



Development at West Kowloon Cultural District

Monthly Environmental Monitoring and Audit
(EM&A) Report for June 2018

July 2018

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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) and L1 Contract (Contract No. CC/2017/3A/030) 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 both the main works of M+ Museum and Lyric Theatre Complex conducted from 1 June to 30 June 2018.

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 8, 14, 21 and 28 June 2018 for M+ Museum and 6, 13, 20, and 27 June 2018 for Lyric Theatre Complex 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.

EPD site inspection with Contractor was conducted on 29 June 2018 at M+ Museum. No adverse comment was received.

Record of Complaints

No environmental complaint was recorded in the reporting month.

Record of Notification of Summons and Successful Prosecutions

No notification of summons and successful prosecution were recorded in the reporting month.

Future Key Issues

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

- M+ Main Works (Podium) construction of Columns, Walls & Slab

- RDE Building Construction of: Columns, Walls & Slab (Zone A, B, C)
- CSF Building (Zone A & B) Construction of Columns, Walls & Slab

The major site works for Lyric Theatre Complex scheduled to be commissioned in the coming month include:

- Excavation and lateral support works at main cofferdam
- King post installation and extension;
- Bulk excavation;
- Operation of barge;
- Construction of manhole (PIW); and
- Extended basement structure construction of Area 06

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) and L1 Contract (Contract No. CC/2017/3A/030) 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 both the main works of M+ Museum and Lyric Theatre Complex conducted from 1 June to 30 June 2018. 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:

- M+ Main Works (Podium) construction of:
 - RF Columns, Walls & URF Slab

- 16F Columns, Walls & RF Slab
- Columns and walls from 11/F to 15/F;
- Slab from 12/F to 16/F.
- RDE Building Construction of:
 - UF1 Columns, Walls & RF Slab (Zone A & B)
 - Columns & Walls from 6/F to 15MF (Zone A & B)
 - Slab from 7/F to UF1 (Zone A & B)
 - 5/F columns and walls from (Zone A, B, C)
 - 6/F Slab (Zone A, B, C)
- CSF Building (Zone A & B) Construction of:
 - Columns and walls from 6/F to 8/F
 - Slab from 7/F to RF

During the reporting period, construction works at Lyric Theatre Complex undertaken include:

- Excavation and lateral support works at main cofferdam
- King post installation and extension;
- Bulk excavation;
- Operation of barge;
- Construction of manhole (PIW); and
- Extended basement structure construction of Area 06

The Construction Works Programmes of M+ Museum and Lyric Theatre Complex are provided in **Appendix B**. A layout plan of the Project is provided in **Figure 1**. Please refer to **Table 4.3** on the status of 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

Parameters	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	AM2A – Austin Road West opposite to The Harbourside Tower 1	At least once every 6 days
	1-Hour TSP	AM2A – Austin Road West opposite to The Harbourside Tower 1	At least 3 times every 6 days
Noise	Leq, 30 minutes	NM1A- Podium level of The Harbourside Tower 1	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. 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 AM2A 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)
AM2A	Austin Road West opposite to The Harbourside Tower 1

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)
Calibrator	TE-5025A (Orifice I.D.: 2454)
1-hour TSP monitoring	
Portable direct reading dust meter	Sibata LD-3B (Serial No.: 245833 and 276015)

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)	$L_{eq}(30 \text{ min})$, $L_{90}(30 \text{ min})$ & $L_{10}(30 \text{ min})$	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	Podium floor of 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 Equipments

Monitoring Station	Equipment Model	
	Integrating Sound Level Meter	Calibrator
NM1A	Rion NL-18 (Serial No.00360030)	Rion NC-73 (Serial No. 10486660)

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 AM2A 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-Jun-18	7:50	72	80	86	33-86	273.7	500
	11-Jun-18	8:07	36	41	33			
	15-Jun-18	8:12	41	36	40			
	21-Jun-18	8:10	54	61	60			
	27-Jun-18	7:50	35	39	42			
AM2A	05-Jun-18	8:05	75	83	91	38-91	274.2	500
	11-Jun-18	8:20	38	44	40			
	15-Jun-18	8:24	43	60	49			
	21-Jun-18	8:22	71	68	75			
	27-Jun-18	8:02	41	46	44			

3.2.2 24-hour TSP

Results of 24-hour TSP at the monitoring location AM1 and AM2A 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-Jun-18	07:52	37	34-42	143.6	260
	11-Jun-18	08:05	38			
	15-Jun-18	08:10	34			
	21-Jun-18	08:08	42			
	27-Jun-18	07:52	40			
AM2A	05-Jun-18	08:02	66	50-66	151.1	260
	11-Jun-18	08:17	50			
	15-Jun-18	08:22	62			
	21-Jun-18	08:20	62			
	27-Jun-18	08:04	53			

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	Leq (30 mins), dB(A)	Limit Level for Leq (dB(A))
05-Jun-18	10:15	10:45	69	75
11-Jun-18	10:26	10:56	69	
21-Jun-18	10:36	11:06	68	
27-Jun-18	10:10	10:40	69	

Remarks:

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

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

Construction works were extended to holidays on 3, 10, 17 and 24 June 2018. In accordance with the EM&A Manual, additional monitoring was carried out during the restricted hours on 3, 10, 17 and 24 June 2018. All the L_{eq} (5 mins) is in the range of 58-60 dB(A). Major noise source includes traffic. Construction Noise Permits for the works carried out during restricted hours were obtained and listed in **Table 4.3**.

3.4 Landscape and Visual Impact

Landscape and visual impact inspections were conducted as part of the weekly site inspections on 8 and 21 June 2018 for M+ Museum and 6 and 20 June 2018 for Lyric Theatre Complex 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 are 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 8, 14, 21 and 28 June 2018. The joint site inspection with IEC, ET, ER and Contractor was held on 21 June 2018. All observations have been recorded in the site inspection checklist and passed to the Contractor together with the appropriate recommended mitigation measures where necessary.

EPD site inspection was conducted on 29 June 2018. They conducted a routine inspection and inspected the flood prevention measures at seafront and wastewater treatment facilities. No adverse comment was received. The contractor was reminded to maintain the drainage system in good condition to avoid muddy water overflowing to the sea; ensure adequate water spraying for main haul roads on site to suppress dust generation; and ensure compliance with CNP when work at restricted hours.

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	Contractor's Responses / Action(s) Undertaken	Close-out (Date)
31 May 2018	Air Quality	The haul road near DCS was found dry and dusty. The contractor was reminded to enhance water spraying to reduce dust impact.	The contractor has enhanced water spraying at the haul road near DCS.	6 Jun 2018
31 May 2018	Water quality	The contractor was reminded to provide sand bags at one of the sections near the seafront to further enhance protection against site runoff from overflowing into the sea, though the bund at the seafront was properly in place.	The contractor has placed sand bags near seafront to further enhance protection against overflowing of site runoff into the sea.	6 Jun 2018
8 Jun 2018	Air Quality	The contractor was reminded to check if NRMM label is required for the excavator located near the seafront. If so, the contractor was reminded to provide NRMM label at the excavator.	The contractor has confirmed that the mini excavator is exempted from NRMM label requirement due to low output power. Notice has been displayed on the excavator.	13 Jun 2018
8 Jun 2018	Air Quality	Cement bags (more than 20 bags) without proper cover were found near Gate 1. The contractor was reminded to cover them properly to reduce dust impact.	The contractor has covered the cement bags near Gate 1 properly.	13 Jun 2018
8 Jun 2018	Waste Management	Chemicals were found without drip tray near wetsep no.2. The contractor was reminded to provide drip tray for the chemicals.	The contractor has removed the chemicals previously found without drip tray near wetsep no.2.	13 Jun 2018
8 Jun 2018	Water quality	Effluent quality at wetsep no.1 was checked. It was found visually clear when comparing with standard solution and within proper pH range.	N/A	N/A

Inspection Date	Parameter	Observation / Recommendation	Contractor's Responses / Action(s) Undertaken	Close-out (Date)
14 Jun 2018	Waste Management	Chemicals were found without drip tray on G/F near staircase no.14. The contractor was reminded to provide a drip tray for the chemicals.	The contractor has removed the chemicals previously observed without drip tray on G/F near staircase no. 14.	20 Jun 2018
14 Jun 2018	Waste Management	Oil was observed on the ground on G/F near façade storage area. The contractor was reminded to clear the oil and treat it as chemical waste.	The contractor has cleared the oil on the ground on G/F near façade storage area.	20 Jun 2018
14 Jun 2018	Water quality	Effluent quality at wetsep no.2 was checked. It was found acceptable and within proper pH range.	N/A	N/A
21 Jun 2018	Air Quality	The haul road was observed dry and dusty. The contractor was reminded to enhance water spraying to reduce dust impact.	The contractor has enhanced water spraying at the haul road and it was observed wet.	28 Jun 2018
21 Jun 2018	Waste Management	Chemicals were found without drip trays. The contractor was reminded to provide drip tray for the chemicals or remove them off site if not in use.	The contractor has removed the chemicals previously observed without drip tray.	28 Jun 2018
21 Jun 2018	Water quality	Effluent quality at wetsep no.2 was checked. It was found visually clear when comparing with standard solution and within proper pH range. But algae were found at wetsep no.2. The contractor was reminded to remove the algae.	The contractor has removed the algae at wetsep no.2.	28 Jun 2018
21 Jun 2018	Air Quality	Stockpile near seafront was found not entirely covered. The contractor was reminded to entirely cover it with impervious sheeting.	The contractor has covered the stockpile entirely near seafront with impervious sheeting.	28 Jun 2018
28 Jun 2018	Air Quality	Cement bags without proper cover were observed at B2. The contractor was reminded to cover them with impervious sheeting to reduce dust impact.	Follow-up status will be provided in the next reporting month.	On-going
28 Jun 2018	Water quality	Effluent quality at wetsep no.2 was checked. It was found visually clear when comparing with standard solution and within proper pH range.	N/A	N/A

4.1.2 Lyric Theatre Complex

Construction phase weekly site inspections were carried out on 6, 13, 20, and 27 June 2018. The joint site inspection with IEC, ET, ER and Contractor was held on 20 June 2018. 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**.

Table 4.2: Summary of Site Inspections and Recommendations for Lyric Theatre Complex

Inspection Date	Parameter	Observation / Recommendation	Contractor's Responses / Action(s) Undertaken	Close-out (Date)
6 Jun 2018	Water quality	Turbid water was observed at wetsep #2. Contractor was reminded to clean the turbid water	Contractor has cleared the turbid water to keep good quality of discharge water.	13 Jun 2018

Inspection Date	Parameter	Observation / Recommendation	Contractor's Responses / Action(s) Undertaken	Close-out (Date)
		to keep good quality of discharge water.		
6 Jun 2018	Waste management	Oil leakage was observed. Contractor was reminded to stop the leakage and treat the oil stain.	Contractor has stopped the oil leakage and treated the oil stain.	13 Jun 2018
6 Jun 2018	Waste management	Mud has accumulated in drip trap. Contractor was reminded to clean the accumulated mud.	Contractor has cleared the accumulated mud in drip tray.	13 Jun 2018
20 Jun 2018	Water quality	Turbid water was observed at three wetseps. The Contractor was reminded to clear the suspended solids in order to keep good quality of discharge water.	Contractor has cleared the suspended solids to keep good quality of discharge water.	27 Jun 2018
27 Jun 2018	Waste management	Contractor was reminded to provide drip tray to store chemicals in order to avoid leakage.	Follow-up status will be provided in the next reporting month.	On-going

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, 10.95 tonnes, 575.44 tonnes and 575.99 tonnes of inert C&D material were disposed of as public fill to Chai Wan Public Fill Barging Point, Tuen Mun Area 38 and Tseung Kwan O Area 137 Public Fill respectively, while 188.2 tonnes of general refuse were disposed of at SENT landfill. 47.0 tonnes of metals, 0.3 tonne of paper/cardboard packaging, 0 tonne of plastic and 100.0 tonnes of timber were collected by recycling contractors in the reporting month. 0 tonne of inert C&D materials was reused on site. 0 tonne of inert C&D materials were reused in other projects and 535.2 tonnes of inert C&D materials were disposed to sorting facility. 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 M+ Museum in the reporting month are shown in **Appendix I**.

4.2.2 Lyric Theatre Complex

As advised by the Contractor, 489.9 tonnes and 14,984.78 tonnes of inert C&D material were disposed of as public fill to Tseung Kwan O Area 137 and Tuen Mun Area 38, while 12.8 tonnes of general refuse were disposed of at SENT landfill. 0 tonne of metals, 0.1 tonne of paper/cardboard packaging, 0 tonne of plastic and 0 tonne of timber were collected by recycling contractors in the reporting month. 0 tonne of inert C&D materials was reused on site. 38,749.3 tonnes of inert C&D materials were reused in other projects and 0 tonne of inert C&D materials were disposed to sorting facility. 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 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 4.3-4.4**.

4.3.1 M+ Museum

Table 4.3: 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				
5213-217-H2913-45	05-Nov-15	--	Valid	--
Billing Account Construction Waste Disposal				
7023393	13-Oct-15	--	Account Active	--
Construction Noise Permit				
GW-RE0214-18	2-Apr-18	30-Sep-18	Valid	
Wastewater Discharge License				
WT00023633-2016	4-Mar-16	31-Mar-21	Valid	--
Notification under Air Pollution Control (Construction Dust) Regulation				
394083	7-Oct-15	--	Notified	--

4.3.2 Lyric Theatre Complex

Table 4.4: Status of Environmental Submissions, Licenses and Permits for Lyric Theatre Complex

Permit / License No. / Notification / Reference No.	Valid Period		Status	Remarks
	From	To		
Chemical Waste Producer Registration				
5213-217-G2347-39	17-Feb-16	--	Valid	--
Billing Account Construction Waste Disposal				
7029925	22-Jan-18	--	Account Active	--
Construction Noise Permit				
GW-RE0237-18	30-Mar-18	29-Sep-18	Cancelled on 27-Jun-18	
GW-RE0439-18	27-Jun-18	24-Dec-18	Valid	
Wastewater Discharge License				
WT-00030694-2018	6-Apr-18	30-Apr-23	Valid	
Notification under Air Pollution Control (Construction Dust) Regulation				
429708	16-Jan-18	--	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

Chemical and Waste Management

- Drip trays of proper size should be provided for all chemicals.
- Oil leakage should be cleared and disposed of as chemical waste.

Air Quality

- Maintain high standard of housekeeping to prevent emission of fugitive dust.
- Cement bags and stockpiles of dusty materials should be well covered by impervious sheeting to reduce dust impact.
- Frequent water spraying for haul roads should be provided for dust suppression.
- NRMM labels should be provided for machineries under control by the regulation.

Water Quality

- Algae accumulated at wetseps should be removed regularly to ensure the treatment performance.

4.4.2 Lyric Theatre Complex

Water Quality

- Regular checking and maintenance should be provided to all wetsep units to ensure the treatment performance.

Chemical and Waste Management

- Proper drip trays should be provided to all chemicals to avoid leakage of chemical waste.
- Mud accumulated in drip trays should be regularly removed.

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 May 2018	14 June 2018

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 recorded 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 prosecution 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 scheduled to be commissioned in the coming month include:

- M+ Main Works (Podium) construction of Columns, Walls & Slab
- RDE Building Construction of: Columns, Walls & Slab (Zone A, B, C)
- CSF Building (Zone A & B) Construction of Columns, Walls & Slab

7.1.2 Lyric Theatre Complex

The major site works for Lyric Theatre Complex scheduled to be commissioned in the coming month include:

- Excavation and lateral support works at main cofferdam
- King post installation and extension;
- Bulk excavation;
- Operation of barge;
- Construction of manhole (PIW); and
- Extended basement structure construction of Area 06

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 Leq, 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.

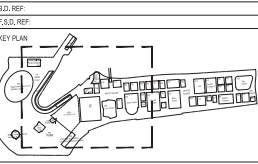
No environmental complaint, notifications of summons or successful prosecution were received during the reporting month.

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**



- NOTES
- WKCD BOUNDARY
 - M+ MUSEUM BOUNDARY
 - LYRIC THEATRE BOUNDARY
 - BOUNDARY OF UNDERPASS ROAD SERVING THE PLANNED WKCD
 - X CONSTRUCTION AIR/NOISE MONITORING STATION

REV.	DATE	DESCRIPTION	INITIAL

JOB TITLE
M+ MUSEUM FOR VISUAL CULTURE (MAIN CONTRACT WORKS) & LYRIC THEATRE COMPLEX

DRAWING TITLE
PROPOSED LOCATIONS OF CONSTRUCTION AIR/NOISE MONITORING STATIONS

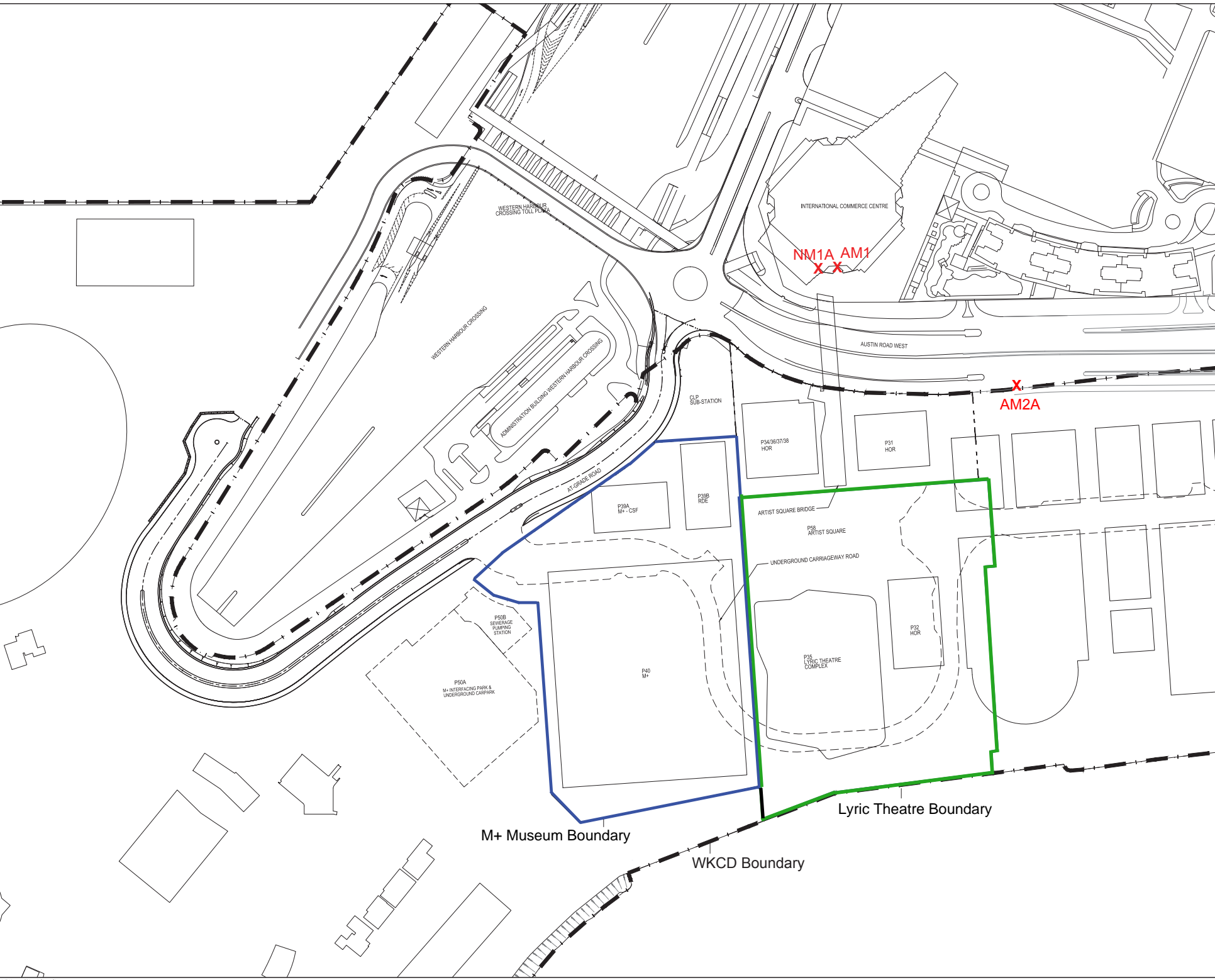
SCALE	1:100	PRINTED	A1
CHECKED		DATE	
APPROVED		DATE	
DRAWN	TY	DATE	16-10-2015

CONTRACT NO.

DRAWING NO.	FIGURE 1	REV.	XA
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CAD REF NAME: XXXXX-AUT-PLNS-DWG-POST-100-000-XXX.dwg

AUTHORITY



A1 (841mm x 594mm) Sheet Size

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

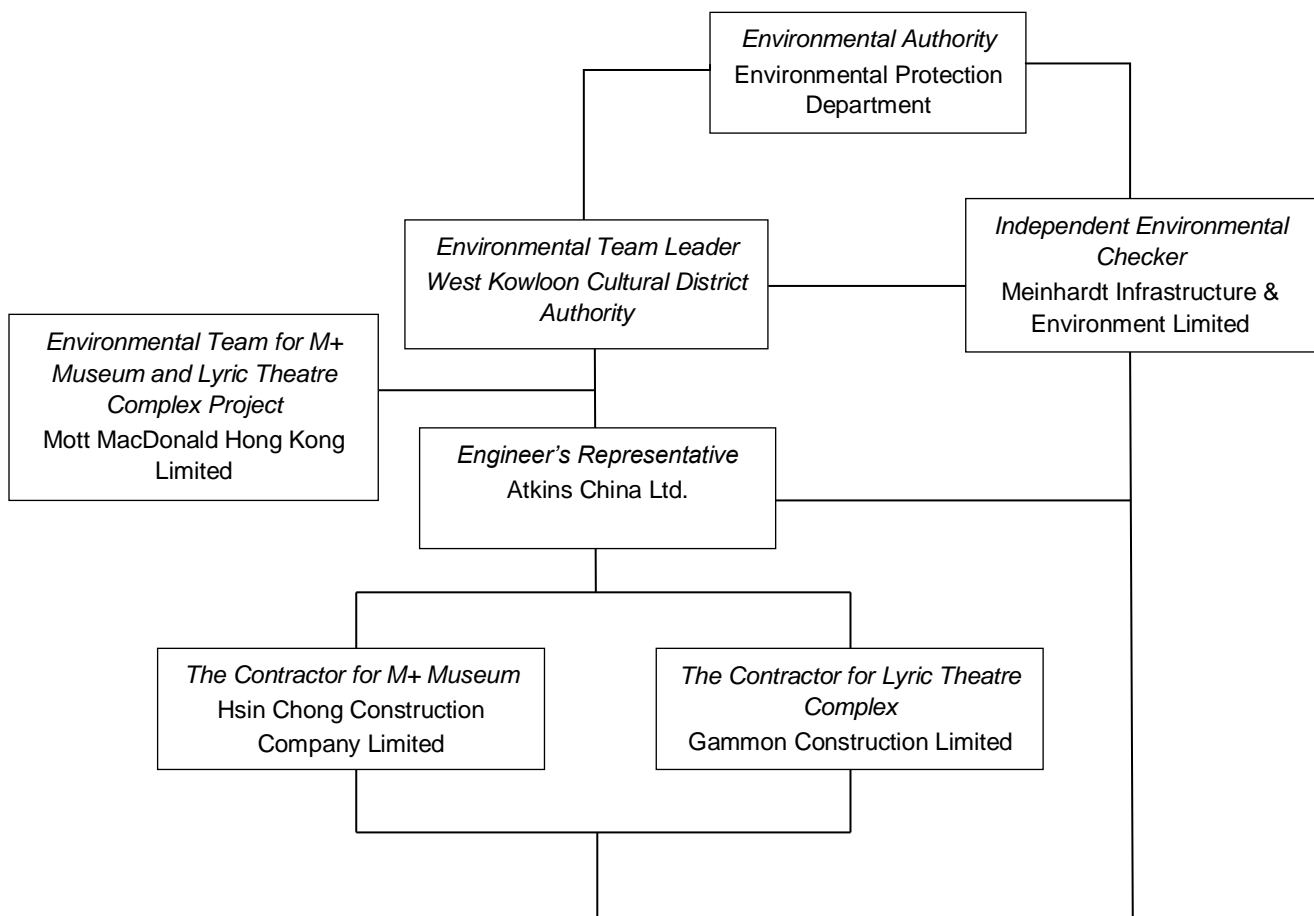


Table A-1: Contact information

Company Name	Role	Name	Telephone
Atkins China Ltd.	Assistant Resident Engineer	Ms. Gloria Lui	5506 6361
Meinhardt Infrastructure & Environment Limited	Independent Environmental Checker	Mr. Fredrick Leong	2859 1739
Hsin Chong Construction Company Limited	Environmental Manager	Mr. Andy Leung	9016 2503
Gammon Construction Limited	Environmental Manager	Ms. Michelle Tang	9267 8866
Mott MacDonald Hong Kong Ltd.	Contractor's Environmental Team Leader	Mr Brandon Wong	2828 5875
West Kowloon Cultural District Authority	Senior Environmental Specialist	Mr. Brian Tam	2200 0059

B. Tentative Construction Programme

M+ Museum

Three Months Rolling Programme (3MRP) - Mth 32 - 31 May

Activity ID	Activity Name	CMWP Dur.	CMWP - R0 (D8*) Start	CMWP - R0 (D8) Finish	Actual / Forecast Start	Actual / Forecast Finish	Planned B/L % Complete	Actual % Complete	Finish Variance (+/-d)	May				June				July				August							
										30	07	14	21	28	04	11	18	25	02	09	16	23	30	06	13	20	27		
Five Weeks Rolling Programme (5WRP-140) (27 May to 02 Jun 2018) (CMWP 8D)																													
M+ Podium & Tower FACADE Preliminaries																													
SHOP DRAWING SUBMISSIONS FACADE SYSTEM & EMBEDS																													
SHOP DRAWING - Metal Cladding FAC-LV-01a/FAC-LV-01b (Additional Scope)																													
A51430	2nd Shopdrawing Submission - Review & Approval	17	16-Feb-18	04-Mar-18	12-Feb-18 A	09-Jun-18	100%	49%	-97																				
BD SUBMISSIONS FACADE SYSTEM & EMBEDS																													
BD Submission - Garden Gallery Ceramic Cladding System & Embed																													
A51785	Garden Gallery Ceramic - BD Approval (2nd Batch)	48	04-May-17	21-Jun-17	05-Mar-18 A	03-Jun-18	100%	95%	-347																				
A51790	Garden Gallery Ceramic - Consent	24	03-Jun-18	27-Jun-18	03-Jun-18	27-Jun-18	0%	0%	0																				
BD Submission - Glass Wall with Ceramic/Precast Concrete Mullion, Concrete Tube & Perforated Claddin																													
A51980	2nd Submission	14	05-Jan-18	19-Jan-18	26-Dec-17 A	04-Jun-18	100%	76%	-136																				
A51990	2nd Submission - Review & Approval by MJV (w/ RSE Endorsement)	31	11-Jan-18	11-Feb-18	02-Jan-18 A	08-Jun-18	100%	76%	-117																				
A52000	Glass Wall with Ceramic & Precast Concrete Mullion - Submission to BD	0		08-Jun-18		08-Jun-18	0%	0%	0																				
A52010	Glass Wall with Ceramic & Precast Concrete Mullion - BD Approval	48	05-Jun-18	23-Jul-18	05-Jun-18	23-Jul-18	0%	0%	0																				
A52020	Glass Wall with Ceramic & Precast Concrete Mullion - Consent	24	23-Jul-18	16-Aug-18	23-Jul-18	16-Aug-18	0%	0%	0																				
SHOPDRAWING SUBMISSIONS - FACADE DOORS																													
Facade Doors Package #1 - Glazed door between Ceramic Concrete Mullion - Total No. of Doors = 53																													
A65210	1st Shopdrawing Submission	58	23-Feb-18	21-Apr-18	17-Feb-18 A	29-Jun-18	100%	51%	-69																				
A52130	1st Shopdrawing Submission - Review & Approval	17	26-Jun-18	13-Jul-18	26-Jun-18	13-Jul-18	0%	0%	0																				
Facade Doors Package #2 - Sliding door at L3 Storefront - Total No. of Doors = 4																													
A52190	2nd Shopdrawing Submission	12	12-Mar-18	23-Mar-18	16-Feb-18 A	06-Jun-18	100%	51%	-75																				
A52200	2nd Shopdrawing - Review & Approval	17	06-Jun-18	23-Jun-18	06-Jun-18	23-Jun-18	0%	0%	0																				
Facade Doors Package #3 - Swing Door at L3 Cafe- Total No. of Doors = 1																													
A52230	2nd Shopdrawing Submission	12	23-Mar-18	04-Apr-18	16-Feb-18 A	06-Jun-18	100%	51%	-63																				
A52250	2nd Shopdrawing Submission - Review & Approval	17	06-Jun-18	23-Jun-18	06-Jun-18	23-Jun-18	0%	0%	0																				
Facade Doors Package #4 - Swing Door mounted in GW with T Mullion - Total No. of Doors = 29																													
A52280	2nd Shopdrawing Submission	12	23-Mar-18	04-Apr-18	16-Feb-18 A	06-Jun-18	100%	51%	-63																				
A52290	2nd Shopdrawing Submission - Review & Approval	17	06-Jun-18	23-Jun-18	06-Jun-18	23-Jun-18	0%	0%	0																				
Facade Doors Package #5 - Large double door at B1 Transformer Room - Total No. of Doors = 1																													
A52320	2nd Shopdrawing Submission	12	23-Mar-18	04-Apr-18	16-Feb-18 A	06-Jun-18	100%	51%	-63																				
A52340	2nd Shopdrawing Submission - Review & Approval	17	06-Jun-18	23-Jun-18	06-Jun-18	23-Jun-18	0%	0%	0																				
Facade Doors Package #6 - B1 Exit Door - Total No. of Doors = 7 (7 x Manual)																													
A52370	2nd Shopdrawing Submission	12	23-Mar-18	04-Apr-18	16-Feb-18 A	06-Jun-18	100%	51%	-63																				
A52380	2nd Shopdrawing Submission - Review & Approval	17	06-Jun-18	23-Jun-18	06-Jun-18	23-Jun-18	0%	0%	0																				
Facade Doors Package #7 - Garden Gallery Door - Total No. of Doors = 2 (2 x Manual)																													
A52410	2nd Shopdrawing Submission	12	02-Mar-18	13-Mar-18	16-Feb-18 A	06-Jun-18	100%	51%	-85																				
A52430	2nd Shopdrawing Submission - Review & Approval	17	06-Jun-18	23-Jun-18	06-Jun-18	23-Jun-18	0%	0%	0																				
Facade Doors Package #8 - Doors located in Metal Cladding - Total No. of Doors = 20 (20 x Manual)																													
A52460	2nd Shopdrawing Submission	12	02-Mar-18	13-Mar-18	23-Feb-18 A	06-Jun-18	100%	51%	-85																				
A52470	2nd Shopdrawing Submission - Review & Approval	17	06-Jun-18	23-Jun-18	06-Jun-18	23-Jun-18	0%	0%	0																				
Facade Doors Package #9 - GF Lobby Access Door in Ceramic Tube - Total No. of Doors = 8																													
A52500	2nd Shopdrawing Submission	12	02-Mar-18	13-Mar-18	16-Feb-18 A	06-Jun-18	100%	51%	-85																				
A52520	2nd Shopdrawing Submission - Review & Approval	17	06-Jun-18	23-Jun-18	06-Jun-18	23-Jun-18	0%	0%	0																				
Facade Doors Package #10 - B1 Carriageway Access Panel & Doors - Total No. of Doors = 24																													
A52550	2nd Shopdrawing Submission	12	23-Mar-18	04-Apr-18	16-Feb-18 A	06-Jun-18	100%	51%	-63																				
A52560	2nd Shopdrawing Submission - Review & Approval	17	06-Jun-18	23-Jun-18	06-Jun-18	23-Jun-18	0%	0%	0																				
Facade Doors Package #12 - B1 Smoke Vent Panel - Total No. of Doors = 1																													
A52600	2nd Shopdrawing Submission	12	23-Mar-18	04-Apr-18	16-Feb-18 A	06-Jun-18	100%	51%	-63																				
A52610	2nd Shopdrawing Submission - Review & Approval	17	06-Jun-18	23-Jun-18	06-Jun-18	23-Jun-18	0%	0%	0																				

■ Remaining Level of Effort ■ Remaining Work ◆ Milestone ◆ Baseline Milestone
■ Actual Level of Effort ■ Critical Remaining Work ◆ Actual Milestone ◆ Critical Milestone
■ Milestone ■ Project Baseline ■ Project LoE Baseline
■ Critical Milestone ■ Project Baseline
■ Actual Work ■ Project LoE Baseline

West Kowloon Cultural District Authority
M+ Contractor's Main Works
Programme CMWP -



Date	Revision	Checked	Approved
28-Feb-18	3MRP-Mth29_28 Feb...	Robby Y	Chris Chau / Ricky Lau
31-Mar-18	3MRP-Mth30_31 Mar...	Robby Y.	Chris Chau / Ricky Lau
30-Apr-18	3MRP-Mth31_30 Apr...	Robby Y.	Chris Chau / Ricky Lau
31-May-18	3MRP-Mth32_31 Ma...	Robby Y.	Chris Chau / Ricky Lau

Three Months Rolling Programme (3MRP) - Mth 32 - 31 May

Activity ID	Activity Name	CMWP Dur.	CMWP - R0 (D8*) Start	CMWP - R0 (D8) Finish	Actual / Forecast Start	Actual / Forecast Finish	Planned B/L % Complete	Actual % Complete	Finish Variance (+/-d)	May							June							July							August							
										30	07	14	21	28	04	11	18	25	02	09	16	23	30	06	13	20	27											
PERFORMANCE TEST - SHOPDRAWING SUBMISSION, FABRICATION, INSTALLATION & TEST																																						
PMU SHOPDRAWING SUBMISSION & TEST - Tower Facade Precast Panel																																						
A54645	Perf MU - Testing & Report Submission of Tower Precast Concrete Facade	36	25-Nov-17	30-Dec-17	01-Nov-17 A	12-Jun-18	100%	67%	-164																													
PMU SHOPDRAWING SUBMISSION & TEST - Podium Facade Precast Panel																																						
A54680	Perf MU - Testing & Report Submission of Podium Facade PC+CW	14	04-Jun-18	18-Jun-18	04-Jun-18	18-Jun-18	0%	0%	0																													
PMU SHOPDRAWING SUBMISSION & TEST - Kinked Glass with T Mullion																																						
A54730	Perf MU - Testing & Report Submission of GW with T Mullion + Reflective Glass	14	11-Jun-18	25-Jun-18	11-Jun-18	25-Jun-18	0%	0%	0																													
PMU SHOPDRAWING SUBMISSION & TEST - Glass Wall with Ceramic Mullions at GF																																						
A52780	Perf MU - 2nd Shopdrawing Submission - Review & Approval	17	03-Mar-18	20-Mar-18	02-Mar-18 A	09-Jun-18	100%	50%	-81																													
A54740	Perf MU - GW with Ceramic Mullion G/F Production & Fabrication	48	11-Sep-17	29-Oct-17	04-Nov-17 A	17-Jul-18	100%	4%	-261																													
A54750	Perf MU - GW with Ceramic Mullion G/F Installation	22	25-Jun-18	17-Jul-18	25-Jun-18	17-Jul-18	0%	0%	0																													
A54760	Perf MU - Commence Testing of GW with Ceramic Mullion G/F	0	17-Jul-18		17-Jul-18		0%	0%	0																													
A54770	Perf MU - Testing & Report Submission of GW with Ceramic Mullion G/F	12	17-Jul-18	29-Jul-18	17-Jul-18	29-Jul-18	0%	0%	0																													
PMU SHOPDRAWING SUBMISSION & TEST - Vertical Glass Wall at Skylight Gallery																																						
A54850	Perf MU - Testing & Report Submission of Vertical Glass Wall Skylight Gallery	10	06-Jun-18	15-Jun-18	06-Jun-18	15-Jun-18	0%	0%	0																													
PMU SHOPDRAWING SUBMISSION & TEST - Plaza Skylight 3/F Terrace																																						
A54780	Perf MU - Plaza Skylight 3/F Terrace Production & Fabrication	65	05-Apr-17	09-Jun-17	04-May-17 A	13-Jul-18	100%	35%	-399																													
A54790	Perf MU - Plaza Skylight 3/F Terrace Installation	24	10-Jul-18	03-Aug-18	10-Jul-18	03-Aug-18	0%	0%	0																													
A54800	Perf MU - Commence Testing of Plaza Skylight 3/F Terrace	0	03-Aug-18		03-Aug-18		0%	0%	0																													
A54810	Perf MU - Testing & Report Submission of Plaza Skylight 3/F Terrace	10	03-Aug-18	12-Aug-18	03-Aug-18	12-Aug-18	0%	0%	0																													
PRODUCTION MOCK UP & INSPECTION																																						
Prod MU - Podium Facade Precast Panel																																						
A55380	Podium Precast Concrete & Curtain Wall Prod MU	108	07-Feb-18	25-May-18	02-Jan-18 A	20-Jun-18	100%	82%	-25																													
Prod MU - Kinked Glass with T Mullion																																						
A55400	GW with T Mullion (Kinked & Straight) Prod MU	48	25-Jun-18	12-Aug-18	25-Jun-18	12-Aug-18	0%	0%	0																													
A55410	Inspection (Prod MU) - GW with T Mullion (Kinked & Straight)	0	15-Aug-18		15-Aug-18		0%	0%	0																													
Prod MU - Vertical Glass Wall at Skylight Gallery																																						
A55440	Vertical GW with Skylight Gallery Prod MU	48	07-Jun-18	25-Jul-18	07-Jun-18	25-Jul-18	0%	0%	0																													
Prod MU - Plaza Skylight 3/F Terrace																																						
A55460	Plaza Skylight Prod MU	48	12-Aug-18	29-Sep-18	12-Aug-18	29-Sep-18	0%	0%	0																													
FABRICATION & DELIVERY OF M+ TOWER & PODIUM FACADE SYSTEM																																						
01A Tower Facade PC+CW (Bulk)																																						
Glass Production & Fabrication																																						
A54450	Coated Glass Production	96	19-Nov-16	16-Mar-17	19-Nov-16 A	16-Jun-18	100%	86%	-368																													
A54460	Fabrication of Glass Panel	128	03-Mar-17	08-Aug-17	03-Mar-17 A	10-Jul-18	100%	75%	-271																													
CW Glazed Panel Production & Fabrication																																						
A54910	Aluminium Extrusion Production	179	21-Aug-17	27-Mar-18	19-Jun-17 A	03-Jul-18	100%	86%	-75																													
A54920	Application of PVF2 Coating	181	29-Dec-17	10-Aug-18	02-Dec-17 A	01-Aug-18	67.4%	72%	8																													
A54860	Fabrication & Assemble of Curtain Wall Unit	191	08-Feb-18	03-Oct-18	23-Dec-17 A	07-Nov-18	46.07%	31%	-29																													
Terracotta Production																																						
A54940	Terracotta Production - Tower (Bulk)	100	17-Mar-17	20-Jul-17	17-Mar-17 A	06-Jul-18	100%	71%	-284																													
A54950	Delivery to Precast. Factory	249	05-Sep-17	11-Jul-18	22-Jun-17 A	21-Sep-18	86.79%	62%	-62																													
Tower Tiles TE501 Production																																						
A64320	TE501-L02-07 (11F & 12F)	38	16-Apr-18	24-May-18	06-Apr-18 A	09-Jul-18	100%	83%	-46																													
A64330	TE501-L02-08 (13F & 14F)	50	09-Jul-18	28-Aug-18	09-Jul-18	28-Aug-18	0%	0%	0																													
A64340	TE501-L02-09 (15F & 16F)	50	28-Aug-18	18-Oct-18	28-Aug-18	18-Oct-18	0%	0%	0																													
Tower Tiles TE502 Production																																						
A64430	TE502-L02-08 (13F & 14F)	50	14-May-18	03-Jul-18	05-Apr-18 A	21-Jul-18	35.71%	64%	-18																													
A64440	TE502-L02-09 (15F & 16F)	50	21-Jul-18	09-Sep-18	21-Jul-18	09-Sep-18	0%	0%	0																													
Tower Tiles TE503 Production																																						
A64460	TE503-L02-01 (West)	14	02-Aug-18	16-Aug-18	26-Feb-18 A	15-Jun-18	0%	40%	63																													
A64470	TE503-L02-02 (East)	14	16-Mar-18	30-Mar-18	01-Mar-18 A	15-Jun-18	100%	30%	-77																													
A64550	TE503-L02-10 (Roof)	43	20-Apr-18	02-Jun-18	08-Jan-18 A	14-Jul-18	97.22%	14%	-42																													
A64540	TE503-L02-09 (15F & 16F)	154	05-Jan-18	07-Jun-18	02-Jan-18 A	01-Nov-18	95.7%	56%	-147																													

Three Months Rolling Programme (3MRP) - Mth 32 - 31 May

Activity ID	Activity Name	CMWP Dur.	CMWP - R0 (D8*) Start	CMWP - R0 (D8) Finish	Actual / Forecast Start	Actual / Forecast Finish	Planned B/L % Complete	Actual % Complete	Finish Variance (+/-d)	Gantt Chart (May to August)							
										May 30	May 07	May 14	May 21	May 28	June 04	June 11	June 18
Tower Tiles TE505 Production																	
A64560	TE505-L02-01 (West)	14	06-Jun-18	20-Jun-18	06-Jun-18	20-Jun-18	0%	0%	0								
A64570	TE505-L02-02 (East)	14	20-Jun-18	04-Jul-18	20-Jun-18	04-Jul-18	0%	0%	0								
Precast Concrete Facade																	
A54990	Inspection, Packing & Delivery to Site - Tower Facade	80	04-Apr-18	12-Jul-18	13-Mar-18 A	28-Jul-18	58.61%	40%	-15								
A54970	Concreting of Precast Concrete	192	08-May-18	24-Dec-18	27-Nov-17 A	03-Dec-18	10.42%	20%	18								
A54980	Assemble of Curtain Wall to Precast Facade	190	23-May-18	08-Jan-19	27-Nov-17 A	12-Dec-18	4.21%	15%	21								
01B Tower Lighting (Bulk)																	
Procurement & Production (3F to Roof) & Shipment																	
A55020	Production - Tower Lighting Bar	168	18-Apr-17	07-Nov-17	16-Apr-17 A	18-Jul-18	100%	77%	-203								
CW Glazed Panel Production & Fabrication																	
A10000	IQC Inspection	169	03-Apr-18	25-Oct-18	13-Mar-18 A	09-Nov-18	28.4%	21%	-13								
A10010	OQC Inspection	169	23-Mar-18	18-Oct-18	13-Mar-18 A	09-Nov-18	31.95%	21%	-19								
A55030	Delivery & Assembly	178	23-Mar-18	29-Oct-18	13-Mar-18 A	17-Nov-18	30.34%	21%	-17								
02 Podium Facade PC + CW (Bulk)																	
A54480	1st Delivery to Site - Precast Panel for Podium	0	27-Jun-18		27-Jun-18		0%	0%	0	1st Delivery to Site - Precast Panel for Podium, 27-Jun-18							
A54470	Production & Fabrication - Precast Panel for Podium	120	12-Nov-16	12-Mar-17	11-Dec-16 A	27-Sep-18	100%	1%	-565								
Glass Production & Fabrication																	
A10020	Ordering of Coated Glass	85	12-Nov-16	04-Feb-17	11-Dec-16 A	23-Jun-18	100%	74%	-503								
A10030	Fabrication of Insulated Glass Panel	124	05-Feb-18	09-Jun-18	02-Jan-18 A	25-Sep-18	93.47%	6%	-108								
CW Glazed Panel Production & Fabrication																	
A10040	Die Making - Bulk Production	41	17-Feb-17	06-Apr-17	17-Feb-17 A	06-Jun-18	100%	88%	-343								
A10050	Aluminium Extrusion Production	131	15-Jan-18	27-Jun-18	02-Jan-18 A	02-Aug-18	83.21%	61%	-29								
A10060	Application of PVF2 Coating	145	27-Jan-18	27-Jul-18	03-Jan-18 A	26-Sep-18	67.59%	51%	-50								
A10070	Fabrication & Assemble of Curtain Wall Unit	116	15-Feb-18	11-Jun-18	04-Jan-18 A	28-Sep-18	91.29%	0%	-110								
Terracotta Production																	
A10160	Delivery of Terracotta to Precast Factory from Italy (by ship)	116	21-Aug-17	10-Jan-18	22-Jun-17 A	04-Jul-18	100%	77%	-139								
A10100	Terracotta Production - Podium (Bulk)	147	24-Apr-17	18-Oct-17	24-Apr-17 A	28-Sep-18	100%	81%	-280								
Precast Concrete Facade																	
A10180	Curing of 1st Lot	6	26-Mar-18	04-Apr-18	02-Jan-18 A	07-Jun-18	100%	7.01%	-52								
A10110	Precast Concrete Mould Making	136	18-Sep-17	05-Mar-18	19-Jun-17 A	12-Jun-18	100%	93%	-79								
A10150	Precast Panel 1st Delivery to Site - Podium	0	27-Jun-18		27-Jun-18		0%	0%	0	Precast Panel 1st Delivery to Site - Podium, 27-Jun-18							
A10120	Concreting of Precast Concrete	95	16-Mar-18	19-Jun-18	02-Jan-18 A	30-Aug-18	80.78%	5%	-72								
A10130	Assemble of Curtain Wall to Precast Facade	93	06-Apr-18	07-Jul-18	03-Jan-18 A	30-Aug-18	60.24%	2%	-54								
A10140	Inspection, Packing & Delivery to Site - Podium Facade	93	12-Jun-18	12-Sep-18	12-Jun-18	12-Sep-18	0%	0%	0								
03 GW with T Mullion (Kinked & Straight B1F to GF) (Bulk)																	
A54490	Production & Fabrication - GW with T Mullion (Kinked & Straight B1F to GF)	151	15-Aug-18	13-Jan-19	15-Aug-18	13-Jan-19	0%	0%	0								
Glass Production & Fabrication																	
A10300	Delivery of Glass Panel to Site	46	22-Aug-18	18-Oct-18	22-Aug-18	18-Oct-18	0%	0%	0								
A10200	Fabrication of Insulated Glass Panel	67	22-Aug-18	12-Nov-18	22-Aug-18	12-Nov-18	0%	0%	0								
A10190	Coated Glass Production	84	15-Aug-18	24-Nov-18	15-Aug-18	24-Nov-18	0%	0%	0								
Alum Section Production & Fabrication																	
A10230	Application of PVF2 Coating	6	10-Jul-18	17-Jul-18	18-May-18 A	07-Jun-18	0%	5.99%	32								
A10210	Die Making - Bulk Production	34	21-Apr-18	01-Jun-18	02-Jan-18 A	11-Jun-18	97.06%	76%	-7								
A10220	Aluminium Extrusion Production	34	29-May-18	10-Jul-18	18-May-18 A	10-Jul-18	7.35%	6%	0	A10220							
A10240	Fabrication & Assemble of Curtain Wall Unit	35	07-Jun-18	20-Jul-18	07-Jun-18	20-Jul-18	0%	0%	0								
T Painted GMS Mullion, Transom & Brackets																	
A10280	1st Delivery T-Mullion B1	0	19-Jul-18		19-Jul-18		0%	0%	0	1st Delivery T-Mullion B1, 19-Jul-18							
A10260	Painting	88	15-Jun-18	28-Sep-18	15-Jun-18	28-Sep-18	0%	0%	0								
A10250	GMS Fabrication	109	21-Apr-18	30-Aug-18	02-Jan-18 A	11-Oct-18	30.28%	0%	-34								
A10270	Packing & Delivery	81	12-Jul-18	18-Oct-18	12-Jul-18	18-Oct-18	0%	0%	0								
04A GW with PC Mullion at 2F Courtyard (Bulk)																	
A54530	1st Delivery to Site - GW with PC Mullion at 2F Courtyard	0	06-Jun-18		06-Jun-18		0%	0%	0	1st Delivery to Site - GW with PC Mullion at 2F Courtyard, 06-Jun-18							
A54520	Production & Fabrication - GW with PC Mullion at 2F Courtyard	180	29-Apr-18	26-Oct-18	02-Jan-18 A	11-Nov-18	17.79%	9%	-16								

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Activity ID	Activity Name	CMWP Dur.	CMWP - R0 (D8*) Start	CMWP - R0 (D8) Finish	Actual / Forecast Start	Actual / Forecast Finish	Planned B/L % Complete	Actual % Complete	Finish Variance (+/-d)	May							June							July							August							
										30	07	14	21	28	04	11	18	25	02	09	16	23	30	06	13	20	27	03	10	17	24	31	07	14	21	28	04	11
Glass Production & Fabrication																																						
A10310	Coated Glass Production	63	18-May-18	20-Jul-18	02-Jan-18 A	28-Jul-18	21.87%	9%	-8																													
A10320	Fabrication of Insulated Glass Panel	19	28-Jul-18	16-Aug-18	28-Jul-18	16-Aug-18	0%	0%	0																													
A10330	Delivery of Glass Panel to Site	2	16-Aug-18	18-Aug-18	16-Aug-18	18-Aug-18	0%	0%	0																													
Alum Frame Production & Fabrication																																						
A10350	Aluminium Extrusion Production	106	26-May-18	09-Sep-18	02-Jan-18 A	07-Sep-18	4.75%	7%	2																													
A10340	Die Making - Bulk Production	142	29-Apr-18	18-Sep-18	02-Jan-18 A	12-Sep-18	22.61%	27%	6																													
04B GW with Ceramic Mullion (GF & 1F) (Bulk)																																						
A54540	Production & Fabrication - GW with Ceramic Mullion (GF & 1F)	220	05-Jan-18	12-Aug-18	02-Jan-18 A	19-Nov-18	66.82%	22%	-99																													
Glass Production & Fabrication																																						
A10460	Coated Glass Production	75	08-Jan-18	12-Apr-18	02-Jan-18 A	22-Aug-18	100%	9%	-108																													
A10470	Fabrication of Insulated Glass Panel	110	22-Aug-18	04-Jan-19	22-Aug-18	04-Jan-19	0%	0%	0																													
Alum Frame Production & Fabrication																																						
A10500	Application of PVF2 Coating	6	09-Apr-18	14-Apr-18	03-Jan-18 A	07-Jun-18	100%	10%	-43																													
A10480	Die Making - Bulk Production	34	04-Oct-17	14-Nov-17	31-Jul-17 A	21-Jun-18	100%	50%	-175																													
A10510	Fabrication of Aluminium Frame to Site	33	17-May-18	27-Jun-18	09-May-18 A	07-Jul-18	35.15%	10%	-8																													
A10490	Aluminium Extrusion Production	38	15-Feb-18	07-Apr-18	27-Nov-17 A	13-Jul-18	100%	10%	-78																													
Terracotta Production																																						
A10550	Die Making - Bulk Production	44	11-Sep-17	04-Nov-17	07-Aug-17 A	22-Jun-18	100%	61%	-184																													
A10560	Terracotta Production (Bulk)	74	03-Mar-18	04-Jun-18	02-Jan-18 A	25-Aug-18	95.95%	3%	-69																													
A10570	Application of PVF2 Coating	67	15-Jun-18	03-Sep-18	15-Jun-18	03-Sep-18	0%	0%	0																													
Precast Concrete Facade Die Making																																						
A10580	Precast Concrete Mould Making	24	14-Apr-18	14-May-18	02-Jan-18 A	23-Jun-18	100%	21%	-33																													
A10600	Curing of 1st Lot	5	23-Jun-18	29-Jun-18	23-Jun-18	29-Jun-18	0%	0%	0																													
A10590	Aluminium Extrusion Production	87	14-May-18	27-Aug-18	02-Jan-18 A	10-Sep-18	16.35%	3%	-12																													
Precast Concrete Facade																																						
A10520	Assemble of Alum Section to Precast Mullion	87	27-Aug-18	08-Dec-18	02-Jan-18 A	07-Sep-18	0%	5%	76																													
A10530	Delivery of Precast Concrete to Site	112	15-Jun-18	29-Oct-18	15-Jun-18	29-Oct-18	0%	0%	0																													
05 Ceramic Concrete Tubes & Perforated Cladding (Bulk)																																						
A54610	1st Delivery to Site - Ceramic Concrete Tubes & Perforated Cladding	0	15-Aug-18		15-Aug-18		0%	0%	0																													
A54600	Production & Fabrication - Ceramic Concrete Tubes & Perforated Cladding	220	05-Jan-18	12-Aug-18	02-Jan-18 A	26-Dec-18	66.82%	5%	-136																													
Alum Frame Production & Fabrication																																						
A10650	Aluminium Extrusion Production	45	13-Apr-18	06-Jun-18	02-Jan-18 A	04-Jul-18	88.89%	40%	-22																													
A10660	Application of PVF2 Coating	5	05-Jul-18	10-Jul-18	05-Jul-18	10-Jul-18	0%	0%	0																													
A10640	Die Making - Bulk Production	64	20-Jan-18	12-Apr-18	02-Jan-18 A	01-Aug-18	100%	21%	-91																													
A10670	Fabrication of Aluminium Frame to Site	46	11-Jul-18	01-Sep-18	11-Jul-18	01-Sep-18	0%	0%	0																													
Terracotta Production																																						
A10700	Application of PVF2 Coating	56	26-May-18	01-Aug-18	02-Jan-18 A	03-Aug-18	8.93%	6%	-2																													
A10680	Die Making - Bulk Production	78	08-Jan-18	16-Apr-18	02-Jan-18 A	16-Aug-18	100%	19%	-100																													
A10690	Terracotta Production (Bulk)	67	16-Aug-18	06-Nov-18	16-Aug-18	06-Nov-18	0%	0%	0																													
Precast Concrete Facade Die Making																																						
A10710	Precast Concrete Mould Making	26	28-May-18	27-Jun-18	02-Jan-18 A	26-Jun-18	15.38%	20%	1																													
A10730	Curing of 1st Lot	6	26-Jun-18	04-Jul-18	26-Jun-18	04-Jul-18	0%	0%	0																													
A10750	1st Delivery to Site - Ceramic Concrete Tubes	0	15-Aug-18		15-Aug-18*		0%	0%	0																													
A10720	Concreting of Precast Concrete	88	26-Jun-18	10-Oct-18	26-Jun-18	10-Oct-18	0%	0%	0																													
A10740	Assemble of Brackets to Ceramic Concrete Tubes	97	26-Jul-18	20-Nov-18	26-Jul-18	20-Nov-18	0%	0%	0																													
06A Plaza Skylight 3F (Bulk)																																						
A19130	Production & Fabrication - Plaza Skylight 3F	150	16-May-18	12-Oct-18	02-Jan-18 A	19-Oct-18	10.67%	6%	-7																													
Glass Production & Fabrication																																						
A18760	Fabrication of Insulated Glass Panel	32	14-May-18	21-Jun-18	09-May-18 A	09-Jul-18	46.88%	5%	-13																													
A18750	Coated Glass Production	72	18-May-18	13-Aug-18	02-Jan-18 A	20-Aug-18	15.28%	8%	-5																													
Alum Frame Production & Fabrication																																						
A18770	Die Making - Bulk Production	55	18-May-18	24-Jul-18	02-Jan-18 A	07-Jul-18	20%	46%	14																													
A18780	Aluminium Extrusion Production	32	07-Jul-18	14-Aug-18	07-Jul-18	14-Aug-18	0%	0%	0																													

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Activity ID	Activity Name	CMWP Dur.	CMWP - R0 (D8) Start	CMWP - R0 (D8) Finish	Actual / Forecast Start	Actual / Forecast Finish	Planned B/L % Complete	Actual % Complete	Finish Variance (+/-d)	Gantt Chart (May to August)																		
										May 30	May 07	May 14	May 21	May 28	June 04	June 11	June 18	June 25	July 02	July 09	July 16	July 23	August 30	August 06	August 13	August 20	August 27	
A56745	Stage 12 - De-prop GF (GL 1-5/K-M)	3	07-Aug-18	10-Aug-18	07-Aug-18	10-Aug-18	0%	0%	0	[Gantt bar for A56745]																		
Zone D1 External Wall (C) & Carriage Wall (A&B) - (GL 1-7 K-L)																												
A59290	Construct External Wall (C)-GL 1-5/M & Carraigeaway Wall (B) @GL 1-7/K-L	22	07-Feb-18	07-Mar-18	28-Dec-17 A	09-Jun-18	100%	65%	-75	[Gantt bar for A59290]																		
A59300	Complete External Wall @GL 1-7/M & H/O M13 & M14	0		09-Jun-18		09-Jun-18	0%	0%	0	[Gantt bar for A59300]																		
A59280	Install void former on AEL tunnel @GL 1-5/M and 1-5/K-L	12	09-Jun-18	23-Jun-18	09-Jun-18	23-Jun-18	0%	0%	0	[Gantt bar for A59280]																		
A56730	Construct carriage wall (A)/column/GF Slab (GL 1-5/K-M)	74	23-May-18	20-Aug-18	16-May-18 A	07-Aug-18	10.41%	25%	11	[Gantt bar for A56730]																		
A56780	De-prop/Remove Falsework/Sand Blow-out	16	07-Aug-18	23-Aug-18	07-Aug-18	23-Aug-18	0%	0%	0	[Gantt bar for A56780]																		
Zone D2 External Wall (C) & Carriage Wall (A&B) - (GL 5-7 K-L)																												
A59510	Install void former /Construct Carriage External Wall (C&B)-GL 5-7/K-L	37	10-Jul-18	16-Aug-18	23-May-18 A	17-Jun-18	0%	55%	60	[Gantt bar for A59510]																		
A16055	Excavate / Construct Retaining Wall (GL 5-7/H-K)	22	04-Jun-18	29-Jun-18	04-Jun-18	29-Jun-18	0%	0%	0	[Gantt bar for A16055]																		
A16120	Install void filler material on AEL Tunnel (GL 5-8/J-L)	12	30-Jun-18	14-Jul-18	30-Jun-18	14-Jul-18	0%	0%	0	[Gantt bar for A16120]																		
A16130	Construct carriage wall (A) (GL 5-8/J-L)	30	16-Jul-18	18-Aug-18	16-Jul-18	18-Aug-18	0%	0%	0	[Gantt bar for A16130]																		
A16140	Depprop/Remove Falsework/Sand Blow-out	16	20-Aug-18	06-Sep-18	20-Aug-18	06-Sep-18	0%	0%	0	[Gantt bar for A16140]																		
Zone D2 (GL 5-7/H-M)																												
A16280	Stage 11 - Removal of stability prop & de-prop 3F falsework (GL 5-7/H-M)	5	11-May-18	17-May-18	01-May-18 A	02-Jun-18	100%	70%	-13	[Gantt bar for A16280]																		
A16180	Stage 12 - Construct wall, column & GF slab (GL 5-8/K-M)	21	16-Jul-18	08-Aug-18	16-Jul-18	08-Aug-18	0%	0%	0	[Gantt bar for A16180]																		
A16190	Stage 12 - GF concrete curing	7	09-Aug-18	16-Aug-18	09-Aug-18	16-Aug-18	0%	0%	0	[Gantt bar for A16190]																		
A16200	Stage 12 - De-prop GF (GL 5-8/H-M)	3	16-Aug-18	20-Aug-18	16-Aug-18	20-Aug-18	0%	0%	0	[Gantt bar for A16200]																		
A42920	Complete Zone D2 Structure	0		20-Aug-18		20-Aug-18	0%	0%	0	[Gantt bar for A42920]																		
A16210	Stage 12 - De-prop carriage wall (GL 1-8/M)	3	16-Aug-18	20-Aug-18	16-Aug-18	20-Aug-18	0%	0%	0	[Gantt bar for A16210]																		
Zone B @5-7/E-J																												
A16290	Stage 1 - Construct 1M slab (GL 5-7/E-J)	19	14-Jun-18	07-Jul-18	14-Jun-18	07-Jul-18	0%	0%	0	[Gantt bar for A16290]																		
A16300	Stage 2 - Construct 1MF-2F wall, column & GF slab (GL 5-7/E-J)	16	09-Jul-18	26-Jul-18	09-Jul-18	26-Jul-18	0%	0%	0	[Gantt bar for A16300]																		
A16310	Stage 3 - Construct B1 slab (GL 5-7/E-J)	16	27-Jul-18	14-Aug-18	27-Jul-18	14-Aug-18	0%	0%	0	[Gantt bar for A16310]																		
A16320	Stage 4 - Construct 2F-3F wall, column (GL 5-7/E-J)	16	27-Jul-18	14-Aug-18	27-Jul-18	14-Aug-18	0%	0%	0	[Gantt bar for A16320]																		
A16330	Stage 5 - Construct B1-GF wall, column & GF-1MF Hanger Column (GL 5-7/E-J)	9	15-Aug-18	24-Aug-18	15-Aug-18	24-Aug-18	0%	0%	0	[Gantt bar for A16330]																		
A16340	Stage 6 - De-prop Zone B (GL 5-7/E-J)	3	25-Aug-18	28-Aug-18	25-Aug-18	28-Aug-18	0%	0%	0	[Gantt bar for A16340]																		
A48010	Complete Zone B Structure	0		28-Aug-18		28-Aug-18	0%	0%	0	[Gantt bar for A48010]																		
Zone Q @5-7/D-F																												
A16350	Stage 1 - Construct 1M wall, column & slab (GL 5-7/D-F)	16	09-Jun-18	29-Jun-18	09-Jun-18	29-Jun-18	0%	0%	0	[Gantt bar for A16350]																		
A16360	Stage 2 - Construct 1MF-2F wall, column & GF slab (GL 5-7/D-F)	16	29-Jun-18	19-Jul-18	29-Jun-18	19-Jul-18	0%	0%	0	[Gantt bar for A16360]																		
A16380	Stage 3 - Construct 2F-3F wall, column (GL 5-7/D-F)	16	19-Jul-18	07-Aug-18	19-Jul-18	07-Aug-18	0%	0%	0	[Gantt bar for A16380]																		
A16370	Stage 4 - Construct B1 slab (GL 5-7/D-F)	16	07-Aug-18	25-Aug-18	07-Aug-18	25-Aug-18	0%	0%	0	[Gantt bar for A16370]																		
A16390	Stage 5 - Construct B1-GF wall, column & GF-1MF Hanger Column (GL 5-7/D-F)	16	25-Aug-18	13-Sep-18	25-Aug-18	13-Sep-18	0%	0%	0	[Gantt bar for A16390]																		
Podium Structure Zone K, L & P (Deferred Zone Near T1 & T2)																												
Zone P (Revised Sequence) @GL 8-11/D-H																												
WB45 Construction																												
A60019	De-prop WB45, WB44, 1MF slab & beams (GL 8-11/D-F) - Section A, B & C	12	27-Apr-18	11-May-18	25-Apr-18 A	07-Jun-18	100%	50%	-22	[Gantt bar for A60019]																		
WB11 Construction																												
A60060	De-prop 1MF (GL 8-11/F-H) (together w/ Zone K & L)	7	30-Apr-18	09-May-18	25-Apr-18 A	01-Jun-18	100%	90%	-19	[Gantt bar for A60060]																		
A60136	Construct 2F wall, column & 3/4 slab (GL 8-11/D-H)	13	30-Apr-18	16-May-18	24-Apr-18 A	08-Jun-18	100%	50%	-19	[Gantt bar for A60136]																		
A60137	3F Concrete Curing	7	08-Jun-18	15-Jun-18	08-Jun-18	15-Jun-18	0%	0%	0	[Gantt bar for A60137]																		
A60138	De-prop 2F (GL 8-11/D-J)	12	15-Jun-18	30-Jun-18	15-Jun-18	30-Jun-18	0%	0%	0	[Gantt bar for A60138]																		
A60070	Construct GF column & slab (GL 8-11/E-H)	20	04-Jul-18	27-Jul-18	04-Jul-18	27-Jul-18	0%	0%	0	[Gantt bar for A60070]																		
A60090	GF Concrete Curing	2	27-Jul-18	30-Jul-18	27-Jul-18	30-Jul-18	0%	0%	0	[Gantt bar for A60090]																		
A60110	Construct 1F hanger column & walls (GL 9-11/D-J)	12	30-Jul-18	13-Aug-18	30-Jul-18	13-Aug-18	0%	0%	0	[Gantt bar for A60110]																		
A60140	De-prop 1F (GL 9-11/D-J)	3	13-Aug-18	16-Aug-18	13-Aug-18	16-Aug-18	0%	0%	0	[Gantt bar for A60140]																		
A60150	De-prop GF (GL 8-11/D-J)	3	16-Aug-18	20-Aug-18	16-Aug-18	20-Aug-18	0%	0%	0	[Gantt bar for A60150]																		
A65200	Construct Found Space	26	13-Aug-18	12-Sep-18	13-Aug-18	12-Sep-18	0%	0%	0	[Gantt bar for A65200]																		
Retaining Wall @ GL 8-11/D-F																												
A64000	Stage 4 - Remove strut @ GL 8-11/D-F	2	04-Jun-18	06-Jun-18	04-Jun-18	06-Jun-18	0%	0%	0	[Gantt bar for A64000]																		
A64010	Stage 4 - Excavate existing GF @ +5mPD to +2mPDF @ GL 8-11/D-F	11	06-Jun-18	20-Jun-18	06-Jun-18	20-Jun-18	0%	0%	0	[Gantt bar for A64010]																		
A64020	Stage 4 - Construct retaining wall @B2F +1 to +2mPD @ GL 8-11/D-F	6	20-Jun-18	27-Jun-18	20-Jun-18	27-Jun-18	0%	0%	0	[Gantt bar for A64020]																		
A64030	Stage 4 - Construct slab @ +2mPD GL 8-11/D-F	11	27-Jun-18	11-Jul-18	27-Jun-18	11-Jul-18	0%	0%	0	[Gantt bar for A64030]																		

Three Months Rolling Programme (3MRP) - Mth 32 - 31 May

Activity ID	Activity Name	CMWP Dur.	CMWP - R0 (D8) Start	CMWP - R0 (D8) Finish	Actual / Forecast Start	Actual / Forecast Finish	Planned B/L % Complete	Actual % Complete	Finish Variance (+/-d)	Gantt Chart (Timeline)																		
										May 30	May 07	May 14	May 21	May 28	June 04	June 11	June 18	June 25	July 02	July 09	July 16	July 23	August 30	August 06	August 13	August 20	August 27	
A64040	Stage 4 - Construct retaining wall @B2F +2 to +6mPD @GL 8-11/D-F	9	11-Jul-18	21-Jul-18	11-Jul-18	21-Jul-18	0%	0%	0	[Gantt bar from 11-Jul-18 to 21-Jul-18]																		
Zone K & L (Revised Sequence) @GL 8-11/H-M (K, L & P de-prop together)																												
A60217	Stage 8 - De-prop WB11 (GL 9-10/H-K) & 1MF beam & 2F slab (GL 8-10/H-M)	6	27-Apr-18	04-May-18	23-Apr-18 A	02-Jun-18	100%	70%	-24	[Gantt bar from 23-Apr-18 to 02-Jun-18]																		
A60260	Stage 10 - De-prop 2F (GL 8-11/H-M)	7	04-Jun-18	12-Jun-18	26-Feb-18 A	08-Jun-18	0%	2.99%	3	[Gantt bar from 26-Feb-18 to 08-Jun-18]																		
A60220	Stage 9 - Propping & Construct 2F column, wall & 3F slab (GL 8-11/H-M)	25	02-May-18	01-Jun-18	23-Apr-18 A	12-Jun-18	96.44%	60%	-9	[Gantt bar from 23-Apr-18 to 12-Jun-18]																		
A60218	Stage 8 - Construct B1 slab (GL 8-11/H-K)	25	08-Jun-18	10-Jul-18	08-Jun-18	10-Jul-18	0%	0%	0	[Gantt bar from 08-Jun-18 to 10-Jul-18]																		
A60225	Stage 9 - Construct GF slab (GL 8-11/H-M)	25	13-Jun-18	13-Jul-18	13-Jun-18	13-Jul-18	0%	0%	0	[Gantt bar from 13-Jun-18 to 13-Jul-18]																		
A60230	Stage 10 - Construct GF hanger column & wall (GL 8-11/H-M)	23	14-Jul-18	09-Aug-18	14-Jul-18	09-Aug-18	0%	0%	0	[Gantt bar from 14-Jul-18 to 09-Aug-18]																		
A60250	Stage 10 - GF Concrete Curing	17	10-Aug-18	26-Aug-18	10-Aug-18	26-Aug-18	0%	0%	0	[Gantt bar from 10-Aug-18 to 26-Aug-18]																		
A60255	Stage 10 - De-prop GF (GL 8-11/H-M)	6	27-Aug-18	01-Sep-18	27-Aug-18	01-Sep-18	0%	0%	0	[Gantt bar from 27-Aug-18 to 01-Sep-18]																		
180-Seat Cinema (G.L. 8-10 / H-K)																												
A64990	Construct LGF-GF walls, columns, beam, GF slab	16	14-Jul-18	01-Aug-18	14-Jul-18	01-Aug-18	0%	0%	0	[Gantt bar from 14-Jul-18 to 01-Aug-18]																		
A65000	Construct GF hanger columns	16	02-Aug-18	20-Aug-18	02-Aug-18	20-Aug-18	0%	0%	0	[Gantt bar from 02-Aug-18 to 20-Aug-18]																		
A64980	Construct B1F-LGF walls, columns, 180-seat cinema inclined slab, LGF slab	38	21-Aug-18	05-Oct-18	21-Aug-18	05-Oct-18	0%	0%	0	[Gantt bar from 21-Aug-18 to 05-Oct-18]																		
Podium Structure Zone E, G & J (Deferred Zone Near T3 & T4)																												
Zone E1 Connecting Zone @GL 8-11/C-D																												
A17050	Stage 9 - De-prop GF (GL 14-13/A-G) & 3F (GL 13-11/A-G)	3	16-May-18	19-May-18	26-Feb-18 A	01-Jun-18	100%	90%	-10	[Gantt bar from 26-Feb-18 to 01-Jun-18]																		
A17060	Stage 9 - Complete De-propping 1MF for E1 & E2	0		15-Jun-18		15-Jun-18	0%	0%	0	[Gantt bar from 15-Jun-18 to 15-Jun-18]																		
A65190	Stage 8 - Construct B1/F slab	12	04-Jun-18	16-Jun-18	04-Jun-18	16-Jun-18	0%	0%	0	[Gantt bar from 04-Jun-18 to 16-Jun-18]																		
A17030	Stage 9 - Construct B1-GF wall, column & slab (GL 11-10/C-D)	16	17-May-18	05-Jun-18	23-Apr-18 A	16-Jun-18	75%	30%	-10	[Gantt bar from 23-Apr-18 to 16-Jun-18]																		
A17040	Stage 8 - 1F, GF, 2/F & 3F slab Concrete Curing	7	17-Jun-18	24-Jun-18	17-Jun-18	24-Jun-18	0%	0%	0	[Gantt bar from 17-Jun-18 to 24-Jun-18]																		
A17025	Stage 9 - Construct GF-1F Wall/Column Slab (GL 11-8/C-D)	16	19-Jun-18	07-Jul-18	19-Jun-18	07-Jul-18	0%	0%	0	[Gantt bar from 19-Jun-18 to 07-Jul-18]																		
Zone G @GL 11-14/A-F (Revised Sequence)																												
A63000	Complete Zone G Structure	0		06-Aug-18		06-Aug-18	0%	0%	0	[Gantt bar from 06-Aug-18 to 06-Aug-18]																		
GL 11-14/B-E (B1 to L3)																												
A63200	Construct B1-GF Wall/Column/Slab and above 3/F Structure	11	15-Jun-18	28-Jun-18	02-May 18 A	08-Jun-18	0%	40%	16	[Gantt bar from 02-May-18 to 08-Jun-18]																		
A63220	Construct B1 Slab	16	08-Jun-18	28-Jun-18	08-Jun-18	28-Jun-18	0%	0%	0	[Gantt bar from 08-Jun-18 to 28-Jun-18]																		
A63280	Construct GF-1F Wall/Column/Slab, Hanger Column to 1MF	16	28-Jun-18	18-Jul-18	28-Jun-18	18-Jul-18	0%	0%	0	[Gantt bar from 28-Jun-18 to 18-Jul-18]																		
A63250	Stage 8 - Construct escalator structure (GL 12-11/D)	7	18-Jul-18	26-Jul-18	18-Jul-18	26-Jul-18	0%	0%	0	[Gantt bar from 18-Jul-18 to 26-Jul-18]																		
A63260	Stage 8 - GF, 1F & escalator structure Concrete Curing	7	26-Jul-18	02-Aug-18	26-Jul-18	02-Aug-18	0%	0%	0	[Gantt bar from 26-Jul-18 to 02-Aug-18]																		
A63270	Stage 9 - De-prop 1F & escalator structure	3	02-Aug-18	06-Aug-18	02-Aug-18	06-Aug-18	0%	0%	0	[Gantt bar from 02-Aug-18 to 06-Aug-18]																		
Zone J @GL 11-14/H-F																												
A46350	Construct 2F Slab (GL 11-14/E-H)	20	12-Apr-18	07-May-18	12-Mar-18 A	08-Jun-18	100%	65%	-28	[Gantt bar from 12-Mar-18 to 08-Jun-18]																		
A46340	Construct WB15 (GL F-H), 1MF Slab, Wall, Column (GL 11-14/E-H)	24	09-Feb-18	12-Mar-18	25-Apr-18 A	12-Jun-18	100%	60%	-73	[Gantt bar from 25-Apr-18 to 12-Jun-18]																		
A46355	De-prop 1MF (GL 12-14/E-H)	3	09-Jun-18	12-Jun-18	09-Jun-18	12-Jun-18	0%	0%	0	[Gantt bar from 09-Jun-18 to 12-Jun-18]																		
A46360	Construct Wall, Column & 3F slab (GL 11-14/E-H)	12	09-Jun-18	23-Jun-18	09-Jun-18	23-Jun-18	0%	0%	0	[Gantt bar from 09-Jun-18 to 23-Jun-18]																		
A46370	Construct B1 slab (GL 11-14/E-H)	12	13-Jun-18	27-Jun-18	13-Jun-18	27-Jun-18	0%	0%	0	[Gantt bar from 13-Jun-18 to 27-Jun-18]																		
A46380	Construct Wall, Column & LGF, (Cinema), GF slab (GL 11-14/F-H)	13	28-Jun-18	13-Jul-18	28-Jun-18	13-Jul-18	0%	0%	0	[Gantt bar from 28-Jun-18 to 13-Jul-18]																		
A46400	Construct Wall, Column 1F (GL 11-14/F-H)	8	14-Jul-18	23-Jul-18	14-Jul-18	23-Jul-18	0%	0%	0	[Gantt bar from 14-Jul-18 to 23-Jul-18]																		
A46410	De-prop 1F (GL 11-14/F-H)	3	24-Jul-18	26-Jul-18	24-Jul-18	26-Jul-18	0%	0%	0	[Gantt bar from 24-Jul-18 to 26-Jul-18]																		
A46415	De-prop GF (GL 11-14/F-H)	3	27-Jul-18	30-Jul-18	27-Jul-18	30-Jul-18	0%	0%	0	[Gantt bar from 27-Jul-18 to 30-Jul-18]																		
A46420	Complete Zone J Structure	0		30-Jul-18		30-Jul-18	0%	0%	0	[Gantt bar from 30-Jul-18 to 30-Jul-18]																		
Auditorium																												
A60270	Construct auditorium beam & slab (GL 10-13)	50	13-Jun-18	11-Aug-18	13-Jun-18	11-Aug-18	0%	0%	0	[Gantt bar from 13-Jun-18 to 11-Aug-18]																		
A60290	Auditorium slab Concrete Curing	17	12-Aug-18	28-Aug-18	12-Aug-18	28-Aug-18	0%	0%	0	[Gantt bar from 12-Aug-18 to 28-Aug-18]																		
A60300	De-prop auditorium beam & slab	3	28-Aug-18	31-Aug-18	28-Aug-18	31-Aug-18	0%	0%	0	[Gantt bar from 28-Aug-18 to 31-Aug-18]																		
A60780	Construct enclosure above Auditorium	64	28-Aug-18	14-Nov-18	28-Aug-18	14-Nov-18	0%	0%	0	[Gantt bar from 28-Aug-18 to 14-Nov-18]																		
M+ Podium Glass Wall & Skylight (By RedLand, Permasteelisa)																												
(By Permasteelisa) Preliminary Works																												
A41120	Surveying for Embeds	60	13-Jun-18	23-Aug-18	13-Jun-18	23-Aug-18	0%	0%	0	[Gantt bar from 13-Jun-18 to 23-Aug-18]																		
A41130	Submission of Embeds Survey Report	54	29-Jun-18	01-Sep-18	29-Jun-18	01-Sep-18	0%	0%	0	[Gantt bar from 29-Jun-18 to 01-Sep-18]																		
1/F to 2/F Level																												
(By Permasteelisa) Glass Wall with Ceramic/Ceramic Mullion/Precast Concrete																												
Zone G																												

Three Months Rolling Programme (3MRP) - Mth 32 - 31 May

Activity ID	Activity Name	CMWP Dur.	CMWP - R0 (D8*) Start	CMWP - R0 (D8*) Finish	Actual / Forecast Start	Actual / Forecast Finish	Planned B/L % Complete	Actual % Complete	Finish Variance (+/-d)	May			June			July			August									
										30	07	14	21	28	04	11	18	25	02	09	16	23	30	06	13	20	27	
LT10840	Lifts Car Installation (LT21 & LT22)	54	26-Jul-18	28-Sep-18	26-Jul-18	28-Sep-18	0%	0%	0	[Gantt Chart: 30-Jul to 27-Aug]																		
Escalators (ES01 & ES02) @ Zone E											[Gantt Chart: 30-Jul to 27-Aug]																	
LT11130	Available of Escalator Pit ES01 & ES02 at Zone E	0		15-Aug-18		15-Aug-18	0%	0%	0	Available of Escalator																		
LT11140	Escalators ES01 & ES02 Installation	53	15-Aug-18	19-Oct-18	15-Aug-18	19-Oct-18	0%	0%	0	[Gantt Chart: 15-Aug to 19-Oct]																		
Escalators (ES03 & ES04) @ Zone A B1F to GF											[Gantt Chart: 15-Aug to 19-Oct]																	
LT11170	Available of Escalator Pit ES03 & ES04 at Zone A	0	15-Aug-18		15-Aug-18		0%	0%	0	Available of Escalator																		
LT11180	Escalators ES03 & ES04 Installation	53	15-Aug-18	20-Oct-18	15-Aug-18	20-Oct-18	0%	0%	0	[Gantt Chart: 15-Aug to 20-Oct]																		
Escalators (ES13 & ES14) @ Zone G 1F to 3F											[Gantt Chart: 15-Aug to 20-Oct]																	
LT11290	Available of Escalator Pit ES13 & ES14 at Zone E	0	06-Aug-18		06-Aug-18		0%	0%	0	Available of Escalator																		
LT11300	Escalators ES13 & ES14 Installation	67	06-Aug-18	26-Oct-18	06-Aug-18	26-Oct-18	0%	0%	0	[Gantt Chart: 06-Aug to 26-Oct]																		
M+ Basement & Podium ABWF & Building Services																												
B2/F																												
1. CSF/RDE Zone																												
General Areas / BOH/ Corridor																												
Corridor/Lift Lobby																												
AW-B2-121	ABWF-Wet Trade; T-Post/Block Wall/Rendering (GL 3-6)	25	12-Jan-18	09-Feb-18	12-Jan-18 A	06-Jun-18	100%	80%	-91	[Gantt Chart: 12-Jan to 06-Jun]																		
BS-B2-10780	MEP 1st/2nd Fix-Pipes/duct/containment	50	29-Mar-18	01-Jun-18	15-Mar-18 A	25-Jul-18	98%	10%	-44	[Gantt Chart: 29-Mar to 25-Jul]																		
BS-B2-10790	MEP- 2nd Fix (Cabling)/Install AC equipment & connection	50	26-Jul-18	21-Sep-18	26-Jul-18	21-Sep-18	0%	0%	0	[Gantt Chart: 26-Jul to 21-Sep]																		
BOH Office/Storage Rooms (GL C* to J*)																												
AW-B2-122	ABWF-Wet Trade:T-Post/Block Wall/Rendering/Floor Screeding	25	26-Feb-18	26-Mar-18	09-Jan-18 A	28-Jun-18	100%	10%	-74	[Gantt Chart: 26-Feb to 28-Jun]																		
BS-B2-10830	MEP-1st/2nd Fix Installation	50	27-Mar-18	30-May-18	20-Feb-18 A	25-Jul-18	100%	11%	-46	[Gantt Chart: 27-Mar to 25-Jul]																		
BS-B2-10840	MEP- 2nd Fix Cabling/AC Equipment Installation/connection	50	26-Jul-18	21-Sep-18	26-Jul-18	21-Sep-18	0%	0%	0	[Gantt Chart: 26-Jul to 21-Sep]																		
Loading & Unloading Area Including Loading Bay																												
BS-B2-10890	MEP H/L 1st Fix Installation	33	13-Jan-18	24-Feb-18	27-Nov-17 A	28-Jun-18	100%	33%	-98	[Gantt Chart: 13-Jan to 28-Jun]																		
AW-B2-12280	ABWF-Wearing Slab Constructon	46	14-Jun-18	09-Aug-18	14-Jun-18	09-Aug-18	0%	0%	0	[Gantt Chart: 14-Jun to 09-Aug]																		
BS-B2-10900	MEP 2nd Fix Installation-Cabling	54	09-Aug-18	13-Oct-18	09-Aug-18*	13-Oct-18	0%	0%	0	[Gantt Chart: 09-Aug to 13-Oct]																		
AW-B2-12290	HC-Construction Logistic/Temporary Site Storage Period	187	28-Jun-18	13-Feb-19	28-Jun-18	13-Feb-19	0%	0%	0	[Gantt Chart: 28-Jun to 13-Feb-19]																		
Cappark EAF Room (B2-1-005)																												
AW-B2-12360	ABWF-Wet Trade (Plastering/Floor Screeding/1st coat painting/Sealer) -Ceiling/Wall/Floor	19	20-Feb-18	13-Mar-18	05-Feb-18 A	20-Jun-18	100%	20%	-77	[Gantt Chart: 20-Feb to 20-Jun]																		
BS-B2-10930	MEP 1st / 2nd Fix	27	14-Mar-18	18-Apr-18	19-Feb-18 A	03-Jul-18	100%	4%	-61	[Gantt Chart: 14-Mar to 03-Jul]																		
BS-B2-11770	MEP - AC equipment on site	0	04-Jul-18		04-Jul-18		0%	0%	0	MEP - AC equipment on site; 04-Jul-18																		
BS-B2-11760	MEP Fan / LMCP Installation	54	04-Jul-18	04-Sep-18	04-Jul-18	04-Sep-18	0%	0%	0	[Gantt Chart: 04-Jul to 04-Sep]																		
PAU Room (B2-1-807M & B2-1-808M)																												
AW-B2-12390	ABWF-Wet Trade (Plastering/Floor Screeding/1st coat painting/Sealer) -Ceiling/Wall/Floor	19	09-Jun-18	03-Jul-18	09-Jun-18	03-Jul-18	0%	0%	0	[Gantt Chart: 09-Jun to 03-Jul]																		
BS-B2-10970	MEP 1st / 2nd	27	04-Jul-18	03-Aug-18	04-Jul-18*	03-Aug-18	0%	0%	0	[Gantt Chart: 04-Jul to 03-Aug]																		
BS-B2-11790	MEP - PAU equipment on site	0	04-Aug-18		04-Aug-18*		0%	0%	0	MEP - PAU equipment on site																		
BS-B2-11780	MEP PAU / LMCP Installation	54	04-Aug-18	08-Oct-18	04-Aug-18	08-Oct-18	0%	0%	0	[Gantt Chart: 04-Aug to 08-Oct]																		
Staircase Press (B2-1-801M) at GL D'-E' 4																												
AW-B2-12410	ABWF-Plinth/Sealer	21	04-Jun-18	28-Jun-18	04-Jun-18	28-Jun-18	0%	0%	0	[Gantt Chart: 04-Jun to 28-Jun]																		
BS-B2-11010	MEP- 1st / 2nd Fix	30	29-Jun-18	03-Aug-18	29-Jun-18	03-Aug-18	0%	0%	0	[Gantt Chart: 29-Jun to 03-Aug]																		
BS-B2-11700	MEP - AC equipment on site	0	04-Aug-18		04-Aug-18		0%	0%	0	MEP - AC equipment on site																		
AW-B2-12420	ABWF-Door/Ironmongeries installation	6	04-Aug-18	10-Aug-18	04-Aug-18	10-Aug-18	0%	0%	0	[Gantt Chart: 04-Aug to 10-Aug]																		
BS-B2-11690	MEP- Air Duct/Fan/LMCP Installation	54	04-Aug-18	08-Oct-18	04-Aug-18	08-Oct-18	0%	0%	0	[Gantt Chart: 04-Aug to 08-Oct]																		
ELV Room (B2-1-956M)																												
AW-B2-12430	ABWF-ceiling soffit & application of epoxy paint on wall	7	11-Jun-18	20-Jun-18	11-Jun-18	20-Jun-18	0%	0%	0	[Gantt Chart: 11-Jun to 20-Jun]																		
BS-B2-11040	MEP-1st/2nd Fix Installation	19	20-Jun-18	13-Jul-18	20-Jun-18	13-Jul-18	0%	0%	0	[Gantt Chart: 20-Jun to 13-Jul]																		
AW-B2-12450	ABWF-Wall/ floor Final Paint	3	17-Jul-18		17-Jul-18		0%	0%	0	[Gantt Chart: 17-Jul]																		
AW-B2-12460	ELV Room Door & ironmongeries installation	3	17-Jul-18	20-Jul-18	17-Jul-18	20-Jul-18	0%	0%	0	[Gantt Chart: 17-Jul to 20-Jul]																		
BS-B2-11050	MEP/ELV-Equipment Rack/Cabling	54	20-Jul-18	21-Sep-18	20-Jul-18	21-Sep-18	0%	0%	0	[Gantt Chart: 20-Jul to 21-Sep]																		
M+ Heat Exchange Room (B2-1-806M)																												
AW-B2-12490	ABWF- ceiling soffit & application of epoxy paint on wall	7	22-Jan-18	29-Jan-18	08-Jan-18 A	05-Jun-18	100%	50%	-100	[Gantt Chart: 22-Jan to 05-Jun]																		
AW-B2-12470	ABWF-Concrete plinth and waterproofing & water test	7	05-Jun-18	13-Jun-18	05-Jun-18	13-Jun-18	0%	0%	0	[Gantt Chart: 05-Jun to 13-Jun]																		
AW-B2-12480	ABWF-Floor Screeding & wall rendering (PD-B2GP-2460)	7	13-Jun-18	22-Jun-18	13-Jun-18	22-Jun-18	0%	0%	0	[Gantt Chart: 13-Jun to 22-Jun]																		
BS-B2-11060	MEP-1st/2nd Fix/Pipe/duct/Containment Installation	54	30-Jan-18	10-Apr-18	02-Jan-18 A	01-Aug-18	100%	6%	-93	[Gantt Chart: 30-Jan to 01-Aug]																		

Three Months Rolling Programme (3MRP) - Mth 32 - 31 May

Activity ID	Activity Name	CMWP Dur.	CMWP - R0 (D8*) Start	CMWP - R0 (D8) Finish	Actual / Forecast Start	Actual / Forecast Finish	Planned B/L % Complete	Actual % Complete	Finish Variance (+/-d)	May				June				July				August								
										30	07	14	21	28	04	11	18	25	02	09	16	23	30	06	13	20	27			
BS-B2-11070	MEP-Pump/HX/LMCC Installation/Final Connection	27	01-Aug-18	01-Sep-18	01-Aug-18	01-Sep-18	0%	0%	0																					
Chilled Water Pump (B2-1-801R)																														
AW-B2-10560	ABWF-Concrete plinth and waterproofing & water test	7	11-Jun-18	20-Jun-18	11-Jun-18	20-Jun-18	0%	0%	0																					
AW-B2-10570	ABWF-Floor Screeding & wall rendering (PD-B2GP-2460)	7	20-Jun-18	28-Jun-18	20-Jun-18	28-Jun-18	0%	0%	0																					
AW-B2-10580	ABWF- ceiling soffit & application of epoxy paint on wall	7	28-Jun-18	07-Jul-18	28-Jun-18	07-Jul-18	0%	0%	0																					
BS-B2-10170	MEP-1st/2nd Fix Pipe/Duct/Containment Installation	54	10-Aug-18	13-Oct-18	10-Aug-18	13-Oct-18	0%	0%	0																					
RDE Sprinkler Water Tank (B2-3-502R) & FS Tank (B2-3-604R)																														
AW-B2-12520	ABWF/MEP Installation in RDE Water Tanks (Detail refer to M+,CSF Tanks Section)	27	23-Jul-18	23-Aug-18	23-Jul-18	23-Aug-18	0%	0%	0																					
AW-B2-12510	ABWF/MEP Installation in RDE FS Pump (Detail refer to CSF FS Pump Section)	134	11-Jun-18	20-Nov-18	11-Jun-18	20-Nov-18	0%	0%	0																					
RDE TBR Room/Mobile Equipment Room @ GL J', 4'-5'																														
AW-B2-14330	ABWF-ceiling soffit & application of epoxy paint on wall	7	14-May-18	21-May-18	23-Apr-18 A	02-Jun-18	100%	80%	-9																					
AW-B2-14350	MEP final fix (ready for FS System T&C)	3	28-Jun-18	30-Jun-18	26-Apr-18 A	04-Jun-18	0%	8.02%	22																					
AW-B2-14340	ABWF - Final coat of paint on wall / floor sealer	3	25-Jun-18	27-Jun-18	26-Apr-18 A	04-Jun-18	0%	0%	19																					
BS-B2-11680	MEP 1st / 2nd fix	27	23-May-18	23-Jun-18	24-Apr-18 A	07-Jun-18	29.63%	80%	14																					
AW-B2-14360	ABWF / Door & ironmongeries installation	3	04-Jun-18	07-Jun-18	04-Jun-18	07-Jun-18	0%	0%	0																					
AS-B2-10910	Access ready for utility provider	0		07-Jun-18		07-Jun-18	0%	0%	0																					
Refuse Room/Refrigerated Refuse Rooms @ GL A', 4'-5'																														
AW-B2-12540	BW-Waterproofing/Water Test	13	20-Feb-18	06-Mar-18	12-Feb-18 A	04-Jun-18	100%	80%	-71																					
AW-B2-12530	ABWF Wet Trade-Wall Rendering/FloorScreeding/ Tile	19	07-Mar-18	28-Mar-18	15-Feb-18 A	21-Jun-18	100%	12%	-66																					
BS-B2-10200	MEP-1st/2nd Fix Installation	19	29-Mar-18	24-Apr-18	22-Feb-18 A	22-Jun-18	100%	6%	-48																					
BS-B2-10210	MEP-Refrigerated Refuse System	54	22-Jun-18	25-Aug-18	22-Jun-18	25-Aug-18	0%	0%	0																					
BS-B2-10220	MEP Final Fix (Ready FS System T&C)	7	25-Aug-18	03-Sep-18	25-Aug-18	03-Sep-18	0%	0%	0																					
SEF Room above Recycling Room at GL A', 5'																														
AW-B2-14370	ABWF-Plinth/Sealer	14	04-Jun-18	21-Jun-18	04-Jun-18	21-Jun-18	0%	0%	0																					
BS-B2-11710	MEP- 1st / 2nd Fix	28	21-Jun-18	25-Jul-18	21-Jun-18	25-Jul-18	0%	0%	0																					
BS-B2-11730	MEP - AC equipment on site	0	26-Jul-18	26-Jul-18	26-Jul-18	26-Jul-18	0%	0%	0																					
BS-B2-11720	MEP- Air Duct/Fan/LMCP Installation	54	26-Jul-18	27-Sep-18	26-Jul-18	27-Sep-18	0%	0%	0																					
CSF Water Pump Rooms at GL K',5'-6'																														
AW-B2-12560	BW-RC Plinth/Waterproofing/Water Test	21	04-Jun-18	29-Jun-18	04-Jun-18	29-Jun-18	0%	0%	0																					
AW-B2-12570	ABWF-Wet Trade (Plastering/Floor Screeding/1st coat painting/Sealer) -Ceiling/Wall/Floor	21	29-Jun-18	25-Jul-18	29-Jun-18	25-Jul-18	0%	0%	0																					
BS-B2-10230	MEP 1st/2nd Installation/FS Pumps Set/Pipework/LMCC	50	25-Jul-18	21-Sep-18	25-Jul-18	21-Sep-18	0%	0%	0																					
2. Zone A, M, E, C																														
General Areas: Corridor, Workshop, BOH office, Other Rooms																														
Corridors/Lobbys																														
AW-B2-101	ABWF-Soffit Sealer	6	09-Feb-18	20-Feb-18	28-Dec-17 A	04-Jun-18	100%	50%	-83																					
AW-B2-125	ABWF-Wearing Slab (GL 1-3)	13	18-Apr-18	04-May-18	28-Dec-17 A	07-Jun-18	100%	60%	-28																					
BS-B2-10300	MEP-1st/2nd Fix Installation (GL 6-10)	27	24-Apr-18	26-May-18	02-Jan-18 A	23-Jun-18	100%	32%	-22																					
BS-B2-10290	MEP-1st/2nd Fix Installation (GL 3-6)	38	06-Mar-18	23-Apr-18	02-Jan-18 A	03-Jul-18	100%	32%	-57																					
BS-B2-10280	MEP-1st/2nd Fix Installation (GL 1-3)	45	09-Jan-18	05-Mar-18	02-Jan-18 A	09-Jul-18	100%	32%	-100																					
AW-B2-126	ABWF-Wearing Slab (GL 3-6)	13	03-Jul-18	18-Jul-18	03-Jul-18	18-Jul-18	0%	0%	0																					
BS-B2-10310	MEP- 2nd Fix (Cabling)	50	19-Mar-18	23-May-18	19-Feb-18 A	21-Jul-18	100%	16%	-50																					
AW-B2-126	ABWF-Wearing Slab (GL 6-10)	13	18-Jul-18	02-Aug-18	18-Jul-18	02-Aug-18	0%	0%	0																					
AW-B2-126	ABWF-Wet Trade; T-Post/Block Wall/Rendering (GL 1-3)	54	09-Jul-18	10-Sep-18	09-Jul-18	10-Sep-18	0%	0%	0																					
AW-B2-126	ABWF-Wet Trade; T-Post/Block Wall/Rendering (GL 3-6)	54	18-Jul-18	19-Sep-18	18-Jul-18	19-Sep-18	0%	0%	0																					
BOH Workshop, Office and Facilities Rooms																														
BS-B2-10380	MEP-1st/2nd Fix Installation (GL 6-10)	27	06-Mar-18	11-Apr-18	24-Jan-18 A	27-Jun-18	100%	19%	-63																					
BS-B2-10360	MEP-1st/2nd Fix Installation (GL 3-6)	40	22-Mar-18	14-May-18	02-Jan-18 A	10-Jul-18	100%	22%	-46																					
BS-B2-10350	MEP-1st/2nd Fix Installation (GL 1-3)	40	31-Jan-18	22-Mar-18	02-Jan-18 A	10-Jul-18	100%	22%	-86																					
BS-B2-10390	MEP- 2nd Fix (Cabling)-(GL 1-10)	50	20-Feb-18	24-Apr-18	23-Jan-18 A	14-Jul-18	100%	29%	-66																					
AW-B2-102	ABWF-Wearing Slab (GL 1-3)	13	10-Jul-18	25-Jul-18	10-Jul-18	25-Jul-18	0%	0%	0																					
BS-B2-10370	MEP Ceiling mounted AHU Installation/Connection (GL 1-6, Workshop Area)	54	07-Apr-18	12-Jun-18	19-Feb-18 A	31-Jul-18	81.85%	8%	-40																					
AW-B2-101	ABWF-Wet Trade; T-Post/Block Wall/Rendering/sealer (GL 3 to 6)	54	04-Jun-18	07-Aug-18	04-Jun-18	07-Aug-18	0%	0%	0																					
AW-B2-102	ABWF-Wearing Slab (GL 3-6)	13	25-Jul-18	09-Aug-18	25-Jul-18	09-Aug-18	0%	0%	0																					
AW-B2-102	ABWF-Wearing Slab (GL 6-10)	13	09-Aug-18	24-Aug-18	09-Aug-18	24-Aug-18	0%	0%	0																					

Three Months Rolling Programme (3MRP) - Mth 32 - 31 May

Activity ID	Activity Name	CMWP Dur.	CMWP - R0 (D8*) Start	CMWP - R0 (D8) Finish	Actual / Forecast Start	Actual / Forecast Finish	Planned B/L % Complete	Actual % Complete	Finish Variance (+/-d)	Gantt Chart																		
										May 30	07	14	21	28	June 04	11	18	25	July 02	09	16	23	August 30	06	13	20	27	
AW-B2-102	ABWF-H/L Steel Platform (GL 1-6)	54	31-Jul-18	04-Oct-18	31-Jul-18	04-Oct-18	0%	0%	0																			
AW-B2-101	ABWF-Wet Trade; T-Post/Block Wall/Rendering/sealer (GL 1-3)	54	08-Aug-18	11-Oct-18	08-Aug-18	11-Oct-18	0%	0%	0																			
Toilets & Toilet Lobby																												
Public Toilet at GL 6,D																												
BS-B2-104	MEP Dropper	4	05-Mar-18	09-Mar-18	09-Feb-18 A	05-Jun-18	100%	8.98%	-69																			
AW-B2-14	ABWF-Block Wall	7	16-Dec-17	23-Dec-17	09-Dec-17 A	08-Jun-18	100%	10%	-130																			
BS-B2-104	MEP-Low Level P&D Pipework, H/L 1st/2nd Fix	14	12-Jan-18	29-Jan-18	02-Jan-18 A	12-Jun-18	100%	31.01%	-106																			
AW-B2-14	ABWF-Floor screeding/Wall Plastering/Tiling/Counter Steel Frame	14	31-Jan-18	20-Feb-18	23-Dec-17 A	13-Jun-18	100%	25%	-91																			
AW-B2-14	ABWF-Ceiling Close up/Ceiling Finish	7	12-Jun-18	21-Jun-18	12-Jun-18	21-Jun-18	0%	0%	0																			
AW-B2-14	ABWF-Ceiling Grid/Ceiling Panel with Service Openings	7	13-Jun-18	22-Jun-18	13-Jun-18	22-Jun-18	0%	0%	0																			
AW-B2-14	ABWF-Cubic Partition	7	21-Jun-18	29-Jun-18	21-Jun-18	29-Jun-18	0%	0%	0																			
AW-B2-14	ABWF-Final Fix-Sanitaryware/Sink/Door	5	29-Jun-18	06-Jul-18	29-Jun-18	06-Jul-18	0%	0%	0																			
BS-B2-104	MEP Final Fix	7	06-Jul-18	14-Jul-18	06-Jul-18	14-Jul-18	0%	0%	0																			
AS-B2-109	ABWF/MEP Installation Completed	0		14-Jul-18		14-Jul-18	0%	0%	0																			
Staff Toilet at GL 6, C																												
AW-B2-11	ABWF/MEP Installation in Toilet (Detail refer to Public Toilet at GL 6 D	85	03-Feb-18	24-May-18	03-Feb-18 A	28-Aug-18	100%	14%	-80																			
Staff Toilet at GL 2, C																												
AW-B2-1	ABWF/MEP Installation in Toilet (Detail refer to Public Toilet at GL 6 D	85	10-Feb-18	31-May-18	08-Feb-18 A	31-Aug-18	100%	10%	-77																			
Security Control Room & Security Equipemtn Rack Room (B2-1-048 & 049)																												
BS-B2-10470	MEP H/L and Wall 1st/2nd F ix MEP Installation	21	26-Jan-18	23-Feb-18	02-Jan-18 A	20-Jun-18	100%	26%	-93																			
AW-B2-10650	ABWF-Wet Trade (up to 1st coat painting) - Ceiling/Wall/Floor	21	09-Dec-17	05-Jan-18	02-Dec-17 A	20-Jun-18	100%	25%	-132																			
AW-B2-10660	ABWF-Ceiling Frame w/service panels	7	20-Jun-18	28-Jun-18	20-Jun-18	28-Jun-18	0%	0%	0																			
BS-B2-10480	MEP- H/L Dropper	5	28-Jun-18	05-Jul-18	28-Jun-18	05-Jul-18	0%	0%	0																			
AW-B2-10670	ABWF-Raised Floor Setting out/Padestal/Grid/Door	4	05-Jul-18	10-Jul-18	05-Jul-18	10-Jul-18	0%	0%	0																			
BS-B2-10500	MEP-Floor Mounted Installation	7	10-Jul-18	18-Jul-18	10-Jul-18	18-Jul-18	0%	0%	0																			
AW-B2-10680	ABWF-Raised Floor Panel Close-up	3	18-Jul-18	21-Jul-18	18-Jul-18	21-Jul-18	0%	0%	0																			
AW-B2-10690	ABWF-Wall Final Paint/Carpet	3	21-Jul-18	25-Jul-18	21-Jul-18	25-Jul-18	0%	0%	0																			
AS-B2-10960	ABWF/MEP Installation Completed	0		27-Jul-18		27-Jul-18	0%	0%	0																			
BS-B2-10510	MEP-Final Fix	2	25-Jul-18	27-Jul-18	25-Jul-18	27-Jul-18	0%	0%	0																			
BS-B2-11910	MEP-Security Equipemtn Rack/Equipemtn/System Installation	120	31-Aug-18	25-Jan-19	31-Aug-18*	25-Jan-19	0%	0%	0																			
CSF FS Pump Room (B2-1-500F)																												
BS-B2-10520	MEP 1st/2nd fix- Pipe/duct/containment Installation	50	11-Jan-18	14-Mar-18	02-Jan-18 A	27-Jul-18	100%	6%	-108																			
BS-B2-11810	MEP-FS Water pump equipment on site	0	28-Jul-18		28-Jul-18		0%	0%	0																			
BS-B2-10530	MEP-Pumps/LMCP Installation/Connection	25	28-Jul-18	25-Aug-18	28-Jul-18	25-Aug-18	0%	0%	0																			
AW-B2-10730	ABWF-Door Frame/Door/Final Coat(Wall & Floor)	13	27-Aug-18	10-Sep-18	27-Aug-18	10-Sep-18	0%	0%	0																			
M+ Water Pump Room (B2-1-600M)																												
BS-B2-11820	MEP-Water pump equipment on site	0	07-Aug-18		07-Aug-18		0%	0%	0																			
BS-B2-11190	MEP 1st/2nd fix Pipe / containment Installation	60	12-Feb-18	02-May-18	16-Jan-18 A	07-Aug-18	100%	7%	-80																			
BS-B2-11200	MEP-Pumps/LMCC Installation and Connection	27	07-Aug-18	07-Sep-18	07-Aug-18	07-Sep-18	0%	0%	0																			
M+ FS Pump Room (B2-1-506M)																												
AW-B2-10770	ABWF-Wet Trade (Plastering/Floor Screeding/1st coat painting/Sealer) -Ceiling/Wall/Floor	21	29-Jan-18	26-Feb-18	16-Jan-18 A	07-Jun-18	100%	75%	-81																			
BS-B2-11830	MEP-FS Water pump equipment on site	0	08-Aug-18		08-Aug-18		0%	0%	0																			
BS-B2-11240	MEP 1st / 2nd fix / Pipework	60	15-Feb-18	05-May-18	02-Jan-18 A	08-Aug-18	100%	6%	-78																			
BS-B2-11250	MEP-FS Pumps / LMCC Installation and Connection	27	08-Aug-18	08-Sep-18	08-Aug-18	08-Sep-18	0%	0%	0																			
Grease Trap Rm for Podium (B2-1-604M)																												
BS-B2-11840	MEP-Grease trap room equipment on site	0	08-Aug-18		08-Aug-18		0%	0%	0																			
BS-B2-11290	MEP 1st / 2nd Fix	60	09-Feb-18	27-Apr-18	05-Feb-18 A	08-Aug-18	100%	6%	-83																			
BS-B2-11850	MEP Greasp Trap Installation	54	08-Aug-18	12-Oct-18	08-Aug-18	12-Oct-18	0%	0%	0																			
M+ IR and Rainwater Water Tank at GL A, 9-10																												
AW-B2-10830	ABWF-Wet Trade-Rendering/Tile	21	26-Jan-18	22-Feb-18	19-Jan-18 A	13-Jun-18	100%	50%	-89																			
AW-B2-10840	ABWF-MW-Cat Ladder/Hatch Cover	16	13-Jun-18	04-Jul-18	13-Jun-18	04-Jul-18	0%	0%	0																			
BS-B2-11330	MEP-Pipework Assessors and Final connection	16	04-Jul-18	23-Jul-18	04-Jul-18*	23-Jul-18	0%	0%	0																			
AS-B2-11020	Ready for System T&C	0		23-Jul-18		23-Jul-18	0%	0%	0																			
M+, CSF FS Water Tanks along GLA																												

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Activity ID	Activity Name	CMWP Dur.	CMWP - R0 (D8*) Start	CMWP - R0 (D8*) Finish	Actual / Forecast Start	Actual / Forecast Finish	Planned B/L % Complete	Actual % Complete	Finish Variance (+/-d)	Gantt Chart (Timeline)																	
										May 30	May 07	May 14	May 21	May 28	May 04	June 11	June 18	June 25	July 02	July 09	July 16	July 23	August 30	August 06	August 13	August 20	August 27
AW-B2-10860	ABWF-Wet Trade-Rendering/Tile	27	26-Jan-18	01-Mar-18	19-Jan-18 A	11-Jun-18	100%	70%	-80	[Gantt bar: 19-Jan-18 to 11-Jun-18]																	
BS-B2-11350	MEP-Pipework Assessors and Final connection	19	10-Mar-18	04-Apr-18	23-Jan-18 A	23-Jun-18	100%	3%	-64	[Gantt bar: 23-Jan-18 to 23-Jun-18]																	
AW-B2-10870	ABWF-MW-Cat Ladder/Hatch Cover	13	11-Jun-18	27-Jun-18	11-Jun-18	27-Jun-18	0%	0%	0	[Gantt bar: 11-Jun-18 to 27-Jun-18]																	
AS-B2-11030	Ready for System T&C	0		23-Jul-18		23-Jul-18	0%	0%	0	[Gantt bar: 23-Jul-18 to 23-Jul-18]																	
Industrial Space (B2-1-051)																											
AS-B2-10660	Access for ABWF/MEP Installation (GF Slab@ zone B cast/depropped)	0	21-Jul-18		21-Jul-18		0%	0%	0	[Gantt bar: 21-Jul-18 to 21-Jul-18]																	
AW-B2-10880	GW-Erect Common Scaffold (2m below Soffit)	13	21-Jul-18	04-Aug-18	21-Jul-18	04-Aug-18	0%	0%	0	[Gantt bar: 21-Jul-18 to 04-Aug-18]																	
AW-B2-10890	BW-Fairface Concrete Defect Rectification	7	06-Aug-18	13-Aug-18	06-Aug-18	13-Aug-18	0%	0%	0	[Gantt bar: 06-Aug-18 to 13-Aug-18]																	
AW-B2-10900	ABWF-Wet Trade-Patching up tie-bolt/Ceiling/Wall(2m below soffit) Sealer	13	14-Aug-18	28-Aug-18	14-Aug-18	28-Aug-18	0%	0%	0	[Gantt bar: 14-Aug-18 to 28-Aug-18]																	
BS-B2-11370	MEP H/L 1st/2nd/Final Fix Installation (Including FS Device)-under Soffit	19	29-Aug-18	19-Sep-18	29-Aug-18	19-Sep-18	0%	0%	0	[Gantt bar: 29-Aug-18 to 19-Sep-18]																	
2. Zone D1 GL 1-5J-M																											
AHU Room (B2-1-809R)																											
BS-B2-11860	MEP-AHU equipment on site	0	15-Jun-18		15-Jun-18		0%	0%	0	[Gantt bar: 15-Jun-18 to 15-Jun-18]																	
BS-B2-11110	MEP- 1st / 2nd fix - Pipe / Duct / Containment Installation	13	13-Apr-18	28-Apr-18	23-Jan-18 A	15-Jun-18	100%	5%	-39	[Gantt bar: 23-Jan-18 to 15-Jun-18]																	
AS-B2-10670	Access for ABWF/MEP Installation	0	20-Jun-18		20-Jun-18		0%	0%	0	[Gantt bar: 20-Jun-18 to 20-Jun-18]																	
AW-B2-11000	ABWF-Plinth/Sealer	7	20-Jun-18	28-Jun-18	20-Jun-18	28-Jun-18	0%	0%	0	[Gantt bar: 20-Jun-18 to 28-Jun-18]																	
AW-B2-11010	ABWF-Door/Ironmoaries	5	28-Jun-18	05-Jul-18	28-Jun-18	05-Jul-18	0%	0%	0	[Gantt bar: 28-Jun-18 to 05-Jul-18]																	
BS-B2-11140	MEP - AHU equipment installation / Connection	25	15-Jun-18	17-Jul-18	15-Jun-18	17-Jul-18	0%	0%	0	[Gantt bar: 15-Jun-18 to 17-Jul-18]																	
3. Zone D																											
RDE FS Tank & Pump Room (B2-3-500R)																											
AS-B2-10680	Access for ABWF/MEP Installation	0	20-Jun-18		20-Jun-18		0%	0%	0	[Gantt bar: 20-Jun-18 to 20-Jun-18]																	
AW-B2-11030	BW-RC Plinth/Waterproofing/Water Test	13	20-Jun-18	06-Jul-18	20-Jun-18	06-Jul-18	0%	0%	0	[Gantt bar: 20-Jun-18 to 06-Jul-18]																	
AW-B2-11040	ABWF-Wet Trade-Ceiling/Wall/Floor Paint	7	06-Jul-18	14-Jul-18	06-Jul-18	14-Jul-18	0%	0%	0	[Gantt bar: 06-Jul-18 to 14-Jul-18]																	
AW-B2-11020	ABWF/MEP Installation in RDE Water Tanks (Detail refer to M+,CSF Tanks Section)	27	20-Jun-18	23-Jul-18	20-Jun-18	23-Jul-18	0%	0%	0	[Gantt bar: 20-Jun-18 to 23-Jul-18]																	
BS-B2-11440	MEP 1st/2nd fix / FS Pumps Set / Pipework / LMCC	27	14-Jul-18	15-Aug-18	14-Jul-18*	15-Aug-18	0%	0%	0	[Gantt bar: 14-Jul-18 to 15-Aug-18]																	
BS-B2-11870	MEP-FS Water pump equipment on site	0	15-Aug-18		15-Aug-18		0%	0%	0	[Gantt bar: 15-Aug-18 to 15-Aug-18]																	
BS-B2-11450	MEP-FS Pumps/LMCC Installation and Connection	27	15-Aug-18	15-Sep-18	15-Aug-18	15-Sep-18	0%	0%	0	[Gantt bar: 15-Aug-18 to 15-Sep-18]																	
Crate Workshop																											
AS-B2-10690	Access for ABWF & MEP Installation	0	21-Jun-18		21-Jun-18		0%	0%	0	[Gantt bar: 21-Jun-18 to 21-Jun-18]																	
AW-B2-11060	ABWF-Wet Trade;Rendering/Floor screeding/sealer	13	21-Jun-18	07-Jul-18	21-Jun-18	07-Jul-18	0%	0%	0	[Gantt bar: 21-Jun-18 to 07-Jul-18]																	
AW-B2-11070	ABWF- Install Security Shutter	13	07-Jul-18	23-Jul-18	07-Jul-18	23-Jul-18	0%	0%	0	[Gantt bar: 07-Jul-18 to 23-Jul-18]																	
BS-B2-11500	MEP-1st/2nd Fix Installation/Ceiling Mounted AHU	13	07-Jul-18	23-Jul-18	07-Jul-18	23-Jul-18	0%	0%	0	[Gantt bar: 07-Jul-18 to 23-Jul-18]																	
AW-B2-11080	ABWF-H/L Steel Platform	13	23-Jul-18	07-Aug-18	23-Jul-18	07-Aug-18	0%	0%	0	[Gantt bar: 23-Jul-18 to 07-Aug-18]																	
BS-B2-11510	MEP- 2nd Fix-Wiring/connection/Dropper under Platform	3	07-Aug-18	10-Aug-18	07-Aug-18	10-Aug-18	0%	0%	0	[Gantt bar: 07-Aug-18 to 10-Aug-18]																	
AW-B2-11090	ABWF- Wall Final Paint	7	10-Aug-18	18-Aug-18	10-Aug-18	18-Aug-18	0%	0%	0	[Gantt bar: 10-Aug-18 to 18-Aug-18]																	
BS-B2-11520	MEP-Ceiling/Wall Final Fix	3	18-Aug-18	22-Aug-18	18-Aug-18	22-Aug-18	0%	0%	0	[Gantt bar: 18-Aug-18 to 22-Aug-18]																	
AW-B2-11100	ABWF- Door/Ironmongeries	7	22-Aug-18	30-Aug-18	22-Aug-18	30-Aug-18	0%	0%	0	[Gantt bar: 22-Aug-18 to 30-Aug-18]																	
AS-B2-11070	Ready for FS System T&C	0		30-Aug-18		30-Aug-18	0%	0%	0	[Gantt bar: 30-Aug-18 to 30-Aug-18]																	
4. Zone H GL 9-14/H-M																											
DCS Chiller Plant																											
BS-B2-11590	MEP- Equipment Connection	27	23-Apr-18	26-May-18	23-Jan-18 A	22-Jun-18	100%	36%	-22	[Gantt bar: 23-Jan-18 to 22-Jun-18]																	
BS-B2-11550	MEP-1st Fix- Main Pipeworks Installation	54	12-Dec-17	20-Feb-18	20-Oct-17 A	22-Jun-18	100%	68%	-98	[Gantt bar: 20-Oct-17 to 22-Jun-18]																	
BS-B2-11570	MEP-1st Fix Containment	30	14-Jun-18	21-Jul-18	23-May-18 A	07-Jul-18	0%	2%	12	[Gantt bar: 23-May-18 to 07-Jul-18]																	
BS-B2-11560	MEP-1st Fix- Position Pumps/Stainers/MCC and Remaining Equipment	54	03-Jan-18	09-Mar-18	27-Nov-17 A	12-Jul-18	100%	38%	-98	[Gantt bar: 27-Nov-17 to 12-Jul-18]																	
BS-B2-11580	MEP-2nd Fix Installation-Cabling	27	07-Jul-18	08-Aug-18	07-Jul-18	08-Aug-18	0%	0%	0	[Gantt bar: 07-Jul-18 to 08-Aug-18]																	
BS-B2-11600	MEP-Final Fix Pipe Insulation/Detector	27	30-Jul-18	30-Aug-18	30-Jul-18	30-Aug-18	0%	0%	0	[Gantt bar: 30-Jul-18 to 30-Aug-18]																	
BS-B2-11610	Ready for System Flushing and System T&C	0		30-Aug-18		30-Aug-18	0%	0%	0	[Gantt bar: 30-Aug-18 to 30-Aug-18]																	
AS-B2-11090	Ready for FS System T&C	0		30-Aug-18		30-Aug-18	0%	0%	0	[Gantt bar: 30-Aug-18 to 30-Aug-18]																	
B1/F																											
1. CSF/RDE Zone																											
Carpark Area																											
AW-B1-11340	ABWF - Wet Trade / Block wall / rendering / Ceiling / Floor	21	11-Jun-18	06-Jul-18	11-Jun-18	06-Jul-18	0%	0%	0	[Gantt bar: 11-Jun-18 to 06-Jul-18]																	
BS-B1-12430	MEP H/L 1st Fix Installation	60	28-Dec-17	13-Mar-18	27-Nov-17 A	18-Jul-18	100%	35%	-101	[Gantt bar: 27-Nov-17 to 18-Jul-18]																	
BS-B1-12440	MEP 2nd Fix Installation-Cabling	54	19-Jul-18	19-Sep-18	19-Jul-18*	19-Sep-18	0%	0%	0	[Gantt bar: 19-Jul-18 to 19-Sep-18]																	

Three Months Rolling Programme (3MRP) - Mth 32 - 31 May

Activity ID	Activity Name	CMWP Dur.	CMWP - R0 (D8*) Start	CMWP - R0 (D8) Finish	Actual / Forecast Start	Actual / Forecast Finish	Planned B/L % Complete	Actual % Complete	Finish Variance (+/-d)	Gantt Chart (May to August 2018)							
										May 30	May 07	May 14	May 21	May 28	June 04	June 11	June 18
Generator & Fuel & Tank Rooms (B1-2-708) GL 5'-6"/A-K'																	
AW-B1-11350	HC-Construction Logistic/Temporary Site Storage Period	156	19-Jul-18	23-Jan-19	19-Jul-18	23-Jan-19	0%	0%	0								
BS-B1-10540	MEP 1st Fix/2nd	7	14-Mar-18	22-Mar-18	02-Jan-18 A	07-Jun-18	100%	16.01%	-60								
AW-B1-11460	ABWF - Door & Louvers Installation	7	07-Jun-18	15-Jun-18	07-Jun-18	15-Jun-18	0%	0%	0								
AW-B1-11470	ABWF final touch up	3	12-Jun-18	15-Jun-18	12-Jun-18	15-Jun-18	0%	0%	0								
AW-B1-11440	General Builder's Works, including concrete plinth & waterproofing works for fuel tank room	21	07-Jun-18	03-Jul-18	07-Jun-18	03-Jul-18	0%	0%	0								
AW-B1-11450	ABWF - Plastering, tank soffit sealer & cat ladder installation	14	04-Jul-18	19-Jul-18	04-Jul-18	19-Jul-18	0%	0%	0								
BS-B1-10550	Generator Installation	60	07-Feb-18	26-Apr-18	23-Jan-18 A	27-Jul-18	100%	22%	-75								
BS-B1-10560	Generator SAT	13	27-Jul-18	11-Aug-18	27-Jul-18	11-Aug-18	0%	0%	0								
Master Meter Room (B1-2-600) GL 4'-5"/K'-A'																	
AW-B1-11480	ABWF - Ceiling / Wall / floor - 1st Coat	19	14-Jun-18	07-Jul-18	14-Jun-18	07-Jul-18	0%	0%	0								
BS-B1-10570	MEP Installation	19	09-Jul-18	30-Jul-18	09-Jul-18	30-Jul-18	0%	0%	0								
AW-B1-11490	ABWF - Door frame & panels & ironmongeries installation	7	31-Jul-18	07-Aug-18	31-Jul-18	07-Aug-18	0%	0%	0								
AW-B1-11500	ABWF final touch up	7	08-Aug-18	15-Aug-18	08-Aug-18	15-Aug-18	0%	0%	0								
DG Store (B1-2-957) GL 2'-3"/C'-D'																	
AW-B1-11510	ABWF - Ceiling / Wall / floor - 1st Coat	19	09-Jul-18	30-Jul-18	09-Jul-18	30-Jul-18	0%	0%	0								
BS-B1-10580	MEP Installation	19	31-Jul-18	21-Aug-18	31-Jul-18	21-Aug-18	0%	0%	0								
AW-B1-11520	ABWF - Door frame & panels & ironmongeries installation	7	22-Aug-18	29-Aug-18	22-Aug-18	29-Aug-18	0%	0%	0								
AW-B1-11530	ABWF final touch up	7	30-Aug-18	06-Sep-18	30-Aug-18	06-Sep-18	0%	0%	0								
LV Switch Room (B1-3-701R) GL 2'-3"/E'-F'																	
AW-B1-10790	ABWF - Door frame & panels & ironmongeries installation	7	14-Jun-18	22-Jun-18	14-Jun-18	22-Jun-18	0%	0%	0								
AW-B1-10800	ABWF - Dust free sealer on floor	3	23-Jun-18	26-Jun-18	23-Jun-18	26-Jun-18	0%	0%	0								
Lighting Control Centre (B1-2-705C)																	
AS-B1-10740	Access for MEP / ABWF Installation	0	28-Jun-18		28-Jun-18		0%	0%	0	Access for MEP / ABWF Installation, 28-Jun-18							
AW-B1-11990	General Builder's Works	7	28-Jun-18	06-Jul-18	28-Jun-18	06-Jul-18	0%	0%	0								
AW-B1-12000	ABWF - Ceiling / Wall / floor - 1st Coat	21	07-Jul-18	31-Jul-18	07-Jul-18	31-Jul-18	0%	0%	0								
BS-B1-11040	MEP-1st/2nd Fix Installation (G.L. 2-11/C-D)	50	01-Aug-18	28-Sep-18	01-Aug-18	28-Sep-18	0%	0%	0								
2. Carriageway																	
Zone S																	
Zone S Carriageway FS Control Room (B1-1-907M)-1																	
BS-B1-11030	Access for ABWF / MEP Installation	0	17-Jun-18		17-Jun-18		0%	0%	0	Access for ABWF / MEP Installation, 17-Jun-18							
AW-B1-133	ABWF-Soffit Sealer	7	19-Jun-18	26-Jun-18	19-Jun-18	26-Jun-18	0%	0%	0								
AW-B1-133	ABWF-Door/Ironmongeries	27	19-Jun-18	20-Jul-18	19-Jun-18	20-Jul-18	0%	0%	0								
BS-B1-12590	MEP-1st/2nd Fix Installation	40	27-Jun-18	13-Aug-18	27-Jun-18	13-Aug-18	0%	0%	0								
BS-B1-12600	MEP-Fire Control Panel Installation	27	14-Aug-18	13-Sep-18	14-Aug-18	13-Sep-18	0%	0%	0								
Zone S Communal Area FS Control Room (B1-1-908M)																	
AS-B1-10900	Access for ABWF / MEP Installation	0	17-Jun-18		17-Jun-18		0%	0%	0	Access for ABWF / MEP Installation, 17-Jun-18							
AW-B1-129	ABWF-Soffit Sealer	7	19-Jun-18	26-Jun-18	19-Jun-18	26-Jun-18	0%	0%	0								
BS-B1-10480	MEP-1st/2nd Fix Installation	40	27-Jun-18	13-Aug-18	27-Jun-18	13-Aug-18	0%	0%	0								
BS-B1-10740	Room Power On	0		14-Aug-18		14-Aug-18	0%	0%	0	Room Power On							
AW-B1-129	ABWF-Door/Ironmongeries	1	14-Aug-18	14-Aug-18	14-Aug-18	14-Aug-18	0%	0%	0								
BS-B1-10720	MEP-Fire Control Panel Installation	27	15-Aug-18	14-Sep-18	15-Aug-18	14-Sep-18	0%	0%	0								
Zone R																	
B1/F_Zone R Carriageway SEF Room (B1-1-808C)																	
BS-B1-11340	MEP-SES Equipment On Site	0	05-Jun-18		05-Jun-18*		0%	0%	0	MEP-SES Equipment On Site, 05-Jun-18*							
AS-B1-10910	Access for ABWF / MEP Installation	0	17-Jun-18		17-Jun-18*		0%	0%	0	Access for ABWF / MEP Installation, 17-Jun-18*							
AW-B1-121	General Builder's Works	7	19-Jun-18	26-Jun-18	19-Jun-18	26-Jun-18	0%	0%	0								
AW-B1-123	MEP- SES Equipment on Site	0	12-Jul-18		12-Jul-18*		0%	0%	0	MEP- SES Equipment on Site, 12-Jul-18*							
AW-B1-123	ABWF - Ceiling / Wall / floor - 1st Coat	19	27-Jun-18	19-Jul-18	27-Jun-18	19-Jul-18	0%	0%	0								
AW-B1-123	MEP-Equipment Installation and Connection	27	13-Aug-18	13-Sep-18	13-Aug-18	13-Sep-18	0%	0%	0								
BS-B1-11320	MEP 1st / 2nd / Final Fix	54	12-Jul-18	13-Sep-18	12-Jul-18	13-Sep-18	0%	0%	0								
B1/F_Zone R Carriageway, including taxi drop off bays & pedestrian pavement GL 6'-2"/A-M																	
AS-B1-10920	Access for ABWF / MEP Installation	0	17-Jun-18		17-Jun-18		0%	0%	0	Access for ABWF / MEP Installation, 17-Jun-18							
AW-B1-106	ABWF-Ceiling Sealer	3	19-Jun-18	21-Jun-18	19-Jun-18	21-Jun-18	0%	0%	0								

Three Months Rolling Programme (3MRP) - Mth 32 - 31 May

Activity ID	Activity Name	CMWP Dur.	CMWP - R0 (D8*) Start	CMWP - R0 (D8) Finish	Actual / Forecast Start	Actual / Forecast Finish	Planned B/L % Complete	Actual % Complete	Finish Variance (+/-d)	Gantt Chart (Timeline)																		
										May 30	07	14	21	28	June 04	11	18	25	July 02	09	16	23	30	August 06	13	20	27	
BS-B1-11760	MEP-Carriageway 1st / 2nd Fix	12	22-Jun-18	06-Jul-18	22-Jun-18	06-Jul-18	0%	0%	0	[Gantt bar: 22-Jun-18 to 06-Jul-18]																		
BS-B1-11780	MEP-Escalator (ES11, ES12) Installation	40	19-Jun-18	04-Aug-18	19-Jun-18	04-Aug-18	0%	0%	0	[Gantt bar: 19-Jun-18 to 04-Aug-18]																		
AW-B1-122	ABWF-Carriageway paving, road kerb and pedestrian pavement construction	36	07-Jul-18	17-Aug-18	07-Jul-18	17-Aug-18	0%	0%	0	[Gantt bar: 07-Jul-18 to 17-Aug-18]																		
BaP-B1-100	HC logistics / vehicle access	130	07-Jul-18	08-Dec-18	07-Jul-18	08-Dec-18	0%	0%	0	[Gantt bar: 07-Jul-18 to 08-Dec-18]																		
Zone D1, D2, N, L, K, H																												
MAF / SEF Room (B1-1-800C, 802C, 803C)																												
AS-B1-10960	Access for ABWF / MEP Installation	0	23-Aug-18		23-Aug-18		0%	0%	0	[Gantt bar: 23-Aug-18 to 23-Aug-18]																		
AW-B1-105	General Builder's Works	7	23-Aug-18	31-Aug-18	23-Aug-18	31-Aug-18	0%	0%	0	[Gantt bar: 23-Aug-18 to 31-Aug-18]																		
AW-B1-105	ABWF - Ceiling / Wall / floor - 1st Coat	19	31-Aug-18	22-Sep-18	31-Aug-18	22-Sep-18	0%	0%	0	[Gantt bar: 31-Aug-18 to 22-Sep-18]																		
3. Zone A_M_E_N																												
General Area - BOH/Office/Storage/Corridor/Toilets/Lobby																												
Corridors/Lobbys																												
AW-B1-124	ABWF-Soffit Sealer	7	05-Jun-18	13-Jun-18	05-Jun-18	13-Jun-18	0%	0%	0	[Gantt bar: 05-Jun-18 to 13-Jun-18]																		
BS-B1-11430	MEP Dropper	13	21-Apr-18	07-May-18	26-Mar-18 A	14-Jun-18	100%	8.01%	-32	[Gantt bar: 21-Apr-18 to 07-May-18]																		
AW-B1-124	ABWF-Wet Trade; T-Post/Block Wall/Rendering (GL 1 to 3)	25	14-Feb-18	19-Mar-18	05-Dec-17 A	19-Jun-18	100%	40%	-72	[Gantt bar: 14-Feb-18 to 19-Mar-18]																		
BS-B1-11410	MEP-1st/2nd Fix Installation	40	14-Apr-18	01-Jun-18	15-Mar-18 A	22-Jun-18	97.5%	57%	-16	[Gantt bar: 14-Apr-18 to 01-Jun-18]																		
AW-B1-124	ABWF-Ceiling Frame (FS Ceiling)	13	11-Jun-18	26-Jun-18	11-Jun-18	26-Jun-18	0%	0%	0	[Gantt bar: 11-Jun-18 to 26-Jun-18]																		
AW-B1-124	ABWF- FS Ceiling Close up	13	26-Jun-18	12-Jul-18	26-Jun-18	12-Jul-18	0%	0%	0	[Gantt bar: 26-Jun-18 to 12-Jul-18]																		
BS-B1-11420	MEP- 2nd Fix (Cabling)	54	03-Mar-18	10-May-18	21-Feb-18 A	25-Jul-18	100%	18%	-61	[Gantt bar: 03-Mar-18 to 10-May-18]																		
BS-B1-11440	MEP-Ceiling Final Fix	13	12-Jul-18	27-Jul-18	12-Jul-18	27-Jul-18	0%	0%	0	[Gantt bar: 12-Jul-18 to 27-Jul-18]																		
AW-B1-124	ABWF-Wall Final Paint/Corner Protection	13	12-Jul-18	27-Jul-18	12-Jul-18	27-Jul-18	0%	0%	0	[Gantt bar: 12-Jul-18 to 27-Jul-18]																		
AW-B1-124	ABWF-Door/Ironmongeries	13	27-Jul-18	11-Aug-18	27-Jul-18	11-Aug-18	0%	0%	0	[Gantt bar: 27-Jul-18 to 11-Aug-18]																		
BOH Workshop, Office and Facilities Rooms																												
BS-B1-11460	MEP-1st/2nd Fix Installation	15	23-May-18	08-Jun-18	09-Apr-18 A	15-Jun-18	53.33%	18%	-5	[Gantt bar: 23-May-18 to 08-Jun-18]																		
BS-B1-11470	MEP- 2nd Fix (Cabling)	31	15-May-18	21-Jun-18	19-Mar-18 A	30-Jun-18	45.16%	20%	-8	[Gantt bar: 15-May-18 to 21-Jun-18]																		
AW-B1-125	ABWF-Wet Trade; T-Post/Block Wall/Rendering/sealer	40	30-Jan-18	21-Mar-18	05-Dec-17 A	10-Jul-18	100%	20%	-87	[Gantt bar: 30-Jan-18 to 21-Mar-18]																		
AW-B1-125	ABWF-Ceiling Frame/Grid (Office Ceiling Area)	13	30-Jun-18	17-Jul-18	30-Jun-18	17-Jul-18	0%	0%	0	[Gantt bar: 30-Jun-18 to 17-Jul-18]																		
BS-B1-11480	MEP- FS /Lighting /A/C Dropper (Office Ceiling Area)	27	17-Jul-18	17-Aug-18	17-Jul-18	17-Aug-18	0%	0%	0	[Gantt bar: 17-Jul-18 to 17-Aug-18]																		
AW-B1-125	ABWF-Ceiling Close Up (Office Ceiling Area)	27	17-Aug-18	18-Sep-18	17-Aug-18	18-Sep-18	0%	0%	0	[Gantt bar: 17-Aug-18 to 18-Sep-18]																		
BS-B1-11490	MEP-Ceiling/Wall Final Fix	54	17-Aug-18	23-Oct-18	17-Aug-18	23-Oct-18	0%	0%	0	[Gantt bar: 17-Aug-18 to 23-Oct-18]																		
Toilets & Toilet Lobby																												
Public Toilet at GL 6,D																												
BS-B1-115	MEP Dropper	3	19-May-18	24-May-18	19-Mar-18 A	04-Jun-18	100%	5.99%	-9	[Gantt bar: 19-May-18 to 24-May-18]																		
AW-B1-121	ABWF-Block Wall	7	30-Apr-18	09-May-18	28-Dec-17 A	08-Jun-18	100%	5%	-25	[Gantt bar: 30-Apr-18 to 09-May-18]																		
BS-B1-115	MEP-Low Level P&D Pipework, H/L 1st/2nd Fix	13	26-Jan-18	10-Feb-18	15-Jan-18 A	11-Jun-18	100%	34%	-94	[Gantt bar: 26-Jan-18 to 10-Feb-18]																		
AW-B1-121	ABWF-Ceiling Close up/Ceiling Finish	7	04-Jun-18	12-Jun-18	04-Jun-18	12-Jun-18	0%	0%	0	[Gantt bar: 04-Jun-18 to 12-Jun-18]																		
AW-B1-121	ABWF-Waterproofing/Water Test	7	11-Jun-18	20-Jun-18	11-Jun-18	20-Jun-18	0%	0%	0	[Gantt bar: 11-Jun-18 to 20-Jun-18]																		
AW-B1-121	ABWF-Cubic Partition	7	12-Jun-18	21-Jun-18	12-Jun-18	21-Jun-18	0%	0%	0	[Gantt bar: 12-Jun-18 to 21-Jun-18]																		
AW-B1-121	ABWF-Final Fix-Sanitaryware/Sink/Door	7	21-Jun-18	29-Jun-18	21-Jun-18	29-Jun-18	0%	0%	0	[Gantt bar: 21-Jun-18 to 29-Jun-18]																		
AW-B1-121	ABWF-Floor screeding/Wall Plastering/Tiling/Counter Steel Frame	13	20-Jun-18	06-Jul-18	20-Jun-18	06-Jul-18	0%	0%	0	[Gantt bar: 20-Jun-18 to 06-Jul-18]																		
BS-B1-115	MEP Final Fix	7	29-Jun-18	09-Jul-18	29-Jun-18	09-Jul-18	0%	0%	0	[Gantt bar: 29-Jun-18 to 09-Jul-18]																		
AS-B1-111	ABWF/MEP Installation Completed	0		09-Jul-18		09-Jul-18	0%	0%	0	[Gantt bar: 09-Jul-18 to 09-Jul-18]																		
AW-B1-121	ABWF-Ceiling Grid/Ceiling Panel with Service Openings	7	06-Jul-18	14-Jul-18	06-Jul-18	14-Jul-18	0%	0%	0	[Gantt bar: 06-Jul-18 to 14-Jul-18]																		
Staff Toilet / Changing Room at GL 5-6, B																												
AW-B2-11	ABWF/MEP Installation in Toilet (Detail refer to Public Toilet at GL 6 D	72	01-Feb-18	05-May-18	15-Jan-18 A	09-Aug-18	100%	20%	-79	[Gantt bar: 01-Feb-18 to 05-May-18]																		
Staff Toilet at GL 2, C																												
AW-B2-1	ABWF/MEP Installation in Toilet (Detail refer to Public Toilet at GL 6 D	72	22-Jan-18	24-Apr-18	15-Jan-18 A	09-Aug-18	100%	20%	-88	[Gantt bar: 22-Jan-18 to 24-Apr-18]																		
Transformer Room 1 & 2 (B1-1-700 & B1-1-702)																												
BS-B1-11560	Tx Rm 1 & 2 Power On by CLP	0		09-Jun-18		09-Jun-18	0%	0%	0	[Gantt bar: 09-Jun-18 to 09-Jun-18]																		
LV Main Switchroom 1 & 2 (B1-1-704 & B1-1-703)																												
BS-B1-10290	Installation Completed and Ready for Power On	0		07-Jun-18		07-Jun-18	0%	0%	0	[Gantt bar: 07-Jun-18 to 07-Jun-18]																		
AW-B1-10100	ABWF - Door frame & panels & ironmongeries installation	7	16-Jun-18	25-Jun-18	16-Jun-18	25-Jun-18	0%	0%	0	[Gantt bar: 16-Jun-18 to 25-Jun-18]																		
Main IT Room (B1-1-954)																												
AW-B1-12710	ABWF-Wall Final Paint	3	10-Mar-18	14-Mar-18	04-Dec-17 A	02-Jun-18	100%	50%	-63	[Gantt bar: 10-Mar-18 to 14-Mar-18]																		

Three Months Rolling Programme (3MRP) - Mth 32 - 31 May

Activity ID	Activity Name	CMWP Dur.	CMWP - R0 (D8) Start	CMWP - R0 (D8) Finish	Actual / Forecast Start	Actual / Forecast Finish	Planned B/L % Complete	Actual % Complete	Finish Variance (+/-d)	Gantt Chart																
										May 30	May 07	May 14	May 21	May 28	June 04	June 11	June 18	June 25	July 02	July 09	July 16	July 23	August 30	August 06	August 13	August 20
BS-B1-11570	MEP H/L and Wall 1st/2nd Fix MEP Installation	19	29-Jan-18	23-Feb-18	27-Nov-17 A	16-Jun-18	100%	29%	-91	[Gantt bar: 16-Jun-18 to 27-Nov-17 A]																
AW-B1-12640	ABWF-Wet Trade (Up to 1st coat painting) - Ceiling / Wall / Floor	19	04-Jun-18	27-Jun-18	04-Jun-18	04-Jun-18	0%	0%	0	[Gantt bar: 04-Jun-18 to 27-Jun-18]																
AW-B1-12670	ABWF-Ceiling Frame w/ service panels	7	25-Jun-18	04-Jul-18	25-Jun-18	04-Jul-18	0%	0%	0	[Gantt bar: 25-Jun-18 to 04-Jul-18]																
BS-B1-11580	MEP-H/L Dropper	3	04-Jul-18	07-Jul-18	04-Jul-18	07-Jul-18	0%	0%	0	[Gantt bar: 04-Jul-18 to 07-Jul-18]																
AW-B1-12690	Ceiling close up	3	07-Jul-18	11-Jul-18	07-Jul-18	11-Jul-18	0%	0%	0	[Gantt bar: 07-Jul-18 to 11-Jul-18]																
AW-B1-12680	ABWF-Raised Floor Setting out/Padestal/Grid/Door	7	04-Jul-18	12-Jul-18	04-Jul-18	12-Jul-18	0%	0%	0	[Gantt bar: 04-Jul-18 to 12-Jul-18]																
AW-B1-12700	ABWF-Raised Floor Panel Close-up	3	12-Jul-18	16-Jul-18	12-Jul-18	16-Jul-18	0%	0%	0	[Gantt bar: 12-Jul-18 to 16-Jul-18]																
AW-B1-12720	ABWF/MEP Installation Completed (Ready for FS & TC)	0		17-Jul-18		17-Jul-18	0%	0%	0	[Gantt bar: 17-Jul-18 to 17-Jul-18]																
BS-B1-11600	MEP Wall & Ceiling Final Fix	5	11-Jul-18	17-Jul-18	11-Jul-18	17-Jul-18	0%	0%	0	[Gantt bar: 11-Jul-18 to 17-Jul-18]																
BS-B1-11610	ELV- Equipment Rack Installation	13	17-Jul-18	01-Aug-18	17-Jul-18	01-Aug-18	0%	0%	0	[Gantt bar: 17-Jul-18 to 01-Aug-18]																
BS-B1-11620	ELV- Backbone Cabling From Various Floors	90	17-Jul-18	02-Nov-18	17-Jul-18	02-Nov-18	0%	0%	0	[Gantt bar: 17-Jul-18 to 02-Nov-18]																
Central Control Centre & Central Control Centre Equip. Rm & Network Operation Centre (G.L. 6-12/A)																										
AW-B1-10180	ABWF/MEP Installation in Central Control Centre (Detail refer to Main IT Room)	63	04-Jun-18	18-Aug-18	03-May-18 A	15-Aug-18	0%	0%	3	[Gantt bar: 03-May-18 A to 15-Aug-18]																
AW-B1-10190	ABWF/MEP Installation in Central Control Equipment Rm(Detail refer to Main IT Room)	63	15-Jun-18	29-Aug-18	15-Jun-18	29-Aug-18	0%	0%	0	[Gantt bar: 15-Jun-18 to 29-Aug-18]																
AW-B1-10200	ABWF/MEP Installation in Network Operation Centre (Detail refer to Main IT Room)	63	23-Jun-18	06-Sep-18	23-Jun-18	06-Sep-18	0%	0%	0	[Gantt bar: 23-Jun-18 to 06-Sep-18]																
Cafe kitchen (B1-1-044) GL 10-12/A-E & Catering Kitchen (G.L. 10 / B)																										
BS-B1-10170	MEP 1st / 2nd fix	19	25-Apr-18	18-May-18	05-Feb-18 A	22-Jun-18	100%	9%	-28	[Gantt bar: 05-Feb-18 A to 22-Jun-18]																
BS-B1-11660	MEP- Install Floor Drain/Wall Concealed Pipework	7	22-Jun-18	30-Jun-18	22-Jun-18	30-Jun-18	0%	0%	0	[Gantt bar: 22-Jun-18 to 30-Jun-18]																
AW-B1-10730	ABWF-Waterproofing & floor screeding/Rendering/Tile	25	30-Jun-18	31-Jul-18	30-Jun-18	31-Jul-18	0%	0%	0	[Gantt bar: 30-Jun-18 to 31-Jul-18]																
BS-B1-10250	KIT-Installation Kitchen Equipment	38	31-Jul-18	13-Sep-18	31-Jul-18	13-Sep-18	0%	0%	0	[Gantt bar: 31-Jul-18 to 13-Sep-18]																
BS-B1-11690	MEP-2nd fix connection to Kitchen Equipment/Cabling	38	14-Aug-18	28-Sep-18	14-Aug-18	28-Sep-18	0%	0%	0	[Gantt bar: 14-Aug-18 to 28-Sep-18]																
5. Zone C_D1																										
BOH Corridor along G.L.J																										
AS-B1-10840	Access for ABWF/MEP Installation	0	23-Aug-18		23-Aug-18		0%	0%	0	[Gantt bar: 23-Aug-18 to 23-Aug-18]																
AW-B1-12800	ABWF-Sealer paint	3	23-Aug-18	27-Aug-18	23-Aug-18	27-Aug-18	0%	0%	0	[Gantt bar: 23-Aug-18 to 27-Aug-18]																
BS-B1-11180	MEP 1stFix-Main Chilled Water Header Installation/Connection to Risers	54	27-Aug-18	01-Nov-18	27-Aug-18	01-Nov-18	0%	0%	0	[Gantt bar: 27-Aug-18 to 01-Nov-18]																
ICT Riser Room																										
AS-B1-10850	Access for ABWF/MEP Installation	0	23-Aug-18		23-Aug-18		0%	0%	0	[Gantt bar: 23-Aug-18 to 23-Aug-18]																
AW-B1-12820	ABWF-Sealer paint	3	23-Aug-18	27-Aug-18	23-Aug-18	27-Aug-18	0%	0%	0	[Gantt bar: 23-Aug-18 to 27-Aug-18]																
BS-B1-11120	MEP 1st/2nd Fix	13	27-Aug-18	11-Sep-18	27-Aug-18	11-Sep-18	0%	0%	0	[Gantt bar: 27-Aug-18 to 11-Sep-18]																
ELV Room																										
AS-B1-10870	Access for ABWF/MEP Installation	0	23-Aug-18		23-Aug-18		0%	0%	0	[Gantt bar: 23-Aug-18 to 23-Aug-18]																
AW-B1-12840	ABWF Sealer paint	3	23-Aug-18	27-Aug-18	23-Aug-18	27-Aug-18	0%	0%	0	[Gantt bar: 23-Aug-18 to 27-Aug-18]																
BS-B1-11240	MEP 1st/2nd Fix	13	27-Aug-18	11-Sep-18	27-Aug-18	11-Sep-18	0%	0%	0	[Gantt bar: 27-Aug-18 to 11-Sep-18]																
7. Zone H																										
Transformer Room C																										
BS-B1-12650	CLP Power On	0		07-Jun-18		07-Jun-18	0%	0%	0	[Gantt bar: 07-Jun-18 to 07-Jun-18]																
LG/F																										
CSF/RDE Zone																										
Carpark Area																										
AW-LG-10000	ABWF - Wet Trade / Block wall / rendering / Ceiling / Floor	19	06-Jun-18	29-Jun-18	06-Jun-18	29-Jun-18	0%	0%	0	[Gantt bar: 06-Jun-18 to 29-Jun-18]																
BS-LG-10000	MEP H/L 1st Fix Installation	50	18-Jan-18	21-Mar-18	27-Nov-17 A	10-Jul-18	100%	37%	-87	[Gantt bar: 27-Nov-17 A to 10-Jul-18]																
BS-LG-10010	MEP 2nd Fix Installation-Cabling	54	10-Jul-18	11-Sep-18	10-Jul-18	11-Sep-18	0%	0%	0	[Gantt bar: 10-Jul-18 to 11-Sep-18]																
BaP-LG-10000	HC-Construction Logistic/Temporary Site Storage Period	143	10-Jul-18	29-Dec-18	10-Jul-18	29-Dec-18	0%	0%	0	[Gantt bar: 10-Jul-18 to 29-Dec-18]																
LV Switch Room (LG-3-700R) GL 4'-5'/H-'J'																										
BS-LG-10040	LV Switch Room Installation (Refer to B1/F LV Switch Room)	73	06-Feb-18	11-May-18	06-Jan-18 A	01-Aug-18	100%	31%	-67	[Gantt bar: 06-Jan-18 A to 01-Aug-18]																
BS-LG-10050	Ready for Power On	0		01-Aug-18		01-Aug-18	0%	0%	0	[Gantt bar: 01-Aug-18 to 01-Aug-18]																
RDE Stair Pressurization (LG-3-800R)																										
AS-LG-10110	Access for ABWF/MEP Installation	0	06-Jun-18		06-Jun-18		0%	0%	0	[Gantt bar: 06-Jun-18 to 06-Jun-18]																
AW-LG-10060	BW-Plinth	7	06-Jun-18	13-Jun-18	06-Jun-18	13-Jun-18	0%	0%	0	[Gantt bar: 06-Jun-18 to 13-Jun-18]																
AW-LG-10070	ABWF - Ceiling / Wall / floor - 1st Coat	19	14-Jun-18	07-Jul-18	14-Jun-18	07-Jul-18	0%	0%	0	[Gantt bar: 14-Jun-18 to 07-Jul-18]																
BS-LG-10060	MEP 1st/2nd Fix Installation	54	29-Jun-18	01-Sep-18	29-Jun-18	01-Sep-18	0%	0%	0	[Gantt bar: 29-Jun-18 to 01-Sep-18]																
G/F																										
1. Zone A, M,E																										

Three Months Rolling Programme (3MRP) - Mth 32 - 31 May

Activity ID	Activity Name	CMWP Dur.	CMWP - R0 (D8*) Start	CMWP - R0 (D8) Finish	Actual / Forecast Start	Actual / Forecast Finish	Planned B/L % Complete	Actual % Complete	Finish Variance (+/-d)	May				June				July				August								
										30	07	14	21	28	04	11	18	25	02	09	16	23	30	06	13	20	27			
Temporary Exhibition (G-1-004)																														
AS-GF-10450	Access for ABWF / MEP / Fit-out Installation	0	29-Jun-18		29-Jun-18		0%	0%	0	Access for ABWF / MEP / Fit-out Installation, 29-Jun-18																				
RC-GF-10000	RC defect rectification	13	29-Jun-18	14-Jul-18	29-Jun-18	14-Jul-18	0%	0%	0																					
AW-GF-10000	PISA-Glass Wall/Mullion	9	16-Jul-18	25-Jul-18	16-Jul-18	25-Jul-18	0%	0%	0																					
BS-GF-10450	MEP H/L - 1st fix - riser duct installation	19	17-Jul-18	08-Aug-18	17-Jul-18	08-Aug-18	0%	0%	0																					
BS-GF-10000	MEP H/L 2nd Fix - Lighting wiring / lighting / AC equipment	13	26-Jul-18	09-Aug-18	26-Jul-18	09-Aug-18	0%	0%	0																					
BS-GF-10010	MEP H/L - final fix - sprinkler head / alignment (after pipew / dropper install @ 1MF)	13	26-Jul-18	09-Aug-18	26-Jul-18	09-Aug-18	0%	0%	0																					
AW-GF-10040	ABWF and MEP H/L 1st/2nd Fix Completed	0		10-Aug-18		10-Aug-18	0%	0%	0	ABWF and MEP H/L																				
AW-GF-10830	ABWF - Raised floor - setting out / install pedestal / grid (partial)	7	10-Aug-18	17-Aug-18	10-Aug-18	17-Aug-18	0%	0%	0																					
BS-GF-10460	MEP (under raised floor) - A/C duct with insulation / containment wiring / fs sprinkler	27	18-Aug-18	18-Sep-18	18-Aug-18	18-Sep-18	0%	0%	0																					
Zone A - Lift Lobby / Corridor / Staff Entrance																														
AS-GF-10460	Access for ABWF / MEP / Fit-out Installation	0	29-Jun-18		29-Jun-18		0%	0%	0	Access for ABWF / MEP / Fit-out Installation, 29-Jun-18																				
AW-GF-10090	ABWF - Wet trade - rendering / ceiling / wall 1st coat	13	29-Jun-18	14-Jul-18	29-Jun-18	14-Jul-18	0%	0%	0																					
BS-GF-10060	MEP Installation H/L 1st & 2nd Fix / riser	40	16-Jul-18	30-Aug-18	16-Jul-18	30-Aug-18	0%	0%	0																					
BS-GF-10080	MEP - 2nd fix cabling & wiring / AC equipment	27	31-Aug-18	03-Oct-18	31-Aug-18	03-Oct-18	0%	0%	0																					
Zone M - Lift Lobby / Corridor / Concourse																														
AS-GF-10470	Access for ABWF / MEP / Fit-out Installation	0	15-Jul-18		15-Jul-18		0%	0%	0	Access for ABWF / MEP / Fit-out Installation																				
AW-GF-10860	ABWF - Wet trade - rendering / ceiling / wall 1st coat	13	16-Jul-18	30-Jul-18	16-Jul-18	30-Jul-18	0%	0%	0																					
BS-GF-10510	MEP Installation H/L 1st & 2nd Fix / riser / AC equipment	40	31-Jul-18	14-Sep-18	31-Jul-18	14-Sep-18	0%	0%	0																					
Toilets & Toilet Lobbies																														
AS-GF-10530	Access for ABWF and MEP Installation (Link from Zone E1/E2)	0	15-Jun-18		15-Jun-18		0%	0%	0	Access for ABWF and MEP Installation (Link from Zone E1/E2), 15-Jun-18																				
AW-GF-10280	ABWF/MEP Installation (detail sequence please "B2 Toilet")	107	15-Jun-18	24-Oct-18	15-Jun-18	24-Oct-18	0%	0%	0																					
FS Inlet Cabinet GL 2-3/A-D																														
AS-GF-10480	Access for MEP Installation	0	29-Jun-18		29-Jun-18*		0%	0%	0	Access for MEP Installation, 29-Jun-18*																				
BS-GF-10110	FS inlet cabinet installation	40	21-Jul-18	05-Sep-18	21-Jul-18	05-Sep-18	0%	0%	0																					
BS-GF-10120	FS inlet pipework installation	40	11-Aug-18	28-Sep-18	11-Aug-18	28-Sep-18	0%	0%	0																					
2. Zone B, F, Q, P (Main Lobby)																														
Main Lobby (G-1-014), including Zone A Portion-GL 3-6																														
Zone A (GL 3-6)																														
AW-GF-112	ABWF- Ceiling Sealer (GL 3-6)	7	12-Jun-18	20-Jun-18	12-Jun-18	20-Jun-18	0%	0%	0																					
AS-GF-1054C	Access for ABWF / MEP / Fit-out Installation (Zone A Portion- GL 3-6)	0	29-Jun-18		29-Jun-18		0%	0%	0	Access for ABWF / MEP / Fit-out Installation (Zone A Port																				
BS-GF-1071C	MEP 1st/2nd Fix (Around Columnn)/H/L 2nd Fix (Lighting Wiring)- (GL 3-6) / AC equipment	25	21-Jun-18	20-Jul-18	21-Jun-18	20-Jul-18	0%	0%	0																					
BS-GF-1076C	MEP-Final Fix H/L Light Fitting	25	15-Aug-18	12-Sep-18	15-Aug-18	12-Sep-18	0%	0%	0																					
Zone E, P (GL 8-11)																														
AS-GF-1056C	Access for ABWF / MEP / Fit-out Installation- Link from Zone P Slab Cast	0	22-Jun-18		22-Jun-18		0%	0%	0	Access for ABWF / MEP / Fit-out Installation- Link from Zone P S																				
AW-GF-113	RC-Defect Rectification	13	22-Jun-18	07-Jul-18	22-Jun-18	07-Jul-18	0%	0%	0																					
AW-GF-113	ABWF- Ceiling Sealer	7	09-Jul-18	16-Jul-18	09-Jul-18	16-Jul-18	0%	0%	0																					
BS-GF-1082C	MEP- Erect Escalator Truss (E501, 02)- From GF to B2	13	17-Jul-18	31-Jul-18	17-Jul-18	31-Jul-18	0%	0%	0																					
BS-GF-1081C	MEP 1st/2nd Fix (Around Columnn)/H/L 2nd Fix (Lighting Wiring) / AC equipment	25	17-Jul-18	14-Aug-18	17-Jul-18	14-Aug-18	0%	0%	0																					
AW-GF-113	PISA-Install Ceramic Tube/Mullion/Glass Wall	43	09-Jul-18	27-Aug-18	09-Jul-18	27-Aug-18	0%	0%	0																					
BS-GF-1084C	MEP-H/L Final Fix	13	15-Aug-18	29-Aug-18	15-Aug-18	29-Aug-18	0%	0%	0																					
AW-GF-113	PISA-Install Ceramic Tube/Mullion/Glass Wall (GL D-H, 11 and D-E, 11-12)	27	01-Aug-18	31-Aug-18	01-Aug-18	31-Aug-18	0%	0%	0																					
AW-GF-113	ABWF-Install FS/Security Shutter	19	28-Aug-18	18-Sep-18	28-Aug-18	18-Sep-18	0%	0%	0																					
BS-GF-1083C	MEP-Escalator Installation/T&C	54	01-Aug-18	04-Oct-18	01-Aug-18	04-Oct-18	0%	0%	0	BS-GF-1083C																				
Zone L & K Toilets & Toilet Lobbies GL J/9-10																														
AS-GF-1057C	Access for ABWF and MEP Installation (Link from Zone E1/E2)	0	22-Jun-18		22-Jun-18		0%	0%	0	Access for ABWF and MEP Installation (Link from Zone E1/E2), 2																				
AW-GF-109	ABWF/MEP Installation (detail sequence please "B2 Toilet")	107	22-Jun-18	29-Oct-18	22-Jun-18	29-Oct-18	0%	0%	0																					
3. Zone G																														
150-Seat lecture theatre/Workshop / Multi-purpose Lounge/Storage/Lobby																														
AS-GF-10510	Access for ABWF / MEP / Fit-out Installation	0	23-Jul-18		23-Jul-18		0%	0%	0	Access for ABWF / MEP / Fit-out In																				
AW-GF-11000	ABWF-Patching up the tie-bolt hole	9	23-Jul-18	02-Aug-18	23-Jul-18	02-Aug-18	0%	0%	0																					
AW-GF-10520	ABWF-Isolated floor on structure floor slab at the 150-seat lecture theatre	19	23-Jul-18	14-Aug-18	23-Jul-18	14-Aug-18	0%	0%	0																					
BS-GF-10240	MEP 1st / 2nd fix HL	25	14-Aug-18	12-Sep-18	14-Aug-18	12-Sep-18	0%	0%	0																					
AW-GF-10990	ABWF-dry wall installation	25	14-Aug-18	12-Sep-18	14-Aug-18	12-Sep-18	0%	0%	0																					

Three Months Rolling Programme (3MRP) - Mth 32 - 31 May

Activity ID	Activity Name	CMWP Dur.	CMWP - R0 (D8*) Start	CMWP - R0 (D8) Finish	Actual / Forecast Start	Actual / Forecast Finish	Planned B/L % Complete	Actual % Complete	Finish Variance (+/-d)	Gantt Chart (Timeline)																	
										May 30	May 07	May 14	May 21	May 28	June 04	June 11	June 18	June 25	July 02	July 09	July 16	July 23	August 30	August 06	August 13	August 20	August 27
BS-1M-10000	MEP 1st/2nd Fix Installation- Containment/Pipe/Duct/MEP Equipment-AHU/Fan/LMCP/Cabling/Wiring/Connection	54	29-Jun-18	01-Sep-18	29-Jun-18	01-Sep-18	0%	0%	0	[Gantt bar from 29-Jun-18 to 01-Sep-18]																	
ELV Room/ICT Riser Room @ GL B,4																											
BS-1M-10060	MEP- 1st/2nd Fix	19	12-Jun-18	05-Jul-18	18-May 18 A	23-Jun-18	0%	1%	9	[Gantt bar from 12-Jun-18 to 05-Jul-18]																	
AW-1M-100	ABWF-Erect Block Wall, Wall/Ceiling/Floor Finish/Door Frame/Door	25	17-Jul-18	15-Aug-18	19-Jan-18 A	25-Jun-18	0%	20%	42	[Gantt bar from 17-Jul-18 to 15-Aug-18]																	
BS-1M-10070	ELV-Equipment Rack	7	23-Jun-18	03-Jul-18	23-Jun-18	03-Jul-18	0%	0%	0	[Gantt bar from 23-Jun-18 to 03-Jul-18]																	
2. Zone D1, D2																											
AS-1M-10440	Access for ABWF/MEP Installation (Linked from L3 Slab Cast/deprop date)	0	08-Jun-18		08-Jun-18		0%	0%	0	[Gantt bar from 08-Jun-18 to 08-Jun-18]																	
AW-1M-10030	BW-MEP Plinths/Ceiling Paint (Sealer)	13	08-Jun-18	23-Jun-18	08-Jun-18	23-Jun-18	0%	0%	0	[Gantt bar from 08-Jun-18 to 23-Jun-18]																	
BS-1M-10090	MEP 1st/2nd Fix Installation- Containment/Pipe/Duct/MEP Equipment position	80	25-Jun-18	27-Sep-18	25-Jun-18	27-Sep-18	0%	0%	0	[Gantt bar from 25-Jun-18 to 27-Sep-18]																	
ELV Room/ICT Riser Room @ GL K,4																											
AW-1M-100	ABWF-Erect Block Wall, Wall/Ceiling/Floor Finish/Door Frame/Door	25	08-Jun-18	09-Jul-18	08-Jun-18	09-Jul-18	0%	0%	0	[Gantt bar from 08-Jun-18 to 09-Jul-18]																	
BS-1M-10150	MEP- 1st/2nd Fix	19	10-Jul-18	31-Jul-18	10-Jul-18	31-Jul-18	0%	0%	0	[Gantt bar from 10-Jul-18 to 31-Jul-18]																	
BS-1M-10160	ELV-Equipment Rack	5	01-Aug-18	06-Aug-18	01-Aug-18	06-Aug-18	0%	0%	0	[Gantt bar from 01-Aug-18 to 06-Aug-18]																	
BS-1M-10170	ELV-Cabling/Wiring	72	07-Aug-18	01-Nov-18	07-Aug-18*	01-Nov-18	0%	0%	0	[Gantt bar from 07-Aug-18 to 01-Nov-18]																	
3. Zone G																											
AS-1M-10450	Access for ABWF/MEP Installation (Linked from L3 Slab Cast/deprop date)	0	06-Jun-18		06-Jun-18		0%	0%	0	[Gantt bar from 06-Jun-18 to 06-Jun-18]																	
AW-1M-10050	BW-MEP Plinths/Ceiling Paint (Sealer)	13	19-Jun-18	04-Jul-18	19-Jun-18	04-Jul-18	0%	0%	0	[Gantt bar from 19-Jun-18 to 04-Jul-18]																	
BS-1M-10480	MEP SEF equipment on site	0	05-Jul-18		05-Jul-18*		0%	0%	0	[Gantt bar from 05-Jul-18 to 05-Jul-18]																	
BS-1M-10490	MEP - Equipment Installation	54	05-Jul-18	05-Sep-18	05-Jul-18	05-Sep-18	0%	0%	0	[Gantt bar from 05-Jul-18 to 05-Sep-18]																	
BS-1M-10180	MEP 1st/2nd Fix Installation- Containment/Pipe/Duct/MEP Equipment-AHU/Fan/LMCP/Connection	80	28-Jul-18	01-Nov-18	28-Jul-18	01-Nov-18	0%	0%	0	[Gantt bar from 28-Jul-18 to 01-Nov-18]																	
4. Zone L, K, H,J																											
AS-1M-10460	Access for ABWF/MEP Installation	0	09-Jun-18		09-Jun-18		0%	0%	0	[Gantt bar from 09-Jun-18 to 09-Jun-18]																	
AW-1M-10060	BW-MEP Plinths/Ceiling Paint (Sealer)	27	09-Jun-18	12-Jul-18	09-Jun-18	12-Jul-18	0%	0%	0	[Gantt bar from 09-Jun-18 to 12-Jul-18]																	
BS-1M-10230	MEP 1st/2nd Fix Installation- Containment/Pipe/Duct/MEP Equipment Position	80	09-Jun-18	12-Sep-18	09-Jun-18	12-Sep-18	0%	0%	0	[Gantt bar from 09-Jun-18 to 12-Sep-18]																	
ELV Room/ICT Riser Room @ GL J,14																											
AW-1M-100	ABWF-Erect Block Wall, Wall/Ceiling/Floor Finish/Door Frame/Door	25	09-Jun-18	10-Jul-18	09-Jun-18	10-Jul-18	0%	0%	0	[Gantt bar from 09-Jun-18 to 10-Jul-18]																	
BS-1M-10290	MEP- 1st/2nd Fix	19	11-Jul-18	01-Aug-18	11-Jul-18	01-Aug-18	0%	0%	0	[Gantt bar from 11-Jul-18 to 01-Aug-18]																	
BS-1M-10470	ELV-Equipment Rack	5	02-Aug-18	07-Aug-18	02-Aug-18	07-Aug-18	0%	0%	0	[Gantt bar from 02-Aug-18 to 07-Aug-18]																	
BS-1M-10310	ELV-Cabling/Wiring	72	08-Aug-18	02-Nov-18	08-Aug-18*	02-Nov-18	0%	0%	0	[Gantt bar from 08-Aug-18 to 02-Nov-18]																	
5. Zone B,Q,F,N																											
AS-1M-10470	Access for ABWF/MEP Installation (Linked from L3 Slab Cast/deprop date)	0	26-Aug-18		26-Aug-18		0%	0%	0	[Gantt bar from 26-Aug-18 to 26-Aug-18]																	
AW-1M-10080	BW-MEP Plinths/Ceiling Paint (Sealer)	27	27-Aug-18	27-Sep-18	27-Aug-18	27-Sep-18	0%	0%	0	[Gantt bar from 27-Aug-18 to 27-Sep-18]																	
BS-1M-10320	MEP 1st/2nd Fix Installation- Containment/Pipe/Duct/MEP Equipment Position	80	27-Aug-18	30-Nov-18	27-Aug-18	30-Nov-18	0%	0%	0	[Gantt bar from 27-Aug-18 to 30-Nov-18]																	
6. Zone P, E1																											
AS-1M-10480	Access for ABWF/MEP Installation (Linked from L3 Slab Cast/deprop date)	0	23-Jun-18		23-Jun-18		0%	0%	0	[Gantt bar from 23-Jun-18 to 23-Jun-18]																	
AW-1M-10090	BW-MEP Plinths/Ceiling Paint (Sealer)	19	23-Jun-18	16-Jul-18	23-Jun-18	16-Jul-18	0%	0%	0	[Gantt bar from 23-Jun-18 to 16-Jul-18]																	
BS-1M-10380	MEP 1st/2nd Fix Installation- Containment/Pipe/Duct/MEP Equipment Position	80	23-Jun-18	26-Sep-18	23-Jun-18	26-Sep-18	0%	0%	0	[Gantt bar from 23-Jun-18 to 26-Sep-18]																	
ELV Room																											
AW-1M-101	ABWF-Erect Block Wall, Wall/Ceiling/Floor Finish/Door Frame/Door	25	23-Jun-18	23-Jul-18	23-Jun-18	23-Jul-18	0%	0%	0	[Gantt bar from 23-Jun-18 to 23-Jul-18]																	
BS-1M-10440	MEP- 1st/2nd Fix	19	24-Jul-18	14-Aug-18	24-Jul-18	14-Aug-18	0%	0%	0	[Gantt bar from 24-Jul-18 to 14-Aug-18]																	
BS-1M-10450	ELV-Equipment Rack	5	15-Aug-18	20-Aug-18	15-Aug-18	20-Aug-18	0%	0%	0	[Gantt bar from 15-Aug-18 to 20-Aug-18]																	
BS-1M-10460	ELV-Cabling/Wiring	72	21-Aug-18	15-Nov-18	21-Aug-18*	15-Nov-18	0%	0%	0	[Gantt bar from 21-Aug-18 to 15-Nov-18]																	
2/F																											
1. Zone A, E, M																											
Zone A - Temporary Exhibition, Gallery 5 & 6 and Tall Gallery 1 & 2/BOH Area																											
AW-2F-10730	ABWF/MEP-Mobilisation	7	01-Mar-18	09-Mar-18	15-Jan-18 A	07-Jun-18	100%	26.01%	-70	[Gantt bar from 01-Mar-18 to 09-Mar-18]																	
AW-2F-10710	BW-Floor screeding	19	07-Jun-18	30-Jun-18	07-Jun-18	30-Jun-18	0%	0%	0	[Gantt bar from 07-Jun-18 to 30-Jun-18]																	
BS-2F-10460	MEP 1st/2nd Fix -Containment/A/C duct/FS Pipe/ Riser in lift cores(BOH and Riser in Cores)	25	16-Jun-18	18-Jul-18	18-May 18 A	30-Jun-18	0%	1%	14	[Gantt bar from 16-Jun-18 to 18-Jul-18]																	
BS-2F-10400	MEP H/L 1st/2nd Fix -Containment/A/C duct/FS Pipe (FOH Area)	38	09-Mar-18	27-Apr-18	15-Jan-18 A	10-Jul-18	100%	16%	-59	[Gantt bar from 09-Mar-18 to 27-Apr-18]																	
BS-2F-10420	MEP/ELV Cabling & Wiring	19	30-Jun-18	24-Jul-18	30-Jun-18	24-Jul-18	0%	0%	0	[Gantt bar from 30-Jun-18 to 24-Jul-18]																	
AW-2F-10020	ABWF-Drywall stud/1side broad/MEP concea/Drywall close up	38	14-Jun-18	31-Jul-18	14-Jun-18	31-Jul-18	0%	0%	0	[Gantt bar from 14-Jun-18 to 31-Jul-18]																	
AS-2F-10470	Facade completed and Weathertight (Link from L2 Facade Installation)	0		31-Jul-18		31-Jul-18*	0%	0%	0	[Gantt bar from 31-Jul-18 to 31-Jul-18]																	
AW-2F-10040	ABWF Wall Plastering/Wall Under/1st Coat	13	31-Jul-18	15-Aug-18	31-Jul-18	15-Aug-18	0%	0%	0	[Gantt bar from 31-Jul-18 to 15-Aug-18]																	
AW-2F-10030	ABWF-Ceiling Frame(FOH)/ Door Frame/Fire Shutter(BOH)	25	15-Aug-18	13-Sep-18	15-Aug-18	13-Sep-18	0%	0%	0	[Gantt bar from 15-Aug-18 to 13-Sep-18]																	

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Activity ID	Activity Name	CMWP Dur.	CMWP - R0 (D8*) Start	CMWP - R0 (D8) Finish	Actual / Forecast Start	Actual / Forecast Finish	Planned B/L % Complete	Actual % Complete	Finish Variance (+/-d)	May				June				July				August								
										30	07	14	21	28	04	11	18	25	02	09	16	23	30	06	13	20	27			
Zone E-Gallery 8 /BOH /Lift lobby and Gallery Study Area																														
AS-2F-10360	Access for ABWF/MEP Installation (Link from L3 slab/deprop date - zone E)	0	17-Aug-18		17-Aug-18		0%	0%	0																					
AW-2F-10220	ABWF Installation before A/C On- Typical Sequence Please refer Temporary Exhibition Section	107	17-Aug-18	24-Dec-18	17-Aug-18	24-Dec-18	0%	0%	0																					
BS-2F-10110	MEP Installation before A/C On - Typical Sequence Please refer Temporary Exhibition Section	107	17-Aug-18	24-Dec-18	17-Aug-18	24-Dec-18	0%	0%	0																					
Zone M-Stair/Lift Lobbys/First Aid Room																														
AW-2F-10130	ABWF-Floor screeding/Door Frame, Ceiling/Wall/Floor Paint	54	13-Jun-18	17-Aug-18	13-Jun-18	17-Aug-18	0%	0%	0																					
BS-2F-10070	MEP H/L 1st/2nd Fix -Containment/A/C duct/Fs Pipe/ Rainwater Pipe	80	21-Jun-18	24-Sep-18	21-Jun-18	24-Sep-18	0%	0%	0																					
Zone E- Gallery Tolient																														
AS-2F-10350	Access for ABWF/MEP Installation	0	17-Aug-18		17-Aug-18		0%	0%	0																					
AW-2F-10150	ABWF-Block Wall	7	17-Aug-18	25-Aug-18	17-Aug-18	25-Aug-18	0%	0%	0																					
BS-2F-10080	MEP-Low Level P&D Pipework, H/L 1st/2nd Fix	13	25-Aug-18	10-Sep-18	25-Aug-18	10-Sep-18	0%	0%	0																					
3. Zone G GL 11-14/A-H																														
Gallery 10 and Courtyard View Gallery																														
AS-2F-10370	Access for ABWF/MEP Installation (Link from L3 Slab cast/deprop date-zone G)	0	20-Jun-18		20-Jun-18		0%	0%	0																					
BS-2F-10140	MEP Installation before A/C On - Typical Sequence Please refer Temporary Exhibition Section	89	13-Jul-18	29-Oct-18	13-Jul-18	29-Oct-18	0%	0%	0																					
AW-2F-10260	ABWF Installation before A/C On- Typical Sequence Please refer Temporary Exhibition Section	89	23-Jul-18	07-Nov-18	23-Jul-18	07-Nov-18	0%	0%	0																					
Park View Gallery, Gallery 9, Harbour Gallery 1 and Garden Gallery 2																														
AS-2F-10380	Access for ABWF/MEP Installation (Link from L3 Slab cast/deprop date-zone G)	0	20-Jun-18		20-Jun-18		0%	0%	0																					
AW-2F-10300	ABWF Installation before A/C On- Typical Sequence Please refer Temporary Exhibition Section	107	20-Jun-18	27-Oct-18	20-Jun-18	27-Oct-18	0%	0%	0																					
BS-2F-10170	MEP Installation before A/C On - Typical Sequence Please refer Temporary Exhibition Section	107	20-Jun-18	27-Oct-18	20-Jun-18	27-Oct-18	0%	0%	0																					
2. Zone C, D1 and D2																														
Zone C- Skylight Gallery and BOH along GL 1 and GL K																														
AS-2F-10400	Access for ABWF/MEP Installation (Link from L3 Precast-Wall and Roof Cladding) Act A47490	0	22-Jun-18		22-Jun-18		0%	0%	0																					
AW-2F-10400	Skylight Installation Completed (Link from Act ID 47350)	0		27-Aug-18		27-Aug-18	0%	0%	0																					
Zone D1- Plaza view Gallery, Gallery 1-4 and 14 &15 and BOH along GL M & GL 5-6																														
AS-2F-10390	Access for ABWF/MEP Installation (Link from L3 Slab cast/deprop date-zone D2)	0	22-Jun-18		22-Jun-18		0%	0%	0																					
AW-2F-10340	ABWF Installation before A/C On- Typical Sequence Please refer Temporary Exhibition Section	94	22-Jun-18	13-Oct-18	22-Jun-18	13-Oct-18	0%	0%	0																					
BS-2F-10200	MEP Installation before A/C On - Typical Sequence Please refer Temporary Exhibition Section	94	22-Jun-18	13-Oct-18	22-Jun-18	13-Oct-18	0%	0%	0																					
6. Zone B, Q, F, P, E1																														
Zone P- Jukebox Gallery and Gallery 11																														
AS-2F-10430	Access for ABWF/MEP Installation (Link from L3 Slab cast/deprop date-zone P)	0	27-Aug-18		27-Aug-18		0%	0%	0																					
AS-2F-10580	Facade Completed and Weathertight	0		27-Aug-18		27-Aug-18	0%	0%	0																					
Zone E1- Gallery 7 and Garden Gallery 1																														
AS-2F-10410	Access for ABWF/MEP Installation (Link from L3 Slab cast/deprop date-zone E1)	0	13-Jun-18		13-Jun-18		0%	0%	0																					
AS-2F-10600	Facade Completed and Weathertight	0		16-Jun-18		16-Jun-18*	0%	0%	0																					
BS-2F-10250	MEP Installation before A/C On - Typical Sequence Please refer Temporary Exhibition Section	107	13-Jun-18	22-Oct-18	13-Jun-18	22-Oct-18	0%	0%	0																					
AW-2F-10440	ABWF Installation before A/C On- Typical Sequence Please refer Temporary Exhibition Section	107	13-Jun-18	22-Oct-18	13-Jun-18	22-Oct-18	0%	0%	0																					
4. Zone L, K, H, J																														
Zone J Gallery 12																														
AS-2F-10440	Access for ABWF/MEP Installation (Link from L3 Slab cast/deprop date-zone L,K)	0	13-Jun-18		13-Jun-18		0%	0%	0																					
AW-2F-10570	ABWF Installation before A/C On- Typical Sequence Please refer Temporary Exhibition Section	80	06-Aug-18	10-Nov-18	06-Aug-18	10-Nov-18	0%	0%	0																					
Zone L, K, H- Open Gallery, Harbour View Gallery, Corridor and BOH																														
AS-2F-10450	Access for ABWF/MEP Installation (Link from L3 Slab cast/deprop date-zone L,K)	0	06-Jul-18		06-Jul-18		0%	0%	0																					
AW-2F-10610	ABWF Installation before A/C On- Typical Sequence Please refer Temporary Exhibition Section	80	06-Jul-18	10-Oct-18	06-Jul-18	10-Oct-18	0%	0%	0																					
3/F																														
Roof Terrace																														
Zone A (G.L. A-H/1-6)																														
AS-3F-11000	ABWF/MEP Access Installation	0	03-Jul-18		03-Jul-18		0%	0%	0																					
AW-3F-10010	ABWF-Wet Trade / Screeding / Water Proofing / Test / Insulation / Screeding	38	03-Jul-18	16-Aug-18	03-Jul-18	16-Aug-18	0%	0%	0																					
BS-3F-10000	MEP-1st & 2nd Fix	54	16-Aug-18	22-Oct-18	16-Aug-18	22-Oct-18	0%	0%	0																					
Zone E & P & G (G.L. A-G/8-14)																														
Zone P																														
AW-3F-106i	Zone P Remaining Structure for Skylight (Link from Zone P 3/F slab cast)	27	28-Jun-18	31-Jul-18	28-Jun-18	31-Jul-18	0%	0%	0																					
AW-3F-106:	PISA-Skylight Installation	23	31-Jul-18	27-Aug-18	31-Jul-18	27-Aug-18	0%	0%	0																					

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Activity ID	Activity Name	CMWP Dur.	CMWP - R0 (D8*) Start	CMWP - R0 (D8) Finish	Actual / Forecast Start	Actual / Forecast Finish	Planned B/L % Complete	Actual % Complete	Finish Variance (+/-d)	Gantt Chart									
										May 30	07	14	21	28	June 04	11	18	25	July 02
Zone B & C & D (G.L. A-E/8-11)																			
Zone B & D																			
AS-3F-11020	ABWF/MEP Access Installation	0	03-Jul-18		03-Jul-18		0%	0%	0										
Zone C																			
AW-3F-104	Zone C Remaining Structure for Skylight (Link from Zone C 3/F slab cast)	27	06-Jun-18	09-Jul-18	06-Jun-18	09-Jul-18	0%	0%	0										
AW-3F-104	REL-Precast Wall / Roof Ready	27	10-Jul-18	09-Aug-18	10-Jul-18	09-Aug-18	0%	0%	0										
AW-3F-104	PISA-Skylight Installation	23	10-Aug-18	05-Sep-18	10-Aug-18	05-Sep-18	0%	0%	0										
Zone F																			
Staircase & Staircase Lobby																			
ST-B2-10220	Staircase ST-76 (Similar working procedures as ST-04B)	75	15-Jun-18	13-Sep-18	15-Jun-18	13-Sep-18	0%	0%	0										
Moving Image Centre Working Programme																			
B1/F																			
Cooridor along G.L. 10-14/K																			
AS-MC-10090	Access for ABWF/MEP Installation	0	29-Jun-18		29-Jun-18		0%	0%	0										
AW-MC-100	ABWF-Wet Trade-Block Wall/Rendering/1st Coat	27	29-Jun-18	31-Jul-18	29-Jun-18	31-Jul-18	0%	0%	0										
G/F																			
Main Auditorium / Open Cinema (G/F - 2/F) (2-1-053)																			
AS-Aud-1000C	Access for ABWF / MEP installation (Link from A60290 Auditorium slab curing)	0	12-Aug-18		12-Aug-18		0%	0%	0										
RC-Aud-100C	Steel truss construction	27	13-Aug-18	12-Sep-18	13-Aug-18	12-Sep-18	0%	0%	0										
All Levels Works																			
Risers																			
1. Zone A & M																			
BS-ALL-10020	Zone M- MEP Riser Installation-1st/2nd Fix Installation	41	06-Apr-18	26-May-18	19-Feb-18 A	20-Jul-18	100%	2%	-44										
BS-ALL-10000	Zone A(GL B & E)- MEP Riser Installation-1st/2nd Fix Installation	54	09-Apr-18	13-Jun-18	19-Feb-18 A	03-Aug-18	80.45%	2%	-42										
BS-ALL-10010	Zone A(GL H)- MEP Riser Installation-1st/2nd Fix Installation	54	28-Jun-18	31-Aug-18	28-Jun-18	31-Aug-18	0%	0%	0										
BS-ALL-10050	Zone M-MEP Riser Installation-Cabling	54	20-Jul-18	21-Sep-18	20-Jul-18	21-Sep-18	0%	0%	0										
BS-ALL-10030	Zone A(GL B & E)-MEP Riser Installation-Cabling	54	03-Aug-18	08-Oct-18	03-Aug-18	08-Oct-18	0%	0%	0										
BS-ALL-10040	Zone A(GL H)-MEP Riser Installation-Cabling	54	31-Aug-18	06-Nov-18	31-Aug-18	06-Nov-18	0%	0%	0										
2. Zone N																			
BS-ALL-10060	Zone N- MEP Riser Installation-1st/2nd Fix Installation	41	20-Aug-18	09-Oct-18	20-Aug-18	09-Oct-18	0%	0%	0										
3. Zone G																			
BS-ALL-10080	Zone G- MEP Riser Installation-1st/2nd Fix Installation	41	20-Jun-18	08-Aug-18	20-Jun-18	08-Aug-18	0%	0%	0										
BS-ALL-10090	Zone G-MEP Riser Installation-Cabling	54	08-Aug-18	12-Oct-18	08-Aug-18	12-Oct-18	0%	0%	0										
4. Zone D1																			
BS-ALL-10100	Zone D1- MEP Riser Installation-1st/2nd Fix Installation	41	03-Jul-18	20-Aug-18	03-Jul-18	20-Aug-18	0%	0%	0										
BS-ALL-10110	Zone D1-MEP Riser Installation-Cabling	54	20-Aug-18	25-Oct-18	20-Aug-18	25-Oct-18	0%	0%	0										
5. Zone H																			
BS-ALL-10120	Zone H- MEP Riser Installation-1st/2nd Fix Installation	27	14-Jul-18	15-Aug-18	14-Jul-18	15-Aug-18	0%	0%	0										
BS-ALL-10130	Zone H-MEP Riser Installation-Cabling	27	15-Aug-18	15-Sep-18	15-Aug-18	15-Sep-18	0%	0%	0										
6. Zone E																			
BS-ALL-10140	Zone E- MEP Riser Installation-1st/2nd Fix Installation	41	21-Jun-18	09-Aug-18	21-Jun-18	09-Aug-18	0%	0%	0										
BS-ALL-10150	Zone E-MEP Riser Installation-Cabling	54	09-Aug-18	13-Oct-18	09-Aug-18	13-Oct-18	0%	0%	0										
Staircases																			
M+																			
Stair cores @ GL B-C/3 (Zone A)																			
Staircase B2/F - G/F Staircase ST-04B																			
AS-ALL-10I	Access Date for ST-04B	0	17-Jun-18		17-Jun-18		0%	0%	0										
BS-ALL-10	MEP 1st / 2nd Fix, FS Riser / Containment	7	19-Jun-18	26-Jun-18	19-Jun-18	26-Jun-18	0%	0%	0										
AW-ALL-1C	ABWF-Metal Work- Hand rail, balustrade (7 days)	7	27-Jun-18	05-Jul-18	27-Jun-18	05-Jul-18	0%	0%	0										
AW-ALL-1C	ABWF-Wet Trade, Floor/Wall/Ceiling	19	06-Jul-18	27-Jul-18	06-Jul-18	27-Jul-18	0%	0%	0										
BS-ALL-10	MEP Final Fix (7 days)	7	28-Jul-18	04-Aug-18	28-Jul-18	04-Aug-18	0%	0%	0										
AW-ALL-1C	ABWF-Door/Ironmongeries	7	06-Aug-18	13-Aug-18	06-Aug-18	13-Aug-18	0%	0%	0										
Staircase G/F/ - 3/F Staircase ST-04																			
AS-ALL-10I	Access Date for ST-04	0	14-Aug-18		14-Aug-18		0%	0%	0										

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Activity ID	Activity Name	CMWP Dur.	CMWP - R0 (D8*) Start	CMWP - R0 (D8) Finish	Actual / Forecast Start	Actual / Forecast Finish	Planned B/L % Complete	Actual % Complete	Finish Variance (+/-d)	Gantt Chart																			
										May 30	May 07	May 14	May 21	May 28	June 04	June 11	June 18	June 25	July 02	July 09	July 16	July 23	July 30	August 06	August 13	August 20	August 27		
BS-ALL-10	MEP 1st /2nd Fix, FS Riser / Containment	13	14-Aug-18	28-Aug-18	14-Aug-18	28-Aug-18	0%	0%	0																				
AW-ALL-1C	ABWF-Metal Work- Hand rail, balustrade (7 days)	13	29-Aug-18	12-Sep-18	29-Aug-18	12-Sep-18	0%	0%	0																				
Stair cores @ A-B/7-8 (Zone M)																													
Staircase B1/F - G/F Staircase ST-01B																													
AS-ALL-10I	Access Date for ST-01B	0	17-Jun-18		17-Jun-18		0%	0%	0																				
BS-ALL-10	MEP 1st /2nd Fix, FS Riser / Containment	7	19-Jun-18	26-Jun-18	19-Jun-18	26-Jun-18	0%	0%	0																				
AW-ALL-1C	ABWF-Metal Work- Hand rail, balustrade	7	27-Jun-18	05-Jul-18	27-Jun-18	05-Jul-18	0%	0%	0																				
AW-ALL-1C	ABWF-Wet Trade, Floor/Wall/Ceiling	19	06-Jul-18	27-Jul-18	06-Jul-18	27-Jul-18	0%	0%	0																				
BS-ALL-10	MEP Final Fix	7	28-Jul-18	04-Aug-18	28-Jul-18	04-Aug-18	0%	0%	0																				
AW-ALL-1C	ABWF-Door/Ironmongeries	7	01-Aug-18	09-Aug-18	01-Aug-18	09-Aug-18	0%	0%	0																				
Staircase G/F/ - 3/F Staircase ST-01																													
AS-ALL-10I	Access Date for ST-03	0	09-Aug-18		09-Aug-18		0%	0%	0																				
BS-ALL-10	MEP 1st /2nd Fix, FS Riser / Containment	13	09-Aug-18	24-Aug-18	09-Aug-18	24-Aug-18	0%	0%	0																				
AW-ALL-1C	ABWF-Metal Work- Hand rail, balustrade	13	24-Aug-18	08-Sep-18	24-Aug-18	08-Sep-18	0%	0%	0																				
BS-ALL-10	MEP 1st /2nd Fix, FS Riser / Containment	13	09-Aug-18	24-Aug-18	09-Aug-18	24-Aug-18	0%	0%	0																				
M+ Basement & Podium Testing & Commissioning																													
MEP System T&C																													
Electrical																													
M+ Podium																													
EL-CLP-10000	TX Room A CLP power on (M+ & CSF)	0		20-Jun-18		20-Jun-18	0%	0%	0																				
EL-CLP-10010	TX Room B CLP power on (M+ & CSF)	0		20-Jun-18		20-Jun-18	0%	0%	0																				
EL-CLP-10020	TX Room C CLP power on (DCS)	0		20-Jun-18		20-Jun-18	0%	0%	0																				
HVAC																													
BS-BaP-TC300	T&C for Seawater Side	13	06-Jun-18	22-Jun-18	06-Jun-18	22-Jun-18	0%	0%	0																				
BS-BaP-TC180	CHW pumping system Inc MCC self test (DCS)	13	30-Aug-18	14-Sep-18	30-Aug-18	14-Sep-18	0%	0%	0																				
M+ Tower																													
Tower Crane Provision																													
Provision of TC7 (Tower Facade Installation & Dismantle of TC2)																													
TC7-2 Erection																													
A59310	Commencement of TC7-2 erection @ M+ Tower Roof Slab	0	16-Aug-18		16-Aug-18		0%	0%	0																				
A59320	Erect TC7-2 @ M+ Tower Roof Slab (to 118.7mPD)	9	16-Aug-18	25-Aug-18	16-Aug-18	25-Aug-18	0%	0%	0																				
A59330	Inspection and ICE & RPE Certification	5	27-Aug-18	31-Aug-18	27-Aug-18	31-Aug-18	0%	0%	0																				
Critical Key Dates																													
Critical Key Dates - M+ Tower Structure RC Works																													
Critical Key Dates - M+ Tower Structure Works - West Core																													
A12900	Complete West Core Wall - R/F Slab, Wall & Column (GL 7-8/A-E)	0		03-Jul-18		03-Jul-18	0%	0%	0																				
A12910	Complete West Core Wall - UR/F Slab, Wall & Column (GL 7-8/A-E)	0		24-Jul-18		24-Jul-18	0%	0%	0																				
Critical Key Dates - M+ Tower Structure Works - Tower																													
A13230	Complete Tower Structure - R/F Slab, Wall & Column (GL 7-8/E-L)	0		11-Aug-18		11-Aug-18	0%	0%	0																				
A37620	15F-16F Wall, Column & 16F slab (GL 7-8/A-D)	15	01-Jun-18	19-Jun-18	29-May-18 A	13-Jun-18	0%	30%	5																				
A37630	16F-RF Wall, Column & RF slab (GL 7-8/A-D)	15	13-Jun-18	03-Jul-18	13-Jun-18	03-Jul-18	0%	0%	0																				
A37650	Complete West Core Wall Structure to RF slab	0		24-Jul-18		24-Jul-18	0%	0%	0																				
A37640	RF-URF Wall, Column & URF (GL 7-8/A-D)	18	03-Jul-18	24-Jul-18	03-Jul-18	24-Jul-18	0%	0%	0																				
A37850	13F-14F Wall, Column & 14F slab (GL 7-8/D-H)	15	01-Jun-18	19-Jun-18	01-Jun-18 A	19-Jun-18	0%	0%	0																				
A37860	14F-15F Wall, Column & 15F slab (GL 7-8/D-H)	15	20-Jun-18	07-Jul-18	20-Jun-18	07-Jul-18	0%	0%	0																				
A37870	15F-16F Wall, Column & 16F slab (GL 7-8/D-H)	15	09-Jul-18	25-Jul-18	09-Jul-18	25-Jul-18	0%	0%	0																				
A37900	16F-RF Wall, Column & RF slab (GL 7-8/D-H)	15	26-Jul-18	11-Aug-18	26-Jul-18	11-Aug-18	0%	0%	0																				
A37910	RF-URF Wall, Column & URF (GL 7-8/D-H)	18	13-Aug-18	01-Sep-18	13-Aug-18	01-Sep-18	0%	0%	0																				
Tower Structure - Deferred Zone F & East Core Wall Zone N @GL 7-8/H-M (M3)																													
Tower Structure - Deferred Zone F & East Core Wall Zone N @GL 7-8/H-M																													

Three Months Rolling Programme (3MRP) - Mth 32 - 31 May

Activity ID	Activity Name	CMWP Dur.	CMWP - R0 (D8*) Start	CMWP - R0 (D8*) Finish	Actual / Forecast Start	Actual / Forecast Finish	Planned B/L % Complete	Actual % Complete	Finish Variance (+/-d)	Gantt Chart (Timeline)																		
										May 30	May 07	May 14	May 21	May 28	June 04	June 11	June 18	June 25	July 02	July 09	July 16	July 23	August 30	August 06	August 13	August 20	August 27	
A37670	11F-12F Wall, Column & 12F slab (GL 7-8/H-M)	15	01-Jun-18	19-Jun-18	21-May-18 A	07-Jun-18	0%	60%	9	[Gantt bar: 21-May-18 to 07-Jun-18]																		
A37690	12F-13F Wall, Column & 13F slab (GL 7-8/H-M)	15	08-Jun-18	26-Jun-18	08-Jun-18	26-Jun-18	0%	0%	0	[Gantt bar: 08-Jun-18 to 26-Jun-18]																		
A37700	13F-14F Wall, Column & 14F slab (GL 7-8/H-M)	15	27-Jun-18	14-Jul-18	27-Jun-18	14-Jul-18	0%	0%	0	[Gantt bar: 27-Jun-18 to 14-Jul-18]																		
A37710	14F-15F Wall, Column & 15F slab (GL 7-8/H-M)	15	16-Jul-18	01-Aug-18	16-Jul-18	01-Aug-18	0%	0%	0	[Gantt bar: 16-Jul-18 to 01-Aug-18]																		
A37720	15F-16F Wall, Column & 16F slab (GL 7-8/H-M)	15	02-Aug-18	18-Aug-18	02-Aug-18	18-Aug-18	0%	0%	0	[Gantt bar: 02-Aug-18 to 18-Aug-18]																		
A37730	16F-RF Wall, Column & RF slab (GL 7-8/H-M)	15	20-Aug-18	05-Sep-18	20-Aug-18	05-Sep-18	0%	0%	0	[Gantt bar: 20-Aug-18 to 05-Sep-18]																		
M+ Tower Temporary Works																												
MTFF-10000	Fair Face Concrete Remedial Works - M+ Tower G/F	14	20-Jan-18	06-Feb-18	01-Mar-18 A	16-Jun-18	100%	0%	-103	[Gantt bar: 01-Mar-18 to 16-Jun-18]																		
MTFF-10010	Fair Face Concrete Remedial Works - M+ Tower 1/F	14	19-Jun-18	05-Jul-18	19-Jun-18	05-Jul-18	0%	0%	0	[Gantt bar: 19-Jun-18 to 05-Jul-18]																		
MTFF-10020	Fair Face Concrete Remedial Works - M+ Tower 2/F	14	06-Jul-18	21-Jul-18	06-Jul-18	21-Jul-18	0%	0%	0	[Gantt bar: 06-Jul-18 to 21-Jul-18]																		
MTFF-10030	Fair Face Concrete Remedial Works - M+ Tower 3/F	14	23-Jul-18	07-Aug-18	23-Jul-18	07-Aug-18	0%	0%	0	[Gantt bar: 23-Jul-18 to 07-Aug-18]																		
MTFF-10040	Fair Face Concrete Remedial Works - M+ Tower 4/F	14	08-Aug-18	23-Aug-18	08-Aug-18	23-Aug-18	0%	0%	0	[Gantt bar: 08-Aug-18 to 23-Aug-18]																		
MTFF-10050	Fair Face Concrete Remedial Works - M+ Tower 5/F	14	24-Aug-18	08-Sep-18	24-Aug-18	08-Sep-18	0%	0%	0	[Gantt bar: 24-Aug-18 to 08-Sep-18]																		
M+ Tower External Envelope (By Permasteelisa)																												
Tower Facade Advance Works																												
Provision of Catchfan																												
Provision of Catch fan @ 9/F for Block A																												
A47985	Dismantle Catchfan at 9th/F Block A	5	14-Aug-18	20-Aug-18	14-Aug-18	20-Aug-18	0%	0%	0	[Gantt bar: 14-Aug-18 to 20-Aug-18]																		
Provision of Catch fan @ 13/F for Block A																												
A38180	Remove Scaffolding @ 14/F Block A	2	04-Jun-18	05-Jun-18	04-Jun-18	05-Jun-18	0%	0%	0	[Gantt bar: 04-Jun-18 to 05-Jun-18]																		
A38190	Install Catch fan @ 13/F South Elevation Block A	5	06-Jun-18	11-Jun-18	06-Jun-18	11-Jun-18	0%	0%	0	[Gantt bar: 06-Jun-18 to 11-Jun-18]																		
A38200	Install Catch fan @ 13/F North Elevation Block A	5	06-Jun-18	11-Jun-18	06-Jun-18	11-Jun-18	0%	0%	0	[Gantt bar: 06-Jun-18 to 11-Jun-18]																		
A38210	Inspection, ICE & RPE certification for Catchfan @ 15/F Block A	5	12-Jun-18	16-Jun-18	12-Jun-18	16-Jun-18	0%	0%	0	[Gantt bar: 12-Jun-18 to 16-Jun-18]																		
A38220	Install Working Platform @ 12th/F & 14th/F for South North Elevation Block A	5	20-Jun-18	25-Jun-18	20-Jun-18	25-Jun-18	0%	0%	0	[Gantt bar: 20-Jun-18 to 25-Jun-18]																		
A38230	Inspection, ICE & RPE certification for Working Platform @ Block A	5	26-Jun-18	30-Jun-18	26-Jun-18	30-Jun-18	0%	0%	0	[Gantt bar: 26-Jun-18 to 30-Jun-18]																		
Provision of Catch fan @ 9/F for Block B																												
A43550	Dismantle Catchfan at 11th/F Block B	5	05-Jul-18	11-Jul-18	05-Jul-18	11-Jul-18	0%	0%	0	[Gantt bar: 05-Jul-18 to 11-Jul-18]																		
Provision of Catch fan @ 13/F for Block B																												
A15270	14/F RC Structure Completed	0	20-Jun-18	20-Jun-18	20-Jun-18	20-Jun-18	0%	0%	0	[Milestone: 20-Jun-18]																		
A15275	Install Catch fan @ 13/F South Elevation Block B	5	20-Jun-18	25-Jun-18	20-Jun-18	25-Jun-18	0%	0%	0	[Gantt bar: 20-Jun-18 to 25-Jun-18]																		
A15280	Install Catch fan @ 13/F North Elevation Block B	5	20-Jun-18	25-Jun-18	20-Jun-18	25-Jun-18	0%	0%	0	[Gantt bar: 20-Jun-18 to 25-Jun-18]																		
A15290	Inspection, ICE & RPE certification for Catchfan @ 13/F Block B	5	26-Jun-18	30-Jun-18	26-Jun-18	30-Jun-18	0%	0%	0	[Gantt bar: 26-Jun-18 to 30-Jun-18]																		
A15295	Install Working Platform @ 10th & 12th for South/North Elevation Block B	5	16-Jul-18	20-Jul-18	16-Jul-18	20-Jul-18	0%	0%	0	[Gantt bar: 16-Jul-18 to 20-Jul-18]																		
A15305	Inspection, ICE & RPE certification for Working Platform @ Block B	5	21-Jul-18	26-Jul-18	21-Jul-18	26-Jul-18	0%	0%	0	[Gantt bar: 21-Jul-18 to 26-Jul-18]																		
Provision of Monorails, Catch fan & Working Platform																												
Provision of Monorail @ 8/F																												
Monorail-Block A (8/F)																												
A14890	Monorail Operati on Period@ 8F, Block A	84	02-Mar-18	15-Jun-18	28-Feb-18 A	09-Jul-18	85.4%	63.06%	-19	[Gantt bar: 02-Mar-18 to 15-Jun-18]																		
A14900	Dismantle Monorails at 8/F @ Block A	5	10-Jul-18	14-Jul-18	10-Jul-18	14-Jul-18	0%	0%	0	[Gantt bar: 10-Jul-18 to 14-Jul-18]																		
Monorail-Block B (8/F)																												
A15000	Dismantle Monorails at 8F @ Block B	5	03-Aug-18	08-Aug-18	03-Aug-18	08-Aug-18	0%	0%	0	[Gantt bar: 03-Aug-18 to 08-Aug-18]																		
A14990	Monorail Operati on Period @ 8/F, Block B	91	20-Apr-18	08-Aug-18	20-Apr-18 A	08-Aug-18	37.36%	37.36%	0	[Gantt bar: 20-Apr-18 to 08-Aug-18]																		
Provision of Monorails @ 12/F																												
Monorail-Block A (12/F)																												
A14910	14/F Structure Complete	0	20-Jun-18	20-Jun-18	20-Jun-18	20-Jun-18	0%	0%	0	[Milestone: 20-Jun-18]																		
A14920	Install/ICE Inspect monorails at 12/F slab @ Block A	16	20-Jun-18	09-Jul-18	20-Jun-18	09-Jul-18	0%	0%	0	[Gantt bar: 20-Jun-18 to 09-Jul-18]																		
A14930	Monorail Operati on Period@12/F Block A	59	10-Jul-18	17-Sep-18	10-Jul-18	17-Sep-18	0%	0%	0	[Gantt bar: 10-Jul-18 to 17-Sep-18]																		
Monorail-Block B (12/F)																												
A15010	14/F Structure Completed	0	15-Jul-18	15-Jul-18	15-Jul-18	15-Jul-18	0%	0%	0	[Milestone: 15-Jul-18]																		
A15020	Install/ICE Inspect monorails at 12/F slab @ Block B	16	16-Jul-18	02-Aug-18	16-Jul-18	02-Aug-18	0%	0%	0	[Gantt bar: 16-Jul-18 to 02-Aug-18]																		
A15030	Monorail Operati on Period	38	03-Aug-18	17-Sep-18	03-Aug-18	17-Sep-18	0%	0%	0	[Gantt bar: 03-Aug-18 to 17-Sep-18]																		
Facade Installation by TC6-2, TC2, TC7-2 & Monorail																												
Preparation Works																												
A59820	Survey, Setup & Bracket Installation for 1st Installation - Staircase Zone	22	13-Jun-18	11-Jul-18	13-Jun-18	11-Jul-18	0%	0%	0	[Gantt bar: 13-Jun-18 to 11-Jul-18]																		

Three Months Rolling Programme (3MRP) - Mth 32 - 31 May

Activity ID	Activity Name	CMWP Dur.	CMWP - R0 (D8*) Start	CMWP - R0 (D8) Finish	Actual / Forecast Start	Actual / Forecast Finish	Planned B/L % Complete	Actual % Complete	Finish Variance (+/-d)	Gantt Chart							
										May 30	07	14	21	28	June 04	11	18
Monorail @8/F - North & South Elevation 4/F to 6/F (Weathertight Zone)																	
Block A																	
A59740	M+ Tower 5/F - External Facade 2nd Fix -Remaining	5	07-Jun-18	12-Jun-18	07-Jun-18	12-Jun-18	0%	0%	0								
A60080	M+ Tower 6/F - External Facade 2nd Fix -Remaining	5	13-Jun-18	19-Jun-18	13-Jun-18	19-Jun-18	0%	0%	0								
Block B																	
A59700	M+ Tower (Block B) 4/F Lower - External Facade 2nd Fix	8	30-Apr-18	09-May-18	20-Apr-18 A	01-Jun-18	100%	95%	-18								
A59710	M+ Tower (Block B) 4/F Upper - External Facade 2nd Fix	8	09-May-18	18-May-18	03-May-18 A	02-Jun-18	100%	80%	-12								
A59720	M+ Tower 5/F - External Facade 2nd Fix	10	09-Jun-18	22-Jun-18	09-Jun-18	22-Jun-18	0%	0%	0								
A59730	M+ Tower 6/F - External Facade 2nd Fix	10	22-Jun-18	05-Jul-18	22-Jun-18	05-Jul-18	0%	0%	0								
Monorail @12/F - North & South Elevation 7/F to 10/F (Weathertight Zone)																	
Block A																	
A64890	M+ Tower - Monorail Installed and Operated @ 12/F	0	15-Jul-18		15-Jul-18		0%	0%	0								
A64840	M+ Tower 7/F - External Facade 2nd Fix	5	16-Jul-18	20-Jul-18	16-Jul-18	20-Jul-18	0%	0%	0								
A64850	M+ Tower 8/F - External Facade 2nd Fix	5	21-Jul-18	26-Jul-18	21-Jul-18	26-Jul-18	0%	0%	0								
A64860	M+ Tower 9/F - External Facade 2nd Fix	5	27-Jul-18	01-Aug-18	27-Jul-18	01-Aug-18	0%	0%	0								
A64870	M+ Tower 10/F - External Facade 2nd Fix	5	02-Aug-18	07-Aug-18	02-Aug-18	07-Aug-18	0%	0%	0								
Block B																	
A64900	M+ Tower - Monorail Installed and Operated @ 12/F	0	09-Aug-18		09-Aug-18		0%	0%	0								
A59620	M+ Tower 7/F - External Facade 2nd Fix	8	09-Aug-18	17-Aug-18	09-Aug-18	17-Aug-18	0%	0%	0								
A59630	M+ Tower 8/F - External Facade 2nd Fix	8	20-Aug-18	29-Aug-18	20-Aug-18	29-Aug-18	0%	0%	0								
A59640	M+ Tower 9/F - External Facade 2nd Fix	8	29-Aug-18	07-Sep-18	29-Aug-18	07-Sep-18	0%	0%	0								
Final Fix - North & South Elevation																	
A59340	M+ Tower 4/F - External Facade Final Fix	6	09-Jun-18	16-Jun-18	09-Jun-18	16-Jun-18	0%	0%	0								
A59350	M+ Tower 5/F - External Facade Final Fix	6	22-Jun-18	29-Jun-18	22-Jun-18	29-Jun-18	0%	0%	0								
A59360	M+ Tower 6/F - External Facade Final Fix	6	05-Jul-18	12-Jul-18	05-Jul-18	12-Jul-18	0%	0%	0								
A59370	M+ Tower 7/F - External Facade Final Fix	6	18-Aug-18	24-Aug-18	18-Aug-18	24-Aug-18	0%	0%	0								
A59380	M+ Tower 8/F - External Facade Final Fix	6	29-Aug-18	05-Sep-18	29-Aug-18	05-Sep-18	0%	0%	0								
M+ Tower Lift Installation																	
Service Lifts (LT01 & 02)																	
LT10010	Commence Lift LT01 & LT02 M/C Room Installation @ Roof	0	24-Jul-18		24-Jul-18		0%	0%	0								
LT10000	Available of lift pit at B2F, LT01 & LT02	0	24-Jul-18		24-Jul-18		0%	0%	0								
LT10020	Builders' Work & Lift M/C Room Installation @ R/F (LT01 & 02)	19	24-Jul-18	15-Aug-18	24-Jul-18	15-Aug-18	0%	0%	0								
LT10030	Lift Car Installation (LT01 & 02)	54	15-Aug-18	20-Oct-18	15-Aug-18	20-Oct-18	0%	0%	0								
Public Lifts (LT05, LT06, LT07 & LT08, 4nos, pit in B2F)																	
LT10250	Available of lift Shaft LT05, LT06, LT07 & LT08 (w/ Tower A weathertight)	0	24-Jul-18		24-Jul-18		0%	0%	0								
LT10360	Lift Shaft Builders' Work (LT08)	16	24-Jul-18	11-Aug-18	24-Jul-18	11-Aug-18	0%	0%	0								
LT10260	Commence LT05, LT06 & LT07 Lift M/C Room Installation	0		20-Aug-18		20-Aug-18	0%	0%	0								
LT10255	Builders' Work for Lift Shaft & M/C Room	23	24-Jul-18	20-Aug-18	24-Jul-18	20-Aug-18	0%	0%	0								
LT10280	Lift M/C Room Installation @ R/F (LT05 & LT06)	23	20-Aug-18	15-Sep-18	20-Aug-18	15-Sep-18	0%	0%	0								
LT10320	Lift M/C Room Installation @ 4F/5F/6F (LT07)	23	20-Aug-18	15-Sep-18	20-Aug-18	15-Sep-18	0%	0%	0								
LT10370	Lift car Installation (LT08)	54	11-Aug-18	16-Oct-18	11-Aug-18	16-Oct-18	0%	0%	0								
M+ Tower ABWF & Building Services (4/F - 16/F & R/F - UR/F)																	
4/F - 10/F																	
MP-10000	4/F - ABWF / MEP Installation (Similar working procedures as 5/F)	125	05-Jun-18	02-Nov-18	05-Jun-18	02-Nov-18	0%	0%	0								
MP-10010	6/F - ABWF / MEP Installation (Similar working procedures as 5/F)	125	05-Jun-18	02-Nov-18	05-Jun-18	02-Nov-18	0%	0%	0								
MP-10020	7/F - ABWF / MEP Installation (Similar working procedures as 5/F)	125	06-Jun-18	03-Nov-18	06-Jun-18	03-Nov-18	0%	0%	0								
MP-10030	8/F - ABWF / MEP Installation (Similar working procedures as 5/F)	125	21-Jun-18	19-Nov-18	21-Jun-18	19-Nov-18	0%	0%	0								
MP-10040	9/F - ABWF / MEP Installation (Similar working procedures as 5/F)	125	10-Jul-18	06-Dec-18	10-Jul-18	06-Dec-18	0%	0%	0								
MP-10050	10/F - ABWF / MEP Installation (Similar working procedures as 5/F)	125	27-Jul-18	24-Dec-18	27-Jul-18	24-Dec-18	0%	0%	0								
5/F - GL B-K (FOH Area include lift lobby @ GL B & L)																	
AS-MP-10160	Access for ABWF / MEP / Fit-out Installation (Linked from 8/F Slab Cast date)	0	09-Jun-18		09-Jun-18		0%	0%	0								
AW-MP-10250	ABWF - Dry Wall stud	7	09-Jun-18	16-Jun-18	09-Jun-18	16-Jun-18	0%	0%	0								
BS-MP-10350	MEP Installation H/L 1st Fix	19	09-Jun-18	04-Jul-18	09-Jun-18	04-Jul-18	0%	0%	0								
BS-MP-10360	MEP - 2nd fix include cabling and wiring	19	25-Jun-18	18-Jul-18	25-Jun-18	18-Jul-18	0%	0%	0								

Three Months Rolling Programme (3MRP) - Mth 32 - 31 May

Activity ID	Activity Name	CMWP Dur.	CMWP - R0 (D8*) Start	CMWP - R0 (D8) Finish	Actual / Forecast Start	Actual / Forecast Finish	Planned B/L % Complete	Actual % Complete	Finish Variance (+/-d)	May				June				July				August				
										30	07	14	21	28	04	11	18	25	02	09	16	23	30	06	13	20
11F-16F																										
MP-10080	13/F - ABWF / MEP Insatallation (Similar working procedures as 1/F) before watertight	72	21-Jul-18	15-Oct-18	21-Jul-18	15-Oct-18	0%	0%	0																	
MP-10090	14/F - ABWF / MEP Insatallation (Similar working procedures as 1/F) before watertight	60	18-Aug-18	31-Oct-18	18-Aug-18	31-Oct-18	0%	0%	0																	
MP-10100	15/F - ABWF / MEP Insatallation (Similar working procedures as 1/F) before watertight	62	16-Aug-18	31-Oct-18	16-Aug-18	31-Oct-18	0%	0%	0																	
11/F																										
Lift Lobby / Plant Rooms																										
AS-MP-10030	Access for ABWF & MEP Installation (Linked from TR/F Slab Cast date)	0	14-Aug-18		14-Aug-18		0%	0%	0																	
AW-MP-1011	ABWF-Wet Trade Block Wall / Rendering	19	14-Aug-18	05-Sep-18	14-Aug-18	05-Sep-18	0%	0%	0																	
FOH																										
AS-MP-10120	Access for ABWF & MEP Installation (Linked from TR/F Slab Cast date)	0	14-Aug-18		14-Aug-18		0%	0%	0																	
AW-MP-1031	ABWF - Wet Trade Block Wall / Rendering	19	14-Aug-18	05-Sep-18	14-Aug-18	05-Sep-18	0%	0%	0																	
All Level																										
Riser (GL B for ELV & MEP Room)																										
4/F - 10/F																										
AS-MP-10170	Access for MEP Installation (Linked from 14/F Slab Cast date)	0	27-Jul-18		27-Jul-18		0%	0%	0																	
MEP Riser (GL L-M)																										
4/F - 10/F																										
AS-MP-10180	Access for MEP Installation (Linked from 14/F Slab Cast date)	0	27-Jul-18		27-Jul-18		0%	0%	0																	
AS-MP-11140	BW - Temporary waterproofing & protection barroe installation on 11/F	13	27-Jul-18	11-Aug-18	27-Jul-18	11-Aug-18	0%	0%	0																	
BS-MP-10420	MEP Riser Installation-1st/2nd Fix Installation	27	11-Aug-18	12-Sep-18	11-Aug-18	12-Sep-18	0%	0%	0																	
M+ Tower Testing & Commissioning (4/F - 16/F & R/F - UR/F)																										
MEP System T&C																										
Electrical																										
EL-CLP-10140	TX Room A CLP power on (M+ & CSF)	0		20-Jun-18		20-Jun-18	0%	0%	0																	
EL-CLP-10150	TX Room B CLP power on (M+ & CSF)	0		20-Jun-18		20-Jun-18	0%	0%	0																	
CSF Tower																										
Tower Crane Provision																										
Provision of TC4 (CSF, Entrance Portal & AEL North Podium Construction)																										
TC4 Erection																										
A64650	TC4 Operational Period	9	18-Mar-16	31-Mar-16	15-Apr-17 A	11-Feb-19	100%	0%	-850																	
CSF Tower RC Structure Construction (G/F - 8/F & R/F)																										
CSF Super-Structure RC Works																										
CSF Building																										
CSF Structure @ Portion - T (G/F to 8/F)																										
Grid Line B' to F' / 4' to 6'																										
A65440	CSF - 6/F to 7/F Construction - Zone A	23	18-May-18	14-Jun-18	14-May-18 A	11-Jun-18	47.83%	60.87%	3																	
A50780	CSF - 6/F to 7/F Construction - Zone B	21	25-May-18	19-Jun-18	16-May-18 A	15-Jun-18	28.57%	38.1%	2																	
A65450	CSF - 7/F to 8/F Construction - Zone A	18	12-Jun-18	04-Jul-18	12-Jun-18	04-Jul-18	0%	0%	0																	
A50790	CSF - 7/F to 8/F Construction - Zone B	19	16-Jun-18	10-Jul-18	16-Jun-18	10-Jul-18	0%	0%	0																	
A65460	CSF - 8/F to +61.13/62.0 Construction - Zone A	24	05-Jul-18	01-Aug-18	05-Jul-18	01-Aug-18	0%	0%	0																	
A50795	CSF - 8/F to +61.13/62.0 Construction - Zone B	24	11-Jul-18	07-Aug-18	11-Jul-18	07-Aug-18	0%	0%	0																	
A65470	CSF - 8/F to R/F Construction - Zone A	53	02-Aug-18	04-Oct-18	02-Aug-18	04-Oct-18	0%	0%	0																	
A50800	CSF - 8/F to R/F Construction - Zone B	53	08-Aug-18	10-Oct-18	08-Aug-18	10-Oct-18	0%	0%	0																	
CSF Building Temporary Works																										
CFFF-10030	Fair Face Concrete Remedial Works - CSF 2/F	14	07-Jun-18	23-Jun-18	07-Jun-18	23-Jun-18	0%	0%	0																	
CFFF-10040	Fair Face Concrete Remedial Works - CSF 3/F	14	25-Jun-18	11-Jul-18	25-Jun-18	11-Jul-18	0%	0%	0																	
CFFF-10050	Fair Face Concrete Remedial Works - CSF 4/F	14	12-Jul-18	27-Jul-18	12-Jul-18	27-Jul-18	0%	0%	0																	
CFFF-10060	Fair Face Concrete Remedial Works - CSF 5/F	14	28-Jul-18	13-Aug-18	28-Jul-18	13-Aug-18	0%	0%	0																	
CFFF-10070	Fair Face Concrete Remedial Works - CSF 6/F	14	14-Aug-18	29-Aug-18	14-Aug-18	29-Aug-18	0%	0%	0																	
CFFF-10080	Fair Face Concrete Remedial Works - CSF 7/F	14	30-Aug-18	14-Sep-18	30-Aug-18	14-Sep-18	0%	0%	0																	
CF10940	Material Hoist Operation period	197	25-May-18	18-Jan-19	30-Jan-18 A	23-Feb-19	3.05%	0%	-28																	
CSF Building FACADE Preliminaries																										
ENGINEERING & APPROVAL - CSF																										
SHOPDRAWING - Facade Doors Package #11 - CSF Doors - Total No. = 2																										

Three Months Rolling Programme (3MRP) - Mth 32 - 31 May

Activity ID	Activity Name	CMWP Dur.	CMWP - R0 (D8*) Start	CMWP - R0 (D8) Finish	Actual / Forecast Start	Actual / Forecast Finish	Planned B/L % Complete	Actual % Complete	Finish Variance (+/-d)	Gantt Chart (Timeline)																		
										May 30	07	14	21	28	June 04	11	18	25	July 02	09	16	23	30	August 06	13	20	27	
A19290	1st Shopdrawing Submission	86	05-Jan-18	23-Apr-18	02-Jan-18 A	07-Aug-18	100%	35%	-87																			
A19300	1st Shopdrawing Submission - Review & Approval	19	07-Aug-18	29-Aug-18	07-Aug-18	29-Aug-18	0%	0%	0																			
A19310	2nd Shopdrawing Submission	13	29-Aug-18	13-Sep-18	29-Aug-18	13-Sep-18	0%	0%	0																			
PERFORMANCE TEST - SHOPDRAWING SUBMISSION, FABRICATION, INSTALLATION & TEST																												
PERFORMANCE TEST & MOCK UP - CSF																												
A19450	Ordering & Production of Material	95	31-Mar-17	29-Jul-17	31-Mar-17 A	24-Aug-18	100%	26%	-318																			
A19460	Installation Performance Mock up	37	24-Aug-18	09-Oct-18	24-Aug-18	09-Oct-18	0%	0%	0																			
PMU SHOPDRAWING SUBMISSION & TEST - CSF Building																												
A19520	Perf MU - CSF Fa cade Ordering & Production	89	18-May-18	01-Sep-18	18-May-18 A	05-Sep-18	12.36%	10%	-2																			
Fabrication & Delivery of CSF Facade System																												
A19570	Glass Production and Fabrication	113	13-Jul-18	26-Nov-18	13-Jul-18	26-Nov-18	0%	0%	0																			
A19560	Glass Wall Production and Fabrication	187	09-Jun-18	22-Jan-19	09-Jun-18	22-Jan-19	0%	0%	0																			
A19580	Roof Louvre Wall Production & Fabrication	144	06-Aug-18	28-Jan-19	06-Aug-18	28-Jan-19	0%	0%	0																			
Glass Production & Fabrication																												
A19590	Ordering of Coated Glass	60	25-Oct-17	08-Jan-18	06-Jul-17 A	15-Jun-18	100%	80%	-127																			
A19600	Fabrication of Insulated Glass Panel	54	15-Jun-18	20-Aug-18	15-Jun-18	20-Aug-18	0%	0%	0																			
Glass Wall Production & Fabrication																												
A19610	Die Making	45	03-Mar-17	29-Apr-17	03-Mar-17 A	12-Jun-18	100%	80%	-331																			
A19630	PVF2 Paint Ordering	45	10-Apr-17	08-Jun-17	04-Oct-17 A	12-Jun-18	100%	80%	-300																			
A19620	Aluminium Extrusion Production	22	30-May-18	26-Jun-18	18-May-18 A	25-Jun-18	8.79%	10%	0																			
A19640	Application of PVF2 Coating	16	25-Jun-18	14-Jul-18	25-Jun-18	14-Jul-18	0%	0%	0																			
A19650	Steel Frame Fabrication - Roof Louvre	66	14-Jul-18	02-Oct-18	14-Jul-18	02-Oct-18	0%	0%	0																			
Roof Louvre Wall Production & Fabrication																												
A19690	Die Making	54	09-Mar-18	17-May-18	02-Jan-18 A	27-Jul-18	100%	14%	-58																			
A19700	Aluminium Extrusion Production	27	27-Jul-18	28-Aug-18	27-Jul-18	28-Aug-18	0%	0%	0																			
A19710	PVF2 Paint Ordering	27	27-Jul-18	28-Aug-18	27-Jul-18	28-Aug-18	0%	0%	0																			
A19720	Application of PVF2 Coating	11	28-Aug-18	10-Sep-18	28-Aug-18	10-Sep-18	0%	0%	0																			
A19680	Steel Frame Fabrication - Roof Louvre	107	06-Aug-18	12-Dec-18	06-Aug-18	12-Dec-18	0%	0%	0																			
CSF External Envelope																												
CSF Structure Milestones																												
A19830	CSF - Wall, Column & 6/F to 7/F Slab Complete	0		15-Jun-18		15-Jun-18	0%	0%	0																			
A19840	CSF - Wall, Column & 7/F to 8/F Slab Complete	0		10-Jul-18		10-Jul-18	0%	0%	0																			
FACADE INSTALLATION - by Permasteelisa																												
A19860	Access for PISA Survey (6/F to 8/F)	0		29-Jun-18		29-Jun-18	0%	0%	0																			
A19961	PISA-Embed Survey/Report/Remedial/Bracket Installation (6/F to 7/F)	7	29-Jun-18	09-Jul-18	29-Jun-18	09-Jul-18	0%	0%	0																			
A19951	PISA-Embed Survey/Report/Remedial/Bracket Installation (G/F to 1/F)	57	05-Jun-18	11-Aug-18	05-Jun-18	11-Aug-18	0%	0%	0																			
CSF Tower ABWF & Building Services (G/F - 8/F & R/F)																												
CSF Tower GF-1F, 3-6F																												
CSF-10350	1/F BOH /FOH ABWF/MEP Installation	85	06-Jun-18	14-Sep-18	06-Jun-18	14-Sep-18	0%	0%	0																			
CSF-10370	G/F BOH /FOH ABWF/MEP Installation	85	13-Jun-18	21-Sep-18	13-Jun-18	21-Sep-18	0%	0%	0																			
CSF-10310	3/F BOH /FOH ABWF/MEP Installation	85	16-Jun-18	26-Sep-18	16-Jun-18	26-Sep-18	0%	0%	0																			
CSF-10320	4/F BOH /FOH ABWF/MEP Installation	85	11-Jul-18	20-Oct-18	11-Jul-18	20-Oct-18	0%	0%	0																			
CSF-10330	5/F BOH /FOH ABWF/MEP Installation	85	08-Aug-18	17-Nov-18	08-Aug-18	17-Nov-18	0%	0%	0																			
2/F																												
2/F, GL B'-F' (FOH Area)																												
AS-CSF-10470	Access for ABWF/MEP Installation	0	05-Jun-18		05-Jun-18		0%	0%	0																			
AW-CSF-11970	ABWF-Dry Wall Stud	7	05-Jun-18	12-Jun-18	05-Jun-18	12-Jun-18	0%	0%	0																			
BS-CSF-11190	MEP-1st/2nd Fix Duct/Containment/ Pipe/FCU	25	05-Jun-18	05-Jul-18	05-Jun-18	05-Jul-18	0%	0%	0																			
AW-CSF-12010	ABWF-Dry Wall Close-up	7	06-Jul-18	13-Jul-18	06-Jul-18	13-Jul-18	0%	0%	0																			
AW-CSF-12020	ABWF-Ceiling Frame	7	14-Jul-18	21-Jul-18	14-Jul-18	21-Jul-18	0%	0%	0																			
BS-CSF-11230	MEP- MEP Dropper	7	23-Jul-18	30-Jul-18	23-Jul-18	30-Jul-18	0%	0%	0																			
AW-CSF-12030	ABWF-Ceiling Close-up	7	31-Jul-18	07-Aug-18	31-Jul-18	07-Aug-18	0%	0%	0																			
AW-CSF-12040	ABWF-Wall/Ceiling/Floor Final Finishing	25	08-Aug-18	05-Sep-18	08-Aug-18	05-Sep-18	0%	0%	0																			
2/F- GL B-C (BOH/Plant Room Area)																												

CSF - Wall, Column & 6/F to 7/F Slab Complete,
 CSF - Wall, Column & 7/F to 8/F Slab Complete,
 Access for PISA Survey (6/F to 8/F),
 Access for ABWF/MEP Installation, 05-Jun-18

Three Months Rolling Programme (3MRP) - Mth 32 - 31 May

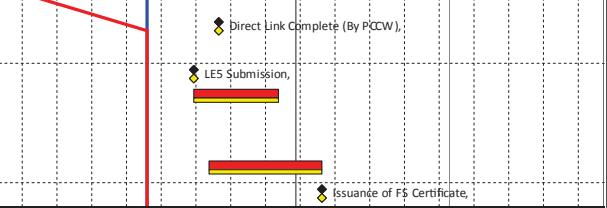
Activity ID	Activity Name	CMWP Dur.	CMWP - R0 (D8*) Start	CMWP - R0 (D8*) Finish	Actual / Forecast Start	Actual / Forecast Finish	Planned B/L % Complete	Actual % Complete	Finish Variance (+/-d)	May				June				July				August			
										30	07	14	21	28	04	11	18	25	02	09	16	23	30	06	13
BD DRAWING + DESIGN CALCULATION - by PISA																									
A54220	1st BD Submission Cast-in Embed for Window Wall & Louver at 15F to RF - Review & Approval	12	30-Mar-17	18-Apr-17	30-Mar-17 A	01-Jun-18	100%	98.01%	-332																
RDE External Envelope																									
RDE Structure																									
A21260	RDE - Wall, Column & 7/F Slab Complete	0		06-Jul-18		06-Jul-18	0%	0%	0																
FACADE INSTAL LATION - by Permasteelisa																									
NORTH ELEVATION - Glazed Glass Curtain Wall (FC-WW-03a, 03b, 04, 05a & 05b)																									
A21290	Handover of Working Area (after completion of 7/F Slab)	0		06-Jul-18		06-Jul-18	0%	0%	0																
A21295	RDE - Survey & Setting Out G/F to 7/F (North Elevation)	13	06-Jul-18	20-Jul-18	06-Jul-18	20-Jul-18	0%	0%	0																
A21310	RDE - 2/F to 3/F Install Window Curtain Wall (2 wks per floor)	3	21-Jul-18	24-Jul-18	21-Jul-18	24-Jul-18	0%	0%	0																
A21320	RDE - 3/F to 4/F Install Window Curtain Wall	3	04-Aug-18	07-Aug-18	04-Aug-18	07-Aug-18	0%	0%	0																
A21330	RDE - 4/F to 5/F Install Window Curtain Wall	3	18-Aug-18	21-Aug-18	18-Aug-18	21-Aug-18	0%	0%	0																
WEST ELEVATION - Glazed Glass Curtain Wall (FC-WW-03a, 03b, 04, 05a & 05b)																									
A21450	Handover of Working Area (after completion of 7/F Slab)	0		06-Jul-18		06-Jul-18	0%	0%	0																
A64730	RDE - Survey & Setting Out G/F to 7/F (West Elevation)	13	06-Jul-18	20-Jul-18	06-Jul-18	20-Jul-18	0%	0%	0																
A21470	RDE - 2/F to 3/F Install Window Curtain Wall	3	25-Jul-18	27-Jul-18	25-Jul-18	27-Jul-18	0%	0%	0																
A21480	RDE - 3/F to 4/F Install Window Curtain Wall	3	08-Aug-18	10-Aug-18	08-Aug-18	10-Aug-18	0%	0%	0																
A21490	RDE - 4/F to 5/F Install Window Curtain Wall	3	22-Aug-18	24-Aug-18	22-Aug-18	24-Aug-18	0%	0%	0																
SOUTH ELEVATION - Glazed Glass Curtain Wall (FC-WW-03a, 03b, 04, 05a & 05b)																									
A21640	Handover of Working Area (after completion of 7/F Slab)	0		06-Jul-18		06-Jul-18	0%	0%	0																
A64740	RDE - Survey & Setting Out G/F to 7/F (South Elevation)	13	06-Jul-18	20-Jul-18	06-Jul-18	20-Jul-18	0%	0%	0																
A21660	RDE - 2/F to 3/F Install Window Curtain Wall	3	28-Jul-18	31-Jul-18	28-Jul-18	31-Jul-18	0%	0%	0																
A21670	RDE - 3/F to 4/F Install Window Curtain Wall	3	11-Aug-18	14-Aug-18	11-Aug-18	14-Aug-18	0%	0%	0																
A21680	RDE - 4/F to 5/F Install Window Curtain Wall	3	25-Aug-18	28-Aug-18	25-Aug-18	28-Aug-18	0%	0%	0																
EAST ELEVATION - Glazed Glass Curtain Wall (FC-WW-03a, 03b, 04, 05a & 05b)																									
A21800	Handover of Working Area (after completion of 7/F Slab)	0		06-Jul-18		06-Jul-18	0%	0%	0																
A64750	RDE - Survey & Setting Out G/F to 7/F (East Elevation)	13	06-Jul-18	20-Jul-18	06-Jul-18	20-Jul-18	0%	0%	0																
A21820	RDE - 2/F to 3/F Install Window Curtain Wall	3	01-Aug-18	03-Aug-18	01-Aug-18	03-Aug-18	0%	0%	0																
A21830	RDE - 3/F to 4/F Install Window Curtain Wall	3	15-Aug-18	17-Aug-18	15-Aug-18	17-Aug-18	0%	0%	0																
A21840	RDE - 4/F to 5/F Install Window Curtain Wall	3	29-Aug-18	31-Aug-18	29-Aug-18	31-Aug-18	0%	0%	0																
FACADE INSTAL LATION - by ISP																									
SOUTH ELEVATION - Facade Mesh Balustrade (FC-BA-02)																									
A22020	RDE - 2/F Install Facade Mesh Balustrade (FC-BA-02)	10	04-Aug-18	15-Aug-18	04-Aug-18	15-Aug-18	0%	0%	0																
A22030	RDE - 3/F Install Facade Mesh Balustrade (FC-BA-02)	10	18-Aug-18	29-Aug-18	18-Aug-18	29-Aug-18	0%	0%	0																
RDE Tower ABWF & Building Services (GF - 15M/F & UR/F)																									
RDE Tower GF - 14F, Excluding 2F, 5F, 15F & 15MF																									
RDE-10140	G/F - ABWF / MEP Installation (Similar working procedures as 5/F)	86	07-Jun-18	17-Sep-18	07-Jun-18	17-Sep-18	0%	0%	0																
RDE-10120	3/F - ABWF / MEP Installation (Similar working procedures as 2/F)	94	28-Jun-18	19-Oct-18	28-Jun-18	19-Oct-18	0%	0%	0																
RDE-10130	4/F - ABWF / MEP Installation (Similar working procedures as 2/F)	94	16-Jul-18	05-Nov-18	16-Jul-18	05-Nov-18	0%	0%	0																
RDE-10150	6/F - ABWF / MEP Installation (Similar working procedures as 5/F)	85	17-Aug-18	27-Nov-18	17-Aug-18	27-Nov-18	0%	0%	0																
2F																									
Toilets (GL 2'-3'/H')																									
AS-RDE-10270	Access for ABWF/MEP Installation (Linked from 5/F Slab Cast date)	0	15-Jun-18	15-Jun-18	15-Jun-18	15-Jun-18	0%	0%	0																
AW-RDE-1073	ABWF - Block Wall	13	15-Jun-18	30-Jun-18	15-Jun-18	30-Jun-18	0%	0%	0																
BS-RDE-10510	MEP - Low Level P&D Pipework, H/L 1st/2nd Fix	13	03-Jul-18	17-Jul-18	03-Jul-18	17-Jul-18	0%	0%	0																
AW-RDE-1074	ABWF - Waterproofing/Water Test	7	18-Jul-18	25-Jul-18	18-Jul-18	25-Jul-18	0%	0%	0																
AW-RDE-1075	ABWF - Floor screeding / Wall Plastering / Tiling	19	26-Jul-18	16-Aug-18	26-Jul-18	16-Aug-18	0%	0%	0																
AW-RDE-1076	ABWF - Ceiling Grid/Ceiling Panel with Service Openings	7	17-Aug-18	24-Aug-18	17-Aug-18	24-Aug-18	0%	0%	0																
BS-RDE-10520	MEP Dropper	3	25-Aug-18	28-Aug-18	25-Aug-18	28-Aug-18	0%	0%	0																
AW-RDE-1077	ABWF - Ceiling Close up / Ceiling Finish	7	29-Aug-18	05-Sep-18	29-Aug-18	05-Sep-18	0%	0%	0																
FOH (GL 2'-6'/G'-J') (including lobby)																									
AS-RDE-10310	Access for ABWF / MEP / Fit-out Installation (Linked from 5/F Slab Cast date)	0	15-Jun-18	15-Jun-18	15-Jun-18	15-Jun-18	0%	0%	0																
AW-RDE-1091	ABWF - Block Wall	13	15-Jun-18	30-Jun-18	15-Jun-18	30-Jun-18	0%	0%	0																
BS-RDE-10630	MEP Installation H/L 1st Fix	19	23-Jun-18	17-Jul-18	23-Jun-18	17-Jul-18	0%	0%	0																

Three Months Rolling Programme (3MRP) - Mth 32 - 31 May

Activity ID	Activity Name	CMWP Dur.	CMWP - R0 (D8*) Start	CMWP - R0 (D8) Finish	Actual / Forecast Start	Actual / Forecast Finish	Planned B/L % Complete	Actual % Complete	Finish Variance (+/-d)	Gantt Chart																		
										May 30	07	14	21	28	June 04	11	18	25	July 02	09	16	23	August 30	06	13	20	27	
A32220	SPS - Install GRC Architectural Louvre & Bracket	6	21-Aug-17	28-Aug-17	21-Jul-17 A	05-Jun-18	100%	35.71%	-227																			
A56570	SPS - Final Fix & Facade Final Cleaning	5	06-Jun-18	11-Jun-18	06-Jun-18	11-Jun-18	0%	0%	0																			
ICP WORKS (Interfacing Car Park)																												
M+ ICP Accelerated Works Programme																												
M+ ICP KD & MS																												
ICP-M01	Obtain OP for works within the ICP (TOP)	0		25-Jun-18		25-Jun-18*	0%	0%	0																			
A1010	ICP Remaining Works Duration	278	12-Jan-18	16-Oct-18	01-Oct-17 A	31-Aug-18	50.4%	66.86%	46																			
A1020	Practical Completion	0		31-Aug-18		31-Aug-18	0%	0%	0																			
ICP-M02	Achieve Practical Completion of all Works within the ICP	0		31-Aug-18		31-Aug-18*	0%	0%	0																			
Civil Works																												
A2160	BA 14 Acknowledgement by BD	22	22-May-18	13-Jun-18	10-May-18 A	16-Jun-18*	41.96%	30%	-3																			
A2140	Construct Retaining Wall "E"	100	21-May-18	18-Sep-18	15-May-18 A	31-Jul-18	8.64%	50%	41																			
A2150	BA14 Submission for Retaining Walls & Drainage	0		01-Aug-18		01-Aug-18	0%	0%	0																			
Builders works - Level B1																												
Driveway & Parking Areas																												
A1030	Blockwall + Plastering (Around cavity walls)	47	03-Oct-17	29-Nov-17	01-Oct-17 A	04-Jun-18	100%	95%	-148																			
Major Plant Room & Tank																												
A1110	Blockwall + Plastering and Painting _ Clear Wtr/Flush Wtr Pump Rm & Security Rm (9, 10)	13	07-Dec-17	22-Dec-17	07-Dec-17 A	01-Jun-18	100%	95%	-126																			
A1105	Blockwall + Plastering and Painting _ FS Pump Rm (8)	13	07-Dec-17	22-Dec-17	07-Dec-17 A	01-Jun-18	100%	95%	-126																			
A1100	Blockwall + Plastering and Painting _ FS/Spr. inlet cab., FS Control Ctr & Water Mtr Cab. (6, 7)	18	13-Dec-17	05-Jan-18	13-Dec-17 A	01-Jun-18	100%	95%	-117																			
A1220	Floor Screeding	19	22-Jan-18	12-Feb-18	08-Jan-18 A	01-Jun-18	100%	95%	-85																			
A1120	Blockwall + Plastering and Painting _ Intake & Ex. Fan Rm 1 (6)	58	13-Oct-17	20-Dec-17	13-Oct-17 A	02-Jun-18	100%	97%	-129																			
A1090	Blockwall + Plastering and Painting _ Emer. Generator Set Rm (13)	65	13-Oct-17	30-Dec-17	13-Oct-17 A	02-Jun-18	100%	97%	-122																			
A1230	Cleaning and protections	7	04-Jun-18	13-Jun-18	04-Jun-18	13-Jun-18	0%	0%	0																			
Staircase & Lift																												
A1180	Builders Works of ST-03 and Finishes	16	13-Nov-17	30-Nov-17	13-Nov-17 A	04-Jun-18	100%	84%	-147																			
A1170	Builders Works of ST-02 and Corridor area + Finishes	36	03-Oct-17	15-Nov-17	01-Oct-17 A	07-Jun-18	100%	84%	-163																			
A1200	Builders Works of ST-04 and Corridor area + Finishes	46	13-Nov-17	09-Jan-18	13-Nov-17 A	09-Jun-18	100%	84%	-121																			
A1190	Builders Works at Lift Lobby (Except ceiling)	31	02-Mar-18	12-Apr-18	19-Feb-18 A	05-Jul-18	100%	10%	-69																			
Builders works - Level B2																												
Major Plant Room																												
A1470	Blockwall + Plastering and Painting _ Storage Rm (5A)	22	23-Nov-17	19-Dec-17	23-Nov-17 A	02-Jun-18	100%	95%	-130																			
A1420	Blockwall + Plastering and Painting _ ELV Rm and ICT (4, 5)	29	23-Nov-17	29-Dec-17	23-Nov-17 A	02-Jun-18	100%	95%	-123																			
A1480	Blockwall + Plastering and Painting _ Intake Fan Rm 2 (5)	17	07-Dec-17	28-Dec-17	07-Dec-17 A	02-Jun-18	100%	90%	-124																			
A1410	Blockwall + Plastering and Painting _ Exhaust Fan Rm 3 (1)	22	23-Nov-17	19-Dec-17	23-Nov-17 A	04-Jun-18	100%	90%	-131																			
Staircase & Lift																												
A1450	Builder Works of ELE Room and Lift Lobby (Except ceiling)(2)	17	03-Feb-18	26-Feb-18	02-Jan-18 A	01-Jun-18	100%	95%	-76																			
A1430	Builder Works of ST-04 and Corridor area + Finishes	16	28-Dec-17	16-Jan-18	28-Dec-17 A	04-Jun-18	100%	84%	-110																			
A1440	Builder Works of ST-03 and Finishes	16	16-Jan-18	02-Feb-18	29-Dec-17 A	04-Jun-18	100%	84%	-95																			
A1460	Builder Works of ST-02 and Corridor area + Finishes	19	03-Feb-18	28-Feb-18	05-Jan-18 A	04-Jun-18	100%	84%	-76																			
Area A - GLAa - Da																												
A1250	Floor Screeding + Protection	10	23-Mar-18	07-Apr-18	17-Mar-18 A	02-Jun-18	100%	95%	-45																			
Area B - GLDa - Ga																												
A1290	Floor Screeding + Protection	10	23-Apr-18	04-May-18	02-Apr-18 A	01-Jun-18	100%	95%	-23																			
Area C - GLGa - La																												
A1330	Floor Screeding + Protection	8	23-Apr-18	02-May-18	16-Apr-18 A	02-Jun-18	100%	85%	-25																			
Area D - GLEa - Ka																												
A1370	Floor Screeding + Protection	7	08-Jun-18	16-Jun-18	08-Jun-18	16-Jun-18	0%	0%	0																			
Fitting out works																												
A1840	FS Shutter Installation	28	19-Apr-18	24-May-18	19-Feb-18 A	04-Jun-18	100%	90%	-9																			
A1850	Fire damper & Enclosure Installation	21	09-Apr-18	04-May-18	02-Apr-18 A	06-Jun-18*	100%	80%	-27																			
A1830	FRR Ceiling & Door Installation (door frames installation)	44	17-May-18	11-Jul-18	02-Apr-18 A	11-Jun-18	26.5%	80%	24																			
A1640	Wall and Ceiling finishes _ PAINTING + Road marking B1	28	14-Mar-18	19-Apr-18	09-Feb-18 A	21-Jun-18	100%	40%	-51																			
A1650	Wall and Ceiling finishes _ PAINTING + Road marking B2	30	09-Mar-18	18-Apr-18	09-Feb-18 A	23-Jun-18*	100%	40%	-54																			

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Activity ID	Activity Name	CMWP Dur.	CMWP - R0 (D8*) Start	CMWP - R0 (D8*) Finish	Actual / Forecast Start	Actual / Forecast Finish	Planned B/L % Complete	Actual % Complete	Finish Variance (+/-d)	Gantt Chart																
										May 30	07	14	21	28	June 04	11	18	25	July 02	09	16	23	August 30	06	13	20
A1660	Final Builders installations including doors and Road Signages	50	22-Jun-18	20-Aug-18	12-May-18 A	05-Jul-18	0%	45%	39																	
A1670	Ceiling Installation	67	01-Jun-18	20-Aug-18	12-May-18 A	05-Jul-18	0%	58%	39																	
Building Services																										
MEP Installation - 1st fix																										
B1/F																										
A1860	MEP 1st Fix _ Ex. Fan 2 (17)	50	19-Jan-18	09-Mar-18	19-Jan-18 A	05-Jun-18	100%	90%	-88																	
A1910	MEP 1st Fix _ FS Pump Rm (8)	50	04-Apr-18	24-May-18	09-Mar-18 A	05-Jun-18	100%	90%	-12																	
A1920	MEP 1st Fix _ Intake ex. Fan Rm (6)	50	19-Jan-18	09-Mar-18	19-Jan-18 A	05-Jun-18	100%	90%	-88																	
A1525	B1 Parking Areas - MEP 1st Fix	80	19-Jan-18	30-Apr-18	15-Jan-18 A	05-Jun-18	100%	95%	-29																	
A1915	MEP 1st Fix _ Clear Wtr/Flush Wtr Pump Rm & Security Rm (9, 10)	55	09-Feb-18	23-Apr-18	09-Feb-18 A	07-Jun-18	100%	90%	-37																	
A1865	MEP 1st Fix _ Sprinkler Room (17)	55	19-Jan-18	28-Mar-18	19-Jan-18 A	07-Jun-18	100%	90%	-55																	
A1890	MEP 1st Fix _ Emer. Generator Set Room (13)	55	09-Feb-18	23-Apr-18	09-Feb-18 A	07-Jun-18	100%	90%	-37																	
A1900	MEP 1st Fix _ FS/Spr. inlet cab., FS Control Ctr & Water Mtr Cab. (6, 7)	55	03-Apr-18	09-Jun-18	23-Mar-18 A	07-Jun-18	87.1%	90%	2																	
A1880	MEP 1st Fix _ ELV Room and ICT at B1 (14, 15)	50	19-Jan-18	09-Mar-18	19-Jan-18 A	08-Jun-18	100%	85%	-91																	
B2/F																										
A2000	MEP 1st Fix _ Exhaust Fan Room 3 (1)	48	16-Mar-18	02-May-18	12-Mar-18 A	05-Jun-18	100%	90%	-34																	
A2030	MEP 1st Fix _ Intake Fan Room (5)	48	12-Mar-18	28-Apr-18	12-Mar-18 A	05-Jun-18	100%	90%	-38																	
A2020	MEP 1st Fix _ Storage Room (5A)	48	12-Mar-18	28-Apr-18	12-Mar-18 A	15-Jun-18	100%	70%	-47																	
A2010	MEP 1st Fix _ ELV Room and ICT (4, 5)	53	16-Mar-18	24-May-18	12-Mar-18 A	20-Jun-18	100%	70%	-23																	
MEP Installation - 2nd fix																										
B1/F																										
A1970	MEP 2nd Fix _ FS/Spr. inlet cab., FS Control Ctr & Water Mtr Cab. (6, 7)	24	06-Jun-18	30-Jun-18	29-Mar-18 A	05-Jun-18	0%	80%	25																	
A1980	MEP 2nd Fix _ FS Pump Rm (8)	22	29-May-18	21-Jun-18	19-Apr-18 A	06-Jun-18	10.36%	75%	14																	
A1565	B1 Parking Areas - MEP 2nd Fix	22	25-May-18	16-Jun-18	02-May-18 A	06-Jun-18	28.57%	75%	10																	
A1930	MEP 2nd Fix _ Ex. Fan (17)	24	26-May-18	19-Jun-18	22-Apr-18 A	06-Jun-18	21.83%	75%	13																	
A1990	MEP 2nd Fix _ Intake ex. Fan Rm (6)	24	16-May-18	09-Jun-18	21-Apr-18 A	06-Jun-18	63.17%	75%	3																	
A1985	MEP 2nd Fix _ Clear Wtr/Flush Wtr Pump Rm & Security Rm (9, 10)	27	28-Apr-18	01-Jun-18	27-Mar-18 A	08-Jun-18	98.92%	75%	-6																	
A1945	MEP 2nd Fix _ Switch Room (12)	27	23-Mar-18	27-Apr-18	16-Mar-18 A	08-Jun-18	100%	75%	-34																	
A1935	MEP 2nd Fix _ Sprinkler Room (17)	27	23-Apr-18	26-May-18	26-Mar-18 A	08-Jun-18	100%	75%	-11																	
A1555	B1 Drive Way - MEP 2nd Fix	27	16-Mar-18	20-Apr-18	12-Mar-18 A	09-Jun-18	100%	70%	-41																	
A1950	MEP 2nd Fix _ ELV Room and ICT at B1 (14, 15)	24	24-May-18	17-Jun-18	21-Apr-18 A	12-Jun-18	30.33%	50%	5																	
A1960	MEP 2nd Fix _ E. Generator Set Room (13)	27	07-Jun-18	10-Jul-18	19-May-18 A	16-Jun-18	0%	50%	18																	
B2/F																										
A1560	Area A - MEP 2nd Fix	27	27-Apr-18	31-May-18	09-Apr-18 A	13-Jun-18	100%	60%	-11																	
A1570	Area B - MEP 2nd Fix	27	04-May-18	06-Jun-18	19-Apr-18 A	13-Jun-18	84.17%	60%	-6																	
A1580	Area C - MEP 2nd Fix	27	27-Apr-18	31-May-18	09-Apr-18 A	13-Jun-18	100%	60%	-11																	
A1590	Area D - MEP 2nd Fix	27	28-Apr-18	31-May-18	03-Apr-18 A	13-Jun-18	100%	60%	-11																	
A2040	MEP 2nd Fix _ Exhaust Fan Room 3 (1)	24	04-Jun-18	28-Jun-18	19-Apr-18 A	15-Jun-18	0%	40%	13																	
A2070	MEP 2nd Fix _ Intake Fan Room (5)	24	25-May-18	18-Jun-18	25-Apr-18 A	17-Jun-18	25.83%	30%	1																	
A2060	MEP 2nd Fix _ Storage Room (5A)	24	15-Jun-18	09-Jul-18	30-May-18 A	20-Jun-18	0%	20%	19																	
A2050	MEP 2nd Fix _ ELV Room and ICT (4, 5)	27	13-Jun-18	16-Jul-18	15-May-18 A	20-Jun-18	0%	40%	21																	
Overall MEP T&C																										
A1600	Test & Commissioning for all MEP system	28	06-Jun-18	03-Jul-18	15-May-18 A	24-Jun-18*	0%	15%	9																	
Lift Installation																										
A1610	Lift Installation	48	22-Mar-18	09-May-18	15-Mar-18 A	10-Jun-18	100%	80%	-32																	
ICP Statutory Approval																										
A2170	Direct Link Complete (By PCCW)	0		15-Jun-18		15-Jun-18*	0%	0%	0																	
EMSD																										
A1620	LE5 Submission	0		10-Jun-18		10-Jun-18	0%	0%	0																	
A1630	Issue of use permit	17	10-Jun-18	27-Jun-18	10-Jun-18*	27-Jun-18	0%	0%	0																	
FSD																										
TOP (excluding Roof Landscaping Works)																										
A2090	FSD inspection	18	13-Jun-18	06-Jul-18	13-Jun-18	06-Jul-18	0%	0%	0																	
A2130	Issuance of FS Certificate	0		06-Jul-18		06-Jul-18	0%	0%	0																	



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										May 30	07	14	21	28	June 04	11	18
OP																	
A1677	Submission of Form FS501 for FSD inspection	0	09-Jul-18		09-Jul-18*		0%	0%	0								
A1680	FSD inspection	16	21-Jul-18	06-Aug-18	21-Jul-18	06-Aug-18	0%	0%	0								
A1685	Issuance of FS Certificate	0		06-Aug-18		06-Aug-18	0%	0%	0								
WSD																	
Portable Water																	
A1750	Issue Water Sample Report (Portable Water)	12	04-May-18	18-May-18	02-May-18 A	15-Jun-18	100%	0%	-23								
A1770	Complete meter installation & water main connection (Portable Water)	22	01-Jun-18	22-Jun-18	25-May-18 A	22-Jun-18*	0%	0%	0								
A1760	WWO46 Part V Submission (Portable Water)	0		03-Jul-18		03-Jul-18	0%	0%	0								
FS Water																	
A1790	WSD Inspection	11	04-May-18	16-May-18	03-May-18 A	13-Jun-18	100%	0%	-23								
A1800	Issue Water Sample Report (FS Water)	12	13-Jun-18	29-Jun-18	13-Jun-18	29-Jun-18	0%	0%	0								
A1810	WWO46 Part V Submission (FS Water)	0		16-Jul-18		16-Jul-18	0%	0%	0								
A1820	Complete meter installation & water main connection (FS Water)	22	16-Jul-18	07-Aug-18	16-Jul-18	07-Aug-18*	0%	0%	0								
BD submission																	
A1690	OP Inspection	19	12-Aug-18	31-Aug-18	12-Aug-18	31-Aug-18*	0%	0%	0								
A2080	Achieve OP Certificate and Practical Completion of all works within the ICP	0		31-Aug-18		31-Aug-18*	0%	0%	0								
IPA Area Completion and Handover Programme																	
Milestone Dates																	
IPA.M5.02	IPA-02 Complete HCC scope and Ready for Handover to SFK - Area A	0		04-Jul-18		04-Jul-18*	0%	0%	0								
IPA.M5.03	IPA-03 Complete HCC scope and Ready for Handover to SFK - Area C	0		12-Jul-18		12-Jul-18*	0%	0%	0								
CSO Area																	
IPA.AC.190	Construct CSO footprint	49	12-Jun-18	09-Aug-18	12-Jun-18	09-Aug-18*	0%	0%	0								
IPA Area A - Earthwork																	
Construction of IPA works																	
IPA.AA.330	Construct Root Barriers	5	06-Jun-18	11-Jun-18	06-Jun-18	11-Jun-18	0%	0%	0								
IPA.AA.380	Construct fire mains	20	06-Apr-18	28-Apr-18	06-Apr-18 A	25-Jun-18	100%	20%	-46								
IPA.AA.310	Construct drainage, catch pits & UC	20	10-Apr-18	03-May-18	22-Mar-18 A	25-Jun-18	100%	90%	-43								
IPA.AA.320	Construct Cable ducts & Draw pits i.e ICT, ELV, FTNS, lighting etc	20	10-Apr-18	03-May-18	22-Mar-18 A	25-Jun-18	100%	90%	-43								
IPA.AA.340	Construct district wide CLP cable ducts & Draw pits	20	11-Apr-18	04-May-18	02-Apr-18 A	25-Jun-18	100%	10%	-42								
IPA.AA.350	Construct light ducts & pole footings	20	10-Apr-18	03-May-18	22-Mar-18 A	25-Jun-18	100%	90%	-43								
IPA.AA.360	Construct irrigation system	20	06-Jun-18	29-Jun-18	06-Jun-18	29-Jun-18	0%	0%	0								
IPA.AA.370	Construct main path & secondary path	20	06-Jun-18	29-Jun-18	06-Jun-18	29-Jun-18	0%	0%	0								
IPA.AA.390	Construct fencing	20	08-Jun-18	03-Jul-18	08-Jun-18	03-Jul-18	0%	0%	0								
IPA.AA.420	Complete HCC scope and Ready for Handover of Area A to Park Contractor	0		04-Jul-18		04-Jul-18	0%	0%	0								
IPA Area B - Earthwork																	
Clear up & water proofing ICP & use as facade yard (High level - South)																	
IPA.AB.90	Clear up Area B	5	08-Jun-18	13-Jun-18	08-Jun-18	13-Jun-18	0%	0%	0								
Backfill to future formation level																	
IPA.AB.100	Install ASC block and RC encase	9	17-Apr-18	26-Apr-18	09-Apr-18 A	11-Jun-18	100%	80%	-37								
IPA.AB.120	Backfill with soil	19	04-May-18	26-May-18	06-Apr-18 A	23-Jun-18	100%	20%	-23								
Construction of UU																	
IPA.AB.130	Construct drainage, catch pits & UC	28	25-Jun-18	27-Jul-18	25-Jun-18	27-Jul-18	0%	0%	0								
IPA.AB.140	Construct district wide CLP Cable ducts & Draw pits	28	20-Jul-18	21-Aug-18	20-Jul-18	21-Aug-18	0%	0%	0								
IPA.AB.150	Construct light ducts & pole footings	21	03-Aug-18	27-Aug-18	03-Aug-18	27-Aug-18	0%	0%	0								
IPA.AB.160	Construct CLP cable ducts & Draw pits Southside	20	28-Aug-18	19-Sep-18	28-Aug-18	19-Sep-18	0%	0%	0								
IPA Area C - Earthwork																	
Backfill of soil as per temp profile																	
IPA.AC.230	Backfill to design profile (deferred area)	10	26-Jun-18	07-Jul-18	26-Jun-18	07-Jul-18	0%	0%	0								
Construction of Storm Drain																	
Between SE2.7 - DM52C (-39m)																	
IPA.AC.110	Plug off manhole SE2.7 & DM52C	1	07-Jun-18	07-Jun-18	19-May-18 A	01-Jun-18	0%	50%	5								
IPA.AC.90	Install 1200mm pipes	3	02-Jun-18	05-Jun-18	19-May-18 A	04-Jun-18	0%	50%	1								
IPA.AC.120	Backfill & SRT	3	08-Jun-18	11-Jun-18	19-May-18 A	04-Jun-18	0%	50%	6								

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										May 30	07	14	21	28	04	June 11	18	25	July 02	09	16	23	30	August 06	13	20	27	
IPA.AC.50	Install sheet piles	4	04-May-18	08-May-18	23-Apr-18 A	05-Jun-18	100%	50%	-23	[Gantt bar for IPA.AC.50]																		
IPA.AC.100	Testing	1	05-Jun-18	05-Jun-18	05-Jun-18	05-Jun-18	0%	0%	0	[Gantt bar for IPA.AC.100]																		
IPA.AC.60	Excavate & install 1st strut	3	03-May-18	05-May-18	24-Apr-18 A	06-Jun-18	100%	50%	-26	[Gantt bar for IPA.AC.60]																		
IPA.AC.70	Excavate & install 2st strut	3	04-May-18	07-May-18	25-Apr-18 A	07-Jun-18	100%	50%	-26	[Gantt bar for IPA.AC.70]																		
IPA.AC.80	Excavate to formation & SRT & blinding	2	05-May-18	07-May-18	26-Apr-18 A	08-Jun-18	100%	50%	-27	[Gantt bar for IPA.AC.80]																		
Construction of Sewer Drain																												
Between F2.1E - SM19																												
IPA.AC.140	Install sheet piles	4	07-Jun-18	11-Jun-18	07-Jun-18	11-Jun-18	0%	0%	0	[Gantt bar for IPA.AC.140]																		
IPA.AC.150	Excavate & install ELS (1st layer)	3	12-Jun-18	14-Jun-18	12-Jun-18	14-Jun-18	0%	0%	0	[Gantt bar for IPA.AC.150]																		
IPA.AC.160	Excavate to formation & SRT & blinding	2	15-Jun-18	16-Jun-18	15-Jun-18	16-Jun-18	0%	0%	0	[Gantt bar for IPA.AC.160]																		
IPA.AC.180	Install 300DI pipes	2	19-Jun-18	20-Jun-18	19-Jun-18	20-Jun-18	0%	0%	0	[Gantt bar for IPA.AC.180]																		
IPA.AC.200	Testing	1	21-Jun-18	21-Jun-18	21-Jun-18	21-Jun-18	0%	0%	0	[Gantt bar for IPA.AC.200]																		
IPA.AC.210	Plug off manhole F2.1E & SM19	1	22-Jun-18	22-Jun-18	22-Jun-18	22-Jun-18	0%	0%	0	[Gantt bar for IPA.AC.210]																		
IPA.AC.220	Backfill & SRT & remove ELS	2	23-Jun-18	25-Jun-18	23-Jun-18	25-Jun-18	0%	0%	0	[Gantt bar for IPA.AC.220]																		
Construction of remaining UU																												
IPA.AC.240	Construct drainage, catch pits & UC	17	09-Jul-18	27-Jul-18	09-Jul-18	27-Jul-18	0%	0%	0	[Gantt bar for IPA.AC.240]																		
Construct district wide CLP ducts																												
IPA.AC.250	Open cut to formation & SRT & blinding	8	16-Jul-18	24-Jul-18	23-May-18 A	09-Jun-18	0%	10%	36	[Gantt bar for IPA.AC.250]																		
IPA.AC.340	Lay ducts	4	11-Jun-18	14-Jun-18	11-Jun-18	14-Jun-18	0%	0%	0	[Gantt bar for IPA.AC.340]																		
IPA.AC.350	Backfill & SRT	5	15-Jun-18	21-Jun-18	15-Jun-18	21-Jun-18	0%	0%	0	[Gantt bar for IPA.AC.350]																		
Construct light ducts & pole footings																												
IPA.AC.260	Excavate to formation & SRT & blinding	2	09-Jul-18	10-Jul-18	09-Jul-18	10-Jul-18	0%	0%	0	[Gantt bar for IPA.AC.260]																		
IPA.AC.280	Install ducts & backfill	4	11-Jul-18	14-Jul-18	11-Jul-18	14-Jul-18	0%	0%	0	[Gantt bar for IPA.AC.280]																		
Lighting cable ducts																												
IPA.AC.290	Excavate to formation & SRT & blinding	1	11-Jul-18	11-Jul-18	11-Jul-18	11-Jul-18	0%	0%	0	[Gantt bar for IPA.AC.290]																		
IPA.AC.300	Install ducts & backfill	4	12-Jul-18	16-Jul-18	12-Jul-18	16-Jul-18	0%	0%	0	[Gantt bar for IPA.AC.300]																		
IPA.AC.320	Construct lighting base	4	17-Jul-18	20-Jul-18	17-Jul-18	20-Jul-18	0%	0%	0	[Gantt bar for IPA.AC.320]																		
Construction of EVA																												
South side																												
IPA.AC.270	Prepare formation and SRT	3	09-Jul-18	11-Jul-18	09-Jul-18	11-Jul-18	0%	0%	0	[Gantt bar for IPA.AC.270]																		
IPA.AC.310	Lay kerbs	9	12-Jul-18	21-Jul-18	12-Jul-18	21-Jul-18	0%	0%	0	[Gantt bar for IPA.AC.310]																		
IPA.AC.330	Lay path base	9	17-Jul-18	27-Jul-18	17-Jul-18	27-Jul-18	0%	0%	0	[Gantt bar for IPA.AC.330]																		
IPA.AC.370	Lay path surface	9	23-Jul-18	02-Aug-18	23-Jul-18	02-Aug-18*	0%	0%	0	[Gantt bar for IPA.AC.370]																		
Construction of remaining paths & EVA																												
IPA.AC.360	Open cut to formation & SRT & blinding	3	15-Jun-18	19-Jun-18	15-Jun-18	19-Jun-18	0%	0%	0	[Gantt bar for IPA.AC.360]																		
IPA.AC.380	Lay kerbs	5	20-Jun-18	25-Jun-18	20-Jun-18	25-Jun-18	0%	0%	0	[Gantt bar for IPA.AC.380]																		
IPA.AC.390	Lay path base	6	26-Jun-18	03-Jul-18	26-Jun-18	03-Jul-18	0%	0%	0	[Gantt bar for IPA.AC.390]																		
IPA.AC.400	Lay path surface	7	04-Jul-18	11-Jul-18	04-Jul-18	11-Jul-18	0%	0%	0	[Gantt bar for IPA.AC.400]																		
IPA.AC.410	Complete HCC scope and Ready for Handover of Area C to Park Contractor	0	12-Jul-18	12-Jul-18	12-Jul-18	12-Jul-18	0%	0%	0	[Gantt bar for IPA.AC.410]																		
DCS Plant Feeding CHW to Park Freespace Building																												
KD & MS																												
DCS-01	Complete Installation of Cable Ducts for CLP Inspection	0		06-Jul-18		06-Jul-18*	0%	0%	0	[Gantt bar for DCS-01]																		
DCS-02	Energise Transformer Room TX C	0		24-Aug-18		24-Aug-18*	0%	0%	0	[Gantt bar for DCS-02]																		
DCS-03	Commission DCS System and complete all works necessary to provide Chilled Water to Park	0		31-Aug-18		31-Aug-18*	0%	0%	0	[Gantt bar for DCS-03]																		
Construction																												
DCS.160	Construct Civil Works	29	23-Mar-18	30-Apr-18	16-Mar-18 A	06-Jul-18	100%	60%	-54	[Gantt bar for DCS.160]																		
DCS.170	Cable Laying (by CLP)	24	10-Jul-18	06-Aug-18	10-Jul-18	06-Aug-18	0%	0%	0	[Gantt bar for DCS.170]																		
DCS.100	Short Pipe Fabrication and Delivery	57	19-Jan-18	29-Mar-18	19-Jan-18 A	08-Aug-18*	100%	0%	-105	[Gantt bar for DCS.100]																		
DCS.220	Power On	16	07-Aug-18	24-Aug-18	07-Aug-18	24-Aug-18	0%	0%	0	[Gantt bar for DCS.220]																		
Sea Water Pump Shell																												
DCS.180	Completion of Installation Works	0		01-Jun-18		01-Jun-18*	0%	0%	0	[Gantt bar for DCS.180]																		
DCS.150	Power on to Sea Water Plant	15	12-Jun-18	29-Jun-18	12-Jun-18	29-Jun-18	0%	0%	0	[Gantt bar for DCS.150]																		
DCS.140	Pipe Flushing incl. Testing and Commissioning	26	08-Jun-18	10-Jul-18	08-Jun-18	10-Jul-18	0%	0%	0	[Gantt bar for DCS.140]																		
DCS Plant																												

Three Months Rolling Programme (3MRP) - Mth 32 - 31 May

Activity ID	Activity Name	CMWP Dur.	CMWP - R0 (D8*) Start	CMWP - R0 (D8) Finish	Actual / Forecast Start	Actual / Forecast Finish	Planned B/L % Complete	Actual % Complete	Finish Variance (+/-d)	May				June				July				August								
										30	07	14	21	28	04	11	18	25	02	09	16	23	30	06	13	20	27			
U/G chilled water pipes																														
DCS.120	Power on to Chilled Water Plant	15	12-Jun-18	29-Jun-18	12-Jun-18	29-Jun-18*	0%	0%	0																					
DCS.190	Completion of Installation	0		30-Jun-18		30-Jun-18*	0%	0%	0																					
DCS.130	Pipe Flushing incl. Testing and Commissioning	52	30-Jun-18	31-Aug-18	30-Jun-18	31-Aug-18	0%	0%	0																					
DCS-3	Commission DCS System and complete all works necessary to provide Chilled Water to Park	0		31-Aug-18		31-Aug-18*	0%	0%	0																					
U/G chilled water pipes																														
DCS.110	Pipe Flushing incl. Testing and Commissioning	48	14-Jun-18	10-Aug-18	14-Jun-18*	10-Aug-18*	0%	0%	0																					
DCS.200	Ready for final connection by Park	0		10-Aug-18		10-Aug-18	0%	0%	0																					
ICP - External Envelope																														
A36990	ICP - Install GRC Architectural Louvre & Bracket	40	09-Jun-18	28-Jul-18	09-Jun-18	28-Jul-18	0%	0%	0																					
A37010	ICP - Install Facade Louvre Screen	40	09-Jun-18	28-Jul-18	09-Jun-18	28-Jul-18	0%	0%	0																					
A37000	ICP - GRC Facade Final Cleaning	16	28-Jul-18	16-Aug-18	28-Jul-18	16-Aug-18	0%	0%	0																					
A37020	ICP - Facade Louvre Screen Final Cleaning	16	28-Jul-18	16-Aug-18	28-Jul-18	16-Aug-18	0%	0%	0																					
External Works																														
SPS																														
SPS - G/F External Utilities & Roadworks																														
Works Above SPS and ICP at Portion A																														
A37340	Portion A - Final backfilling	54	19-Dec-17	27-Feb-18	28-Oct-17 A	04-Jun-18	100%	95%	-77																					
A37350	Portion A - EVA Carriageway / Roadworks	54	23-Mar-18	31-May-18	12-Mar-18 A	11-Jul-18	100%	40%	-32																					
ICP																														
ICP - G/F External Utilities & Roadworks																														
Entrance Portal from At-grade Road																														
A56630	ICP - Construct Entrance Carriageway	11	06-Apr-18	19-Apr-18	11-Apr-18 A	11-Jun-18	100%	20%	-43																					
Works Above ICP at Portion B																														
A37470	Portion B - Waterproofing & Backfilling	27	16-Sep-17	19-Oct-17	23-Sep-17 A	04-Jun-18	100%	90%	-182																					
A37480	Portion B - Above Slab Utilities & Fire Hydrant	30	04-Jun-18	11-Jul-18	04-Jun-18	11-Jul-18	0%	0%	0																					
A37490	Portion B - Final backfilling	27	29-Nov-17	02-Jan-18	30-Aug-17 A	19-Jul-18	100%	0%	-159																					
A37500	Portion B - EVA Carriageway / Roadworks	60	04-Jun-18	15-Aug-18	04-Jun-18	15-Aug-18	0%	0%	0																					
Co-ordinated External Works & Utilities Services Installation																														
Interface Dates																														
Access Dates																														
A60730	L01 - West of Lyric Main Site L01 (near M14 & M14a) (15Aug2017)	0	01-Jun-18		01-Jun-18		0%	0%	0																					
A25130	M70 - Arts Pavilion Area on M+ side of M+ / Park Interface (t.b.a.)	0	01-Jun-18		01-Jun-18*		0%	0%	0																					
Vacation Date																														
A25910	L22 - Area Reserved for AISO, Northern Part including Walkway (25Jan2019)	0		01-Jun-18		01-Jun-18	0%	0%	0																					
A25920	L23 - Area Reserved for AISO, Southern Part(25Jan2019)	0		01-Jun-18		01-Jun-18	0%	0%	0																					
A25930	L25 - MTR Area to North-West of MTR Workshop(25Jan2019)	0		01-Jun-18		01-Jun-18	0%	0%	0																					
A25940	L26 - MTR Area to South-West of MTR Workshop(25Jan2019)	0		01-Jun-18		01-Jun-18	0%	0%	0																					
A25320	M12 - Lyric Interface North (2nd H/O to Lyric) (31Mar17)	0		01-Jun-18		01-Jun-18	0%	0%	0																					
A25390	M16 - M+ Lyric Interface South (2nd H/O to Lyric) (31May17)	0		01-Jun-18		01-Jun-18*	0%	0%	0																					
A25420	M19 - M+ Waterfront Promenade Part within STT Area (H/O to Waterfront Promenade Ctr)(31Dec2017)	0		01-Jun-18		01-Jun-18	0%	0%	0																					
A60740	L04 - East of Lyric Main Site L04 (near AISO office) (27Jun2017)	0		01-Jun-18		01-Jun-18	0%	0%	0																					
A60760	L06 - West of Lyric Main Site (near M14 & M14a) (15Aug2017)	0		01-Jun-18		01-Jun-18*	0%	0%	0																					
A60770	L01 - West of Lyric Main Site L01 (near M14 & M14a) (15Aug2017)	0		01-Jun-18		01-Jun-18*	0%	0%	0																					
A25270	M07 - ICP Frontage beside At-grade Road (25Jan19)	0		01-Jun-18		01-Jun-18	0%	0%	0																					
A25550	M38 - Lyric Waterfront (Part of MTR Area A1) (H/O to Lyric) (31May2017)	0		01-Jun-18		01-Jun-18*	0%	0%	0																					
A25560	M39 - Lyric Waterfront / through ESS Compound (H/O to Lyric) (31May2017)	0		01-Jun-18		01-Jun-18*	0%	0%	0																					
A25590	M42 - Lyric Waterfront east of barging point (Prior to Lyric Main Ctr) (31May2017)	0		01-Jun-18		01-Jun-18*	0%	0%	0																					
A25480	M26 - M+ Entrance interface with At-grade Road (Practical Completion)	0		01-Jun-18		01-Jun-18	0%	0%	0																					
A25640	M47 - M+ Promenade Terrace (Practical Completion)	0		01-Jun-18		01-Jun-18	0%	0%	0																					
A25650	M48 - M+ Waterfront Promenade Part incl' KGO Pump Cells (H/O to Waterfront Promenade Ctr) (31Dec2017)	0		01-Jun-18		01-Jun-18*	0%	0%	0																					
A25660	M49 - M+ Waterfront Part for Access Around ESS (H/O to Waterfront Promenade Ctr) (31Dec2017)	0		01-Jun-18		01-Jun-18	0%	0%	0																					
A25700	M54 - Internal of ICP (Practical Completion)	0		01-Jun-18		01-Jun-18	0%	0%	0																					
A25710	M55 - Footprint of RDE Building (Parcel 39B) (on OP & PC of RDE Building) (25Jul2018)	0		01-Jun-18		01-Jun-18	0%	0%	0																					
A25720	M56 - Around RDE Building (Parcel 39B) (on OP & PC of RDE Building) (25Jul2018)	0		01-Jun-18		01-Jun-18	0%	0%	0																					

Three Months Rolling Programme (3MRP) - Mth 32 - 31 May

Activity ID	Activity Name	CMWP Dur.	CMWP - R0 (D8*) Start	CMWP - R0 (D8) Finish	Actual / Forecast Start	Actual / Forecast Finish	Planned B/L % Complete	Actual % Complete	Finish Variance (+/-d)	Gantt Chart (May to August)																		
										May 30	May 07	May 14	May 21	May 28	June 04	June 11	June 18	June 25	July 02	July 09	July 16	July 23	August 30	August 06	August 13	August 20	August 27	
A26450	Complete drain test & Handover to DSD (3 months prior to KD03 of Park Contract) (22 Sep 2017)	0		07-Jun-18		07-Jun-18	0%	0%	0	Complete drain test & Handover to DSD (3 months prior to KD03 of Park Contract)																		
A26430	Complete Laying Sewer Pipe DN300 from F2.1E to SM19	0		04-Aug-18		04-Aug-18	0%	0%	0	Complete Laying Sewer																		
SPS & Interface Carpark Interface w/ Park																												
A26500	Complete Access Road to SPS for FS Inspection (Park above ICP)	0		01-Jun-18		01-Jun-18	0%	0%	0	Complete Access Road to SPS for FS Inspection (Park above ICP)																		
A26510	Obtain necessary OP for ICP	0		01-Jun-18		01-Jun-18	0%	0%	0	Obtain necessary OP for ICP																		
Telecoms Interface w/ Park PIW (W of M+)																												
A26520	Allow Access to Park Contractor to connect ICT Cable Ducts to M+ Draw-pit	0	01-Jun-18		01-Jun-18		0%	0%	0	Allow Access to Park Contractor to connect ICT Cable Ducts to M+ Draw-pit, 01-Jun-18																		
A26530	Allow Access to Park Contractor to connect ELV Cable Ducts to M+ Draw-pit	0	01-Jun-18		01-Jun-18		0%	0%	0	Allow Access to Park Contractor to connect ELV Cable Ducts to M+ Draw-pit, 01-Jun-18																		
A26540	Allow Access to Park Contractor to construct & connect FTNS Cable Ducts at M+ GL A/6-7	0	01-Jun-18		01-Jun-18		0%	0%	0	Allow Access to Park Contractor to construct & connect FTNS Cable Ducts at M+ GL A/6-7																		
Pre-Construction Works																												
Shop Drawings Submission & Approval																												
PC-SDSA-1000	Shop drawings	267	03-Oct-16	25-Aug-17	03-Oct-16 A	19-Nov-18	100%	0%	-366																			
Method Statement & ITP Submission & Approval																												
PC-MSSA-1000	Method statement & ITP	267	03-Oct-16	25-Aug-17	03-Oct-16 A	19-Nov-18	100%	0%	-366																			
Landscaping Submission and Approval																												
Landscaping Preliminaries																												
Soft Landscaping																												
A2190	Approval of green roof system materials	90	13-Dec-17	13-Mar-18	01-Mar-18 A	23-Jun-18	100%	74.44%	-103																			
A2270	Approval of grass paver materials	90	02-Apr-18	30-Jun-18	06-Mar-18 A	25-Jun-18	66.67%	72.22%	5																			
A65240	Submission of plant photos	90	01-Dec-17	01-Mar-18	01-Dec-17 A	14-Jul-18	100%	51.11%	-136																			
A65250	Approval of plants	40	15-Jul-18	23-Aug-18	15-Jul-18	23-Aug-18	0%	0%	0																			
A2220	Submission of green wall materials & drawings	90	16-Dec-17	16-Mar-18	19-Feb-18 A	14-Sep-18	100%	0%	-183																			
A2200	Submission of vertical greening materials & drawings	90	16-Dec-17	16-Mar-18	19-Feb-18 A	15-Sep-18	100%	0%	-184																			
A65270	Submission of soiling material	61	24-Aug-18	23-Oct-18	24-Aug-18	23-Oct-18	0%	0%	0																			
A2240	Submission of hydroseeding materials	65	24-Aug-18	27-Oct-18	24-Aug-18	27-Oct-18	0%	0%	0																			
A2300	Submission of Procurement of material	153	24-Jun-18	23-Nov-18	24-Jun-18	23-Nov-18	0%	0%	0	A2300																		
Irrigation System																												
A2320	Submission of irrigation system materials	90	15-Jul-18	12-Oct-18	15-Jul-18	12-Oct-18	0%	0%	0	A2320																		
A2340	Submission of irrigation system drawings	90	15-Jul-18	12-Oct-18	15-Jul-18	12-Oct-18	0%	0%	0	A2340																		
A2330	Approval of irrigation system materials	90	26-Aug-18	23-Nov-18	26-Aug-18	23-Nov-18	0%	0%	0	A2330																		
A2350	Approval of irrigation system drawings	90	26-Aug-18	23-Nov-18	26-Aug-18	23-Nov-18	0%	0%	0	A2350																		
Materials Submission & Approval																												
General Items																												
PC-MTSA-1080	General materials	267	03-Oct-16	25-Aug-17	03-Oct-16 A	19-Nov-18	100%	0%	-366																			
Long Lead Items																												
PC-MTSA-1090	Metal ceiling	160	10-Apr-17	23-Oct-17	10-Apr-17 A	18-Sep-18	100%	43%	-267																			
PC-MTSA-1060	Timber (floor, wall & ceiling)	160	13-Feb-17	26-Aug-17	13-Feb-17 A	26-Sep-18	100%	39%	-321																			
PC-MTSA-1070	Glazing works	160	09-Mar-17	20-Sep-17	09-Mar-17 A	20-Oct-18	100%	27%	-319																			
PC-MTSA-1010	Door Ironmongeries	267	03-Oct-16	25-Aug-17	03-Oct-16 A	31-Oct-18	100%	53%	-350																			
PC-MTSA-1020	Tiling works	267	03-Oct-16	25-Aug-17	03-Oct-16 A	31-Oct-18	100%	53%	-350																			
PC-MTSA-1030	Fire shutters	267	03-Oct-16	25-Aug-17	03-Oct-16 A	31-Oct-18	100%	53%	-350																			
PC-MTSA-1040	Smoke curtain	267	03-Oct-16	25-Aug-17	03-Oct-16 A	31-Oct-18	100%	53%	-350																			
PC-MTSA-1050	Security shutters (Lateral sliding type)	267	03-Oct-16	25-Aug-17	03-Oct-16 A	31-Oct-18	100%	53%	-350																			
PC-MTSA-1140	Security shutters (Top-mounted)	267	03-Oct-16	25-Aug-17	03-Oct-16 A	31-Oct-18	100%	53%	-350																			
PC-MTSA-1000	Doors	267	03-Oct-16	25-Aug-17	03-Oct-16 A	31-Oct-18	100%	53%	-350																			
PC-MTSA-1120	Raised floor system	160	27-Apr-17	07-Nov-17	27-Apr-17 A	03-Dec-18	100%	4%	-318																			
PC-MTSA-1130	FF&E Items (seating/ cushion, curtain, blinds, etc)	174	01-Jun-18	28-Dec-18	01-Jun-18	28-Dec-18	0%	0%	0	PC-MTSA-1130																		
PC-MTSA-1150	Fixed & loose furniture	177	01-Jun-18	02-Jan-19	01-Jun-18	02-Jan-19	0%	0%	0	PC-MTSA-1150																		
PC-MTSA-1100	Fabric	160	15-May-17	22-Nov-17	15-May-17 A	15-Jan-19	100%	0%	-339																			
PC-MTSA-1110	Carpet, linoleum & mats	212	04-Jun-18	19-Feb-19	04-Jun-18	19-Feb-19	0%	0%	0	PC-MTSA-1110																		
Procurement																												
General Items																												
PC-MTPR-108	General items	267	17-Nov-16	11-Oct-17	17-Nov-16 A	08-Jan-19	100%	40%	-368																			
Long Lead Items																												

Three Months Rolling Programme (3MRP) - Mth 32 - 31 May

Activity ID	Activity Name	CMWP Dur.	CMWP - R0 (D8*) Start	CMWP - R0 (D8) Finish	Actual / Forecast Start	Actual / Forecast Finish	Planned B/L % Complete	Actual % Complete	Finish Variance (+/-d)	Gantt Chart (Timeline)							
										May 30	May 07	May 14	May 21	May 28	June 04	June 11	June 18
Doors																	
PC-MTPR-10I	Transformer Room Doors	80	09-Feb-17	19-May-17	09-Feb-17 A	30-Jun-18	100%	0%	-331	[Gantt bar: 09-Feb-17 to 30-Jun-18]							
PC-MTPR-10I	Priority Doors (for Mechanical Rooms)	80	09-Aug-18	14-Nov-18	09-Aug-18	14-Nov-18	0%	0%	0	[Gantt bar: 09-Aug-18 to 14-Nov-18]							
Ironmongeries																	
PC-MTPR-10I	Transformer Room Door Ironmongeries	80	09-Feb-17	19-May-17	09-Feb-17 A	30-Jun-18	100%	68.75%	-331	[Gantt bar: 09-Feb-17 to 30-Jun-18]							
PC-MTPR-10I	Priority Door Ironmongeries (for Mechanical Rooms)	80	02-Aug-18	07-Nov-18	02-Aug-18	07-Nov-18	0%	0%	0	[Gantt bar: 02-Aug-18 to 07-Nov-18]							
Tiling Works																	
PC-MTPR-10I	Other Tiling Areas	107	26-Jul-18	30-Nov-18	26-Jul-18	30-Nov-18	0%	0%	0	[Gantt bar: 26-Jul-18 to 30-Nov-18]							
Timber (Floor, Wall & Ceiling)																	
PC-MTPR-10I	Timber for Benchmark Toilet/ Toilet Lobby @ B2/F)	133	20-May-17	27-Oct-17	05-May-17 A	09-Nov-18	100%	0%	-306	[Gantt bar: 20-May-17 to 27-Oct-17]							
Other Long Lead Items																	
PC-MTPR-10I	Metal ceiling	80	17-Jul-18	22-Oct-18	17-Jul-18	22-Oct-18	0%	0%	0	[Gantt bar: 17-Jul-18 to 22-Oct-18]							
PC-MTPR-11I	FF&E Items (seating/ cushion, curtain, blinds, etc)	107	15-Jun-18	23-Oct-18	15-Jun-18	23-Oct-18	0%	0%	0	[Gantt bar: 15-Jun-18 to 23-Oct-18]							
PC-MTPR-10I	Fire shutters	54	25-Aug-18	31-Oct-18	25-Aug-18	31-Oct-18	0%	0%	0	[Gantt bar: 25-Aug-18 to 31-Oct-18]							
PC-MTPR-10I	Smoke curtain	54	25-Aug-18	31-Oct-18	25-Aug-18	31-Oct-18	0%	0%	0	[Gantt bar: 25-Aug-18 to 31-Oct-18]							
PC-MTPR-11I	Security shutters (Lateral sliding type)	80	16-Aug-18	21-Nov-18	16-Aug-18	21-Nov-18	0%	0%	0	[Gantt bar: 16-Aug-18 to 21-Nov-18]							
PC-MTPR-11I	Fixed & loose furniture	138	15-Jun-18	28-Nov-18	15-Jun-18	28-Nov-18	0%	0%	0	[Gantt bar: 15-Jun-18 to 28-Nov-18]							
PC-MTPR-10I	Security Shutters (Top mounted)	107	26-Jul-18	30-Nov-18	26-Jul-18	30-Nov-18	0%	0%	0	[Gantt bar: 26-Jul-18 to 30-Nov-18]							
PC-MTPR-10I	Glazing works	107	16-Aug-18	22-Dec-18	16-Aug-18	22-Dec-18	0%	0%	0	[Gantt bar: 16-Aug-18 to 22-Dec-18]							
Construction																	
Seawater Outfall Pipe																	
Construction at CH0+86 to CH0+108																	
Construct Cofferdam & Pipe works for Lead In (CH0+102 to CH0+108)																	
A26880	Pressure Test	6	04-Jun-18	09-Jun-18	04-Jun-18	09-Jun-18	0%	0%	0	[Gantt bar: 04-Jun-18 to 09-Jun-18]							
A26890	Back Filling to Ground Level	6	11-Jun-18	16-Jun-18	11-Jun-18	16-Jun-18	0%	0%	0	[Gantt bar: 11-Jun-18 to 16-Jun-18]							
Construction at CH0+0 to CH66																	
Trench Excavation & Pipe works CH0+0 to CH0+32																	
A27110	Trench @GL +5.0mPD to +4.0mPD	12	19-Apr-18	04-May-18	19-Mar-18 A	07-Jun-18	100%	50%	-29	[Gantt bar: 19-Apr-18 to 04-May-18]							
A27150	Pipe Laying & Associated Works	21	01-Jun-18	26-Jun-18	19-May-18 A	13-Jun-18	0%	50%	11	[Gantt bar: 01-Jun-18 to 26-Jun-18]							
A27180	Pressure Test	6	07-Jun-18	13-Jun-18	07-Jun-18	13-Jun-18	0%	0%	0	[Gantt bar: 07-Jun-18 to 13-Jun-18]							
A27190	Back Filling to 1st layer Struts	1	14-Jun-18	14-Jun-18	14-Jun-18	14-Jun-18	0%	0%	0	[Gantt bar: 14-Jun-18 to 14-Jun-18]							
A27200	Dismantle 1st Layer Struts & Wailing	6	15-Jun-18	22-Jun-18	15-Jun-18	22-Jun-18	0%	0%	0	[Gantt bar: 15-Jun-18 to 22-Jun-18]							
A27210	Back Filling to GL	1	23-Jun-18	23-Jun-18	23-Jun-18	23-Jun-18	0%	0%	0	[Gantt bar: 23-Jun-18 to 23-Jun-18]							
A27160	Construct Bend Blocks	15	13-Jun-18	03-Jul-18	13-Jun-18	03-Jul-18	0%	0%	0	[Gantt bar: 13-Jun-18 to 03-Jul-18]							
DCS Box (Portion M15&M16)																	
A27290	Construct remaining wall & roof	12	16-Dec-17	02-Jan-18	26-Aug-17 A	19-Jun-18	100%	0%	-134	[Gantt bar: 16-Dec-17 to 02-Jan-18]							
A27300	DCS Box complete	0		19-Jun-18		19-Jun-18	0%	0%	0	[Gantt bar: 19-Jun-18 to 19-Jun-18]							
Seawater Intake Pipe Works																	
Construction of Seawater Intake Pipe																	
A27490	Pressure Testing and Inspection	5	12-Oct-17	18-Oct-17	22-Jun-17 A	07-Jun-18	100%	0%	-187	[Gantt bar: 12-Oct-17 to 18-Oct-17]							
Seawater Pump Cell																	
BME																	
A58630	Delivery of DI pipe	2	29-Dec-17	30-Dec-17	29-Dec-17 A	01-Jun-18	100%	80%	-120	[Gantt bar: 29-Dec-17 to 30-Dec-17]							
A58660	Install sea water pump	2	29-Dec-17	30-Dec-17	29-Dec-17 A	01-Jun-18	100%	70%	-121	[Gantt bar: 29-Dec-17 to 30-Dec-17]							
A58610	Dismantle the existing unused Equipment	19	24-Jun-17	17-Jul-17	23-Jun-17 A	01-Jun-18	100%	95%	-259	[Gantt bar: 24-Jun-17 to 17-Jul-17]							
A58620	Builder's work	7	04-Sep-17	12-Sep-17	29-Aug-17 A	05-Jun-18	100%	55%	-213	[Gantt bar: 04-Sep-17 to 12-Sep-17]							
A58680	Install Pump motor	29	03-Jul-18	06-Aug-18	03-Jul-18	06-Aug-18	0%	0%	0	[Gantt bar: 03-Jul-18 to 06-Aug-18]							
A58640	Install DI pump	75	23-May-18	21-Aug-18	15-May-18 A	11-Aug-18	9.93%	20%	8	[Gantt bar: 23-May-18 to 21-Aug-18]							
A58670	Install electrical & Control	56	08-Jun-18	15-Aug-18	08-Jun-18	15-Aug-18	0%	0%	0	[Gantt bar: 08-Jun-18 to 15-Aug-18]							
A58690	Hydraulic Test of DI pipe	11	15-Aug-18	28-Aug-18	15-Aug-18	28-Aug-18	0%	0%	0	[Gantt bar: 15-Aug-18 to 28-Aug-18]							
A58700	T&C of Sea water Pump	27	28-Aug-18	29-Sep-18	28-Aug-18	29-Sep-18	0%	0%	0	[Gantt bar: 28-Aug-18 to 29-Sep-18]							
Plumbing & Drainage																	
A58750	Delivery of Pipes and Fittings	2	03-Apr-18	04-Apr-18	26-Mar-18 A	01-Jun-18	100%	70%	-47	[Gantt bar: 03-Apr-18 to 04-Apr-18]							
A58760	Install Pipes and Fittings	9	19-Apr-18	30-Apr-18	27-Mar-18 A	07-Jun-18	100%	40%	-31	[Gantt bar: 19-Apr-18 to 30-Apr-18]							

Three Months Rolling Programme (3MRP) - Mth 32 - 31 May

Activity ID	Activity Name	CMWP Dur.	CMWP - R0 (D8*) Start	CMWP - R0 (D8) Finish	Actual / Forecast Start	Actual / Forecast Finish	Planned B/L % Complete	Actual % Complete	Finish Variance (+/-d)	Gantt Chart (Timeline)																			
										May 30	May 07	May 14	May 21	May 28	June 04	June 11	June 18	June 25	July 02	July 09	July 16	July 23	August 30	August 06	August 13	August 20	August 27		
A58780	Install Sump Pump Panels	8	09-Jun-18	20-Jun-18	30-May-18 A	09-Jun-18	0%	10%	8	[Gantt bar for A58780: 30-May-18 to 09-Jun-18]																			
A58740	Install Sump Pumps	12	01-Jun-18	14-Jun-18	01-Jun-18	14-Jun-18	0%	0%	0	[Gantt bar for A58740: 01-Jun-18 to 14-Jun-18]																			
A58790	Hydraulic Test (Deansing Pipes)	6	09-Jun-18	16-Jun-18	09-Jun-18	16-Jun-18	0%	0%	0	[Gantt bar for A58790: 09-Jun-18 to 16-Jun-18]																			
A58800	T&C of Sump Pumps	13	16-Jun-18	04-Jul-18	16-Jun-18	04-Jul-18	0%	0%	0	[Gantt bar for A58800: 16-Jun-18 to 04-Jul-18]																			
Electrical Works																													
A58820	Delivery of Power Cable	2	11-May-18	14-May-18	09-May-18 A	01-Jun-18	100%	50%	-15	[Gantt bar for A58820: 09-May-18 to 01-Jun-18]																			
A58830	Delivery of Cable Tray	2	07-Apr-18	10-Apr-18	07-Apr-18 A	01-Jun-18	100%	50%	-44	[Gantt bar for A58830: 07-Apr-18 to 01-Jun-18]																			
A58890	Install Lighting Fitting and Wiring Accessories	10	15-Jun-18	28-Jun-18	19-May-18 A	06-Jun-18	0%	50%	18	[Gantt bar for A58890: 19-May-18 to 06-Jun-18]																			
A58840	Install Cable Tray and Power Cable	8	06-Jun-18	15-Jun-18	19-May-18 A	07-Jun-18	0%	30%	7	[Gantt bar for A58840: 19-May-18 to 07-Jun-18]																			
A58850	Install Surface Conduit and wiring Cable	8	06-Jun-18	15-Jun-18	19-May-18 A	07-Jun-18	0%	30%	7	[Gantt bar for A58850: 19-May-18 to 07-Jun-18]																			
A58880	Install MCB Board	10	07-Jun-18	20-Jun-18	30-May-18 A	09-Jun-18	0%	20%	8	[Gantt bar for A58880: 30-May-18 to 09-Jun-18]																			
A58900	T&C of Electrical Works	8	07-Jun-18	15-Jun-18	07-Jun-18	15-Jun-18	0%	0%	0	[Gantt bar for A58900: 07-Jun-18 to 15-Jun-18]																			
Fire Service Works																													
A58910	Dismantle the existing unused Equipment	4	18-Apr-18	21-Apr-18	26-Feb-18 A	01-Jun-18	100%	75%	-33	[Gantt bar for A58910: 26-Feb-18 to 01-Jun-18]																			
A58920	Deliver and Install heat detection system	5	09-Apr-18	13-Apr-18	09-Apr-18 A	05-Jun-18	100%	30%	-43	[Gantt bar for A58920: 09-Apr-18 to 05-Jun-18]																			
A58930	T&C of heat detection system	4	05-Jun-18	09-Jun-18	05-Jun-18	09-Jun-18	0%	0%	0	[Gantt bar for A58930: 05-Jun-18 to 09-Jun-18]																			
Sewerage																													
Sewerage Interface with PIW & F2 Contractor																													
Sewerage at Austin Road West (Portion L08)																													
A27850	Pressure Test	3	19-Jan-18	22-Jan-18	27-Dec-17 A	02-Jun-18	100%	50%	-104	[Gantt bar for A27850: 27-Dec-17 to 02-Jun-18]																			
Sewerage at Portion M01, Gridline A / 3-14																													
A27940	HCC grant access to Park Contractor for SM100 construction	0	15-Aug-18		15-Aug-18		0%	0%	0	[Gantt bar for A27940: 15-Aug-18 to 15-Aug-18]																			
MH F2.1E to MH F2.1D																													
A28150	Manhole & Trench Excavation for Sewerage Pipe between MH F2.1E to F2.1D	3	22-Jan-18	24-Jan-18	02-Jan-18 A	26-Jun-18	100%	0%	-121	[Gantt bar for A28150: 02-Jan-18 to 26-Jun-18]																			
A28160	Construct Manholes F2.1E	21	27-Jun-18	21-Jul-18	27-Jun-18	21-Jul-18	0%	0%	0	[Gantt bar for A28160: 27-Jun-18 to 21-Jul-18]																			
A28170	Lay Sewerage Pipe between MH F2.1E to F2.1D (DN375mm) (Approx. 25m)	33	27-Jun-18	04-Aug-18	27-Jun-18	04-Aug-18	0%	0%	0	[Gantt bar for A28170: 27-Jun-18 to 04-Aug-18]																			
A28180	Pressure Test	4	06-Aug-18	09-Aug-18	06-Aug-18	09-Aug-18	0%	0%	0	[Gantt bar for A28180: 06-Aug-18 to 09-Aug-18]																			
A28190	Backfill to ground level	4	10-Aug-18	14-Aug-18	10-Aug-18	14-Aug-18	0%	0%	0	[Gantt bar for A28190: 10-Aug-18 to 14-Aug-18]																			
Storm Drainage																													
Storm Drain DN750 along Gridline A/3-11 (MH S2.4 to S2.6)																													
A28530	Construct Manhole S2.4 & S2.6	11	20-Sep-17	03-Oct-17	20-Oct-17 A	01-Jun-18	100%	100%	-192	[Gantt bar for A28530: 20-Oct-17 to 01-Jun-18]																			
A28560	Backfill to existing ground level	5	30-Jan-18	05-Feb-18	21-Nov-17 A	09-Jun-18	100%	0%	-98	[Gantt bar for A28560: 21-Nov-17 to 09-Jun-18]																			
Storm Drain DN1050 along Gridline A/11-14 (MH S2.6 to S2.6A to S2.7 to S2.8)																													
A28580	Construct Manhole S2.6a, S2.7 & S2.8	12	05-Mar-18	17-Mar-18	11-Dec-17 A	04-Jun-18	100%	80%	-60	[Gantt bar for A28580: 11-Dec-17 to 04-Jun-18]																			
A28600	Pressure Test	5	16-Jan-18	20-Jan-18	13-Dec-17 A	08-Jun-18	100%	0%	-110	[Gantt bar for A28600: 13-Dec-17 to 08-Jun-18]																			
A28610	Backfill to existing ground level	5	22-Jan-18	26-Jan-18	14-Dec-17 A	14-Jun-18	100%	0%	-110	[Gantt bar for A28610: 14-Dec-17 to 14-Jun-18]																			
Storm Drain DN1050 along Gridline A/14 (MH S2.8 to S2.9a to SE2.7)																													
A28640	Construct Manhole S2.9a & SE2.7	11	04-Jun-18	15-Jun-18	04-Jun-18	15-Jun-18	0%	0%	0	[Gantt bar for A28640: 04-Jun-18 to 15-Jun-18]																			
A28650	Lay DN1050 pipe from Manholes S2.8 to S2.9a to SE2.7 (Approx. 37m)	7	16-Jun-18	25-Jun-18	16-Jun-18	25-Jun-18	0%	0%	0	[Gantt bar for A28650: 16-Jun-18 to 25-Jun-18]																			
A28660	Pressure Test	3	26-Jun-18	28-Jun-18	26-Jun-18	28-Jun-18	0%	0%	0	[Gantt bar for A28660: 26-Jun-18 to 28-Jun-18]																			
A28670	Backfill to existing ground level	5	29-Jun-18	05-Jul-18	29-Jun-18	05-Jul-18	0%	0%	0	[Gantt bar for A28670: 29-Jun-18 to 05-Jul-18]																			
Storm Drain at Gridline M/13																													
A28880	Excavate and lay 225 U-Channel Drain with Gully Trap	3	08-Jun-18	12-Jun-18	08-Jun-18	12-Jun-18	0%	0%	0	[Gantt bar for A28880: 08-Jun-18 to 12-Jun-18]																			
A28890	Excavate trench and lay 150DN Pipe from Gully Trap to MH S2.13	5	12-Jun-18	19-Jun-18	12-Jun-18	19-Jun-18	0%	0%	0	[Gantt bar for A28890: 12-Jun-18 to 19-Jun-18]																			
A28900	Backfill to existing ground level	1	19-Jun-18	20-Jun-18	19-Jun-18	20-Jun-18	0%	0%	0	[Gantt bar for A28900: 19-Jun-18 to 20-Jun-18]																			
Storm Drain DN750 along Gridline A-B/14 (MH S2.9c to S2.9b to S2.9a)																													
A29040	Construct Manhole S2.9b & S2.9c	14	16-Apr-18	02-May-18	14-Mar-18 A	08-Jun-18	100%	50%	-31	[Gantt bar for A29040: 14-Mar-18 to 08-Jun-18]																			
A29020	Excavate Trial Trench	3	08-Jun-18	11-Jun-18	08-Jun-18	11-Jun-18	0%	0%	0	[Gantt bar for A29020: 08-Jun-18 to 11-Jun-18]																			
A29050	Lay DN750 pipe from Manholes S2.9c to S2.9b to S2.9a (Approx. 21m)	6	09-Jun-18	15-Jun-18	09-Jun-18	15-Jun-18	0%	0%	0	[Gantt bar for A29050: 09-Jun-18 to 15-Jun-18]																			
A29030	Excavate to formation level	6	12-Jun-18	19-Jun-18	12-Jun-18	19-Jun-18	0%	0%	0	[Gantt bar for A29030: 12-Jun-18 to 19-Jun-18]																			
A29060	Pressure Test	3	16-Jun-18	20-Jun-18	16-Jun-18	20-Jun-18	0%	0%	0	[Gantt bar for A29060: 16-Jun-18 to 20-Jun-18]																			
A29070	Backfill to existing ground level	3	21-Jun-18	23-Jun-18	21-Jun-18	23-Jun-18	0%	0%	0	[Gantt bar for A29070: 21-Jun-18 to 23-Jun-18]																			
Storm Drain DN450 suspended along Gridline J/1-M/1																													
Storm Drain at Portion M12																													

HCC grant acc

Three Months Rolling Programme (3MRP) - Mth 32 - 31 May

Activity ID	Activity Name	CMWP Dur.	CMWP - R0 (D8') Start	CMWP - R0 (D8') Finish	Actual / Forecast Start	Actual / Forecast Finish	Planned B/L % Complete	Actual % Complete	Finish Variance (+/-d)	Gantt Chart							
										May 30	07	14	21	28	June 04	11	18
Grd Lvl - Storm / Drainage Connection (Outside SPS)																	
A37260	Sewerage - Install 450 / 300 Storm Drainage Pipes & Testing	5	19-Jan-18	24-Jan-18	09-Jan-18 A	01-Jun-18	100%	80%	-101								
A37280	Connect to Existing Storm Manholes & Backfill	5	19-Jan-18	24-Jan-18	10-Jan-18 A	02-Jun-18	100%	60%	-102								
A37290	Completed Storm Drain + Report	13	25-Jan-18	08-Feb-18	15-Jan-18 A	06-Jun-18	100%	61.54%	-92								
A37300	Inform DSD for Inspection of Storm Drain	6	04-Jun-18	09-Jun-18	04-Jun-18	09-Jun-18	0%	0%	0								
A37310	DSD Inspection	1	11-Jun-18	11-Jun-18	11-Jun-18	11-Jun-18	0%	0%	0								
Adjacent SPS to Center of At Grade Road																	
A29790	Backfill, Extract Sheet Piles and Reinstate Pavement	5	03-Mar-17	09-Mar-17	03-Mar-17 A	01-Jun-18	100%	81.25%	-363								
Center of At Grade Road to MH_2a.1																	
A38030	Excavate trial trench for existing underground utilities	6	20-Jan-18	26-Jan-18	20-Dec-17 A	01-Jun-18	100%	83.33%	-99								
A38040	Drive In Sheet Piles	2	27-Jan-18	29-Jan-18	23-Dec-17 A	02-Jun-18	100%	0%	-98								
A38050	Excavate to invert level and install struts	6	30-Jan-18	05-Feb-18	02-Jan-18 A	04-Jun-18	100%	50%	-93								
A38060	Laydown DN300 between MH6_2a.1 to Center of at Grade Road (Approx. 9m)	3	06-Feb-18	08-Feb-18	03-Jan-18 A	05-Jun-18	100%	0%	-91								
A38070	Pressure Test	3	09-Feb-18	12-Feb-18	05-Jan-18 A	06-Jun-18	100%	0%	-89								
A38080	Backfill, Extract Sheet Piles and Reinstate Pavement	6	13-Feb-18	22-Feb-18	08-Jan-18 A	07-Jun-18	100%	0%	-84								
Grd Lvl - External Storm Drainage Connection																	
A37450	Inform DSD for Inspection	6	22-Nov-17	28-Nov-17	06-Jul-17 A	12-Jun-18	100%	0%	-156								
A37460	DSD Inspection & Acceptance Test	11	13-Jun-18	26-Jun-18	13-Jun-18	26-Jun-18	0%	0%	0								
WSD																	
Water Main Works at Portion M01 (Refer to M+ MEP Programme)																	
A29820	Remove existing hoarding fixed to Sheet pile	3	01-Jun-18	04-Jun-18	01-Jun-18	04-Jun-18	0%	0%	0								
A29830	Install a new hoarding with 500mm clearance from roadside	3	05-Jun-18	07-Jun-18	05-Jun-18	07-Jun-18	0%	0%	0								
A29840	Excavate Trench in footway to expose PIW watermain & Cut Down Sheet Piles	2	08-Jun-18	09-Jun-18	08-Jun-18	09-Jun-18	0%	0%	0								
A29850	Lay 2Nos of DN150 DI Fresh Water Pipe & 1 No of DN100 DI Salt Water Pipe	5	11-Jun-18	15-Jun-18	11-Jun-18	15-Jun-18	0%	0%	0								
A29860	Pressure test (By PIW Contractor)	6	16-Jun-18	23-Jun-18	16-Jun-18	23-Jun-18	0%	0%	0								
A29870	Remove the Blank Flanges & Make Final Connection	2	25-Jun-18	26-Jun-18	25-Jun-18	26-Jun-18	0%	0%	0								
A29880	Backfill & Reinstate to Ground Level	3	27-Jun-18	29-Jun-18	27-Jun-18	29-Jun-18	0%	0%	0								
A29890	Handover to PIW for footway pavement construction (IS Appdx D1, #36-15 Aug 17)	0		29-Jun-18		29-Jun-18	0%	0%	0								
Water Main Works at Portion M17																	
A29940	Excavate Trench for DN150 pipe along gridline A-F/14	14	28-Mar-18	18-Apr-18	27-Jan-18 A	07-Jun-18	100%	57.14%	-41								
A29950	Lay down and install DN 150 pipe and connect isolation valve (gridline B-F/14)	13	18-Apr-18	04-May-18	31-Jan-18 A	08-Jun-18	100%	46.15%	-29								
A29920	Construct M+ Street Fire Hydrant & FS Pipe at gridline E-F/14	11	14-Mar-18	27-Mar-18	29-Jan-18 A	11-Jun-18	100%	18.18%	-59								
A29960	Construct End Block and Washout Tee with washout pump pit	9	06-Feb-18	20-Feb-18	01-Feb-18 A	11-Jun-18	100%	0%	-90								
A29970	Lay down and install remaining DN150 pipe	6	20-Feb-18	27-Feb-18	01-Feb-18 A	13-Jun-18	100%	0%	-86								
A29980	Pressure Test	3	14-Jun-18	16-Jun-18	14-Jun-18	16-Jun-18	0%	0%	0								
A29990	Swabbing Test	3	19-Jun-18	21-Jun-18	19-Jun-18	21-Jun-18	0%	0%	0								
A30000	Sterilization	6	22-Jun-18	28-Jun-18	22-Jun-18	28-Jun-18	0%	0%	0								
A30010	Lab Test	6	29-Jun-18	06-Jul-18	29-Jun-18	06-Jul-18	0%	0%	0								
A30020	Backfill to adjacent ground level	2	07-Jul-18	07-Jul-18	07-Jul-18	07-Jul-18	0%	0%	0								
A30030	Connection of Watermain (IS Appendix D1, #37, 31 October 2017)	0		09-Jul-18		09-Jul-18	0%	0%	0								
SPS External - Grd Lvl - Watermain (Outside SPS) to PIW																	
A30110	Lab Test	11	18-Nov-17	30-Nov-17	14-Nov-17 A	07-Jun-18	100%	50%	-150								
A30120	Watermain Final Connection	3	07-Jun-18	11-Jun-18	07-Jun-18	11-Jun-18	0%	0%	0								
ICP External - Grd Lvl - External Watermain Connection to PIW																	
A30190	Lab Test	11	26-May-18	07-Jun-18	19-May-18 A	07-Jun-18	45.45%	50%	1								
A30200	Watermain Final Connection	3	07-Jun-18	11-Jun-18	07-Jun-18	11-Jun-18	0%	0%	0								
A30220	Backfill to Ground Level	6	11-Jun-18	19-Jun-18	11-Jun-18	19-Jun-18	0%	0%	0								
Power																	
Power Cable 11kV at Footpath adjacent to Entrance Portal (Interface with PIW)																	
A30270	Lay Lead-in Cable (by CLP) & Inspection	27	01-Jun-18	04-Jul-18	01-Jun-18	04-Jul-18	0%	0%	0								
A30280	Backfilling footway to adjacent ground level	3	05-Jul-18	07-Jul-18	05-Jul-18	07-Jul-18	0%	0%	0								
Power Cable 11kV at Gridline A/ 1-3																	
A30310	Lay Lead-in Cable (by CLP) & connect to district-wide system	27	01-Jun-18	04-Jul-18	01-Jun-18	04-Jul-18	0%	0%	0								
Power Cable 11kV at Gridline A/ 3-14																	

Three Months Rolling Programme (3MRP) - Mth 32 - 31 May

Activity ID	Activity Name	CMWP Dur.	CMWP - R0 (D8*) Start	CMWP - R0 (D8) Finish	Actual / Forecast Start	Actual / Forecast Finish	Planned B/L % Complete	Actual % Complete	Finish Variance (+/-d)	Gantt Chart							
										May 30	May 07	May 14	May 21	May 28	June 04	June 11	June 18
Inspection & Testing																	
A30390	Test & Inspection	27	02-Jun-18	05-Jul-18	02-Jun-18	05-Jul-18	0%	0%	0	A30390							
Power Cable 11kV at Gridline A-C / 14																	
A30410	Tests & inspection	1	01-Jun-18	01-Jun-18	01-Jun-18	01-Jun-18	0%	0%	0	A30410							
Power Cable 11kV at Gridline C-M / 14																	
A30440	Tests & inspection	3	01-Jun-18	04-Jun-18	01-Jun-18	04-Jun-18	0%	0%	0	A30440							
Power Cable 11kV at Gridline 13-14 / M																	
A30460	Construct Cable Trench / Tunnel & Install Cable Ducts (Approx 18m)	4	01-Jun-18	05-Jun-18	01-Jun-18	05-Jun-18	0%	0%	0	A30460							
A30470	Lay power lead-in (by CLP) & inspection	53	01-Jun-18	04-Aug-18	01-Jun-18	04-Aug-18	0%	0%	0	A30470							
LV Power from DCS to M+ Seawater Pump Cells																	
A30480	Excavate trench & Install Shoring from DCS to M+ Seawater Pump Cells	4	04-Jun-18	07-Jun-18	04-Jun-18	07-Jun-18	0%	0%	0	A30480							
A30490	Construct Cable Trench & Lay 4Nos of DN150 & 5Nos of DN100 Cable Duct	11	08-Jun-18	21-Jun-18	08-Jun-18	21-Jun-18	0%	0%	0	A30490							
A30510	Construct 6 Nos of Drawpit	16	08-Jun-18	27-Jun-18	08-Jun-18	27-Jun-18	0%	0%	0	A30510							
A30500	Cable Pulling from DCS to Seawater Pump Cells	5	28-Jun-18	04-Jul-18	28-Jun-18	04-Jul-18	0%	0%	0	A30500							
A30520	Backfill to Existing Ground Level	4	31-Jul-18	04-Aug-18	31-Jul-18	04-Aug-18	0%	0%	0	A30520							
Gas																	
Gas Main at Portion M01																	
Gas Main RDE connection along Gridline E' - I' / 1'																	
A30700	Trial Trench for Underground Utilities	9	04-Jun-18	13-Jun-18	04-Jun-18	13-Jun-18*	0%	0%	0	A30700							
A30710	Install support for existing Underground Utilities	6	14-Jun-18	21-Jun-18	14-Jun-18	21-Jun-18	0%	0%	0	A30710							
A30720	Excavate Trench for Main Gas 100mm and install shoring	8	22-Jun-18	30-Jun-18	22-Jun-18	30-Jun-18	0%	0%	0	A30720							
A30730	Lay down Main Gas 100mm (by Towngas Specialist Contractor)	13	03-Jul-18	17-Jul-18	03-Jul-18	17-Jul-18	0%	0%	0	A30730							
A30740	Backfill Trench to Ground Level	4	18-Jul-18	21-Jul-18	18-Jul-18	21-Jul-18	0%	0%	0	A30740							
A30750	Testing and Inspection	5	23-Jul-18	27-Jul-18	23-Jul-18	27-Jul-18	0%	0%	0	A30750							
Gas Main M+ along Gridline 2-9/A																	
A30760	Excavate Trench for Main Gas and install shoring	11	06-Jun-18	19-Jun-18	15-Jan-18 A	13-Jun-18	0%	2%	4	A30760							
A30770	Construct and Lay down 350x350mm concrete pipe bench	11	01-Jun-18	13-Jun-18	01-Jun-18	13-Jun-18	0%	0%	0	A30770							
A30780	Lay down and install DN100 gas main (by Towngas Specialist Contractor)	25	26-Jun-18	26-Jul-18	16-Jan-18 A	27-Jun-18	0%	12%	23	A30780							
A30800	Testing and Inspection	4	27-Jun-18	30-Jun-18	27-Jun-18	30-Jun-18	0%	0%	0	A30800							
A30790	Backfill trench at M+ to adjacent level	6	26-Jul-18	02-Aug-18	17-Jan-18 A	30-Jun-18	0%	0%	26	A30790							
Telecom/ICT/FTNS																	
Telecom @ Gridline C-M/14																	
A30810	Completion for Construction of Power Cable Trench/Tunnel	0		30-Jun-18		30-Jun-18	0%	0%	0	A30810							
A30820	Lay 28Nos of DN100 Ducting @ A-C/14 (Approx. 100m)	5	03-Jul-18	07-Jul-18	03-Jul-18	07-Jul-18	0%	0%	0	A30820							
A30830	Construct 5# 28 DN100 FTNS drawpit @ gridline C-M/14	16	09-Jul-18	26-Jul-18	09-Jul-18	26-Jul-18	0%	0%	0	A30830							
A30840	Notify Telecom and request installation of cables	0		26-Jul-18		26-Jul-18	0%	0%	0	A30840							
Telecom @ Gridline A-C/14																	
A30850	Completion for Construction of Power Cable Trench/Tunnel	0		08-Jun-18		08-Jun-18	0%	0%	0	A30850							
A30860	Lay 28Nos of DN100 Ducting @ A-C/14 (Approx. 30m)	2	09-Jun-18	11-Jun-18	09-Jun-18	11-Jun-18	0%	0%	0	A30860							
A30870	Construct 1# 28 DN100 FTNS drawpit @ gridline A-C/14	4	12-Jun-18	15-Jun-18	12-Jun-18	15-Jun-18	0%	0%	0	A30870							
A30880	Notify Telecom and request installation of cables	0		15-Jun-18		15-Jun-18	0%	0%	0	A30880							
Telecom @ Gridline M/12-14 (Portion M15)																	
A30890	Construct ICT & ELV drawpits @ Gridline M/12-14	8	09-Jul-18	17-Jul-18	09-Jul-18	17-Jul-18	0%	0%	0	A30890							
A30900	Notify Telecom and request installation of cables	0		17-Jul-18		17-Jul-18	0%	0%	0	A30900							
Cable Laying & Testing (By Telco)																	
A30990	Cable Laying & Testing (By Telco) @ GL M/14-12	2	18-Jul-18	19-Jul-18	18-Jul-18	19-Jul-18	0%	0%	0	A30990							
A30980	Cable Laying & Testing (By Telco) @ GL A-M/14	11	27-Jul-18	08-Aug-18	27-Jul-18	08-Aug-18	0%	0%	0	A30980							
Backfilling and EVA																	
Backfilling																	
A31050	Backfilling to +6.50mPD	11	16-Sep-17	28-Sep-17	08-Aug-17 A	09-Jun-18	100%	30%	-203	A31050							
A31060	Backfilling to +8.50mPD	16	13-Sep-17	30-Sep-17	08-Oct-17 A	15-Jun-18	100%	20%	-206	A31060							
A31070	Backfilling to +10.50mPD	16	03-Apr-18	21-Apr-18	12-Mar-18 A	15-Jun-18	100%	20%	-45	A31070							
A31080	Backfilling to +12.70mPD	16	15-Jun-18	06-Jul-18	15-Jun-18	06-Jul-18	0%	0%	0	A31080							
Construction of EVA																	

Three Months Rolling Programme (3MRP) - Mth 32 - 31 May

Activity ID	Activity Name	CMWP Dur.	CMWP - R0 (D8*) Start	CMWP - R0 (D8) Finish	Actual / Forecast Start	Actual / Forecast Finish	Planned B/L % Complete	Actual % Complete	Finish Variance (+/-d)	May				June				July				August								
										30	07	14	21	28	04	11	18	25	02	09	16	23	30	06	13	20	27			
M+ P&D																														
A65120	Shop Drawing Submission and Approval (Plumbing and Drainage)	288	25-Nov-17	08-Sep-18	16-Nov-16 A	28-Oct-18	65.28%	48%	-50																					
M+ FS																														
A65130	Shop Drawing Submission and Approval (Fire Services)	288	25-Nov-17	08-Sep-18	17-Jun-16 A	17-Jan-19	65.28%	20%	-130																					
RDE MEP Preliminaries																														
M+ FS																														
A65150	Shop Drawing Submission and Approval (Fire Services)	288	25-Nov-17	08-Sep-18	17-Jun-16 A	17-Jan-19	65.28%	20%	-130																					
M+ HVAC																														
A65140	Shop Drawing Submission and Approval (RDE HVAC)	288	20-Oct-17	04-Aug-18	21-Nov-16 A	17-Jan-19	77.74%	20%	-166																					
M+ Electrical																														
A65170	Shop Drawing Submission and Approval (Electrical)	288	25-Nov-17	08-Sep-18	14-Dec-15 A	17-Jan-19	65.28%	20%	-130																					
M+ P&D																														
A65160	Shop Drawing Submission and Approval (Plumbing and Drainage)	288	25-Nov-17	08-Sep-18	14-Dec-16 A	17-Jan-19	65.28%	20%	-130																					
Provisional Items Cost Centre G (FS / OP non related items tentative for reference only)																														
1A) Fixed & loose furniture at Conservation & Storage Facilities																														
P1A6000	CAI for Fixed & loose furniture at Conservation & Storage Facilities	0	12-Jun-18		12-Jun-18		0%	0%	0																					
P1A6010	Fixed & loose furniture at Conservation & Storage Facilities subletting	48	21-Jun-18	07-Aug-18	21-Jun-18	07-Aug-18	0%	0%	0																					
P1A6050	Fixed & loose furniture at Conservation & Storage Facilities Design/Shop drawing submit & approval	288	08-Aug-18	22-May-19	08-Aug-18	22-May-19	0%	0%	0																					
1B) Fixed & loose furniture at M+ Tower																														
P1B6000	CAI for Fixed & loose furniture at M+ Tower	0	12-Jun-18		12-Jun-18		0%	0%	0																					
P1B6010	Fixed & loose furniture at M+ Tower subletting	48	21-Jun-18	07-Aug-18	21-Jun-18	07-Aug-18	0%	0%	0																					
P1B6060	Fixed & loose furniture at M+ Tower Design/Shop drawing submit & approval	288	08-Aug-18	22-May-19	08-Aug-18	22-May-19	0%	0%	0																					
1C) Fixed & loose furniture at M+ Galleries																														
P1C6000	CAI for Fixed & loose furniture at M+ Galleries	0	11-Jun-18		11-Jun-18		0%	0%	0																					
P1C6010	Fixed & loose furniture at M+ Galleries subletting	48	20-Jun-18	06-Aug-18	20-Jun-18	06-Aug-18	0%	0%	0																					
P1C6050	Fixed & loose furniture at M+ Galleries Design/Shop drawing submit & approval	288	07-Aug-18	21-May-19	07-Aug-18	21-May-19	0%	0%	0																					
1D) Juke Box equipment system & machinery																														
P1D6000	CAI for Juke Box equipment system & machinery	0	09-Jun-18		09-Jun-18		0%	0%	0																					
P1D6010	Juke Box equipment system & machinery subletting	48	18-Jun-18	04-Aug-18	18-Jun-18	04-Aug-18	0%	0%	0																					
P1D6060	Fixed & loose furniture at M+ Galleries Design/Shop drawing submit & approval	288	05-Aug-18	19-May-19	05-Aug-18	19-May-19	0%	0%	0																					
1E) Fixed & loose furniture for Learning Centre																														
P1E6000	CAI for Fixed & loose furniture for Learning Centre	0	07-Jun-18		07-Jun-18		0%	0%	0																					
P1E6010	Fixed & loose furniture for Learning Centre subletting	48	15-Jun-18	02-Aug-18	15-Jun-18	02-Aug-18	0%	0%	0																					
P1E6060	Fixed & loose furniture at M+ Galleries Design/Shop drawing submit & approval	288	02-Aug-18	17-May-19	02-Aug-18	17-May-19	0%	0%	0																					
1F) Fixed & loose furniture for Moving Image Centre																														
P1F6000	CAI for Fixed & loose furniture for Moving Image Centre	0	11-Jun-18		11-Jun-18		0%	0%	0																					
P1F6010	Fixed & loose furniture for Moving Image Centre subletting	48	20-Jun-18	07-Aug-18	20-Jun-18	07-Aug-18	0%	0%	0																					
P1F6070	Fixed & loose furniture for Moving Image Centre Design/Shop drawing submit & approval	288	07-Aug-18	22-May-19	07-Aug-18	22-May-19	0%	0%	0																					
1G) Fixed & loose furniture at M+ Workshop & BOH Area																														
P1G6000	CAI for Fixed & loose furniture at M+ Workshop & BOH Area	0	15-Jun-18		15-Jun-18		0%	0%	0																					
P1G6010	Fixed & loose furniture at M+ Workshop & BOH Area subletting	48	24-Jun-18	10-Aug-18	24-Jun-18	10-Aug-18	0%	0%	0																					
P1G6080	Fixed & loose furniture at M+ Workshop & BOH Area Design/Shop drawing submit & approval	288	11-Aug-18	25-May-19	11-Aug-18	25-May-19	0%	0%	0																					
1H) Fitting out works for cafes at B1/F & L3/F																														
P1H6000	CAI for Fitting out works for cafes at B1/F & L3/F	0	06-Jun-18		06-Jun-18		0%	0%	0																					
P1H6010	Fitting out works for cafes at B1/F & L3/F subletting	48	14-Jun-18	31-Jul-18	14-Jun-18	31-Jul-18	0%	0%	0																					
P1H6090	Fitting out works for cafes at B1/F & L3/F Design/Shop drawing submit & approval	288	01-Aug-18	15-May-19	01-Aug-18	15-May-19	0%	0%	0																					
1K) Fixed & loose furniture at M+ Shop including Espresso Bar																														
P1K6000	CAI for Fixed & loose furniture at M+ Shop including Espresso Bar	0	12-Jun-18		12-Jun-18		0%	0%	0																					
P1K6010	Fixed & loose furniture at M+ Shop including Espresso Bar subletting	48	21-Jun-18	07-Aug-18	21-Jun-18	07-Aug-18	0%	0%	0																					
P1K6100	Fixed & loose furniture at M+ Shop including Espresso Bar Design/Shop drawing submit & approval	288	08-Aug-18	22-May-19	08-Aug-18	22-May-19	0%	0%	0																					
2A) Non digital way-finding signage & digital signage																														
P2A6000	CAI for Non digital way-finding signage & digital signage	0	04-Jun-18		04-Jun-18		0%	0%	0																					
P2A6010	Non digital way-finding signage & digital signage subletting	48	12-Jun-18	29-Jul-18	12-Jun-18	29-Jul-18	0%	0%	0																					
P2A6110	Non digital way-finding signage & digital signage Design/Shop drawing submit & approval	288	30-Jul-18	13-May-19	30-Jul-18	13-May-19	0%	0%	0																					

Three Months Rolling Programme (3MRP) - Mth 32 - 31 May

Activity ID	Activity Name	CMWP Dur.	CMWP - R0 (D8*) Start	CMWP - R0 (D8) Finish	Actual / Forecast Start	Actual / Forecast Finish	Planned B/L % Complete	Actual % Complete	Finish Variance (+/-d)	Gantt Chart							
										May 30	May 07	May 14	May 21	May 28	June 04	June 11	June 18
2B) Street lighting & accessories for CCTV & Wi Fi																	
P2B6000	CAI for Street lighting & accessories for CCTV & Wi Fi	0	07-Jun-18		07-Jun-18		0%	0%	0	CAI for Street lighting & accessories for CCTV & Wi Fi, 07-Jun-18							
P2B6010	Street lighting & accessories for CCTV & Wi Fi subletting	48	15-Jun-18	01-Aug-18	15-Jun-18	01-Aug-18	0%	0%	0	[Gantt bar]							
P2B6120	Street lighting & accessories for CCTV & Wi Fi Design/Shop drawing submit & approval	288	02-Aug-18	16-May-19	02-Aug-18	16-May-19	0%	0%	0	[Gantt bar]							
2C) Elements Cooling Main access modification																	
P2C6000	CAI for Elements Cooling Main access modification	0	11-Jun-18		11-Jun-18		0%	0%	0	CAI for Elements Cooling Main access modification, 11-Jun-18							
P2C6010	Elements Cooling Main access modification subletting	60	20-Jun-18	18-Aug-18	20-Jun-18	18-Aug-18	0%	0%	0	[Gantt bar]							
P2C6130	Elements Cooling Main access modification Design/Shop drawing submit & approval	288	19-Aug-18	02-Jun-19	19-Aug-18	02-Jun-19	0%	0%	0	[Gantt bar]							
2E) MEP & Misc building works assoc. District Cooling System intake pump cell																	
P2E6000	CAI for MEP & Misc building works assoc. District Cooling System intake pump cell	0	04-Jun-18		04-Jun-18		0%	0%	0	CAI for MEP & Misc building works assoc. District Cooling System intake pump cell							
P2E6010	MEP & Misc building works assoc. District Cooling System intake pump cell subletting	60	12-Jun-18	10-Aug-18	12-Jun-18	10-Aug-18	0%	0%	0	[Gantt bar]							
P2E6140	MEP & Misc building works assoc. District Cooling System intake pump cell Design/Shop drawing submit & approval	288	11-Aug-18	25-May-19	11-Aug-18	25-May-19	0%	0%	0	[Gantt bar]							
2F) BWIC / basic MEP provision for CLP transformer rooms																	
P2F6000	CAI for BWIC / basic MEP provision for CLP transformer rooms	0	01-Jun-18		01-Jun-18		0%	0%	0	CAI for BWIC / basic MEP provision for CLP transformer rooms, 01-Jun-18							
P2F6010	BWIC / basic MEP provision for CLP transformer rooms subletting	60	09-Jun-18	07-Aug-18	09-Jun-18	07-Aug-18	0%	0%	0	[Gantt bar]							
P2F6150	BWIC / basic MEP provision for CLP transformer rooms Design/Shop drawing submit & approval	288	08-Aug-18	22-May-19	08-Aug-18	22-May-19	0%	0%	0	[Gantt bar]							
M+ Statutory Inspection, OP & PC																	
Plumbing, Portable & Flushing Water																	
A55550	Submit Revised Schematic (VPLD) to WSD	27	26-Jun-18	27-Jul-18	26-Jun-18	27-Jul-18	0%	0%	0	[Gantt bar]							
A55560	Submit WWO46 Part 4 for WSD Inspection	0	27-Jul-18		27-Jul-18		0%	0%	0	Submit WWO46 Part 4 for WSD							
A55570	WSD Inspection	53	27-Jul-18	28-Sep-18	27-Jul-18	28-Sep-18	0%	0%	0	[Gantt bar]							
Contractor's Summary Works Programme																	
Milestone Dates																	
Cost Centre A - Preliminaries & General Requirements																	
MSA.14	Compliance Review to the CA's satisfaction on Project Time & Construction PMgt Doc (t=M30)	0		01-Jun-18		01-Jun-18*	0%	0%	0	Compliance Review to the CA's satisfaction on Project Time & Construction PMgt Doc							
MSA.15	Compliance Review to the CA's satisfaction on Project Time & Construction PMgt Doc (t=M34)	0		30-Jun-18		30-Jun-18*	0%	0%	0	Compliance Review to the CA's satisfaction on Project Time & Construction PMgt Doc							
Cost Centre C - Public Works and Tunnel Protection Works																	
MSC.06	Complete Plant Rooms associated with the Underpass Road (Tr=M32)	0		01-Jul-18		01-Jul-18	0%	0%	0	Complete Plant Roms associated with the Underpass R							
Cost Centre D2 - Interfacing Car Park Works																	
MSD2.04	Obtain FS certificate (t=M33)	0		01-Jun-18		01-Jun-18	0%	0%	0	Obtain FS certificate (t=M33),							
MSD2.05	Complete the integrated testing and commissioning of all systems (t=M34)	0		01-Jun-18		01-Jun-18	0%	0%	0	Complete the integrated testing and commissioning of all systems (t=M34),							
MSD2.06	Complete all work necessary for practical completion (t=M40)	0		01-Jun-18		01-Jun-18	0%	0%	0	Complete all work necessary for practical completion (t=M40),							
Cost Centre B - M+ Museum & CSF																	
MSB.09i	Handover TX Rooms for CLP installation (Tr=M26)	0		01-Jun-18		01-Jun-18	0%	0%	0	Handover TX Rooms for CLP installation (Tr=M26),							
MSB.06.e	Complete 3F slab at Zone A1 to A5, Zone E and Zone H (Tr=M27)	0		01-Jun-18		01-Jun-18	0%	0%	0	Complete 3F slab at Zone A1 to A5, Zone E and Zone H (Tr=M27),							
MSB.06.d	Complete 4F and 2F infill slab between truss 1 and 2 (Tr=M27)	0		01-Jun-18		01-Jun-18	0%	0%	0	Complete 4F and 2F infill slab between truss 1 and 2 (Tr=M27),							
MSB.12i	CLP Power-on (Tr=M28)	0		20-Jun-18		20-Jun-18	0%	0%	0	CLP Power-on (Tr=M28),							
MSB.12iii	Complete installation of DCS plant and equipment (Tr=M31) (Apr 2018)	0		12-Jul-18		12-Jul-18	0%	0%	0	Complete installation of DCS plant and equip							
MSB.08ii	Complete 1M/F floor slab (Tr=M33)	0		25-Aug-18		25-Aug-18	0%	0%	0	Complete installation of DCS plant and equip							
Cost Centre J - RDE Building																	
MSJ.01-2	1F Structure Complete to 100% (Tr=M23)	0		01-Jun-18		01-Jun-18	0%	0%	0	1F Structure Complete to 100% (Tr=M23),							
MSJ.01b	7F Structure Complete (Tr=M30)	0		06-Jul-18		06-Jul-18	0%	0%	0	7F Structure Complete (Tr=M30),							
MSJ.01c	10F Structure Complete (Tr=M32)	0		24-Aug-18		24-Aug-18	0%	0%	0	10F S							
M+																	
SUM-1300	M+ Tower Structure RC Works	190	21-Aug-17	14-Apr-18	31-Jul-17 A	20-Nov-18	100%	24.99%	-181	[Gantt bar]							
SUM-1400	M+ Podium Tower Facade Preliminaries	577	03-Jun-16	14-May-18	06-Mar-16 A	20-Nov-18	100%	75.27%	-157	[Gantt bar]							
SUM-1100	M+ Podium Structure RC Works	412	09-Sep-16	27-Jan-18	09-Sep-16 A	20-Nov-18	100%	65.25%	-240	[Gantt bar]							
SUM-1700	M+ Tower External Envelope (By Permasteelisa)	406	06-Jan-17	25-May-18	06-Jan-17 A	22-Dec-18	100%	58.01%	-176	[Gantt bar]							
SUM-1500	M+ Podium Glass Wall & Skylight (By RedLand, Permasteelisa)	200	23-Feb-18	27-Oct-18	23-Nov-17 A	02-Mar-19	38.95%	0%	-103	[Gantt bar]							
SUM-1600	M+ Podium External Envelope (By Permasteelisa)	228	19-Jun-18	22-Mar-19	19-Jun-18	22-Mar-19	0%	0%	0	[Gantt bar]							
CSF & RDE Construction																	
SUM-2100	CSF Super-Structure RC Works	257	20-Mar-17	29-Jan-18	20-Mar-17 A	10-Oct-18	100%	57.57%	-205	[Gantt bar]							
SUM-2400	RDE Super-Structure RC Works	305	29-Mar-17	12-Apr-18	29-Mar-17 A	28-Dec-18	100%	42.93%	-214	[Gantt bar]							
SUM-2200	CSF Building Facade Preliminaries	340	03-Mar-17	27-Apr-18	03-Mar-17 A	22-Jan-19	100%	42.87%	-221	[Gantt bar]							

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Activity ID	Activity Name	CMWP Dur.	CMWP - R0 (D8*) Start	CMWP - R0 (D8) Finish	Actual / Forecast Start	Actual / Forecast Finish	Planned B/L % Complete	Actual % Complete	Finish Variance (+/-d)	May							June							July							August							
										30	07	14	21	28	04	11	18	25	02	09	16	23	30	06	13	20	27											
SUM-2600	RDE External Envelope	153	21-Jul-18	22-Jan-19	21-Jul-18	22-Jan-19	0%	0%	0																													
SUM-2300	CSF External Envelope	240	02-Sep-17	27-Jun-18	19-Jun-17 A	28-Feb-19	90.83%	7.46%	-200																													
ABWF & Building Services																																						
SUM-3000	Lifts and Escalators	215	19-Jun-18	07-Mar-19	19-Jun-18	07-Mar-19	0%	0%	0																													
SUM-3200	ABWF & Building Services Installation	602	06-Feb-17	16-Feb-19	06-Apr-17 A	29-Mar-19	64.64%	58.79%	-35																													
ICP & SPS																																						
SUM-4000	SPS WORKS (Sewerage Pumping Station)	192	29-Jul-16	18-Mar-17	29-Jul-16 A	08-Sep-18	100%	56.54%	-436																													
SUM-4200	External Works	293	29-Dec-16	22-Dec-17	29-Dec-16 A	08-Sep-18	100%	71.55%	-209																													
SUM-4100	ICP WORKS (Interfacing Car Park)	559	29-Oct-16	17-Sep-18	29-Oct-16 A	29-Sep-18	83.88%	81.94%	-11																													
Co-ordinated External Works & Utilities Services Installation																																						
SUM-5100	Construction	594	12-Jul-16	12-Jul-18	12-Jul-16 A	23-Jan-19	94.31%	67.18%	-161																													
SUM-5000	Interface Dates	1126	01-Oct-15	18-Jul-19	10-Jan-15 A	25-Jan-19	70.32%	82.51%	137																													
M+ Statutory Inspection, OP & PC																																						
SUM-8040	WSD Inspection (Flushing & Portable)	53	27-Jul-18	28-Sep-18	27-Jul-18	28-Sep-18	0%	0%	0																													

Lyric Theatre Complex

Activity ID	Activity Name	Start Date	Finish Date	2018			
				May	Jun	Jul	Aug
				5	6	7	8
L1 Contract for Lyric Theatre Complex (3MRP)							
Cost Centre B - Excavation and Lateral Support (ELS) Stage 2							
Temporary Steel Platform							
CB142210	Stage 2: Ground Profiling & Extend King Post	02-May-18 A	16-May-18 A				
CB142220	Stage 2: Capping Plate & Primary Beam	03-May-18 A	31-May-18 A				
CB142230	Stage 2: Secondary Beam & Steel Deck	05-May-18 A	09-Jun-18*				
CB143210	Stage 3: Ground Profiling & Extend King Post	09-Apr-18 A	19-May-18 A				
CB143220	Stage 3: Capping Plate & Primary Beam	18-Apr-18 A	05-Jun-18				
CB143230	Stage 3: Secondary Beam & Steel Deck	25-Apr-18 A	09-Jun-18*				
CB144220	Stage 4: Capping Plate & Primary Beam	06-Apr-18 A	19-May-18 A				
CB144230	Stage 4: Secondary Beam & Steel Deck	18-Apr-18 A	25-May-18 A				
Excavation and ELS Works (Stage 2)							
KGO Cooling Main & Pipe Pile Cofferdam							
CB161240	Grout Pipe Piles at Cofferdam Window	21-Apr-18 A	05-May-18 A				
Area 1							
CB161410	Area 1: Excavate to +3.5mPD	13-Apr-18 A	09-May-18 A				
CB161420	Area 1: Install Waling & Strut Layer S1	19-Apr-18 A	12-May-18 A				
CB161430	Area 1: Excavate to +0.5mPD	01-Jun-18	14-Jun-18				
CB161440	Area 1: Install Waling & Strut Layer S2	15-Jun-18	29-Jun-18				
CB161450	Area 1: Excavate to -4.2mPD	30-Jun-18	14-Jul-18				
CB161460	Area 1: Install Waling & Strut Layer S3	16-Jul-18	28-Jul-18*				
Area 2							
CB162410	Area 2: Excavate to +3.5mPD	23-Apr-18 A	29-May-18 A				
CB162420	Area 2: Install Waling & Strut Layer S1	26-Apr-18 A	09-Jun-18				
CB162430	Area 2: Excavate to +0.5mPD	11-Jun-18	25-Jun-18				
CB162440	Area 2: Install Waling & Strut Layer S2	26-Jun-18	10-Jul-18				
CB162450	Area 2: Excavate to -4.2mPD	11-Jul-18	24-Jul-18				
CB162460	Area 2: Install Waling & Strut Layer S3	25-Jul-18	07-Aug-18*				
Area 3							
CB163410	Area 3: Excavate to +3.5mPD	10-May-18 A	08-Jun-18				

Activity ID	Activity Name	Start Date	Finish Date	2018			
				May	Jun	Jul	Aug
				5	6	7	8
CB163420	Area 3: Install Waling & Strut Layer S1	18-May-18 A	20-Jun-18				
CB163430	Area 3: Excavate to +0.5mPD	21-Jun-18	05-Jul-18				
CB163440	Area 3: Install Waling & Strut Layer S2	06-Jul-18	19-Jul-18				
CB163450	Area 3: Excavate to -4.2mPD	20-Jul-18	02-Aug-18				
CB163460	Area 3: Install Waling & Strut Layer S3	03-Aug-18	16-Aug-18*				
Area 4							
CB164410	Area 4: Excavate to +3.5mPD	28-May-18 A	28-Jun-18				
CB164420	Area 4: Install Waling & Strut Layer S1	29-Jun-18	13-Jul-18				
CB164430	Area 4: Excavate to +0.5mPD	14-Jul-18	27-Jul-18				
CB164440	Area 4: Install Waling & Strut Layer S2	28-Jul-18	10-Aug-18				
CB164450	Area 4: Excavate to -4.2mPD	11-Aug-18	24-Aug-18				
CB164460	Area 4: Install Waling & Strut Layer S3	25-Aug-18	07-Sep-18*				
Area 6 (Additional Works / Variation Order)							
CB160118	Area 6: ELS Amendment BD Review & Approval	11-Apr-18 A	08-May-18 A				
CB160119	Area 6: Revised Working Drawing (CA11)	09-May-18 A	17-May-18 A				
CB160120	Area 6: Prepare Revised ELS Design & Submit	18-May-18 A	06-Jun-18				
CB160121	Area 6: BD Approval of Revised ELS Design	07-Jun-18	06-Jul-18				
CB160125	Area 6: Remobilize Plant & Equipment	07-Jul-18	10-Jul-18				
CB160130	Area 6: Resume ELS / Excavation Works to Formation Level	11-Jul-18	31-Jul-18*				
Cost Centre D - Public Infrastructure Works (PIW)							
Cost Centre D2 - Austin Road West Lay-by							
MC30-Ch. 160 to MC30-Ch.170							
CD201510	MC30 CH160-Ch170: Excavate M/H SF_1.6 & Blinding	20-Mar-18 A	03-May-18 A				
CD201520	MC30 CH160-Ch170: Construct Bottom Portion M/H SF_1.6	04-May-18 A	12-May-18 A				
CD201540	MC30 CH160-Ch170: Install Drainage Pipe bet. SF_1.6 & EAR2.18a	14-May-18 A	09-Jun-18				
CD201550	MC30 CH160-Ch170: Modification of EAR2.18A	11-Jun-18	16-Jun-18				
Portion 1							
CD201420	Portion 1 (MC30 Ch.90-Ch.160): Set-up TTA	11-May-18 A	18-May-18 A				
CD201430	Portion 1 (MC30 Ch.90-Ch.160): Trial Pits & Expose / Protect Existing Utilities	19-May-18 A	06-Jun-18				
CD201440	Portion 1 (MC30 Ch.90-Ch.160): Install Sheet Pile	07-Jun-18	26-Jun-18				

Remaining Work
 Critical Remaining Work
 Actual Work
 Milestone

Project ID: L13MRP-20180531
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 Page: 2 of 3

West Kowloon Cultural District Authority
L1 Contract for Lyric Theatre Complex & Extended Basement
Three Month Rolling Programme (3MRP) - Status as of 31 May 2018



Activity ID	Activity Name	Start Date	Finish Date	2018			
				May	Jun	Jul	Aug
				5	6	7	8
CD201450	Portion 1 (MC30 Ch.90-Ch.160): Excavation & ELS	16-Jun-18	16-Jul-18				
CD201460	Portion 1 (MC30 Ch.90-Ch.160): Drainage & Utilities Works	17-Jul-18	06-Sep-18				
Portion 2							
CD201120	Portion 2 (MC20 Ch.00-Ch.60): Trial Pits & Expose / Protect Existing Utilities	22-Jun-18	06-Jul-18				
CD201130	Portion 2 (MC20 Ch.00-Ch.60): Install Sheet Pile	07-Jul-18	25-Jul-18				
CD201140	Portion 2 (MC20 Ch.00-Ch.60): Excavation & ELS	17-Jul-18	13-Aug-18				
CD201150	Portion 2 (MC20 Ch.00-Ch.60): Drainage & Utilities Works	14-Aug-18	06-Oct-18				

- Remaining Work
- Critical Remaining Work
- Actual Work
- Milestone

Project ID: L13MRP-20180531
 Layout: L1-3MRP (Env)
 Page: 3 of 3

West Kowloon Cultural District Authority
L1 Contract for Lyric Theatre Complex & Extended Basement
Three Month Rolling Programme (3MRP) - Status as of 31 May 2018



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
AM2A	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
AM2A	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	WKCD A	Contractor
Action Level				
1. Exceedance for one sample	<ol style="list-style-type: none"> 1. Identify source, investigate the causes of exceedance and propose remedial measures; 2. Inform IEC and WKCD A; 3. Repeat measurement to confirm finding; 4. Increase monitoring frequency to daily. 	<ol style="list-style-type: none"> 1. Check monitoring data submitted by ET; 2. Check Contractor's working method. 	<ol style="list-style-type: none"> 1. Notify Contractor 	<ol style="list-style-type: none"> 1. Rectify any unacceptable practice; 2. Amend working methods if appropriate.
2. Exceedance for two or more consecutive samples	<ol style="list-style-type: none"> 1. Identify source; 2. Inform IEC and WKCD A; 3. Advise the WKCD A 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 WKCD A; 8. If exceedance stops, cease additional monitoring. 	<ol 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. 	<ol style="list-style-type: none"> 1. Confirm receipt of notification of failure in writing; 2. Notify Contractor; 3. Ensure remedial measures properly implemented. 	<ol style="list-style-type: none"> 1. Submit proposals for remedial to WKCD A within three working days of notification; 2. Implement the agreed proposals; 3. Amend proposal if appropriate.
Limit Level				
1. Exceedance for one sample	<ol style="list-style-type: none"> 1. Identify source, investigate the causes of exceedance and propose remedial measures; 2. Inform WKCD A, 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 WKCD A informed of the results. 	<ol 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 WKCD A on the effectiveness of the proposed remedial measures; 5. Monitor the implementation of remedial measures. 	<ol style="list-style-type: none"> 1. Confirm receipt of notification of failure in writing; 2. Notify Contractor; 3. Ensure remedial measures properly implemented. 	<ol 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**

2. Exceedance for two or more consecutive samples	<ol 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 WKCDA informed of the results;8. If exceedance stops, cease additional monitoring.	<ol style="list-style-type: none">1. Check monitoring data submitted by ET;2. Check Contractor's working method;3. Discuss amongst WKCDA, ET, and Contractor on the potential remedial actions;4. Review Contractor's remedial actions whenever necessary to assure their effectiveness and advise the WKCDA accordingly;5. Monitor the implementation of 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 on the remedial measures to be implemented;4. Ensure remedial measures properly implemented;5. If exceedance continues, consider what portion of the work is responsible and instruct the Contractor to stop that portion of work until the exceedance is abated.	<ol 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. Resubmit proposals if problem still not under control;5. Stop the relevant portion of works as determined by the WKCDA until the exceedance is abated.
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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	WKCD	Contractor
Action Level	<ol style="list-style-type: none"> 1. Notify WKCD, IEC and Contractor; 2. Carry out investigation; 3. Report the results of investigation to the IEC, WKCD 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 WKCD accordingly; 3. Advise the WKCD 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 WKCD; 2. Implement noise mitigation proposals.
Limit Level	<ol style="list-style-type: none"> 1. Inform IEC, WKCD, 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 WKCD on remedial measures required; 7. Assess effectiveness of Contractor's remedial actions and keep IEC, EPD and WKCD informed of the results; 8. If exceedance stops, cease additional monitoring. 	<ol style="list-style-type: none"> 1. Discuss amongst WKCD, ET, and Contractor on the potential remedial actions; 2. Review Contractor's remedial actions whenever necessary to assure their effectiveness and advise the WKCD 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 WKCD 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 WKCD 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	WKCD A	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 WKCD A; 3. Discuss remedial actions with IEC, WKCD A 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 WKCD A 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 WKCD A; 3. Increase monitoring frequency; 4. Discuss remedial actions with IEC, WKCD A 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 WKCD A 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

JUNE 2018

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
					1	2
3	4	5 AM1, AM2A - 24hrTSP, 1hr TSP x3 NM1A - Noise Impact Monitoring	6	7	8	9
10	11 AM1, AM2A - 24hrTSP, 1hr TSP x3 NM1A - Noise Impact Monitoring	12	13	14	15 AM1, AM2A - 24hrTSP, 1hr TSP x3	16
17	18	19	20	21 AM1, AM2A - 24hrTSP, 1hr TSP x3 NM1A - Noise Impact Monitoring	22	23
24	25	26	27 AM1, AM2A - 24hrTSP, 1hr TSP x3 NM1A - Noise Impact Monitoring	28	29	30
		Notes: AM1 - International Commerce Centre (ICC) AM2A - Austin Road West (Opposite to The Harbourside) NM1A - International Commerce Centre (ICC)				

JULY 2018

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1	2	3 AM1, AM2A - 24hrTSP, 1hr TSP x3 NM1A - Noise Impact Monitoring	4	5	6	7
8	9 AM1, AM2A - 24hrTSP, 1hr TSP x3 NM1A - Noise Impact Monitoring	10	11	12	13 AM1, AM2A - 24hrTSP, 1hr TSP x3	14
15	16	17	18	19 AM1, AM2A - 24hrTSP, 1hr TSP x3 NM1A - Noise Impact Monitoring	20	21
22	23	24	25 AM1, AM2A - 24hrTSP, 1hr TSP x3 NM1A - Noise Impact Monitoring	26	27	28
29	30	31 AM1, AM2A - 24hrTSP, 1hr TSP x3 NM1A - Noise Impact Monitoring				
		Notes: AM1 - International Commerce Centre (ICC) AM2A - Austin Road West (Opposite to The Harbourside) 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 : 12/04/2018

Sampler

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

Calibration Orifice and Standard Calibration Relationship

Serial Number : 2454
 Service Date : 19 Mar 2018
 Slope (m) : 2.05242
 Intercept (b) : -0.01383
 Correlation Coefficient(r) : 0.99994

Standard Condition

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

Calibration Condition

Pa (hpa) : 1012
 Ta(K) : 299

Resistance Plate	dH [green liquid] (inch water)	Z	X=Qstd (cubic meter/min)	IC (chart)	Y (corrected)
1 18 holes	10.2	3.187	1.559	58	57.87
2 13 holes	7.5	2.733	1.338	50	49.89
3 10 holes	5.6	2.361	1.157	42	41.91
4 7 holes	3.8	1.945	0.954	34	33.93
5 5 holes	2.6	1.609	0.791	24	23.95

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

Sampler Calibration Relationship

Slope(m): 43.447 Intercept(b): -8.889 Correlation Coefficient(r): 0.9959

Checked by: 
 Magnum Fan

Date: 14/04/2018

High-Volume TSP Sampler
5-Point Calibration Record

Location : AM1(ICC)
 Calibrated by : K.T.Ho
 Date : 12/06/2018

Sampler

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

Calibration Orifice and Standard Calibration Relationship

Serial Number : 2454
 Service Date : 19 Mar 2018
 Slope (m) : 2.05242
 Intercept (b) : -0.01383
 Correlation Coefficient(r) : 0.99994

Standard Condition

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

Calibration Condition

Pa (hpa) : 1002
 Ta(K) : 302

Resistance Plate	dH [green liquid] (inch water)	Z	X=Qstd (cubic meter/min)	IC (chart)	Y (corrected)
1 18 holes	10.0	3.124	1.529	58	57.30
2 13 holes	6.8	2.576	1.262	48	47.42
3 10 holes	4.8	2.164	1.061	38	37.54
4 7 holes	3.2	1.767	0.868	30	29.64
5 5 holes	2.2	1.465	0.721	20	19.76

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

Sampler Calibration Relationship

Slope(m): 45.752 Intercept(b): -11.452 Correlation Coefficient(r): 0.9954

Checked by: 
 Magnum Fan

Date: 15/06/2018

High-Volume TSP Sampler
5-Point Calibration Record

Location : AM2A (Harbourside)
 Calibrated by : K.T.Ho
 Date : 12/04/2018

Sampler

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

Calibration Orifice and Standard Calibration Relationship

Serial Number : 2454
 Service Date : 19 Mar 2018
 Slope (m) : 2.05242
 Intercept (b) : -0.01383
 Correlation Coefficient(r) : 0.99994

Standard Condition

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

Calibration Condition


Pa (hpa) : 1012
 Ta(K) : 299

Resistance Plate	dH [green liquid] (inch water)	Z	X=Qstd (cubic meter/min)	IC (chart)	Y (corrected)
1 18 holes	12.0	3.457	1.691	60	59.87
2 13 holes	8.2	2.857	1.399	52	51.89
3 10 holes	6.2	2.485	1.217	44	43.90
4 7 holes	4.0	1.996	0.979	34	33.93
5 5 holes	2.4	1.546	0.760	24	23.95

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

Sampler Calibration Relationship

Slope(m): 39.142 Intercept(b): -4.264 Correlation Coefficient(r): 0.9949

Checked by: 
 Magnum Fan

Date: 14/04/2018

High-Volume TSP Sampler
5-Point Calibration Record

Location : AM2A (Harbourside)
 Calibrated by : K.T.Ho
 Date : 12/06/2018

Sampler

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

Calibration Orifice and Standard Calibration Relationship

Serial Number : 2454
 Service Date : 19 Mar 2018
 Slope (m) : 2.05242
 Intercept (b) : -0.01383
 Correlation Coefficient(r) : 0.99994

Standard Condition

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

Calibration Condition


Pa (hpa) : 1002
 Ta(K) : 302

Resistance Plate	dH [green liquid] (inch water)	Z	X=Qstd (cubic meter/min)	IC (chart)	Y (corrected)
1 18 holes	12.0	3.422	1.674	60	59.28
2 13 holes	8.2	2.829	1.385	50	49.40
3 10 holes	6.0	2.420	1.186	40	39.52
4 7 holes	3.8	1.926	0.945	30	29.64
5 5 holes	2.4	1.531	0.752	20	19.76

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

Sampler Calibration Relationship

Slope(m): 43.056 Intercept(b): -11.656 Correlation Coefficient(r): 0.9976

Checked by: 
 Magnum Fan

Date: 15/06/2018



Certificate of Calibration

Calibration Certification Information			
Cal. Date: March 19, 2018	Rootsmeter S/N: 438320	Ta: 294	°K
Operator: Jim Tisch		Pa: 746.8	mm Hg
Calibration Model #: TE-5025A	Calibrator S/N: 2454		

Run	Vol. Init (m3)	Vol. Final (m3)	ΔVol. (m3)	ΔTime (min)	ΔP (mm Hg)	ΔH (in H2O)
1	1	2	1	1.4300	3.2	2.00
2	3	4	1	1.0040	6.4	4.00
3	5	6	1	0.9030	7.9	5.00
4	7	8	1	0.8590	8.7	5.50
5	9	10	1	0.7080	12.8	8.00

Data Tabulation					
Vstd (m3)	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)
0.9917	0.6935	1.4113	0.9957	0.6963	0.8874
0.9874	0.9835	1.9959	0.9914	0.9875	1.2549
0.9854	1.0913	2.2315	0.9894	1.0957	1.4030
0.9843	1.1459	2.3405	0.9883	1.1506	1.4715
0.9789	1.3826	2.8227	0.9829	1.3882	1.7747
QSTD	m=	2.05242	QA	m=	1.28519
	b=	-0.01383		b=	-0.00869
	r=	0.99994		r=	0.99994

Calculations	
Vstd= $\Delta Vol \left(\frac{Pa - \Delta P}{Pstd} \right) \left(\frac{Tstd}{Ta} \right)$	Va= $\Delta Vol \left(\frac{Pa - \Delta P}{Pa} \right)$
Qstd= Vstd/ΔTime	Qa= Va/ΔTime
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

CALIBRATION CERTIFICATE


Date: July 27, 2017

Equipment Name	:	Digital Dust Indicator, Model LD-3B
Code No.	:	080000-42
Quantity	:	1 unit
Serial No.	:	245833
Sensitivity	:	0.001 mg/m ³
Sensitivity Adjustment	:	711CPM
Scale Setting	:	Jul 25, 2017

We hereby certify that the above mentioned instrument has been calibrated satisfactorily.

Sincerely

SIBATA SCIENTIFIC TECHNOLOGY LTD.



Tong Zhang

Overseas Sales Division


REPORT OF EQUIPMENT PERFORMANCE CHECK / CALIBRATION

REPORT NO. : HK1710682
PROJECT NAME : PERFORMANCE CHECK / CALIBRATION OF DUST METER
DATE OF ISSUE : 21/8/2017
CUSTOMER : Envirotech Services Company
ADDRESS : Rm. 113, 1/F., MY LOFT, 9 HOI WING ROAD, TUEN MUN, N.T.


REPORT NO. : HK1710682
PROJECT ITEM NO. : HK1710682-01
PERFORMANCE CHECK / CALIBRATED EQUIPMENT
TYPE : Digital Dust Indicator
MANUFACTURER : SIBATA
MODEL NO. : LD-3B
SERIAL NO. : 245833
EQUIPMENT NO. : ---
RECEIPT DATE : 18/8/2017
PERFORMANCE CHECK / CALIBRATION DATE : 18/8/2017

PERFORMANCE CHECK / CALIBRATION Information

CODE	Calibration Parameter	Method Procedure	Reference Method
Dust PC/CAL	Performance Check / Calibration of Dust Meter	CAL003	General Technical Requirements of Environmental Monitoring, Environmental Monitoring & Audit Guidelines for Development Projects in HK

- Notes : 1. This report shall not be reproduced, except in full, without prior approval from Pilot Testing Limited.
 2. Performance Check / Calibration result relates to performance check / calibration item(s) as received.

Approved Signatory



 Wong Po Yan Pauline
 (Assistant Laboratory Manager)

Issue Date: 21/8/2017


REPORT OF PERFORMANCE CHECK / CALIBRATION

PROJECT NAME : PERFORMANCE CHECK / CALIBRATION OF DUST METER
 DATE OF ISSUE : 21/8/2017
 REPORT NO. : HK1710682

PERFORMANCE CHECK / CALIBRATED EQUIPMENT

TYPE : Digital Dust Indicator
 MANUFACTURER : SIBATA
 MODEL NO. : LD-3B
 SERIAL NO. : 245833
 EQUIPMENT NO. : ---
 SENSITIVITY ADJUSTMENT : ---
 PERFORMANCE CHECK / CALIBRATION DATE : 18/8/2017

STANDARD EQUIPMENT

TYPE : HIGH VOLUME AIR SAMPLER
 MANUFACTURER : TISCH
 MODEL NO. : TE-5170
 EQUIPMENT REF NO. : PTL_HV002
 LAST CALIBRATION DATE : 31/7/2017

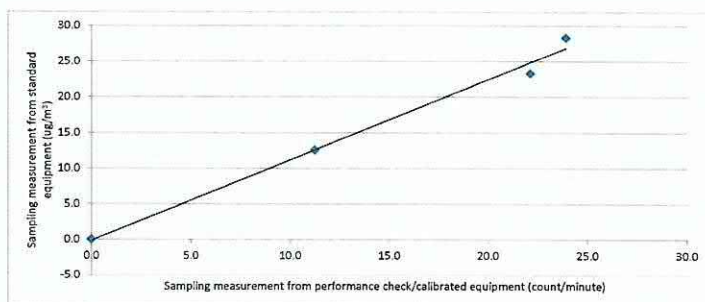
EQUIPMENT PERFORMANCE CHECK / CALIBRATION RESULTS:

Sensitivity Adjustment Scale Setting (Before Performance check / Calibration): $\frac{712}{712}$ CPM
 Sensitivity Adjustment Scale Setting (After Performance check / Calibration): $\frac{712}{712}$ CPM

Trial no. in 1-hr period	Time	Mean Temp (°C)	Mean Pressure (hPa)	Concentration in $\mu\text{g}/\text{m}^3$ (Standard equipment) (Y - Axis)	Total Count ² (Performance Check / Calibrated equipment)	Concentration in Count/Minute ³ (Performance Check / Calibrated equipment) (X - Axis)
Zero Check ¹	18/8/2017, 1:15:00 PM	30.4	1010	0	0	0
1	18/8/2017, 2:19:00 PM	30.4	1010	23	1327	22
2	18/8/2017, 3:24:00 PM	30.4	1010	28	1434	24
3	18/8/2017, 4:29:00 PM	30.4	1010	13	674	11

Linear Regression of Y on X

Slope (K- factor) : $\frac{1.1}{0.9953}$
 Correlation Coefficient : $\frac{0.9953}{18/8/2018}$
 Validity of Performance Check / Calibration Record : 18/8/2018



- Notes : 1. Zero check conducted as per CAL003 SOP and manufacturer's manual as appropriate.
 2. Total Count was measured by Digital Dust Indicator.
 3. Count/minute was calculated by (Total Count/60)
 4. This report shall not be reproduced, except in full, without prior approval from Pilot Testing Limited.
 5. Performance Check / Calibration result relates to performance check / calibration item(s) as received.

Operator: Lau, Natalie Signature: *Natalie* Date: 18/8/2017

Checked by: Wong Po Yan, Pauline Signature: *Wong Po Yan* Date: 21/8/2017

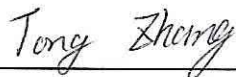
CALIBRATION CERTIFICATE

Date: July 27, 2017

Equipment Name	:	Digital Dust Indicator, Model LD-3B
Code No.	:	080000-42
Quantity	:	1 unit
Serial No.	:	276015
Sensitivity	:	0.001 mg/m ³
Sensitivity Adjustment	:	721CPM
Scale Setting	:	Jul 6, 2017

We hereby certify that the above mentioned instrument has been calibrated satisfactorily.

Sincerely

SIBATA SCIENTIFIC TECHNOLOGY LTD.

Tong Zhang

Overseas Sales Division



REPORT OF EQUIPMENT PERFORMANCE CHECK / CALIBRATION

REPORT NO. : HK1710683
 PROJECT NAME : PERFORMANCE CHECK / CALIBRATION OF DUST METER
 DATE OF ISSUE : 21/8/2017

CUSTOMER : Envirotech Services Company
 ADDRESS : Rm. 113, 1/F., MY LOFT, 9 HOI WING ROAD, TUEN MUN, N.T.

REPORT NO. : HK1710683
 PROJECT ITEM NO. : HK1710683-01

PERFORMANCE CHECK / CALIBRATED EQUIPMENT

TYPE : Digital Dust Indicator
 MANUFACTURER : SIBATA
 MODEL NO. : LD-3B
 SERIAL NO. : 276015
 EQUIPMENT NO. : ---
 RECEIPT DATE : 18/8/2017
 PERFORMANCE CHECK / CALIBRATION DATE : 18/8/2017

PERFORMANCE CHECK / CALIBRATION Information

CODE	Calibration Parameter	Method Procedure	Reference Method
Dust PC/CAL	Performance Check / Calibration of Dust Meter	CAL003	General Technical Requirements of Environmental Monitoring, Environmental Monitoring & Audit Guidelines for Development Projects in HK

- Notes : 1. This report shall not be reproduced, except in full, without prior approval from Pilot Testing Limited.
 2. Performance Check / Calibration result relates to performance check / calibration item(s) as received.

Approved Signatory



Wong Po Yan Pauline
 (Assistant Laboratory Manager)

Issue Date:

21/8/2017


REPORT OF PERFORMANCE CHECK / CALIBRATION

PROJECT NAME : PERFORMANCE CHECK / CALIBRATION OF DUST METER
 DATE OF ISSUE : 21/8/2017
 REPORT NO. : HK1710683

PERFORMANCE CHECK / CALIBRATED EQUIPMENT

TYPE : Digital Dust Indicator
 MANUFACTURER : SIBATA
 MODEL NO. : LD-3B
 SERIAL NO. : 276015
 EQUIPMENT NO. : ---
 SENSITIVITY ADJUSTMENT : ---
 PERFORMANCE CHECK / CALIBRATION DATE : 18/8/2017

STANDARD EQUIPMENT

TYPE : HIGH VOLUME AIR SAMPLER
 MANUFACTURER : TISCH
 MODEL NO. : TE-5170
 EQUIPMENT REF NO. : PTL_HV002
 LAST CALIBRATION DATE : 31/7/2017

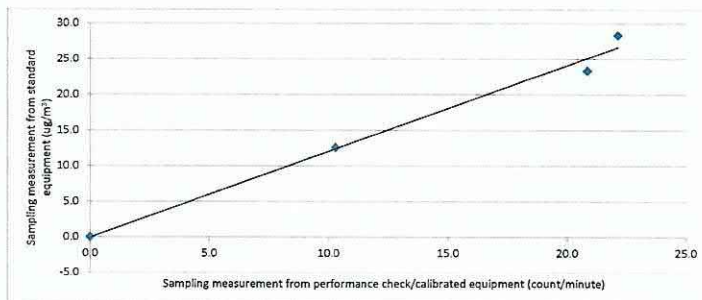
EQUIPMENT PERFORMANCE CHECK / CALIBRATION RESULTS:

Sensitivity Adjustment Scale Setting (Before Performance check / Calibration): 721 CPM
 Sensitivity Adjustment Scale Setting (After Performance check / Calibration): 721 CPM

Trial no. in 1-hr period	Time	Mean Temp (C)	Mean Pressure (hPa)	Concentration in ug/m ³ (Standard equipment) (Y - Axis)	Total Count ² (Performance Check / Calibrated equipment)	Concentration in Count/Minute ³ (Performance Check / Calibrated equipment) (X - Axis)
Zero Check ¹	18/8/2017,1:15:00 PM	30.4	1010	0	0	0
1	18/8/2017,2:19:00 PM	30.4	1010	23	1252	21
2	18/8/2017,3:24:00 PM	30.4	1010	28	1329	22
3	18/8/2017,4:29:00 PM	30.4	1010	13	618	10

Linear Regression of Y on X

Slope (K- factor) : 1.2
 Correlation Coefficient : 0.9937
 Validity of Performance Check / Calibration Record : 18/8/2018



- Notes : 1. Zero check conducted as per CAL003 SOP and manufacturer's manual as appropriate.
 2. Total Count was measured by Digital Dust Indicator.
 3. Count/minute was calculated by (Total Count/60)
 4. This report shall not be reproduced, except in full, without prior approval from Pilot Testing Limited.
 5. Performance Check / Calibration result relates to performance check / calibration item(s) as received.

Operator: Lau, Natalie Signature: Natalie Date: 18/8/2017

Checked by: Wong Po Yan, Pauline Signature: Pauline Date: 21/8/2017



Certificate of Calibration

校正證書

Certificate No. : C174093
證書編號

ITEM TESTED / 送檢項目 (Job No. / 序引編號 : IC17-1613) Date of Receipt / 收件日期 : 11 July 2017
Description / 儀器名稱 : Precision Integrating Sound Level Meter
Manufacturer / 製造商 : Rion
Model No. / 型號 : NL-18
Serial No. / 編號 : 00360030
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 : $(55 \pm 20)\%$
Line Voltage / 電壓 : ---

TEST SPECIFICATIONS / 測試規範

Calibration


DATE OF TEST / 測試日期 : 22 July 2017

TEST RESULTS / 測試結果

The results apply to the particular unit-under-test only.
The results do not exceed manufacturer's specification. (after adjustment)
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
- Agilent Technologies / Keysight Technologies
- Rohde & Schwarz Laboratory, Germany
- 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 : 24 July 2017
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室書面批准。

Certificate of Calibration

校正證書

Certificate No. : C174093

證書編號

1. The unit-under-test (UUT) was allowed to stabilize in the laboratory for over 12 hours, and switched on to warm up for over 10 minutes before the commencement of the test.
2. Self-calibration using the internal standard (After Adjustment) was performed before the test from 6.1.1.2 to 6.4.
3. The results presented are the mean of 3 measurements at each calibration point.
4. Test equipment :

<u>Equipment ID</u>	<u>Description</u>	<u>Certificate No.</u>
CL280	40 MHz Arbitrary Waveform Generator	C170048
CL281	Multifunction Acoustic Calibrator	PA160023

5. Test procedure : MA101N.

6. Results :

6.1 Sound Pressure Level

6.1.1 Reference Sound Pressure Level

6.1.1.1 Before Adjustment

UUT Setting				Applied Value		UUT Reading (dB)	IEC 60651 Type 1 Spec. (dB)
Range (dB)	Mode	Frequency Weighting	Time Weighting	Level (dB)	Freq. (kHz)		
50 - 110	LA	A	Fast	94.00	1	* 92.9	± 0.7

* Out of IEC 60651 Type 1 Spec.

6.1.1.2 After Adjustment

UUT Setting				Applied Value		UUT Reading (dB)	IEC 60651 Type 1 Spec. (dB)
Range (dB)	Mode	Frequency Weighting	Time Weighting	Level (dB)	Freq. (kHz)		
50 - 110	LA	A	Fast	94.00	1	94.1	± 0.7

6.1.2 Linearity

UUT Setting				Applied Value		UUT Reading (dB)
Range (dB)	Mode	Frequency Weighting	Time Weighting	Level (dB)	Freq. (kHz)	
60 - 120	LA	A	Fast	94.00	1	94.1 (Ref.)
				104.00		104.1
				114.00		114.1

IEC 60651 Type 1 Spec. : ± 0.4 dB per 10 dB step and ± 0.7 dB for overall different.

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.

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校正證書

Certificate No. : C174093

證書編號

6.2 Time Weighting

6.2.1 Continuous Signal

UUT Setting				Applied Value		UUT Reading (dB)	IEC 60651 Type 1 Spec. (dB)
Range (dB)	Mode	Frequency Weighting	Time Weighting	Level (dB)	Freq. (kHz)		
50 - 110	LA	A	Fast	94.00	1	94.1	Ref.
			Slow			94.0	± 0.1

6.2.2 Tone Burst Signal (2 kHz)

UUT Setting				Applied Value		UUT Reading (dB)	IEC 60651 Type 1 Spec. (dB)
Range (dB)	Mode	Frequency Weighting	Time Weighting	Level (dB)	Burst Duration		
50 - 110	LA	A	Fast	106.00	Continuous	106.0	Ref.
	LAmx				200 ms	105.1	-1.0 ± 1.0
	LA	Slow	Continuous		106.0	Ref.	
	LAmx		500 ms		102.4	-4.1 ± 1.0	

6.3 Frequency Weighting

6.3.1 A-Weighting

UUT Setting				Applied Value		UUT Reading (dB)	IEC 60651 Type 1 Spec. (dB)
Range (dB)	Mode	Frequency Weighting	Time Weighting	Level (dB)	Freq.		
50 - 110	LA	A	Fast	94.00	31.5 Hz	54.5	-39.4 ± 1.5
					63 Hz	67.7	-26.2 ± 1.5
					125 Hz	77.7	-16.1 ± 1.0
					250 Hz	85.3	-8.6 ± 1.0
					500 Hz	90.7	-3.2 ± 1.0
					1 kHz	94.1	Ref.
					2 kHz	95.4	$+1.2 \pm 1.0$
					4 kHz	95.1	$+1.0 \pm 1.0$
					8 kHz	93.0	$-1.1 (+1.5 ; -3.0)$
12.5 kHz	89.8	$-4.3 (+3.0 ; -6.0)$					

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.

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Certificate of Calibration

校正證書

Certificate No. : C174093
證書編號

6.3.2 C-Weighting

UUT Setting				Applied Value		UUT Reading (dB)	IEC 60651 Type 1 Spec. (dB)
Range (dB)	Mode	Frequency Weighting	Time Weighting	Level (dB)	Freq.		
50 - 110	LC	C	Fast	94.00	31.5 Hz	90.9	-3.0 ± 1.5
					63 Hz	93.2	-0.8 ± 1.5
					125 Hz	93.9	-0.2 ± 1.0
					250 Hz	94.1	0.0 ± 1.0
					500 Hz	94.2	0.0 ± 1.0
					1 kHz	94.1	Ref.
					2 kHz	94.0	-0.2 ± 1.0
					4 kHz	93.3	-0.8 ± 1.0
					8 kHz	91.1	-3.0 (+1.5 ; -3.0)
12.5 kHz	87.8	-6.2 (+3.0 ; -6.0)					

6.4 Time Averaging

UUT Setting				Applied Value					UUT Reading (dB)	IEC 60804 Type 1 Spec. (dB)
Range (dB)	Mode	Frequency Weighting	Integrating Time	Freq. (kHz)	Burst Duration (ms)	Burst Duty Factor	Burst Level (dB)	Equivalent Level (dB)		
50 - 110	LAeq	A	10 sec.	4	1	1/10	110	100	100.1	± 0.5
								90	90.1	± 0.5
			60 sec.					80	79.5	± 1.0
			5 min.					70	69.8	± 1.0

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.

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輝創工程有限公司

Sun Creation Engineering Limited

Calibration and Testing Laboratory

Certificate of Calibration

校正證書

Certificate No. : C174093
證書編號

Remarks : - UUT Microphone Model No. : UC-53A & S/N : 307435

- Mfr's Spec. : IEC 60651 Type 1 & IEC 60804 Type 1

- Uncertainties of Applied Value :

94 dB	: 31.5 Hz - 125 Hz	: ± 0.35 dB
	250 Hz - 500 Hz	: ± 0.30 dB
	1 kHz	: ± 0.20 dB
	2 kHz - 4 kHz	: ± 0.35 dB
	8 kHz	: ± 0.45 dB
	12.5 kHz	: ± 0.70 dB
104 dB	: 1 kHz	: ± 0.10 dB (Ref. 94 dB)
114 dB	: 1 kHz	: ± 0.10 dB (Ref. 94 dB)
Burst equivalent level		: ± 0.2 dB (Ref. 110 dB continuous sound level)

- 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.

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Sun Creation Engineering Limited Calibration & Testing Laboratory

c/o 4/F, Tsing Shan Wan Exchange Building, 1 Hing On Lane, Tuen Mun, New Territories, Hong Kong

輝創工程有限公司 校正及檢測實驗室

c/o 香港新界屯門興安里一號青山灣機樓四樓

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



輝創工程有限公司

Sun Creation Engineering Limited

Calibration & Testing Laboratory

Certificate of Calibration

校正證書

Certificate No. : C181755

證書編號

ITEM TESTED / 送檢項目 (Job No. / 序引編號 : IC18-0616)

Date of Receipt / 收件日期 : 20 March 2018

Description / 儀器名稱 : Sound Level Calibrator

Manufacturer / 製造商 : Rion

Model No. / 型號 : NC-73

Serial No. / 編號 : 10486660

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 : 5 April 2018

TEST RESULTS / 測試結果

The results apply to the particular unit-under-test only.

The results do not exceed manufacturer's specification.

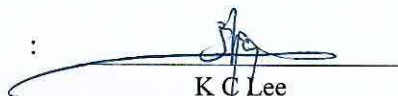
The results are detailed in the subsequent page(s).

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

- The Government of The Hong Kong Special Administrative Region Standard & Calibration Laboratory
- Agilent Technologies / Keysight Technologies
- Rohde & Schwarz Laboratory, Germany
- Fluke Everett Service Center, USA


Tested By

測試


K C Lee
Engineer

Certified By

核證


H C Chan
Engineer

Date of Issue

簽發日期

11 April 2018

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。

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

輝創工程有限公司 - 校正及檢測實驗室

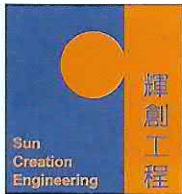
c/o 香港新界屯門興安里一號四樓

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



輝創工程有限公司

Sun Creation Engineering Limited

Calibration & Testing Laboratory

Certificate of Calibration 校正證書

Certificate No. : C181755

證書編號

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

<u>Equipment ID</u>	<u>Description</u>	<u>Certificate No.</u>
CL130	Universal Counter	C173864
CL281	Multifunction Acoustic Calibrator	PA160023
TST150A	Measuring Amplifier	C181288

- Test procedure : MA100N.

- 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	93.7	± 0.5	± 0.2

- 5.2 Frequency Accuracy

UUT Nominal Value (kHz)	Measured Value (kHz)	Mfr's Spec.	Uncertainty of Measured Value (Hz)
1	0.988	1 kHz ± 2 %	± 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.

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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 — 校正及檢測實驗室

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

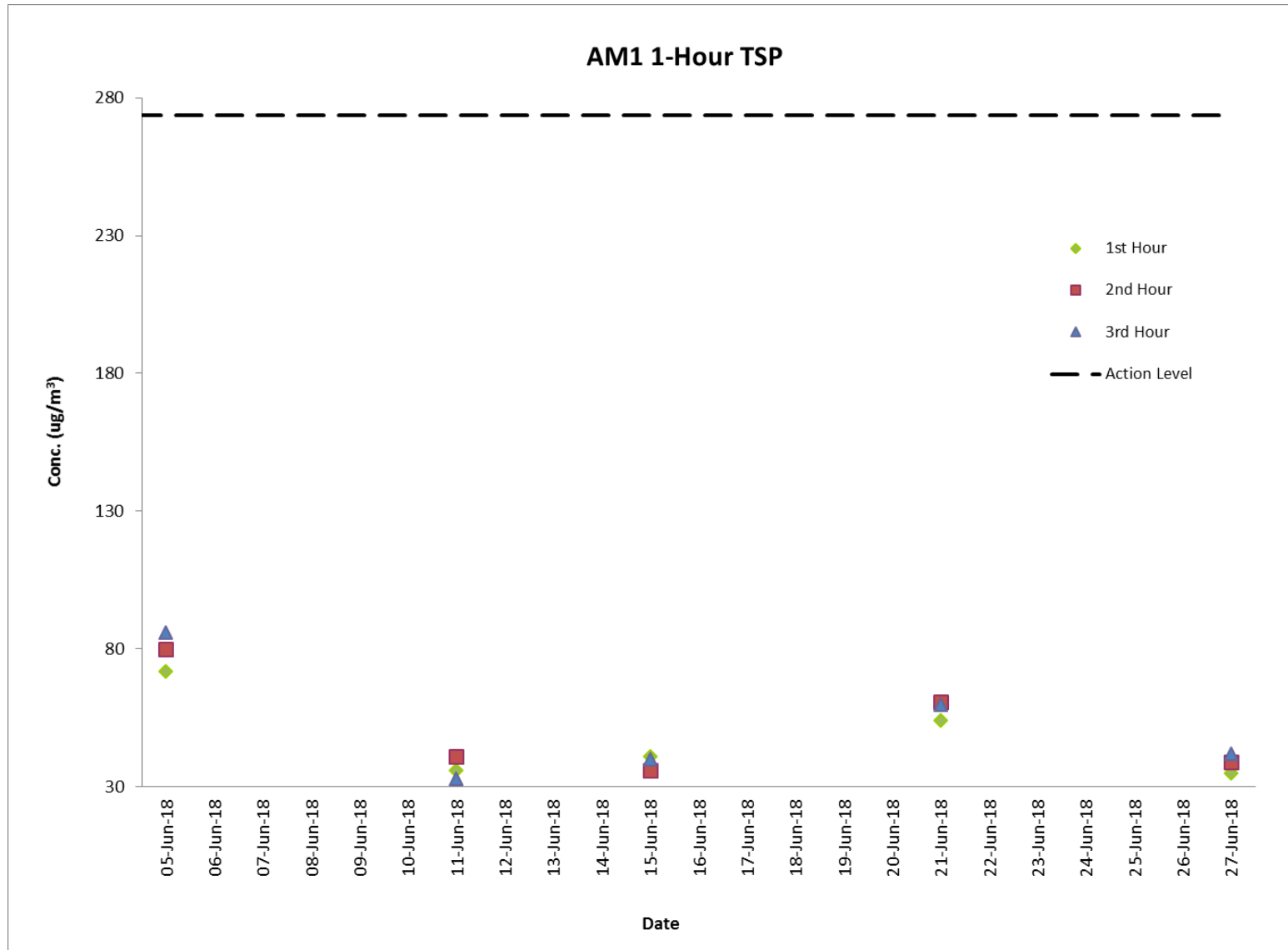
Page 2 of 2

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 ($\mu\text{g}/\text{m}^3$)
			1st Hour	2nd Hour	3rd Hour		
05-Jun-18	Cloudy	7:50 - 10:50	72	80	86	273.7	500
11-Jun-18	Sunny	8:07 - 11:07	36	41	33	273.7	500
15-Jun-18	Cloudy	8:12 - 11:12	41	36	40	273.7	500
21-Jun-18	Cloudy	8:10 - 11:10	54	61	60	273.7	500
27-Jun-18	Fine	7:50 - 10:50	35	39	42	273.7	500

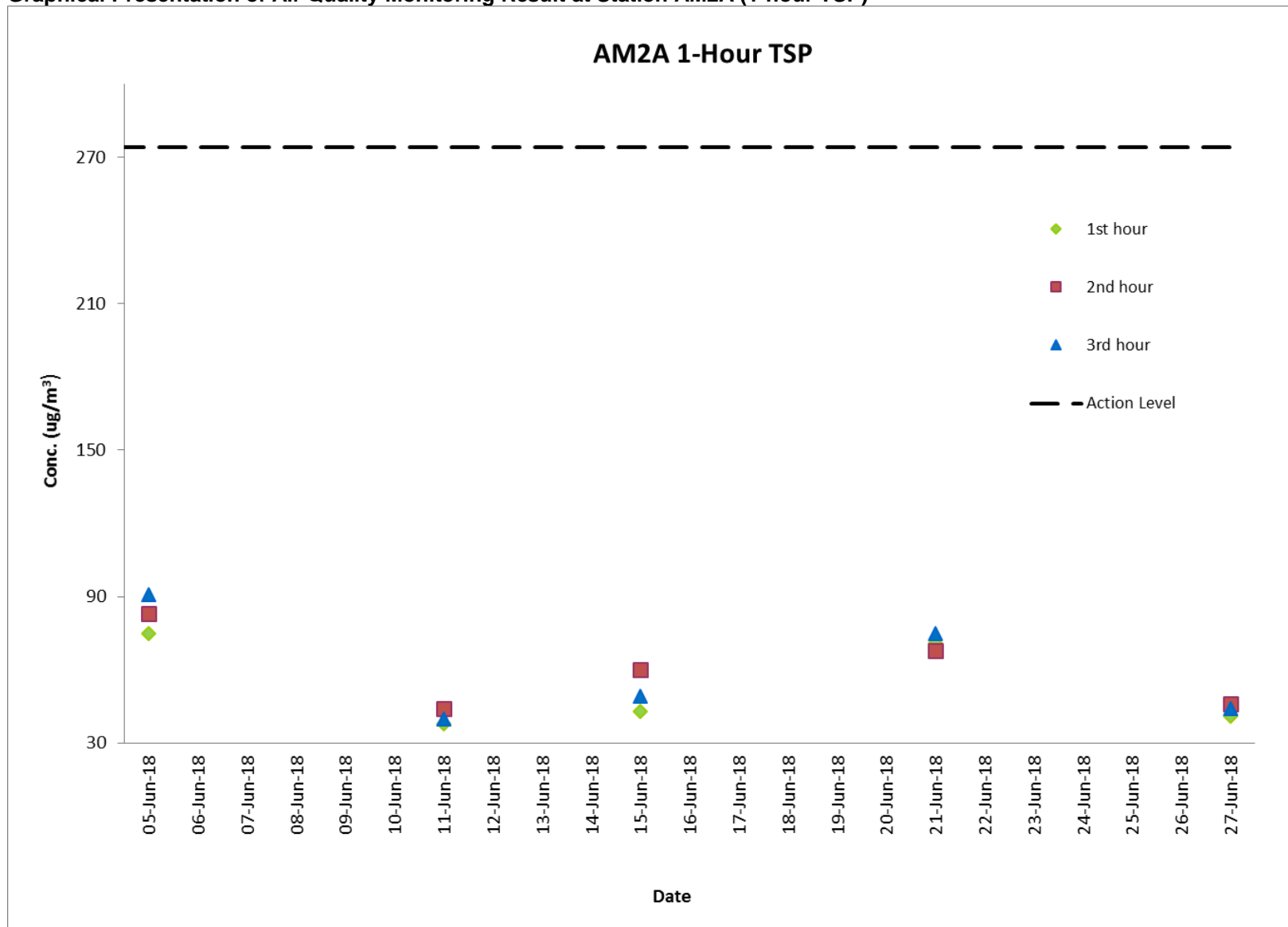
Graphical Presentation of Air Quality Monitoring Result at Station AM1 (1-hour TSP)



Air Quality Monitoring Result at Station AM2A (1-hour TSP)

Date	Weather Condition	Time	Conc. ($\mu\text{g}/\text{m}^3$)			Action Level ($\mu\text{g}/\text{m}^3$)	Limit Level ($\mu\text{g}/\text{m}^3$)
			1st Hour	2nd Hour	3rd Hour		
05-Jun-18	Cloudy	8:05 - 11:05	75	83	91	274.2	500
11-Jun-18	Sunny	8:20 - 11:20	38	44	40	274.2	500
15-Jun-18	Cloudy	8:24 - 11:24	43	60	49	274.2	500
21-Jun-18	Cloudy	8:22 - 11:22	71	68	75	274.2	500
27-Jun-18	Fine	8:02 - 11:02	41	46	44	274.2	500

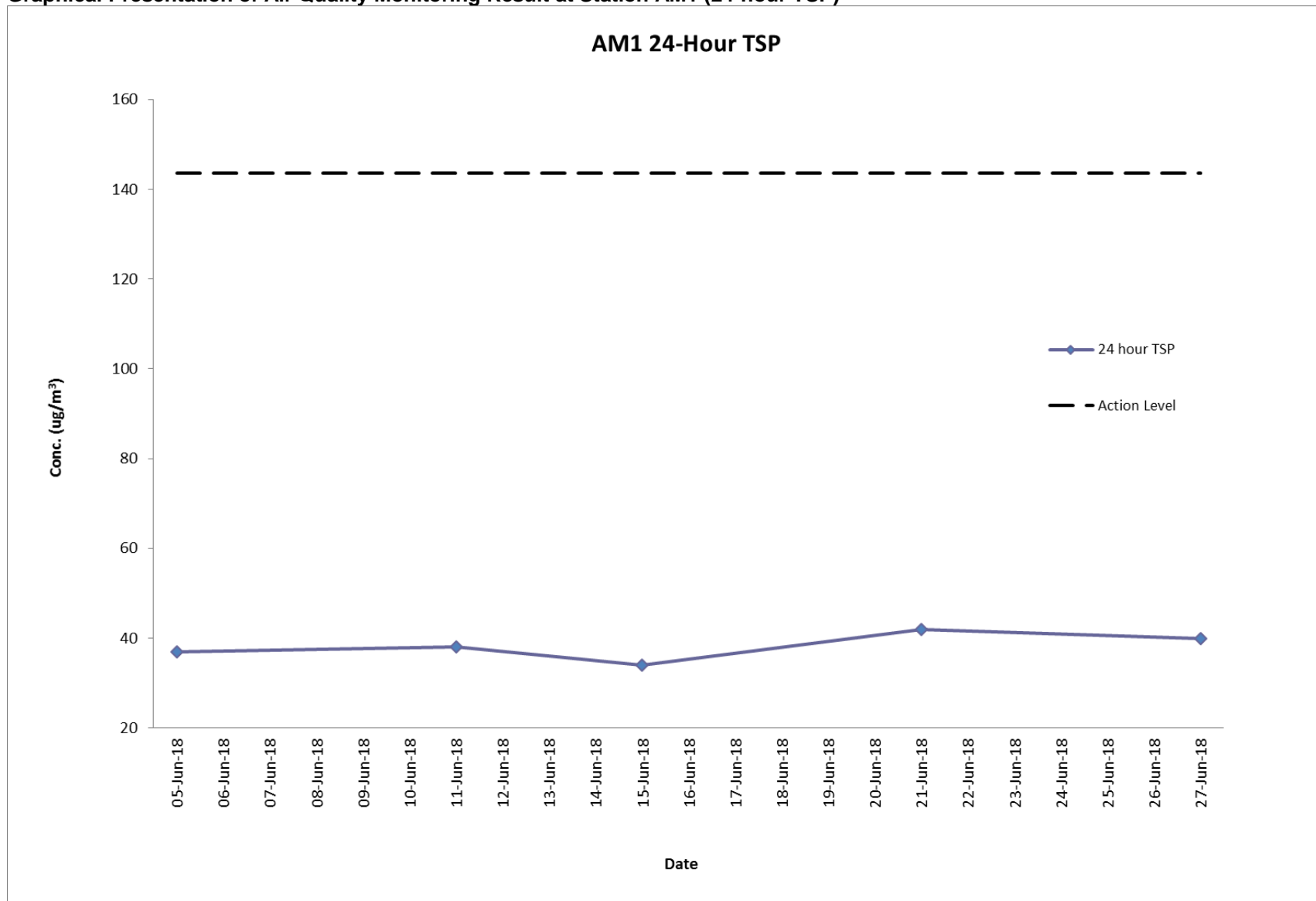
Graphical Presentation of Air Quality Monitoring Result at Station AM2A (1-hour TSP)



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-Jun-18	07:52	06-Jun-18	07:52	2.8645	2.9292	22728.38	22752.38	24	1.22	1.22	1.22	37	Cloudy	143.6	260
11-Jun-18	08:05	12-Jun-18	08:05	2.8540	2.9200	22752.38	22776.38	24	1.22	1.22	1.22	38	Sunny	143.6	260
15-Jun-18	08:10	16-Jun-18	08:10	2.6000	2.6573	22776.38	22800.38	24	1.17	1.17	1.17	34	Cloudy	143.6	260
21-Jun-18	08:08	22-Jun-18	08:08	2.5964	2.6666	22800.38	22824.38	24	1.17	1.17	1.17	42	Cloudy	143.6	260
27-Jun-18	07:52	28-Jun-18	07:52	2.5877	2.6558	22824.38	22848.38	24	1.17	1.17	1.17	40	Fine	143.6	260

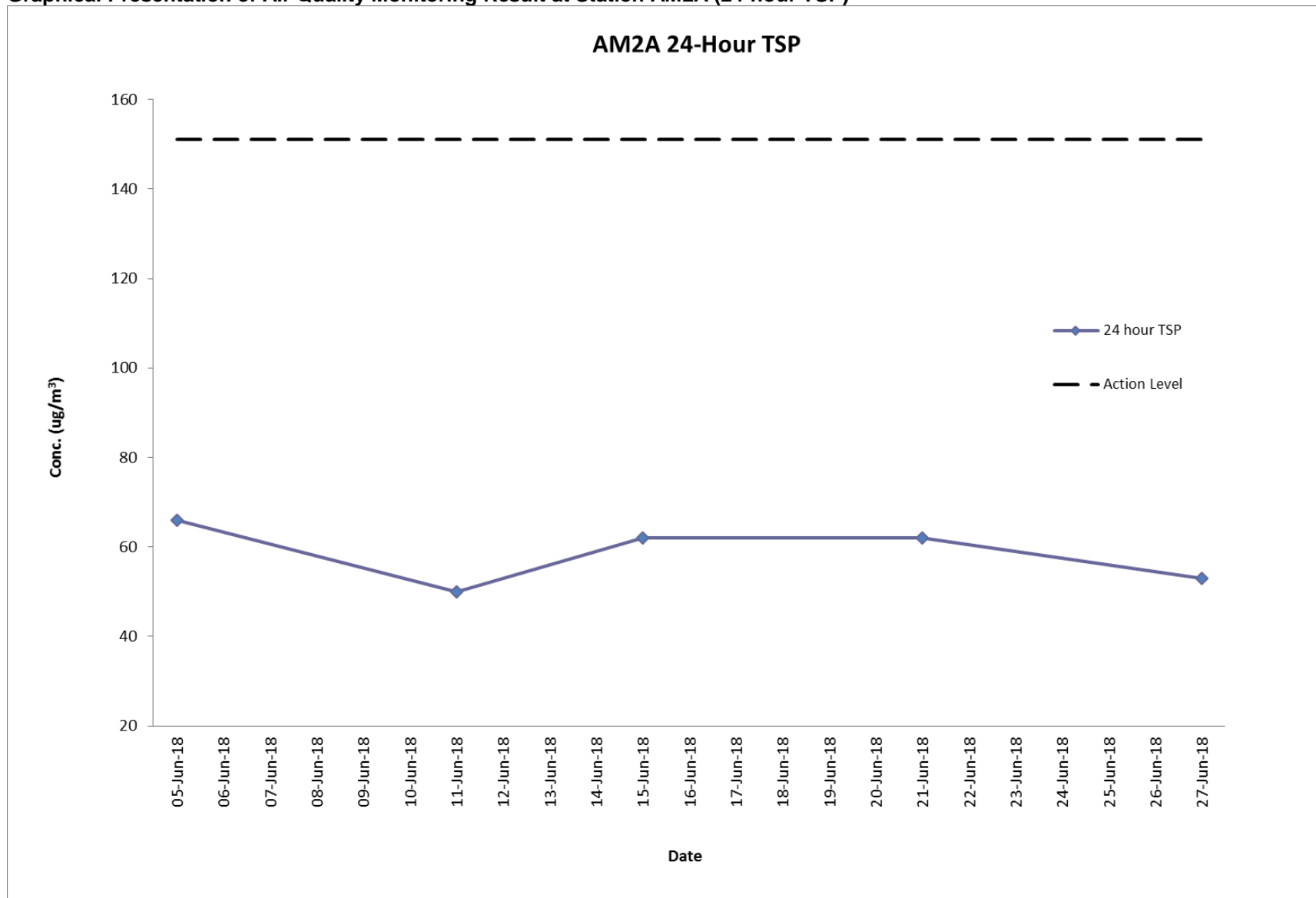
Graphical Presentation of Air Quality Monitoring Result at Station AM1 (24-hour TSP)



Air Quality Monitoring Result at Station AM2A (24-hour TSP)

Start		Finish		Filter Weight (g)		Elapsed Time Reading		Sampling Time (hrs)	Flow Rate (m3/min)			Conc. (µg/m3)	Weather Condition	Action Level	Limit Level
Date	Time	Date	Time	Initial	Final	Initial	Final		Initial	Final	Average				
05-Jun-18	08:02	06-Jun-18	08:02	2.8623	2.9809	18383.59	18407.59	24	1.24	1.24	1.24	66	Cloudy	151.1	260
11-Jun-18	08:17	12-Jun-18	08:17	2.6013	2.6897	18407.59	18431.59	24	1.24	1.24	1.24	50	Sunny	151.1	260
15-Jun-18	08:22	16-Jun-18	08:22	2.6002	2.7122	18431.59	18455.59	24	1.25	1.25	1.25	62	Cloudy	151.1	260
21-Jun-18	08:20	22-Jun-18	08:20	2.5936	2.7057	18455.59	18479.59	24	1.25	1.25	1.25	62	Cloudy	151.1	260
27-Jun-18	08:04	28-Jun-18	08:04	2.5947	2.6908	18479.59	18503.59	24	1.25	1.25	1.25	53	Fine	151.1	260

Graphical Presentation of Air Quality Monitoring Result at Station AM2A (24-hour TSP)



Noise Monitoring Result at Station NM1A

Date	Time	Measured L10 dB(A)	Measured L90 dB(A)	Leq (30 min.) dB(A)
05-Jun-18	10:15	68.4	63.1	69
05-Jun-18	10:20	67.7	63.0	
05-Jun-18	10:25	69.0	64.9	
05-Jun-18	10:30	66.7	62.7	
05-Jun-18	10:35	67.4	63.1	
05-Jun-18	10:40	68.3	64.4	
11-Jun-18	10:26	66.4	62.1	69
11-Jun-18	10:31	67.7	63.4	
11-Jun-18	10:36	68.1	64.1	
11-Jun-18	10:41	66.9	62.7	
11-Jun-18	10:46	69.9	65.1	
11-Jun-18	10:51	67.7	63.9	
21-Jun-18	10:36	67.0	62.1	68
21-Jun-18	10:41	68.3	63.4	
21-Jun-18	10:46	66.7	61.9	
21-Jun-18	10:51	68.9	63.1	
21-Jun-18	10:56	67.1	62.8	
21-Jun-18	11:01	68.0	62.9	
27-Jun-18	10:10	67.0	62.1	69
27-Jun-18	10:15	67.5	63.0	
27-Jun-18	10:20	66.7	62.4	
27-Jun-18	10:25	68.9	64.1	
27-Jun-18	10:30	67.7	63.9	
27-Jun-18	10:35	68.8	64.1	

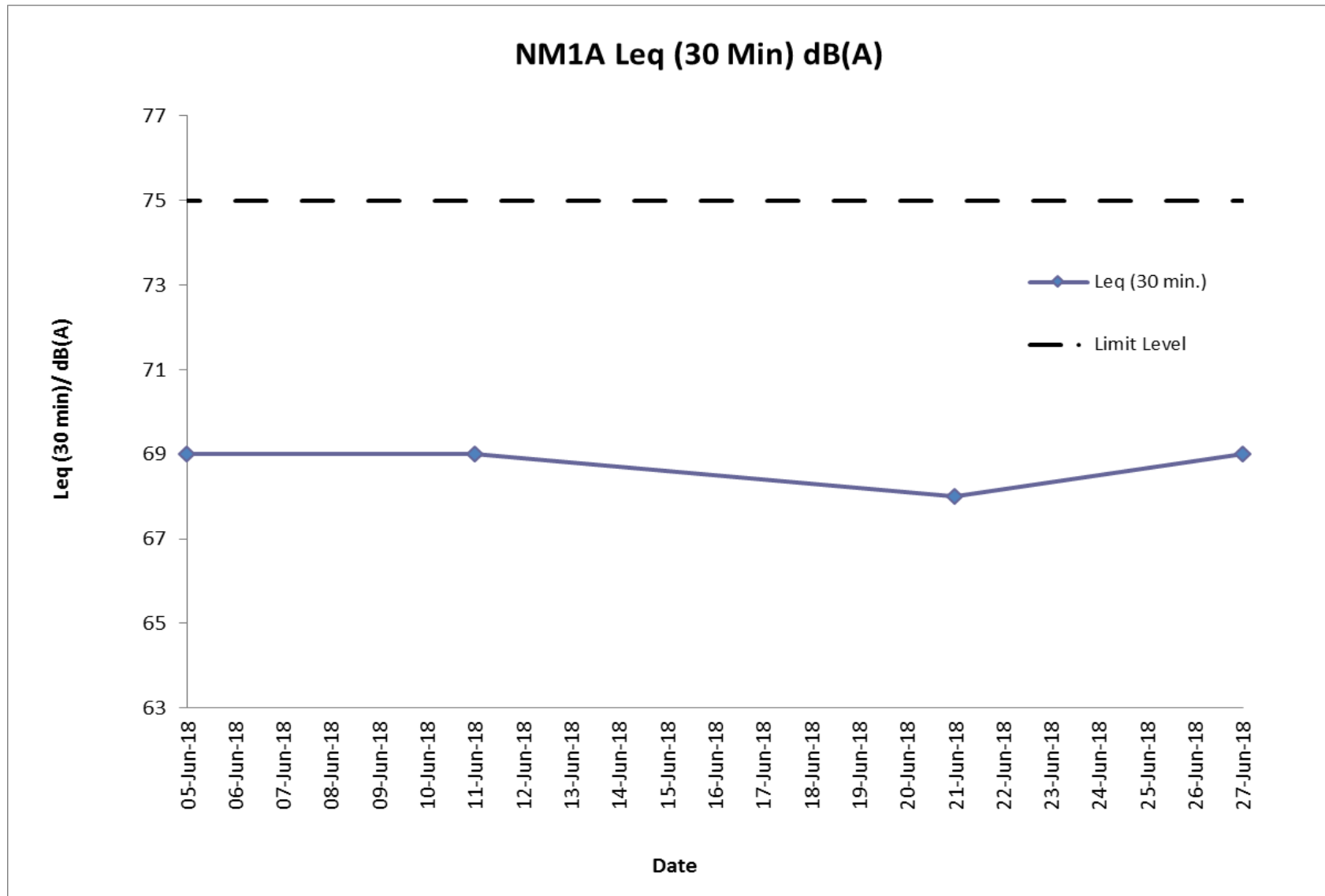
Remarks:

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



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

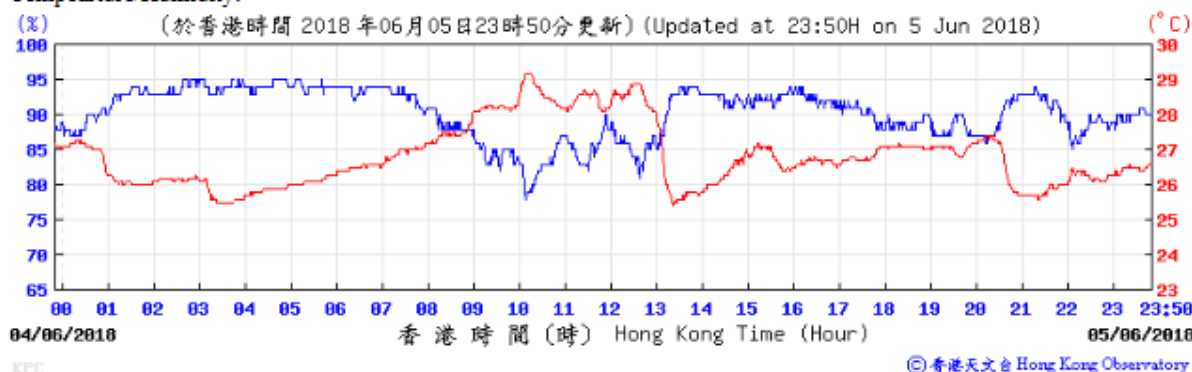
Graphical Presentation Noise Monitoring Result at Station NM1A



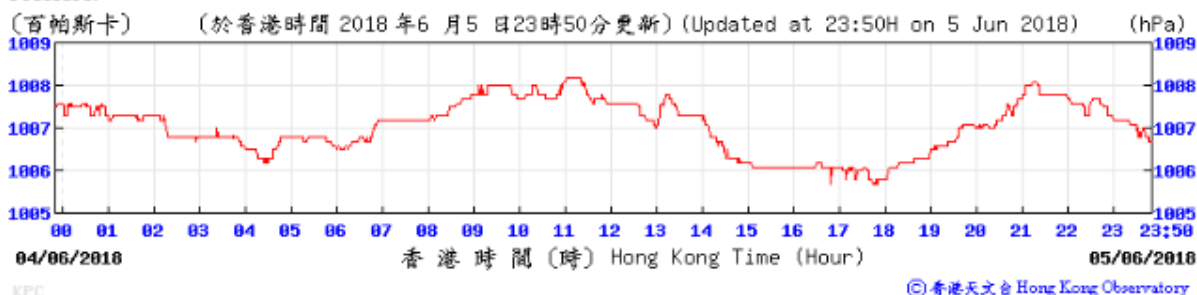
H. Meteorological Data Extracted from Hong Kong Observatory

Extract of Meteorological Observations for King's Park Automatic Weather Station, June 2018

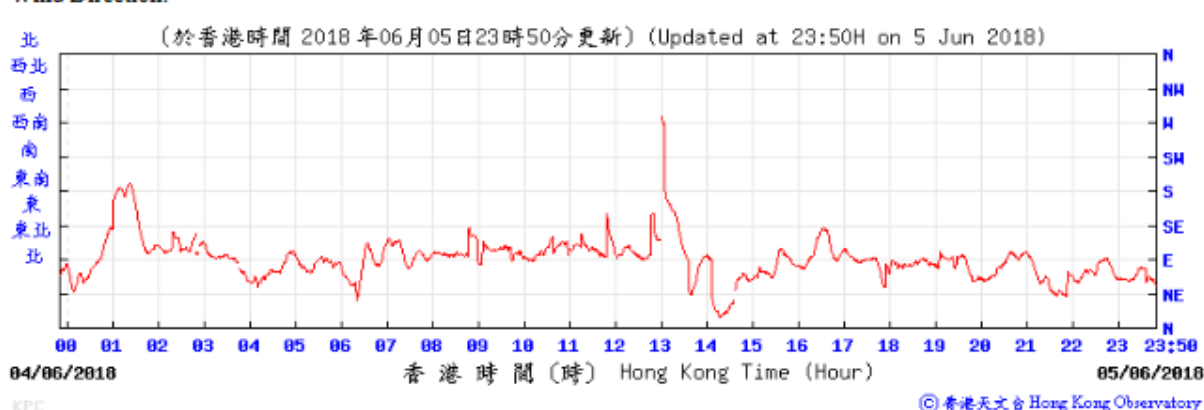
Temperature/Humidity:



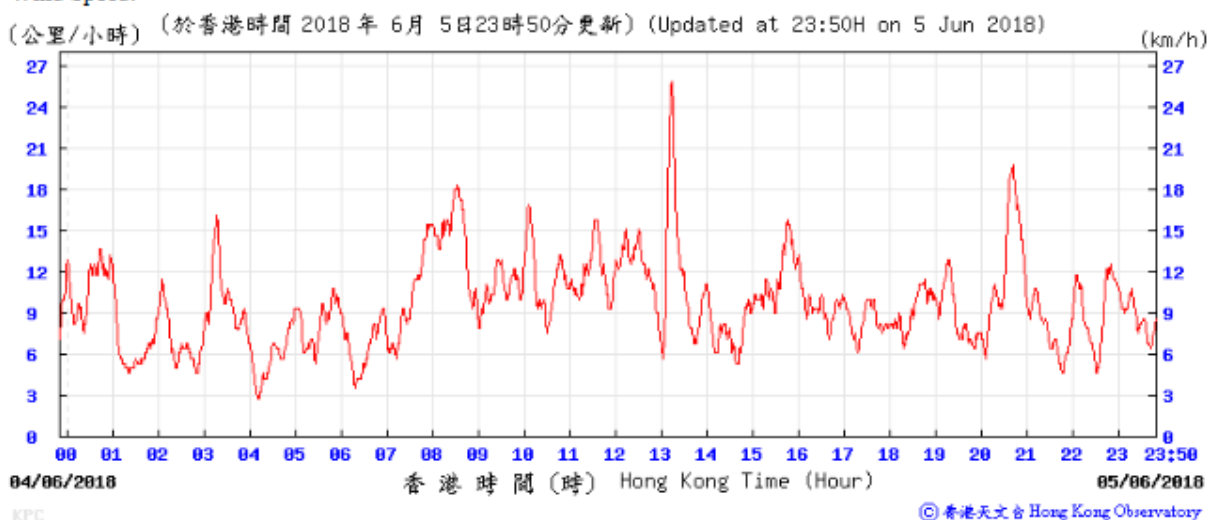
Pressure:



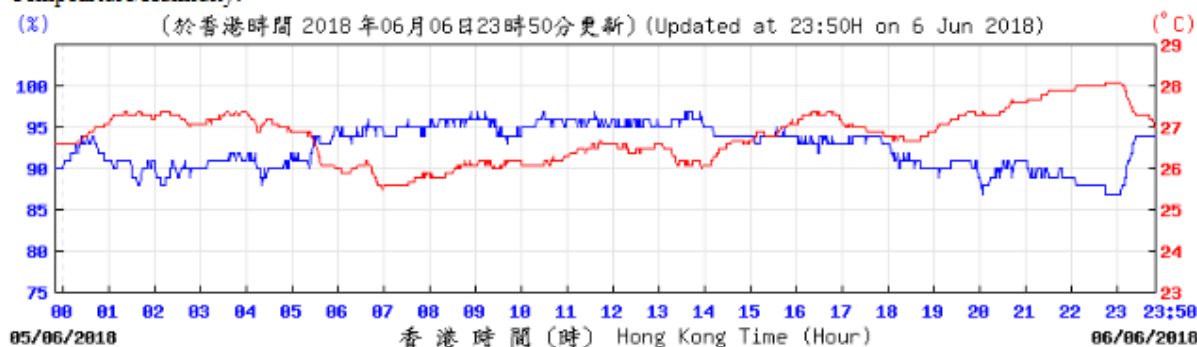
Wind Direction:



Wind Speed:

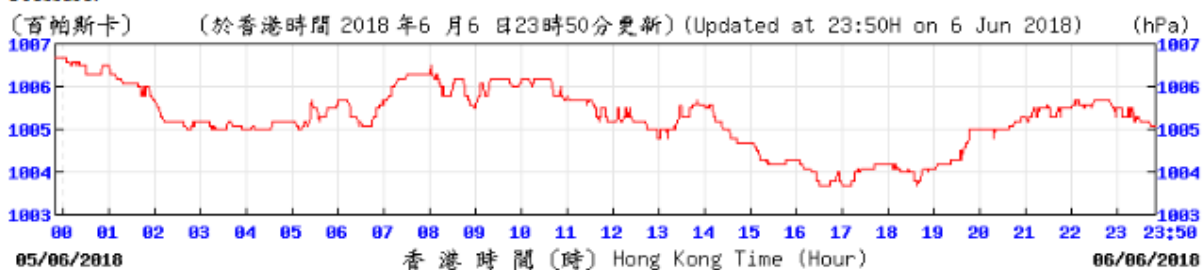


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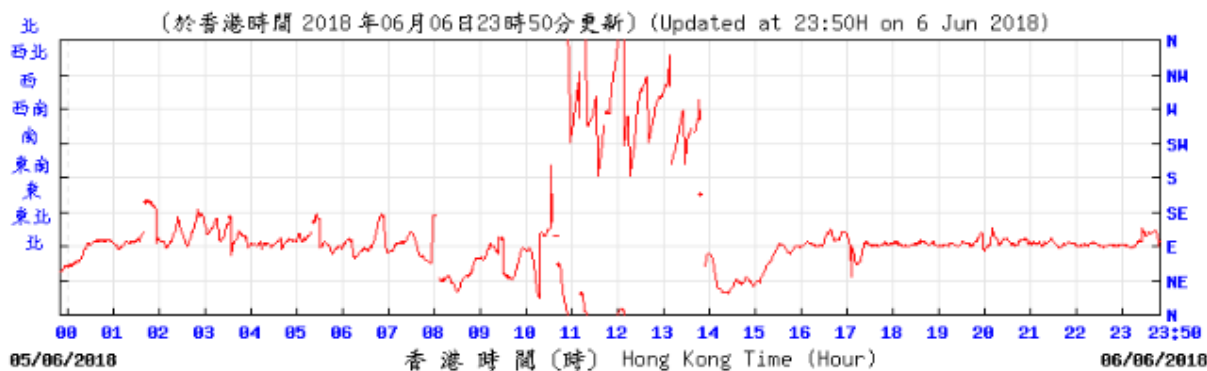
KPC

Pressure:



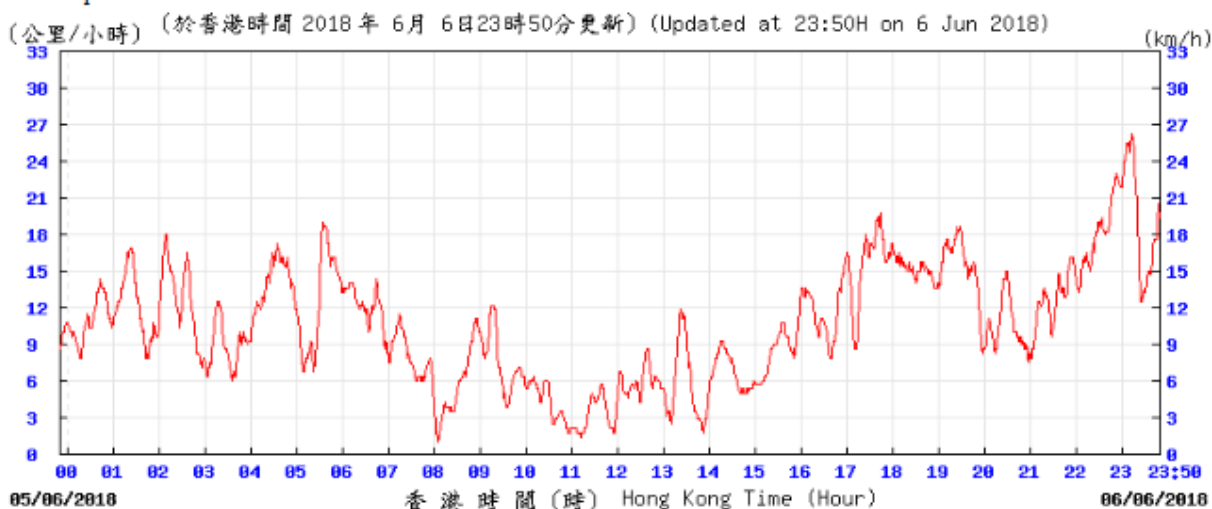
KPC

Wind Direction:



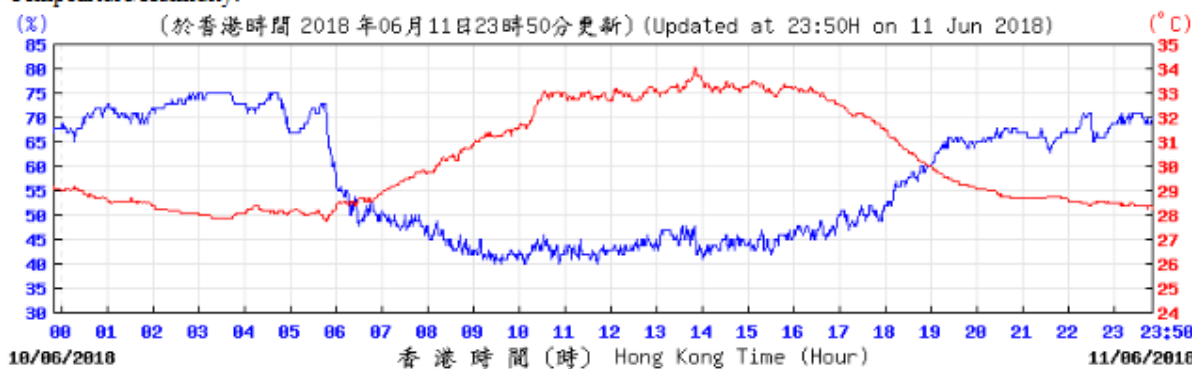
KPC

Wind Speed:

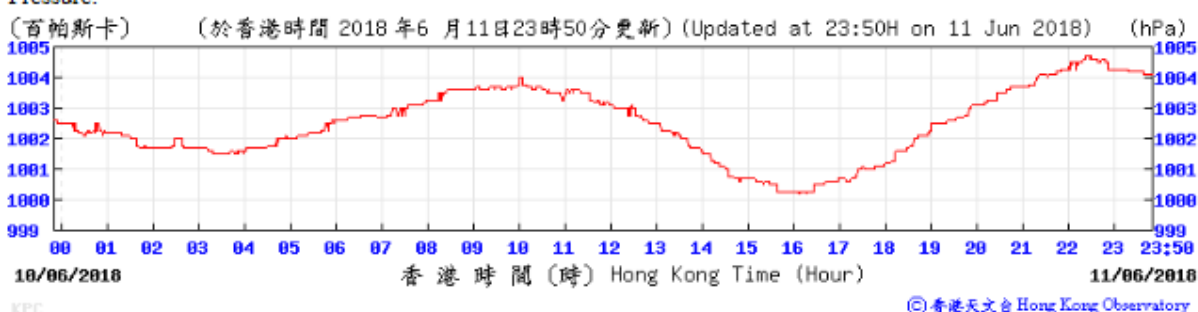


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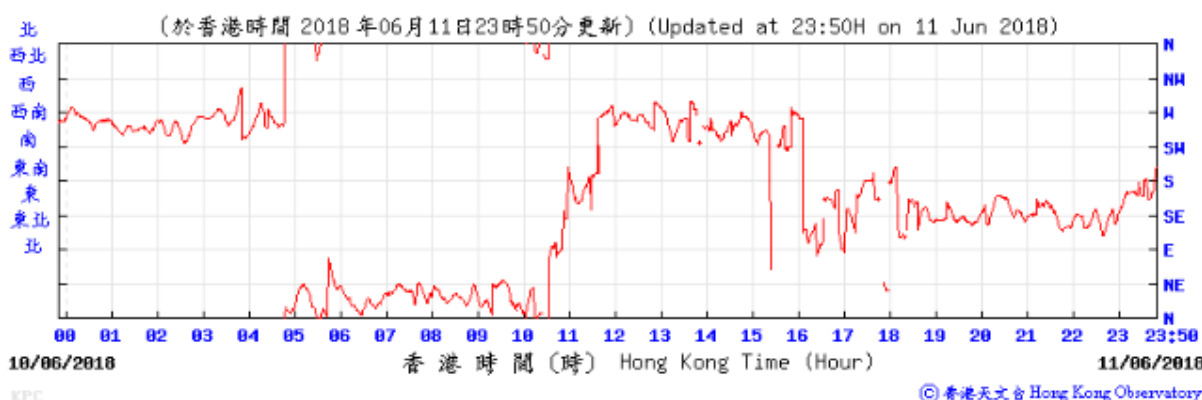
Temperature/Humidity:



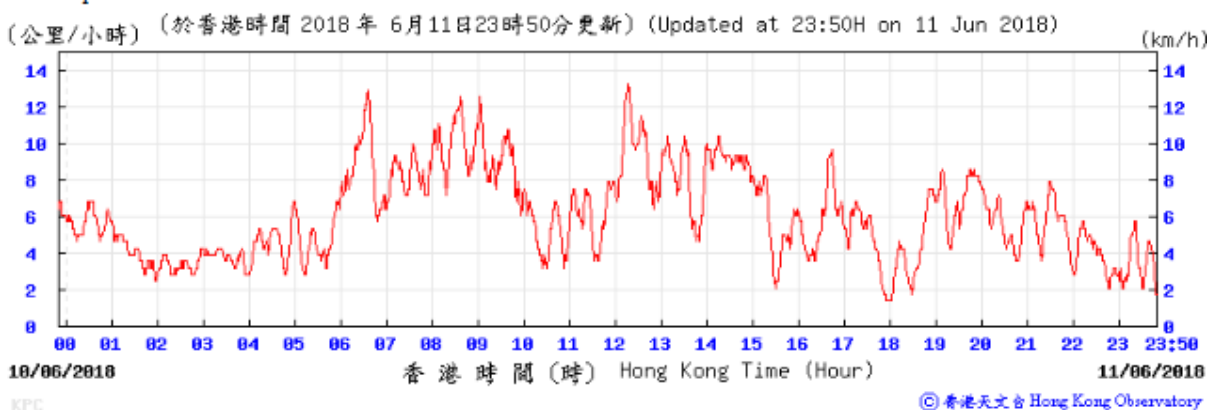
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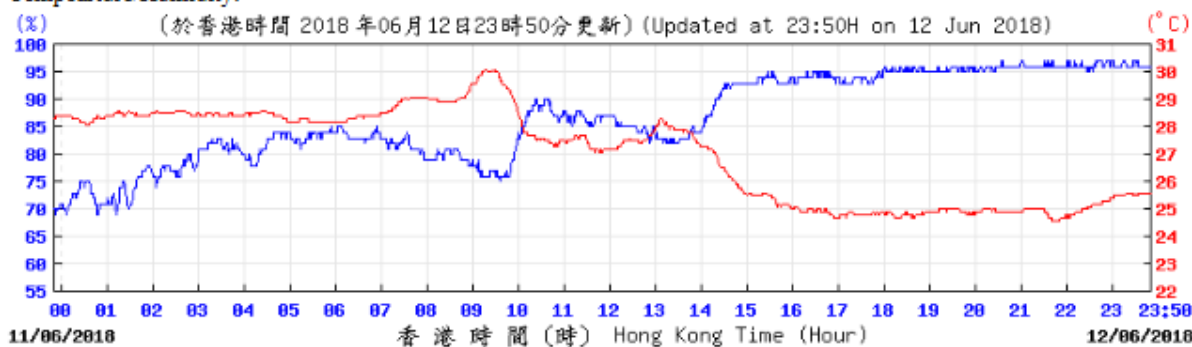
Wind Direction:



Wind Speed:



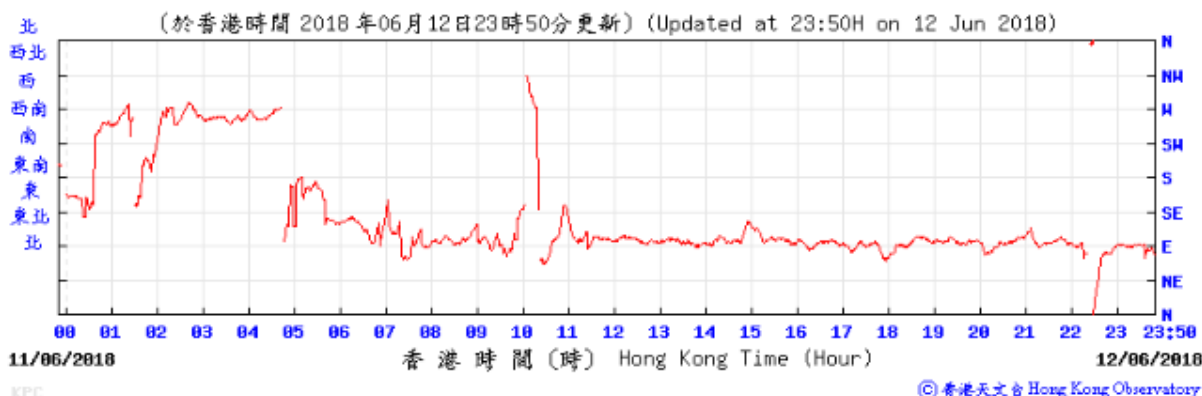
Temperature/Humidity:



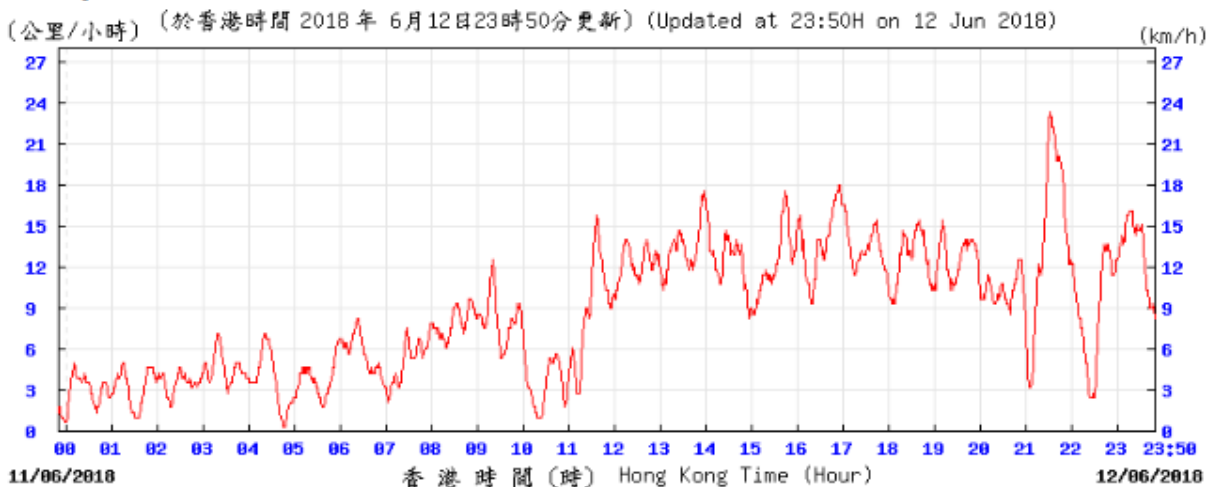
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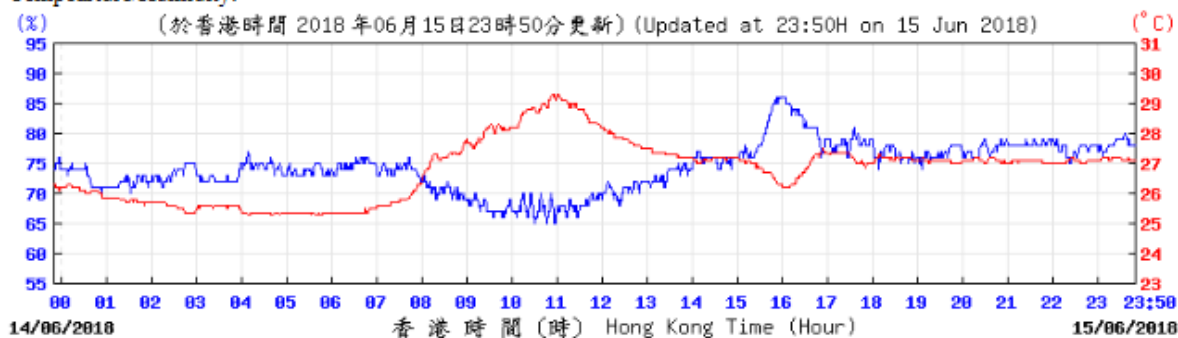
Wind Direction:



Wind Speed:

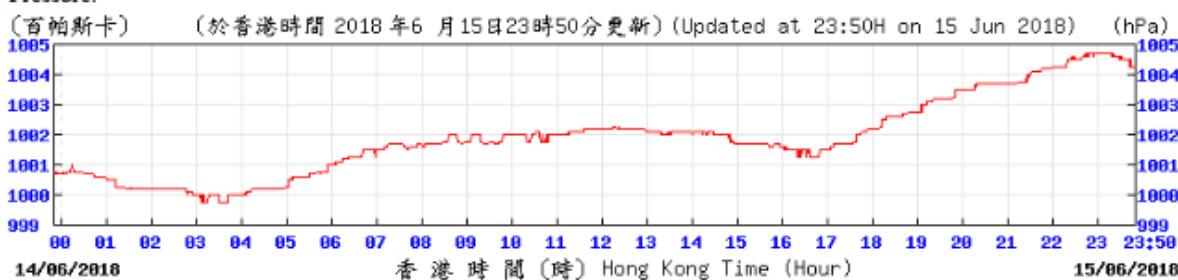


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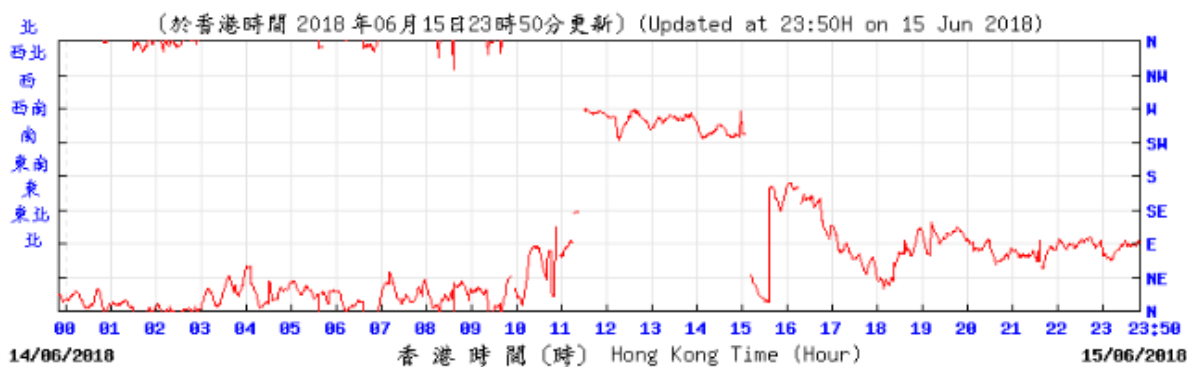
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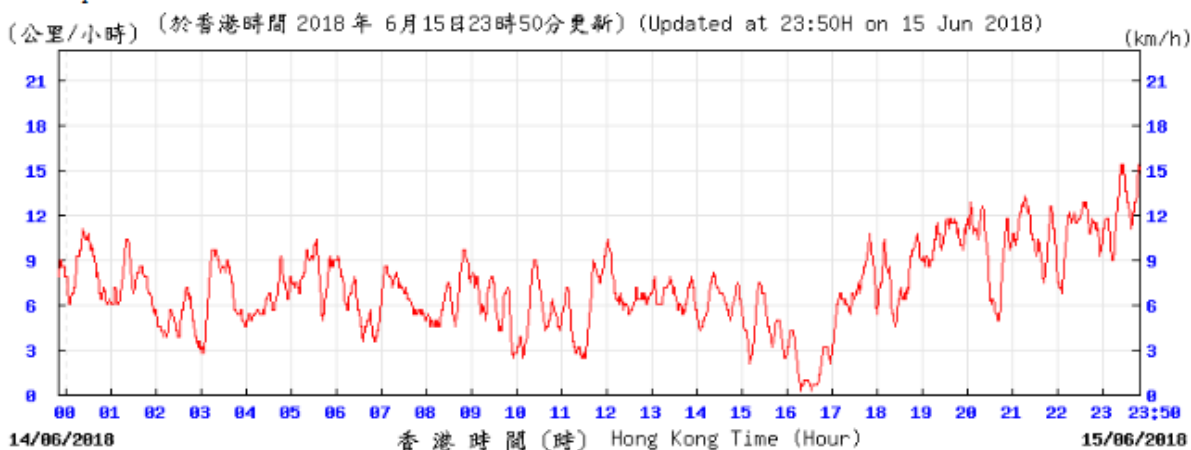
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Wind Direction:



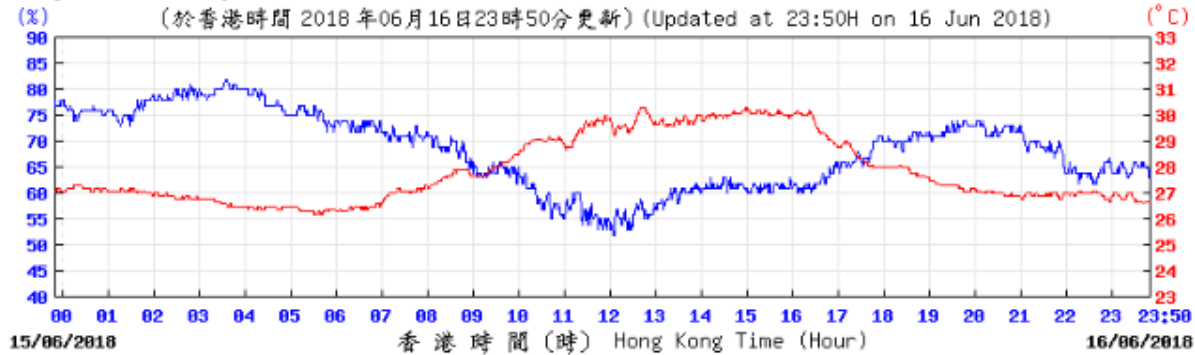
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Wind Speed:



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Temperature/Humidity:



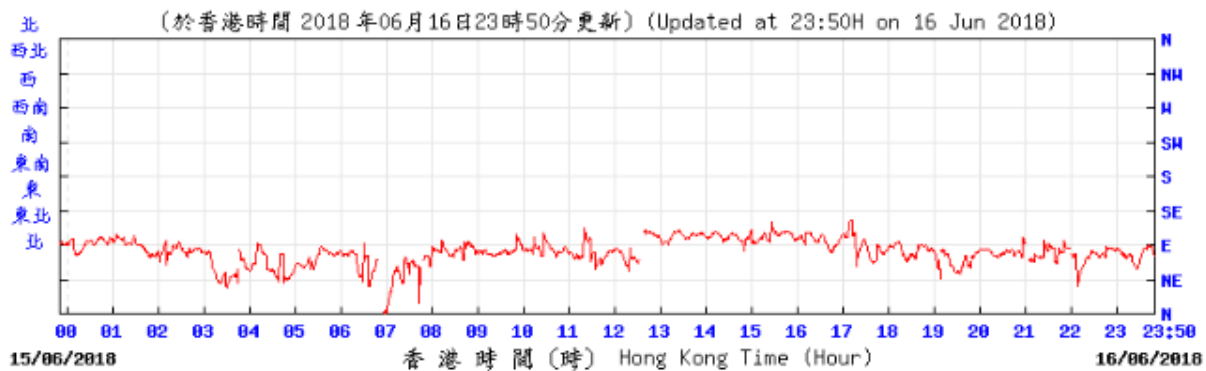
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Pressure:



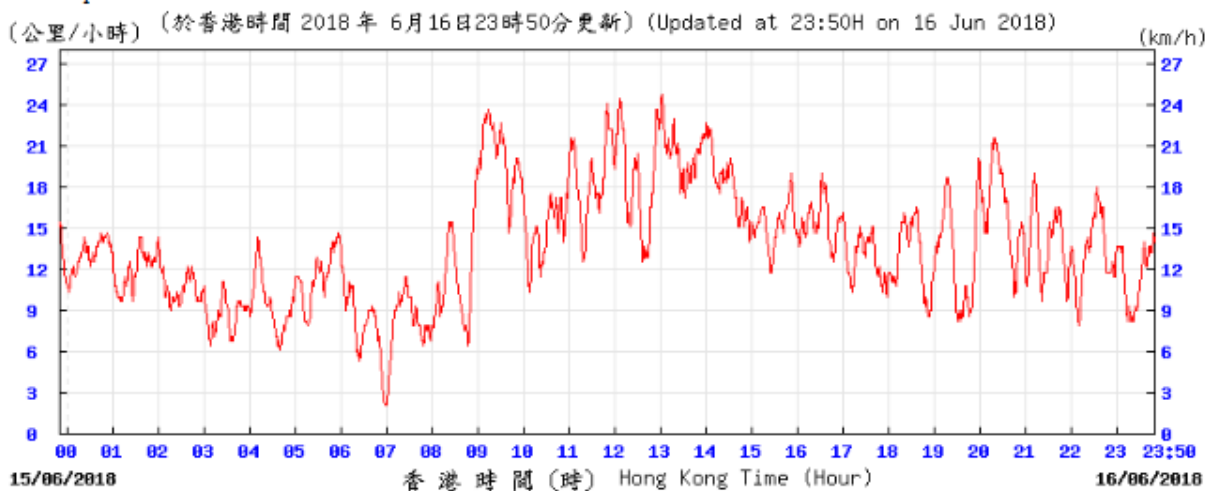
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Wind Direction:



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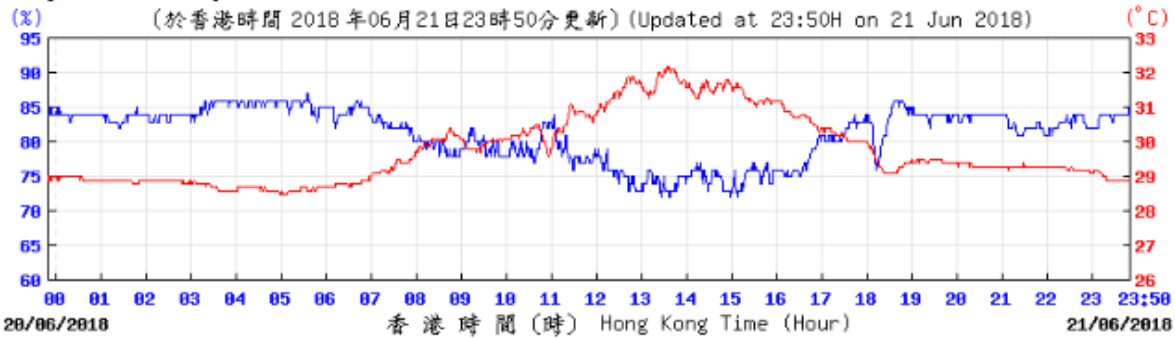
Wind Speed:



KPC

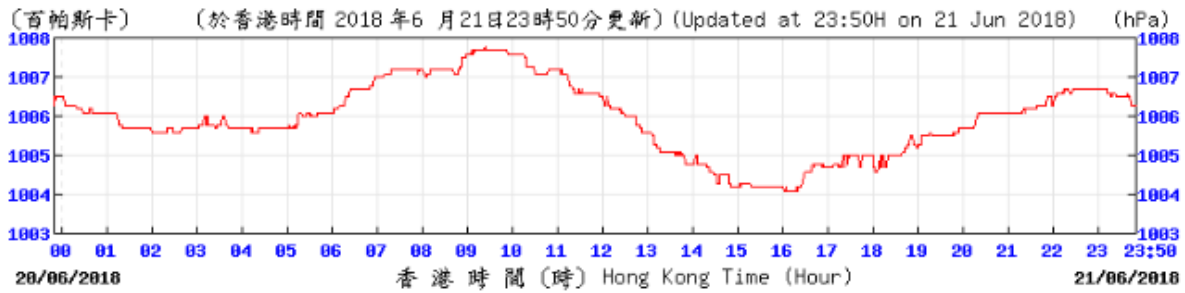
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Temperature/Humidity:



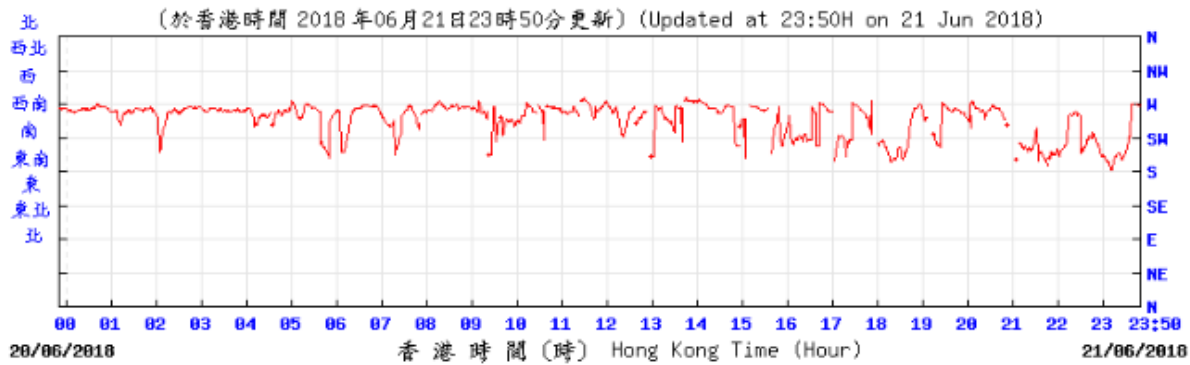
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Pressure:



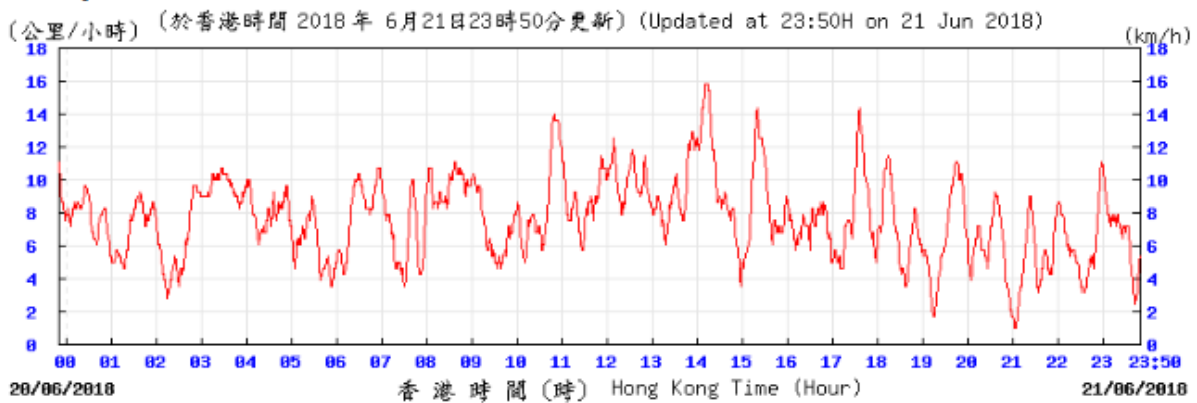
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Wind Direction:



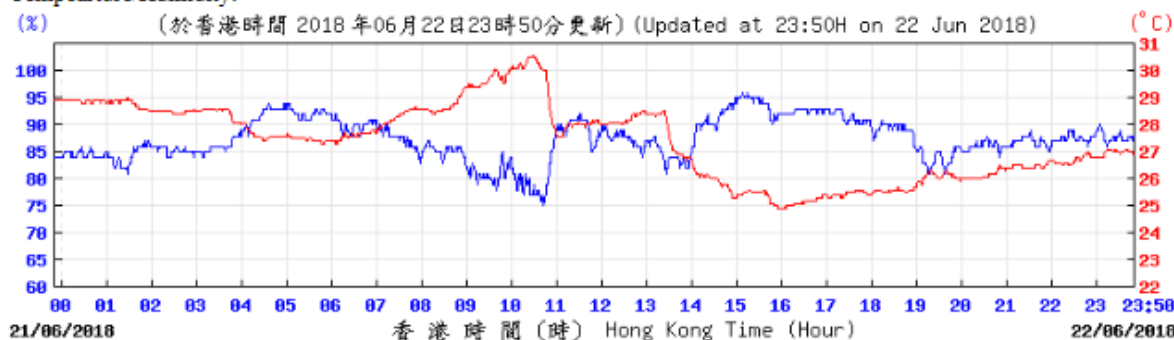
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Wind Speed:



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Temperature/Humidity:



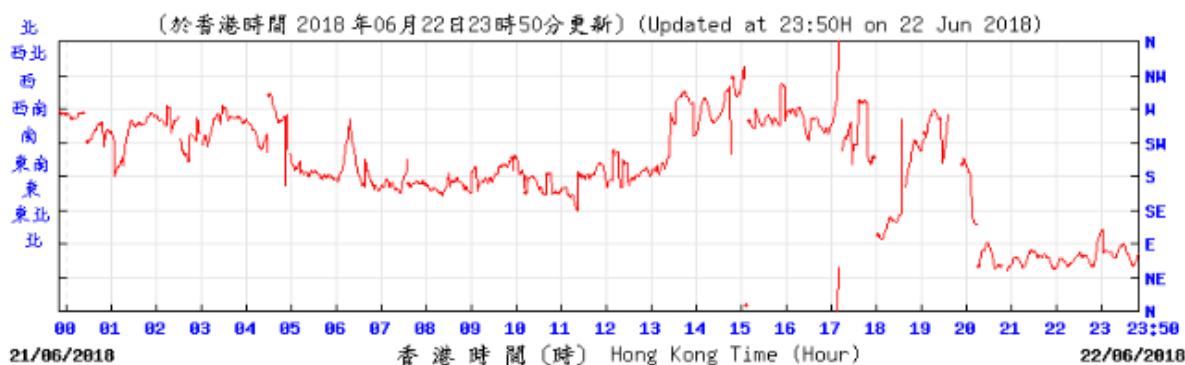
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Pressure:



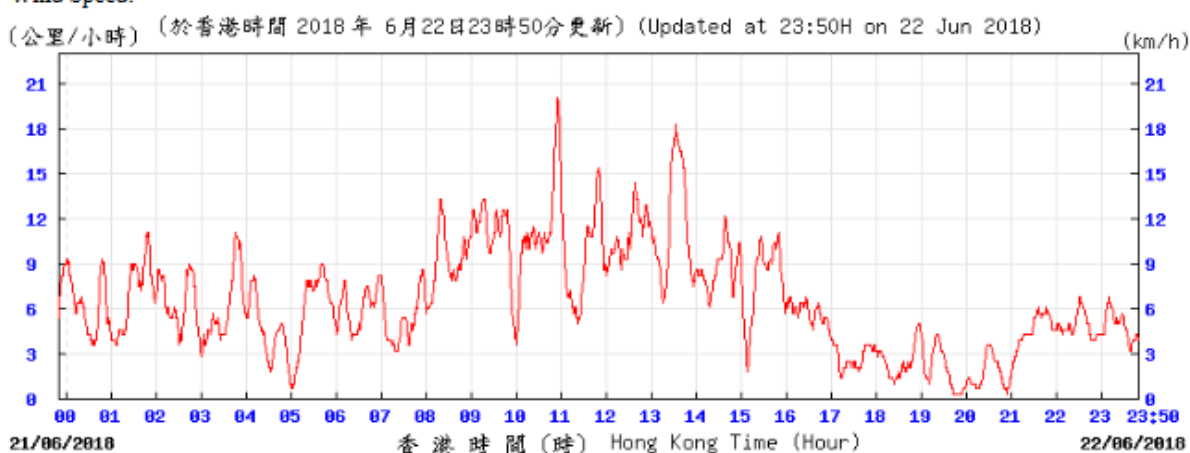
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Wind Direction:



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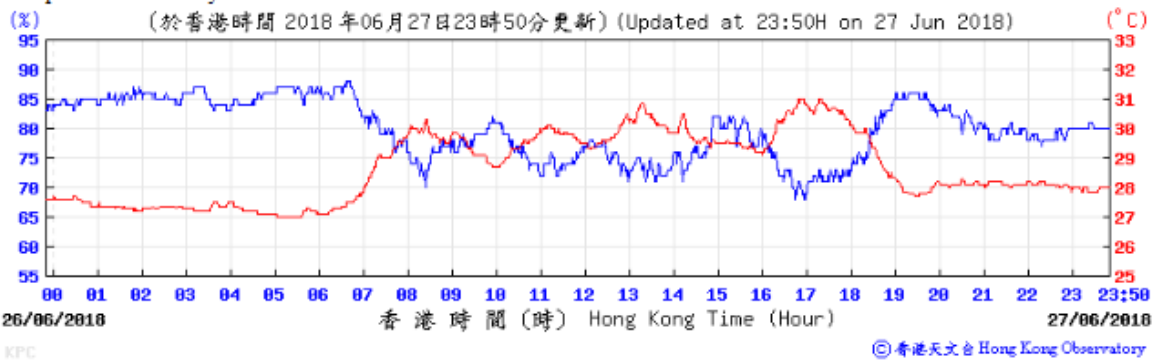
Wind Speed:



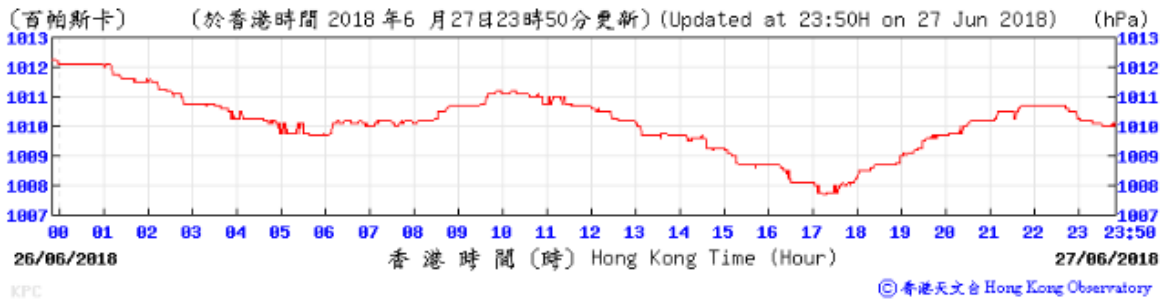
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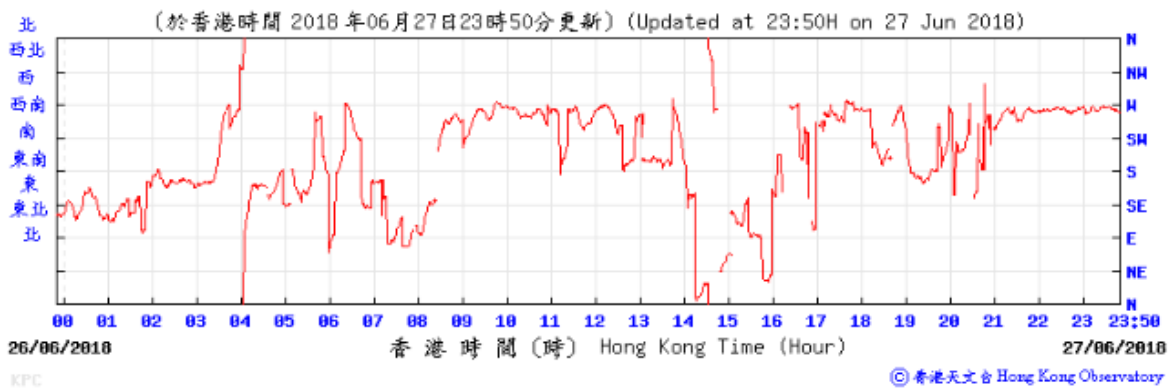
Temperature/Humidity:



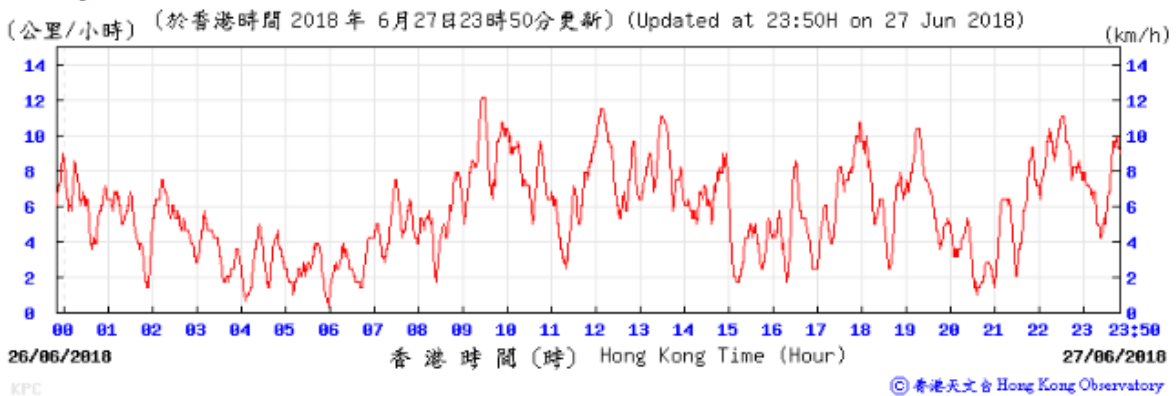
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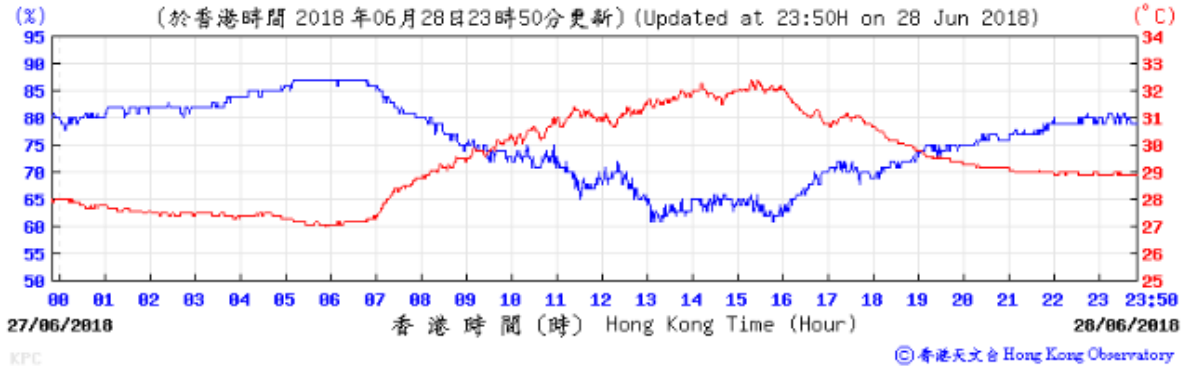
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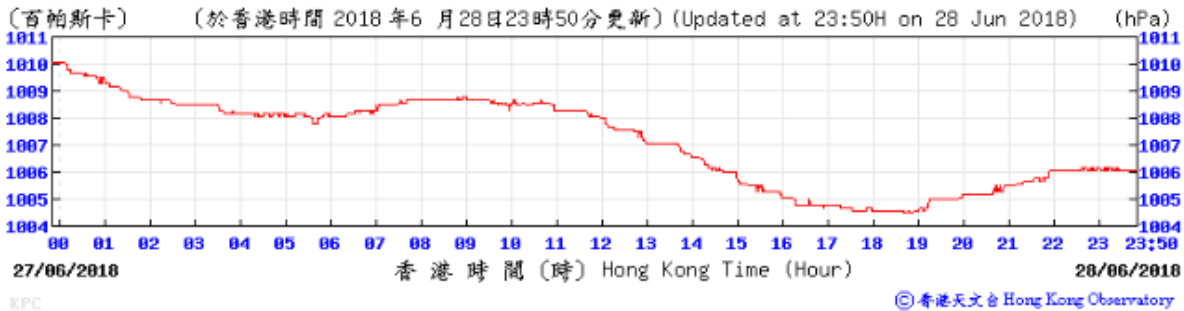
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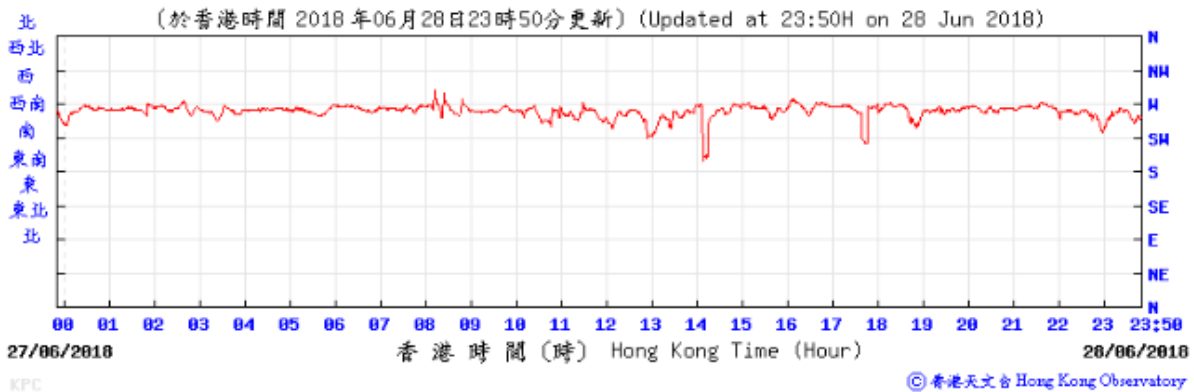
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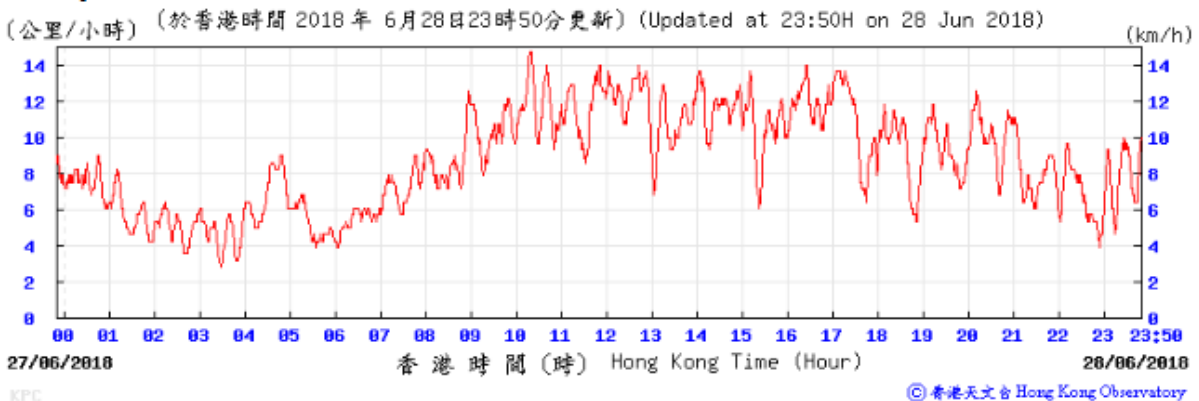
Pressure:



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

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)
Sub-total (2017)	12453.0	0.0	0.0	3168.0	6522.6	2762.4	0.0	2985.3	8.9	0.0	1921.1	0.2	1855.5
2018													
Jan	1015.3	0.0	0.0	0.0	574.1	441.2	0.0	773.3	1.5	0.0	100.0	0.0	183.6
Feb	847.6	0.0	0.0	0.0	608.3	239.3	0.0	34.0	1.0	0.0	25.0	0.0	154.9
Mar	1507.0	0.0	0.0	0.0	1102.1	404.9	0.0	39.5	1.5	0.0	120.0	0.0	264.1
Apr	2942.8	0.0	0.0	0.0	2542.4	400.4	0.0	60.1	0.3	0.0	100.0	0.0	252.5
May	2109.2	0.0	0.0	0.0	1593.3	515.9	0.0	37.0	0.4	0.0	70.0	0.0	311.4
Jun	1697.6	0.0	0.0	0.0	1162.4	535.2	0.0	47.0	0.3	0.0	100.0	0.0	188.2
Sub-total (2018)	10119.4	0.0	0.0	0.0	7582.5	2536.9	0.0	990.9	5.0	0.0	515.0	0.0	1354.6
Total	232966.2	0.0	25232.0	140485.4	61783.2	5465.6	0.0	4893.6	16.2	0.0	2836.2	1.4	4205.6

Note:

- 10.95 ton, 575.44 ton and 575.99 ton of inert C&D material were disposed of as public fill to Chai Wan Public Fill Barging Point, Tuen Mun Area 38 and Tseung Kwan O Area 137 Public Fill 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.
- Quantities of waste materials generated for the previous reporting months have been updated by Contractor.

Lyric Theatre Complex

Table I-2: Monthly Waste Flow Table for Lyric Theatre Complex

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

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	4083.7	0.0	0.0	1455.0	2628.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.9
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	0.004
Mar	5959.2	0.0	0.0	5610.1	349.1	0.0	0.0	0.0	0.0	1.0	0.0	0.6	17.6
Apr	10854.2	0.0	0.0	8878.0	1976.3	0.0	0.0	0.0	0.0	0.2	0.0	0.0	7.6
May	40289.3	0.0	0.0	27494.6	12794.7	0.0	0.0	44.4	0.0	0.0	0.0	0.0	9.4
Jun	54224.0	0.0	0.0	38749.3	15474.7	0.0	0.0	0.0	0.1	0.0	0.0	0.0	12.8
Sub-total (2018)	115410.4	0.0	0.0	82186.9	33223.5	0.0	0.0	44.4	0.1	1.2	0.0	0.6	50.3
Total	289642.3	0.0	0.0	101237.9	188381.0	23.4	0.0	566.0	1.2	2.7	0.0	11.9	379.1

Note:
-489.9 tonnes and 14,984.78 tonnes of inert C&D material were disposed of as public fill to Tseung Kwan O Area 137 and Tuen Mun Area 38 Public Fill respectively in the reporting month.
-Quantities of waste materials generated for the previous reporting months have been updated by Contractor.

J. Environmental Mitigation Measures – Implementation Status

Table J-1: Environmental Mitigation Measures Implementation Status

EM&A Ref.	Recommendation Measures	Implementation Stage	
		M+ Museum	Lyric Theatre Complex
Air Quality Impact (Construction)			
2.1 & 10.3.1	<p>General Dust Control Measures</p> <p>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)</p>	Obs	✓
2.1 & 10.3.1	<p>Best Practice For Dust Control</p> <p>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:</p> <p><i>Good Site Management</i></p> <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. <p><i>Disturbed Parts of the Roads</i></p> <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. <p><i>Exposed Earth</i></p> <ul style="list-style-type: none"> • Exposed earth should be properly treated by compaction, hydroseeding, vegetation planting or seeding 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 	Obs	✓
		✓	✓
		✓	✓
		N/A	N/A
		✓	✓

EM&A Ref.	Recommendation Measures	Implementation Stage	
		M+ Museum	Lyric Theatre Complex
	so as to keep the dusty material wet.		
	<i>Debris Handling</i>		
	<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. 	✓	✓
	<ul style="list-style-type: none"> Before debris is dumped into a chute, water should be sprayed so that it remains wet when it is dumped. 	✓	✓
	<i>Transport of Dusty Materials</i>		
	<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. 	✓	✓
	<i>Wheel washing</i>		
	<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. 	✓	✓
	<i>Use of vehicles</i>		
	<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. 	✓	✓
	<ul style="list-style-type: none"> Immediately before leaving the construction site, every vehicle should be washed to remove any dusty materials from its body and wheels. 	✓	✓
	<ul style="list-style-type: none"> 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. 	✓	✓
	<i>Site hoarding</i>		
	<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>		

EM&A Ref.	Recommendation Measures	Implementation Stage	
		M+ Museum	Lyric Theatre Complex
	<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 	✓	✓
	Emission Limits		
	<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 	✓	✓
	Engineering Design/Technical Requirements		
	<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 	✓	✓
-	<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>	Rem	✓
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> <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	<p>Adoption of Quieter PME</p> <p>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.</p>	N/A	N/A

EM&A Ref.	Recommendation Measures	Implementation Stage	
		M+ Museum	Lyric Theatre Complex
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.	N/A	✓
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.	N/A	N/A
3.1 & 10.4.1	Use of Noise Insulating Fabric Noise insulating fabric can also be adopted for certain PME (e.g. drill rig, pilling 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.	✓	✓
3.1 & 10.4.1	Scheduling of Construction Works outside School Examination Periods 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
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 WKCDA's Contractor prior to the commencement of construction; 	✓	✓
	<ul style="list-style-type: none"> 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 WKCDA's Contractor prior to the commencement of construction. 	✓	✓
	<ul style="list-style-type: none"> All drainage facilities and erosion and sediment control structures should be regularly inspected and 	Obs	Obs

EM&A Ref.	Recommendation Measures	Implementation Stage	
		M+ Museum	Lyric Theatre Complex
	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.		
	<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. 	✓	✓
	<ul style="list-style-type: none"> 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. 	✓	✓
	<ul style="list-style-type: none"> 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. 	✓	✓
	<ul style="list-style-type: none"> 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. 	✓	✓
	<ul style="list-style-type: none"> 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. 	✓	✓
	<ul style="list-style-type: none"> 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. 	N/A	N/A
	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; 	N/A	N/A
	<ul style="list-style-type: none"> 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 		

EM&A Ref.	Recommendation Measures	Implementation Stage	
		M+ Museum	Lyric Theatre Complex
	materials or polluted water during loading or transportation;	N/A	N/A
	<ul style="list-style-type: none"> 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	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. 	✓	✓
		✓	✓
Waste Management Implications (Construction)			
6.1 & 10.7.1	Good Site Practices Recommendations for good site practices during the construction activities include:		
	<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 &	Waste Reduction Measures		

EM&A Ref.	Recommendation Measures	Implementation Stage	
		M+ Museum	Lyric Theatre Complex
10.7.1	<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 Plan the use of construction materials carefully to minimise amount of waste generated and avoid unnecessary generation of waste 	<p>✓</p> <p>✓</p> <p>✓</p> <p>✓</p> <p>✓</p>	<p>✓</p> <p>✓</p> <p>✓</p> <p>✓</p> <p>✓</p>
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. 	<p>✓</p> <p>✓</p> <p>✓</p> <p>✓</p> <p>✓</p>	<p>✓</p> <p>✓</p> <p>✓</p> <p>✓</p> <p>✓</p>
6.1 &	Chemical Waste		

EM&A Ref.	Recommendation Measures	Implementation Stage	
		M+ Museum	Lyric Theatre Complex
10.7.1	<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. 	Obs	Obs
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)			
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; 	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	Lyric Theatre Complex
	<ul style="list-style-type: none"> 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; 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	N/A
		N/A	N/A
		N/A	N/A
		N/A	N/A
		N/A	N/A
Ecological Impact (Construction)			
	No mitigation measure is required.		
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
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
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
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
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
Table 9.1 & 10.8 (CM6)	Sensitive streetscape design should be incorporated along all new roads and streets.	N/A	N/A
Table 9.1 & 10.8 (CM7)	Structure, ornamental planting shall be provided along amenity strips to enhance the landscape quality.	N/A	N/A

EM&A Ref.	Recommendation Measures	Implementation Stage	
		M+ Museum	Lyric Theatre Complex
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
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
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
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
Table 9.2 & 10.9 (MCP4)	Control of night time lighting	✓	✓
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 - 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	4	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	5	0	0