2	08-Oct-19	09-Oct-19	10-Feb-20	11-Feb-20	-98	100%	0%									
4918	RDE_L5_Z03_Toilet - MEP final fix	6	28-Sep-19	05-Oct-19	20-Feb-20	26-Feb-20	-113	100%	0%									
4925	RDE_L5_Z03_Toilet - Ceiling finishes final coat	3	09-Aug-19	12-Aug-19	20-Feb-20	22-Feb-20	-155	100%	0%									
4912	RDE_L5_Z03_Toilet - All Other Finishes / Make Good & Clean	6	10-Oct-19	16-Oct-19	21-Apr-20	27-Apr-20	-156	100%	0%									
Level 6																		
ABWF & MEP Works																		
FoH Areas (Office/ OACF, Passenger Lit Lobbies & Terrace) - RDE_L6_Z01																		
4593	RDE_L6_Z01_FoH - Ceiling/Wall/Columns Sealer	2	10-Nov-18	15-Nov-18	12-Apr-19 A	04-Feb-20	-358	100%	95.02%									
4594	RDE_L6_Z01_FoH - Wall/Columns Protection	4	16-Nov-18	22-Nov-18	02-May-19 A	06-Feb-20	-354	100%	54.99%									
4589	RDE_L6_Z01_FoH - MEP 2nd fix	14	06-Jun-19	05-Jul-19	24-Jun-19 A	18-Feb-20	-183	100%	75.98%									
4588a	RDE_L6_Z01_FoH - MEP 1st fix (Part 2) (after material hoist closure)	12			03-Feb-20	15-Feb-20		0%	0%									
4590	RDE_L6_Z01_FoH - MEP final fix	18	24-Sep-19	16-Oct-19	07-Feb-20	27-Feb-20	-106	100%	0%									
4589a	RDE_L6_Z01_FoH - Raised Floor MEP Containment/Wiring MEP 1st, 2nd fix	12			17-Feb-20	29-Feb-20		0%	0%									
4595	RDE_L6_Z01_FoH - Raised Floor	12	17-Oct-19	22-Oct-19	24-Feb-20	07-Mar-20	-110	100%	0%									
4592	RDE_L6_Z01_FoH - All Other Finishes / Make Good & Clean	12	15-Oct-19	29-Oct-19	14-Apr-20	27-Apr-20	-146	100%	0%									
BoH Plan Rooms, Corridors, FS Lift Lobby - RDE_L6_Z02																		
4568	RDE_L6_Z02_BoH - Wet Trades (plaster/screed/C&W_sealer/undercoat)	10	01-Apr-19	17-Apr-19	11-Mar-19 A	13-Feb-20	-244	100%	84%									
4560	RDE_L6_Z02_BoH - Seal Wall Opening	6	09-Jul-19	15-Jul-19	05-Aug-19 A	08-Feb-20	-167	100%	72.02%									
4561	RDE_L6_Z02_BoH - MEP 2nd fix	14	09-Jul-19	29-Jul-19	02-Sep-19 A	18-Feb-20	-163	100%	58.37%									
4562	RDE_L6_Z02_BoH - Door Frame & Plastering of Perimeter Edges	8	09-Jul-19	13-Jul-19	16-Sep-19 A	11-Feb-20	-170	100%	59.99%									
4557	RDE_L6_Z02_BoH - Misc Metal Works / Access Panels	48	30-Jul-19	05-Aug-19	02-Oct-19 A	28-Mar-20	-191	100%	69.01%									
4564	RDE_L6_Z02_BoH - Lobbies & Corr Ceiling Rods/ Grids	10	09-Jul-19	12-Jul-19	04-Nov-19 A	13-Feb-20	-173	100%	24%									
4555	RDE_L6_Z02_BoH - Door / Ironmong / Hose Reel Cabs	16	30-Jul-19	06-Aug-19	11-Nov-19 A	21-Feb-20	-159	100%	30%									
4565	RDE_L6_Z02_BoH - Lobbies & Corr Close ceiling (board) incl. Cut-Outs	16	30-Jul-19	02-Aug-19	11-Nov-19 A	21-Feb-20	-162	100%	15%									
4570	RDE_L6_Z02_BoH - MEP final fix	12	16-Oct-19	29-Oct-19	14-Feb-20	27-Feb-20	-95	100%	0%									
4569	RDE_L6_Z02_BoH - Wall epoxy/ emulsion paint final coat	3	30-Jul-19	01-Aug-19	22-Feb-20	25-Feb-20	-166	100%	0%									
4567	RDE_L6_Z02_BoH - Floor sealer	2	01-Aug-19	02-Aug-19	25-Feb-20	26-Feb-20	-166	100%	0%									
4556	RDE_L6_Z02_BoH - All Other Finishes / Make Good & Clean	12	23-Oct-19	05-Nov-19	14-Apr-20	27-Apr-20	-139	100%	0%									
Toilets - RDE_L6_Z03																		
4587	RDE_L6_Z03_Toilet - MEP 1st fix Ceiling	8	10-Jun-19	04-Jul-19	14-Nov-19 A	11-Feb-20	-178	100%	61.6%									
4583	RDE_L6_Z03_Toilet - Cubicle partitions & sanitary ware & fittings	34	12-Oct-19	18-Oct-19	25-Nov-19 A	13-Mar-20	-117	100%	20%									
4577	RDE_L6_Z03_Toilet - MEP 2nd fix	20	18-Jul-19	31-Jul-19	13-Jan-20 A	28-Feb-20	-170	100%	13.67%									
10002	RDE_L6_Z03_Toilet - Dry Wall Frame & One Side Board	12			03-Feb-20	15-Feb-20		0%	0%									
4585	RDE_L6_Z03_Toilet - MEP 1st fix Dry Wall	8	20-Feb-19	28-Feb-19	13-Feb-20	21-Feb-20	-291	100%	0%									
4580	RDE_L6_Z03_Toilet - Floor Screed	4	23-Feb-19	27-Feb-19	17-Feb-20	20-Feb-20	-291	100%	0%									
10003	RDE_L6_Z03_Toilet - Dry Wall Closing Board	6			20-Feb-20	26-Feb-20		0%	0%									
4578	RDE_L6_Z03_Toilet - Door Frame	2	05-Jul-19	06-Jul-19	21-Feb-20	22-Feb-20	-186	100%	0%									
4576	RDE_L6_Z03_Toilet - Seal Wall Opening	3	01-Mar-19	04-Mar-19	27-Feb-20	29-Feb-20	-295	100%	0%									
4582	RDE_L6_Z03_Toilet - Finishes Walls & Floor Tiling	10	28-Sep-19	11-Oct-19	27-Feb-20	09-Mar-20	-119	100%	0%									
4574	RDE_L6_Z03_Toilet - Ceiling Rods/ Grids	4	13-Jul-19	17-Jul-19	02-Mar-20	05-Mar-20	-187	100%	0%									
4575	RDE_L6_Z03_Toilet - Close ceiling (board) incl. Cut-Outs	7	01-Aug-19	08-Aug-19	04-Mar-20	11-Mar-20	-173	100%	0%									
4579	RDE_L6_Z03_Toilet - MEP final fix	6	12-Oct-19	18-Oct-19	12-Mar-20	18-Mar-20	-121	100%	0%									
4586	RDE_L6_Z03_Toilet - Ceiling finishes final coat	3	09-Aug-19	12-Aug-19	12-Mar-20	14-Mar-20	-173	100%	0%									
4572	RDE_L6_Z03_Toilet - Door / Ironmong	2	19-Oct-19	21-Oct-19	14-Mar-20	16-Mar-20	-117	100%	0%									
4573	RDE_L6_Z03_Toilet - All Other Finishes / Make Good & Clean	6	22-Oct-19	28-Oct-19	21-Apr-20	27-Apr-20	-146	100%	0%									
Level 7																		

ID	Activity	RD	BL Start	BL Finish	Fcast / Actual Start	Fcast / Actual Finish	BL Fin Var	Sch %	Curr %	2020																
										Qtr 1				Qtr 2												
										Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep								
ABWF & MEP Works																										
FoH Areas (Office/ OACF, Passenger Lift Lobbies & Terrace) - RDE_L9_Z01										6	18-Feb-19	30-Mar-19	17-Jun-19 A	08-Feb-20	-254	100%	95.59%									
5946	RDE_L9_Z01_FoH - MEP 1st fix (Part 1)																									
5953	RDE_L9_Z01_FoH - Terrace Balustrade (base frame & glass)									4	03-Aug-19	09-Aug-19	08-Jul-19 A	06-Feb-20	-143	100%	90.02%									
5951	RDE_L9_Z01_FoH - Wall/Columns Protection									4	11-Feb-19	16-Feb-19	01-Aug-19 A	06-Feb-20	-288	100%	69.99%									
5947	RDE_L9_Z01_FoH - MEP 2nd fix									20	06-Jul-19	02-Aug-19	14-Oct-19 A	25-Feb-20	-165	100%	30.6%									
5946a	RDE_L9_Z01_FoH - MEP 1st fix (Part 2) (after material hoist closure)									18			03-Feb-20	22-Feb-20		0%	0%									
5947a	RDE_L9_Z01_FoH - Raised Floor MEP Containment/Wiring MEP 1st, 2nd fix									12			24-Feb-20	07-Mar-20		0%	0%									
5948	RDE_L9_Z01_FoH - MEP final fix									18	24-Sep-19	16-Oct-19	26-Feb-20	17-Mar-20	-122	100%	0%									
5952	RDE_L9_Z01_FoH - Raised Floor									12	17-Oct-19	22-Oct-19	02-Mar-20	14-Mar-20	-116	100%	0%									
5949	RDE_L9_Z01_FoH - All Other Finishes / Make Good & Clean									12	15-Oct-19	29-Oct-19	14-Apr-20	27-Apr-20	-146	100%	0%									
BoH Plant Rooms, Corridors, FS Lift Lobby - RDE_L9_Z02																										
5926	RDE_L9_Z02_BoH - Wet Trades (plaster/screed/C&W_sealer/undercoat)									8	15-Apr-19	30-Apr-19	02-May-19 A	11-Feb-20	-231	100%	74%									
5919	RDE_L9_Z02_BoH - MEP 1st fix									12	17-Jun-19	15-Jul-19	17-Jun-19 A	15-Feb-20	-173	100%	85.07%									
5922	RDE_L9_Z02_BoH - Door Frame & Plastering of Perimeter Edges									14	16-Jul-19	20-Jul-19	23-Sep-19 A	20-Feb-20	-172	100%	63.9%									
5918	RDE_L9_Z02_BoH - Misc Metal Works / Access Panels									46	06-Aug-19	12-Aug-19	08-Oct-19 A	30-Mar-20	-186	100%	83.78%									
5920	RDE_L9_Z02_BoH - Seal Wall Opening									18	16-Jul-19	22-Jul-19	14-Oct-19 A	22-Feb-20	-173	100%	34.91%									
5921	RDE_L9_Z02_BoH - MEP 2nd fix									20	16-Jul-19	05-Aug-19	14-Oct-19 A	27-Feb-20	-165	100%	28.19%									
5923	RDE_L9_Z02_BoH - Lobbies & Corr Ceiling Rods/ Grids									16	16-Jul-19	19-Jul-19	15-Nov-19 A	20-Feb-20	-173	100%	24%									
5924	RDE_L9_Z02_BoH - Lobbies & Corr Close ceiling (board) incl. Cut-Outs									24	06-Aug-19	09-Aug-19	21-Nov-19 A	03-Mar-20	-165	100%	14%									
5916	RDE_L9_Z02_BoH - Door / Ironmong / Hose Reel Cabs									22	06-Aug-19	13-Aug-19	25-Nov-19 A	03-Mar-20	-162	100%	25.04%									
5928	RDE_L9_Z02_BoH - MEP final fix									12	30-Oct-19	12-Nov-19	02-Mar-20	14-Mar-20	-97	100%	0%									
5927	RDE_L9_Z02_BoH - Wall epoxy/ emulsion paint final coat									3	10-Aug-19	13-Aug-19	04-Mar-20	06-Mar-20	-165	100%	0%									
5925	RDE_L9_Z02_BoH - Floor sealer									2	13-Aug-19	14-Aug-19	06-Mar-20	07-Mar-20	-165	100%	0%									
5917	RDE_L9_Z02_BoH - All Other Finishes / Make Good & Clean									5	06-Nov-19	19-Nov-19	22-Apr-20	27-Apr-20	-127	100%	0%									
Toilets - RDE_L9_Z03																										
5945	RDE_L9_Z03_Toilet - MEP 1st fix Ceiling									12	17-Jun-19	11-Jul-19	14-Oct-19 A	15-Feb-20	-176	100%	49.95%									
10008	RDE_L9_Z03_Toilet - Dry Wall Frame & One Side Board									14			11-Nov-19 A	20-Feb-20		0%	23%									
5941	RDE_L9_Z03_Toilet - Cubicle partitions & sanitary ware & fittings									42	26-Oct-19	01-Nov-19	18-Nov-19 A	26-Mar-20	-116	100%	20%									
5938	RDE_L9_Z03_Toilet - Floor Screed									24	23-Apr-19	26-Apr-19	20-Nov-19 A	03-Mar-20	-252	100%	65.01%									
5935	RDE_L9_Z03_Toilet - MEP 2nd fix									32	25-Jul-19	07-Aug-19	28-Dec-19 A	18-Mar-20	-180	100%	5.53%									
5943	RDE_L9_Z03_Toilet - MEP 1st fix Dry Wall									8	19-Apr-19	27-Apr-19	21-Feb-20	29-Feb-20	-249	100%	0%									
10009	RDE_L9_Z03_Toilet - Dry Wall Closing Board									6			02-Mar-20	07-Mar-20		0%	0%									
5936	RDE_L9_Z03_Toilet - Door Frame									2	12-Jul-19	13-Jul-19	04-Mar-20	05-Mar-20	-190	100%	0%									
5934	RDE_L9_Z03_Toilet - Seal Wall Opening									3	29-Apr-19	02-May-19	09-Mar-20	11-Mar-20	-255	100%	0%									
5940	RDE_L9_Z03_Toilet - Finishes Walls & Floor Tiling									10	15-Oct-19	25-Oct-19	09-Mar-20	19-Mar-20	-116	100%	0%									
5932	RDE_L9_Z03_Toilet - Ceiling Rods/ Grids									4	20-Jul-19	24-Jul-19	12-Mar-20	16-Mar-20	-190	100%	0%									
5933	RDE_L9_Z03_Toilet - Close ceiling (board) incl. Cut-Outs									7	08-Aug-19	15-Aug-19	19-Mar-20	26-Mar-20	-180	100%	0%									
5930	RDE_L9_Z03_Toilet - Door / Ironmong									2	02-Nov-19	04-Nov-19	27-Mar-20	28-Mar-20	-116	100%	0%									
5937	RDE_L9_Z03_Toilet - MEP final fix									6	26-Oct-19	01-Nov-19	27-Mar-20	02-Apr-20	-122	100%	0%									
5944	RDE_L9_Z03_Toilet - Ceiling finishes final coat									3	16-Aug-19	19-Aug-19	27-Mar-20	30-Mar-20	-180	100%	0%									
5931	RDE_L9_Z03_Toilet - All Other Finishes / Make Good & Clean									6	05-Nov-19	11-Nov-19	21-Apr-20	27-Apr-20	-134	100%	0%									
Level 10																										
ABWF & MEP Works																										
FoH Areas (Offices, Passenger Lift Lobbies & Terrace) - RDE_L10_Z01																										
5985	RDE_L10_Z01_FoH - MEP 1st fix									16	14-Mar-19	25-Apr-19	17-Jun-19 A	2												

CMWP - M Target Project Remaining Works Programme_12th Progress Update (DD: 31Jan2020)

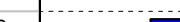
ID	Activity	RD	BL Start	BL Finish	Fcast / Actual Start	Fcast / Actual Finish	BL Fin Var	Sch %	Curr %	2020										
										Qtr 1				Qtr 2						
										Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep		
5163	RDE_L12_Z01_FoH - MEP 1st fix	14	16-May-19	27-Jun-19	16-Sep-19 A	18-Feb-20	-189	100%	83.97%											
5170	RDE_L12_Z01_FoH - Terrace Balustrade (base frame & glass)	10	02-Oct-19	09-Oct-19	04-Nov-19 A	13-Feb-20	-100	100%	90%											
5164	RDE_L12_Z01_FoH - MEP 2nd fix	24	02-Sep-19	30-Sep-19	20-Jan-20 A	03-Mar-20	-122	100%	10.11%											
5164a	RDE_L12_Z01_FoH - Raised Floor MEP Containment/Wiring MEP 1st, 2nd fix	12			19-Feb-20	03-Mar-20		0%	0%											
5169	RDE_L12_Z01_FoH - Raised Floor	12	24-Oct-19	29-Oct-19	26-Feb-20	10-Mar-20	-106	100%	0%											
5165	RDE_L12_Z01_FoH - MEP final fix	18	02-Oct-19	23-Oct-19	04-Mar-20	24-Mar-20	-122	100%	0%											
5166	RDE_L12_Z01_FoH - All Other Finishes / Make Good & Clean	12	22-Oct-19	05-Nov-19	14-Apr-20	27-Apr-20	-140	100%	0%											
FoH Plant Rooms, Corridors, FS Lift Lobby - RDE_L12_Z02																				
5143	RDE_L12_Z02_BoH - Wet Trades (plaster/screed/C&W_sealer/undercoat)	10	06-May-19	21-May-19	03-Jun-19 A	13-Feb-20	-216	100%	64.01%											
5136	RDE_L12_Z02_BoH - MEP 1st fix	20	24-Jun-19	22-Jul-19	16-Sep-19 A	25-Feb-20	-175	100%	51.48%											
5139	RDE_L12_Z02_BoH - Door Frame & Plastering of Perimeter Edges	22	23-Jul-19	27-Jul-19	02-Oct-19 A	27-Feb-20	-172	100%	43.93%											
5135	RDE_L12_Z02_BoH - Misc Metal Works / Access Panels	48	13-Aug-19	19-Aug-19	15															

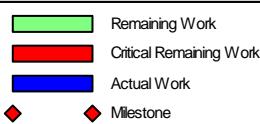
CMWP - M Target Project Remaining Works Programme_12th Progress Update (DD: 31Jan2020)

ID	Activity	RD	BL Start	BL Finish	Fcast / Actual Start	Fcast / Actual Finish	BL Fin Var	Sch %	Curr %	2020								
										Qtr 1			Qtr 2			Qtr 3		
										Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
5360	RDE_L15_Z01_FoH - Close Dry Wall	12	12-Nov-19	25-Nov-19	13-Apr-20	25-Apr-20	-121	100%	0%									
5284	RDE_L15_Z01_FoH - MEP final fix	18	16-Nov-19	06-Dec-19	15-Apr-20	06-May-20	-119	100%	0%									
5289	RDE_L15_Z01_FoH - Terrace Balustrade (base frame & glass)	6	16-Nov-19	22-Nov-19	17-Apr-20	23-Apr-20	-121	100%	0%									
5329	RDE_L15_Z01_FoH - Terrace Timber flooring	6	23-Nov-19	29-Nov-19	24-Apr-20	30-Apr-20	-121	100%	0%									
9766	RDE_L15_Z01_FoH - Dry wall finishes (paint)	8	26-Nov-19	04-Dec-19	27-Apr-20	06-May-20	-121	100%	0%									
5285	RDE_L15_Z01_FoH - All Other Finishes / Make Good & Clean	12	05-Dec-19	19-Dec-19	05-May-20	19-May-20	-119	100%	0%									
5288	RDE_L15_Z01_FoH - Floor Sealer	4	07-Dec-19	12-Dec-19	07-May-20	12-May-20	-119	100%	0%									
BoH Plan Rooms, Corridors, FS Lift Lobby - RDE_L15_Z02																		
5262	RDE_L15_Z02_BoH - Wet Trades (plaster/screed/C&W_sealer/undercoat)	14	10-Sep-19	26-Sep-19	03-Feb-20*	18-Feb-20	-113	100%	0%									
5255	RDE_L15_Z02_BoH - MEP 1st fix	24	27-Sep-19	26-Oct-19	19-Feb-20	17-Mar-20	-113	100%	0%									
5256	RDE_L15_Z02_BoH - Seal Wall Opening	6	28-Oct-19	02-Nov-19	18-Mar-20	24-Mar-20	-113	100%	0%									
5257	RDE_L15_Z02_BoH - MEP 2nd fix	18	28-Oct-19	16-Nov-19	18-Mar-20	08-Apr-20	-113	100%	0%									
5258	RDE_L15_Z02_BoH - Door Frame & Plastering of Perimeter Edges	5	28-Oct-19	01-Nov-19	18-Mar-20	23-Mar-20	-113	100%	0%									
5259	RDE_L15_Z02_BoH - Lobbies & Corr Ceiling Rods/ Grids	4	28-Oct-19	31-Oct-19	18-Mar-20	21-Mar-20	-113	100%	0%									
5355	RDE_L15_Z02_BoH - Dry Wall Frame & Board (one side)	8	19-Oct-19	28-Oct-19	20-Mar-20	28-Mar-20	-122	100%	0%									
5356	RDE_L15_Z02_BoH - Dry Wall MEP Services/Conduits (MEP 1st fix)	12	23-Oct-19	05-Nov-19	24-Mar-20	07-Apr-20	-122	100%	0%									
5357	RDE_L15_Z02_BoH - Close Dry Wall	6	06-Nov-19	12-Nov-19	08-Apr-20	14-Apr-20	-122	100%	0%									
5251	RDE_L15_Z02_BoH - Door / Ironmong / Hose Reel Cabs	7	18-Nov-19	25-Nov-19	09-Apr-20	16-Apr-20	-113	100%	0%									
5253	RDE_L15_Z02_BoH - Misc Metal Works / Access Panels	6	18-Nov-19	23-Nov-19	09-Apr-20	15-Apr-20	-113	100%	0%									
5260	RDE_L15_Z02_BoH - Lobbies & Corr Close ceiling (board) incl. Cut-Outs	7	25-Nov-19	02-Dec-19	09-Apr-20	16-Apr-20	-107	100%	0%									
5263	RDE_L15_Z02_BoH - Wall epoxy/ emulsion paint final coat	3	03-Dec-19	05-Dec-19	17-Apr-20	20-Apr-20	-107	100%	0%									
5264	RDE_L15_Z02_BoH - MEP final fix	12	03-Dec-19	16-Dec-19	17-Apr-20	30-Apr-20	-107	100%	0%									
5261	RDE_L15_Z02_BoH - Floor sealer	2	05-Dec-19	06-Dec-19	20-Apr-20	21-Apr-20	-107	100%	0%									
5252	RDE_L15_Z02_BoH - All Other Finishes / Make Good & Clean	12	10-Dec-19	23-Dec-19	24-Apr-20	08-May-20	-107	100%	0%									
Toilets - RDE_L15_Z03																		
5278	RDE_L15_Z03_Toilet - Conc kerbs, steel posts & block wall	4	10-Sep-19	13-Sep-19	03-Feb-20*	06-Feb-20	-113	100%	0%									
5275	RDE_L15_Z03_Toilet - W'proof/Testing & Protective Screed	5	18-Sep-19	23-Sep-19	10-Feb-20	14-Feb-20	-113	100%	0%									
5279	RDE_L15_Z03_Toilet - MEP 1st fix Block Wall	6	23-Sep-19	28-Sep-19	14-Feb-20	20-Feb-20	-113	100%	0%									
5274	RDE_L15_Z03_Toilet - Floor Screed	1	24-Sep-19	24-Sep-19	15-Feb-20	15-Feb-20	-113	100%	0%									
5281	RDE_L15_Z03_Toilet - MEP 1st fix Ceiling	6	25-Sep-19	02-Oct-19	17-Feb-20	22-Feb-20	-113	100%	0%									
5270	RDE_L15_Z03_Toilet - Seal Wall Opening	1	30-Sep-19	30-Sep-19	21-Feb-20	21-Feb-20	-113	100%	0%									
5272	RDE_L15_Z03_Toilet - Door Frame	2	03-Oct-19	04-Oct-19	24-Feb-20	25-Feb-20	-113	100%	0%									
5265	RDE_L15_Z03_Toilet - Wall Plastering (internal & external)	2	05-Oct-19	08-Oct-19	26-Feb-20	27-Feb-20	-113	100%	0%									
5268	RDE_L15_Z03_Toilet - Ceiling Rods/ Grids	3	09-Oct-19	11-Oct-19	28-Feb-20	02-Mar-20	-113	100%	0%									
5276	RDE_L15_Z03_Toilet - Finishes Walls & Floor Tiling	3	22-Oct-19	24-Oct-19	28-Feb-20	02-Mar-20	-102	100%	0%									
5271	RDE_L15_Z03_Toilet - MEP 2nd fix	12	12-Oct-19	15-Oct-19	03-Mar-20	16-Mar-20	-122	100%	0%									
5277	RDE_L15_Z03_Toilet - Sanitary ware & fittings	2	25-Oct-19	26-Oct-19	03-Mar-20	04-Mar-20	-102	100%	0%									
5269	RDE_L15_Z03_Toilet - Close ceiling (board) incl. Cut-Outs	3	16-Oct-19	18-Oct-19	17-Mar-20	19-Mar-20	-122	100%	0%									
5266	RDE_L15_Z03_Toilet - Door / Ironmong	2	28-Oct-19	29-Oct-19	20-Mar-20	21-Mar-20	-115	100%	0%									
5273	RDE_L15_Z03_Toilet - MEP final fix	1	31-Oct-19	31-Oct-19	20-Mar-20	20-Mar-20	-112	100%	0%									
5280	RDE_L15_Z03_Toilet - Ceiling finishes final coat	2	19-Oct-19	21-Oct-19	20-Mar-20	21-Mar-20	-122	100%	0%									
5267	RDE_L15_Z03_Toilet - All Other Finishes / Make Good & Clean	6	01-Nov-19	07-Nov-19	21-Apr-20	27-Apr-20	-137	100%	0%									
Level 15 MF																		
ABWF & MEP Works																		
FoH Areas (RDE/Auction House) - RDE_L15M_Z01																		
5324	RDE_L15M_Z01_FoH - Ceiling/Wall/Columns Sealer	3	10-Sep-19	12-Sep-19	05-Feb-20	07-Feb-20	-11											

CMWF - M Target Project Remaining Works Programme_12th Progress Update (DD: 31Jan2020)											Page 23 / 23								
ID	Activity	RD	BL Start	BL Finish	F'cast / Actual Start	F'cast / Actual Finish	BL Fin Var	Sch %	Curr %	2020									
										Qtr 1			Qtr 2			Qtr 3			
										Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	
7478	RDE_Fireman's Lifts - EMSD Inspection	12	23-Jan-20	13-Feb-20	13-Apr-20	25-Apr-20	-61	16.67%	0%										
DSD																			
7466	RDE_Drainage - Last Manhole Connection	12	02-Nov-19	15-Nov-19	17-Feb-20	29-Feb-20	-82	100%	0%										
7468	RDE_Drainage - Inspection of Last Manhole	6	16-Nov-19	22-Nov-19	02-Mar-20	07-Mar-20	-82	100%	0%										
WSD																			
7471	RDE_Plumbing/Potable/Flushing Water - W.A. Inspection	6	20-Dec-19	27-Dec-19	22-Apr-20	28-Apr-20	-96	100%	0%										
7473	RDE_Plumbing/Potable/Flushing Water - Water Connection & Water Meter Installai	6	06-Jan-20	11-Jan-20	07-May-20	13-May-20	-96	100%	0%										
7491	RDE_Plumbing/Potable/Flushing Water - WSD Inspection	24	13-Jan-20	17-Feb-20	14-May-20	10-Jun-20	-96	45.83%	0%										
7493	RDE_FS Water - W.A Inspection	6	28-Dec-19	04-Jan-20	25-Apr-20	02-May-20	-93	100%	0%										
7494	RDE_FS Water - Water Connection & Water Meter Installaiton	6	06-Jan-20	11-Jan-20	04-May-20	09-May-20	-93	100%	0%										
7496	RDE_FS Water - WSD Inspection	24	13-Jan-20	17-Feb-20	11-May-20	06-Jun-20	-93	45.83%	0%										
FSD & BD																			
7463	RDE DG - FSD Regional Office Inspection (FSI Gen_Set & Fuel Tanks)	6	02-Jan-20	08-Jan-20	24-Apr-20	30-Apr-20	-89	100%	0%										
RDE_FSD	RDE_FSD - FSD Inspection/Re-Inspection/Remedial Works (layouts & systems)	48	28-Feb-20	24-Apr-20	20-Jun-20	17-Aug-20	-95	0%	0%										
RDE_BD	RDE_BD - Inspection/Re-Inspection	24	25-Apr-20	23-May-20	28-Jul-20	24-Aug-20	-77	0%	0%										

L1

Activity ID	Activity Name	Start Date	Finish Date	2020						
				Feb	Mar	Apr	May			
				26	27	28	29			
L1 Contract for Lyric Theatre Complex (3MRP)										
Cost Centre B - Excavation and Lateral Support (ELS) Stage 2										
Excavation and ELS Works (Stage 2)										
CB161035	[South - Area 1 & 2] Excavate South Soil Berm to -12.4mPD	23-Dec-19 A	02-Mar-20							
CB161040	[South - Area 1 & 2] Pile Head Treatment at South (11 nr BP)	02-Jan-20 A	03-Mar-20							
CB161060	[South - Area 1 & 2] Excavate East Soil Berm to -12.0mPD	23-Jan-20 A	24-Feb-20 A							
CB161070	[South - Area 1 & 2] Install 6th Layer of Strut S6	25-Feb-20 A	11-Mar-20							
CB161100	[South - Area 1 & 2] Excavate East Berm to Formation Level -14.2mPD	12-Mar-20	01-Apr-20							
CB161200	[South - Area 1 & 2] Pile Head Treatment at East (14 nr BP)	23-Mar-20	18-Apr-20							
Cost Centre C - Basement										
Cost Centre C1 - Essential Basement Structure (Excl. AET Protection & Box Culvert)										
Central Area (GL. M1-X1 / 62-70.1)										
CC100420	[South - L01] Construct Central B2-B1 Columns & Structural Walls	02-Oct-19 A	05-Mar-20							
CC100440	[South - L01] Construct Central B1 Beam & Slab	06-Dec-19 A	14-Mar-20							
CC100510	[South - L01] Construct B1-B1M Central Columns & Structural Walls	24-Feb-20 A	23-Apr-20							
CC100520	[South - L01] Construct B1M Central Beam & Slab	24-Apr-20	13-Jun-20							
South / West Area (GL. W1-AA1 / 62-71 & M1-AA1 / 68.1-71)										
CC100220	[South - L01] Construct South / West Pile Cap / B2 Slab at -12.4mPD	22-Dec-19 A	13-Mar-20							
CC100405	[South - L01] Remove Strut Layer S5 West	02-Mar-20*	14-Mar-20							
CC100406	[South - L01] Remove Strut Layer S5 South	16-Mar-20	02-Apr-20							
CC100408a	[South - L01] Construct B2-B1 South / West Basement Wall 1st Pour	26-Mar-20	14-Apr-20							
CC100410a	[South - L01] Remove Strut Layer S4 South / West	15-Apr-20	29-Apr-20							
CC100410b	[South - L01] Construct B2-B1 South / West Basement Wall to bottom of S3	18-Apr-20	04-May-20							
CC100410c	[South - L01] Install Re-prop	29-Apr-20	13-May-20							
CC100410d	[South - L01] Remove Strut Layer S3 South / West	14-May-20	28-May-20							
CC100410e	[South - L01] Construct B2-B1 South / West Internal Walls / Columns	29-May-20	17-Jun-20							
CC100415	[South - L01] Construct Mega Columns / Walls Supporting Wall Beam WF	21-Feb-20 A	06-Mar-20							
CC100418	[South - L01] Construct Beam & Slab Supporting Wall Beam WF	07-Mar-20	18-Mar-20							
CC100419	[South - L01] Construct Mega Columns & Walls up to Soffit Wall Beam WF	19-Mar-20	01-Apr-20							
East Area (GL. M1-A1 / 60-62)										
CC100290	[South - L01] Blinding Layer for Pile Cap / B2 Slab at East	17-Apr-20	08-May-20							



Project ID: L13MRP-20200229
Layout: L1-3MRP (Env)
Page: 1 of 4

West Kowloon Cultural District Authority
L1 Contract for Lyric Theatre Complex & Extended Basement
Three Month Rolling Programme (3MRP) - Status as of 29 Feb 2020



Activity ID	Activity Name	Start Date	Finish Date	2020			
				Feb	Mar	Apr	May
				26	27	28	29
CC100300	[South - L01] Construct East Pile Cap / B2 Slab at -14.2mPD	20-Apr-20	23-May-20				
CC100305	[South/North] BA14 Completion of Pile Cap - BD Submission & Acknowledgement	25-May-20	30-May-20				
CC100400	[South - L01] Remove Strut Layer S6 East	07-May-20	30-May-20				
CC100400a	[South - L01] Construct B2-B1 East Internal Walls & Columns	22-May-20	16-Jun-20				
CC100400b	[South - L01] Construct B2-B1 Basement Wall to bottom of S4	16-May-20	05-Jun-20				
North Area (GL. B1-M1 / 59.1 - 69)							
CC101600	[North - L04] Remove Strut Layer S4 (Phase 2, affected by IC18)	23-Dec-19 A	09-Mar-20	26	27	28	29
CC101665	[North - L04] Construct B2-B1 Columns (West)	07-Nov-19 A	09-Mar-20	26	27	28	29
CC101675	[North - L04] Construct B2-B1 Internal Walls	12-Jan-20 A	17-Mar-20	26	27	28	29
CC101685	[North - L04] Construct B2-B1 Perimeter Walls / Mega Columns (West)	06-Jan-20 A	14-Mar-20	26	27	28	29
CC101700	[North - L04] Construct B2-B1 Perimeter Walls & Columns (East)	19-Jan-20 A	26-Mar-20	26	27	28	29
CC101780	[North - L04] Construct B1 Beam & Slab	13-Jan-20 A	24-Apr-20	26	27	28	29
CC101800	[North - L04] Remove Strut Layer S3 & S2	15-Apr-20	21-May-20				
CC101835	[North - L04] Construct B1-G/F Columns	12-May-20	03-Jun-20				
CC101845	[North - L04] Construct B1-G/F Internal Wall	20-May-20	11-Jun-20				
Area 6							
CC102420	[Area 6 - L06] Construct B1-B1M Columns & Structural Walls	10-Dec-18 A	07-Mar-20	26	27	28	29
CC102430	[Area 6 - L06] Construct B1M Beam & Slab	14-Jan-19 A	20-Mar-20	26	27	28	29
CC102510	[Area 6 - L06] Construct B1M- G/F Columns & Structural Walls	13-May-19 A	24-Mar-20	26	27	28	29
Cost Centre C3 - AET Protection							
Wall Beam WF							
CC300100	Complete South Basement Mega Column & Area 6 Column for WF		01-Apr-20				
CC300190a	WF: Stage 1.1 - Install Temporary Bearing	02-Apr-20	06-Apr-20				
CC300190b	WF: Stage 1.2 - Install Sand Layer & Soffit Formwork	02-Apr-20	14-Apr-20				
CC300190c	WF: Stage 1.3 - Cast Extended Base Slab	15-Apr-20	29-Apr-20				
CC300190d	WF: Stage 1.4 - Cast Wall Stem	02-May-20	08-May-20				
CC300200	WF: Stage 1.5 - Apply Pre-stress	09-May-20	13-May-20				
CC300205a	WF: Stage 2.1 - Washout Sand Layer	14-May-20	16-May-20				
CC300205b	WF: Stage 2.2 - Cast Side Section against ECM	18-May-20	28-May-20				
CC300210	WF: Stage 2.3 - Apply Pre-stress	29-May-20	02-Jun-20				
Wall Beam W2							

 Remaining Work
 Critical Remaining Work
 Actual Work
 Milestone

Project ID: L13MRP-20200229
 Layout: L1-3MRP (Env)
 Page: 2 of 4

West Kowloon Cultural District Authority
L1 Contract for Lyric Theatre Complex & Extended Basement
Three Month Rolling Programme (3MRP) - Status as of 29 Feb 2020



Activity ID	Activity Name	Start Date	Finish Date	2020			
				Feb 26	Mar 27	Apr 28	May 29
CC300100a	Complete North Basement B1 Slab for PT Wall Beams		24-Apr-20				◆
CC300795a	W2: Stage 1.1 - Install Temporary Bearing	25-Apr-20	28-Apr-20			◆	
CC300795b	W2: Stage 1.2 - Install Sand Layer & Soffit Formwork	25-Apr-20	05-May-20			◆	
CC300795c	W2: Stage 1.3 - Cast Extended Base Slab	06-May-20	20-May-20			◆	
CC300795d	W2: Stage 1.4 - Cast Wall Stem	21-May-20	27-May-20			◆	
CC300800	W2: Stage 1.5 - Apply Pre-stress	28-May-20	01-Jun-20			◆	
Wall Beam W1							
CC300695a	W1: Stage 1.1 - Install Temporary Bearing	25-Apr-20	28-Apr-20			◆	
CC300695b	W1: Stage 1.2 - Install Sand Layer & Soffit Formwork	25-Apr-20	05-May-20			◆	
CC300695c	W1: Stage 1.3 - Cast Extended Base Slab	06-May-20	20-May-20			◆	
CC300695d	W1: Stage 1.4 - Cast Wall Stem	21-May-20	27-May-20			◆	
CC300700	W1: Stage 1.5 - Apply Pre-stress	28-May-20	01-Jun-20			◆	
Cost Centre D - Public Infrastructure Works (PIW)							
Cost Centre D2 - Austin Road West Lay-by							
Cost Centre D2.1 Roadworks and Remaining							
MC30-Ch.170 to MC30-Ch.150							
CD210730	MC30-Ch170-150: Roadworks & Footpath	30-Jan-19 A	20-Mar-20			◆	
CD210750	MC30-Ch170-150: Install Street Furniture & Lighting	21-Mar-20	15-Apr-20			◆	
MC30-Ch.150 to MC30-Ch.100							
CD210630	MC30-Ch150-100: Roadworks & Footpath	13-Feb-19 A	27-Mar-20			◆	
CD210650	MC30-Ch150-100: Install Street Furniture & Lighting	16-Apr-20	08-May-20			◆	
MC30-Ch.100 to MC30-Ch.50							
CD210530	MC30-Ch100-50: Roadworks & Footpath	11-Jul-19 A	15-Apr-20			◆	
CD210535	MC30-Ch100-50: Maintenance Staircase	21-Mar-20	15-Apr-20			◆	
CD210550	MC30-Ch100-50: Install Street Furniture & Lighting	09-May-20	29-May-20			◆	
MC30-Ch.50 to MC30-Ch.00							
CD210420	MC30-Ch50-00: DN450 Freshwater (0+64 - 0+14)	14-Mar-19 A	14-Feb-20 A			◆	
CD210425	MC30-Ch50-00: DN450 Salt Water (0+062 - 0+12)	14-Mar-19 A	14-Feb-20 A			◆	
CD210430	MC30-Ch50-00: Roadworks & Footpath	16-Apr-20	03-Jun-20			◆	
MC20-Ch.140 to MC20-Ch.100							
CD210310	MC20-Ch140-100: Road Drainage (WL1.12 to WL1.9)	06-Jun-19 A	27-Mar-20			◆	

█ Remaining Work
█ Critical Remaining Work
█ Actual Work
◆ Milestone

Project ID: L13MRP-20200229
 Layout: L1-3MRP (Env)
 Page: 3 of 4

West Kowloon Cultural District Authority
L1 Contract for Lyric Theatre Complex & Extended Basement
Three Month Rolling Programme (3MRP) - Status as of 29 Feb 2020



Activity ID	Activity Name	Start Date	Finish Date	2020			
				Feb	Mar	Apr	May
				26	27	28	29
CD210320	MC20-Ch140-100: DN450 Freshwater (0+14 - 0+00)	17-Feb-20 A	07-Mar-20				
CD210325	MC20-Ch140-100: DN450 Salt Water (0+12 - 0+00)	17-Feb-20 A	07-Mar-20				
Cost Centre D2.2 Drainage							
MC20-Ch.140 to MC20-Ch.00							
CD220190	MC20-Ch140-00: 1800mm dia Drainage (SF1.1 to SF1.1B) - 30m	02-Jul-19 A	11-Mar-20				
Cost Centre E - Miscellaneous Works							
Cost Centre E2 - External Utilities							
Cost Centre E2.1 - External Utilities - Drainage							
CE210320	N: Install 600mm dia Storm Drainage (DMH1.2 to DMH1.2A) - 21m	25-Mar-20	25-Apr-20				
CE210330	N: Install 300mm dia Storm Drainage (DMH1.5 to DMH1.2) - 5m	27-Apr-20	12-May-20				
CE210340	N: Install 450mm dia Storm Drainage (DMH1.1 to DMH1.2) - 3m	27-Apr-20	12-May-20				
CE210410	N: Install 600mm dia Storm Drainage (DMH1.2A to DMH1.3) - 10m	13-May-20	26-May-20				
CE210510	N: Install 300mm dia Sewerage (SMH1.2 to F1.2) - 9m	24-Feb-20 A	29-Feb-20 A				
CE210520	N: Install 300mm dia Sewerage (SMH1.3 to SMH1.3A) - 20m	02-Mar-20	21-Mar-20				
CE210530	N: Install 300mm dia Sewerage (SMH1.3A to F1.3) - 12m	23-Mar-20	16-Apr-20				
CE210540	N: Install 300mm dia Sewerage (SMH1.1 to F1.5) - 18m	01-Aug-20	21-Aug-20				
Cost Centre E2.2 - External Utilities - Water Works							
CE220210	N: Install DN150 FR.N.P. Freshwater Main (FW) at GL 70 to 69 (12m)	17-Apr-20	16-May-20				
CE220220	N: Install DN100 F.S.P. Freshwater Main (Fire) at Grid 70 to 69 (12.3m)	17-Apr-20	16-May-20				
CE220230	N: Install DN100 FL.W.P. Saltwater Main at Grid 70 to 69 (13.7m)	17-Apr-20	16-May-20				



Project ID: L13MRP-20200229
 Layout: L1-3MRP (Env)
 Page: 4 of 4

West Kowloon Cultural District Authority
L1 Contract for Lyric Theatre Complex & Extended Basement
Three Month Rolling Programme (3MRP) - Status as of 29 Feb 2020



L2

Mark up Rolling Programme (as of 21 Feb 2020)

Work Item	2019												2020				
	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May		
1 <u>Visual Mock Up</u>																	
a) Material and shop drawing submission & approval	■																
b) Identify Location, Install VMU, Inspection/ Approval																	
2 PTMD and CPMD Compliance Review				■		■				■				■			
3 Major E&M Submissions																	
a) Submission of CSD & CBWD LTC																	
4 DfMA Development (MEP Module)																	
a) DfMA Development - LB2		■	■	■	■												
b) DfMA Development - LB1 and LB1M		■	■	■	■												
5 Main Contractor's Design Item																	
a) Façade shop drawings submission/ resubmission																	
b) Stage Lighting Design Coordination																	
c) AV Design Coordination																	
d) Stage Machinery Design Coordination																	
6 MT Steel Truss Shop Drawings Submission and Approval																	
7 LTC Construction																	
VIS Installation																	
B2 Construction																	
B2U/F and B1L/F Construction																	
8 Extended Basement																	
Builder's Works in Extended Basement (South)																	
BS Installation (South B2)																	
9 DCS Cofferdam A																	
DCS Cofferdam A - Section 1																	
DCS Cofferdam A - Section 2																	
10 Remaining Works for M+ Promenade																	
11 Modification to Existing Pump Cell																	
Reprovision of Sea Water Pump Cell																	

Note

1. VMU: Delayed pending for design and material finalisation. VMU completion deadline moved by agreement.
2. MEP: Shop drawings submission dependent on resolution of BIM coordination issues and CAI issues.
3. DfMA: Delay due to CAI-026, CAI-031, L1 CAI-074 and L1 CAI-077.
4. Façade: Delay due to unfrozen design and design changes.
5. DCS, Remaining Works for M+ Promenade, Reprovision of Pump Cell: Delay due to absence of site possession.

C. Action and Limit Levels for Construction Phase

Air Quality

The Action and Limit Levels for 1-hour and 24-hour TSP for the monitoring station are presented in following tables:

Table C-1: Action and Limit Levels for 1-hour TSP

Monitoring Station	Action Level (mg/m ³)	Limit Level (mg/m ³)
AM1	273.7	500
AM2B	274.2	500

Table C-2: Action and Limit Levels for 24-hour TSP

Monitoring Station	Action Level (µg/m ³)	Limit Level (µg/m ³)
AM1	143.6	260
AM2B	151.1	260

Noise

The Action and Limit Levels for Noise for the monitoring stations are presented in following table:

Table C-3: Action and Limit Levels for Construction Noise

Time Period & Monitoring Locations	Action Level	Limit Level
NM1A 0700-1900 hours on normal weekdays	When one documented complaint is received from any one of the sensitive receivers	75 dB(A)

D. Event and Action Plan for Air Quality, Noise, Landscape and Visual Impact

Air Quality

In case the Action and Limit Levels are not complied during construction stage, the following Event and Action Plan should be followed:

Table D-1: Event and Action Plan for Air Quality

Event	Action			
	ET	IEC	WKCDA	Contractor
Action Level				
1. Exceedance for one sample	<ul style="list-style-type: none"> 1. Identify source, investigate the causes of exceedance and propose remedial measures; 2. Inform IEC and WKCDA; 3. Repeat measurement to confirm finding; 4. Increase monitoring frequency to daily. 	<ul style="list-style-type: none"> 1. Check monitoring data submitted by ET; 2. Check Contractor's working method. 	<ul style="list-style-type: none"> 1. Notify Contractor 	<ul style="list-style-type: none"> 1. Rectify any unacceptable practice; 2. Amend working methods if appropriate.
2. Exceedance for two or more consecutive samples	<ul style="list-style-type: none"> 1. Identify source; 2. Inform IEC and WKCDA; 3. Advise the WKCDA on the effectiveness of the proposed remedial measures; 4. Repeat measurements to confirm findings; 5. Increase monitoring frequency to daily; 6. Discuss with IEC and Contractor on remedial actions required; 7. If exceedance continues, arrange meeting with IEC and WKCDA; 8. If exceedance stops, cease additional monitoring. 	<ul style="list-style-type: none"> 1. Check monitoring data submitted by ET; 2. Check Contractor's working method; 3. Discuss with ET and Contractor on possible remedial measures; 4. Advise the ET on the effectiveness of the proposed remedial measures; 5. Monitor the implementation of remedial measures. 	<ul style="list-style-type: none"> 1. Confirm receipt of notification of failure in writing; 2. Notify Contractor; 3. Ensure remedial measures properly implemented. 	<ul style="list-style-type: none"> 1. Submit proposals for remedial to WKCDA within three working days of notification; 2. Implement the agreed proposals; 3. Amend proposal if appropriate.
Limit Level				
1. Exceedance for one sample	<ul style="list-style-type: none"> 1. Identify source, investigate the causes of exceedance and propose remedial measures; 2. Inform WKCDA, Contractor and EPD; 3. Repeat measurement to confirm finding; 4. Increase monitoring frequency to daily; 5. Assess effectiveness of Contractor's remedial actions and keep IEC, EPD and WKCDA informed of the results. 	<ul style="list-style-type: none"> 1. Check monitoring data submitted by ET; 2. Check Contractor's working method; 3. Discuss with ET and Contractor on possible remedial measures; 4. Advise the WKCDA on the effectiveness of the proposed remedial measures; 5. Monitor the implementation of remedial measures. 	<ul style="list-style-type: none"> 1. Confirm receipt of notification of failure in writing; 2. Notify Contractor; 3. Ensure remedial measures properly implemented. 	<ul style="list-style-type: none"> 1. Take immediate action to avoid further exceedance; 2. Submit proposals for remedial actions to IEC within three working days of notification; 3. Implement the agreed proposals; 4. Amend proposal if appropriate.

Event	Action
<p>2. Exceedance for two or more consecutive samples</p> <ul style="list-style-type: none"> 1. Notify IEC, WKCDA, Contractor and EPD; 2. Identify source; 3. Repeat measurement to confirm findings; 4. Increase monitoring frequency to daily; 5. Carry out analysis of Contractor's working procedures to determine possible mitigation to be implemented; 6. Arrange meeting with IEC and WKCDA to discuss the remedial actions to be taken; 7. Assess effectiveness of Contractor's remedial actions and keep IEC, EPD and WKCDAs informed of the results; 8. If exceedance stops, cease additional monitoring. 	<p>1. Check monitoring data submitted by ET;</p> <p>2. Check Contractor's working method;</p> <p>3. Discuss amongst WKCDA, ET, and Contractor on the potential remedial actions;</p> <p>4. Review Contractor's remedial actions whenever necessary to assure their effectiveness and advise the WKCDAs accordingly;</p> <p>5. Monitor the implementation of remedial measures.</p> <p>1. Confirm receipt of notification of failure in writing;</p> <p>2. Notify Contractor;</p> <p>3. In consolidation with the IEC, agree with the Contractor on the remedial measures to be implemented;</p> <p>4. Ensure remedial measures properly implemented;</p> <p>5. If exceedance continues, consider what portion of the work is responsible and instruct the Contractor to stop that portion of work until the exceedance is abated.</p> <p>1. Take immediate action to avoid further exceedance;</p> <p>2. Submit proposals for remedial actions to IEC within three working days of notification;</p> <p>3. Implement the agreed proposals;</p> <p>4. Resubmit proposals if problem still not under control;</p> <p>5. Stop the relevant portion of works as determined by the WKCDAs until the exceedance is abated.</p>

Construction Noise

In case the Action and Limit Levels are not complied during construction stage, the following Event and Action Plan should be followed:

Table D-2: Event and Action Plan for Construction Noise

Event	Action			
	ET	IEC	WKCDA	Contractor
Action Level	<ol style="list-style-type: none"> 1. Notify WKCDA, IEC and Contractor; 2. Carry out investigation; 3. Report the results of investigation to the IEC, WKCDA and Contractor; 4. Discuss with the IEC and Contractor on remedial measures required; 5. Increase monitoring frequency to check mitigation effectiveness. 	<ol style="list-style-type: none"> 1. Review the investigation results submitted by the ET; 2. Review the proposed remedial measures by the Contractor and advise the WKCDA accordingly; 3. Advise the WKCDA on the effectiveness of the proposed remedial measures. 	<ol style="list-style-type: none"> 1. Confirm receipt of notification of failure in writing; 2. Notify Contractor; 3. In consolidation with the IEC, agree with the Contractor on the remedial measures to be implemented; 4. Supervise the implementation of remedial measures. 	<ol style="list-style-type: none"> 1. Submit noise mitigation proposals to IEC and WKCDA; 2. Implement noise mitigation proposals.
Limit Level	<ol style="list-style-type: none"> 1. Inform IEC, WKCDA, Contractor and EPD; 2. Repeat measurements to confirm findings; 3. Increase monitoring frequency; 4. Identify source and investigate the cause of exceedance; 5. Carry out analysis of Contractor's working procedures; 6. Discuss with the IEC, Contractor and WKCDA on remedial measures required; 7. Assess effectiveness of Contractor's remedial actions and keep IEC, EPD and WKCDA informed of the results; 8. If exceedance stops, cease additional monitoring. 	<ol style="list-style-type: none"> 1. Discuss amongst WKCDA, ET, and Contractor on the potentialin writing; remedial actions; 2. Review Contractor's remedial actions whenever necessary to assure their effectiveness and advise the WKCDA accordingly. 	<ol style="list-style-type: none"> 1. Confirm receipt of notification of failure in writing; 2. Notify Contractor; 3. In consolidation with the IEC, agree with the Contractor on the remedial measures to be implemented; 4. Supervise the implementation of remedial measures; 5. If exceedance continues, consider stopping the Contractor to continue working on that portion of work which causes the exceedance until the exceedance is abated. 	<ol style="list-style-type: none"> 1. Take immediate action to avoid further exceedance; 2. Submit proposals for remedial actions to IEC and WKCDA within 3 working days of notification; 3. Implement the agreed proposals; 4. Submit further proposal if problem still not under control; 5. Stop the relevant portion of works as instructed by the WKCDA until the exceedance is abated.

Landscape and Visual Impact

In case of non-compliance of landscape and visual impacts, procedures in accordance with the Event and Action Plan should be followed:

Table D-3: Event and Action Plan for Landscape and Visual Impact

Event	Action			
	ET	IEC	WKCDA	Contractor
Design Check	<ol style="list-style-type: none"> 1. Design check to make sure the design complies with all the proposed mitigation measures in the EIA report; 2. Prepare and submit report. 	<ol style="list-style-type: none"> 1. Check report submitted by ET; 2. Recommend remedial design if necessary. 	<ol style="list-style-type: none"> 1. Undertake remedial design if necessary. 	-
Non-conformity on one occasion	<ol style="list-style-type: none"> 1. Identify source of non-conformity; 2. Report to IEC and WKCDA; 3. Discuss remedial actions with IEC, WKCDA and Contractor; 4. Monitor remedial actions until rectification has been completed. 	<ol style="list-style-type: none"> 1. Check and verify source of non-conformity; 2. Discuss remedial actions with ET and Contractor; 3. Advise WKCDA on effectiveness of proposed remedial actions; 4. Check implementation of remedial actions. 	<ol style="list-style-type: none"> 1. Notify Contractor; 2. Ensure remedial actions are properly implemented. 	<ol style="list-style-type: none"> 1. Amend working method as necessary; 2. Rectify damage and undertake necessary replacement and remedial actions.
Repeated conformity	<ol style="list-style-type: none"> 1. Identify source of non-conformity; 2. Report to IEC and WKCDA; 3. Increase monitoring frequency; 4. Discuss remedial actions with IEC, WKCDA and Contractor; 5. Monitor remedial actions until rectification has been completed; 6. If non-conformity rectified, reduce monitoring frequency back to normal. 	<ol style="list-style-type: none"> 1. Check and verify source of non-conformity; 2. Check Contractor's working method; 3. Discuss remedial actions with ET and Contractor; 4. Advise WKCDA on effectiveness of proposed remedial actions; 5. Supervise implementation of remedial actions. 	<ol style="list-style-type: none"> 1. Notify Contractor; 2. Ensure remedial actions are properly implemented. 	<ol style="list-style-type: none"> 1. Amend working method as necessary; 2. Rectify damage and undertake necessary replacement and remedial actions.

E. Monitoring Schedule

FEBRUARY 2020

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
						1
2	3	4 M+ Landscape & Visual	5 AM1, AM2B - 24hrTSP, 1hr TSP x3 NM1A - Noise Impact Monitoring	6	7	8
9	10	11 AM1, AM2B - 24hrTSP, 1hr TSP x3 NM1A - Noise Impact Monitoring	12 Lyric Landscape & Visual Inspection	13	14	15
16	17 AM1, AM2B - 24hrTSP, 1hr TSP x3 NM1A - Noise Impact Monitoring	18 M+ Landscape & Visual	19	20	21	22 AM1, AM2B - 24hrTSP, 1hr TSP x3
23	24	25	26 Lyric Landscape & Visual Inspection	27	28 AM1, AM2B - 24hrTSP, 1hr TSP x3 NM1A - Noise Impact Monitoring	29
		Notes: AM1 - International Commerce Centre (ICC) AM2B - 1st Floor of Gammon's Site Office NM1A - International Commerce Centre (ICC)				

MARCH 2020

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1	2	3	4	5 AM1, AM2B - 24hrTSP, 1hr TSP x3 NM1A - Noise Impact Monitoring	6	7
8	9	10	11 AM1, AM2B - 24hrTSP, 1hr TSP x3 NM1A - Noise Impact Monitoring	12	13	14
15	16	17 AM1, AM2B - 24hrTSP, 1hr TSP x3 NM1A - Noise Impact Monitoring	18	19	20	21
22	23 AM1, AM2B - 24hrTSP, 1hr TSP x3 NM1A - Noise Impact Monitoring	24	25	26	27 AM1, AM2B - 24hrTSP, 1hr TSP x3	28
29	30	31				
		Notes: AM1 - International Commerce Centre (ICC) AM2B - 1st Floor of Gammon's Site Office NM1A - International Commerce Centre (ICC)				

F. Calibration Certifications

High-Volume TSP Sampler
5-Point Calibration Record

Location : AM1(ICC)
Calibrated by : K.T.Ho
Date : 20/01/2020

Sampler

Model : TE-5170
Serial Number : S/N 0767

Calibration Orifice and Standard Calibration Relationship

Serial Number : 2454
Service Date : 25 February 2019
Slope (m) : 2.07076
Intercept (b) : -0.02917
Correlation Coefficient(r) : 1.00000

Standard Condition

Pstd (hpa) : 1013
Tstd (K) : 298.18

Calibration Condition

Pa (hpa) : 1019
Ta(K) : 293

Resistance Plate	dH [green liquid] (inch water)	Z	X=Qstd (cubic meter/min)	IC (chart)	Y (corrected)
1	18 holes	11.2	3.385	1.649	58
2	13 holes	8.2	2.896	1.413	50
3	10 holes	6.2	2.519	1.230	42
4	7 holes	4.4	2.122	1.039	32
5	5 holes	2.6	1.631	0.802	20

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

Sampler Calibration Relationship

Slope(m): 45.930

Intercept(b): -15.468

Correlation Coefficient(r): 0.9960

Checked by:


Magnum Fan

Date: 21/01/2020

High-Volume TSP Sampler
5-Point Calibration Record

Location : AM2B (Gammon Office)
Calibrated by : K.T.Ho
Date : 20/01/2020

Sampler

Model : TE-5170
Serial Number : S/N 8919

Calibration Orifice and Standard Calibration Relationship

Serial Number : 2454
Service Date : 25 February 2019
Slope (m) : 2.07076
Intercept (b) : -0.02917
Correlation Coefficient(r) : 1.00000

Standard Condition

Pstd (hpa) : 1013
Tstd (K) : 298.18

Calibration Condition

Pa (hpa) : 1019
Ta(K) : 293

Resistance Plate		dH [green liquid] (inch water)	Z	X=Qstd (cubic meter/min)	IC (chart)	Y (corrected)
1	18 holes	12.4	3.562	1.734	62	62.71
2	13 holes	9.0	3.034	1.479	56	56.64
3	10 holes	6.4	2.559	1.250	46	46.53
4	7 holes	4.2	2.073	1.015	32	32.37
5	5 holes	2.2	1.500	0.739	22	22.25

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

Sampler Calibration Relationship

Slope(m): 42.777

Intercept(b): -9.089

Correlation Coefficient(r): 0.9910

Checked by: Magnum Fan

Date: 21/01/2020



RECALIBRATION

DUE DATE:

February 25, 2020

Certificate of Calibration

Calibration Certification Information

Cal. Date:	February 25, 2019	Rootsmeter S/N:	438320	Ta:	294	°K
Operator:	Jim Tisch			Pa:	762.0	mm Hg
Calibration Model #:	TE-5025A		Calibrator S/N:	2454		

Run	Vol. Init (m ³)	Vol. Final (m ³)	ΔVol. (m ³)	ΔTime (min)	ΔP (mm Hg)	ΔH (in H ₂ O)
1	1	2	1	1.4400	3.2	2.00
2	3	4	1	1.0200	6.4	4.00
3	5	6	1	0.9120	7.9	5.00
4	7	8	1	0.8700	8.8	5.50
5	9	10	1	0.7180	12.8	8.00

Data Tabulation

Vstd (m ³)	Qstd (x-axis)	$\sqrt{\Delta H \left(\frac{Pa}{Pstd} \right) \left(\frac{Tstd}{Ta} \right)}$ (y-axis)	Va	Qa (x-axis)	$\sqrt{\Delta H \left(\frac{Ta}{Pa} \right)}$ (y-axis)
1.0120	0.7028	1.4257	0.9958	0.6915	0.8784
1.0077	0.9880	2.0162	0.9916	0.9722	1.2423
1.0057	1.1028	2.2542	0.9896	1.0851	1.3889
1.0045	1.1546	2.3642	0.9885	1.1362	1.4567
0.9992	1.3916	2.8513	0.9832	1.3694	1.7569
QSTD		m= 2.07076		m= 1.29667	
QSTD		b= -0.02917		b= -0.01797	
QSTD		r= 1.00000		r= 1.00000	

Calculations

$$Vstd = \Delta Vol \left(\frac{(Pa - \Delta P)}{Pstd} \right) \left(\frac{Tstd}{Ta} \right)$$

$$Vstd = \Delta Vol \left(\frac{(Pa - \Delta P)}{Pa} \right)$$

$$Qstd = Vstd / \Delta Time$$

$$Qstd = Va / \Delta Time$$

For subsequent flow rate calculations:

$$Qstd = 1/m \left(\left(\sqrt{\Delta H \left(\frac{Pa}{Pstd} \right) \left(\frac{Tstd}{Ta} \right)} \right) - b \right)$$

$$Qa = 1/m \left(\left(\sqrt{\Delta H \left(\frac{Ta}{Pa} \right)} \right) - b \right)$$

Standard Conditions

Tstd: 298.15 °K

Pstd: 760 mm Hg

Key

 ΔH : calibrator manometer reading (in H₂O) ΔP : rootsmeter manometer reading (mm Hg)

Ta: actual absolute temperature (°K)

Pa: actual barometric pressure (mm Hg)

b: intercept

m: slope

RECALIBRATION

US EPA recommends annual recalibration per 1998
40 Code of Federal Regulations Part 50 to 51,
Appendix B to Part 50, Reference Method for the
Determination of Suspended Particulate Matter in
the Atmosphere, 9.2.17, page 30

**SUB-CONTRACTING REPORT**

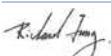
CONTACT	:	MR K.W. FAN	WORK ORDER	:	HK1907876
CLIENT	:	ENVIROTECH SERVICES CO.			
ADDRESS	:	RM113, 1/F, MY LOFT, 9 HOI WING ROAD, TUEN MUN, N.T. HONG KONG	SUB-BATCH	:	1
			DATE RECEIVED	:	22-FEB-2019
			DATE OF ISSUE	:	7-MAR-2019
PROJECT	:	---	NO. OF SAMPLES	:	1
			CLIENT ORDER	:	---

General Comments

- Sample(s) were received in ambient condition.
- Sample(s) analysed and reported on as received basis.
- Calibration was subcontracted to and analysed by Action United Enviro Services.

Signatories

This document has been signed by those names that appear on this report and are the authorised signatories

<i>Signatories</i>	<i>Position</i>
	Richard Fung

General Manager

This is the Final Report and supersedes any preliminary report with this batch number.

Results apply to sample(s) as submitted. All pages of this report have been checked and approved for release.

WORK ORDER : HK1907876
SUB-BATCH : 1
CLIENT : ENVIROTECH SERVICES CO.
PROJECT : ----



ALS Lab ID	Client's Sample ID	Sample Type	Sample Date	External Lab Report No.
HK1907876-001	S/N: 456668	Equipments	22-Feb-2019	S/N: 456668

Equipment Verification Report (TSP)

Equipment Calibrated:

Type:	Laser Dust monitor
Manufacturer:	Sibata LD-3B
Serial No.	456668
Equipment Ref:	Nil
Job Order	HK1907876

Standard Equipment:

Standard Equipment:	Higher Volume Sampler
Location & Location ID:	AUES office (calibration room)
Equipment Ref:	HVS 018
Last Calibration Date:	12 February 2019

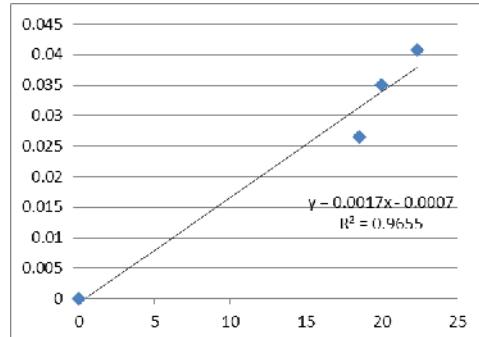
Equipment Verification Results:

Testing Date: 4 March 2019

Hour	Time	Mean Temp °C	Mean Pressure (hPa)	Concentration in mg/m³ (Standard Equipment)	Total Count (Calibrated Equipment)	Count/Minute (Total Count/min)
2hr13min	09:10 ~ 11:23	20.9	1013.7	0.035	2659	20.0
2hr01min	11:30 ~ 13:31	20.9	1013.7	0.026	2241	18.5
2hr01min	13:40 ~ 15:41	20.9	1013.7	0.041	2688	22.3

Linear Regression of Y or X

Slope (K-factor): 0.0017
Correlation Coefficient: 0.9826
Date of Issue: 7 March 2019



Remarks:

- Strong Correlation ($R>0.8$)
- Factor 0.0017 should be applied for TSP monitoring

*If $R<0.5$, repair or re-verification is required for the equipment

Operator : Fai So Signature : Date : 7 March 2019

QC Reviewer : Ben Tam Signature : Date : 7 March 2019

**SUB-CONTRACTING REPORT**

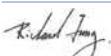
CONTACT	:	MR K.W. FAN	WORK ORDER	:	HK1907875
CLIENT	:	ENVIROTECH SERVICES CO.			
ADDRESS	:	RM113, 1/F, MY LOFT, 9 HOI WING ROAD, TUEN MUN, N.T. HONG KONG	SUB-BATCH	:	1
			DATE RECEIVED	:	22-FEB-2019
			DATE OF ISSUE	:	7-MAR-2019
PROJECT	:	---	NO. OF SAMPLES	:	1
			CLIENT ORDER	:	---

General Comments

- Sample(s) were received in ambient condition.
- Sample(s) analysed and reported on as received basis.
- Calibration was subcontracted to and analysed by Action United Enviro Services.

Signatories

This document has been signed by those names that appear on this report and are the authorised signatories

<i>Signatories</i>	<i>Position</i>
 Richard Fung	General Manager

This is the Final Report and supersedes any preliminary report with this batch number.

Results apply to sample(s) as submitted. All pages of this report have been checked and approved for release.

WORK ORDER : HK1907875
SUB-BATCH : 1
CLIENT : ENVIROTECH SERVICES CO.
PROJECT : ---



ALS Lab ID	Client's Sample ID	Sample Type	Sample Date	External Lab Report No.
HK1907875-001	S/N: 276019	Equipments	22-Feb-2019	S/N: 276019

Equipment Verification Report (TSP)

Equipment Calibrated:

Type:	Laser Dust monitor
Manufacturer:	Sibata LD-3B
Serial No.	276019
Equipment Ref:	Nil
Job Order	HK1907875

Standard Equipment:

Standard Equipment:	Higher Volume Sampler
Location & Location ID:	AUES office (calibration room)
Equipment Ref:	HVS 018
Last Calibration Date:	12 February 2019

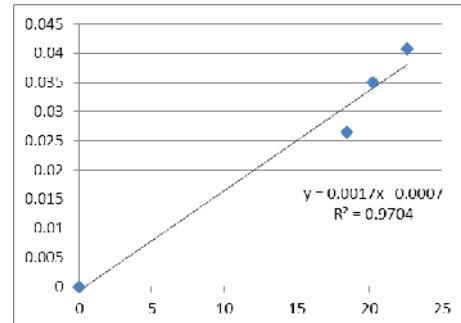
Equipment Verification Results:

Testing Date: 4 March 2019

Hour	Time	Mean Temp °C	Mean Pressure (hPa)	Concentration in mg/m³ (Standard Equipment)	Total Count (Calibrated Equipment)	Count/Minute (Total Count/min)
2hr13min	09:10 ~ 11:23	20.9	1013.7	0.035	2699	20.3
2hr01min	11:30 ~ 13:31	20.9	1013.7	0.026	2235	18.4
2hr01min	13:40 ~ 15:41	20.9	1013.7	0.041	2723	22.6

Linear Regression of Y or X

Slope (K-factor): 0.0017
Correlation Coefficient 0.9851
Date of Issue 7 March 2019



Remarks:

- Strong Correlation ($R>0.8$)
- Factor 0.0017 should be applied for TSP monitoring

*If $R<0.5$, repair or re-verification is required for the equipment

Operator : Fai So Signature : Date : 7 March 2019

QC Reviewer : Ben Tam Signature : Date : 7 March 2019



Certificate of Calibration

for

Description: Sound Level Meter

Manufacturer: RION

Type No.: NL-52 (Serial No.: 00175561)

Microphone: UC-53A (Serial No.: 99995)

Preamplifier: NH-25 (Serial No.: 65663)

Submitted by:

Customer: Envirotech Services Co.

Address: Rm.113, 1/F., My Loft, 9 Hoi Wing Road,
Tuen Mun, N.T., Hong Kong.

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

- Within
 Outside

the allowable tolerance.

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

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

Date of receipt: 24 September 2019

Date of calibration: 26 September 2019

Calibrated by: Max
Calibration Technician

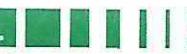
Date of issue: 26 September 2019

Certified by: W.W.W.
Mr. Ng Yan Wa
Laboratory Manager



Certificate No.: APJ19-095-CC001

Page 1 of 4



1. Calibration Precaution:

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

2. Calibration Conditions:

Air Temperature: 24.1 °C
 Air Pressure: 1006 hPa
 Relative Humidity: 54.2 %

3. Calibration Equipment:

	Type	Serial No.	Calibration Report Number	Traceable to
Multifunction Calibrator	B&K 4226	2288467	AV180064	HOKLAS

4. Calibration Results

Sound Pressure Level

Reference Sound Pressure Level

Setting of Unit-under-test (UUT)			Applied value		UUT Reading, dB	IEC 61672 Class 1 Specification, dB
Range, dB	Freq. Weighting	Time Weighting	Level, dB	Frequency, Hz		
30-130	dBA SPL	Fast	94	1000	94.0	±0.4

Linearity

Setting of Unit-under-test (UUT)			Applied value		UUT Reading, dB	IEC 61672 Class 1 Specification, dB
Range, dB	Freq. Weighting	Time Weighting	Level, dB	Frequency, Hz		
30-130	dBA SPL	Fast	94	1000	94.0	Ref
			104		104.0	±0.3
			114		114.1	±0.3

Time Weighting

Setting of Unit-under-test (UUT)			Applied value		UUT Reading, dB	IEC 61672 Class 1 Specification, dB
Range, dB	Freq. Weighting	Time Weighting	Level, dB	Frequency, Hz		
30-130	dBA SPL	Fast	94	1000	94.0	Ref
					94.0	±0.3

Certificate No.: APJ19-095-CC001





Frequency Response

Linear Response

Setting of Unit-under-test (UUT)			Applied value		UUT Reading, dB	IEC 61672 Class 1 Specification, dB
Range, dB	Freq. Weighting	Time Weighting	Level, dB	Frequency, Hz		
30-130	dB SPL	Fast	94	31.5	94.3	± 2.0
				63	94.2	± 1.5
				125	94.1	± 1.5
				250	94.0	± 1.4
				500	94.0	± 1.4
				1000	94.0	Ref
				2000	93.9	± 1.6
				4000	93.7	± 1.6
				8000	91.9	$+2.1; -3.1$

A-weighting

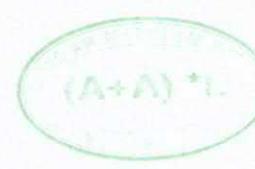
Setting of Unit-under-test (UUT)			Applied value		UUT Reading, dB	IEC 61672 Class 1 Specification, dB
Range, dB	Freq. Weighting	Time Weighting	Level, dB	Frequency, Hz		
30-130	dBA SPL	Fast	94	31.5	55.2	-39.4 ± 2.0
				63	68.0	-26.2 ± 1.5
				125	78.0	-16.1 ± 1.5
				250	85.4	-8.6 ± 1.4
				500	90.8	-3.2 ± 1.4
				1000	94.0	Ref
				2000	95.1	$+1.2 \pm 1.6$
				4000	94.7	$+1.0 \pm 1.6$
				8000	90.9	$-1.1 \pm 2.1; -3.1$

C-weighting

Setting of Unit-under-test (UUT)			Applied value		UUT Reading, dB	IEC 61672 Class 1 Specification, dB
Range, dB	Freq. Weighting	Time Weighting	Level, dB	Frequency, Hz		
30-130	dB C SPL	Fast	94	31.5	91.3	-3.0 ± 2.0
				63	93.4	-0.8 ± 1.5
				125	93.9	-0.2 ± 1.5
				250	94.0	-0.0 ± 1.4
				500	94.0	-0.0 ± 1.4
				1000	94.0	Ref
				2000	93.8	-0.2 ± 1.6
				4000	92.9	-0.8 ± 1.6
				8000	89.0	$-3.0 \pm 2.1; -3.1$

Certificate No.: APJ19-095-CC001

Page 3 of 4





5. Calibration Results Applied

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

Uncertainties of Applied Value:

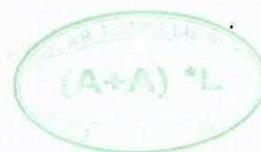
94 dB	31.5 Hz	± 0.15
	63 Hz	± 0.10
	125 Hz	± 0.10
	250 Hz	± 0.05
	500 Hz	± 0.10
	1000 Hz	± 0.05
	2000 Hz	± 0.05
	4000 Hz	± 0.10
	8000 Hz	± 0.10
104 dB	1000 Hz	± 0.05
114 dB	1000 Hz	± 0.05

The uncertainties are evaluated for a 95% confidence level.

Note:

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

Certificate No.: APJ19-095-CC001



Page 4 of 4



輝創工程有限公司
Sun Creation Engineering Limited
Calibration & Testing Laboratory

Certificate of Calibration 校正證書

Certificate No. : C192695
證書編號

ITEM TESTED / 送檢項目 (Job No. / 序號/編號: IC19-0995)

Date of Receipt / 收件日期: 17 May 2019

Description / 儀器名稱 : Precision Acoustic Calibrator
Manufacturer / 製造商 : LARSON DAVIS
Model No. / 型號 : CAL200
Serial No. / 編號 : 11333
Supplied By / 委託者 : Envirotech Services Co.
Room 113, 1/F, My Loft, 9 Hoi Wing Road, Tuen Mun,
New Territories, Hong Kong

TEST CONDITIONS / 測試條件

Temperature / 溫度 : $(23 \pm 2)^\circ\text{C}$

Relative Humidity / 相對濕度 : $(50 \pm 25)\%$

Line Voltage / 電壓 : ---

TEST SPECIFICATIONS / 測試規範

Calibration check

DATE OF TEST / 測試日期 : 26 May 2019

TEST RESULTS / 測試結果

The results apply to the particular unit-under-test only.
The results do not exceed manufacturer's specification.
The results are detailed in the subsequent page(s).

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

- The Government of The Hong Kong Special Administrative Region Standard & Calibration Laboratory
- The Brüel & Kjaer Calibration Laboratory, Denmark
- Agilent Technologies / Keysight Technologies
- Fluke Everett Service Center, USA

Tested By :
測試

H T Wong
Technical Officer

Certified By :
核證

K C Lee
Engineer

Date of Issue : 29 May 2019
簽發日期

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。

Sun Creation Engineering Limited – Calibration & Testing Laboratory

c/o 4/F, 1 Hing On Lane, Tuen Mun, New Territories, Hong Kong

輝創工程有限公司 – 校正及檢測實驗所

c/o 香港新界屯門興安里一號四樓

Tel/電話: (852) 2927 2606 Fax/傳真: (852) 2744 8986 E-mail/電郵: callab@suncreation.com Website/網址: www.suncreation.com



Certificate of Calibration 校正證書

Certificate No. : C192695
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 3 measurements at each calibration point.
3. Test equipment :

<u>Equipment ID</u>	<u>Description</u>	<u>Certificate No.</u>
CL130	Universal Counter	C183775
CL281	Multifunction Acoustic Calibrator	CDK1806821
TST150A	Measuring Amplifier	C181288

4. Test procedure : MA100N.

5. Results :

5.1 Sound Level Accuracy

UUT Nominal Value	Measured Value (dB)	Mfr's Spec. (dB)	Uncertainty of Measured Value (dB)
94 dB, 1 kHz	93.8	± 0.2	± 0.2
114 dB, 1 kHz	113.8		

5.2 Frequency Accuracy

UUT Nominal Value (kHz)	Measured Value (kHz)	Mfr's Spec.	Uncertainty of Measured Value (Hz)
1	1.000	1 kHz ± 1 %	± 1

Remark : The uncertainties are for a confidence probability of not less than 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.

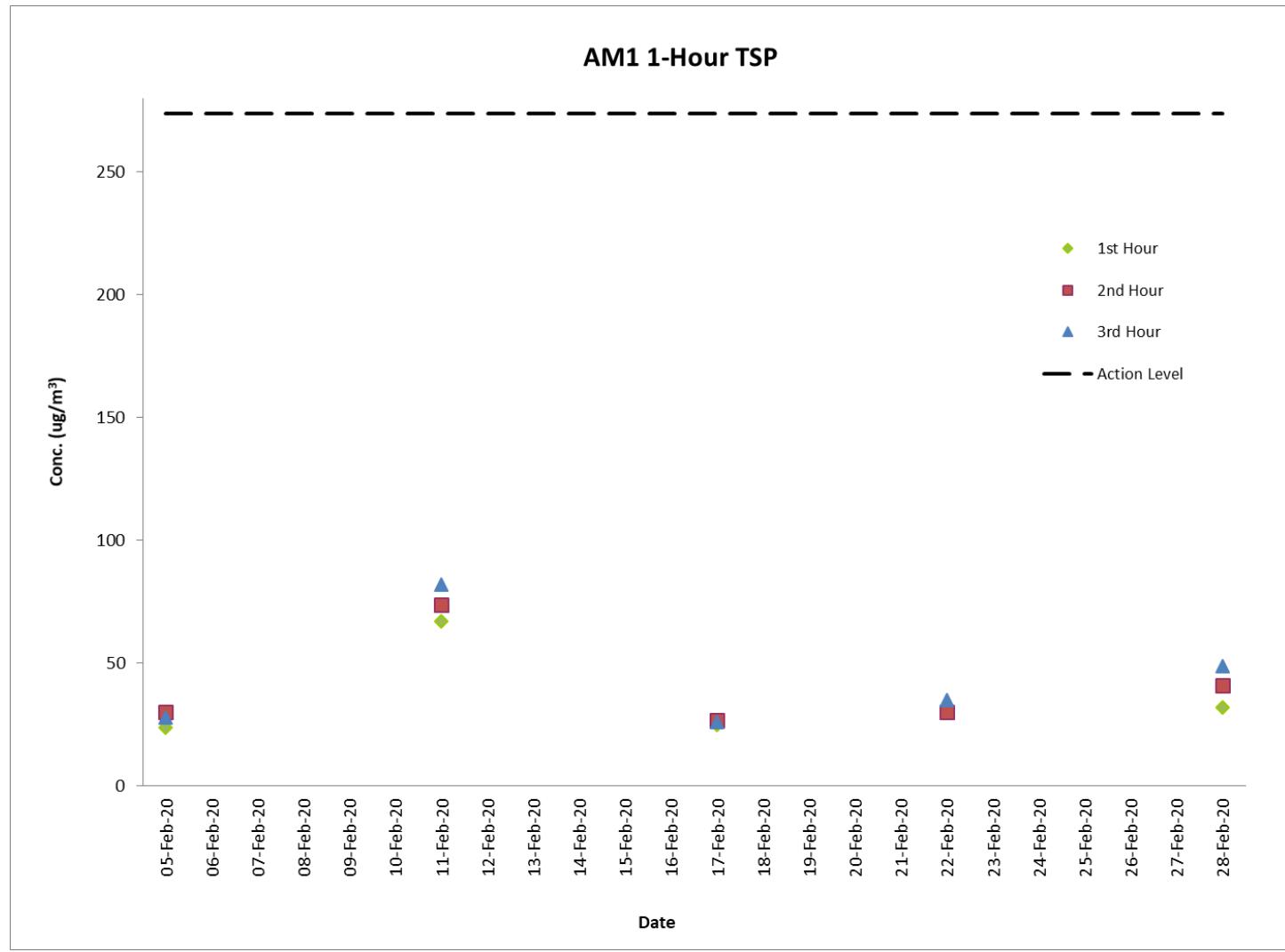
本證書所載校正用之測試器材均可溯源至國際標準。局部複印本證書需先獲本實驗所書面批准。

G. Graphical Plots of the Monitoring Results

Air Quality Monitoring Result at Station AM1 (1-hour TSP)

Date	Weather Condition	Time	Conc. ($\mu\text{g}/\text{m}^3$)			Action Level ($\mu\text{g}/\text{m}^3$)	Limit Level ($\mu\text{g}/\text{m}^3$)
			1 st Hour	2 nd Hour	3 rd Hour		
05-Feb-20	Cloudy	13:14 - 16:14	24	30	28	273.7	500
11-Feb-20	Cloudy	8:10 - 11:10	67	74	82	273.7	500
17-Feb-20	Sunny	8:07 - 11:07	25	27	26	273.7	500
22-Feb-20	Sunny	13:12 - 16:12	32	30	35	273.7	500
28-Feb-20	Cloudy	13:07 - 16:07	32	41	49	273.7	500

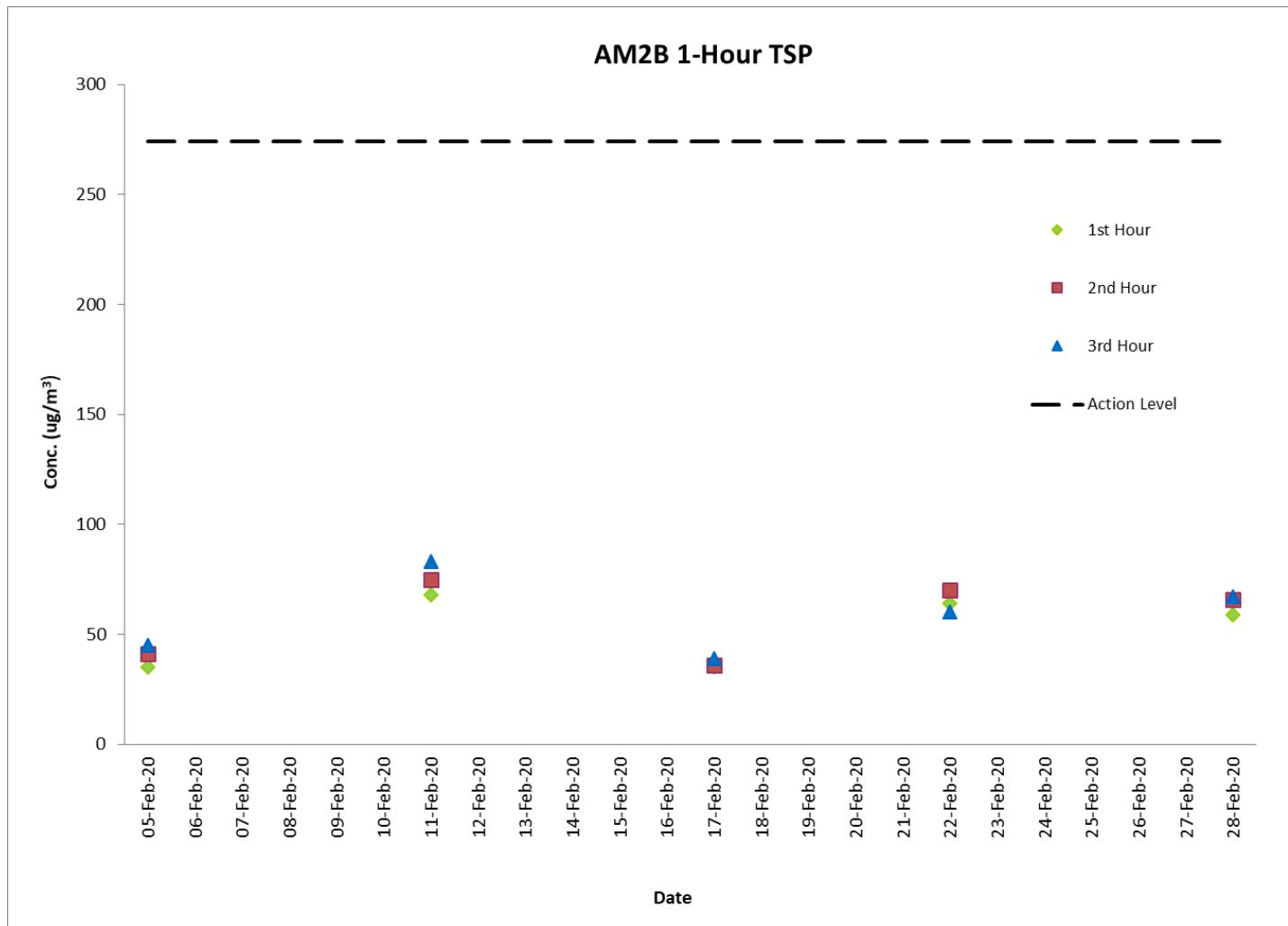
Graphical Presentation of Air Quality Monitoring Result at Station AM1 (1-hour TSP)



Air Quality Monitoring Result at Station AM2B (1-hour TSP)

Date	Weather Condition	Time	Conc. ($\mu\text{g}/\text{m}^3$)			Action Level ($\mu\text{g}/\text{m}^3$)	Limit Level ($\mu\text{g}/\text{m}^3$)
			1 st Hour	2 nd Hour	3 rd Hour		
05-Feb-20	Cloudy	13:28 - 16:28	35	41	45	274.2	500
11-Feb-20	Cloudy	8:23 - 11:23	68	75	83	274.2	500
17-Feb-20	Sunny	8:22 - 11:22	35	36	39	274.2	500
22-Feb-20	Sunny	13:26 - 16:26	64	70	60	274.2	500
28-Feb-20	Cloudy	13:22 - 16:22	59	66	67	274.2	500

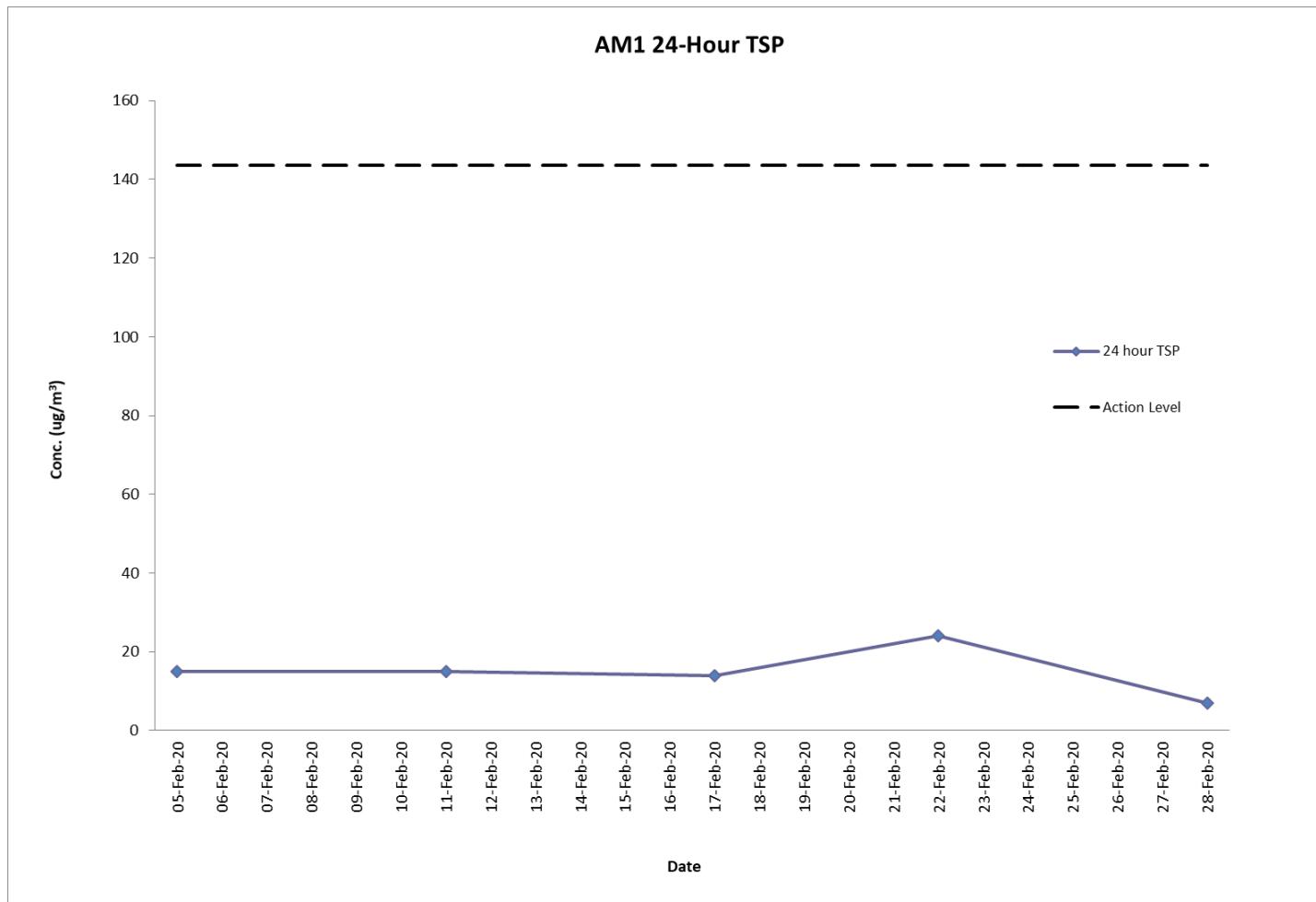
Graphical Presentation of Air Quality Monitoring Result at Station AM2B (1-hour TSP)



Air Quality Monitoring Result at Station AM1 (24-hour TSP)

Start		Finish		Filter Weight (g)		Elapsed Time Reading		Sampling Time (hrs)	Flow Rate (m ³ /min)			Conc. (µg/m ³)	Weather Condition	Action Level	Limit Level
Date	Time	Date	Time	Initial	Final	Initial	Final		Initial	Final	Average				
05-Feb-20	8:12	06-Feb-20	8:12	2.6919	2.7194	21368.38	21392.38	24	1.25	1.25	1.25	15	Cloudy	143.6	260
11-Feb-20	8:08	12-Feb-20	8:08	2.6787	2.7064	21392.38	21416.38	24	1.25	1.25	1.25	15	Cloudy	143.6	260
17-Feb-20	8:05	18-Feb-20	8:05	2.6718	2.6965	21416.38	21440.38	24	1.25	1.25	1.25	14	Sunny	143.6	260
22-Feb-20	8:10	23-Feb-20	8:10	2.671	2.7137	21440.38	21464.38	24	1.25	1.25	1.25	24	Sunny	143.6	260
28-Feb-20	8:05	29-Feb-20	8:05	2.6834	2.6964	21464.38	21488.38	24	1.25	1.25	1.25	7	Cloudy	143.6	260

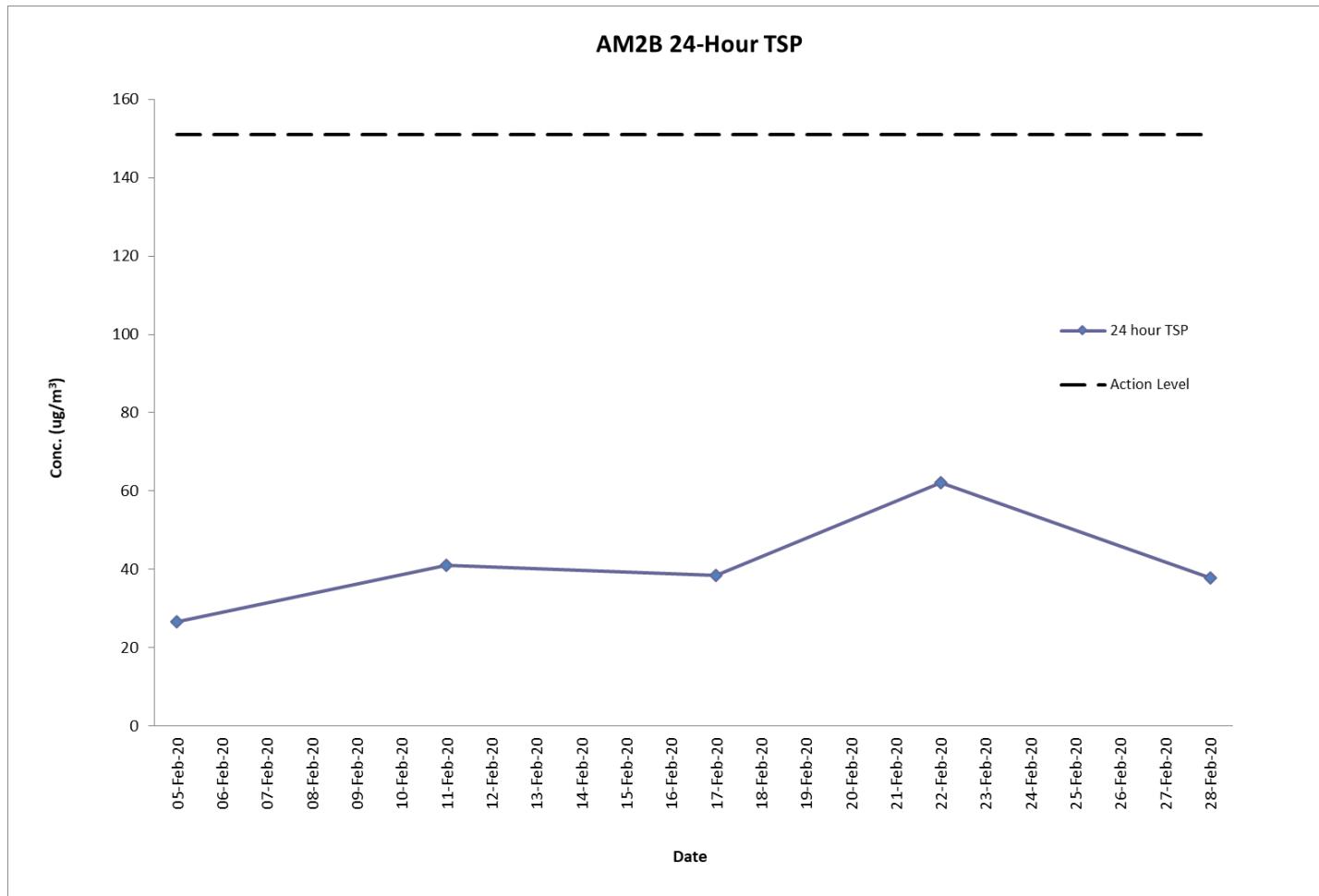
Graphical Presentation of Air Quality Monitoring Result at Station AM1 (24-hour TSP)



Air Quality Monitoring Result at Station AM2B (24-hour TSP)

Start		Finish		Filter Weight (g)		Elapsed Time Reading		Sampling Time (hrs)	Flow Rate (m ³ /min)			Conc. (µg/m ³)	Weather Condition	Action Level	Limit Level
Date	Time	Date	Time	Initial	Final	Initial	Final		Initial	Final	Average				
05-Feb-20	8:26	06-Feb-20	8:26	2.6616	2.7071	20923.05	20947.05	24	1.19	1.19	1.19	27	Cloudy	151.1	260
11-Feb-20	8:21	12-Feb-20	8:21	2.7000	2.7703	20947.05	20971.05	24	1.19	1.19	1.19	41	Cloudy	151.1	260
17-Feb-20	8:19	18-Feb-20	8:19	2.6630	2.7288	20971.05	20995.05	24	1.19	1.19	1.19	38	Sunny	151.1	260
22-Feb-20	8:24	23-Feb-20	8:24	2.6692	2.7757	20995.05	21019.05	24	1.19	1.19	1.19	62	Sunny	151.1	260
28-Feb-20	8:20	29-Feb-20	8:20	2.6824	2.7473	21019.05	21043.05	24	1.19	1.19	1.19	38	Cloudy	151.1	260

Graphical Presentation of Air Quality Monitoring Result at Station AM2B (24-hour TSP)



Noise Monitoring Result at Station NM1A

Date	Time	Measured L ₁₀ , dB(A)	Measured L ₉₀ , dB(A)	L _{eq} (30 min.)*, dB(A)
05-Feb-20	10:30	67.9	63.1	69
05-Feb-20	10:35	66.4	62.7	
05-Feb-20	10:40	67.6	63.3	
05-Feb-20	10:45	68.0	64.5	
05-Feb-20	10:50	67.9	63.6	
05-Feb-20	10:55	68.4	64.1	
11-Feb-20	10:25	66.4	62.3	68
11-Feb-20	10:30	67.0	63.4	
11-Feb-20	10:35	66.2	62.7	
11-Feb-20	10:40	68.4	64.1	
11-Feb-20	10:45	68.9	64.5	
11-Feb-20	10:50	67.1	63.2	
17-Feb-20	10:26	66.7	62.4	68
17-Feb-20	10:31	68.0	64.1	
17-Feb-20	10:36	68.9	64.5	
17-Feb-20	10:41	66.7	62.3	
17-Feb-20	10:46	66.5	62.7	
17-Feb-20	10:51	67.5	63.9	
28-Feb-20	10:26	67.5	63.4	68
28-Feb-20	10:31	66.3	62.7	
28-Feb-20	10:36	67.8	63.9	
28-Feb-20	10:41	66.7	62.2	
28-Feb-20	10:46	66.6	62.5	
28-Feb-20	10:51	67.5	63.6	

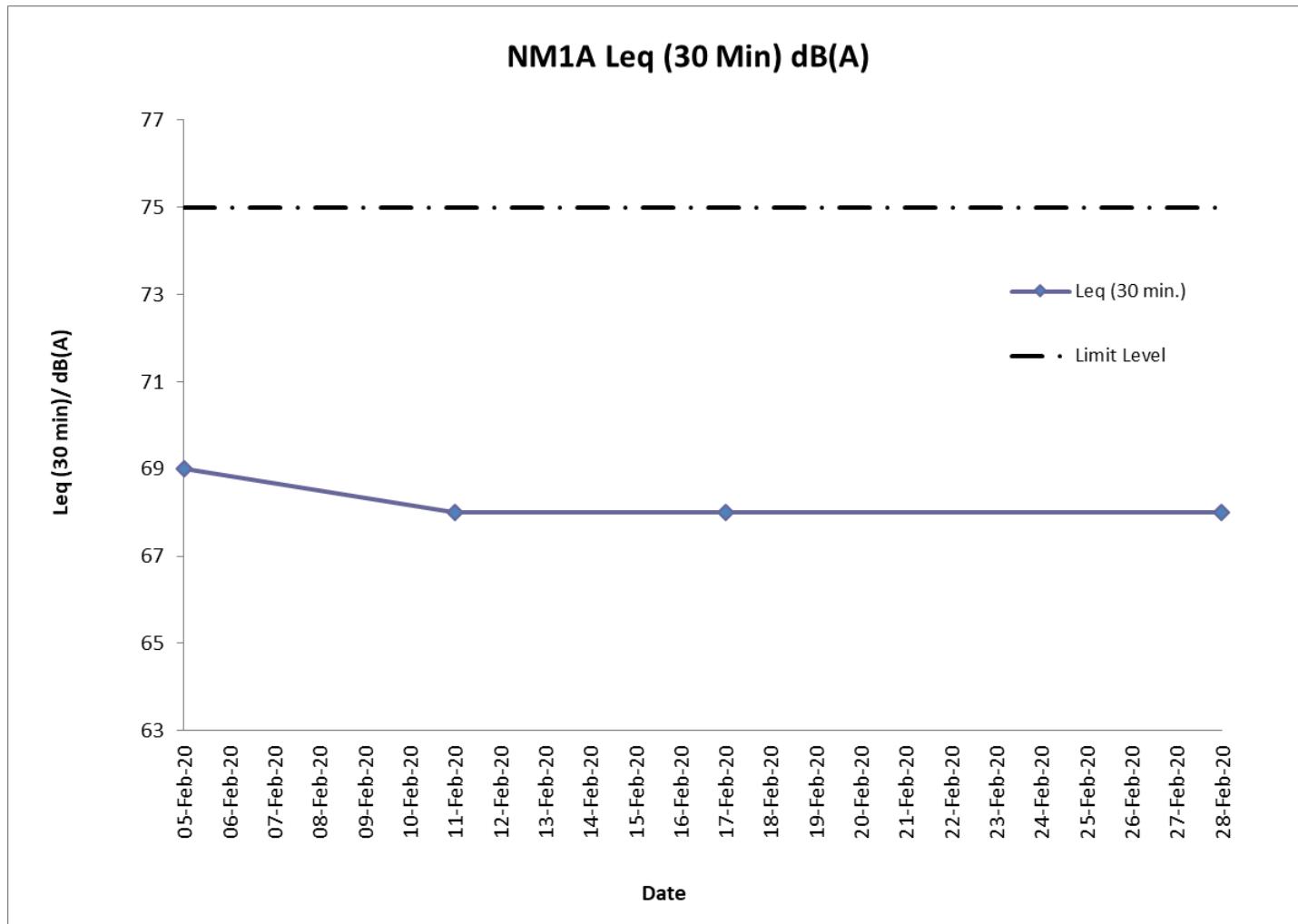
Remarks:

* +3dB (A) correction was applied to free-field measurement.



The station set-up of a free-field measurement at Station NM1A.

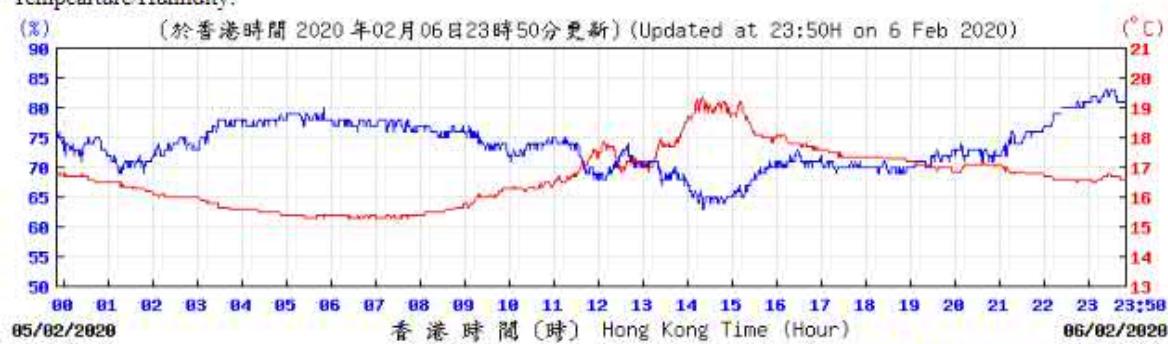
Graphical Presentation Noise Monitoring Result at Station NM1A



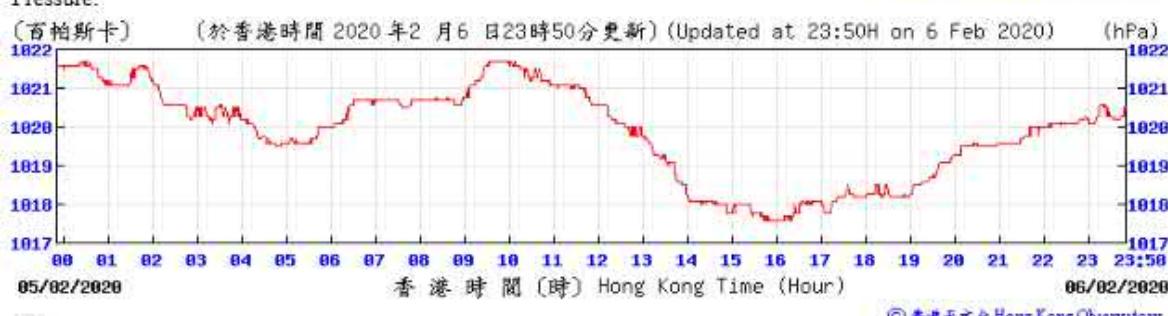
H. Meteorological Data Extracted from Hong Kong Observatory

**Extract of Meteorological Observations for King's Park Automatic Weather Station,
February 2020**

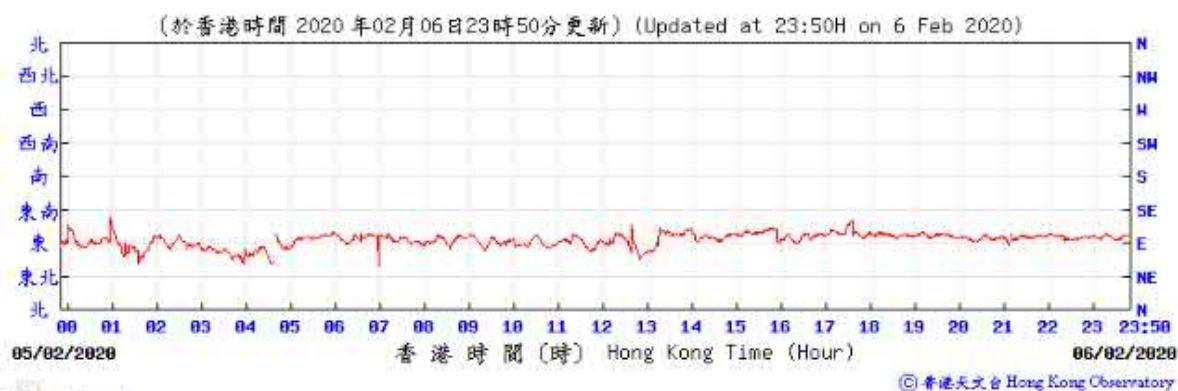
Tempearture/Humidity:



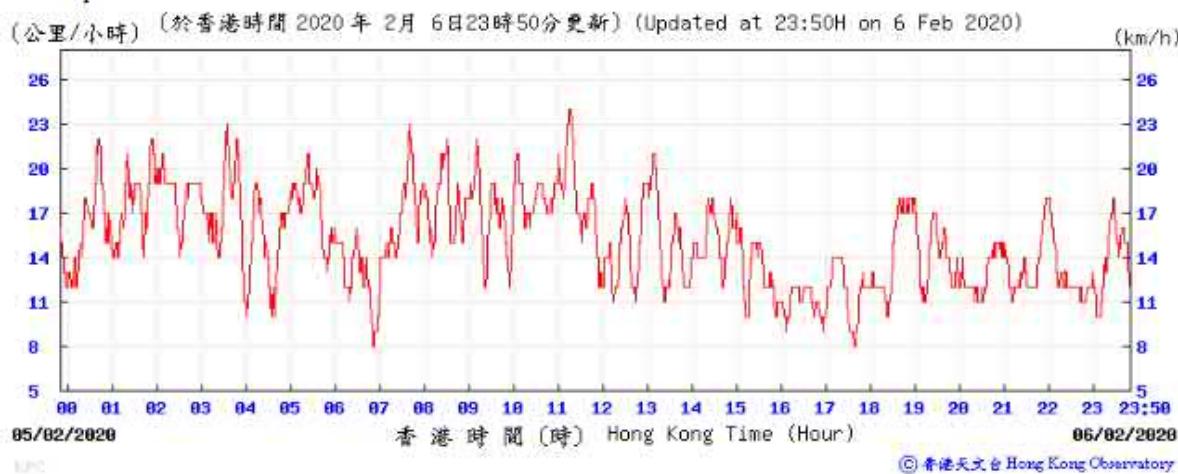
Pressure:



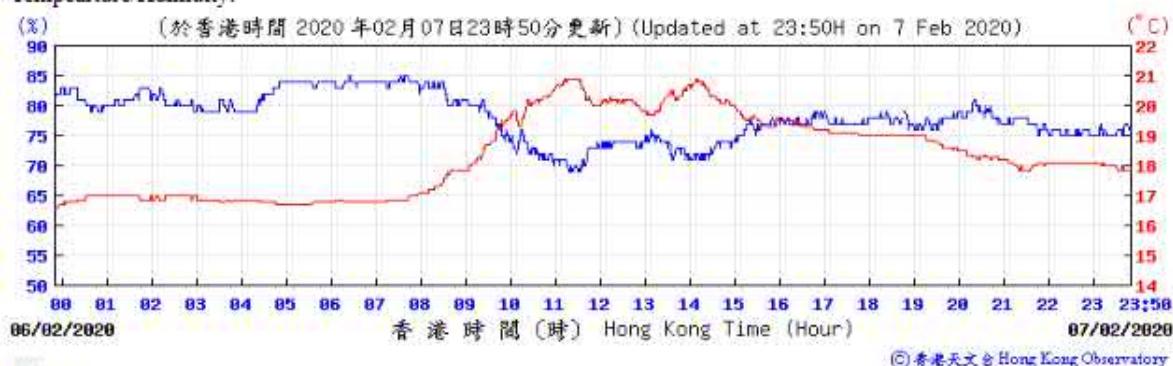
Wind Direction:



Wind Speed:



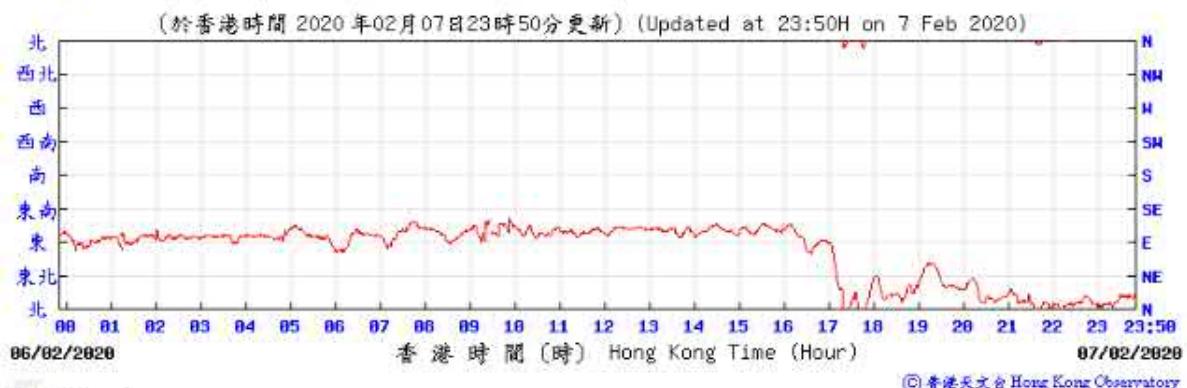
Tempearture/Humidity:



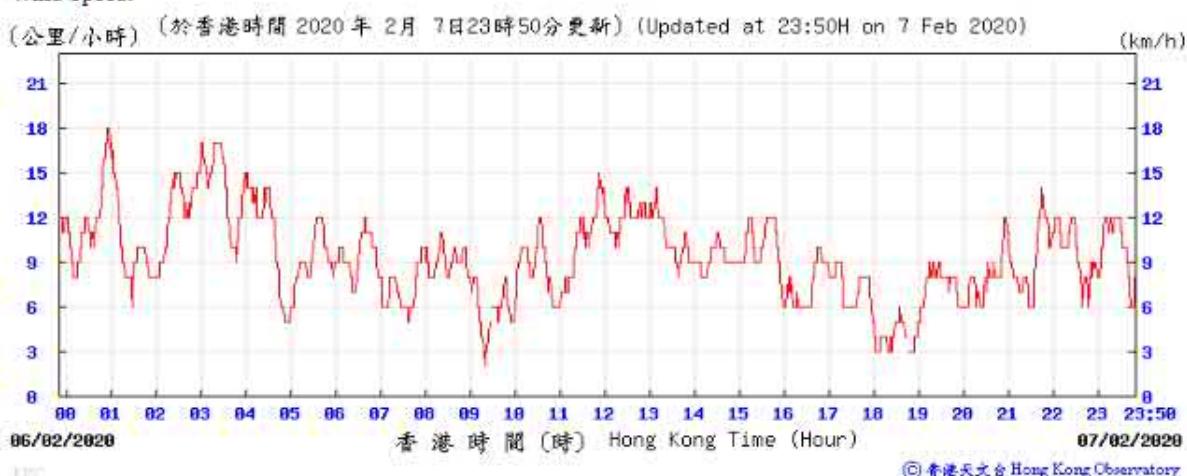
Pressure:



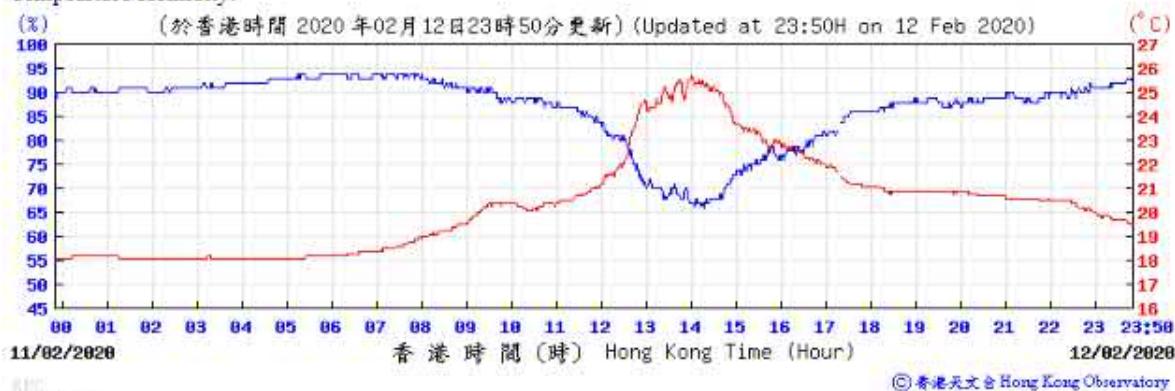
Wind Direction:



Wind Speed:



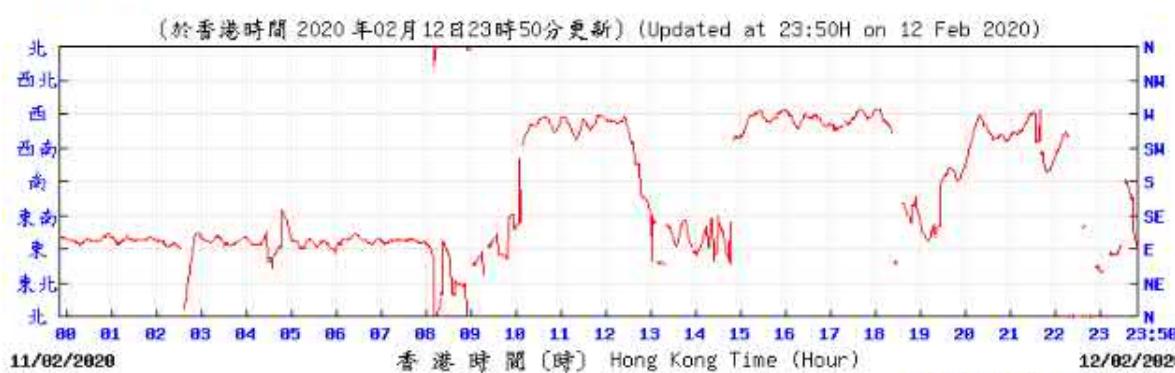
Tempearture/Humidity:



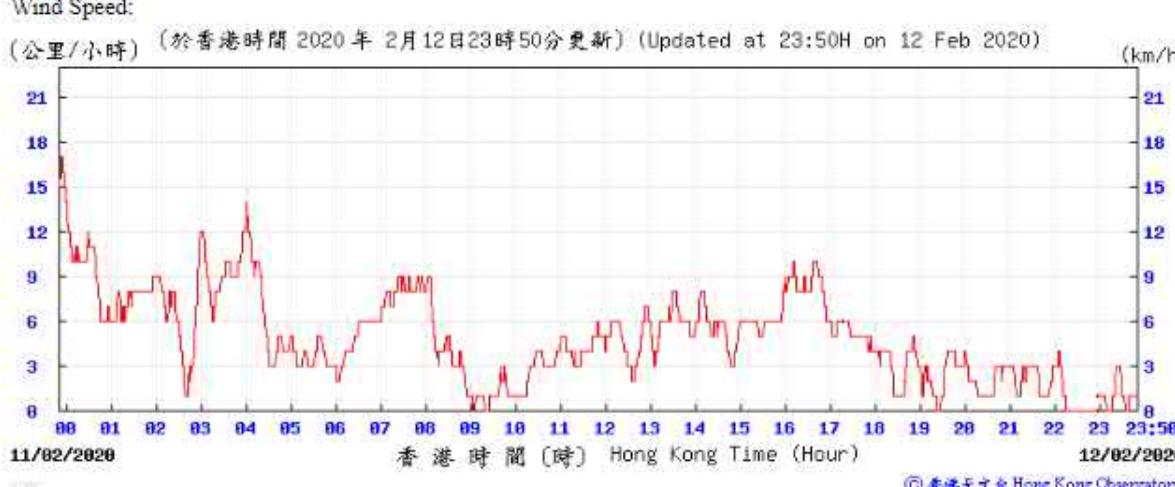
Pressure:



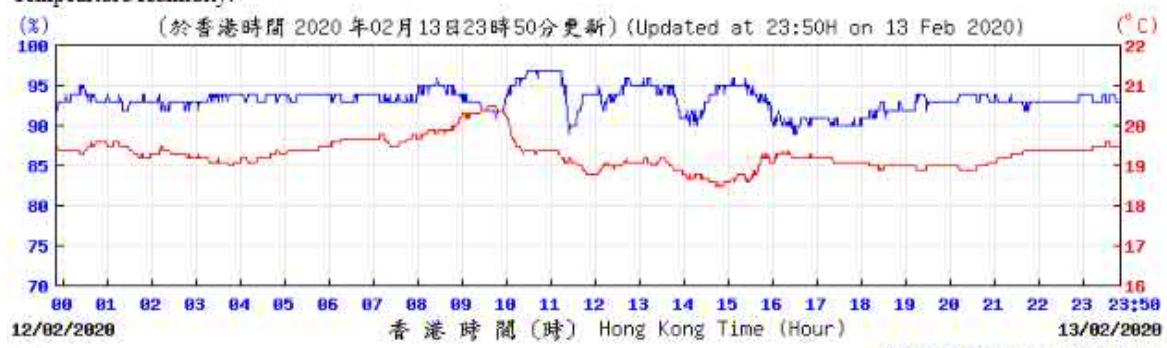
Wind Direction:



Wind Speed:



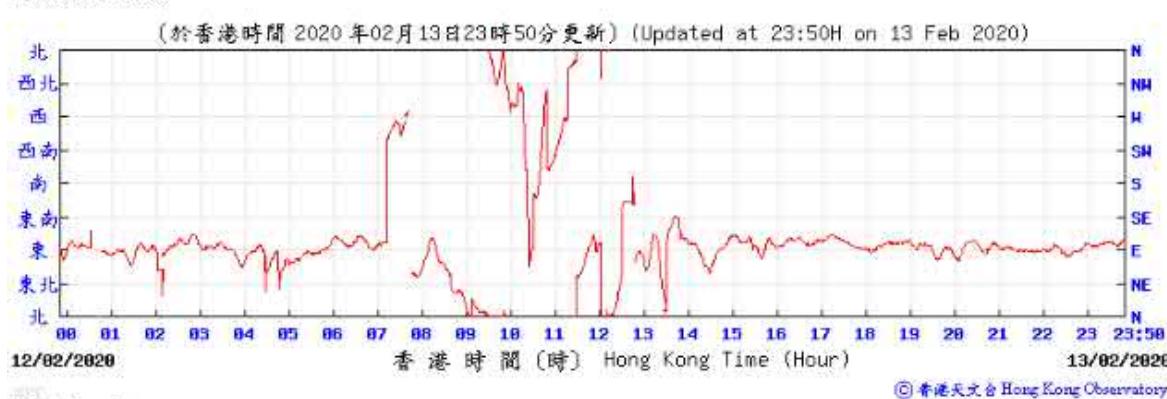
Tempearture/Humidity:



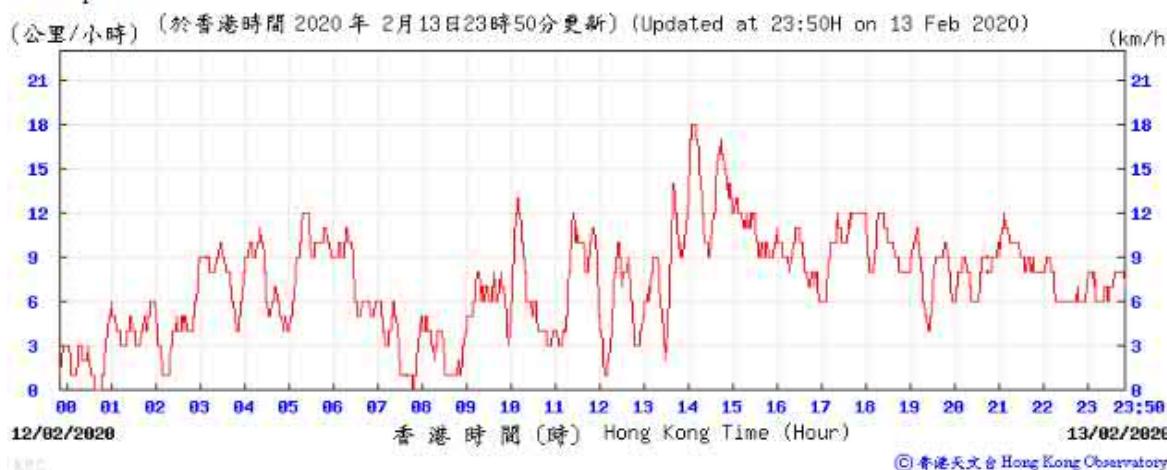
Pressure:



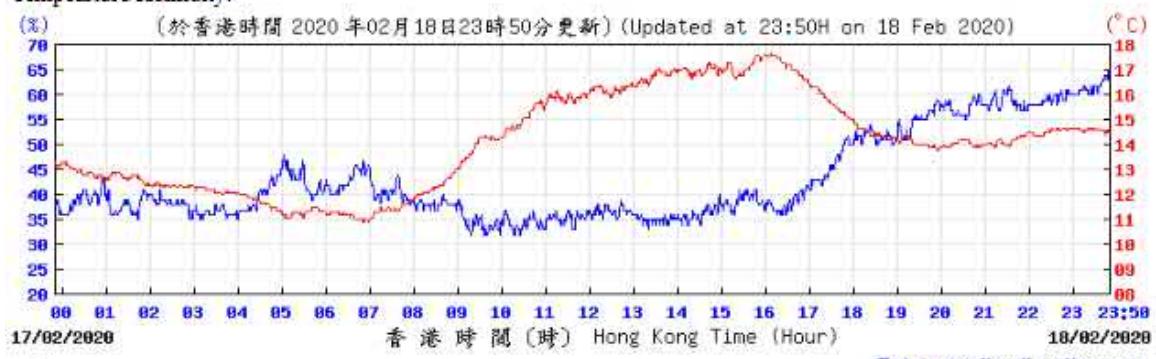
Wind Direction:



Wind Speed:



Tempearture/Humidity:



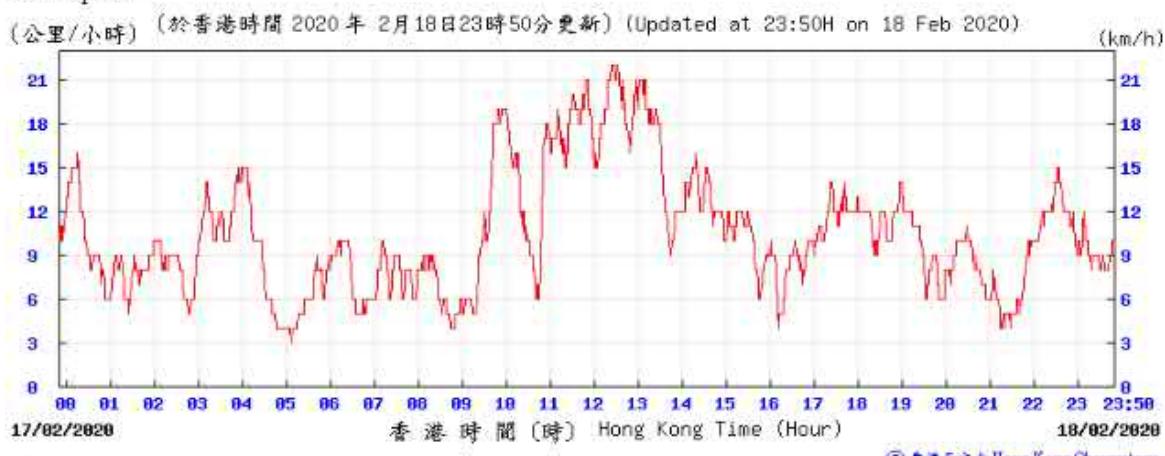
Pressure:



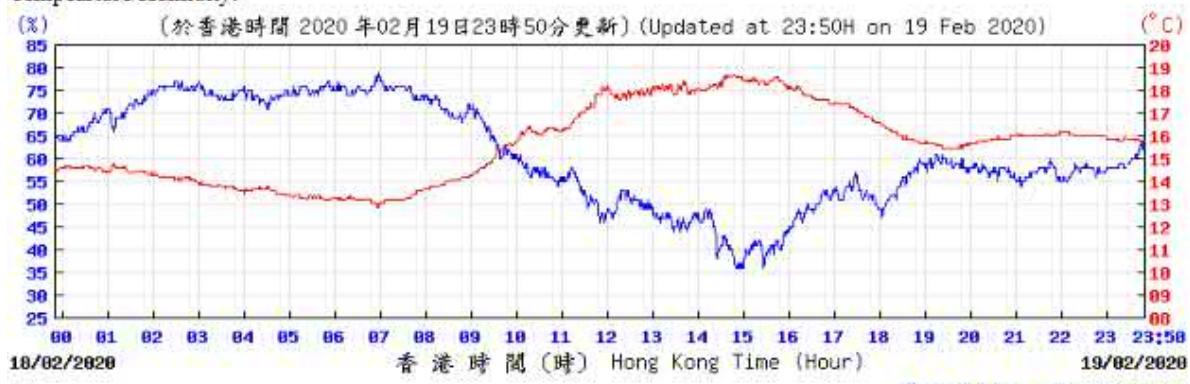
Wind Direction:



Wind Speed:



Tempearture/Humidity:



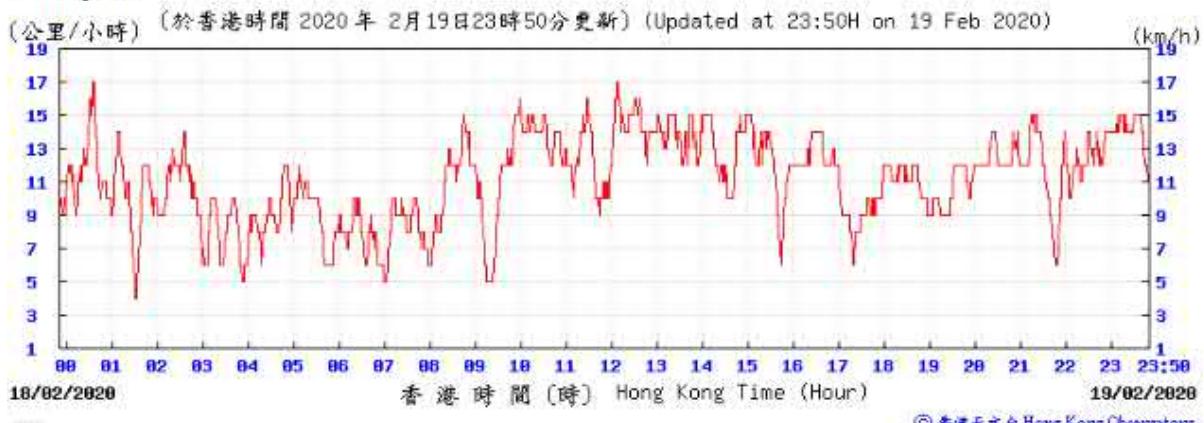
Pressure:



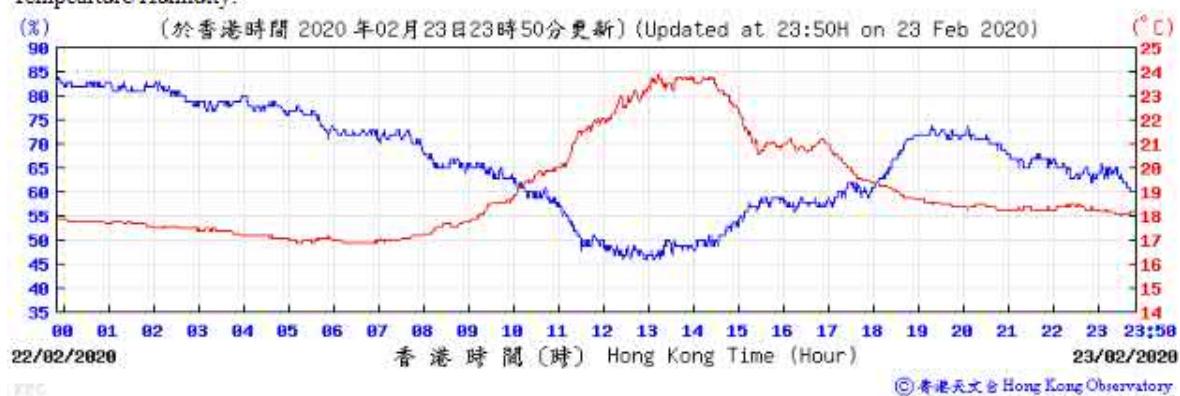
Wind Direction:



Wind Speed:



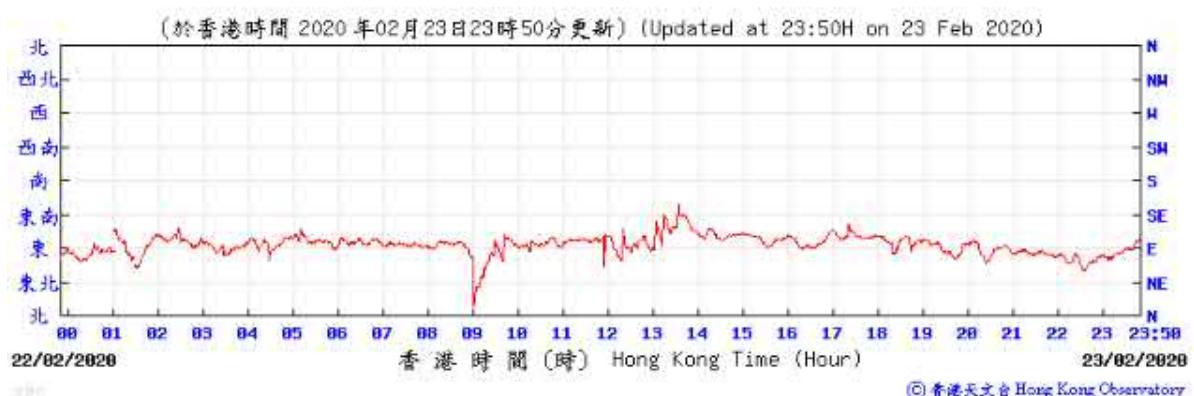
Tempearture Humidity:



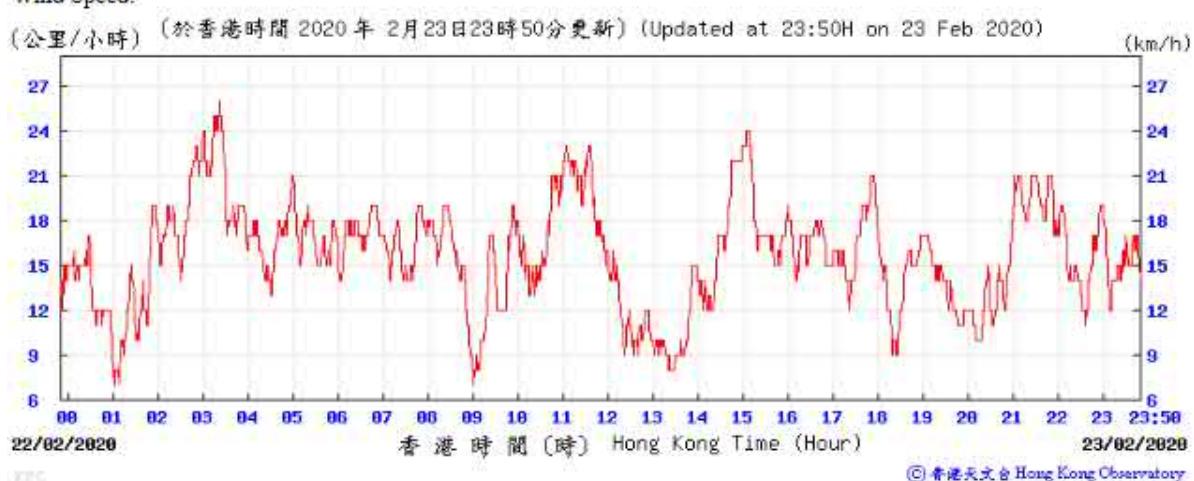
Pressure:



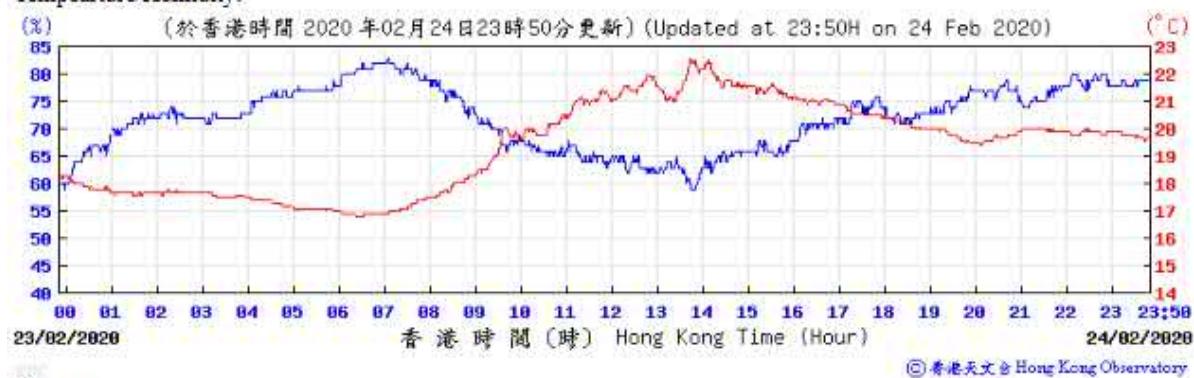
Wind Direction:



Wind Speed:



Tempearture/Humidity:



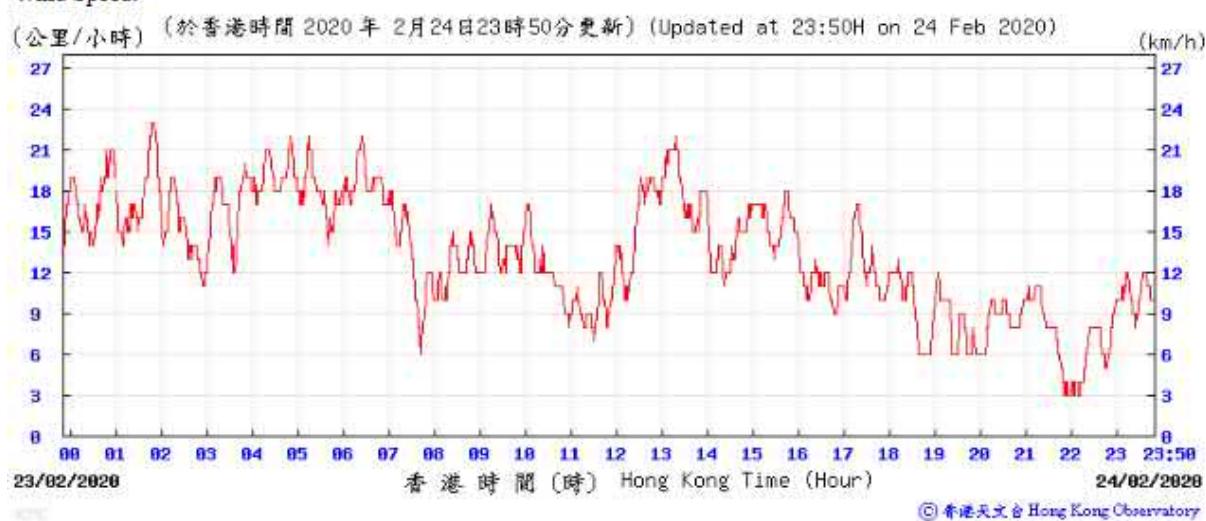
Pressure:



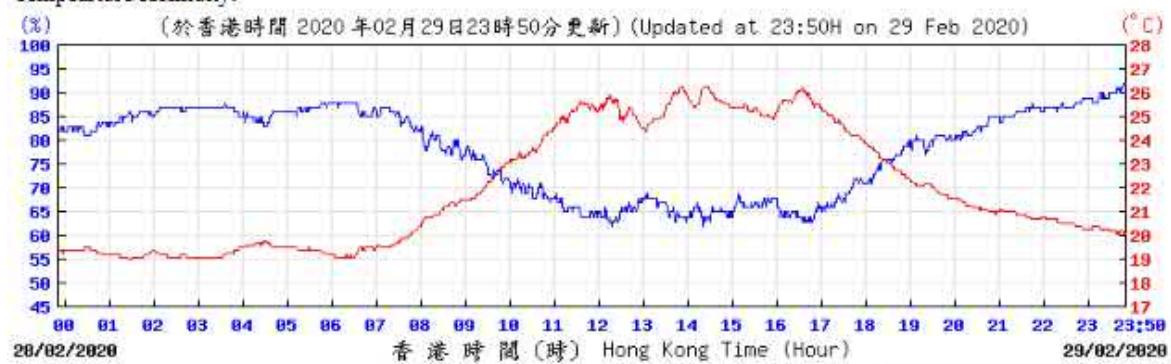
Wind Direction:



Wind Speed:

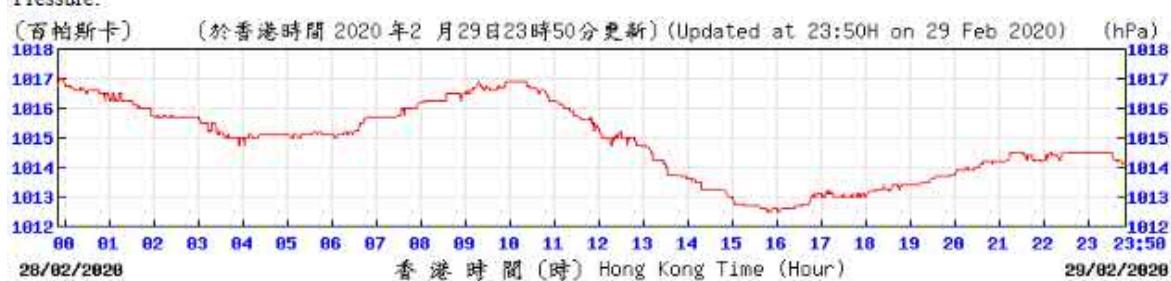


Tempearture Humidity:



©香港天文台 Hong Kong Observatory

Pressure:



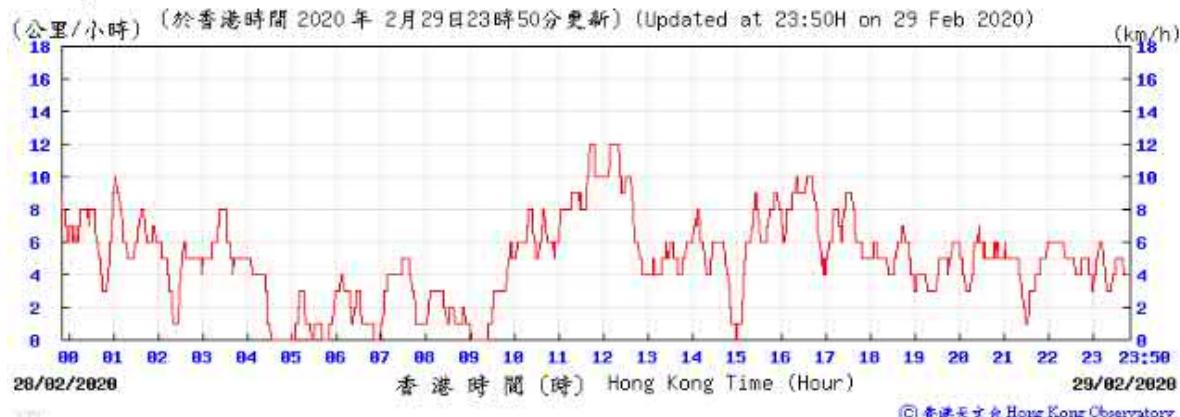
©香港天文台 Hong Kong Observatory

Wind Direction:



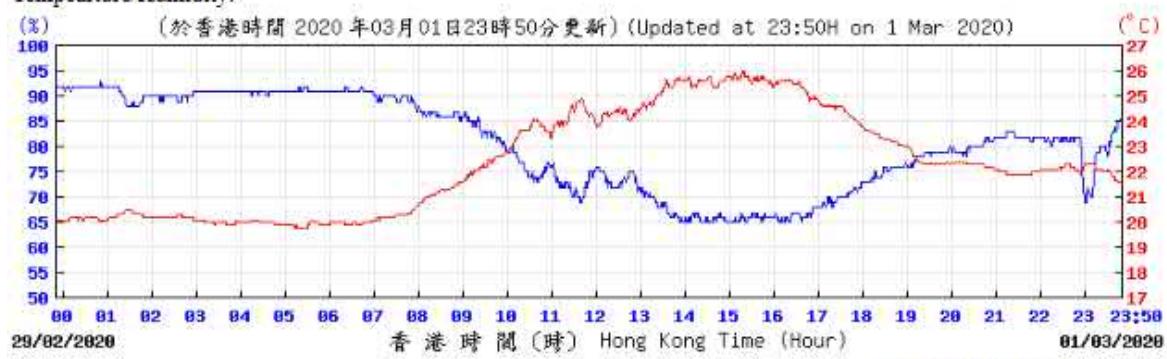
©香港天文台 Hong Kong Observatory

Wind Speed:

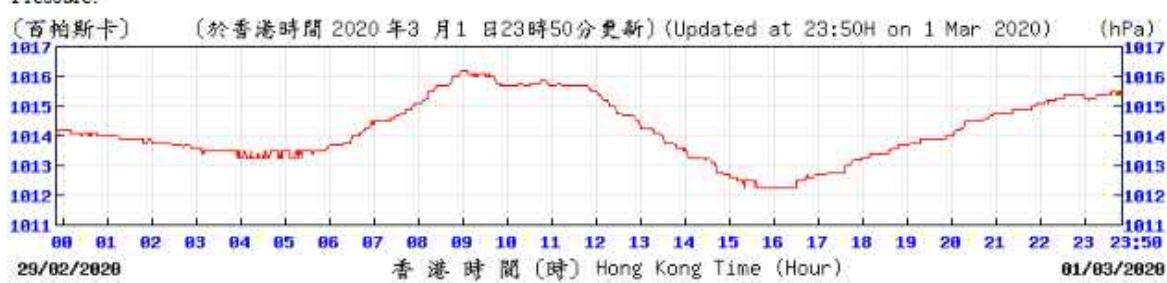


©香港天文台 Hong Kong Observatory

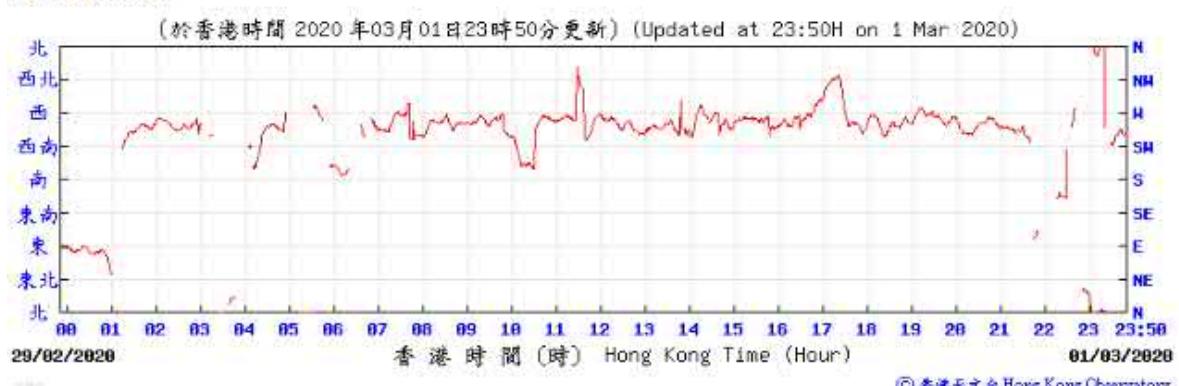
Tempearture Humidity:



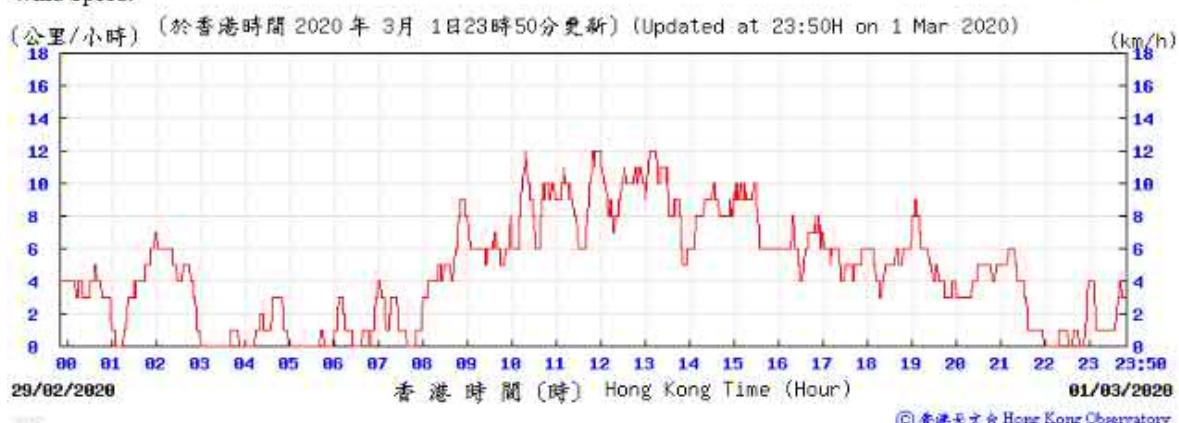
Pressure:



Wind Direction:



Wind Speed:



I. Waste Flow table

M+ Museum

Table I-1: Monthly Waste Flow Table for M+ Museum

Month	Actual Quantities of Inert C&D Materials Generated Monthly							Actual Quantities of C&D Wastes Generated Monthly					
	Total Quantity Generated	Hard Rocks and Large Broken Concrete	Reused in the Contract	Reused in other Projects	Disposed as Public Fill	Disposed to Sorting Facility	Imported Fill	Metals	Paper/ Cardboard Packaging	Plastics	Wood/ Timber	Chemical Waste	Others, e.g. General Refuse
	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)
2015													
Nov	46607.4	0.0	0.0	8240.0	38367.4	0.0	0.0	76.2	0.0	0.0	0.0	0.0	67.6
Dec	29652.9	0.0	0.0	29621.4	31.5	0.0	0.0	26.3	0.0	0.0	0.0	1.0	66.0
Sub-total (2015)	76260.3	0.0	0.0	37861.4	38398.9	0.0	0.0	102.5	0.0	0.0	0.0	1.0	133.6
2016													
Jan	21077.4	0.0	6352.0	14576.0	149.4	0.0	0.0	18.8	0.0	0.0	0.0	0.0	23.2
Feb	7626.2	0.0	3424.0	4048.0	154.2	0.0	0.0	59.8	0.0	0.0	0.0	0.0	20.5
Mar	10442.5	0.0	1600.0	7888.0	954.5	0.0	0.0	29.7	0.0	0.0	0.0	0.0	46.3
Apr	30413.2	0.0	6352.0	23408.0	653.2	0.0	0.0	25.8	0.1	0.0	27.8	0.0	34.5
May	24083.5	0.0	112.0	23216.0	755.5	0.0	0.0	61.5	0.4	0.0	33.6	0.0	62.3
Jun	7880.1	0.0	4736.0	2384.0	760.1	0.0	0.0	106.6	0.1	0.0	14.6	0.0	52.8
Jul	5893.1	0.0	2656.0	2240.0	997.1	0.0	0.0	77.6	0.0	0.0	33.6	0.0	83.1
Aug	13709.6	0.0	0.0	12432.0	1277.6	0.0	0.0	111.3	0.2	0.0	38.5	0.0	104.9
Sep	6702.0	0.0	0.0	5648.0	1000.1	53.9	0.0	104.2	0.0	0.0	45.5	0.2	107.9
Oct	2103.6	0.0	0.0	496.0	1595.4	12.2	0.0	83.0	0.4	0.0	73.5	0.0	108.2
Nov	3302.7	0.0	0.0	2384.0	855.5	63.2	0.0	88.4	0.6	0.0	63.0	0.0	129.1
Dec	899.8	0.0	0.0	736.0	126.8	37.0	0.0	48.3	0.6	0.0	70.0	0.0	89.0
Sub-total (2016)	134133.5	0.0	25232.0	99456.0	9279.3	166.3	0.0	814.9	2.3	0.0	400.1	0.2	861.8
2017													
Jan	675.2	0.0	0.0	432.0	237.9	5.3	0.0	79.5	1.0	0.0	70.0	0.0	79.7
Feb	927.7	0.0	0.0	768.0	125.6	34.0	0.0	70.5	0.6	0.0	84.0	0.0	81.4
Mar	1856.7	0.0	0.0	1280.0	466.9	109.8	0.0	62.8	0.4	0.0	98.0	0.0	148.5
Apr	642.4	0.0	0.0	160.0	324.9	157.5	0.0	87.5	0.7	0.0	175.0	0.0	102.5
May	1118.2	0.0	0.0	528.0	416.4	173.7	0.0	118.3	0.0	0.0	280.0	0.0	139.0
Jun	650.0	0.0	0.0	0.0	451.6	198.4	0.0	199.7	1.4	0.0	350.0	0.0	98.7
Jul	1762.0	0.0	0.0	0.0	1466.6	295.4	0.0	36.9	1.2	0.0	244.0	0.0	164.2
Aug	1231.5	0.0	0.0	0.0	867.5	364.0	0.0	50.9	0.9	0.0	59.0	0.0	186.9
Sep	1681.7	0.0	0.0	0.0	1342.0	339.7	0.0	52.3	0.7	0.0	77.0	0.0	265.3
Oct	483.6	0.0	0.0	0.0	242.5	241.1	0.0	374.8	0.6	0.0	24.1	0.0	128.5
Nov	822.8	0.0	0.0	0.0	344.5	478.3	0.0	948.5	0.7	0.0	140.0	0.2	219.1
Dec	601.3	0.0	0.0	0.0	236.2	365.1	0.0	903.6	0.8	0.0	320.0	0.0	241.9

Table I-1: Monthly Waste Flow Table for M+ Museum

Table I-1: Monthly Waste Flow Table for M+ Museum

Month	Actual Quantities of Inert C&D Materials Generated Monthly							Actual Quantities of C&D Wastes Generated Monthly					
	Total Quantity Generated	Hard Rocks and Large Broken Concrete	Reused in the Contract	Reused in other Projects	Disposed as Public Fill	Disposed to Sorting Facility	Imported Fill	Metals	Paper/ Cardboard Packaging	Plastics	Wood/ Timber	Chemical Waste	Others, e.g. General Refuse
	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)
Jan	404.3	0.0	0.0	0.0	351.1	53.2	0.0	133.2	0.8	0.0	335.0	0.0	523.7
Feb	699.4	0.0	0.0	144.0	511.3	44.1	0.0	22.1	1.7	0.0	280.0	0.0	333.2
Sub-total (2020)	1103.7	0.0	0.0	144.0	862.4	97.3	0.0	155.4	2.4	0.0	615.0	0.0	856.9
Total	248397.4	0.0	25232.0	142316.1	69613.3	11236.0	0.0	6366.7	30.7	0.0	7216.2	3.2	12523.5

Note:

- 0 tonnes, 289.45 tonnes, 221.85 tonnes, 44.08 tonnes of inert C&D material were disposed of as public fill to Chai Wan Public Fill Barging Point, Tuen Mun Area 38, Tseung Kwan O Area 137 Public Fill and Tseung Kwan O Area 137 Sorting Facility respectively in the reporting month.
- For inert C&D materials reused in other projects, the projects refer to (1) Green Valley; (2) Advance Works for Shek Wu Hui Sewage Treatment Works (3) Design and Construction of Kai Tak Cable Tunnel, CLP; (4) MTR Contract 1002 Whampoa Station and Overrun Tunnel; (5) CEDD Tuen Mun Area 54 Contract No. CV/2015/03; (6) Union Construction Ltd.'s site; (7) Foundation Works at Marriot Hotel at Ocean Park.(8) Ming Tai warehouses (9) No.1 Plantation Road; (10) L1 Lyric Theatre

L1

Table I-2: Monthly Waste Flow Table for L1

Month	Actual Quantities of Inert C&D Materials Generated Monthly							Actual Quantities of C&D Wastes Generated Monthly					
	Total Quantity Generated	Hard Rocks and Large Broken Concrete	Reused in the Contract	Reused in other Projects	Disposed as Public Fill	Disposed to Sorting Facility	Imported Fill	Metals	Paper/ Cardboard Packaging	Plastics	Wood/ Timber	Chemical Waste	Others, e.g. General Refuse
	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)
2016													
Mar	2702.1	0.0	0.0	0.0	2702.1	0.0	0.0	4.5	0.1	0.0	0.0	0.0	30.6
Apr	8631.5	0.0	0.0	0.0	8631.5	0.0	0.0	16.0	0.0	0.0	0.0	0.0	19.2
May	12487.8	0.0	0.0	0.0	12487.8	0.0	0.0	34.0	0.0	0.0	0.0	0.7	60.5
Jun	8600.8	0.0	0.0	0.0	8600.8	0.0	0.0	31.4	0.2	0.0	0.0	0.5	13.5
Jul	12624.2	0.0	0.0	0.0	12624.2	0.0	0.0	19.6	0.0	0.0	0.0	2.0	9.9
Aug	14419.9	0.0	0.0	0.0	14419.9	0.0	0.0	43.9	0.0	0.0	0.0	0.0	11.1
Sep	13671.3	0.0	0.0	0.0	13671.3	0.0	0.0	59.8	0.0	0.0	0.0	1.6	12.4
Oct	13088.9	0.0	0.0	0.0	13088.9	0.0	0.0	36.9	0.2	1.5	0.0	0.0	15.2
Nov	12424.7	0.0	0.0	0.0	12424.7	0.0	0.0	74.7	0.0	0.0	0.0	1.4	10.2
Dec	12487.6	0.0	0.0	0.0	12487.6	0.0	0.0	13.9	0.0	0.0	0.0	1.3	9.0
Sub-total (2016)	111138.8	0.0	0.0	0.0	111138.8	0.0	0.0	334.5	0.4	1.5	0.0	7.6	191.6
2017													
Jan	9607.8	0.0	0.0	0.0	9607.8	0.0	0.0	29.5	0.0	0.0	0.0	0.0	7.3
Feb	9108.2	0.0	0.0	0.0	9108.2	0.0	0.0	50.2	0.2	0.0	0.0	0.7	9.8
Mar	11361.7	0.0	0.0	0.0	11361.7	0.0	0.0	16.1	0.0	0.0	0.0	1.4	8.5
Apr	2591.5	0.0	0.0	0.0	2591.5	0.0	0.0	35.7	0.0	0.0	0.0	0.0	4.7
May	2579.3	0.0	0.0	99.0	2480.3	0.0	0.0	20.9	0.1	0.0	0.0	0.5	10.0
Jun	476.0	0.0	0.0	341.0	129.7	5.3	0.0	0.0	0.0	0.0	0.0	0.0	7.6
Jul	3419.0	0.0	0.0	804.0	2615.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	17.8
Aug	3730.9	0.0	0.0	1377.5	2353.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.4
Sep	2108.2	0.0	0.0	1133.5	974.7	0.0	0.0	34.6	0.2	0.0	0.0	0.0	10.8
Oct	9159.0	0.0	0.0	7868.0	1291.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	9.3
Nov	5095.4	0.0	0.0	4352.0	725.2	18.1	0.0	0.0	0.0	0.0	0.0	0.0	38.8
Dec	3856.2	0.0	0.0	3076.0	780.2	0.0	0.0	0.0	0.2	0.0	0.0	0.4	8.4
Sub-total (2017)	63093.1	0.0	0.0	19051.0	44018.7	23.4	0.0	187.1	0.7	0.0	0.0	3.8	137.3

Table I-2: Monthly Waste Flow Table for L1

Month	Actual Quantities of Inert C&D Materials Generated Monthly							Actual Quantities of C&D Wastes Generated Monthly					
	Total Quantity Generated	Hard Rocks and Large Broken Concrete	Reused in the Contract	Reused in other Projects	Disposed as Public Fill	Disposed to Sorting Facility	Imported Fill	Metals	Paper/ Cardboard Packaging	Plastics	Wood/ Timber	Chemical Waste	Others, e.g. General Refuse
	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)
2018													
Jan	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Feb	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5
Mar	6120.2	0.0	0.0	5782.0	338.2	0.0	0.0	0.0	1.0	0.0	0.5	17.6	
Apr	14460.3	0.0	0.0	12484.1	1976.3	0.0	0.0	0.0	0.2	0.0	0.0	7.6	
May	59783.7	0.0	0.0	46989.0	12794.7	0.0	0.0	59.6	0.0	0.0	0.0	9.4	
Jun	53117.5	0.0	0.0	37642.8	15474.7	0.0	0.0	51.5	0.2	0.0	0.0	12.8	
Jul	89901.5	0.0	0.0	85317.1	4584.4	0.0	165.1	114.6	0.0	0.0	0.0	41.3	
Aug	35137.3	0.0	0.0	33731.6	1405.7	0.0	214.3	148.1	0.0	0.0	0.0	48.5	
Sep	4837.3	0.0	0.0	4641.2	109.2	87.0	174.6	40.0	0.0	0.0	0.0	179.2	
Oct	19021.9	0.0	0.0	11301.0	7564.7	156.1	0.0	106.3	0.4	0.0	0.0	528.5	
Nov	104165.3	0.0	0.0	79811.6	24348.4	5.3	0.0	54.5	0.0	0.6	0.0	0.0	31.5
Dec	62987.1	0.0	0.0	51284.4	11697.1	5.6	0.0	95.1	0.0	0.6	0.0	0.0	65.9
Sub-total (2018)	449532.1	0.0	0.0	368984.8	80293.2	254.0	553.9	669.7	0.5	2.4	0.0	0.5	943.7
2019													
Jan	74479.1	0.0	0.0	69249.5	5229.7	0.0	318.0	326.7	0.2	0.0	0.0	0.0	76.3
Feb	21969.9	0.0	0.0	17723.9	4246.0	0.0	16.5	55.2	0.0	0.0	0.0	0.0	26.7
Mar	19311.4	0.0	0.0	8569.4	10742.0	0.0	337.8	64.5	0.0	0.0	0.0	0.0	36.3
Apr	28559.9	0.0	0.0	21280.3	7279.6	0.0	0.0	32.6	0.0	0.8	0.0	0.0	24.9
May	45418.0	0.0	0.0	11200.6	34217.4	0.0	0.0	27.4	0.2	0.5	0.0	0.0	33.7
Jun	66763.1	0.0	0.0	24009.7	42742.5	10.9	59.2	11.9	0.0	0.9	0.0	0.0	35.3
Jul	36606.6	0.0	0.0	1632.7	34947.9	26.0	64.4	120.7	0.0	0.0	0.0	0.0	57.9
Aug	2512.9	0.0	0.0	0.0	2485.1	27.8	31.9	40.2	0.0	0.8	0.0	0.0	66.3
Sep	4103.2	0.0	0.0	0.0	4074.2	28.9	95.2	19.0	0.0	0.6	0.0	0.0	127.4
Oct	6954.9	0.0	0.0	0.0	6928.7	26.1	15.9	11.4	0.2	1.0	0.0	0.6	223.6
Nov	5319.2	0.0	0.0	0.0	5289.0	30.3	0.0	8.9	0.0	0.0	0.0	0.0	151.6
Dec	6236.8	0.0	0.0	0.0	6236.8	0.0	0.0	70.6	0.0	0.0	0.0	0.0	98.9
Sub-total (2019)	318234.9	0.0	0.0	153666.0	164418.8	150.1	938.9	788.8	0.6	4.6	0.0	0.6	959.0
2020													
Jan	7089.9	0.0	0.0	0.0	7089.9	0.0	0.0	10.6	0.2	0.0	0.0	0.0	65.7
Feb	16822.3	0.0	0.0	0.0	16822.3	0.0	0.0	232.2	0.0	0.0	0.0	0.0	66.3
Sub-total (2020)	23912.2	0.0	0.0	0.0	23912.2	0.0	0.0	242.8	0.2	0.0	0.0	0.0	132.0
Total	965911.1	0.0	0.0	541701.9	423781.7	427.5	1492.8	2222.8	2.3	8.5	0.0	12.5	2363.5

Table I-2: Monthly Waste Flow Table for L1

Month	Actual Quantities of Inert C&D Materials Generated Monthly							Actual Quantities of C&D Wastes Generated Monthly					
	Total Quantity Generated	Hard Rocks and Large Broken Concrete	Reused in the Contract	Reused in other Projects	Disposed as Public Fill	Disposed to Sorting Facility	Imported Fill	Metals	Paper/ Cardboard Packaging	Plastics	Wood/ Timber	Chemical Waste	Others, e.g. General Refuse
	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)

Note:

- 7,874.58 tonnes and 8,947.69 tonnes of inert C&D material were disposed of as public fill to Tseung Kwan O Area 137 Public Fill and Tuen Mun Area 38 Public Fill respectively in the reporting month.

L2

Table I-3: Monthly Waste Flow Table for L2

J. Environmental Mitigation Measures – Implementation Status

Table J-1: Environmental Mitigation Measures Implementation Status

EM&A Ref.	Recommendation Measures	M+ Museum	Implementation Stage	
			L1	L2
Air Quality Impact (Construction)				
2.1 & 10.3.1	General Dust Control Measures Frequent water spraying for active construction areas (12 times a day or once every one hour), including Heavy construction activities such as construction of buildings or roads, drilling, ground excavation, cut and fill operations (i.e., earth moving)	✓	✓	✓
2.1 & 10.3.1	Best Practice For Dust Control The relevant best practices for dust control as stipulated in the Air Pollution Control (construction Dust) Regulation should be adopted to further reduce the construction dust impacts from the Project. These best practices include: <i>Good Site Management</i> <ul style="list-style-type: none">• Good site management is important to help reducing potential air quality impact down to an acceptable level. As a general guide, the Contractor should maintain high standard of housekeeping to prevent emission of fugitive dust. Loading, unloading, handling and storage of raw materials, wastes or by-products should be carried out in a manner so as to minimise the release of visible dust emission. Any piles of materials accumulated on or around the work areas should be cleaned up regularly. Cleaning, repair and maintenance of all plant facilities within the work areas should be carried out in a manner minimising generation of fugitive dust emissions. The material should be handled properly to prevent fugitive dust emission before cleaning. <i>Disturbed Parts of the Roads</i> <ul style="list-style-type: none">• Each and every main temporary access should be paved with concrete, bituminous hardcore materials or metal plates and kept clear of dusty materials; or• Unpaved parts of the road should be sprayed with water or a dust suppression chemical so as to keep the entire road surface wet. <i>Exposed Earth</i>	Obs	✓	✓

EM&A Ref.	Recommendation Measures	Implementation Stage		
		M+ Museum	L1	L2
	<ul style="list-style-type: none"> Exposed earth should be properly treated by compaction, hydroseeding, vegetation planting or sealing with latex, vinyl, bitumen within six months after the last construction activity on the site or part of the site where the exposed earth lies. <p><i>Loading, Unloading or Transfer of Dusty Materials</i></p> <ul style="list-style-type: none"> All dusty materials should be sprayed with water immediately prior to any loading or transfer operation so as to keep the dusty material wet. <p><i>Debris Handling</i></p> <ul style="list-style-type: none"> Any debris should be covered entirely by impervious sheeting or stored in a debris collection area sheltered on the top and the three sides. Before debris is dumped into a chute, water should be sprayed so that it remains wet when it is dumped. <p><i>Transport of Dusty Materials</i></p> <ul style="list-style-type: none"> Vehicle used for transporting dusty materials/spoils should be covered with tarpaulin or similar material. The cover should extend over the edges of the sides and tailboards. <p><i>Wheel washing</i></p> <ul style="list-style-type: none"> Vehicle wheel washing facilities should be provided at each construction site exit. Immediately before leaving the construction site, every vehicle should be washed to remove any dusty materials from its body and wheels. <p><i>Use of vehicles</i></p> <ul style="list-style-type: none"> The speed of the trucks within the site should be controlled to about 10km/hour in order to reduce adverse dust impacts and secure the safe movement around the site. Immediately before leaving the construction site, every vehicle should be washed to remove any dusty materials from its body and wheels. Where a vehicle leaving the construction site is carrying a load of dusty materials, the load should be covered entirely by clean impervious sheeting to ensure that the dusty materials do not leak from the vehicle. <p><i>Site hoarding</i></p>	N/A	N/A	N/A
		✓	✓	✓
		✓	Rem	✓
		✓	✓	✓
		✓	✓	✓
		✓	✓	✓
		✓	✓	✓
		✓	✓	✓
		✓	✓	✓
		✓	✓	✓
		✓	✓	✓
		✓	✓	✓
		✓	✓	✓
		✓	✓	✓

EM&A Ref.	Recommendation Measures	M+ Museum	Implementation Stage		
			L1	L2	
	<ul style="list-style-type: none"> Where a site boundary adjoins a road, street, service lane or other area accessible to the public, hoarding of not less than 2.4m high from ground level should be provided along the entire length of that portion of the site boundary except for a site entrance or exit. 	✓	✓	✓	✓
2.1 & 10.3.1	<p>Best Practicable Means for Cement Works (Concrete Batching Plant)</p> <p>The relevant best practices for dust control as stipulated in the Guidance Note on the Best Practicable Means for Cement Works (Concrete Batching Plant) BPM 3/2(93) should be followed and implemented to further reduce the construction dust impacts of the Project. These best practices include:</p> <p>Exhaust from Dust Arrestment Plant</p> <ul style="list-style-type: none"> Wherever possible the final discharge point from particulate matter arrestment plant, where is not necessary to achieve dispersion from residual pollutants, should be at low level to minimise the effect on the local community in the case of abnormal emissions and to facilitate maintenance and inspection <p>Emission Limits</p> <ul style="list-style-type: none"> All emissions to air, other than steam or water vapour, shall be colourless and free from persistent mist or smoke <p>Engineering Design/Technical Requirements</p> <ul style="list-style-type: none"> As a general guidance, the loading, unloading, handling and storage of fuel, raw materials, products, wastes or by-products should be carried out in a manner so as to prevent the release of visible dust and/or other noxious or offensive emissions 	N/A	N/A	N/A	
	<p>Non-Road Mobile Machinery (NRMM):</p> <p>All NRMMs operating on-site which are subject to emission control of Air Pollution Control (Non-road Mobile Machinery) (Emission) Regulation are approved/exempted (as the case may be) and affixed with the requisite approval/exemption labels.</p>	✓	Obs		✓
Noise Impact (Construction)					
3.1 & 10.4.1	<p>Good Site Practice</p> <p>Good site practice and noise management can significantly reduce the impact of construction site activities on nearby NSRs. The following package of measures should be followed during each phase of construction:</p>				

EM&A Ref.	Recommendation Measures	M+ Museum	Implementation Stage		
			L1	L2	
	<ul style="list-style-type: none"> only well-maintained plant to be operated on-site and plant should be serviced regularly during the construction works; machines and plant that may be in intermittent use to be shut down between work periods or should be throttled down to a minimum plant known to emit noise strongly in one direction, should, where possible, be orientated to direct noise away from the NSRs; mobile plant should be sited as far away from NSRs as possible; and material stockpiles and other structures to be effectively utilised, where practicable, to screen noise from on-site construction activities. 	✓	✓	✓	✓
3.1 & 10.4.1	Adoption of Quieter PME The recommended quieter PME adopted in the assessment were taken from the EPD's QPME Inventory and "Sound Power Levels of Other Commonly Used PME" are presented in Table 4.26 in the EIA report. It should be noted that the silenced PME selected for assessment can be found in Hong Kong.	✓	✓	✓	✓
3.1 & 10.4.1	Use of Movable Noise Barriers Movable noise barriers can be very effective in screening noise from particular items of plant when constructing the Project. Noise barriers located along the active works area close to the noise generating component of a PME could produce at least 10 dB(A) screening for stationary plant and 5 dB(A) for mobile plant provided the direct line of sight between the PME and the NSRs is blocked.	✓	✓	✓	✓
3.1 & 10.4.1	Use of Noise Enclosure/ Acoustic Shed The use of noise enclosure or acoustic shed is to cover stationary PME such as air compressor and concrete pump. With the adoption of the noise enclosure, the PME could be completely screened, and noise reduction of 15 dB(A) can be achieved according to the EIAO Guidance Note No. 9/2010.	✓	✓	✓	✓
3.1 & 10.4.1	Use of Noise Insulating Fabric Noise insulating fabric can also be adopted for certain PME (e.g. drill rig, piling machine etc). The fabric should be lapped such that there are no openings or gaps on the joints. According to the approved Tsim Sha Tsui Station Northern Subway EIA report (AEIAR-127/2008), a noise reduction of 10 dB(A) can be achieved for the PME lapped with the noise insulating fabric.	Obs	✓	✓	✓
3.1 &	Scheduling of Construction Works outside School Examination Periods				

EM&A Ref.	Recommendation Measures	Implementation Stage		
		M+ Museum	L1	L2
10.4.1	During construction phase, the contractor should liaise with the educational institutions (including NSRs LCS and CRGPS) to obtain the examination schedule and avoid the noisy construction activities during school examination periods.	N/A	N/A	N/A
Water Quality Impact (Construction)				
4.1 & 10.5.1	Construction site runoff and drainage The site practices outlined in ProPECC Note PN 1/94 should be followed as far as practicable in order to minimise surface runoff and the chance of erosion. The following measures are recommended to protect water quality and sensitive uses of the coastal area, and when properly implemented should be sufficient to adequately control site discharges so as to avoid water quality impacts: <ul style="list-style-type: none">• At the start of site establishment, perimeter cut-off drains to direct off-site water around the site should be constructed with internal drainage works and erosion and sedimentation control facilities implemented. Channels, earth bunds or sand bag barriers should be provided on site to direct storm water to silt removal facilities. The design of the temporary on-site drainage system should be undertaken by the WKCDAs Contractor prior to the commencement of construction;• Sand/silt removal facilities such as sand/silt traps and sediment basins should be provided to remove sand/silt particles from runoff to meet the requirements of the TM standards under the WPCO. The design of efficient silt removal facilities should be based on the guidelines in Appendix A1 of ProPECC Note PN 1/94. Sizes may vary depending upon the flow rate. The detailed design of the sand/silt traps should be undertaken by the WKCDAs Contractor prior to the commencement of construction.• All drainage facilities and erosion and sediment control structures should be regularly inspected and maintained to ensure proper and efficient operation at all times and particularly during rainstorms. Deposited silt and grit should be regularly removed, at the onset of and after each rainstorm to ensure that these facilities are functioning properly at all times.	✓	Rem	✓
		✓	✓	✓
		✓	Rem	✓

EM&A Ref.	Recommendation Measures	Implementation Stage		
		M+ Museum	L1	L2
	<ul style="list-style-type: none"> Measures should be taken to minimize the ingress of site drainage into excavations. If excavation of trenches in wet periods is necessary, they should be dug and backfilled in short sections wherever practicable. Water pumped out from foundation excavations should be discharged into storm drains via silt removal facilities. All vehicles and plant should be cleaned before leaving a construction site to ensure no earth, mud, debris and the like is deposited by them on roads. An adequately designed and sited wheel washing facility should be provided at construction site exit where practicable. Wash-water should have sand and silt settled out and removed regularly to ensure the continued efficiency of the process. The section of access road leading to, and exiting from, the wheel-wash bay to the public road should be paved with sufficient backfall toward the wheel-wash bay to prevent vehicle tracking of soil and silty water to public roads and drains. Open stockpiles of construction materials or construction wastes on-site should be covered with tarpaulin or similar fabric during rainstorms. Measures should be taken to prevent the washing away of construction materials, soil, silt or debris into any drainage system. Manholes (including newly constructed ones) should be adequately covered and temporarily sealed so as to prevent silt, construction materials or debris being washed into the drainage system and stormwater runoff being directed into foul sewers. Precautions should be taken at any time of the year when rainstorms are likely. Actions should be taken when a rainstorm is imminent or forecasted and actions to be taken during or after rainstorms are summarized in Appendix A2 of ProPECC Note PN 1/94. Particular attention should be paid to the control of silty surface runoff during storm events, especially for areas located near steep slopes. Bentonite slurries used in piling or slurry walling should be reconditioned and reused wherever practicable. Temporary enclosed storage locations should be provided on-site for any unused bentonite that needs to be transported away after all the related construction activities are completed. The requirements in ProPECC Note PN 1/94 should be adhered to in the handling and disposal of bentonite slurries. 	✓	✓	✓

EM&A Ref.	Recommendation Measures	Implementation Stage		
		M+ Museum	L1	L2
	Barging facilities and activities Recommendations for good site practices during operation of the proposed barging point include: <ul style="list-style-type: none"> • All vessels should be sized so that adequate clearance is maintained between vessels and the seabed in all tide conditions, to ensure that undue turbidity is not generated by turbulence from vessel movement or propeller wash; • Loading of barges and hoppers should be controlled to prevent splashing of material into the surrounding water. Barges or hoppers should not be filled to a level that will cause the overflow of materials or polluted water during loading or transportation; • All hopper barges should be fitted with tight fitting seals to their bottom openings to prevent leakage of material; and • Construction activities should not cause foam, oil, grease, scum, litter or other objectionable matter to be present on the water within the site. 	N/A	N/A	N/A
4.1 & 10.5.1	Sewage effluent from construction workforce Temporary sanitary facilities, such as portable chemical toilets, should be employed on-site where necessary to handle sewage from the workforce. A licensed contractor should be employed to provide appropriate and adequate portable toilets and be responsible for appropriate disposal and maintenance.	✓	✓	✓
4.1 & 10.5.1	General construction activities <ul style="list-style-type: none"> • Construction solid waste, debris and refuse generated on-site should be collected, handled and disposed of properly to avoid entering any nearby storm water drain. Stockpiles of cement and other construction materials should be kept covered when not being used. • Oils and fuels should only be stored in designated areas which have pollution prevention facilities. To prevent spillage of fuels and solvents to any nearby storm water drain, all fuel tanks and storage areas should be provided with locks and be sited on sealed areas, within bunds of a capacity equal to 110% of the storage capacity of the largest tank. The bund should be drained of rainwater after a rain event. 	✓	✓	✓
6.1 & Good Site Practices	Waste Management Implications (Construction)	Rem	✓	✓

EM&A Ref.	Recommendation Measures	Implementation Stage		
		M+ Museum	L1	L2
10.7.1	<p>Recommendations for good site practices during the construction activities include:</p> <ul style="list-style-type: none"> • Nomination of an approved person, such as a site manager, to be responsible for good site practices, arrangements for collection and effective disposal to an appropriate facility, of all wastes generated at the site • Training of site personnel in proper waste management and chemical handling procedures • Provision of sufficient waste disposal points and regular collection of waste • Appropriate measures to minimise windblown litter and dust/odour during transportation of waste by either covering trucks or by transporting wastes in enclosed containers • Provision of wheel washing facilities before the trucks leaving the works area so as to minimise dust introduction to public roads • Well planned delivery programme for offsite disposal such that adverse environmental impact from transporting the inert or non-inert C&D materials is not anticipated 	✓	✓	✓
6.1 & 10.7.1	<p>Waste Reduction Measures</p> <p>Recommendations to achieve waste reduction include:</p> <ul style="list-style-type: none"> • Sort inert C&D material to recover any recyclable portions such as metals • Segregation and storage of different types of waste in different containers or skips to enhance reuse or recycling of materials and their proper disposal • Encourage collection of recyclable waste such as waste paper and aluminium cans by providing separate labelled bins to enable such waste to be segregated from other general refuse generated by the work force • Proper site practices to minimise the potential for damage or contamination of inert C&D materials 	✓	✓	✓

EM&A Ref.	Recommendation Measures	Implementation Stage		
		M+ Museum	L1	L2
	<ul style="list-style-type: none"> Plan the use of construction materials carefully to minimise amount of waste generated and avoid unnecessary generation of wastes 	✓	✓	✓
6.1 & 10.7.1	<p>Inert and Non-inert C&D Materials</p> <p>In order to minimise impacts resulting from collection and transportation of inert C&D material for off-site disposal, the excavated materials should be reused on-site as fill material as far as practicable. In addition, inert C&D material generated from excavation works could be reused as fill materials in local projects that require public fill for reclamation.</p> <ul style="list-style-type: none"> The surplus inert C&D material will be disposed of at the Government's PFRFs for beneficial use by other projects in Hong Kong. Liaison with the CEDD Public Fill Committee (PFC) on the allocation of space for disposal of the inert C&D materials at PFRF is underway. No construction work is allowed to proceed until all issues on management of inert C&D materials have been resolved and all relevant arrangements have been endorsed by the relevant authorities including PFC and EPD. The C&D materials generated from general site clearance should be sorted on site to segregate any inert materials for reuse or disposal of at PFRFs whereas the non-inert materials will be disposed of at the designated landfill site. In order to monitor the disposal of inert and non-inert C&D materials at respectively PFRFs and the designated landfill site, and to control fly-tipping, it is recommended that the Contractor should follow the Technical Circular (Works) No. 6/2010 for Trip Ticket System for Disposal of Construction & Demolition Materials issued by Development Bureau. In addition, it is also recommended that the Contractor should prepare and implement a Waste Management Plan detailing their various waste arising and waste management practices in accordance with the relevant requirements of the Technical Circular (Works) No. 19/2005 Environmental Management on Construction Site. 	✓	✓	✓

EM&A Ref.	Recommendation Measures	Implementation Stage		
		M+ Museum	L1	L2
6.1 & 10.7.1	<p>Chemical Waste</p> <ul style="list-style-type: none"> If chemical wastes are produced at the construction site, the Contractor will be required to register with the EPD as a chemical waste producer and to follow the guidelines stated in the "Code of Practice on the Packaging Labelling and Storage of Chemical Wastes". Good quality containers compatible with the chemical wastes should be used, and incompatible chemicals should be stored separately. Appropriate labels should be securely attached on each chemical waste container indicating the corresponding chemical characteristics of the chemical waste, such as explosive, flammable, oxidizing, irritant, toxic, harmful, corrosive, etc. The Contractor should use a licensed collector to transport and dispose of the chemical wastes at the approved Chemical Waste Treatment Centre or other licensed recycling facilities, in accordance with the Waste Disposal (Chemical Waste) (General) Regulation. Potential environmental impacts arising from the handling activities (including storage, collection, transportation and disposal of chemical waste) are expected to be minimal with the implementation of appropriate mitigation measures as recommended. 	✓	✓	✓
6.1 & 10.7.1	<p>General Refuse</p> <p>General refuse should be stored in enclosed bins or compaction units separated from inert C&D materials. A reputable waste collector should be employed by the Contractor to remove general refuse from the site, separately from inert C&D materials. Preferably an enclosed and covered area should be provided to reduce the occurrence of 'wind blown' light material.</p>	✓	✓	✓

Land Contamination (Construction)

EM&A Ref.	Recommendation Measures	Implementation Stage		
		M+ Museum	L1	L2
7.1 & 10.8.1	<p>The potential for land contamination issues at the TST Fire Station due to its future relocation will be confirmed by site investigation after land acquisition. Where necessary, mitigation measures for minimising potential exposure to contaminated materials (if any) or remediation measures will be identified. If contaminated land is identified (e.g., during decommissioning of fuel oil storage tanks) after the commencement of works, mitigation measures are proposed in order to minimise the potentially adverse effects on the health and safety of construction workers and impacts arising from the disposal of potentially contaminated materials.</p> <p>The following measures are proposed for excavation and transportation of contaminated material:</p> <ul style="list-style-type: none"> To minimize the chance for construction workers to come into contact with any contaminated materials, bulk earth-moving excavation equipment should be employed; Contact with contaminated materials can be minimised by wearing appropriate clothing and personal protective equipment such as gloves and masks (especially when interacting directly with contaminated material), provision of washing facilities and prohibition of smoking and eating on site; Stockpiling of contaminated excavated materials on site should be avoided as far as possible; The use of contaminated soil for landscaping purpose should be avoided unless pre-treatment was carried out; Vehicles containing any contaminated excavated materials should be suitably covered to reduce dust emissions and/or release of contaminated wastewater; Truck bodies and tailgates should be sealed to stop any discharge; Only licensed waste haulers should be used to collect and transport contaminated material to treatment/disposal site and should be equipped with tracking system to avoid fly tipping; Speed control for trucks carrying contaminated materials should be exercised; 	N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A	N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A	N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A

EM&A Ref.	Recommendation Measures	Implementation Stage		
		M+ Museum	L1	L2
	<ul style="list-style-type: none"> Observe all relevant regulations in relation to waste handling, such as Waste Disposal Ordinance (Cap. 354), Waste Disposal (Chemical Waste) (General) Regulation (Cap. 354) and obtain all necessary permits where required; and Maintain records of waste generation and disposal quantities and disposal arrangements. 	N/A	N/A	N/A
	Ecological Impact (Construction) No mitigation measure is required.	N/A	N/A	N/A
Landscape and Visual Impact (Construction)				
Table 9.1 & 10.8 (CM1)	Trees should be retained in situ on site as far as possible. Should tree removal be unavoidable due to construction impacts, trees will be transplanted or felled with reference to the stated criteria in the Tree Removal Applications to be submitted to relevant government departments for approval in accordance to ETWB TCW No. 29/2004 and 3/2006.	N/A	N/A	N/A
Table 9.1 & 10.8 (CM2)	Compensatory tree planting shall be incorporated to the proposed project and maximize the new tree, shrubs and other vegetation planting to compensate tree felled and vegetation removed. Also, implementation of compensatory planting should be of a ratio not less than 1:1 in terms of quality and quantity within the site.	N/A	N/A	N/A
Table 9.1 & 10.8 (CM3)	Buffer trees for screening purposes to soften the hard architectural and engineering structures and facilities.	N/A	N/A	N/A
Table 9.1 & 10.8 (CM4)	Softscape treatments such as vertical green wall panel /planting of climbing and/or weeping plants, etc, to maximize the green coverage and soften the hard architectural and engineering structures and facilities.	N/A	N/A	N/A
Table 9.1 & 10.8 (CM5)	Roof greening by means of intensive and extensive green roof to maximize the green coverage and improve aesthetic appeal and visual quality of the building/structure.	N/A	N/A	N/A
Table 9.1 & 10.8 (CM6)	Sensitive streetscape design should be incorporated along all new roads and streets.	N/A	N/A	N/A

EM&A Ref.	Recommendation Measures	Implementation Stage		
		M+ Museum	L1	L2
Table 9.1 & 10.8 (CM7)	Structure, ornamental planting shall be provided along amenity strips to enhance the landscape quality.	N/A	N/A	N/A
Table 9.1 & 10.8 (CM8)	Landscape design shall be incorporated to architectural and engineering structures in order to provide aesthetically pleasing designs.	N/A	N/A	N/A
Table 9.1 (CM9)	Minimize the structure of marine facilities to be built on the seabed and foreshore in order to minimize the affected extent to the waterbody	N/A	N/A	N/A
Table 9.2 & 10.9 (MCP1)	Use of decorative screen hoarding/boards	✓	✓	✓
Table 9.2 & 10.9 (MCP2)	Early introduction of landscape treatments	N/A	N/A	N/A
Table 9.2 & 10.9 (MCP3)	Adoption of light colour for the temporary ventilation shafts for the basement during the transition period.	N/A	N/A	N/A
Table 9.2 & 10.9 (MCP4)	Control of night time lighting	N/A	N/A	N/A
Table 9.2 & 10.9 (MCP5)	Use of greenery such as grass cover for the temporary open areas will help achieve the visual balance and soften the hard edges of the structures.	N/A	N/A	N/A

N/A - Not Applicable

✓ - Implemented

Obs - Observed

Rem - Reminder

K. Cumulative Statistics on Complaints, Notifications of Summons and Successful Prosecutions

Cumulative statistics for complaints, notifications of summons and successful prosecutions for the Project account for period starting from the date of commencement of construction works (i.e. 31 October 2015 for M+ Museum main works and 1 March 2016 for Lyric Theatre Complex) to the end of the reporting month and are summarised in the **Table K-1** and **Table K-2** below respectively.

Table K-1: Statistics for complaints, notifications of summons and successful prosecutions for M+ Museum Main Works

Reporting Period	Cumulative Statistics		
	Complaints	Notifications of summons	Successful prosecutions
This reporting month	0	0	0
From 31 October 2015 to end of the reporting month	8	1	0

Table K-2: Statistics for complaints, notifications of summons and successful prosecutions for Lyric Theatre Complex

Reporting Period	Cumulative Statistics		
	Complaints	Notifications of summons	Successful prosecutions
This reporting month	0	0	0
From 1 March 2016 to end of the reporting month	10	0	0

