

# Development at West Kowloon Cultural District

Quarterly Environmental Monitoring and Audit (EM&A) Report  
(November 2022 – January 2023)

February 2023

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

**Certified by:**



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**CK WU**

Environmental Team Leader (ETL)

West Kowloon Cultural District Authority

Date

27 February 2023

**Verified by:**



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**Claudine LEE**

Independent Environmental Checker (IEC)

Meinhardt Infrastructure and Environment Ltd

Date

28 February 2023

This Report Consists of:

**Part-1: EM&A at Lyric Theatre Complex**

**and**

**Part-2: EM&A for Foundation and ELS  
Works in Zones 2A, 2B & 2C**

# Part-1: EM&A at Lyric Theatre Complex



# Lyric Theatre Complex

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# Executive summary

This Quarterly EM&A Report presents the monitoring works at Lyric Theatre Complex conducted from 1 November 2022 to 31 January 2023. The construction works and EM&A programme for M+ Museum was commenced on 31 October 2015 and completed on 28 February 2021; while the construction works and EM&A programme for Lyric Theatre Complex (L1 and L2 Contracts) was commenced on 1 March 2016, and the EM&A programme for L1 Contract was completed on 30 June 2021.

The impact stage EM&A programme for the Project includes air quality, noise, water quality, waste, landscape and visual monitoring. The recommended environmental mitigation measures were implemented on site and regular inspections were carried out to ensure that the environmental conditions are acceptable.

The EM&A programme was carried out by the ET in accordance with the EM&A Manual requirements. It is concluded from the environmental monitoring and audit works that adequate environmental mitigation measures have been implemented by the contractors where appropriate in the reporting quarter.

## **Exceedance of Action and Limit Levels**

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

## **Implementation of Mitigation Measures**

Construction phase weekly site inspections were carried out to confirm the implementation measures undertaken by the Contractors in the reporting quarter. The status of implementation of mitigation measures during the reporting quarter is shown in **Appendix C**.

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

## **Record of Complaints**

Two complaints were received during the reporting quarter.

## **Record of Notifications of Summons and Successful Prosecutions**

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



# 1 Introduction

## 1.1 Background

Mott MacDonald Hong Kong Limited (MMHK) was commissioned to undertake the Environmental Team (ET) services (including environmental monitoring and audit (EM&A)) for the construction of M+ Museum Main Works (Contract No.: CC/2015/3A/022) and Lyric Theatre Complex including the Foundation Works (Contract No.: CC/2015/3A/014), L1 Contract (Contract No. CC/2017/3A/030) and L2 Contract (Contract No. CC/2017/3A/031) at West Kowloon Cultural District (WKCD) (The Project) as part of the WKCD development. The Project Proponent is the West Kowloon Cultural District Authority (WKCDA). The construction works and EM&A programme for M+ Museum was commenced on 31 October 2015 and completed on 28 February 2021; while the construction works and EM&A programme for Lyric Theatre Complex (L1 and L2 Contracts) was commenced on 1 March 2016, and the EM&A programme for L1 Contract was completed on 30 June 2021.

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 1 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 Quarterly EM&A Report is prepared in accordance with the Clause 3.4 of the Environmental Permit No. EP-453/2013/B. This Quarterly EM&A Report presents the monitoring works conducted from 1 November 2022 to 31 January 2023. 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 Status of Construction Works in the Reporting Period

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

- LTC construction
  - Structure (Slab, wall, columns and beam)
    - Falsework and formwork erection
    - Reinforcement work
    - Concrete work
  - ABWF & MEP work
- ASDA and Lyric Theatre Promenade
  - Structure and BS works
  - Hoarding works
- DSC cofferdam (Cofferdam A)
  - Excavation
  - Additional Strengthening of PP Wall
  - Support Existing CW Main
- Modification to Existing Pump Cell
  - Construct new maintenance platform, cat ladder, hoisting eye
- Extended basement
  - ABWF & MEP work
  - Cabling works
  - Late cast RC works (top slab/ backfill sunken etc.)
  - Carpark area plaster and paint
  - Doors permanent frames
- Underpass and Associated Area
  - RC Structure
  - ABWF & MEP work
- M+ Day 2 Works
  - Remove plenum block wall & make good opening for Louvre
- P32 Interim Development
  - RC works

The Construction Works Programme of the Project is provided in **Appendix B**. A layout plan of the Project is provided in **Figure 1**.

## 2 Summary of EM&A Requirements and Mitigation Measures

### 2.1 Monitoring Requirements

In accordance with the EM&A Manual, environmental parameters including air quality, noise, landscape and visual have been monitored. The specific parameters, monitoring frequency and the respective Action and Limit levels are given in **Table 2.1**. Locations of the monitoring stations are provided in **Figure 1**.

**Table 2.1: Summary of Impact EM&A Requirements**

Parameters	Descriptions	Locations	Frequencies	Action level	Limit level
Air Quality	24-Hour TSP	AM1 - International Commerce Centre	At least once every 6 days	143.6 µg/m <sup>3</sup>	260 µg/m <sup>3</sup>
	1-Hour TSP	AM1 - International Commerce Centre	At least 3 times every 6 days	273.7 µg/m <sup>3</sup>	500 µg/m <sup>3</sup>
	24-Hour TSP	AM2 - The Harbourside Tower 1	At least once every 6 days	151.1 µg/m <sup>3</sup>	260 µg/m <sup>3</sup>
	1-Hour TSP	AM2 - The Harbourside Tower 1	At least 3 times every 6 days	274.2 µg/m <sup>3</sup>	500 µg/m <sup>3</sup>
Noise	Leq, 30 minutes	NM1- The Harbourside Tower 1	Weekly	When one documented complaint is received from any one of the sensitive receivers	75 dB(A)
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	N/A	N/A

In the context of the monitoring activities at M+ Museum and the Lyric Complex, three monitoring stations had been considered, including AM1 (International Commerce Centre), AM2 (The Harbourside Tower 1) for air monitoring, and NM1 (The Harbourside Tower 1) for noise monitoring. Other monitoring locations were so far away from M+ Museum and the Lyric Complex and could not be representative for impact monitoring.

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. Nevertheless, a 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 on the ground floor for conducting the air monitoring. However, the electricity supply at AM2 was suspended from 31 August 2016. In order to have a more secure electricity supply, an alternative air monitoring location (AM2A) was identified at Austin Road West opposite to The Harbourside Tower 1, which

is close to Lyric Theatre Complex site entrance. This alternative air monitoring location was approved by EPD on 28 September 2016. Due to the works programme, the air monitoring location AM2A has been relocated to the alternative monitoring location AM2B at the 1st floor of Gammon's site office, which was approved by EPD on 21 February 2019. In view of the upcoming construction works to be undertaken at the air monitoring station AM2B, AM2B was no longer available for conducting the impact air quality monitoring. Hence, an alternative air monitoring location was identified on the ground floor in front of The Harbourside Tower 1 (AM2) which is at the same location as the baseline monitoring and this previously approved monitoring location had also been used for the EM&A Programme from November 2015 to August 2016, the relocation was approved by EPD on 27 May 2021.

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. On the other hand, noise monitoring at G/F of Harbourside could not be representative. However, 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.

In short, 2 air quality monitoring stations and 1 noise impact monitoring station were confirmed for the impact monitoring.

## 2.2 Environmental Mitigation Measures

Environmental mitigation measures have been recommended in the EM&A Manual. Summary of implementation status of the environmental mitigation measures is provided in **Appendix C**.

## 3 Summary of EM&A Results

### 3.1 Monitoring Data

Impact monitoring has been conducted in the reporting quarter. Meteorological data for the reporting quarter have been extracted from Hong Kong Observatory and presented in **Appendix D**. Monitoring data with graphical presentation for the reporting quarter are shown in **Appendix E**. A summary on the monitoring results is presented in **Table 3.1**.

**Table 3.1: Summary of Monitoring Data**

Parameter	Monitoring Location	Minimum	Maximum	Average
<b>Air Quality</b>				
1 hour TSP	AM1	19	61	31
	AM2	23	72	43
24 hour TSP	AM1	9	53	21
	AM2	22	64	33
<b>Construction Noise</b>				
Leq(30min)	NM1A	66	67	67

### 3.2 Monitoring Exceedances

Summary of the exceedances in the reporting quarter is tabulated in **Table 3.2**.

**Table 3.2: Summary of Exceedances**

Monitoring Station	Parameter	No. of Exceedance		Action Taken
		Action Level	Limit Level	
<b>Air Quality</b>				
AM1	1 hour TSP	0	0	N/A
	24 hour TSP	0	0	N/A
AM2	1 hour TSP	0	0	N/A
	24 hour TSP	0	0	N/A
<b>Construction Noise</b>				
NM1A	Leq(30min)	0	0	N/A

#### 3.2.1 1-hour TSP Monitoring

All 1-hour TSP monitoring was conducted as scheduled in the reporting quarter. No Action/ Limit Level exceedance was recorded.

#### 3.2.2 24-hour TSP Monitoring

All 24-hour TSP monitoring was conducted as scheduled in the reporting quarter. No Action/ Limit Level exceedance was recorded.

#### 3.2.3 Construction Noise Monitoring

All construction noise monitoring was conducted as scheduled in the reporting quarter. No Action/ Limit Level exceedance was recorded.

### 3.2.4 Landscape and Visual Monitoring

All landscape and visual impact inspections were conducted as scheduled in the reporting quarter. No adverse comment on landscape and visual aspects were recorded.

## 4 Waste Management

### 4.1 Lyric Theatre Complex

As advised by the Contractor (L2 Contract), 636.9 tonnes, 251.5 tonnes and 0.0 tonne of inert C&D material were disposed of as public fill to Tseung Kwan O Area 137, Tuen Mun Area 38, and Chai Wan Public Fill Barging Point respectively in the reporting quarter, while 1,227.8 tonnes of general refuse were disposed of at SENT and WENT landfill. 119.9 tonnes of metals, 0.3 tonnes of paper/cardboard packaging, 0.0 tonne of plastic and 0.0 tonne of timber were collected by recycling contractors in the reporting quarter. 0.0 tonne of inert C&D materials was reused on site. 0.0 tonne of fill materials was imported for use at site and 0.0 tonne of inert C&D materials was reused in other projects. 0.0 tonne of inert C&D materials were disposed to sorting facility and 0.0 tonne of chemical waste were collected by licensed contractors in the reporting quarter.

The actual amount of different types of waste generated by the activities of construction works at Lyric Theatre Complex in the reporting quarter are shown in **Appendix F**.

## 5 Environmental Non-conformance

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

Two complaints were received in the reporting quarter: one complaint in December 2022 and one complaint in January 2023. No notifications of summons and successful prosecutions were received in the reporting quarter.

On 1 December 2022, the EPD received a complaint from The Harbourside Owners Committee regarding noise impact, and the complaint was referred by the EPD on the next day (i.e. 2 December 2022). The complainant claimed that construction works at the construction sites of WKCD were commenced since 7:00 a.m. and till 11:00 p.m., and the construction noise generated from piling and vehicles has been affecting the residents of The Harbourside. The complainant recommended that 1) the EPD shall carefully consider the impact on the nearby residents when processing the applications of site works and limit the construction hours from 0900 to 1900; 2) Increase random inspection of the WKCD construction site, and monitor the noise level of the Project. From the information provided by the contractor, the major construction activities for Lyric Theatre Complex (L2 Contract) were carried out between 8:00 a.m. and 7:00 p.m. which is compliant with the statutory requirement. The potential noisy works (e.g. breaking) were rescheduled after 9:00 a.m. to minimise the potential impact to the nearby residents. Preventive and mitigation measures are well-deployed and maintained by the Contractor including noise insulating fabric for breaking works, as well as regular briefings and meetings with subcontractors. And from the regular noise monitoring results, the results were well below the action/limit levels such that the construction works of Lyric Theatre Complex (L2 Contract) should not be posing significant impacts to the nearby sensitive receivers.

As concluded from the above investigation and findings, it could not directly imply the complaint was attributable to Lyric Theatre Complex (L2 Contract). However, the contractor is reminded to strictly implement and maintain good site practices to avoid noise impact to the nearby residents and sensitive receivers.

On 26 January 2023, CEDD received a complaint from ICC 1823 regarding polluted water discharge and the dump truck movement issue at WKCD construction site and referred the case on the same day. The complainant claimed that polluted water from the WKCD construction site was observed flowing to the street, and the movement of dump trucks generate rock debris on public roads. The parking of dump trucks also blocked part of the Austin Road West, which is the only exit for The Arch parking space, and severely impedes the traffic. After investigation, it was found that the concerned location was not within the site boundary of Lyric Theatre Complex (L2 Contract), and the dump trucks are properly cleaned and covered before egressing the site. Therefore, the complaint could not be attributable to Lyric Theatre Complex (L2 Contract).

Although the complaint may not be attributable to Lyric Theatre Complex (L2 Contract), dust and water pollution mitigation measures will continue to be strictly implemented on site. Nevertheless, the contractors are reminded to strengthen the implementation of the recommendations for dust and water mitigation measures to reduce impacts to the public.

The cumulative statistics on complaints, notifications of summons and successful prosecutions were provided in **Appendix G**.



## 6 Comments, Recommendations and Conclusion

### 6.1 Comments

Based on the observations made during site audits, landscape inspections, and construction dust and noise monitoring results, no non-compliances and exceedances of air quality and noise were recorded in the reporting quarter.

### 6.2 Recommendations

Reviewing the implementation of the recommended mitigation measures in the EM&A Manual, it was observed that they were effective and efficient in controlling the potential impacts due to construction of the project during the reporting period. Review of the effectiveness and efficiency of the EM&A programme will continue, and recommendations will be provided to remediate any potential impacts due to the project and to improve the EM&A programme if deficiencies of the existing EM&A programme are identified.

### 6.3 Conclusion

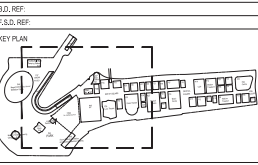
The EM&A programme as recommended in the EM&A Manual has been undertaken. The construction works and EM&A programme for M+ Museum was commenced on 31 October 2015 and completed on 28 February 2021; while the construction works and EM&A programme for Lyric Theatre Complex (L1 and L2 Contracts) was commenced on 1 March 2016, and the EM&A programme for L1 Contract was completed on 30 June 2021.

Monitoring of air quality and noise with respect to the Project is underway. In particular, the 1-hour TSP, 24-hour TSP and 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 Air Quality (1-hour TSP and 24-hour TSP) and Noise in this reporting quarter.

Two complaints were received in the reporting quarter. No notifications of summons and successful prosecutions were received during the reporting quarter.

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

## **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
  - CONSTRUCTION AIR/NOISE MONITORING STATIONS

REMARKS:  
THE AIR MONITORING STATION AM2B HAS BEEN RELOCATED TO THE ALTERNATIVE MONITORING STATION AM2 AT THE G/F OF HARBOURSIDE ON 1 JUNE 2021

REV.	DATE	DESCRIPTION	INITIAL

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

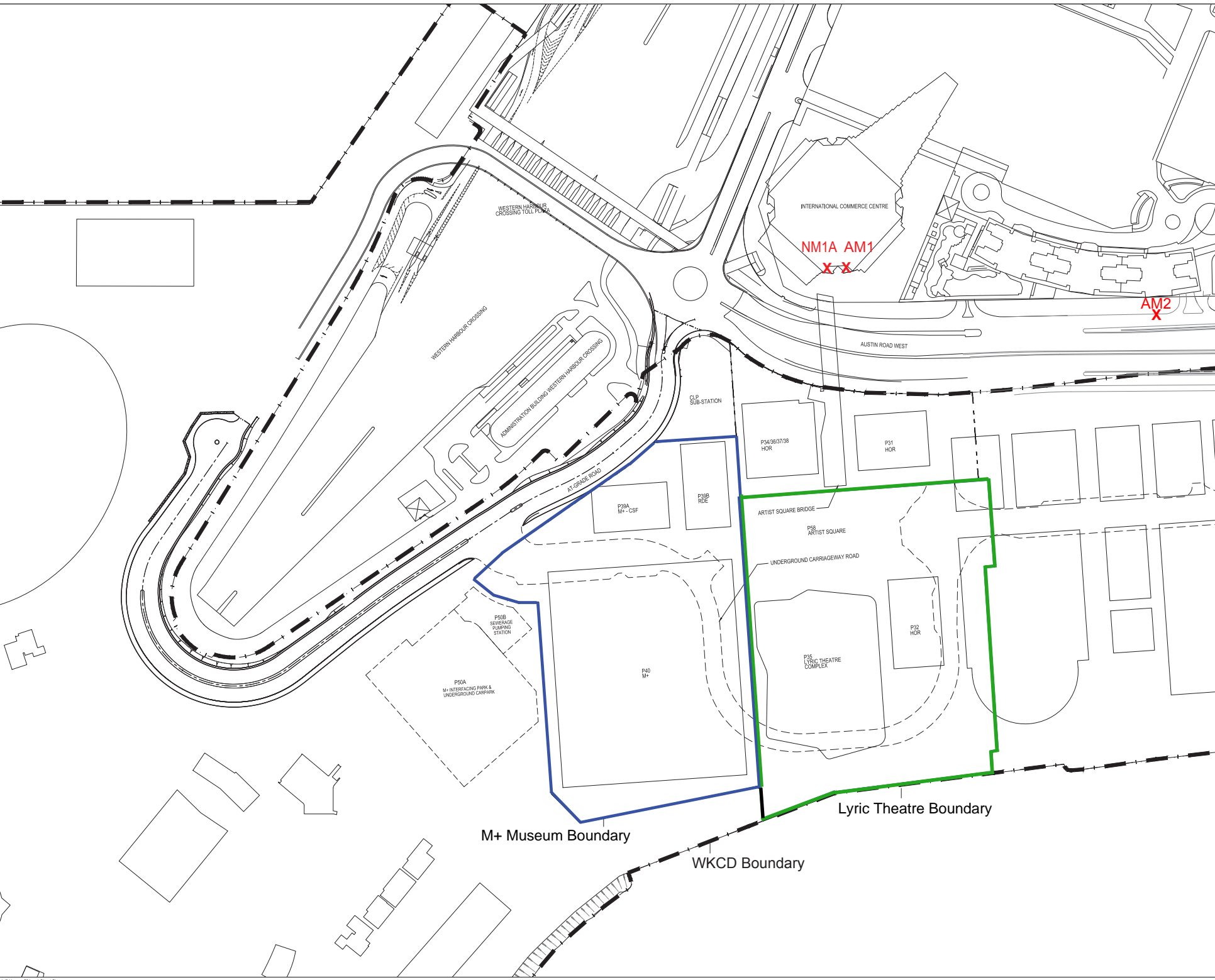
DRAWING TITLE: **PROPOSED LOCATIONS OF CONSTRUCTION AIR/NOISE MONITORING STATIONS**

SCALE	1:100	PRINTED	A1
CHECKED		DATE	
APPROVED		DATE	
DRAWN		DATE	
CONTRACT NO.			

DRAWING NO. **FIGURE 1** REV. **XA**

CAD REF NAME: XXXXX-4UT-FMS-DWG-FIG01A-000-000-XXX.dwg

AUTHORITY

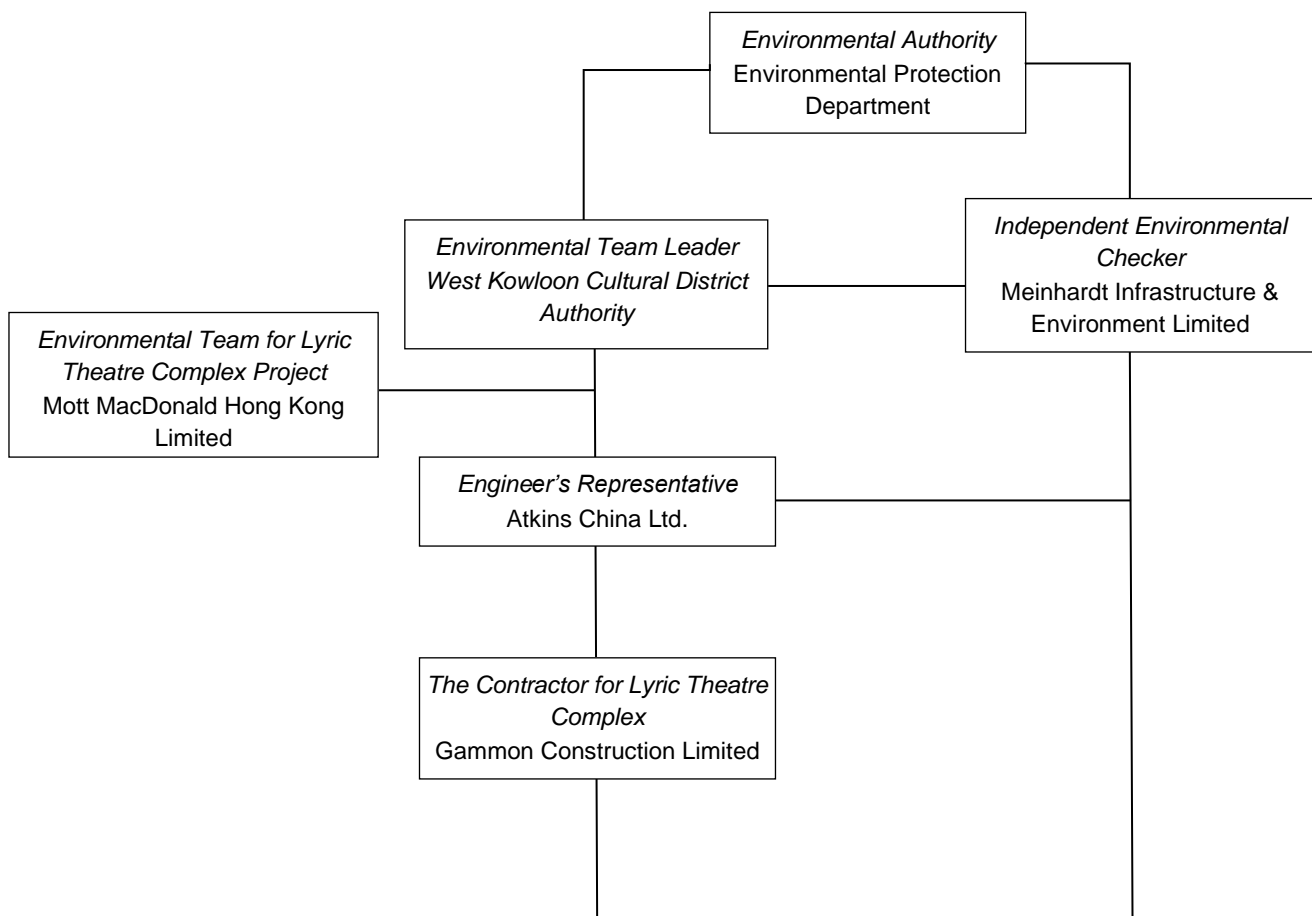


A1 (841mm x 594mm) Sheet Size

# Appendices

- A. Project Organisation
- B. Construction Programme
- C. Environmental Mitigation Measures – Implementation Status
- D. Meteorological Data Extracted from Hong Kong Observatory
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- G. Cumulative Statistics on Complaints, Notifications of Summons and Successful Prosecutions

## A. Project Organisation



**Table A-1: Contact information**

Company Name	Role	Name	Telephone	Email
Atkins China Ltd.	Project Manager	Mr. Simha LytheRao	2204 8259	Simha.Lytherao@atkingglobal.com
Meinhardt Infrastructure & Environment Limited	Independent Environmental Checker	Ms. Claudine Lee	2859 5409	claudinelee@meinhardt.com.hk
Gammon Construction Limited (L2)	Environmental Manager	Mr. Ivan Chiu	9416 1664	ivan.chiu@gammonconstruction.com
Mott MacDonald Hong Kong Ltd.	Contractor's Environmental Team Leader	Mr. Thomas Chan	2828 5757	thomas.chan@mottmac.com
West Kowloon Cultural District Authority	Senior Project Manager (Safety, Health and Environment)	Mr. C.K. Wu	5506 9178	ck.wu@wkcd.a.hk

## B. Construction Programme









## **C. Environmental Mitigation Measures – Implementation Status**

**Table C-1: Environmental Mitigation Measures Implementation Status**

EM&A Ref.	Recommendation Measures	Implementation Stage		
		Nov 2022	Dec 2022	Jan 2023
<b>Air Quality Impact (Construction)</b>				
2.1 & 10.3.1	<p><b>General Dust Control Measures</b></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>	Rem	✓	✓
2.1 & 10.3.1	<p><b>Best Practice For Dust Control</b></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"> <li>• 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.</li> </ul> <p><i>Disturbed Parts of the Roads</i></p> <ul style="list-style-type: none"> <li>• Each and every main temporary access should be paved with concrete, bituminous hardcore materials or metal plates and kept clear of dusty materials; or</li> <li>• Unpaved parts of the road should be sprayed with water or a dust suppression chemical so as to keep the entire road surface wet.</li> </ul> <p><i>Exposed Earth</i></p> <ul style="list-style-type: none"> <li>• 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.</li> </ul> <p><i>Loading, Unloading or Transfer of Dusty Materials</i></p>	Obs	✓	Obs
		✓	✓	✓
		✓	✓	✓
		N/A	N/A	N/A

EM&A Ref.	Recommendation Measures	Implementation Stage		
		Nov 2022	L2 Dec 2022	Jan 2023
	<ul style="list-style-type: none"> <li>All dusty materials should be sprayed with water immediately prior to any loading or transfer operation so as to keep the dusty material wet.</li> </ul>	✓	✓	✓
	<i>Debris Handling</i>			
	<ul style="list-style-type: none"> <li>Any debris should be covered entirely by impervious sheeting or stored in a debris collection area sheltered on the top and the three sides.</li> </ul>	✓	Rem	✓
	<ul style="list-style-type: none"> <li>Before debris is dumped into a chute, water should be sprayed so that it remains wet when it is dumped.</li> </ul>	✓	✓	✓
	<i>Transport of Dusty Materials</i>			
	<ul style="list-style-type: none"> <li>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.</li> </ul>	✓	✓	✓
	<i>Wheel washing</i>			
	<ul style="list-style-type: none"> <li>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.</li> </ul>	✓	✓	✓
	<i>Use of vehicles</i>			
	<ul style="list-style-type: none"> <li>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.</li> </ul>	✓	✓	✓
	<ul style="list-style-type: none"> <li>Immediately before leaving the construction site, every vehicle should be washed to remove any dusty materials from its body and wheels.</li> </ul>	✓	✓	✓
	<ul style="list-style-type: none"> <li>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.</li> </ul>	✓	✓	✓
	<i>Site hoarding</i>			
	<ul style="list-style-type: none"> <li>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.</li> </ul>	✓	✓	✓
2.1 & 10.3.1	<p><b>Best Practicable Means for Cement Works (Concrete Batching Plant)</b></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: Exhaust from Dust Arrestment Plant</p>			

EM&A Ref.	Recommendation Measures	Implementation Stage		
		Nov 2022	Dec 2022	Jan 2023
	<ul style="list-style-type: none"> <li>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</li> </ul>	N/A	N/A	N/A
	<p>Emission Limits</p> <ul style="list-style-type: none"> <li>All emissions to air, other than steam or water vapour, shall be colourless and free from persistent mist or smoke</li> </ul>	N/A	N/A	N/A
	<p>Engineering Design/Technical Requirements</p> <ul style="list-style-type: none"> <li>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</li> </ul>	N/A	N/A	N/A
	<p><b>Non-Road Mobile Machinery (NRMM):</b> 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>	✓	✓	✓
<b>Noise Impact (Construction)</b>				
3.1 & 10.4.1	<p><b>Good Site Practice</b> 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"> <li>only well-maintained plant to be operated on-site and plant should be serviced regularly during the construction works;</li> <li>machines and plant that may be in intermittent use to be shut down between work periods or should be throttled down to a minimum</li> <li>plant known to emit noise strongly in one direction, should, where possible, be orientated to direct noise away from the NSRs;</li> <li>mobile plant should be sited as far away from NSRs as possible; and</li> <li>material stockpiles and other structures to be effectively utilised, where practicable, to screen noise from on-site construction activities.</li> </ul>	✓	✓	✓
	<p><b>Adoption of Quieter PME</b></p>	✓	✓	✓

EM&A Ref.	Recommendation Measures	Implementation Stage		
		Nov 2022	L2 Dec 2022	Jan 2023
3.1 & 10.4.1	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 <b>Table 4.26</b> in the EIA report. It should be noted that the silenced PME selected for assessment can be found in Hong Kong.	✓	✓	✓
3.1 & 10.4.1	<b>Use of Movable Noise Barriers</b> Movable noise barriers can be very effective in screening noise from particular items of plant when constructing the Project. Noise barriers located along the active works area close to the noise generating component of a PME could produce at least 10 dB(A) screening for stationary plant and 5 dB(A) for mobile plant provided the direct line of sight between the PME and the NSRs is blocked.	✓	✓	✓
3.1 & 10.4.1	<b>Use of Noise Enclosure/ Acoustic Shed</b> The use of noise enclosure or acoustic shed is to cover stationary PME such as air compressor and concrete pump. With the adoption of the noise enclosure, the PME could be completely screened, and noise reduction of 15 dB(A) can be achieved according to the EIAO Guidance Note No. 9/2010.	✓	✓	✓
3.1 & 10.4.1	<b>Use of Noise Insulating Fabric</b> Noise insulating fabric can also be adopted for certain PME (e.g. drill rig, piling machine etc). The fabric should be lapped such that there are no openings or gaps on the joints. According to the approved Tsim Sha Tsui Station Northern Subway EIA report (AEIAR-127/2008), a noise reduction of 10 dB(A) can be achieved for the PME lapped with the noise insulating fabric.	✓	Rem	✓
3.1 & 10.4.1	<b>Scheduling of Construction Works outside School Examination Periods</b> During construction phase, the contractor should liaise with the educational institutions (including NSRs LCS and CRGPS) to obtain the examination schedule and avoid the noisy construction activities during school examination periods.	N/A	N/A	N/A

EM&A Ref.	Recommendation Measures	Implementation Stage		
		Nov 2022	Dec 2022	Jan 2023
<b>Water Quality Impact (Construction)</b>				
4.1 & 10.5.1	<p><b>Construction site runoff and drainage</b></p> <p>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:</p> <ul style="list-style-type: none"> <li>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;</li> <li>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.</li> <li>All drainage facilities and erosion and sediment control structures should be regularly inspected and maintained to ensure proper and efficient operation at all times and particularly during rainstorms. Deposited silt and grit should be regularly removed, at the onset of and after each rainstorm to ensure that these facilities are functioning properly at all times.</li> <li>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.</li> </ul>	✓	✓	✓
		✓	✓	✓
		Obs	Obs	Rem
		✓	✓	✓



EM&A Ref.	Recommendation Measures	Implementation Stage		
		Nov 2022	L2 Dec 2022	Jan 2023
	<ul style="list-style-type: none"> <li>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.</li> </ul>	✓	✓	✓
	<ul style="list-style-type: none"> <li>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.</li> </ul>	✓	✓	✓
	<ul style="list-style-type: none"> <li>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.</li> </ul>	✓	✓	✓
	<ul style="list-style-type: none"> <li>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.</li> </ul>	✓	✓	✓
	<ul style="list-style-type: none"> <li>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.</li> </ul>	N/A	N/A	N/A
	<p><b>Barging facilities and activities</b></p> <p>Recommendations for good site practices during operation of the proposed barging point include:</p>			
	<ul style="list-style-type: none"> <li>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;</li> </ul>	N/A	N/A	N/A

EM&A Ref.	Recommendation Measures	Implementation Stage		
		Nov 2022	L2 Dec 2022	Jan 2023
	<ul style="list-style-type: none"> <li>Loading of barges and hoppers should be controlled to prevent splashing of material into the surrounding water. Barges or hoppers should not be filled to a level that will cause the overflow of materials or polluted water during loading or transportation;</li> <li>All hopper barges should be fitted with tight fitting seals to their bottom openings to prevent leakage of material; and</li> <li>Construction activities should not cause foam, oil, grease, scum, litter or other objectionable matter to be present on the water within the site.</li> </ul>	N/A	N/A	N/A
4.1 & 10.5.1	<p><b>Sewage effluent from construction workforce</b></p> <p>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.</p>	✓	✓	✓
4.1 & 10.5.1	<p><b>General construction activities</b></p> <ul style="list-style-type: none"> <li>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.</li> <li>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.</li> </ul>	✓	✓	✓
		Obs	✓	✓
<b>Waste Management Implications (Construction)</b>				
6.1 & 10.7.1	<p><b>Good Site Practices</b></p> <p>Recommendations for good site practices during the construction activities include:</p> <ul style="list-style-type: none"> <li>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</li> <li>Training of site personnel in proper waste management and chemical handling procedures</li> </ul>	✓	✓	✓
		✓	✓	✓

EM&A Ref.	Recommendation Measures	Implementation Stage		
		Nov 2022	L2 Dec 2022	Jan 2023
	<ul style="list-style-type: none"> <li>Provision of sufficient waste disposal points and regular collection of waste</li> <li>Appropriate measures to minimise windblown litter and dust/odour during transportation of waste by either covering trucks or by transporting wastes in enclosed containers</li> <li>Provision of wheel washing facilities before the trucks leaving the works area so as to minimise dust introduction to public roads</li> <li>Well planned delivery programme for offsite disposal such that adverse environmental impact from transporting the inert or non-inert C&amp;D materials is not anticipated</li> </ul>	✓	Obs	Rem
6.1 & 10.7.1	<p><b>Waste Reduction Measures</b></p> <p>Recommendations to achieve waste reduction include:</p> <ul style="list-style-type: none"> <li>Sort inert C&amp;D material to recover any recyclable portions such as metals</li> <li>Segregation and storage of different types of waste in different containers or skips to enhance reuse or recycling of materials and their proper disposal</li> <li>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</li> <li>Proper site practices to minimise the potential for damage or contamination of inert C&amp;D materials</li> <li>Plan the use of construction materials carefully to minimise amount of waste generated and avoid unnecessary generation of wastes</li> </ul>	✓	✓	✓
6.1 & 10.7.1	<p><b>Inert and Non-inert C&amp;D Materials</b></p> <p>In order to minimise impacts resulting from collection and transportation of inert C&amp;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&amp;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"> <li>The surplus inert C&amp;D material will be disposed of at the Government's PFRFs for beneficial use by other projects in Hong Kong.</li> <li>Liaison with the CEDD Public Fill Committee (PFC) on the allocation of space for disposal of the inert C&amp;D materials at PFRF is underway. No construction work is allowed to proceed until all issues on management of inert C&amp;D materials have been resolved and all relevant arrangements have been endorsed by the relevant authorities including PFC and EPD.</li> </ul>	✓	✓	✓

EM&A Ref.	Recommendation Measures	Implementation Stage		
		Nov 2022	L2 Dec 2022	Jan 2023
	<ul style="list-style-type: none"> <li>The C&amp;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.</li> <li>In order to monitor the disposal of inert and non-inert C&amp;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 &amp; 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.</li> </ul>	✓	✓	✓
6.1 & 10.7.1	<p><b>Chemical Waste</b></p> <ul style="list-style-type: none"> <li>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.</li> <li>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.</li> </ul>	Obs	✓	Obs
6.1 & 10.7.1	<p><b>General Refuse</b></p> <p>General refuse should be stored in enclosed bins or compaction units separated from inert C&amp;D materials. A reputable waste collector should be employed by the Contractor to remove general refuse from the site, separately from inert C&amp;D materials. Preferably an enclosed and covered area should be provided to reduce the occurrence of 'wind blown' light material.</p>	✓	✓	✓

EM&A Ref.	Recommendation Measures	Implementation Stage		
		Nov 2022	Dec 2022	Jan 2023
<b>Land Contamination (Construction)</b>				
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"> <li>To minimize the chance for construction workers to come into contact with any contaminated materials, bulk earth-moving excavation equipment should be employed;</li> <li>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;</li> <li>Stockpiling of contaminated excavated materials on site should be avoided as far as possible;</li> <li>The use of contaminated soil for landscaping purpose should be avoided unless pre-treatment was carried out;</li> <li>Vehicles containing any contaminated excavated materials should be suitably covered to reduce dust emissions and/or release of contaminated wastewater;</li> <li>Truck bodies and tailgates should be sealed to stop any discharge;</li> <li>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;</li> <li>Speed control for trucks carrying contaminated materials should be exercised;</li> <li>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</li> </ul>	N/A	N/A	N/A
		N/A	N/A	N/A
		N/A	N/A	N/A
		N/A	N/A	N/A
		N/A	N/A	N/A
		N/A	N/A	N/A
		N/A	N/A	N/A
		N/A	N/A	N/A
		N/A	N/A	N/A

EM&A Ref.	Recommendation Measures	Implementation Stage		
		Nov 2022	L2 Dec 2022	Jan 2023
	<ul style="list-style-type: none"> <li>Maintain records of waste generation and disposal quantities and disposal arrangements.</li> </ul>	N/A	N/A	N/A
<b>Ecological Impact (Construction)</b>				
No mitigation measure is required.				
<b>Landscape and Visual Impact (Construction)</b>				
Table 9.1 & 10.8 (CM1)	Trees should be retained in situ on site as far as possible. Should tree removal be unavoidable due to construction impacts, trees will be transplanted or felled with reference to the stated criteria in the Tree Removal Applications to be submitted to relevant government departments for approval in accordance to ETWB TCW No. 29/2004 and 3/2006.	N/A	N/A	N/A
Table 9.1 & 10.8 (CM2)	Compensatory tree planting shall be incorporated to the proposed project and maximize the new tree, shrubs and other vegetation planting to compensate tree felled and vegetation removed. Also, implementation of compensatory planting should be of a ratio not less than 1:1 in terms of quality and quantity within the site.	N/A	N/A	N/A
Table 9.1 & 10.8 (CM3)	Buffer trees for screening purposes to soften the hard architectural and engineering structures and facilities.	N/A	N/A	N/A
Table 9.1 & 10.8 (CM4)	Softscape treatments such as vertical green wall panel /planting of climbing and/or weeping plants, etc, to maximize the green coverage and soften the hard architectural and engineering structures and facilities.	N/A	N/A	N/A
Table 9.1 & 10.8 (CM5)	Roof greening by means of intensive and extensive green roof to maximize the green coverage and improve aesthetic appeal and visual quality of the building/structure.	N/A	N/A	N/A
Table 9.1 & 10.8 (CM6)	Sensitive streetscape design should be incorporated along all new roads and streets.	N/A	N/A	N/A
Table 9.1 & 10.8 (CM7)	Structure, ornamental planting shall be provided along amenity strips to enhance the landscape quality.	N/A	N/A	N/A
Table 9.1 & 10.8 (CM8)	Landscape design shall be incorporated to architectural and engineering structures in order to provide aesthetically pleasing designs.	N/A	N/A	N/A
Table 9.1 (CM9)	Minimize the structure of marine facilities to be built on the seabed and foreshore in order to minimize the affected extent to the waterbody	N/A	N/A	N/A

EM&A Ref.	Recommendation Measures	Implementation Stage		
		Nov 2022	L2 Dec 2022	Jan 2023
Table 9.2 & 10.9 (MCP1)	Use of decorative screen hoarding/boards	✓	✓	✓
Table 9.2 & 10.9 (MCP2)	Early introduction of landscape treatments	N/A	N/A	N/A
Table 9.2 & 10.9 (MCP3)	Adoption of light colour for the temporary ventilation shafts for the basement during the transition period.	N/A	N/A	N/A
Table 9.2 & 10.9 (MCP4)	Control of night time lighting	✓	✓	✓
Table 9.2 & 10.9 (MCP5)	Use of greenery such as grass cover for the temporary open areas will help achieve the visual balance and soften the hard edges of the structures.	N/A	N/A	N/A

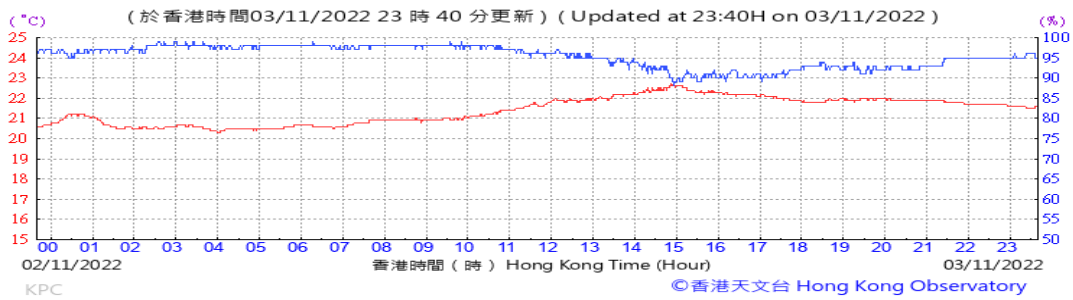
N/A	-	Not Applicable
✓	-	Implemented
Obs	-	Observed
Rem	-	Reminder

## **D. Meteorological Data Extracted from Hong Kong Observatory**

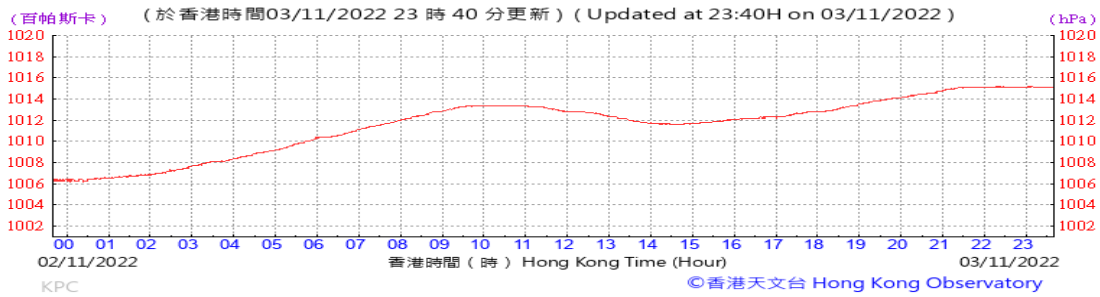


**Table D-1: Extract of Meteorological Observations for King's Park Automatic Weather Station in the reporting quarter**

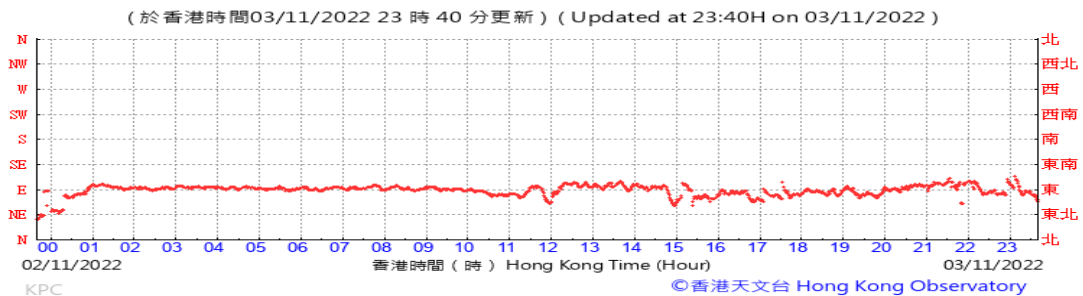
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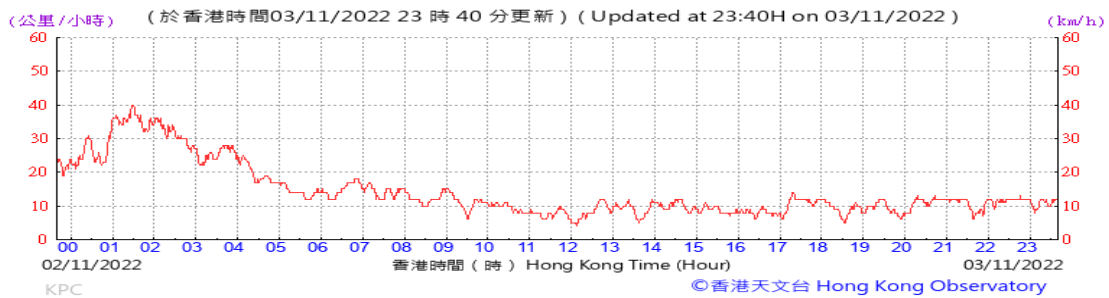
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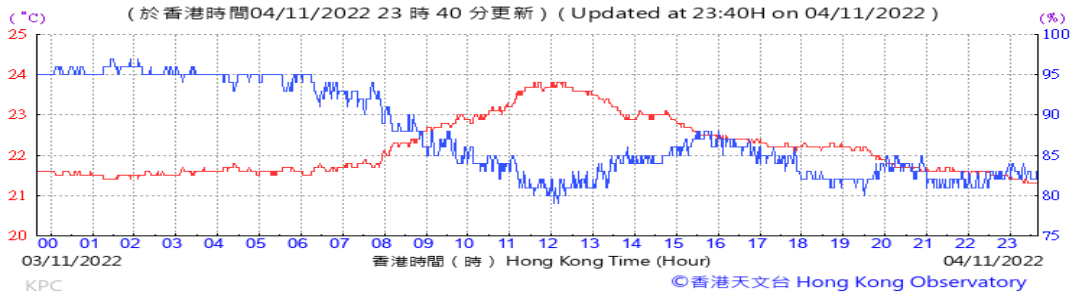
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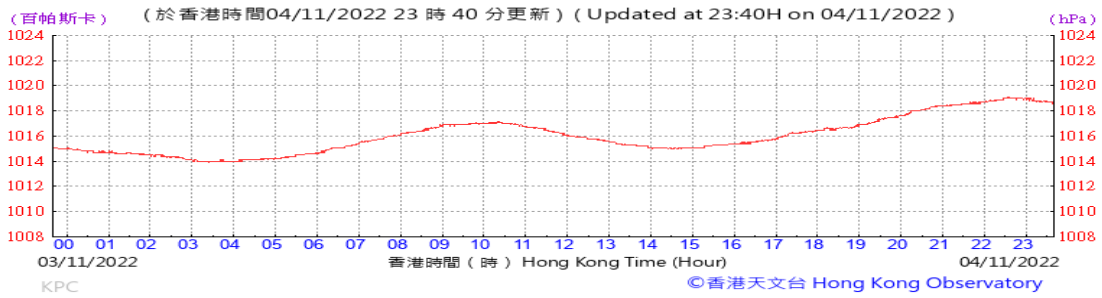
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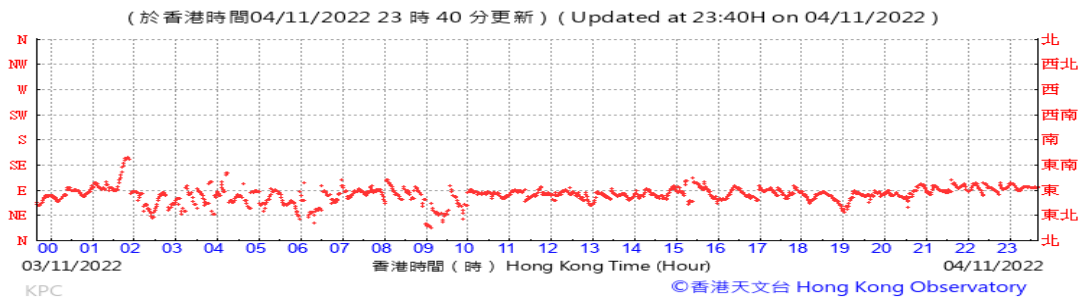
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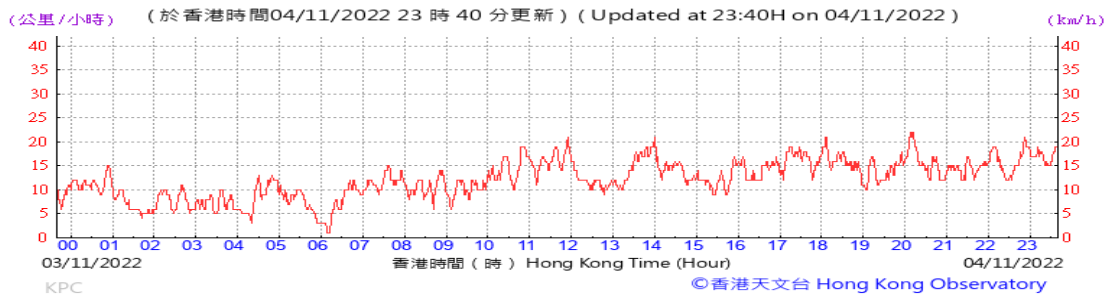
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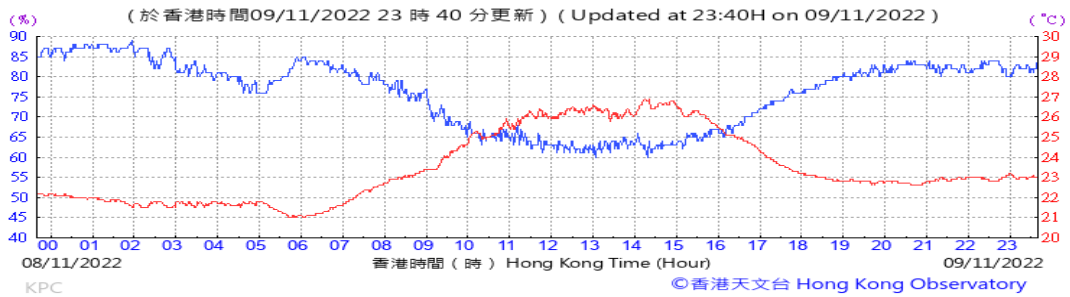
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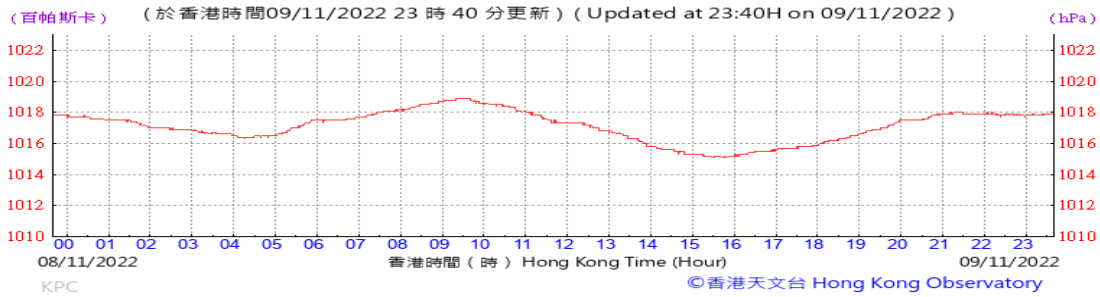
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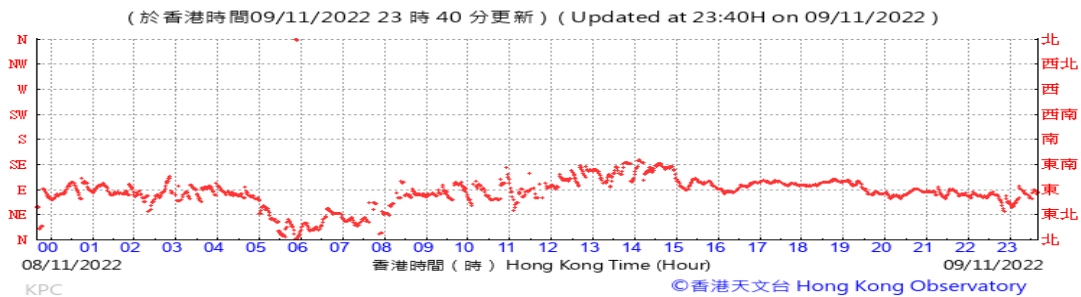
Temperature/Humidity:



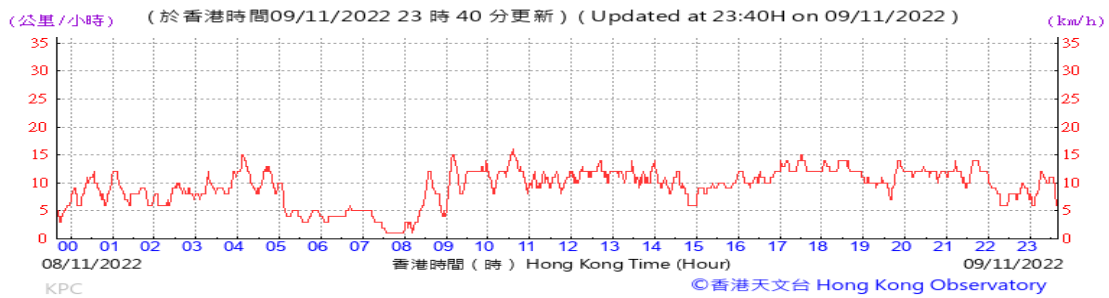
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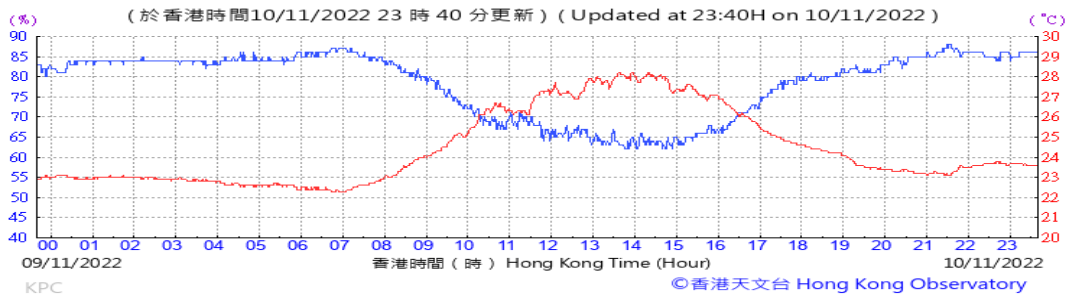
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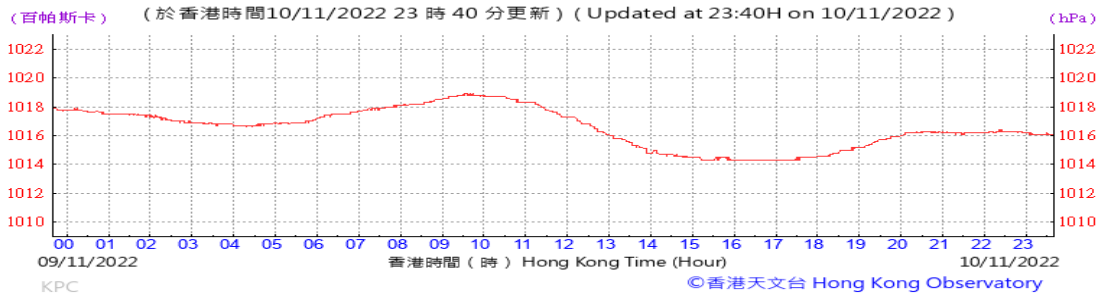
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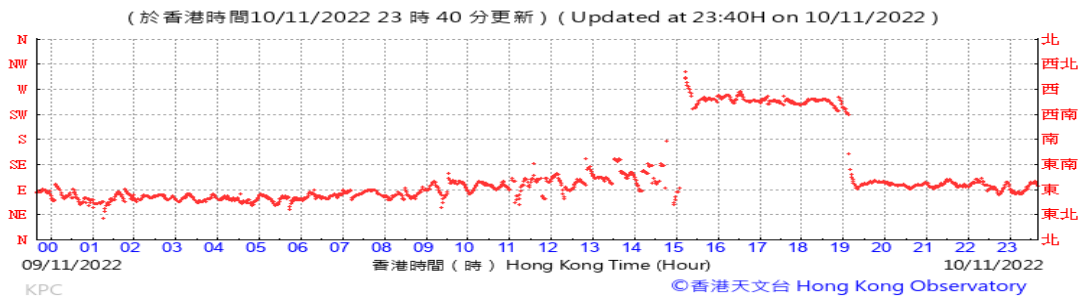
Temperature/Humidity:



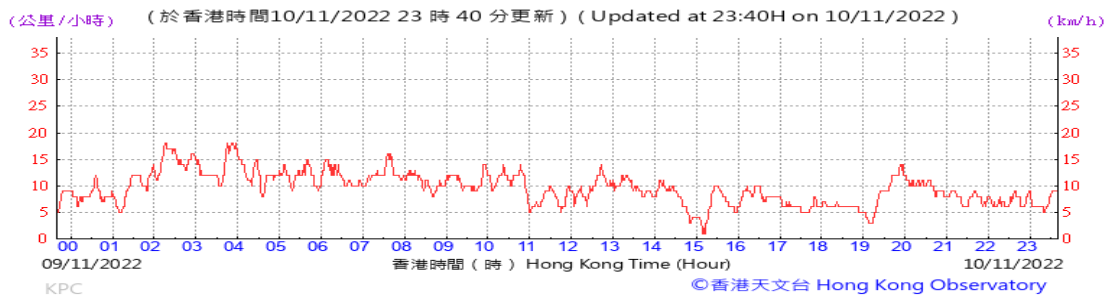
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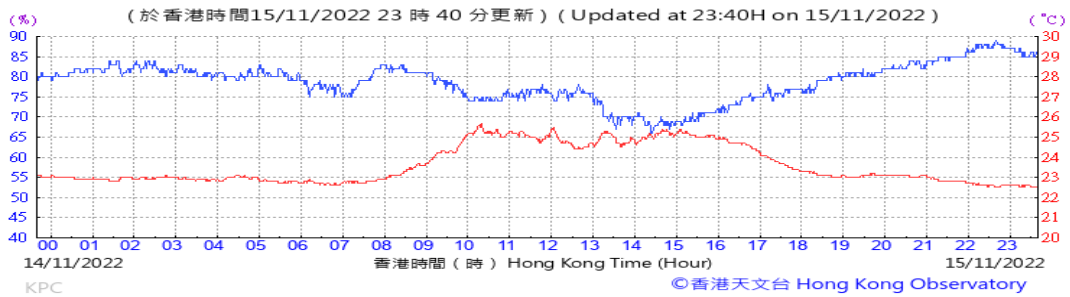
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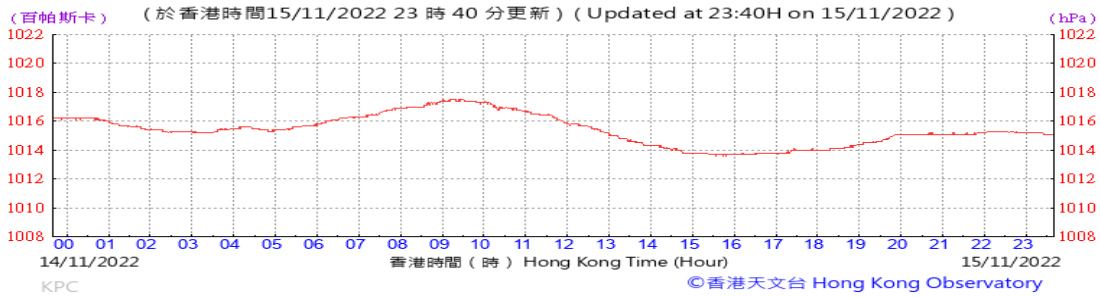
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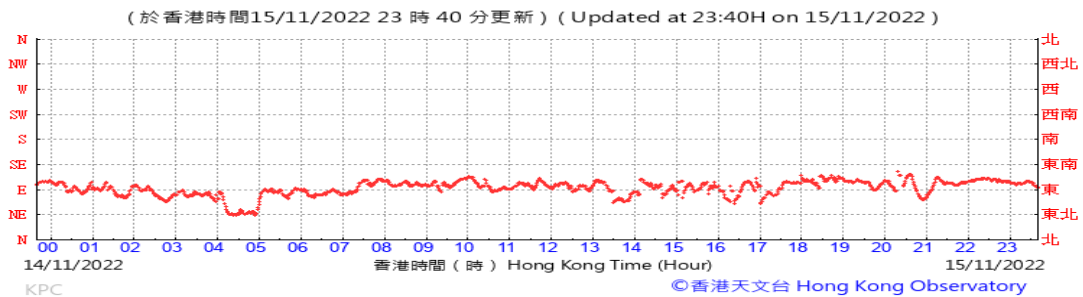
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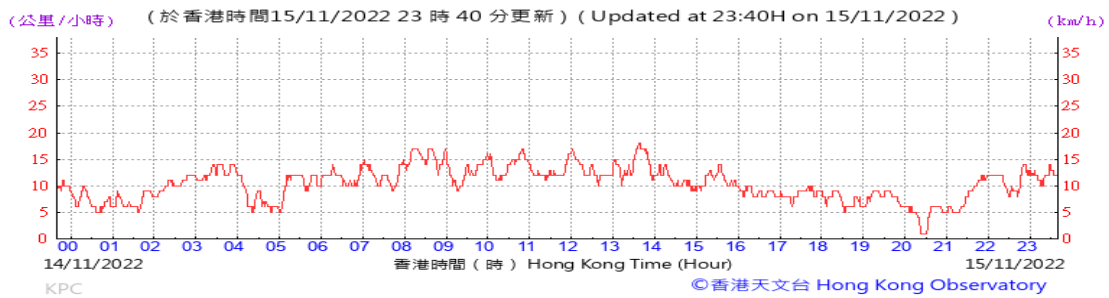
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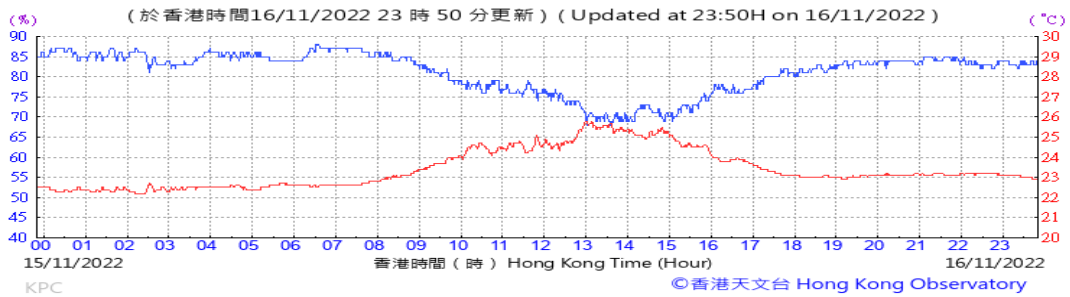
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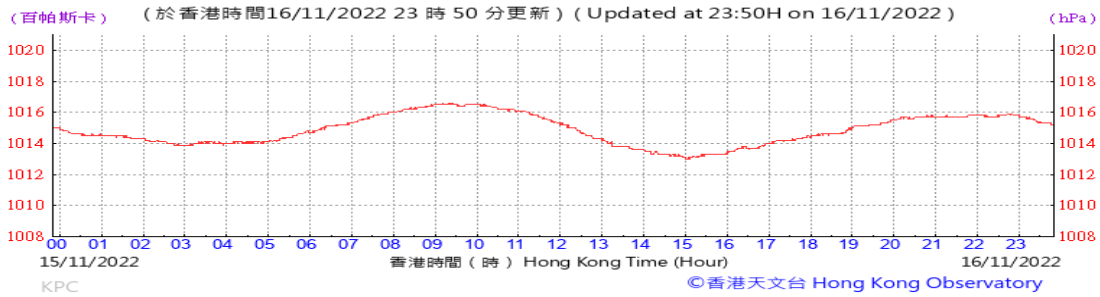
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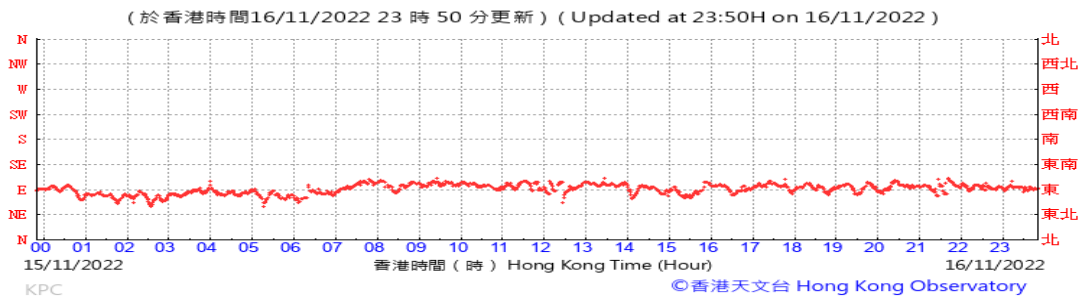
Temperature/Humidity:



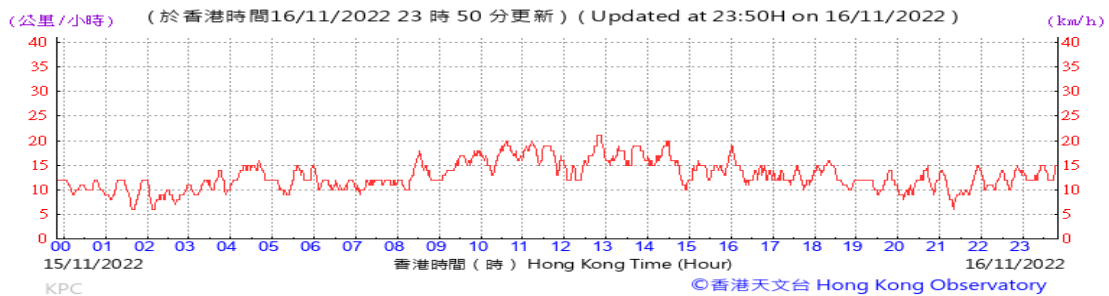
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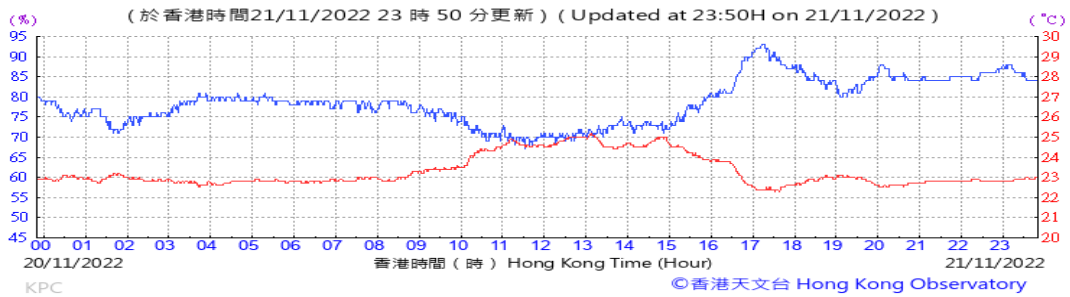
Wind Direction:



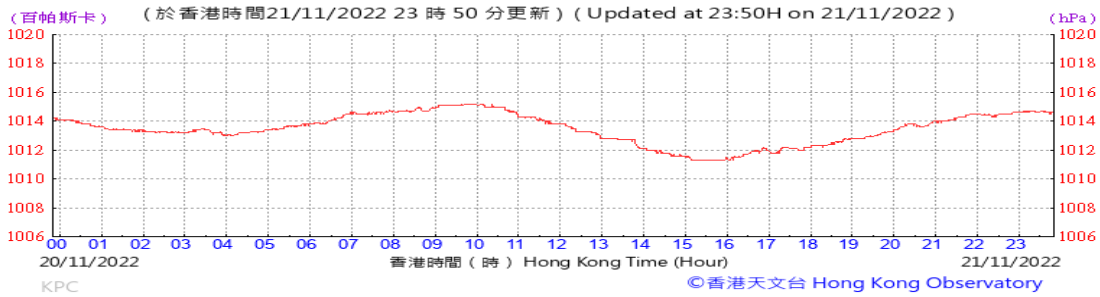
Wind Speed:



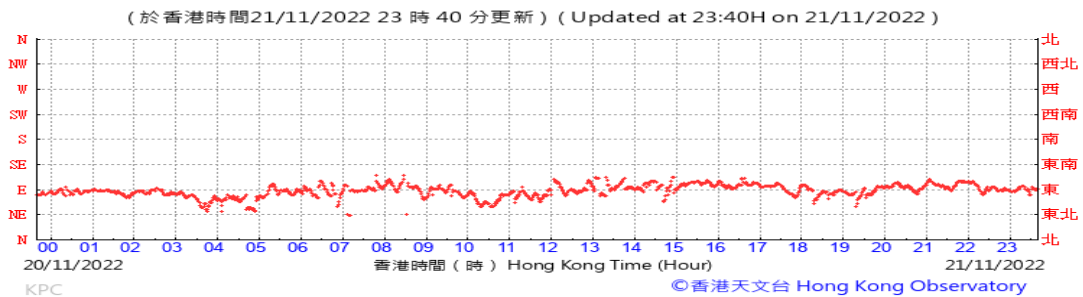
Temperature/Humidity:



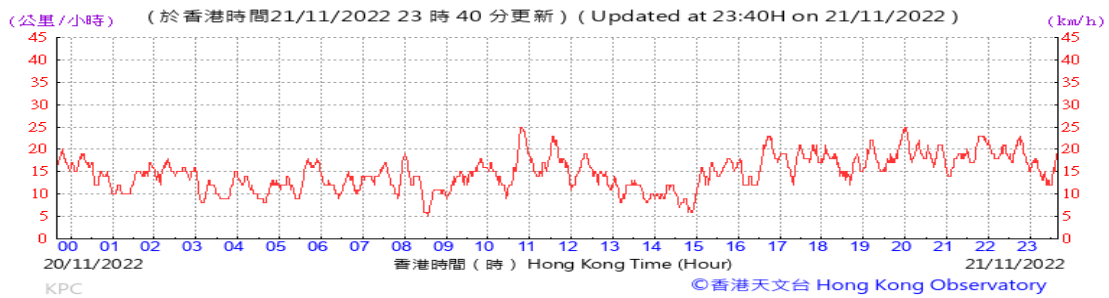
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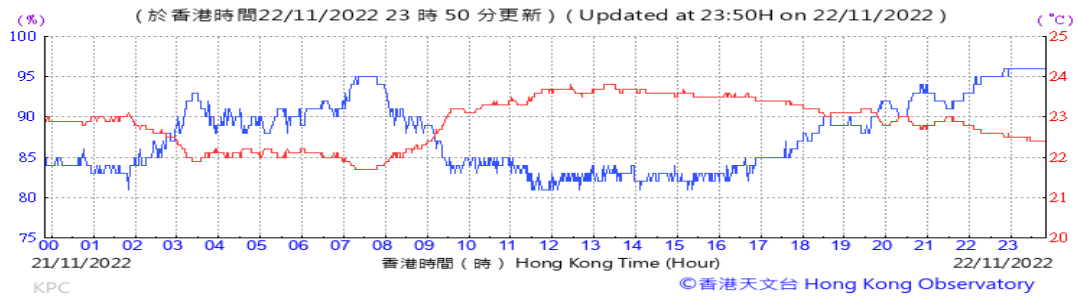
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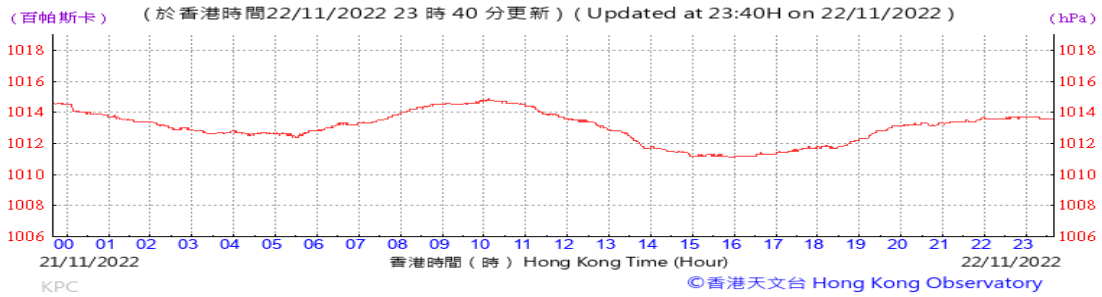
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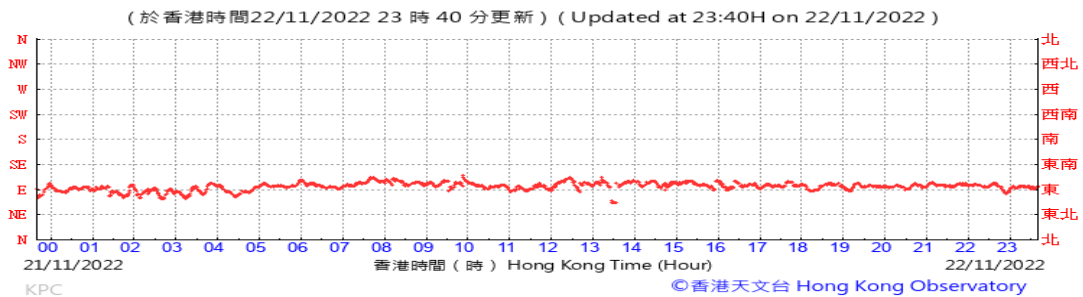
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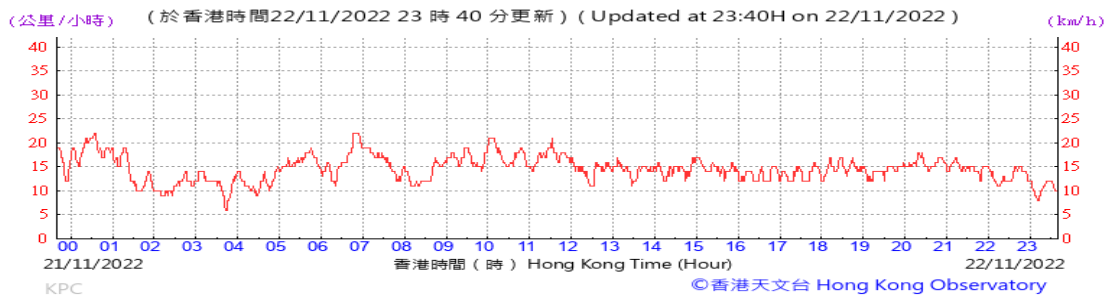
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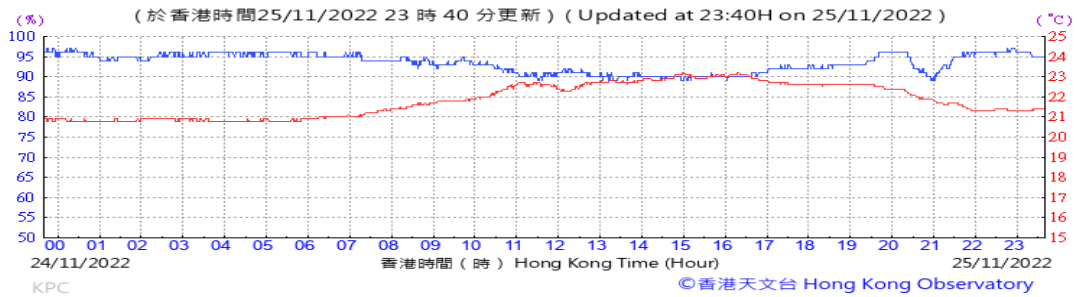


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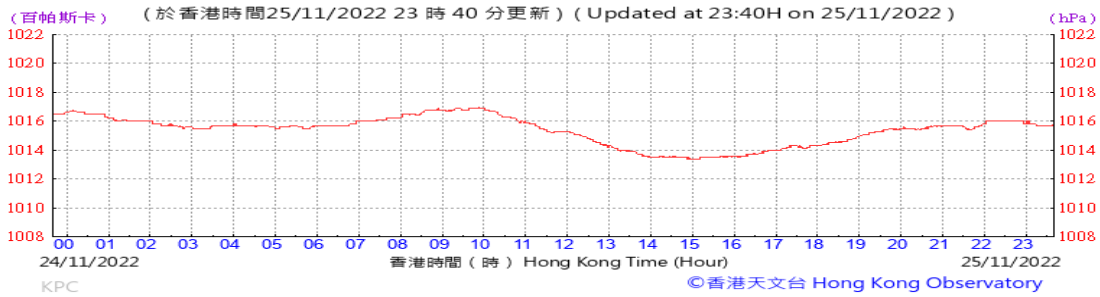




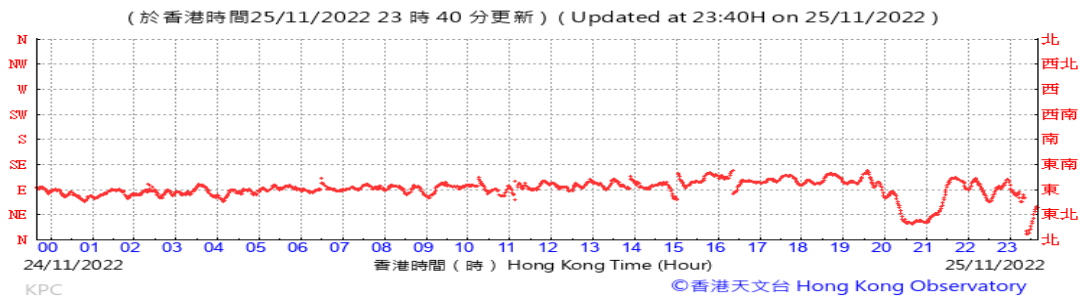
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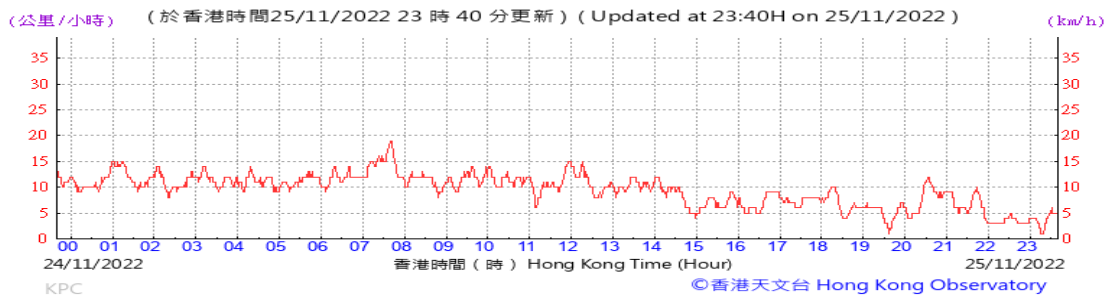
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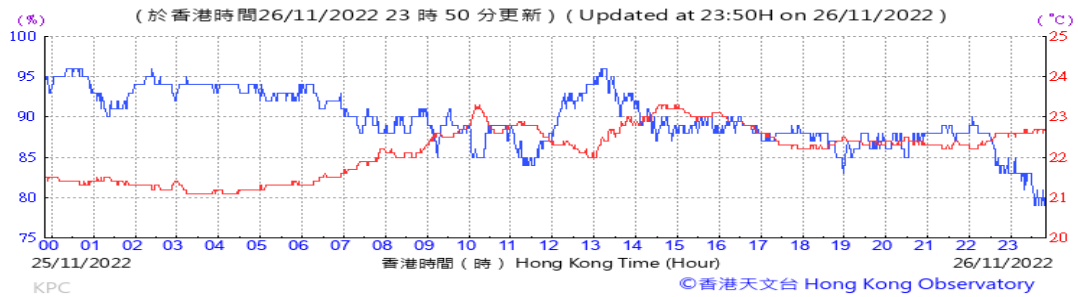
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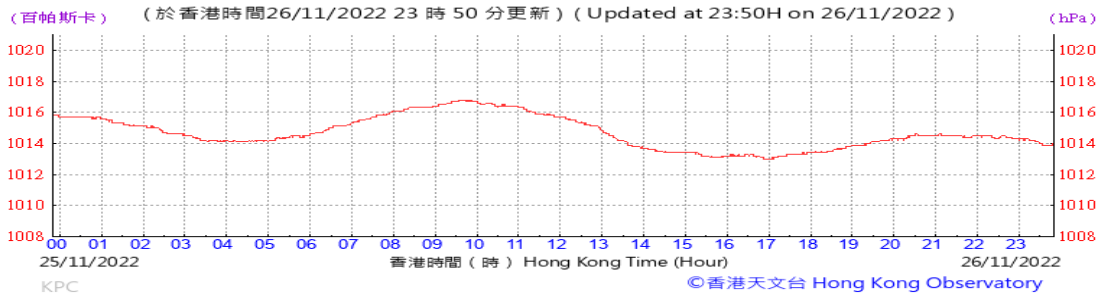
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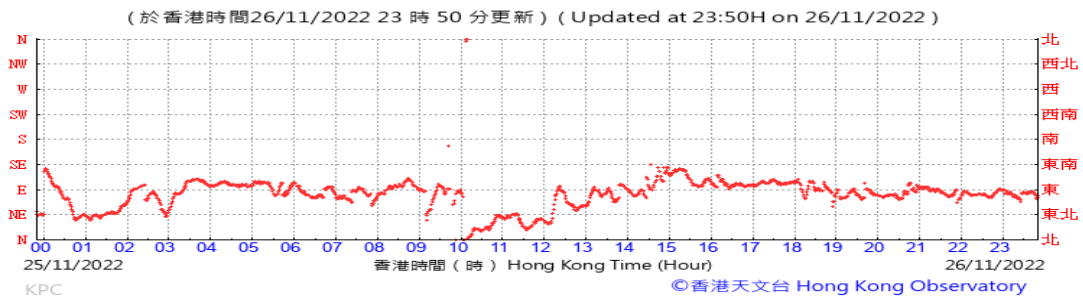
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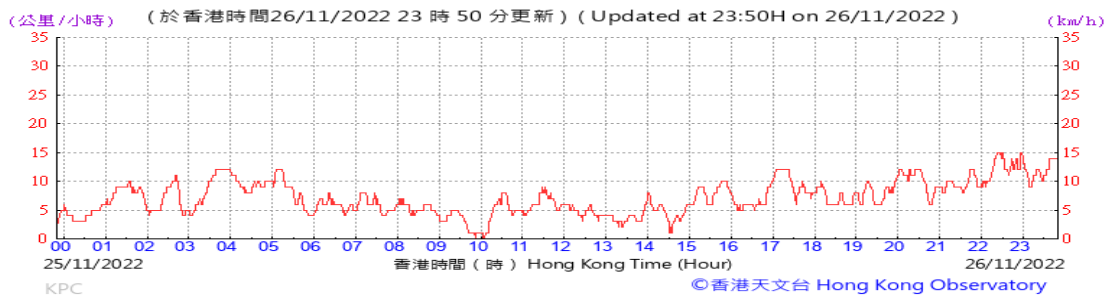
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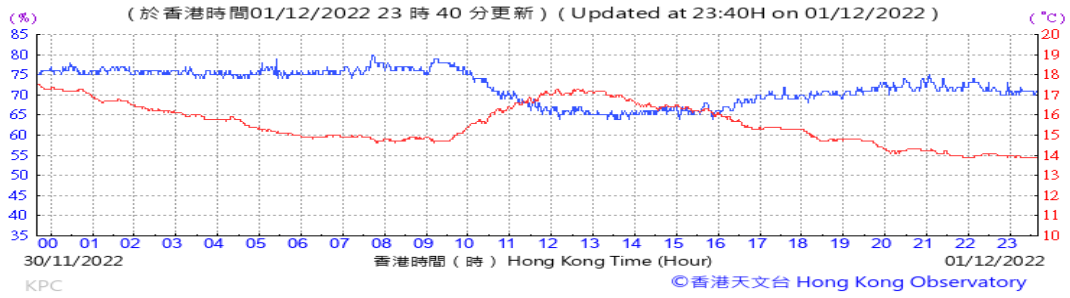
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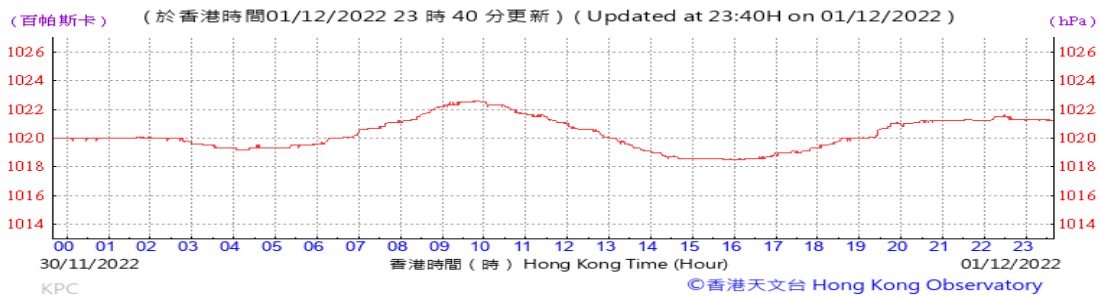
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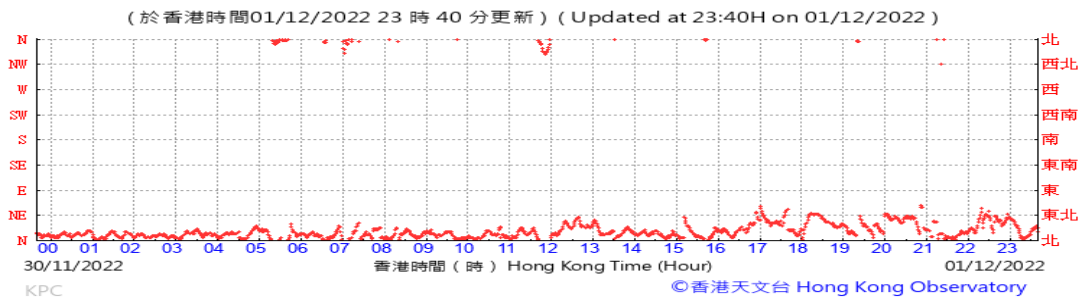
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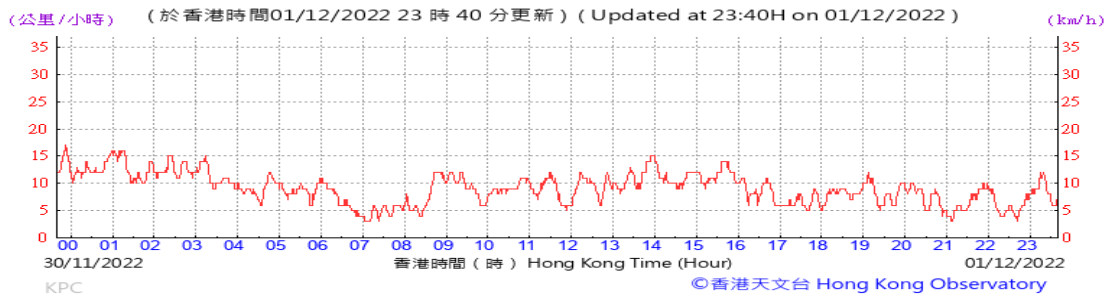
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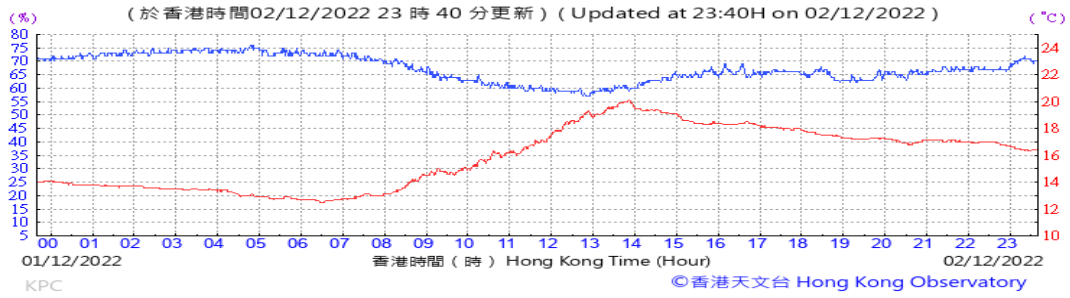
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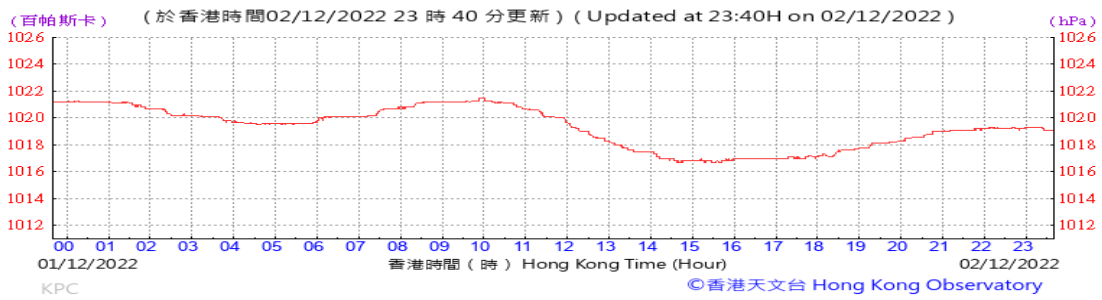
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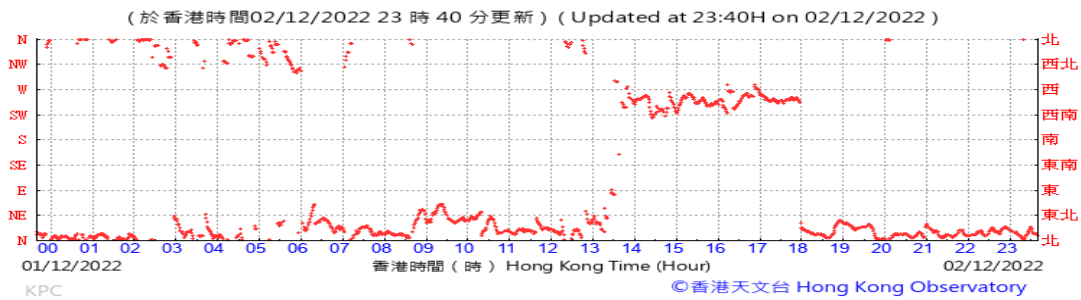
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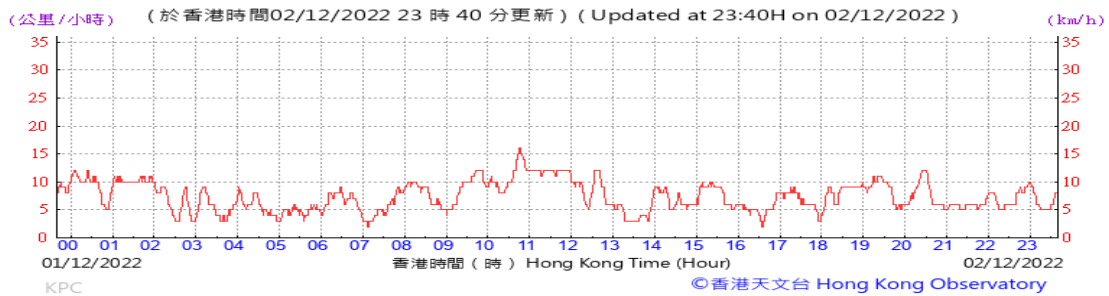
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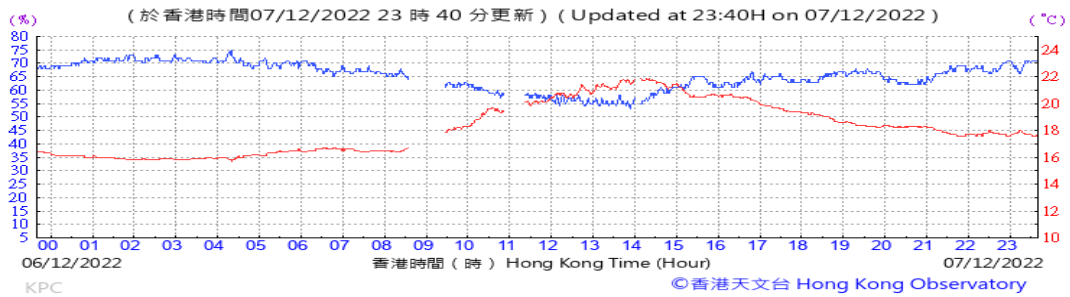
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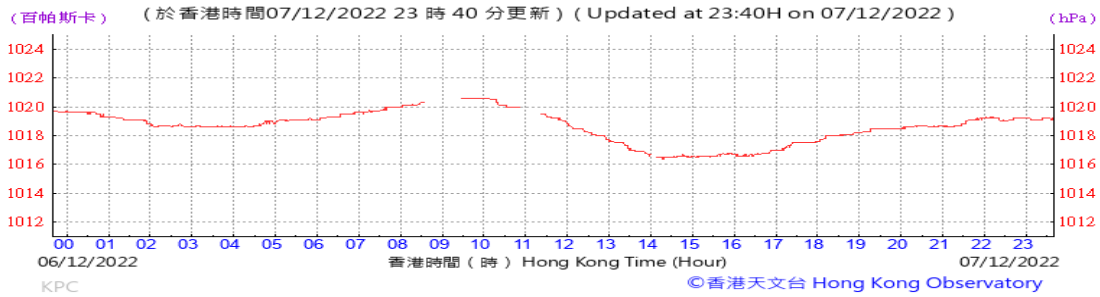
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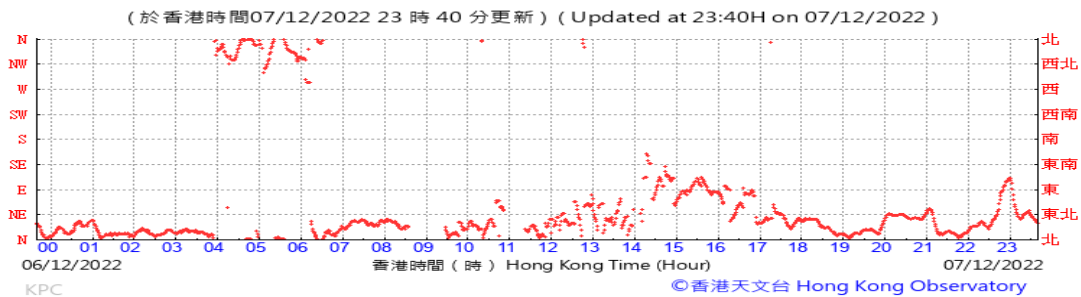
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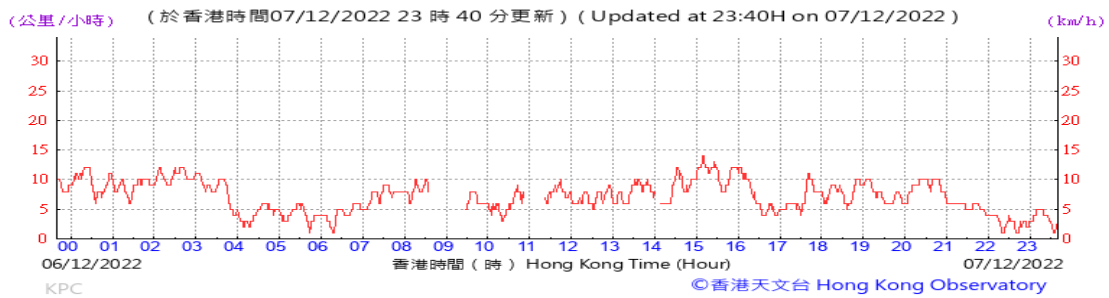
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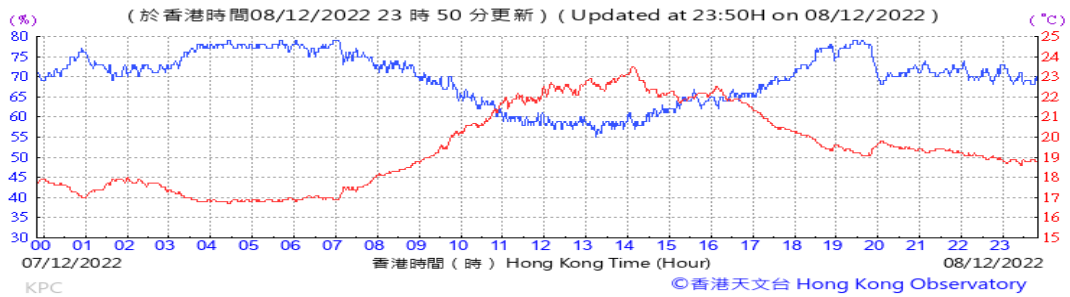
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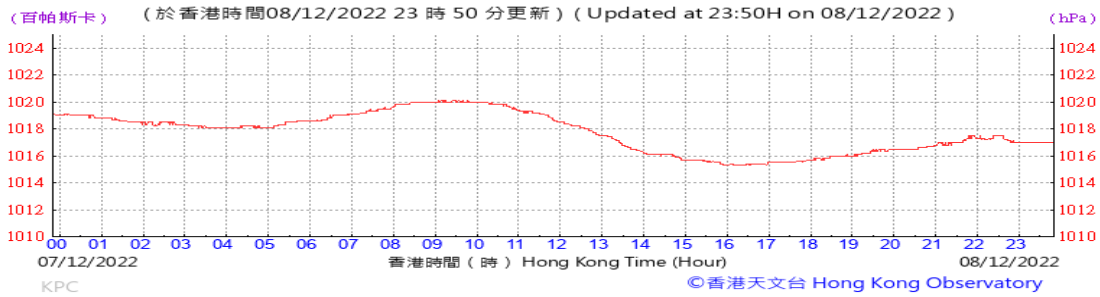
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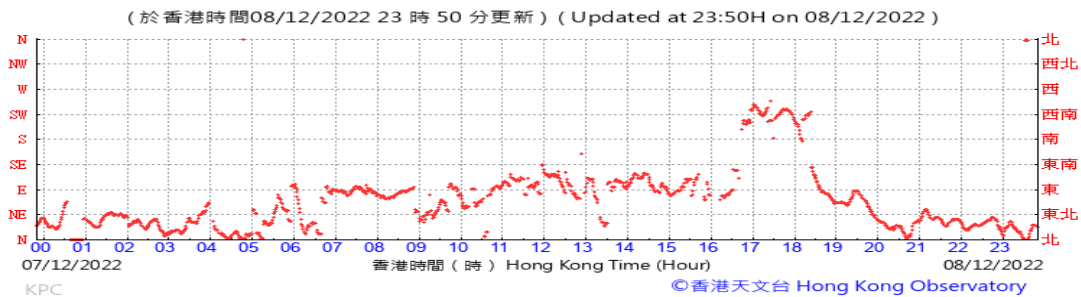
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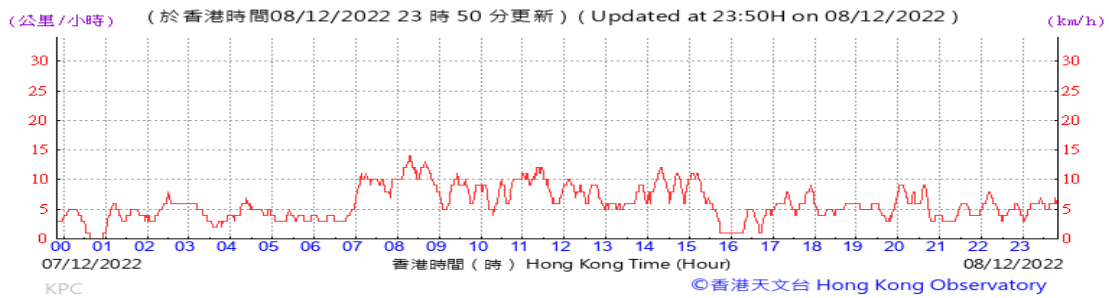
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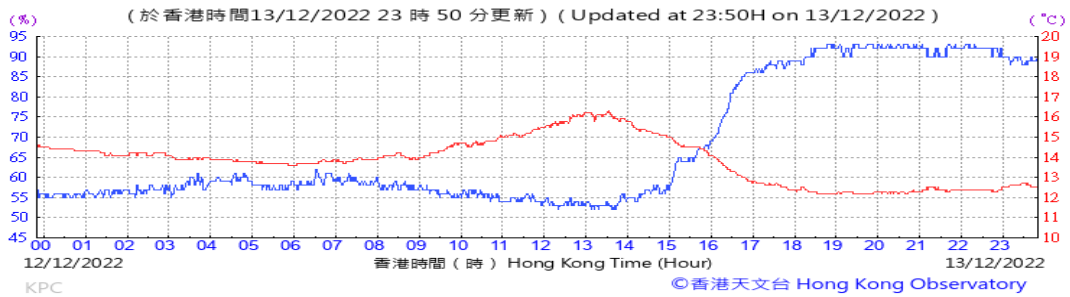
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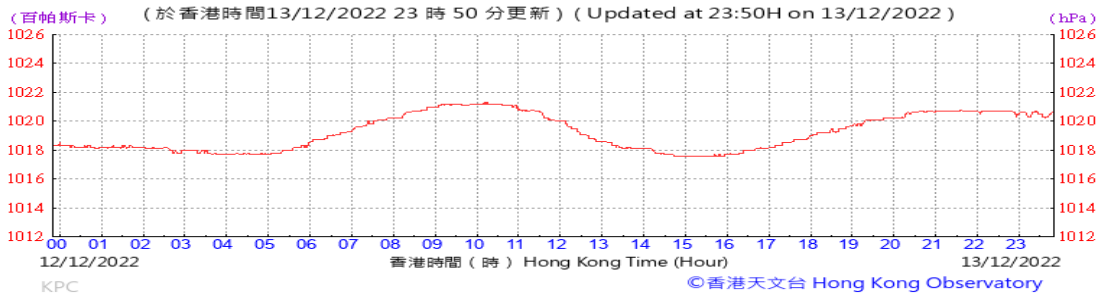
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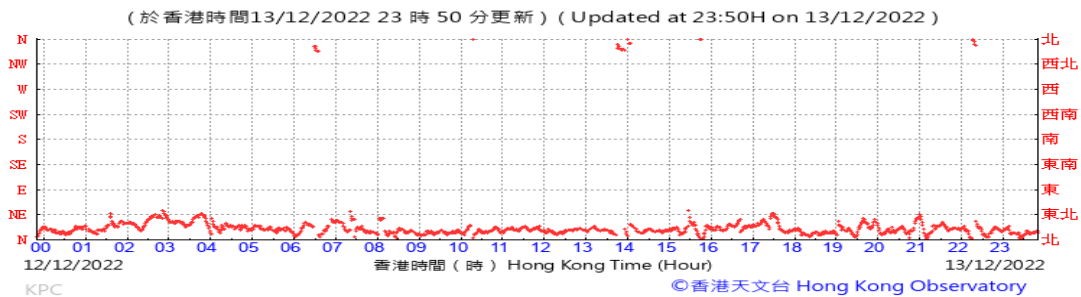
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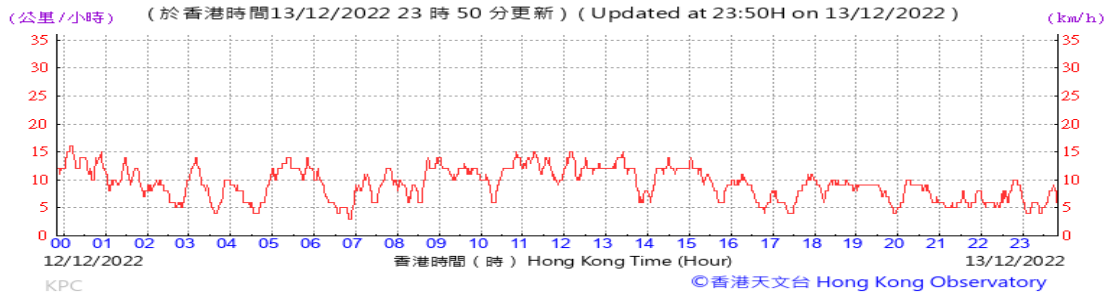
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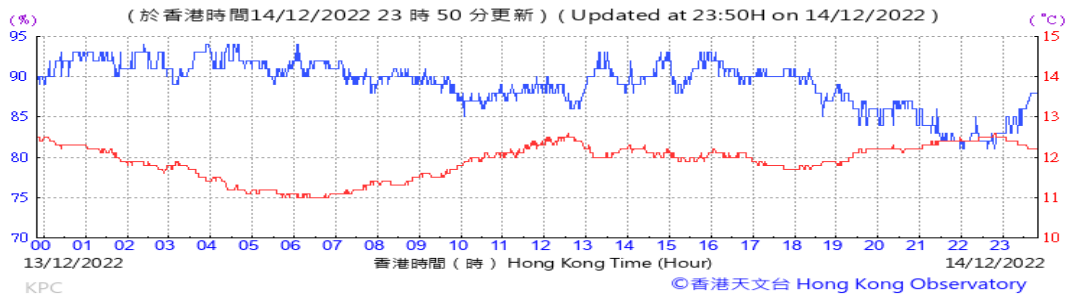
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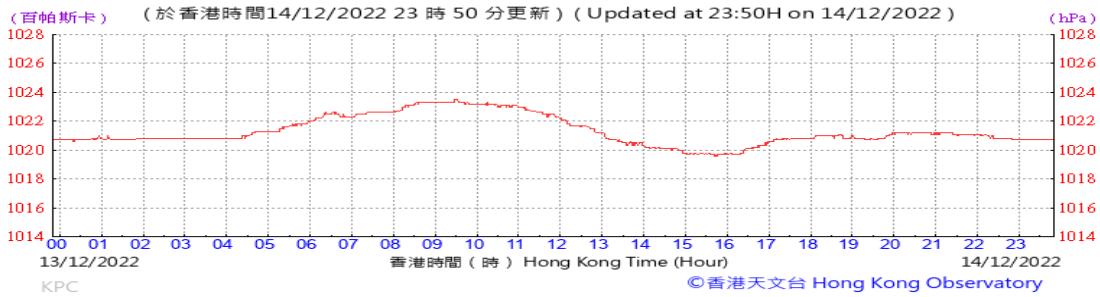
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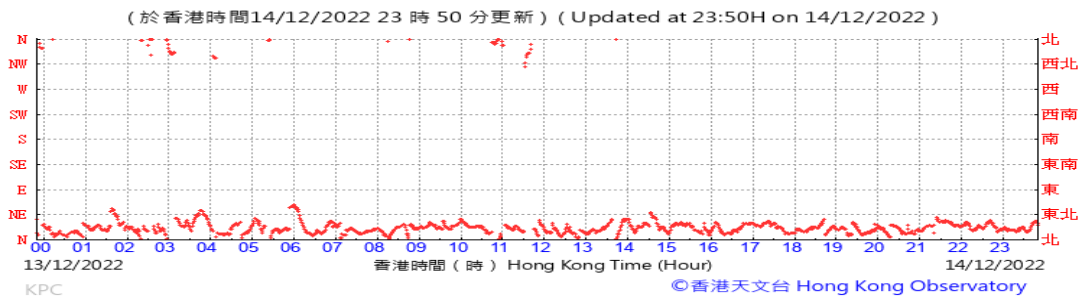
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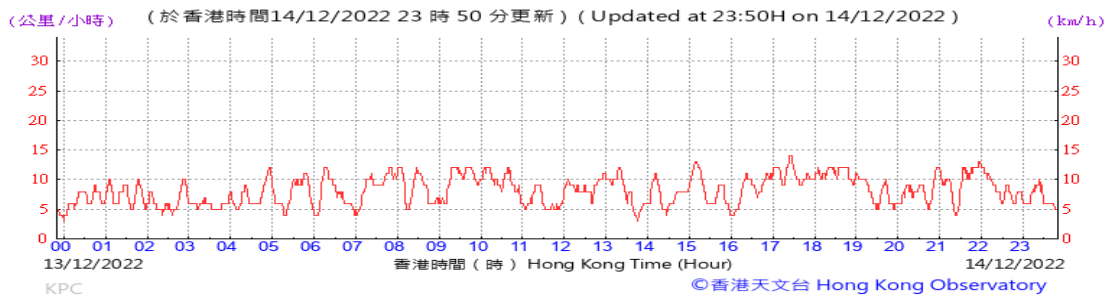
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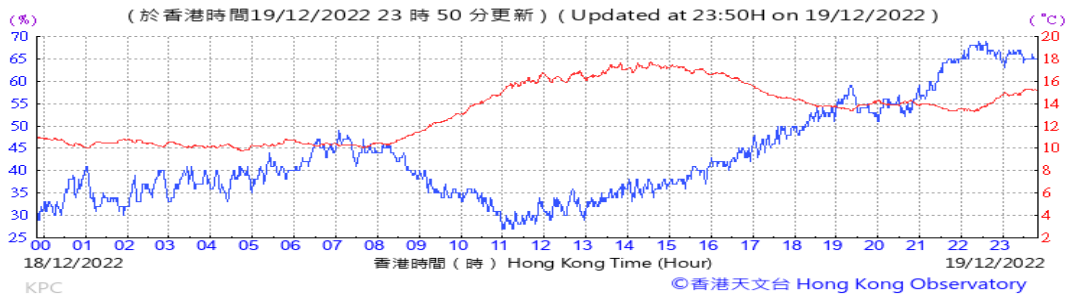


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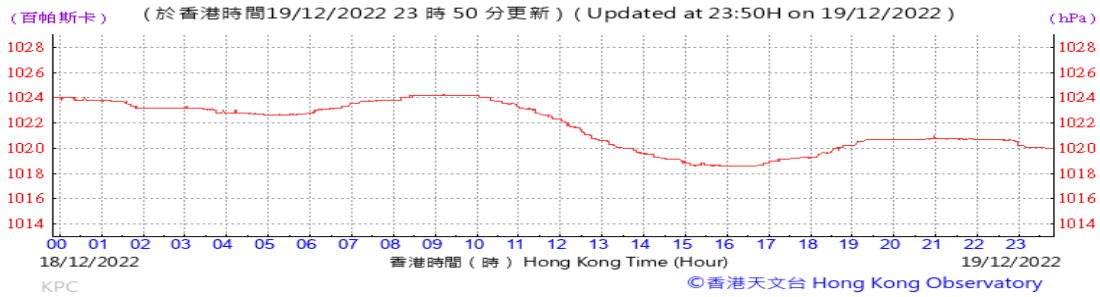




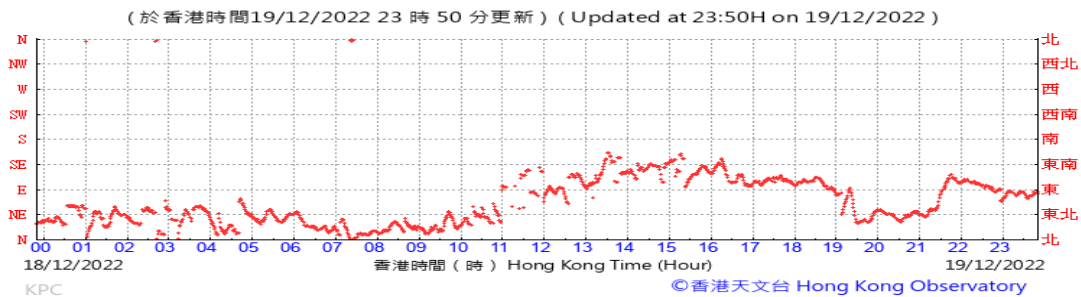
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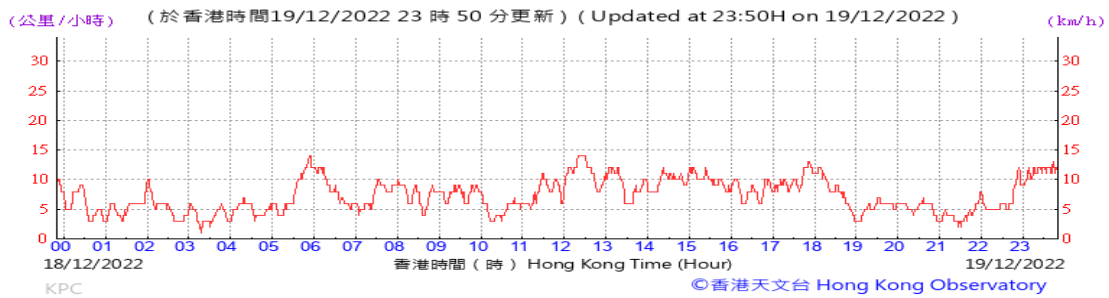
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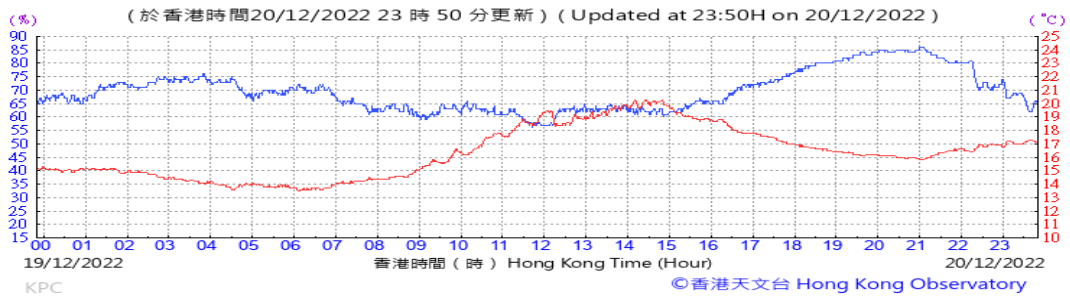
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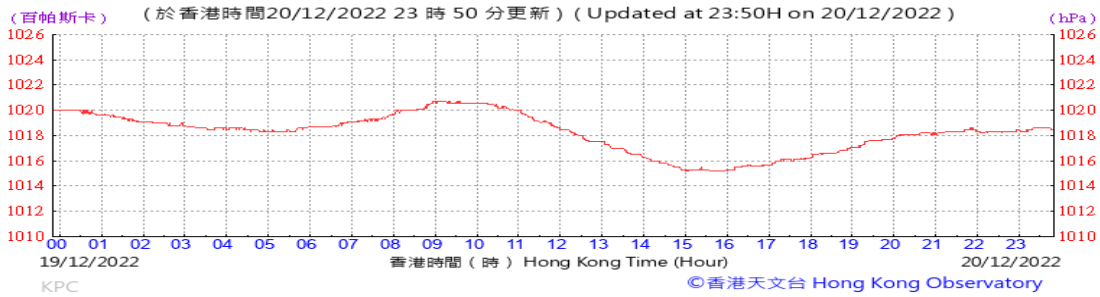
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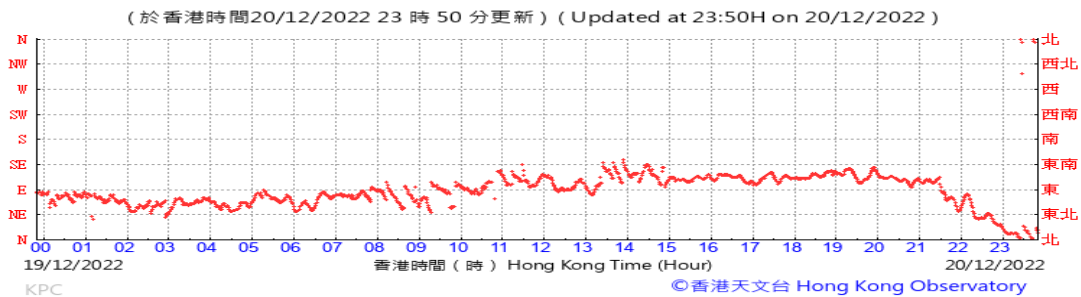
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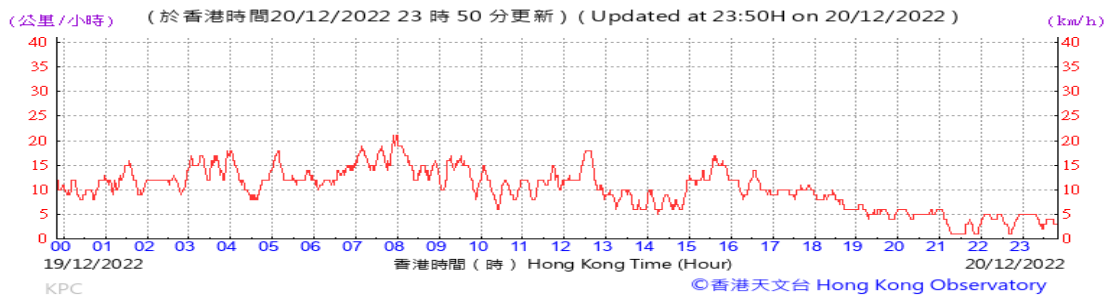
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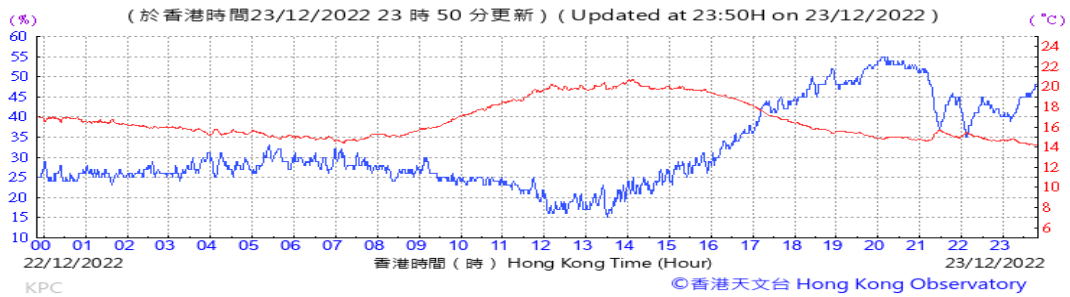
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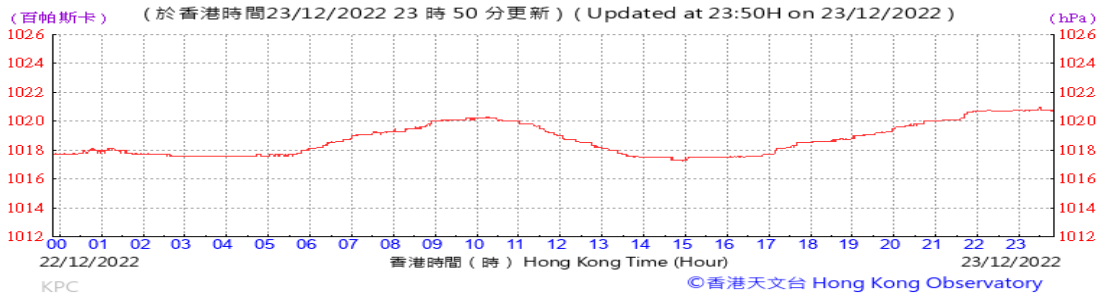
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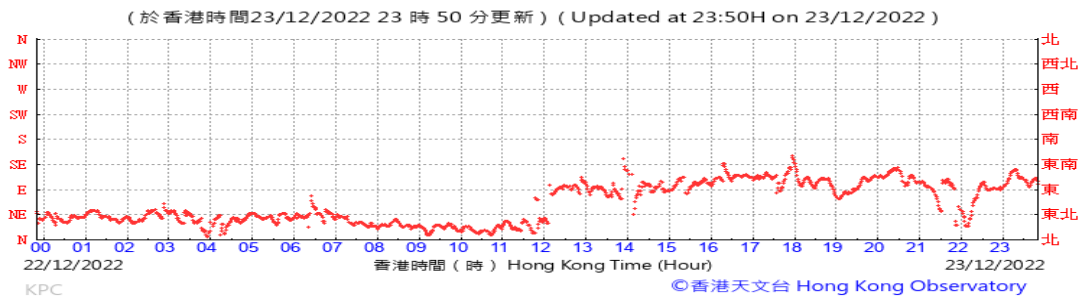
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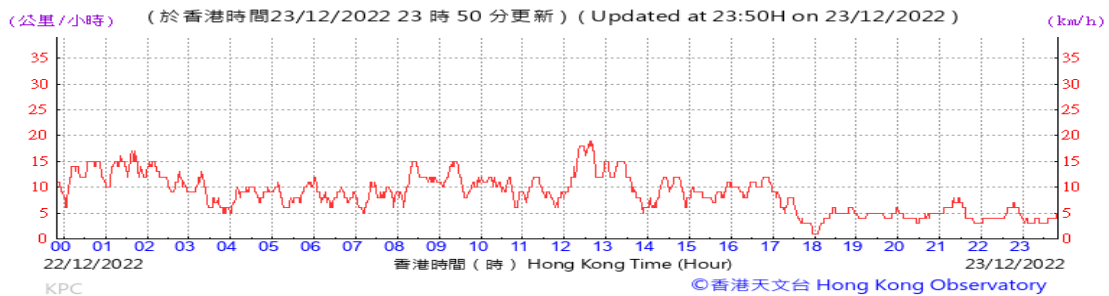
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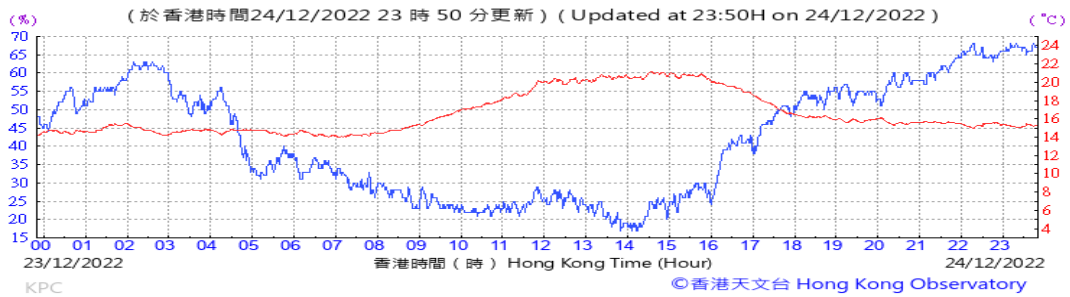
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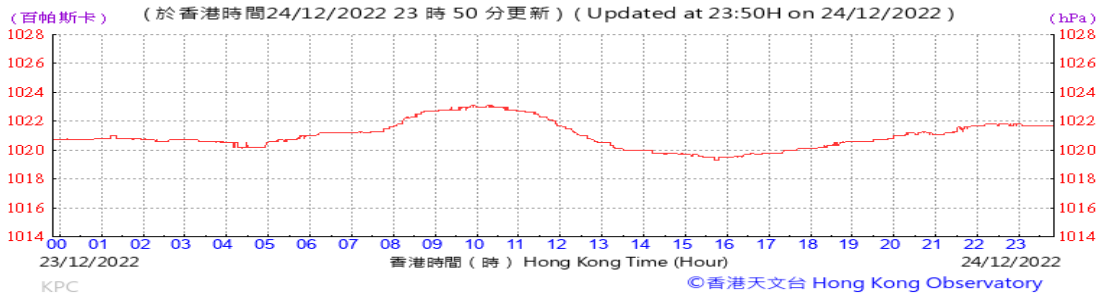
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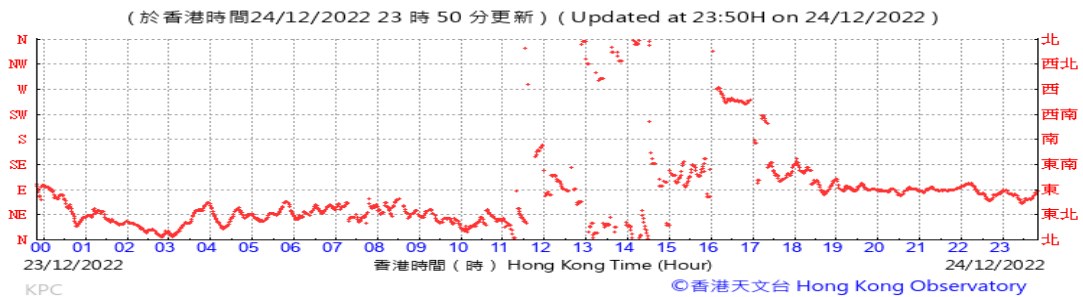
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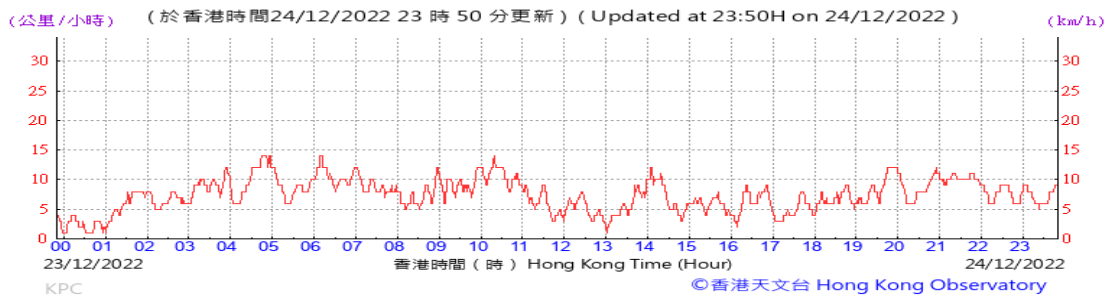
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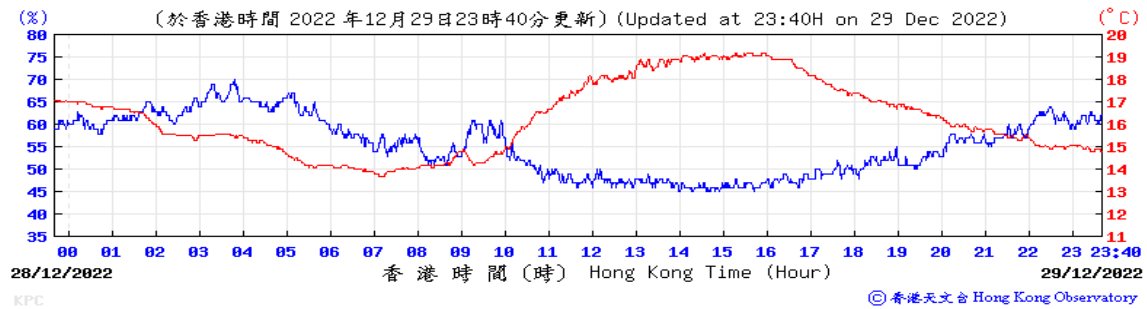
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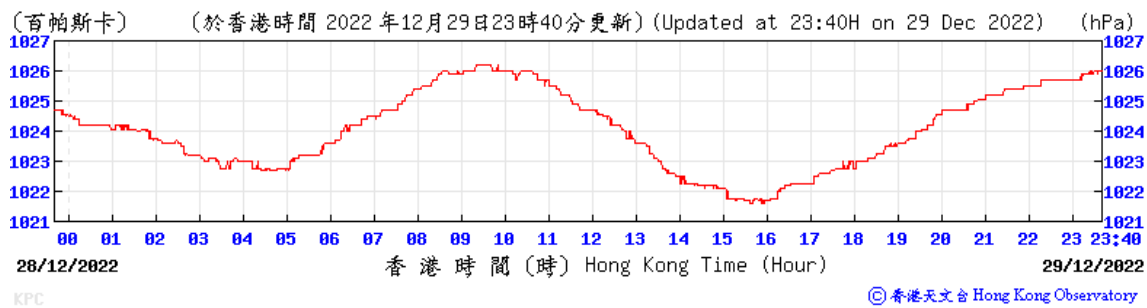
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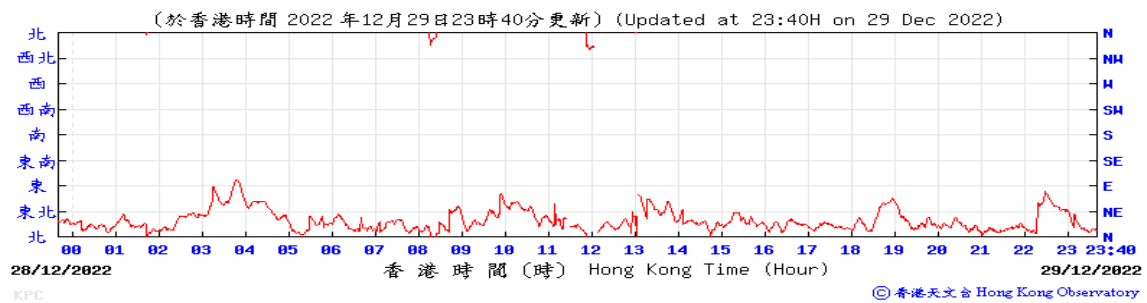
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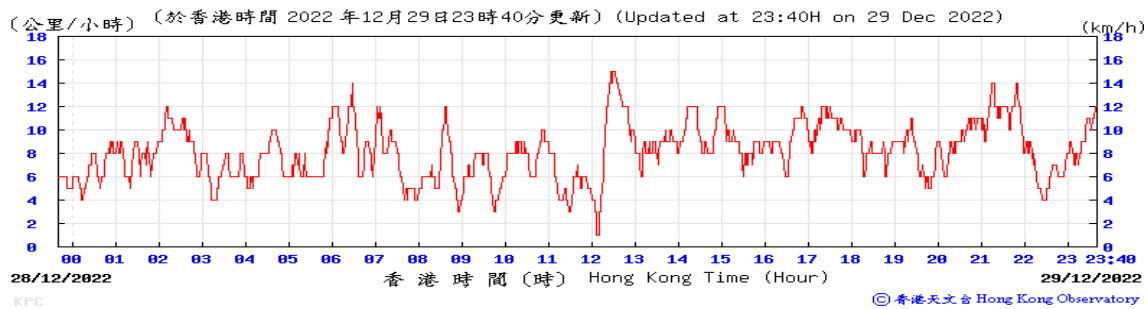
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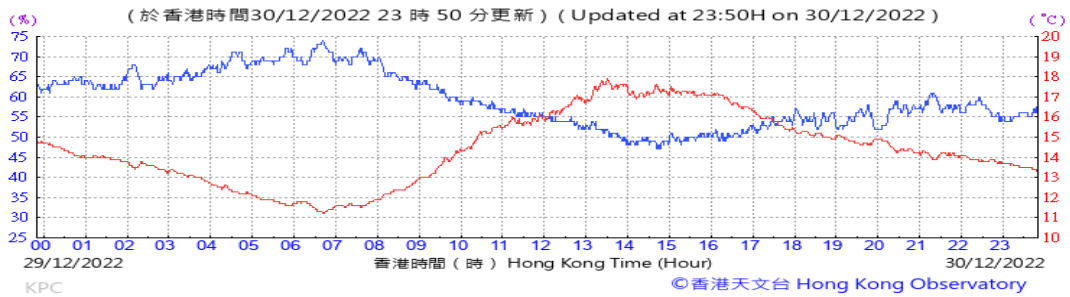
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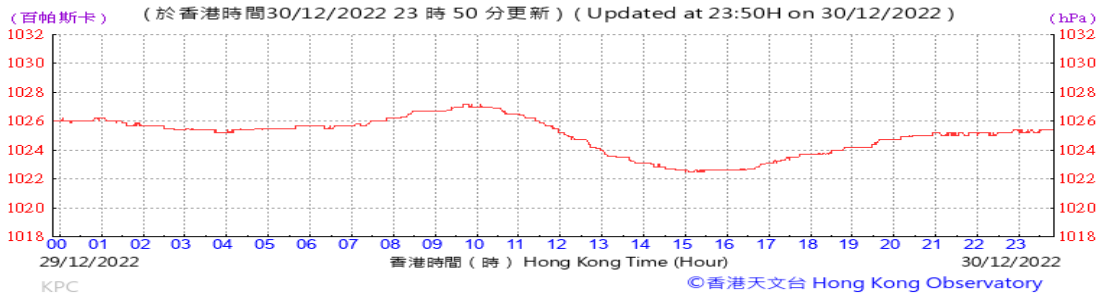
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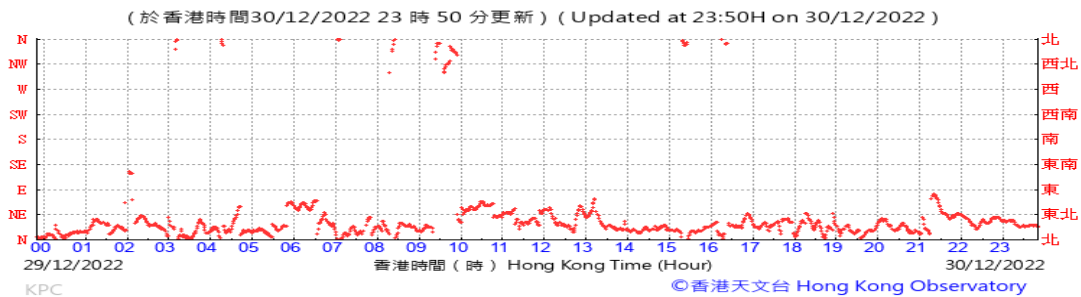
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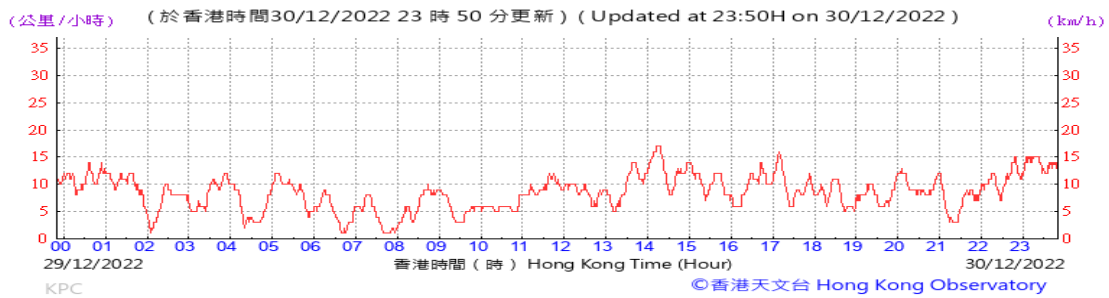
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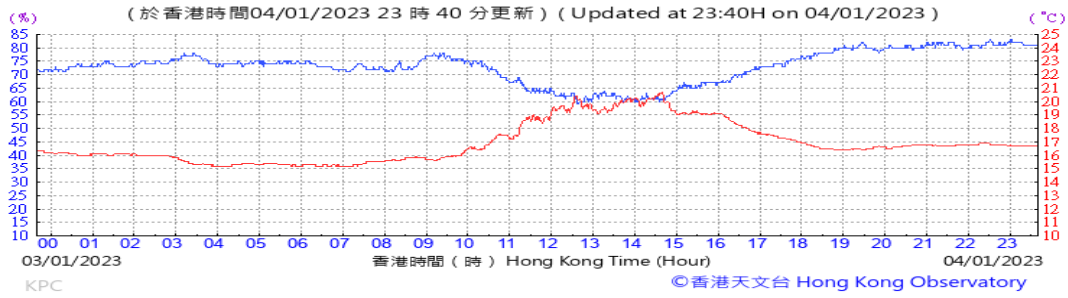
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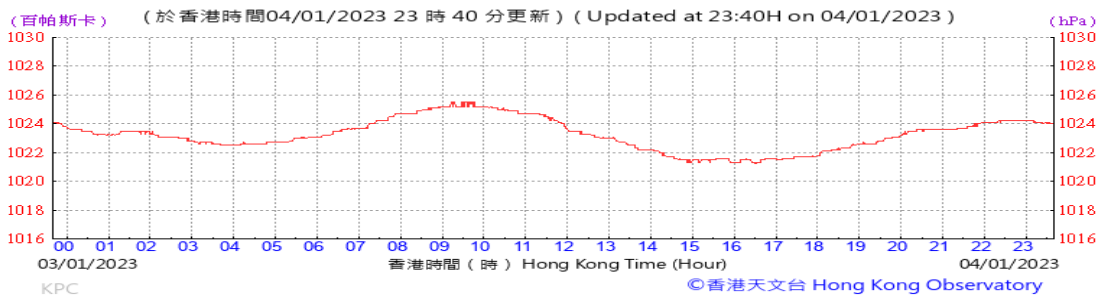
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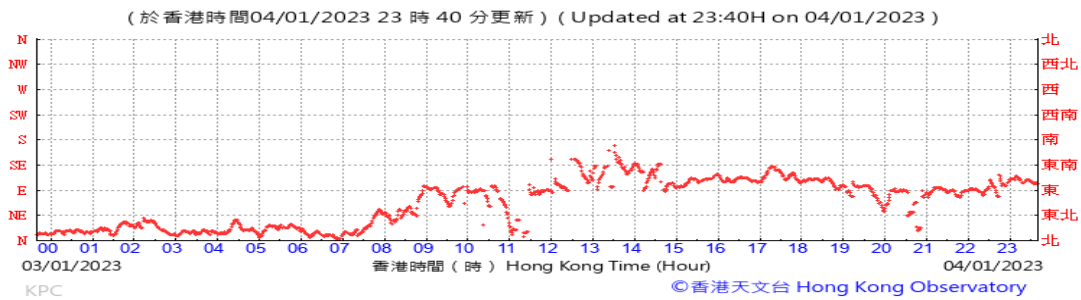
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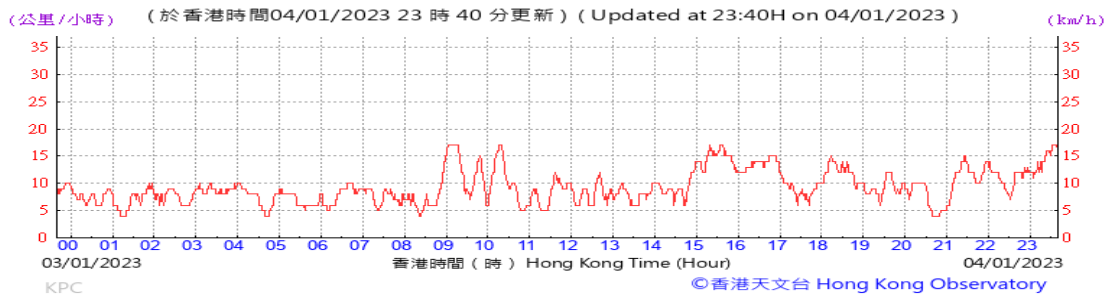
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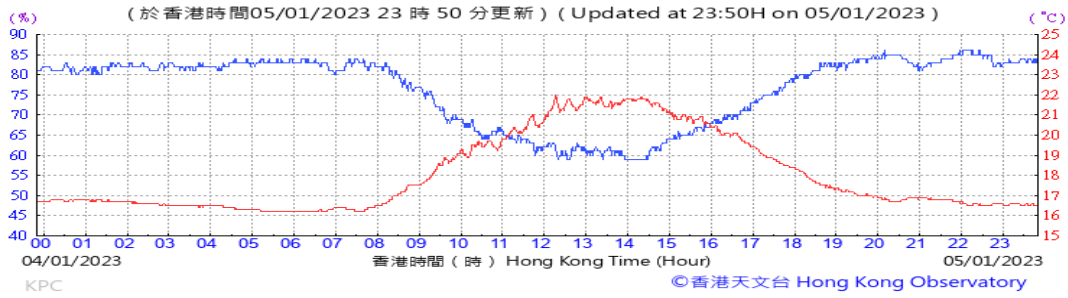
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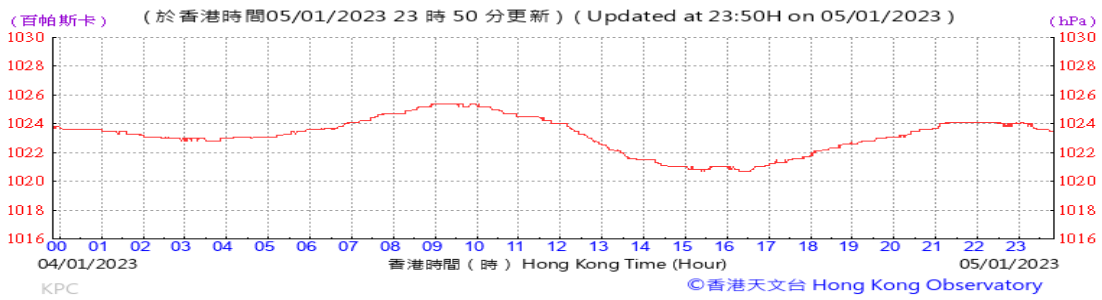
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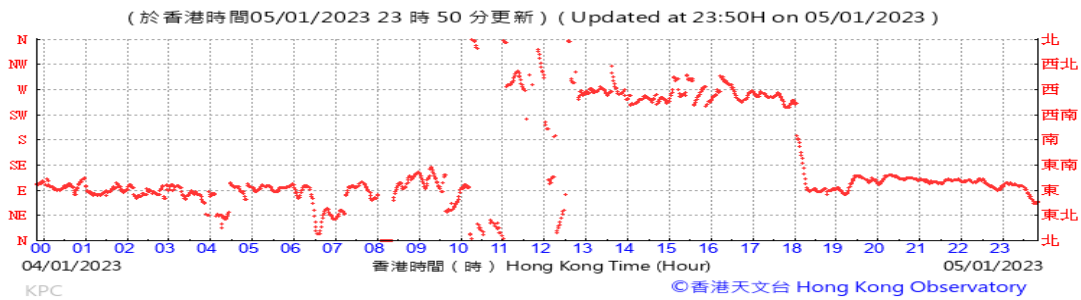
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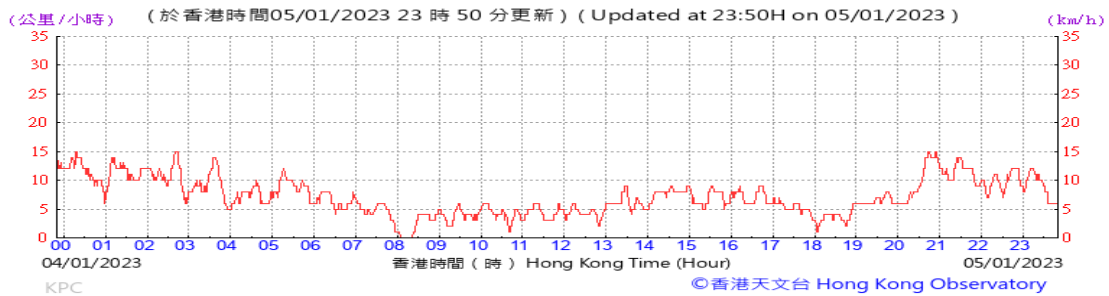
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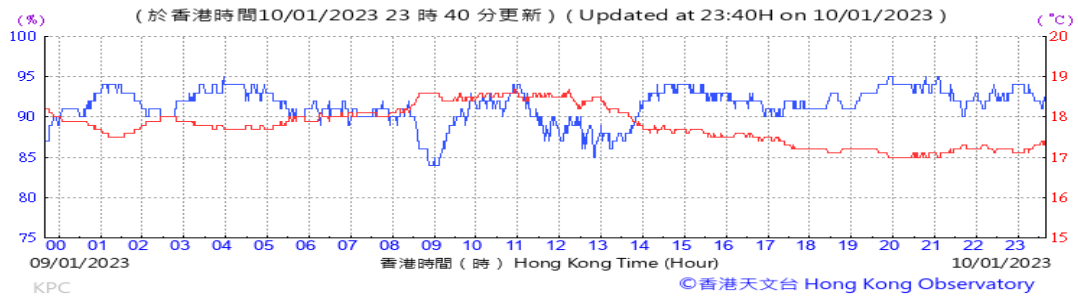


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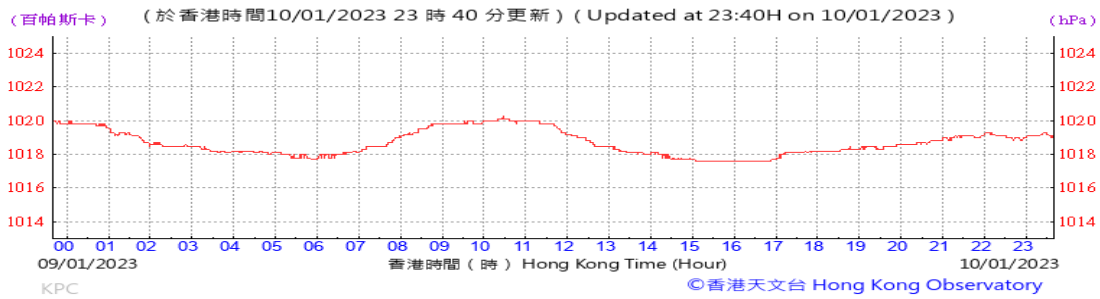




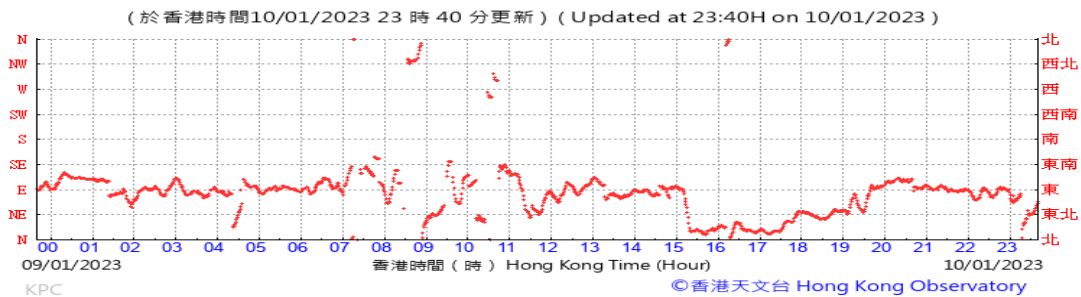
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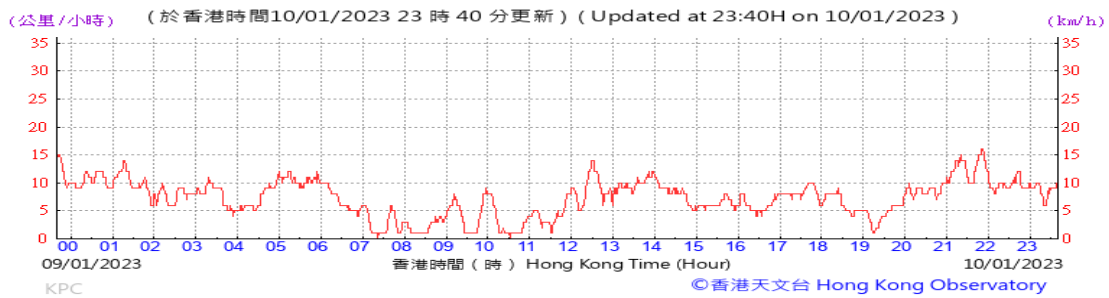
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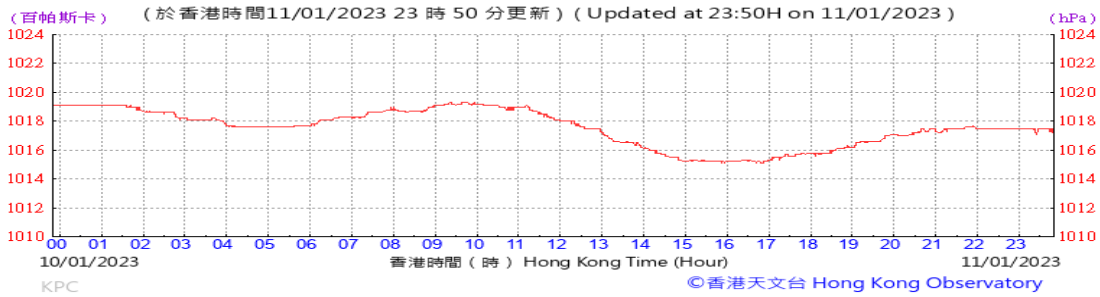
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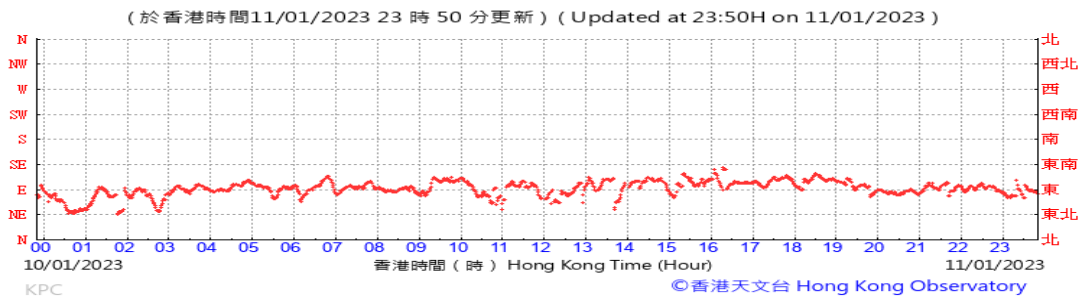
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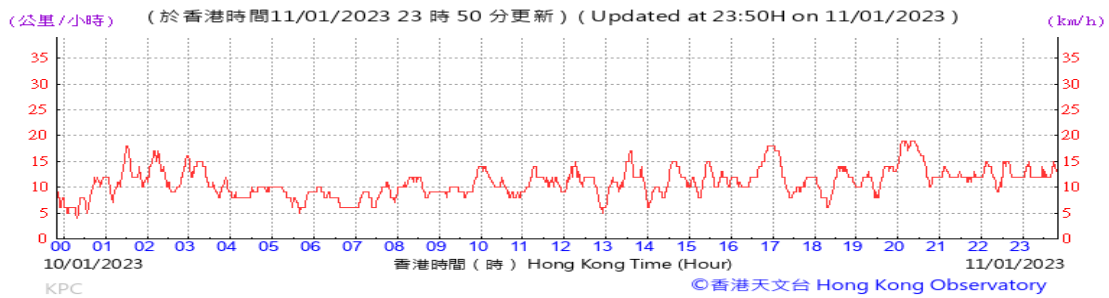
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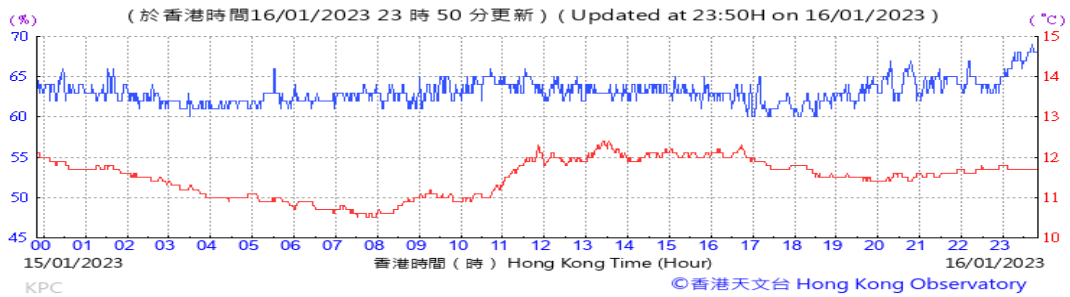
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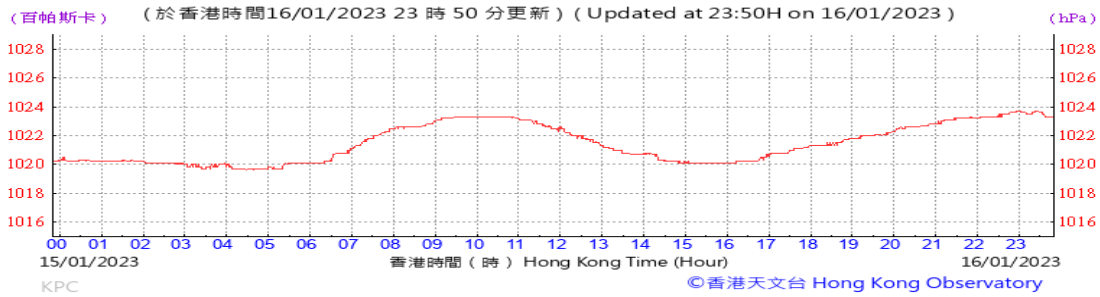
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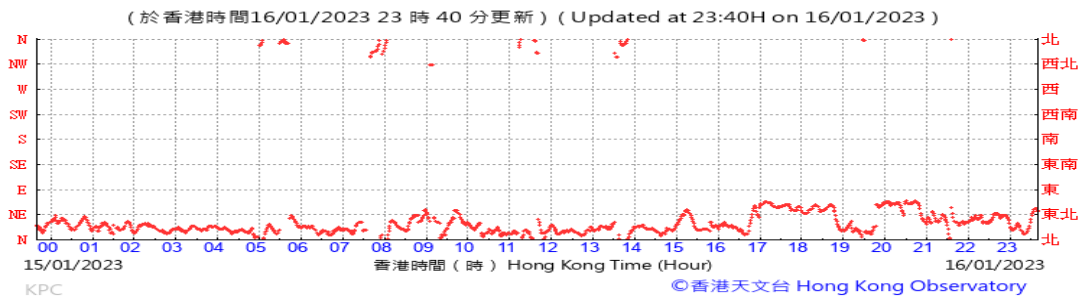
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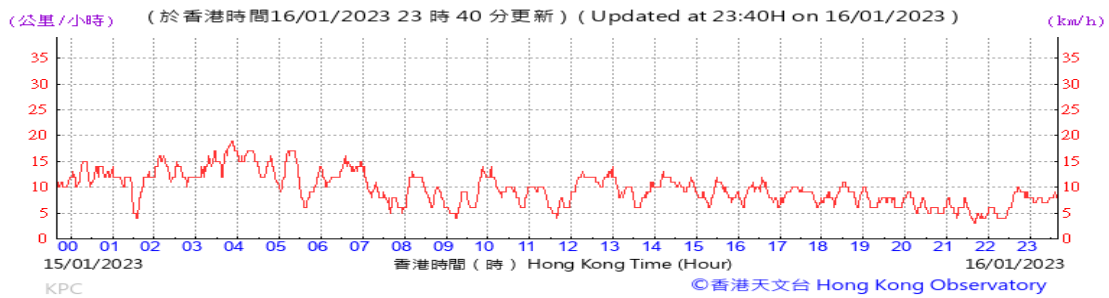
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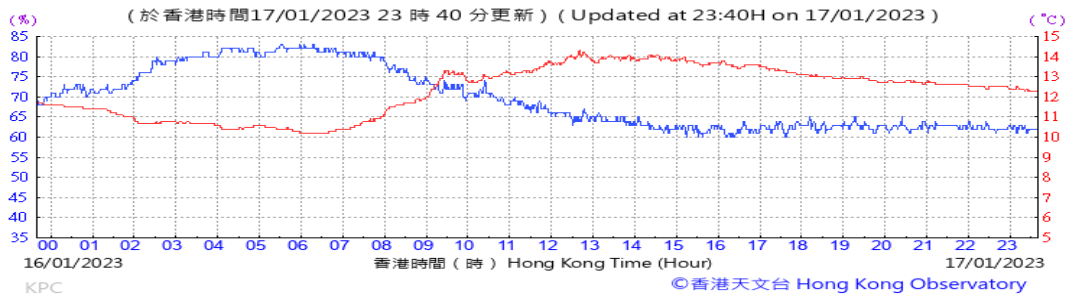
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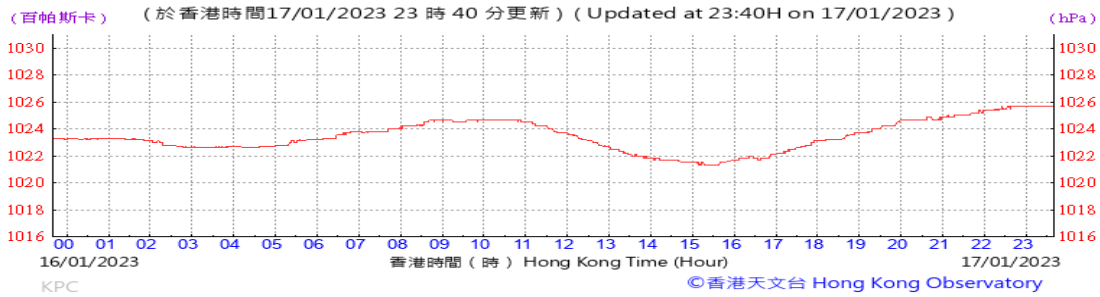
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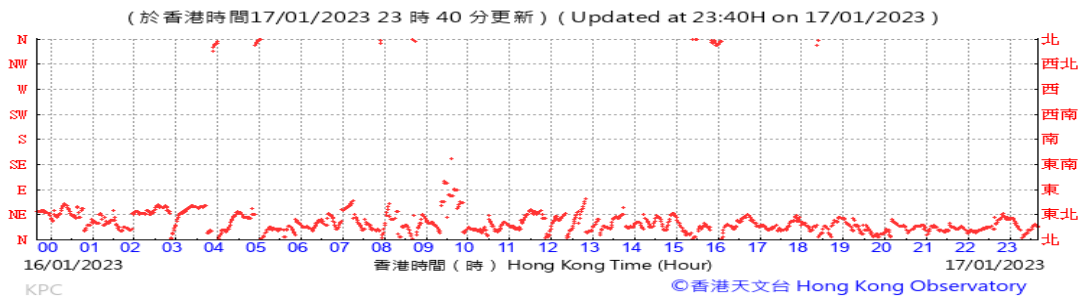
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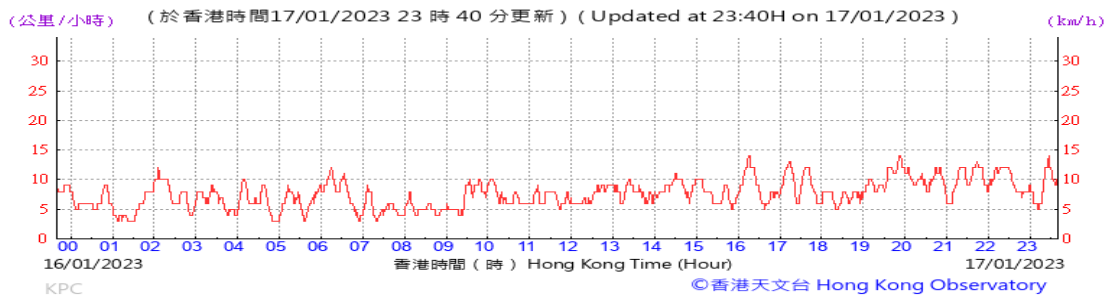
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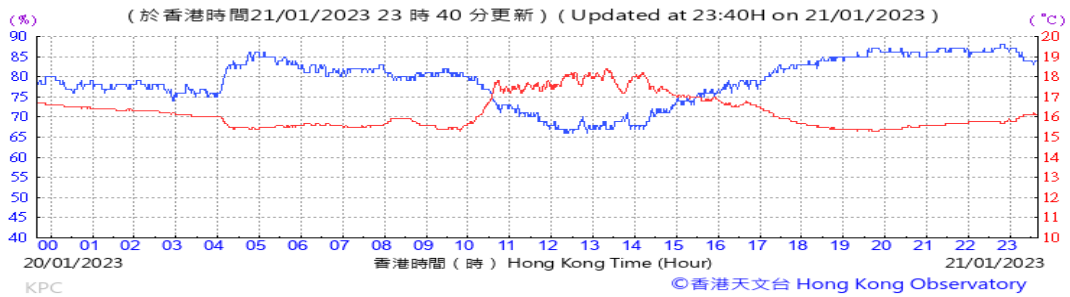
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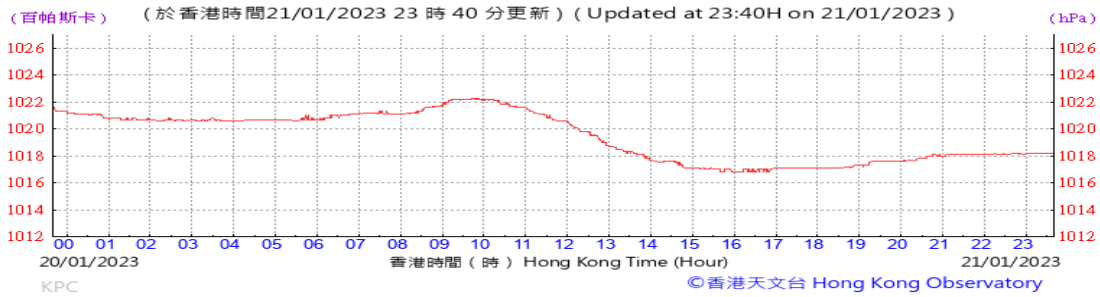
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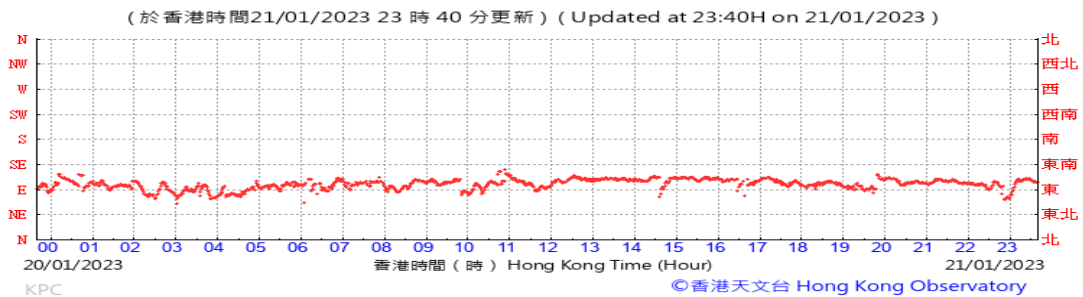
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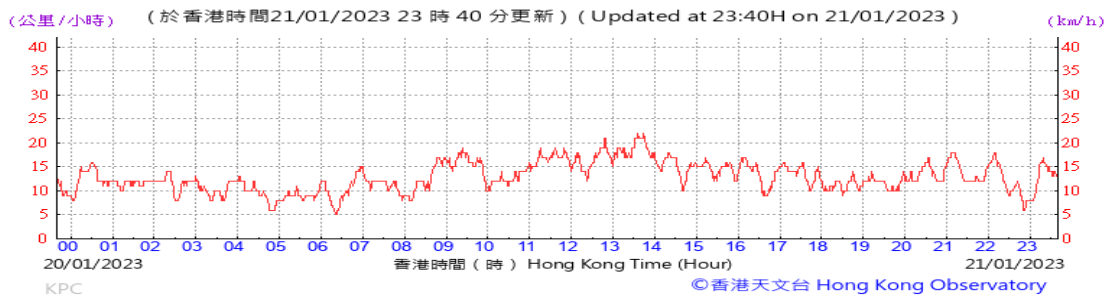
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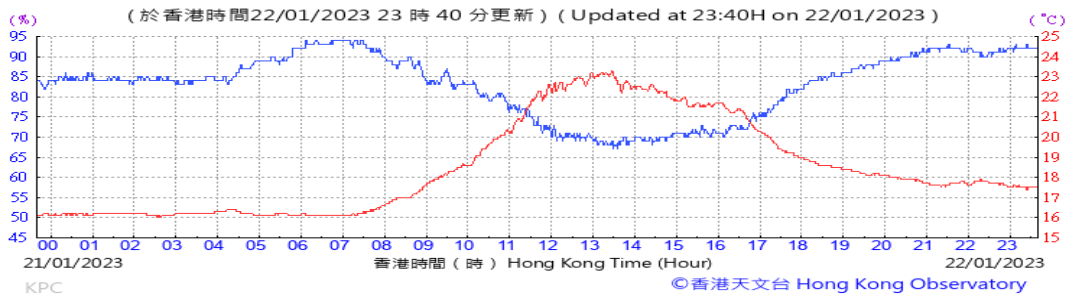
Wind Direction:



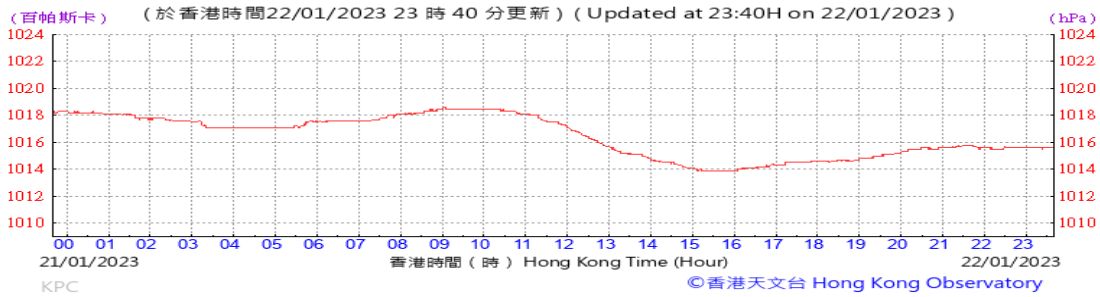
Wind Speed:



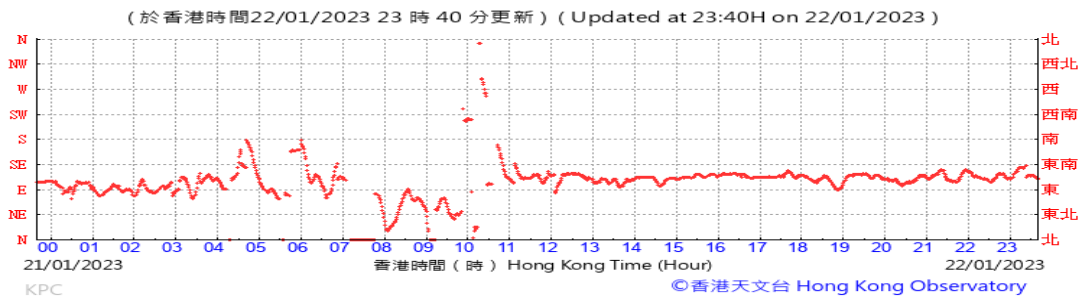
Temperature/Humidity:



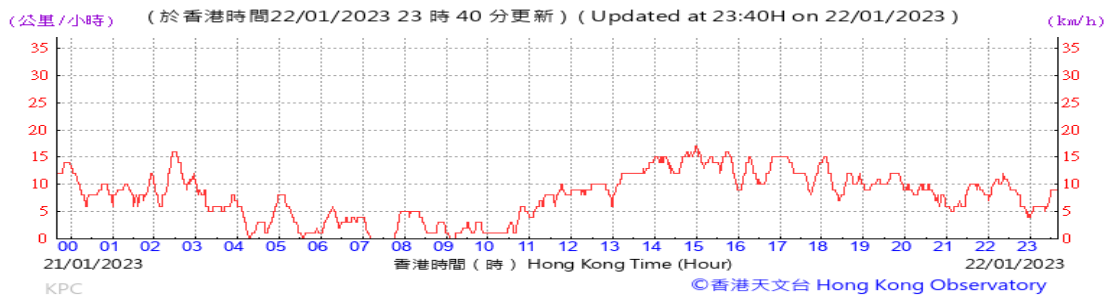
Pressure:



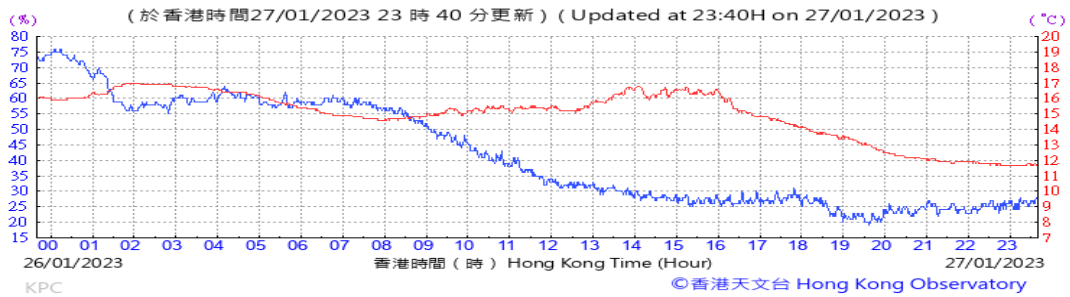
Wind Direction:



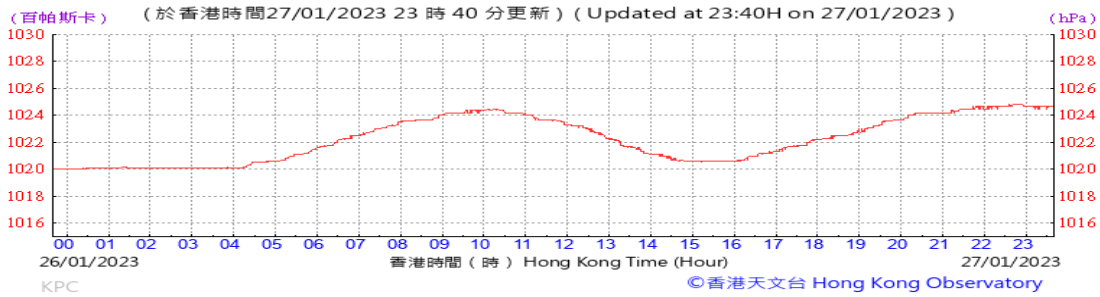
Wind Speed:



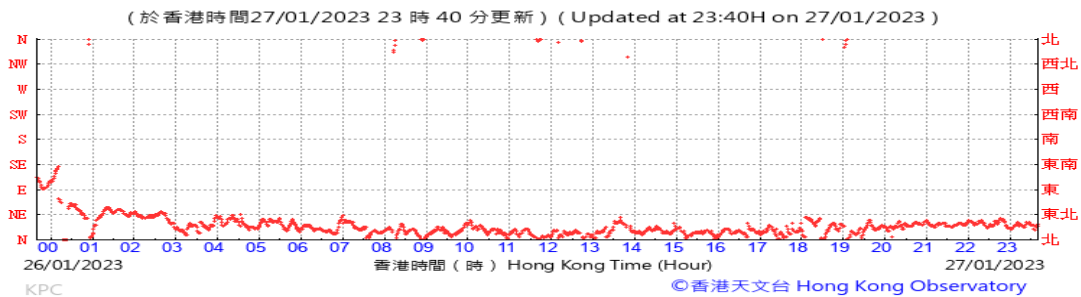
Temperature/Humidity:



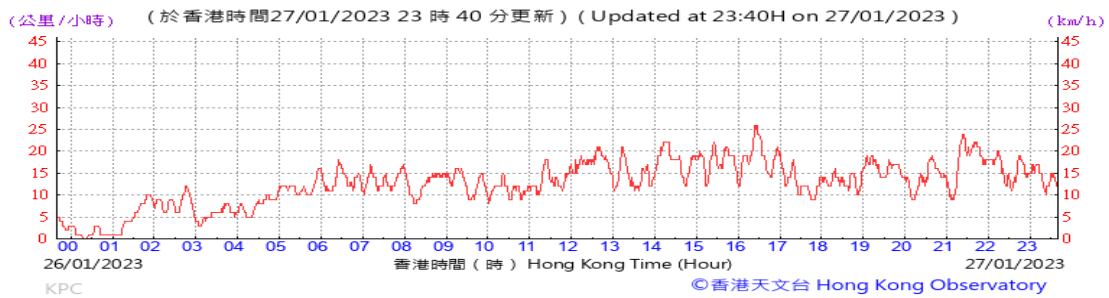
Pressure:



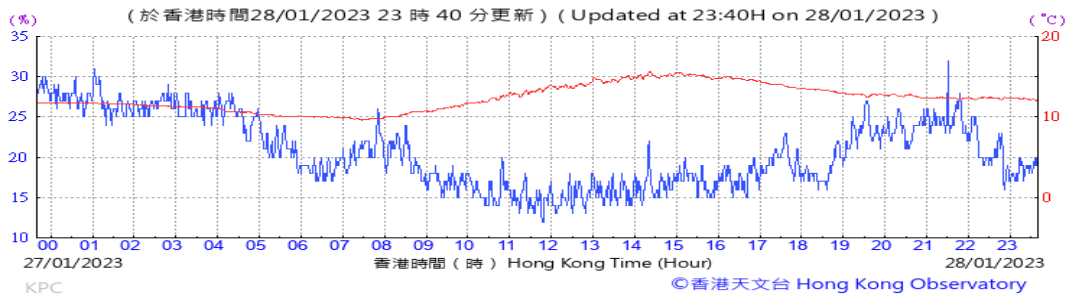
Wind Direction:



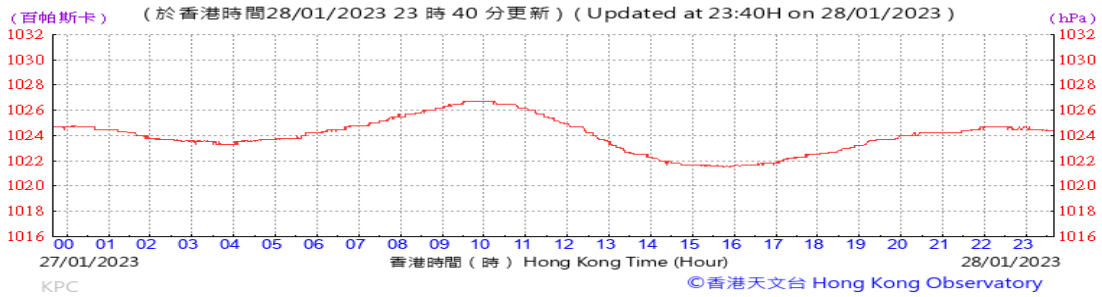
Wind Speed:



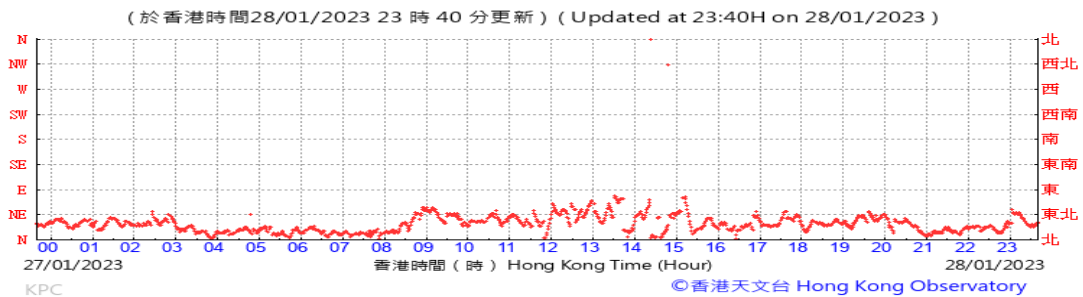
Temperature/Humidity:



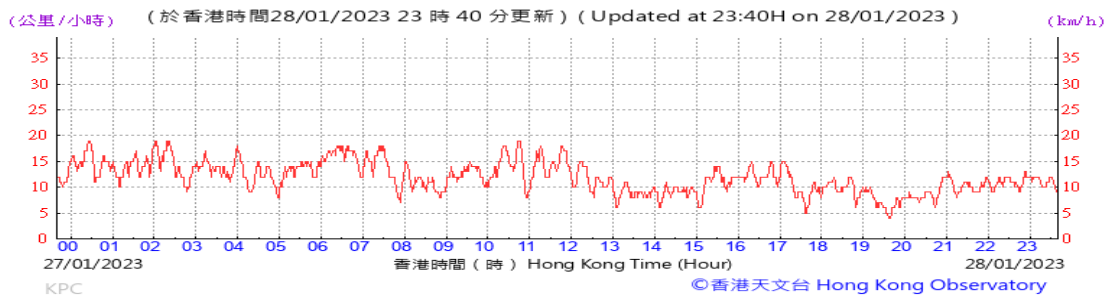
Pressure:



Wind Direction:



Wind Speed:



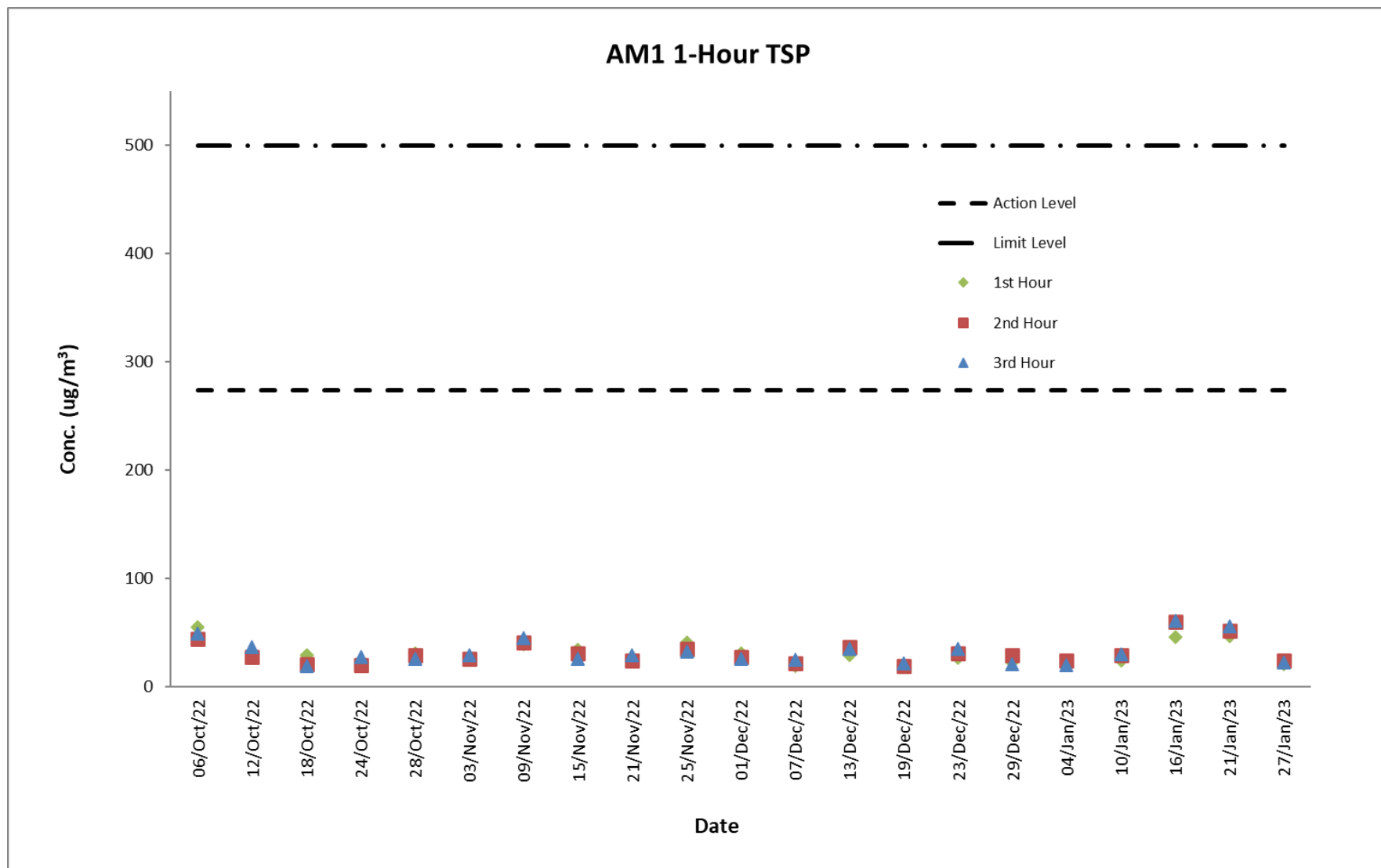


## **E. Graphical Plots of the Monitoring Results**

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

Date	Weather Condition	Time	Conc. ( $\mu\text{g}/\text{m}^3$ )			Action Level ( $\mu\text{g}/\text{m}^3$ )	Limit Level ( $\mu\text{g}/\text{m}^3$ )
			1 <sup>st</sup> Hour	2 <sup>nd</sup> Hour	3 <sup>rd</sup> Hour		
03-Nov-22	Cloudy	8:23 - 11:23	28	26	29	273.7	500
09-Nov-22	Fine	8:22 - 11:22	39	41	45	273.7	500
15-Nov-22	Fine	8:33 - 11:33	34	31	26	273.7	500
21-Nov-22	Cloudy	8:23 - 11:23	27	24	29	273.7	500
25-Nov-22	Cloudy	8:23 - 11:23	41	35	33	273.7	500
01-Dec-22	Cloudy	8:23 - 11:23	31	28	26	273.7	500
07-Dec-22	Fine	8:22 - 11:22	19	22	25	273.7	500
13-Dec-22	Cloudy	8:23 - 11:23	29	37	35	273.7	500
19-Dec-22	Sunny	8:21 - 11:21	20	19	22	273.7	500
23-Dec-22	Sunny	8:23 - 11:23	27	31	35	273.7	500
29-Dec-22	Cloudy	8:18 - 11:18	23	29	21	273.7	500
04-Jan-23	Cloudy	8:28 - 11:28	23	24	20	273.7	500
10-Jan-23	Cloudy	8:24 - 11:24	24	29	30	273.7	500
16-Jan-23	Cloudy	8:28 - 11:28	46	60	61	273.7	500
21-Jan-23	Cloudy	8:23 - 11:23	47	52	56	273.7	500
27-Jan-23	Cloudy	8:23 - 11:23	21	24	23	273.7	500

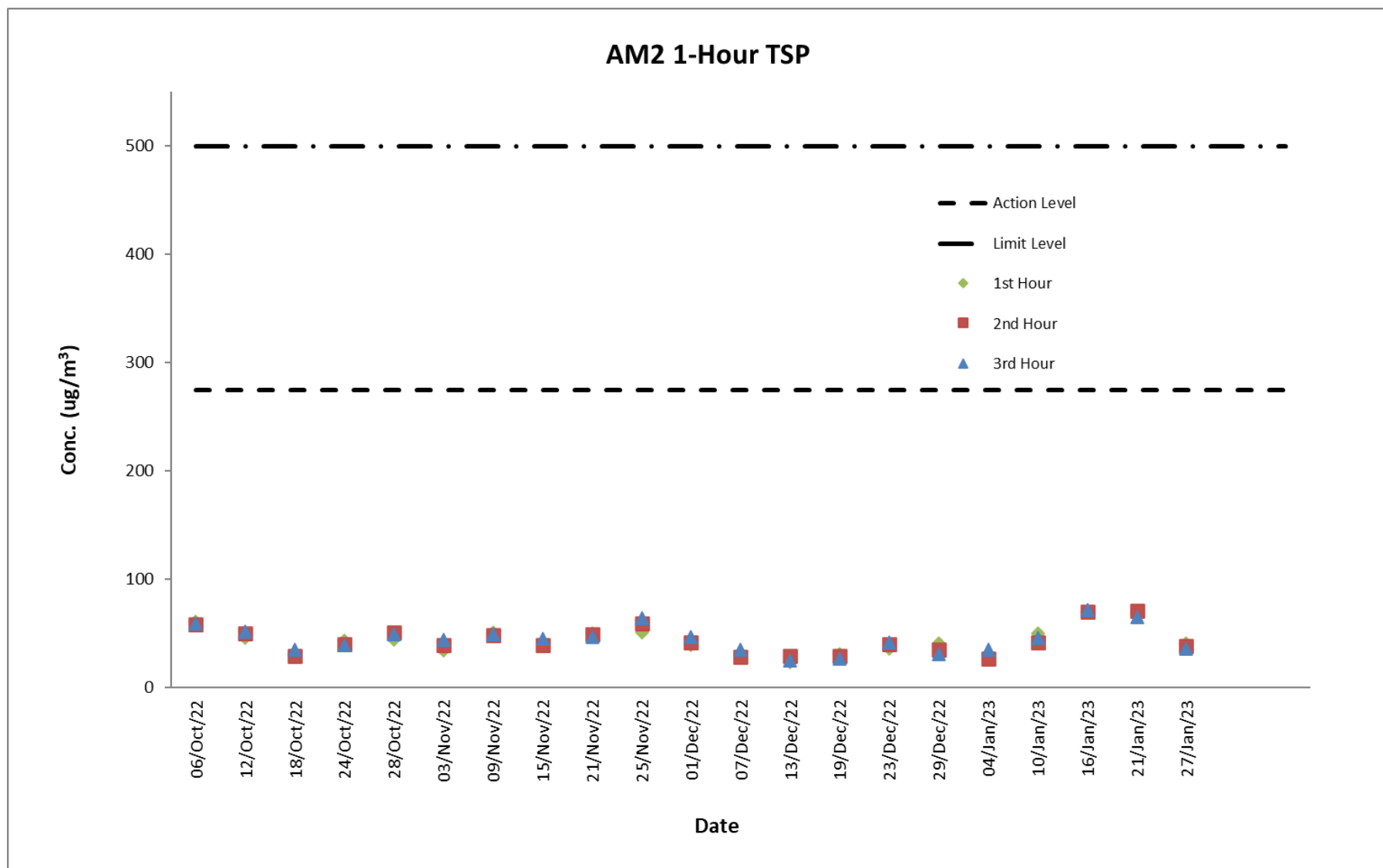
Graphical Presentation of Air Quality Monitoring Result at Station AM1 (1-hour TSP)



**Air Quality Monitoring Result at Station AM2 (1-hour TSP)**

Date	Weather Condition	Time	Conc. ( $\mu\text{g}/\text{m}^3$ )			Action Level ( $\mu\text{g}/\text{m}^3$ )	Limit Level ( $\mu\text{g}/\text{m}^3$ )
			1 <sup>st</sup> Hour	2 <sup>nd</sup> Hour	3 <sup>rd</sup> Hour		
03-Nov-22	Cloudy	8:38 - 11:38	34	39	44	274.2	500
09-Nov-22	Fine	8:36 - 11:36	51	48	49	274.2	500
15-Nov-22	Fine	8:48 - 11:48	42	39	45	274.2	500
21-Nov-22	Cloudy	8:38 - 11:38	50	49	47	274.2	500
25-Nov-22	Cloudy	8:38 - 11:38	51	59	64	274.2	500
01-Dec-22	Cloudy	8:38 - 11:38	39	42	47	274.2	500
07-Dec-22	Fine	8:37 - 11:37	31	28	35	274.2	500
13-Dec-22	Cloudy	8:38 - 11:38	23	29	25	274.2	500
19-Dec-22	Sunny	8:36 - 11:36	31	29	27	274.2	500
23-Dec-22	Sunny	8:38 - 11:38	36	40	42	274.2	500
29-Dec-22	Cloudy	8:33 - 11:33	41	35	31	274.2	500
04-Jan-23	Cloudy	8:43 - 11:43	31	27	35	274.2	500
10-Jan-23	Cloudy	8:39 - 11:39	50	42	46	274.2	500
16-Jan-23	Cloudy	8:43 - 11:43	69	70	72	274.2	500
21-Jan-23	Cloudy	8:38 - 11:38	69	71	65	274.2	500
27-Jan-23	Cloudy	8:38 - 11:38	41	38	36	274.2	500

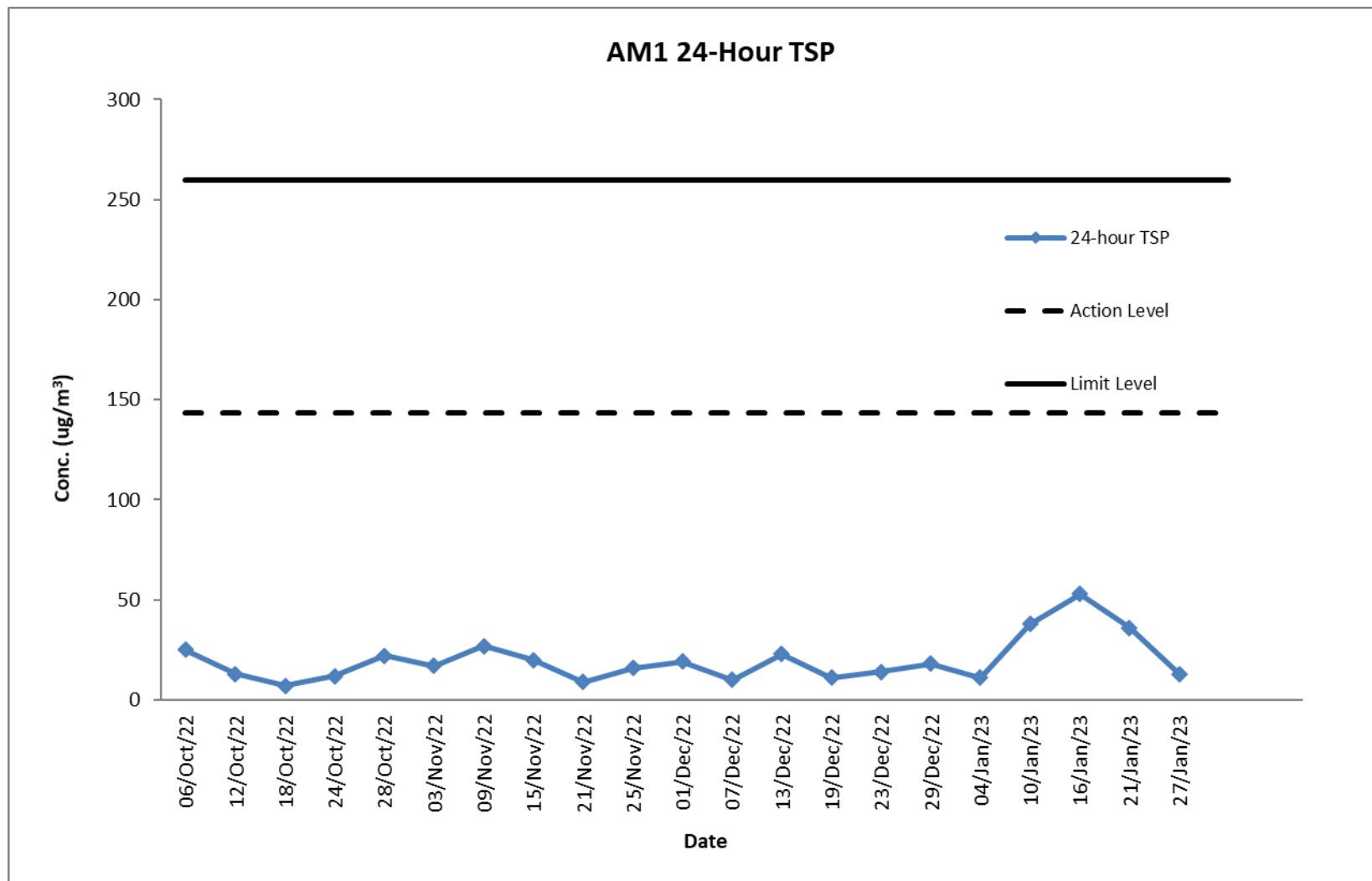
Graphical Presentation of Air Quality Monitoring Result at Station AM2 (1-hour TSP)



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

Start		Finish		Filter Weight (g)		Reading		Sampling Time (hrs)	Flow Rate (m <sup>3</sup> /min)			Conc. (µg/m <sup>3</sup> )	Weather Condition	Action Level	Limit Level
Date	Time	Date	Time	Initial	Final	Initial	Final		Initial	Final	Average				
03-Nov-22	08:20	04-Nov-22	08:20	2.78	2.81	25688.38	25712.38	24	1.26	1.26	1.26	17	Cloudy	143.6	260
09-Nov-22	08:20	10-Nov-22	08:20	2.731	2.7796	25712.38	25736.38	24	1.26	1.26	1.26	27	Fine	143.6	260
15-Nov-22	08:30	16-Nov-22	08:30	2.748	2.7837	25736.38	25760.38	24	1.26	1.26	1.26	20	Fine	143.6	260
21-Nov-22	08:20	22-Nov-22	08:20	2.7542	2.7697	25760.38	25784.38	24	1.26	1.26	1.26	9	Cloudy	143.6	260
25-Nov-22	08:20	26-Nov-22	08:20	2.7395	2.768	25784.38	25808.38	24	1.26	1.26	1.26	16	Cloudy	143.6	260
01-Dec-22	08:20	02-Dec-22	08:20	2.7406	2.7755	25808.38	25832.38	24	1.26	1.26	1.26	19	Cloudy	143.6	260
07-Dec-22	08:20	08-Dec-22	08:20	2.7457	2.7645	25832.38	25856.38	24	1.26	1.26	1.26	10	Fine	143.6	260
13-Dec-22	08:20	14-Dec-22	08:20	2.7445	2.7864	25856.38	25880.38	24	1.26	1.26	1.26	23	Cloudy	143.6	260
19-Dec-22	08:18	20-Dec-22	08:18	2.7520	2.7720	25880.38	25904.38	24	1.26	1.26	1.26	11	Sunny	143.6	260
23-Dec-22	08:20	24-Dec-22	08:20	2.6972	2.7232	25904.38	25928.38	24	1.26	1.26	1.26	14	Sunny	143.6	260
29-Dec-22	08:15	30-Dec-22	08:15	2.7035	2.7361	25928.38	25952.38	24	1.26	1.26	1.26	18	Cloudy	143.6	260
04-Jan-23	08:25	05-Jan-23	08:25	2.6978	2.7173	25952.38	25976.38	24	1.26	1.26	1.26	11	Cloudy	143.6	260
10-Jan-23	08:21	11-Jan-23	08:21	2.6957	2.7644	25976.38	26000.38	24	1.26	1.26	1.26	38	Cloudy	143.6	260
16-Jan-23	08:25	17-Jan-23	08:25	2.6982	2.7826	26000.38	26024.38	24	1.1	1.1	1.1	53	Cloudy	143.6	260
21-Jan-23	08:20	22-Jan-23	08:20	2.6932	2.7506	26024.38	26048.38	24	1.1	1.1	1.1	36	Cloudy	143.6	260
27-Jan-23	08:20	28-Jan-23	08:20	2.6920	2.7127	26048.38	26072.38	24	1.1	1.1	1.1	13	Cloudy	143.6	260

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

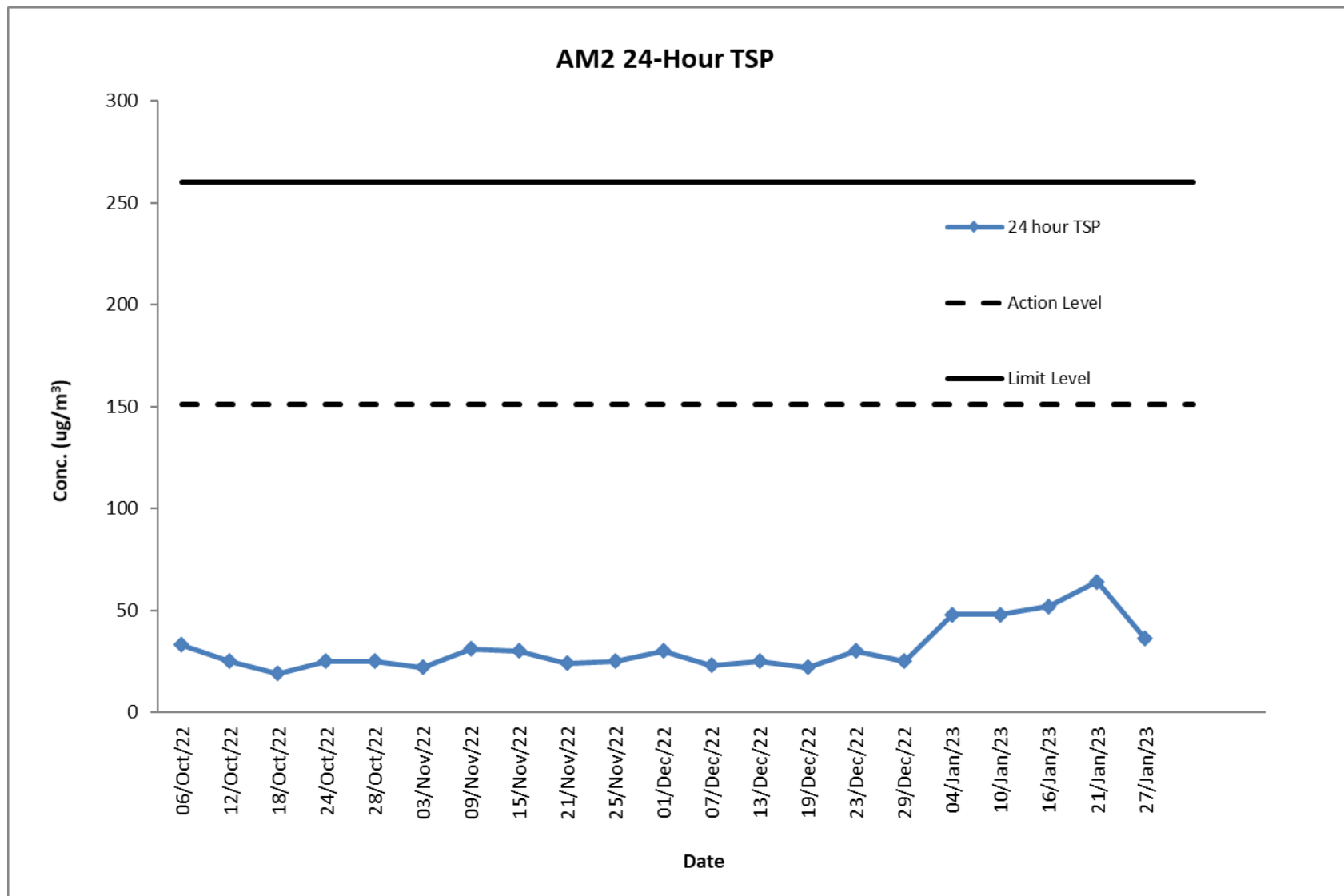


**Air Quality Monitoring Result at Station AM2 (24-hour TSP)**

Start		Finish		Sampling Time (hrs)	Conc. ( $\mu\text{g}/\text{m}^3$ )	Weather Condition	Action Level	Limit Level
Date	Time	Date	Time					
03-Nov-22	08:35	04-Nov-22	08:35	24	22	Cloudy	151.1	260
09-Nov-22	08:34	10-Nov-22	08:34	24	31	Fine	151.1	260
15-Nov-22	08:45	16-Nov-22	08:45	24	30	Fine	151.1	260
21-Nov-22	08:35	22-Nov-22	08:35	24	24	Cloudy	151.1	260
25-Nov-22	08:35	26-Nov-22	08:35	24	25	Cloudy	151.1	260
01-Dec-22	08:35	02-Dec-22	08:35	24	30	Cloudy	151.1	260
07-Dec-22	08:34	08-Dec-22	08:34	24	23	Fine	151.1	260
13-Dec-22	08:35	14-Dec-22	08:35	24	25	Cloudy	151.1	260
19-Dec-22	08:33	20-Dec-22	08:33	24	22	Sunny	151.1	260
23-Dec-22	08:35	24-Dec-22	08:35	24	30	Sunny	151.1	260
29-Dec-22	08:30	30-Dec-22	08:30	24	25	Cloudy	151.1	260
04-Jan-23	08:40	05-Jan-23	08:40	24	48	Cloudy	151.1	260
10-Jan-23	08:36	11-Jan-23	08:36	24	48	Cloudy	151.1	260
16-Jan-23	08:40	17-Jan-23	08:40	24	52	Cloudy	151.1	260
21-Jan-23	08:35	22-Jan-23	08:35	24	64	Cloudy	151.1	260
27-Jan-23	08:35	28-Jan-23	08:35	24	36	Cloudy	151.1	260



Graphical Presentation of Air Quality Monitoring Result at Station AM2 (24-hour TSP)



### Noise Monitoring Result at Station NM1A

Date	Time	Measured L10 dB(A)	Measured L90 dB(A)	Leq (30 min.) dB(A)
03-Nov-22	09:23	65.4	61.9	67
03-Nov-22	09:28	66.5	62.5	
03-Nov-22	09:33	66.2	62.7	
03-Nov-22	09:38	65.0	61.3	
03-Nov-22	09:43	65.8	61.4	
03-Nov-22	09:48	66.7	62.6	
09-Nov-22	09:20	65.9	61.4	66
09-Nov-22	09:25	64.3	60.2	
09-Nov-22	09:30	64.2	60.6	
09-Nov-22	09:35	65.7	61.9	
09-Nov-22	09:40	65.0	61.3	
09-Nov-22	09:45	65.1	61.6	
15-Nov-22	09:32	65.7	61.6	67
15-Nov-22	09:37	65.4	61.8	
15-Nov-22	09:42	66.9	62.7	
15-Nov-22	09:47	66.2	62.1	
15-Nov-22	09:52	65.0	61.2	
15-Nov-22	09:57	66.6	62.4	
21-Nov-22	09:22	65.7	61.5	67
21-Nov-22	09:27	66.4	62.8	
21-Nov-22	09:32	65.3	61.7	
21-Nov-22	09:37	65.2	61.1	
21-Nov-22	09:42	65.0	61.2	
21-Nov-22	09:47	66.9	62.4	
01-Dec-22	09:22	64.2	60.3	66
01-Dec-22	09:27	65.8	61.4	
01-Dec-22	09:32	65.5	61.9	
01-Dec-22	09:37	66.0	62.6	
01-Dec-22	09:42	64.6	60.4	
01-Dec-22	09:47	64.7	60.1	
07-Dec-22	09:23	64.2	60.8	66
07-Dec-22	09:28	65.3	61.1	
07-Dec-22	09:33	65.6	61.5	
07-Dec-22	09:38	64.8	60.2	
07-Dec-22	09:43	66.0	62.9	
07-Dec-22	09:48	65.1	61.4	
13-Dec-22	09:22	65.2	61.7	67
13-Dec-22	09:27	65.3	61.5	
13-Dec-22	09:32	66.6	62.4	
13-Dec-22	09:37	66.8	62.7	
13-Dec-22	09:42	65.0	61.9	
13-Dec-22	09:47	66.2	62.2	
19-Dec-22	09:20	65.2	61.3	67
19-Dec-22	09:25	66.8	62.4	
19-Dec-22	09:30	65.5	61.6	
19-Dec-22	09:35	65.0	61.9	
19-Dec-22	09:40	66.1	62.7	
19-Dec-22	09:45	65.7	61.4	
29-Dec-22	09:18	65.2	61.3	67
29-Dec-22	09:23	66.9	62.4	
29-Dec-22	09:28	66.5	62.8	
29-Dec-22	09:33	65.7	61.5	
29-Dec-22	09:38	66.0	62.7	
29-Dec-22	09:43	65.1	61.6	

04-Jan-23	09:27	64.2	60.5	66
04-Jan-23	09:32	65.4	61.6	
04-Jan-23	09:37	65.7	61.9	
04-Jan-23	09:42	65.8	61.4	
04-Jan-23	09:47	64.0	60.2	
04-Jan-23	09:52	66.7	62.0	
10-Jan-23	09:24	65.2	61.4	67
10-Jan-23	09:29	66.5	62.8	
10-Jan-23	09:34	64.6	60.6	
10-Jan-23	09:39	65.9	61.2	
10-Jan-23	09:44	65.0	61.1	
10-Jan-23	09:49	66.4	62.6	
16-Jan-23	09:28	65.3	61.4	67
16-Jan-23	09:33	64.5	60.6	
16-Jan-23	09:38	66.1	62.8	
16-Jan-23	09:43	66.9	62.5	
16-Jan-23	09:48	65.0	61.6	
16-Jan-23	09:53	66.7	62.5	
27-Jan-23	09:33	64.2	60.3	66
27-Jan-23	09:38	65.4	61.9	
27-Jan-23	09:43	64.6	60.7	
27-Jan-23	09:48	66.8	62.6	
27-Jan-23	09:53	64.0	60.5	
27-Jan-23	09:58	64.7	60.2	

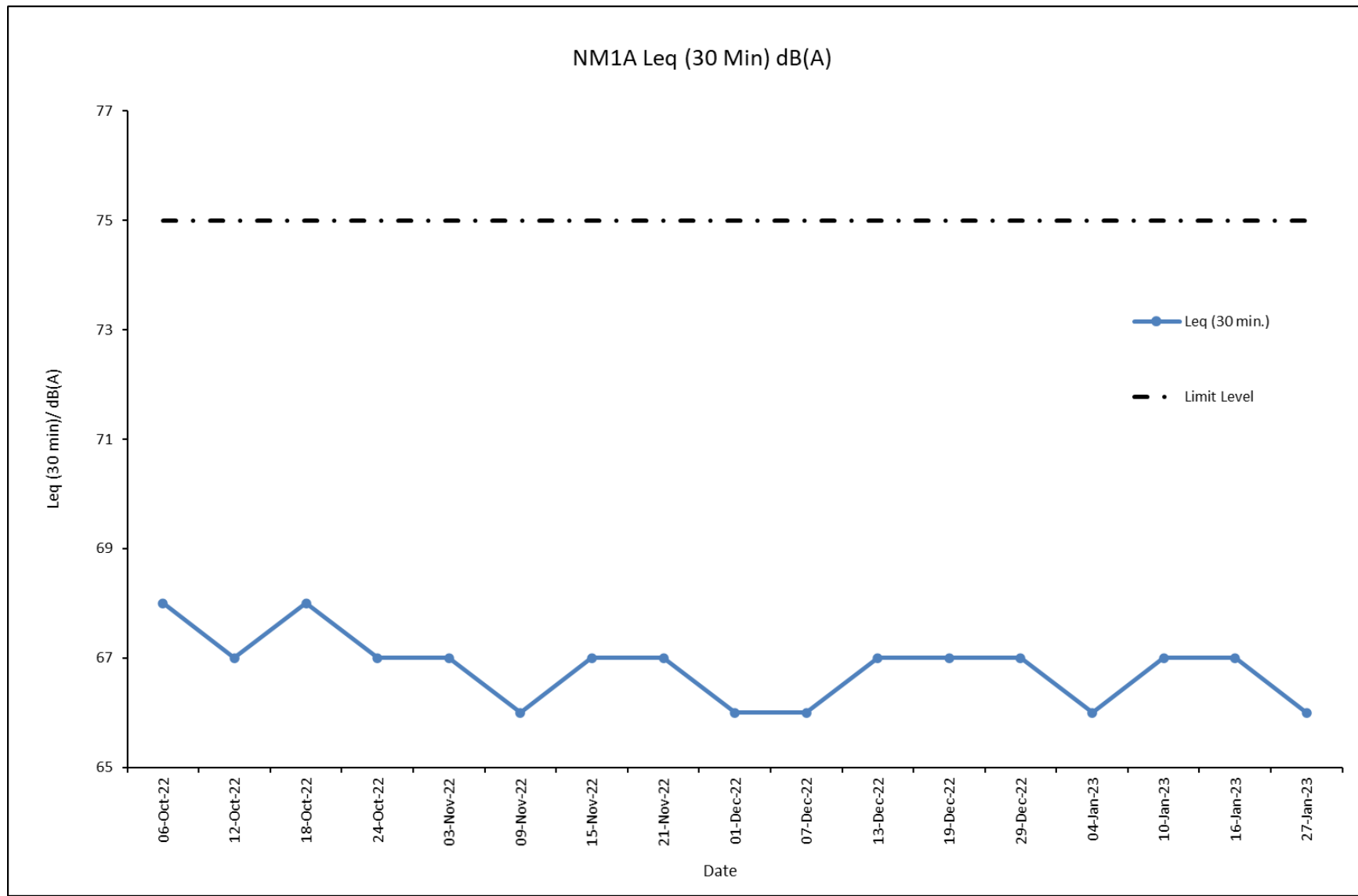
**Remarks:**

+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



## F. Waste Flow table

**Table F-1: 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 ton)	(in ton)	(in ton)	(in ton)	(in ton)	(in ton)	(in ton)	(in ton)	(in ton)	(in ton)	(in ton)	(in ton)	(in ton)
<b>2016</b>													
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
<b>2017</b>													
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 ton)	(in ton)	(in ton)	(in ton)	(in ton)	(in ton)	(in ton)	(in ton)	(in ton)	(in ton)	(in ton)	(in ton)	(in ton)
<b>2018</b>													
Jan	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Feb	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5
Mar	6120.2	0.0	0.0	5782.0	338.2	0.0	0.0	0.0	0.0	1.0	0.0	0.5	17.6
Apr	14460.3	0.0	0.0	12484.1	1976.3	0.0	0.0	0.0	0.0	0.2	0.0	0.0	7.6
May	59783.7	0.0	0.0	46989.0	12794.7	0.0	0.0	59.6	0.0	0.0	0.0	0.0	9.4
Jun	53117.5	0.0	0.0	37642.8	15474.7	0.0	0.0	51.5	0.2	0.0	0.0	0.0	12.8
Jul	89901.5	0.0	0.0	85317.1	4584.4	0.0	165.1	114.6	0.0	0.0	0.0	0.0	41.3
Aug	35137.3	0.0	0.0	33731.6	1405.7	0.0	214.3	148.1	0.0	0.0	0.0	0.0	48.5
Sep	4924.3	0.0	0.0	4641.2	196.1	87.0	174.6	40.0	0.0	0.0	0.0	0.0	179.2
Oct	19099.9	0.0	0.0	11301.0	7642.8	156.1	0.0	106.3	0.4	0.0	0.0	0.0	528.5
Nov	104168.0	0.0	0.0	79811.6	24351.0	5.3	0.0	54.5	0.0	0.6	0.0	0.0	31.5
Dec	62989.9	0.0	0.0	51284.4	11699.9	5.6	0.0	95.1	0.0	0.6	0.0	0.0	65.9
Sub-total (2018)	449702.6	0.0	0.0	368984.8	80463.7	254.0	553.9	669.7	0.5	2.4	0.0	0.5	943.7
<b>2019</b>													
Jan	74479.1	0.0	0.0	69249.5	5229.7	0.0	318.0	326.7	0.2	0.0	0.0	0.0	76.3
Feb	21969.9	0.0	0.0	17723.9	4246.0	0.0	16.5	55.2	0.0	0.0	0.0	0.0	26.7
Mar	19311.9	0.0	0.0	8569.9	10742.0	0.0	337.8	61.5	0.0	0.0	0.0	0.0	36.3
Apr	28559.9	0.0	0.0	21280.3	7279.6	0.0	0.0	32.6	0.0	0.8	0.0	0.0	24.9
May	45418.0	0.0	0.0	11200.6	34217.4	0.0	0.0	27.4	0.2	0.5	0.0	0.0	33.7
Jun	66633.4	0.0	0.0	23874.5	42748.0	10.9	59.2	11.9	0.0	0.9	0.0	0.0	35.3
Jul	36619.6	0.0	0.0	1632.7	34960.9	26.0	64.4	120.7	0.0	0.0	0.0	0.0	57.9
Aug	2526.8	0.0	0.0	0.0	2499.0	27.8	31.9	40.2	0.0	0.8	0.0	0.0	66.3
Sep	4117.6	0.0	0.0	0.0	4088.7	28.9	95.2	19.0	0.0	0.6	0.0	0.0	127.4
Oct	6974.2	0.0	0.0	0.0	6948.1	26.1	15.9	11.4	0.2	1.0	0.0	0.6	223.6
Nov	5334.4	0.0	0.0	0.0	5304.1	30.3	0.0	8.9	0.0	0.0	0.0	0.0	151.6
Dec	6236.8	0.0	0.0	0.0	6236.8	0.0	0.0	70.6	0.0	0.0	0.0	0.0	98.9
Sub-total (2019)	318181.6	0.0	0.0	153531.3	164500.1	150.1	938.9	785.8	0.6	4.6	0.0	0.6	959.0

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 ton)	(in ton)	(in ton)	(in ton)	(in ton)	(in ton)	(in ton)	(in ton)	(in ton)	(in ton)	(in ton)	(in ton)	(in ton)
<b>2020</b>													
Jan	7089.9	0.0	0.0	0.0	7089.9	0.0	0.0	10.6	0.2	0.0	0.0	0.0	65.7
Feb	16822.3	0.0	0.0	0.0	16822.3	0.0	0.0	232.2	0.1	0.0	0.0	0.0	66.3
Mar	6559.0	0.0	0.0	0.0	6559.0	0.0	110.4	63.1	0.0	0.9	0.0	0.0	138.3
Apr	4997.9	0.0	0.0	1615.7	3382.2	0.0	159.2	1123.9	1.9	0.0	0.0	0.0	113.2
May	2236.0	0.0	0.0	452.3	1783.6	0.0	0.0	406.5	0.0	0.0	0.0	0.0	188.8
Jun	1134.3	0.0	0.0	0.0	1134.3	0.0	31.5	262.6	0.2	0.6	0.0	0.0	210.6
Jul	148.8	0.0	0.0	0.0	148.8	0.0	31.5	458.5	0.5	0.0	0.0	0.0	220.0
Aug	540.7	0.0	0.0	0.0	540.7	0.0	0.0	340.8	0.0	0.0	0.0	0.0	238.3
Sep	1432.3	0.0	0.0	0.0	1432.3	0.0	0.0	750.7	0.2	0.0	0.0	0.0	291.9
Oct	1381.5	0.0	0.0	0.0	1381.5	0.0	0.0	717.9	0.2	0.0	0.0	0.0	400.2
Nov	1444.1	0.0	0.0	0.0	1437.4	6.7	475.8	473.6	0.2	0.5	0.0	0.0	377.8
Dec	793.8	0.0	0.0	0.0	793.8	0.0	0.0	478.3	0.2	0.0	0.0	0.0	435.8
Sub-total (2020)	44580.6	0.0	0.0	2068.1	42505.8	6.7	808.3	5318.7	3.7	2.0	0.0	0.0	2746.8
<b>2021</b>													
Jan	881.4	0.0	0.0	0.0	881.4	0.0	0.0	835.1	0.4	0.0	0.0	0.0	497.0
Feb	544.7	0.0	0.0	0.0	544.7	0.0	0.0	100.5	0.3	0.0	0.0	0.0	504.7
Mar	406.1	0.0	0.0	0.0	406.1	0.0	0.0	455.8	0.3	0.0	0.0	0.0	881.7
Apr	633.0	0.0	0.0	0.0	633.0	0.0	0.0	429.9	0.7	0.0	0.0	0.0	613.0
May	1125.8	0.0	0.0	0.0	1125.8	0.0	0.0	355.1	0.2	0.1	0.0	0.0	355.2
Jun	877.3	0.0	0.0	0.0	877.3	0.0	0.0	98.4	0.2	0.0	0.0	0.4	420.3
Jul	8.9	0.0	0.0	0.0	0.0	8.9	0.0	43.9	2.0	0.0	0.0	0.0	278.2
Aug	1296.2	0.0	0.0	0.0	1296.2	0.0	0.0	161.5	0.0	0.0	0.0	0.0	459.1
Sep	1040.5	0.0	0.0	0.0	490.9	549.6	0.0	62.9	0.0	0.0	0.0	0.0	620.8
Oct	311.0	0.0	0.0	0.0	311.0	0.0	0.0	85.9	0.3	0.0	0.0	0.0	485.6
Nov	203.9	0.0	0.0	0.0	203.9	0.0	0.0	65.9	0.0	0.0	0.0	0.0	609.6
Dec	576.6	0.0	0.0	0.0	576.6	0.0	0.0	13.4	0.0	0.0	0.0	0.0	590.6
Sub-total (2021)	7905.3	0.0	0.0	0.0	7346.9	558.5	0.0	2708.2	4.4	0.1	0.0	0.4	6315.9



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 ton)	(in ton)	(in ton)	(in ton)	(in ton)	(in ton)	(in ton)	(in ton)	(in ton)	(in ton)	(in ton)	(in ton)	(in ton)
<b>2022</b>													
Jan	579.3	0.0	0.0	0.0	579.3	0.0	0.0	23.5	0.4	0.0	0.0	0.0	565.5
Feb	58.9	0.0	0.0	0.0	58.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	172.2
Mar	412.8	0.0	0.0	0.0	412.8	0.0	0.0	12.4	0.3	0.0	0.0	0.0	339.8
Apr	390.2	0.0	0.0	0.0	390.2	0.0	0.0	24.8	0.0	0.0	0.0	0.0	390.9
May	350.1	0.0	0.0	0.0	342.9	7.2	0.0	44.3	0.3	0.1	0.0	0.0	401.9
Jun	200.4	0.0	0.0	0.0	200.4	0.0	0.0	21.1	0.0	0.0	0.0	1.1	447.8
Jul	166.8	0.0	0.0	0.0	166.8	0.0	0.0	6.3	0.3	0.0	0.0	0.7	343.9
Aug	150.9	0.0	0.0	0.0	150.9	0.0	0.0	9.6	0.4	0.2	0.0	0.0	410.6
Sep	437.6	0.0	0.0	0.0	437.6	0.0	0.0	11.5	0.3	0.0	0.0	0.0	348.3
Oct	708.0	0.0	0.0	0.0	708.0	0.0	0.0	13.8	0.0	0.0	0.0	0.0	353.0
Nov	244.1	0.0	0.0	0.0	244.1	0.0	0.0	47.3	0.3	0.0	0.0	0.0	427.4
Dec	337.4	0.0	0.0	0.0	337.4	0.0	0.0	28.1	0.0	0.0	0.0	0.0	385.3
Sub-total (2022)	4036.4	0.0	0.0	0.0	4029.3	7.2	0.0	242.7	2.3	0.3	0.0	1.8	4586.6
<b>2023</b>													
Jan	307.0	0.0	0.0	0.0	307.0	0.0	0.0	44.5	0.0	0.0	0.0	0.0	415.1
Sub-total (2023)	307.0	0.0	0.0	0.0	307.0	0.0	0.0	44.5	0.0	0.0	0.0	0.0	415.1
<b>Total</b>	<b>998945.3</b>	<b>0.0</b>	<b>0.0</b>	<b>543635.2</b>	<b>454310.2</b>	<b>999.9</b>	<b>2301.1</b>	<b>10291.0</b>	<b>12.6</b>	<b>10.8</b>	<b>0.0</b>	<b>14.7</b>	<b>16295.9</b>

Note:

(1) 636.91, 251.52 and 0 tonnes of inert C&D material were disposed of as public fill to Tseung Kwan O Area 137, Tuen Mun Area 38, and Chai Wan Public Fill Barging Point respectively in the reporting quarter.

(2) The values in the table are rounded off to 1 decimal place.

## **G. 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 to the end of the reporting quarter are summarized in **Table G-1** below.

**Table G-1: 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 quarter (Nov 22 – Jan 23)	2	0	0
From 1 March 2016 to end of the reporting quarter	56	0	0

**END OF PART-1**

# Part-2: EM&A for Foundation and ELS Works in Zones 2A, 2B & 2C

# Foundation and ELS Works in Zones 2A, 2B & 2C

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The information supplied and contained within this report is, to the best of our knowledge, correct at time of printing

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# Executive summary

This Quarterly EM&A Report presents the monitoring works conducted at Zone 2A and Zone 2B & 2C from 1 November 2022 to 31 January 2023.

The impact stage EM&A programme for the Project includes air quality, noise, water quality, waste, landscape and visual monitoring. The recommended environmental mitigation measures were implemented on site and regular inspections were carried out to ensure that the environmental conditions are acceptable.

The EM&A programme was carried out by the ET in accordance with the EM&A Manual requirements. It is concluded from the environmental monitoring and audit works that adequate environmental mitigation measures have been implemented by the contractors where appropriate in the reporting quarter.

## **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) in this reporting quarter.

One Action Level exceedance (due to one noise related environmental complaint) with no Limit Level exceedance of Construction Noise was recorded in the reporting quarter.

## **Implementation of Mitigation Measures**

Construction phase weekly site inspections were carried out to confirm the implementation measures undertaken by the Contractors in the reporting quarter. The status of implementation of mitigation measures during the reporting quarter is shown in **Appendix C**.

Landscape and visual impact inspections were conducted as part of the above-mentioned weekly site inspections during the reporting quarter. No adverse comment on landscape and visual aspects were made during these inspections.

## **Record of Complaints**

Two environmental complaints were received during the reporting quarter.

## **Record of Notifications of Summons and Successful Prosecutions**

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



# 1 Introduction

## 1.1 Background

Apex Testing & Certification Limited (Apex) was commissioned to undertake the Environmental Team (ET) services (including environmental monitoring and audit (EM&A)) for the construction activities in Zone 2A, consisting of Foundation, Excavation and Lateral Support Works for Integrated Basement and Underground Road (Contract No.: GW/2020/05/073) ; and Zone 2B & 2C consisting of Piling Works for Integrated Basement and Underground Road (Contract No.: CC/2020/2B/088) at WKCD. The major construction works and EM&A programme for Zone 2A and Zone 2B & 2C commenced on 3 October 2020 and 30 September 2021 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 1 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 falls under this same category.

The purpose of the development in Zone 2A and Zone 2B & 2C is to reserve for Integrated Basement (IB) and Underground Road (UR). The Zone 2A construction activities involve the foundation, excavation and lateral support (ELS) works, road works, drainage diversion works, and temporary car parking. The Zone 2B & 2C construction activities involve the piling works.

The Quarterly EM&A Report is prepared in accordance with the Clause 3.4 of the Environmental Permit No. EP-453/2013/B. This Quarterly EM&A Report presents the monitoring works at Zone 2A and Zone 2B & 2C from 1 November 2022 to 31 January 2023. 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 Zone 2A undertaken include:

Zone 2A-1

- Site Works before Handover
  - Site Clearance

Zone 2A-2

- Site Works before Handover

- Site Clearance

#### Zone 2A G/F

- Reinstatement Works at Location A and B
  - Reinstatement Works at Location A and B

#### Zone 2A A&A Works

- WEK B1/F
  - Sand Removal

During the reporting period, construction works at Zone 2B & 2C undertaken include:

KD05 (Section 1), KD06 (Section 2), KD07 (Section 3), KD08 (Section 4), KD09 (Section 5)

- Bored Pile Works
  - RCD Drilling, Airlifting, Cage Installation & Concreting and Excavation

The Construction Works Programme of the Project is provided in **Appendix B**. A layout plan of the Project is provided in **Figure 1**.

## 2 Summary of EM&A Requirements and Mitigation Measures

### 2.1 Monitoring Requirements

In accordance with the EM&A Manual, environmental parameters including air quality, noise, landscape and visual have been monitored. The specific parameters, monitoring frequency and the respective Action and Limit Levels are given in **Table 2.1**. Locations of the monitoring stations are provided in **Figure 1**.

**Table 2.1: Summary of Impact EM&A Requirements**

Parameters	Descriptions	Locations	Frequencies	Action Level	Limit Level
Air Quality	24-Hour TSP	AM3 - The Victoria Towers Tower 1	At least once every 6 days	152.4 µg/m <sup>3</sup>	260 µg/m <sup>3</sup>
	1-Hour TSP	AM3 - The Victoria Towers Tower 1	At least 3 times every 6 days	280.4 µg/m <sup>3</sup>	500 µg/m <sup>3</sup>
	24-Hour TSP	AM4 - Canton Road Government Primary School	At least once every 6 days	152.6 µg/m <sup>3</sup>	260 µg/m <sup>3</sup>
	1-Hour TSP	AM4 - Canton Road Government Primary School	At least 3 times every 6 days	278.5 µg/m <sup>3</sup>	500 µg/m <sup>3</sup>
	24-Hour TSP	AM5 - Topside Developments at West Kowloon Terminus Site	At least once every 6 days	141.1 µg/m <sup>3</sup>	260 µg/m <sup>3</sup>
	1-Hour TSP	AM5 - Topside Developments at West Kowloon Terminus Site	At least 3 times every 6 days	275.4 µg/m <sup>3</sup>	500 µg/m <sup>3</sup>
Noise	Leq, 30 minutes	NM2 - The Arch, Sun Tower	Weekly	When one documented complaint is received from any one of the sensitive receivers	75 dB(A)
	Leq, 30 minutes	NM3 - The Victoria Towers Tower 1	Weekly	When one documented complaint is received from any one of the sensitive receivers	75 dB(A)
	Leq, 30 minutes	NM4 - Canton Road Government Primary School	Weekly	When one documented complaint is received from any one of the sensitive receivers	70/65 dB(A) <sup>^</sup>
	Leq, 30 minutes	NM5 -Development next to Austin Station	Weekly	When one documented complaint is received from any one of the sensitive receivers	75 dB(A)
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	N/A	N/A

Note:

<sup>^</sup>70 dB(A) for schools and 65 dB(A) during school examination periods.

The EM&A programme for the Project require 5 air monitoring stations and 5 noise quality monitoring stations located closest to the Project area. With regard to the monitoring activities at M+ Museum and the Lyric Complex, three monitoring stations had been considered, including AM1, AM2 for air monitoring, and NM1 for noise monitoring. In the context of the construction activities in Zone 2A and Zone 2B & 2C, all other monitoring locations including AM3, AM4, and AM5 for air monitoring; and NM2, NM3, NM4 and NM5 for noise monitoring, have been taken into account. However, access to all these originally designated monitoring stations was declined. Therefore, alternative monitoring stations was identified and proposed.

With regard to air monitoring, alternative monitoring locations (AM3A, AM4A, and AM5A) were identified at ground floor at the Northeast corner of West Kowloon Station's station box, at ground floor at the Southeast corner of West Kowloon Station's station box, and at ground floor at the North of West Kowloon Station's station box respectively. AM3A, AM4A, and AM5A were set in same direction to the area of major construction site activities in Zone 2A. These alternative air monitoring locations (AM3A, AM4A, and AM5A) were approved by EPD on 29 September 2020.

For noise monitoring, alternative noise monitoring location (NM2A) was identified at the ground floor in front of The Arch - Sun Tower, which is at the same location as stated in the EM&A Manual for consistency. This alternative noise monitoring location was approved by EPD on 29 September 2020. Other alternative noise monitoring locations (NM3A, NM4A, and NM5A) were identified at the ground floor in front of the Xiqu Centre, at the ground floor next to Tsim Sha Tsui Fire Station, and at the Pedestrian road (ground floor) outside West Kowloon Station respectively. NM3A, NM4A and NM5A were set closer to the construction site boundary with more direct line sight to the major site activities and higher exposure to the construction noise with no disturbance to the premises' occupants during noise monitoring activities. These alternative noise monitoring locations (NM3A, NM4A, and NM5A) were approved by EPD on 29 September 2020.

Therefore, 3 air quality monitoring stations and 4 noise impact monitoring station were confirmed for the impact monitoring for construction activities in Zone 2A and Zone 2B & 2C.

## 2.2 Environmental Mitigation Measures

Environmental mitigation measures have been recommended in the EM&A Manual. Summary of implementation status of the environmental mitigation measures is provided in **Appendix C**.

## 3 Summary of EM&A Results

### 3.1 Monitoring Data

In accordance with the EM&A Manual, impact monitoring has been conducted in the reporting quarter. Meteorological data for the reporting quarter have been extracted from Hong Kong Observatory and presented in **Appendix D**. Monitoring data with graphical presentation for the reporting quarter are shown in **Appendix E**. A summary on the monitoring results are presented in **Table 3.1**.

**Table 3.1: Summary of Monitoring Data**

Parameter	Monitoring Location	Minimum	Maximum	Average
<b>Air Quality</b>				
1 hour TSP	AM3A	31	88	57
1 hour TSP	AM4A	32	86	58
1 hour TSP	AM5A	33	87	58
24 hour TSP	AM3A	32	83	55
24 hour TSP	AM4A	34	82	55
24 hour TSP	AM5A	33	77	56
<b>Construction Noise</b>				
Leq(30min)	NM2A	61	62	62
Leq(30min)	NM3A	62	63	62
Leq(30min)	NM4A	61	62	62
Leq(30min)	NM5A	64	65	64

### 3.2 Monitoring Exceedances

Summary of the exceedances in the reporting quarter is tabulated in **Table 3.2**.

**Table 3.2: Summary of Exceedances**

Monitoring Station	Parameter	No. of Exceedance		Action Taken
		Action Level	Limit Level	
<b>Air Quality</b>				
AM3A	1 hour TSP	0	0	N/A
	24 hour TSP	0	0	N/A
AM4A	1 hour TSP	0	0	N/A
	24 hour TSP	0	0	N/A
AM5A	1 hour TSP	0	0	N/A
	24 hour TSP	0	0	N/A
<b>Construction Noise</b>				
NM2A	Leq(30min)	1 exceedance due to noise related environmental complaint	0	Strengthen the implementation of noise mitigation measures
NM3A	Leq(30min)		0	
NM4A	Leq(30min)		0	
NM5A	Leq(30min)		0	

### **3.2.1 1-hour TSP Monitoring**

All 1-hour TSP monitoring was conducted as scheduled in the reporting quarter. No Action/ Limit Level exceedance of 1-hour TSP for Air Quality was recorded.

### **3.2.2 24-hour TSP Monitoring**

All 24-hour TSP monitoring was conducted as scheduled in the reporting quarter. No Action/ Limit Level exceedance of 24-hour TSP for Air Quality was recorded.

### **3.2.3 Construction Noise Monitoring**

All construction noise monitoring was conducted as scheduled in the reporting quarter. One Action Level exceedance (due to noise related environmental complaint) with no Limit Level exceedance of Noise was recorded in the reporting quarter.

### **3.2.4 Landscape and Visual Monitoring**

All landscape and visual impact inspections were conducted as scheduled in the reporting quarter. No adverse comment on landscape and visual aspects were recorded.

## 4 Waste Management

### 4.1 Zone 2A

As advised by the Contractor, 0 tonne and 0 tonne of inert C&D material were disposed of as public fill to Tseung Kwan O Area 137 and Tuen Mun Area 38 respectively in the reporting quarter, while 19.36 tonnes of general refuse were disposed of at SENT landfill. 0.0 tonne of metals, 0.0 tonne of paper/cardboard packaging, 0.0 tonne of plastic and 0.0 tonne of timber were collected by recycling contractors in the reporting quarter. 0 tonne of inert C&D materials were reused on site. 0.0 tonne of fill materials were imported for use at site and 1987.03 tonnes of inert C&D materials was reused in other projects. 0 tonne of inert C&D materials were disposed to sorting facility and 0.0 tonne of chemical wastes was collected by licensed contractors in the reporting quarter.

### 4.2 Zone 2B & 2C

As advised by the Zone 2B & 2C Contractor, 53028.90 tonnes and 49904.12 tonnes of inert C&D material were disposed of as public fill to Tseung Kwan O Area 137 and Tuen Mun Area 38 respectively in the reporting quarter, while 95.50 tonnes of general refuse were disposed of at SENT landfill. 10.23 tonnes of metals, 0.0 tonne of paper/cardboard packaging, 0.0 tonne of plastics and 0.0 tonne of timber was collected by recycling contractors in the reporting quarter. 11103.78 tonnes of inert C&D material were reused on site. 0.0 tonne of inert C&D material was imported for reuse at site and 3858.97 tonnes of inert C&D material were reused in other projects. 0.0 tonne of inert C&D material was disposed to sorting facility and 0.0 tonne of chemical waste was collected by licensed contractors in the reporting quarter.

The actual amounts of different types of waste generated by the activities of construction works at Zone 2A and Zone 2B & 2C in the reporting quarter are shown in **Appendix F**.

## 5 Environmental Non-conformance

There was no breach of Action or Limit Levels for Air Quality (1-hour TSP and 24-hour TSP) in the reporting quarter.

One Action Level exceedance due to noise related environmental complaint with no Limit Level exceedance of Construction Noise was recorded in the reporting quarter.

Two complaints were received in the reporting quarter. One complaint in December and one complaint in January. No notifications of summons and successful prosecutions were received in the reporting quarter.

On 02 December 2022, the EPD has received a complaint from The Harbourside Owners Committee, regarding noise pollution at WKCD construction site, and referred to the WKCDA on 02 December 2022. The complainant claimed that: “有關西九文化區一帶地盤已持續進行多年，現時柯士甸道西附近的工地早上 7 時便開始，工作至晚上 11 時才停止，工程期間不斷的打鑿聲、大型泥頭車出入的聲響，在過去長達十年時間，一直影響我們君臨天下之業戶。我們曾就有關事宜聯絡地盤負責工程公司及西九文化區管理局，但獲回覆有關工程已獲相關政府部門批准於上午 7 時至晚上 11 時進行噪音工作，居民對此深感無奈。我們認為貴署，有責任跟進西九文化區一帶的噪音污染問題，於社區發展同時，平衡對鄰近民居的影響。我們有以下建議: 1.希望貴署就處理地盤工程申請時，慎重考慮對鄰近民居的影響，限制工程時間只可於上午 9 時下午 7 時進行。2.增加不定時巡邏西九文化區地盤位置，並以分貝儀等儀器監測音量。” (The complainant claimed that construction site near Austin Road West starts at 0700 and until 2300. During construction period, constant chiselling sound and noise from dump truck have affected the Harbourside’s residents for the past ten years. The complainant has contacted the contractors and WKCDA and they have replied that the relevant construction works between 0700 to 2300 have been approved by relevant government department. The complainant recommended that: 1) the EPD shall carefully consider the impact on the nearby residents when processing the applications of site works and limit the construction hours from 0900 to 1900; 2) Increase random inspection of the WKCD construction site, and monitor the noise level with noise meter.) Investigation at Zone 2A site revealed that no site activity was conducted before 0800 and after 1900 (no nighttime work) on Zone 2A site few months ago. No major physical works were carried out on Zone 2A site over few months. In addition, noise mitigation measures have been properly maintained on site with no exceedance of noise levels. Thereby, the complaint might not be attributable to the Zone 2A site. Nonetheless, the Contractor is recommended to maintain close monitoring of noise control on site, and strengthen the implementation of noise mitigation measures to reduce impacts to the nearby residents. Investigation at Zone 2B & 2C site revealed that some concerned noise might be related to the construction activities conducted at Zone 2B & 2C site. However, those construction activities were conducted within statutory working hours and under the approved construction noise permit (GW-RE1229-22) during restricted hours. Nonetheless, the Contractor is recommended to maintain close monitoring of noise control on site, and strengthen the implementation of noise mitigation measures to reduce impacts to the nearby residents.

On 26 January 2023, the CEDD has received a complaint from ICC 1823, regarding dust and water pollution, traffic control issue at WKCD construction site, and referred to the WKCDA on the same day. The complainant claimed that: “投訴柯士甸道西西九文化區音樂中心地盤管理事宜，該地盤經常排放污水到地盤對出路面，泥頭車出入又令路面有很多碎石，地盤車輛長期停泊



堵塞對出一段柯士甸道西，該處是凱旋門停車場出口唯一通道，地盤車輛停泊嚴重阻礙行車，要求部門跟進地盤管理事宜。” (The complainant claimed that the Austin Road West WKCD Music Centre construction site often discharge polluted water to the road surface. The dump trucks that enter and leaving the construction site causing a lot of gravel on the road surface. Construction vehicles parking along the Austin Road West opposite to the site causing blockage to the entrance of The Arch car park. The construction vehicles parking problem was seriously hindered traffic. The complainant required relevant department to follow up on site management matters.) Investigation at Zone 2A site revealed that the concerned location was not within the site boundary of Zone 2A site. Thereby, the complaint might not be attributable to the Zone 2A site. Nevertheless, the Contractor is recommended to strengthen the implementation of dust and water mitigation measures on site to reduce impacts to the nearby residents. Investigation at Zone 2B & 2C site revealed that the concerned water and gravel might be related to the construction vehicles that are leaving the site gate after wheel washing; and the traffic jam might possibly due to the site traffic through site entrance of Zone 2B & 2C site. Thereby, the complaint might be attributable to the Zone 2B & 2C site. However, prompt actions have been taken by Contractor to enhance the preventive and mitigation measures. In addition, dust monitoring is regularly conducted at the site boundary with no exceedance. Nonetheless, the Contractor is recommended to maintain good practice on site, and strengthen the implementation of road cleaning and traffic control measures to reduce impacts to the nearby residents.

The cumulative statistics on complaints, notifications of summons and successful prosecutions were provided in **Appendix G**.

## 6 Comments, Recommendations and Conclusion

### 6.1 Comments

Based on the observations made during site audits and landscape inspections, and construction dust and noise monitoring results, no non-compliances and exceedances of air quality and construction noise were recorded in the reporting quarter.

### 6.2 Recommendations

Reviewing the implementation of the recommended mitigation measures in the EM&A Manual, it was observed that they were effective and efficient in controlling the potential impacts due to construction of the project during the reporting period. Review of the effectiveness and efficiency of the EM&A programme will continue, and recommendations will be provided to remediate any potential impacts due to the project and to improve the EM&A programme if deficiencies of the existing EM&A programme are identified.

### 6.3 Conclusion

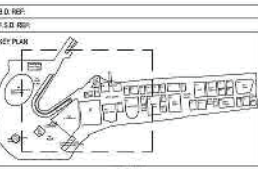
The EM&A programme as recommended in the EM&A Manual has been undertaken since the construction works of Zone 2A and Zone 2B & 2C commenced on 3 October 2020 and 30 September 2021 respectively.

Monitoring of air quality and noise with respect to the Project is underway. In particular, the 1-hour TSP, 24-hour TSP and noise level (as Leq, 30 minutes) under monitoring have been checked against established Action and Limit Levels. There was no breach of Action or Limit Levels for Air Quality (1-hour TSP and 24-hour TSP) in this reporting quarter. One Action Level exceedance (due to noise related environmental complaint) with no Limit Level exceedance of Construction Noise was recorded in the reporting quarter.

Two complaints were received in the reporting quarter. No notifications of summons and successful prosecutions were received during the reporting quarter.

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

## **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
  - CONSTRUCTION AIR/NOISE MONITORING STATION

**REMARKS:**  
 THE AIR MONITORING STATION AM2A HAS BEEN RELOCATED TO THE ALTERNATIVE MONITORING STATION AM2B AT 1ST FLOOR OF GAMMON'S SITE OFFICE ON 26 FEBRUARY 2019.

- Zone 2A Boundary
- Zone 2B & 2C Boundary
- Under Management by Zone 2B & 2C Contractor Starting from 20 Dec 2022

REV.	DATE	DESCRIPTION	INITIAL

**JOB TITLE** DEVELOPMENT AT WEST KOWLOON CULTURAL DISTRICT

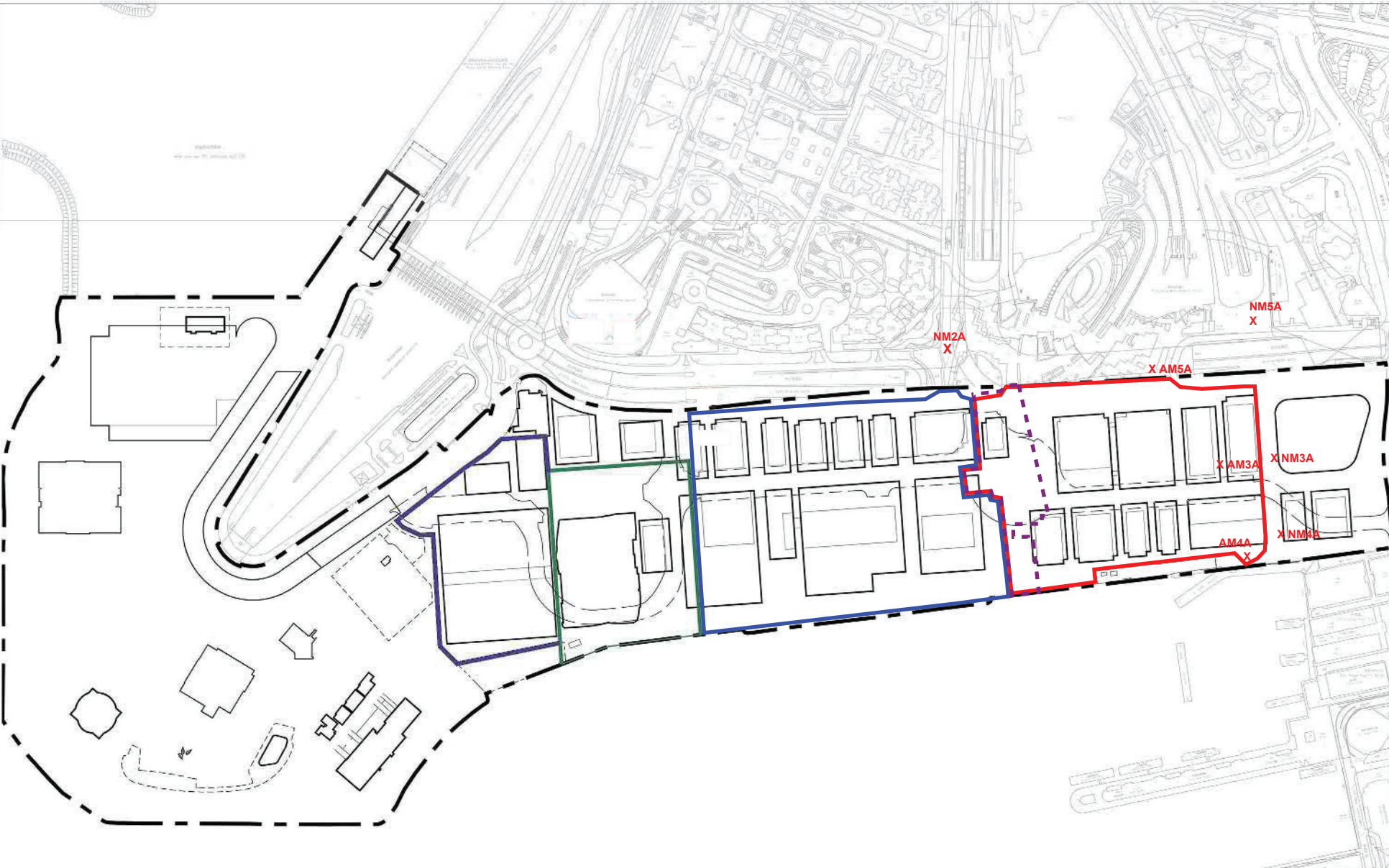
**DRAWING TITLE** SITE LAYOUT PLAN AND MONITORING STATIONS

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<b>CHECKED:</b>		<b>DATE</b>	
<b>APPROVED:</b>		<b>DATE</b>	
<b>DRAWN</b>	TY	<b>DATE</b>	15-10-2015
<b>CONTRACT NO.:</b>			

<b>DRAWING NO.</b>	<b>REV.</b>
FIGURE 1	XX

**CAD REF NAME:** X0000\_A1T\_P145\_DWG\_P10-080-000-000.dwg

**AUTHORITY:**

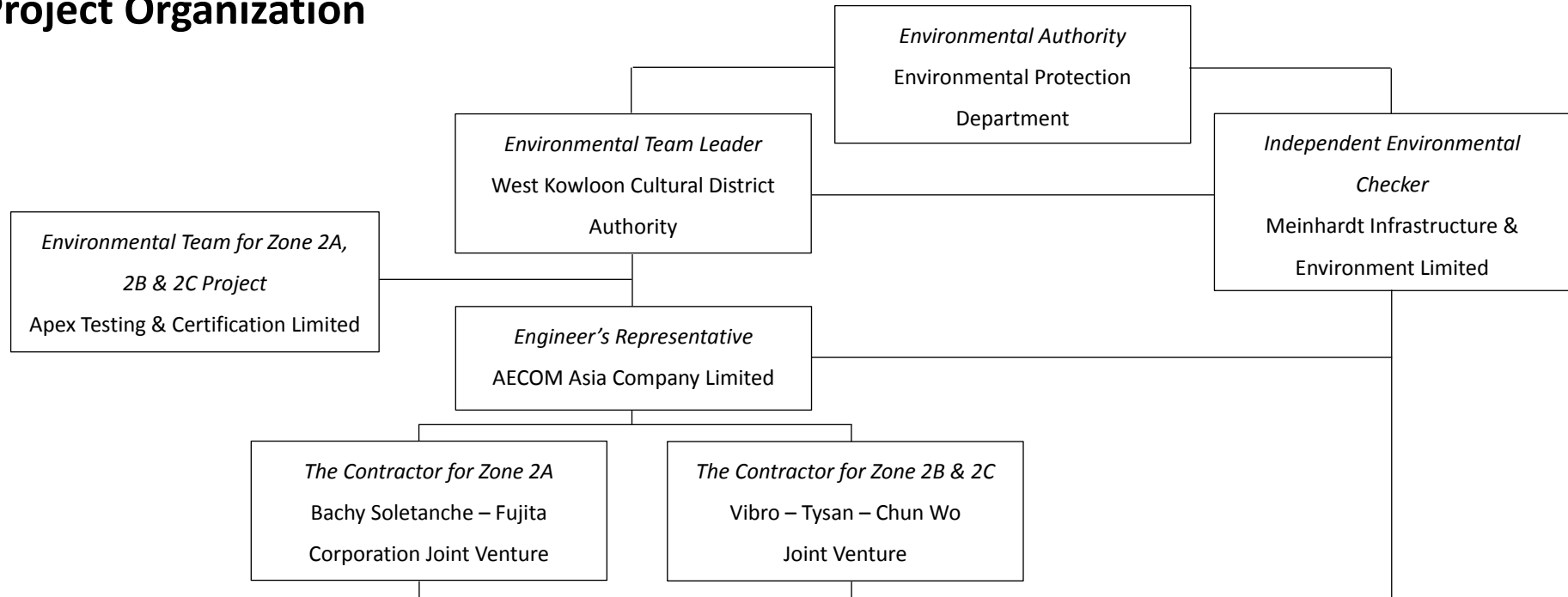


# Appendices

- A. Project Organisation
- B. Construction Programme
- C. Environmental Mitigation Measures – Implementation Status
- D. Meteorological Data Extracted from Hong Kong Observatory
- E. Graphical Plots of the Monitoring Results
- F. Waste Flow table
- G. Cumulative Statistics on Complaints, Notifications of Summons and Successful Prosecutions

## A. Project Organisation

# Project Organization



**Table A-1: Contract Information**

Company Name	Role	Name	Telephone	Email
West Kowloon Cultural District Authority	WKCDA Representative & Project ETL	Mr. C.K. WU	5506 9178	ck.wu@wkcd.a.hk
Meinhardt Infrastructure & Environment Limited	Independent Environmental Checker	Ms. Claudine LEE	2859 5409	caludinelee@meinhardt.com.hk
AECOM Asia Company Limited	Resident Engineer (Zone 2A, 2B & 2C)	Ms. Carmen CHAN	6892 9271	carmen.chan@aecom.com
Bachy Soletanche – Fujita Corporation Joint Venture	Interface & Environmental Manager	Mr. Philip CHAN	9668 8403	philip.chan@soletanche-bachy.com
Vibro – Tysan – Chun Wo Joint Venture	Environmental Sustainability Manager	Mr. Tony YAM	2137 5586	tony_yam@vibro.com.hk
Apex Testing & Certification Limited	Contractor's Environmental Team Leader	Mr. Calvin LUI	9629 9718	calvinlui@apextestcert.com

## B. Construction Programme



**Zone 2A**





**Project Name: Foundation and ELS Works for Integrated Basement and Underground Road in Zone 2A of the West Kowloon Cultural District**

**3-Month Rolling Programme**

Activity Description	Duration (Cal. Day)	Start Date	Finish Date	2023																
				January				February				March				April				
				6	13	20	27	3	10	17	24	3	10	17	24	31	7	14	21	28
<b>Zone 2A A&amp;A Works</b>				W139	W140	W141	W142	W143	W144	W145	W146	W147	W148	W149	W150	W151	W152	W153	W154	W155
<b>WEK B1/F</b>																				
Sand Removal	63	17-Dec-22	17-Feb-23																	

- Actual  
 - Remaining Works

**Zone 2B & 2C**



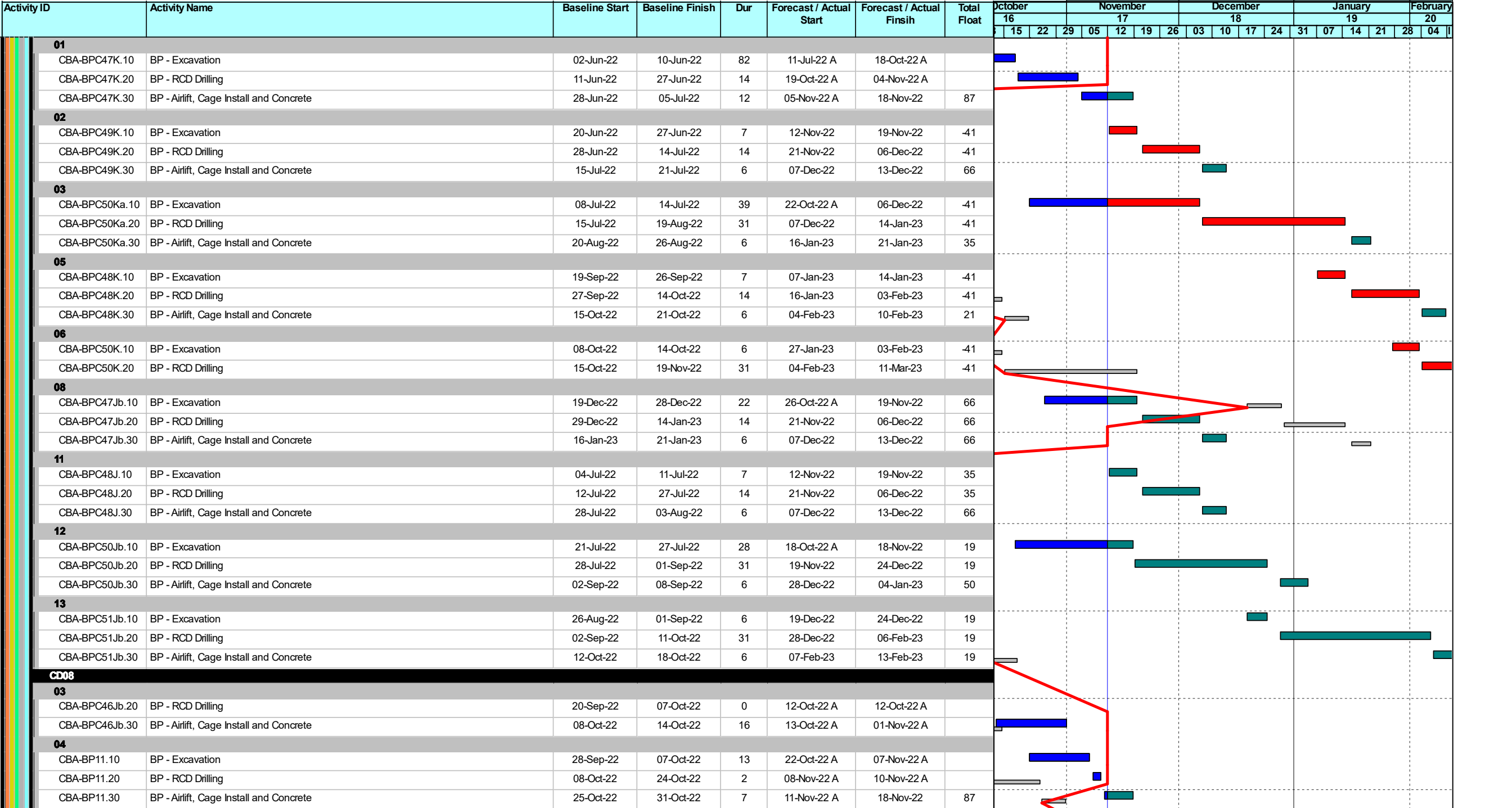








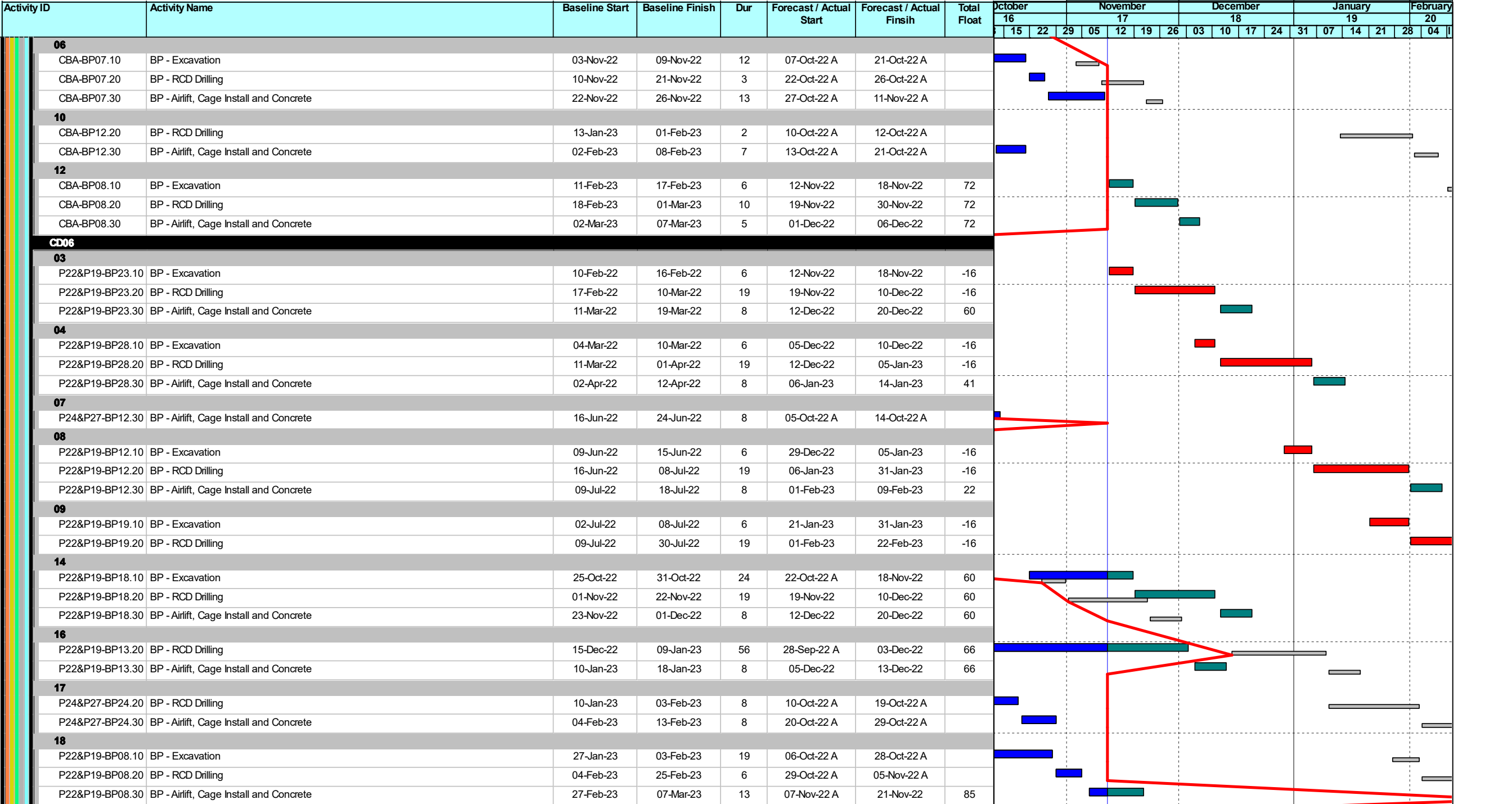




■ Planned Bar     ◆ Milestone  
■ Critical Bar     ◆ Actual MS  
■ Baseline     ◆ Critical MS

**West Kowloon Cultural District Authority**  
**Piling for Integrated Basement and U/G Road in Zone 2B 2C**  
**3 Month Rolling Programme as of 11 November 2022**  
**Based on CMWP Rev.0**

Date	Revision	Checked	Approved
4-Mar-22	Rev.0	KL	B



	Planned Bar		Milestone
	Critical Bar		Actual MS
	Baseline		Critical MS

**West Kowloon Cultural District Authority**  
**Piling for Integrated Basement and U/G Road in Zone 2B 2C**  
**3 Month Rolling Programme as of 11 November 2022**  
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Date	Revision	Checked	Approved
4-Mar-22	Rev.0	KL	B

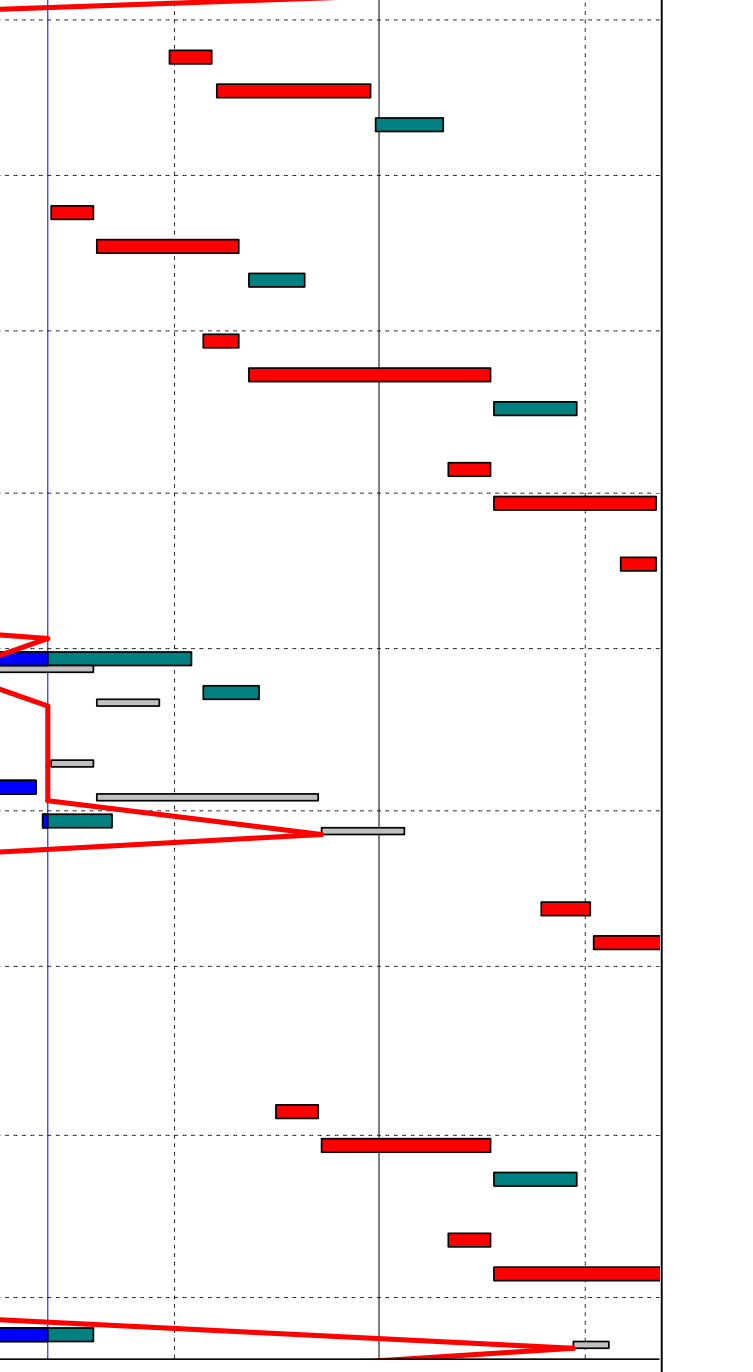
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								16		22		29		05		12		19		26		03		10		17		24		31		07		14		21		28		04								
								16	22	29	05	12	19	26	03	10	17	24	31	07	14	21	28	04	11	18	25	01	08	15	22	29	05	12	19	26	02	09	16	23	30	06	13	20	27	03	10	17

CD05							
12							
P22&P19-BP24.10	BP - Excavation	12-Feb-22	18-Feb-22	6	30-Nov-22	06-Dec-22	-102
P22&P19-BP24.20	BP - RCD Drilling	19-Feb-22	12-Mar-22	19	07-Dec-22	30-Dec-22	-102
P22&P19-BP24.30	BP - Airlift, Cage Install and Concrete	14-Mar-22	22-Mar-22	8	31-Dec-22	10-Jan-23	45
CD03							
03							
P23-BP25.10	BP - Excavation	11-Jan-22	17-Jan-22	6	12-Nov-22	18-Nov-22	-55
P23-BP25.20	BP - RCD Drilling	18-Jan-22	11-Feb-22	19	19-Nov-22	10-Dec-22	-55
P23-BP25.30	BP - Airlift, Cage Install and Concrete	12-Feb-22	21-Feb-22	8	12-Dec-22	20-Dec-22	60
04							
P23-BP15.10	BP - Excavation	05-Feb-22	11-Feb-22	6	05-Dec-22	10-Dec-22	-55
P23-BP15.20	BP - RCD Drilling	12-Feb-22	17-Mar-22	29	12-Dec-22	17-Jan-23	-55
P23-BP15.30	BP - Airlift, Cage Install and Concrete	18-Mar-22	26-Mar-22	8	18-Jan-23	30-Jan-23	31
09							
P23-BP14.10	BP - Excavation	16-Jun-22	22-Jun-22	6	11-Jan-23	17-Jan-23	-55
P23-BP14.20	BP - RCD Drilling	23-Jun-22	15-Jul-22	19	18-Jan-23	11-Feb-23	-55
10							
P23-BP26.10	BP - Excavation	09-Jul-22	15-Jul-22	6	06-Feb-23	11-Feb-23	-55
14							
P23-BP16.10	BP - Excavation	21-Oct-22	27-Oct-22	10	18-Oct-22 A	29-Oct-22 A	
P23-BP16.20	BP - RCD Drilling	28-Oct-22	18-Nov-22	30	31-Oct-22 A	03-Dec-22	66
P23-BP16.30	BP - Airlift, Cage Install and Concrete	19-Nov-22	28-Nov-22	8	05-Dec-22	13-Dec-22	66
15							
P23-BP03.10	BP - Excavation	12-Nov-22	18-Nov-22	11	14-Oct-22 A	27-Oct-22 A	
P23-BP03.20	BP - RCD Drilling	19-Nov-22	22-Dec-22	11	28-Oct-22 A	10-Nov-22 A	
P23-BP03.30	BP - Airlift, Cage Install and Concrete	23-Dec-22	04-Jan-23	9	11-Nov-22 A	21-Nov-22	85
CD02							
06							
P23-BP27.10	BP - Excavation	23-Apr-22	29-Apr-22	6	25-Jan-23	01-Feb-23	-84
P23-BP27.20	BP - RCD Drilling	30-Apr-22	24-May-22	19	02-Feb-23	23-Feb-23	-84

**KD07 (Section 3)**

**Bored Piles**

VD01							
05							
P26-BP11.10	BP - Excavation	19-May-22	25-May-22	6	16-Dec-22	22-Dec-22	-46
P26-BP11.20	BP - RCD Drilling	26-May-22	17-Jun-22	19	23-Dec-22	17-Jan-23	-46
P26-BP11.30	BP - Airlift, Cage Install and Concrete	18-Jun-22	27-Jun-22	8	18-Jan-23	30-Jan-23	123
08							
P26-BP06.10	BP - Excavation	22-Jul-22	28-Jul-22	6	11-Jan-23	17-Jan-23	-46
P26-BP06.20	BP - RCD Drilling	29-Jul-22	31-Aug-22	29	18-Jan-23	23-Feb-23	-46
15							
P26-BP09.10	BP - Excavation	30-Jan-23	04-Feb-23	24	22-Oct-22 A	18-Nov-22	152



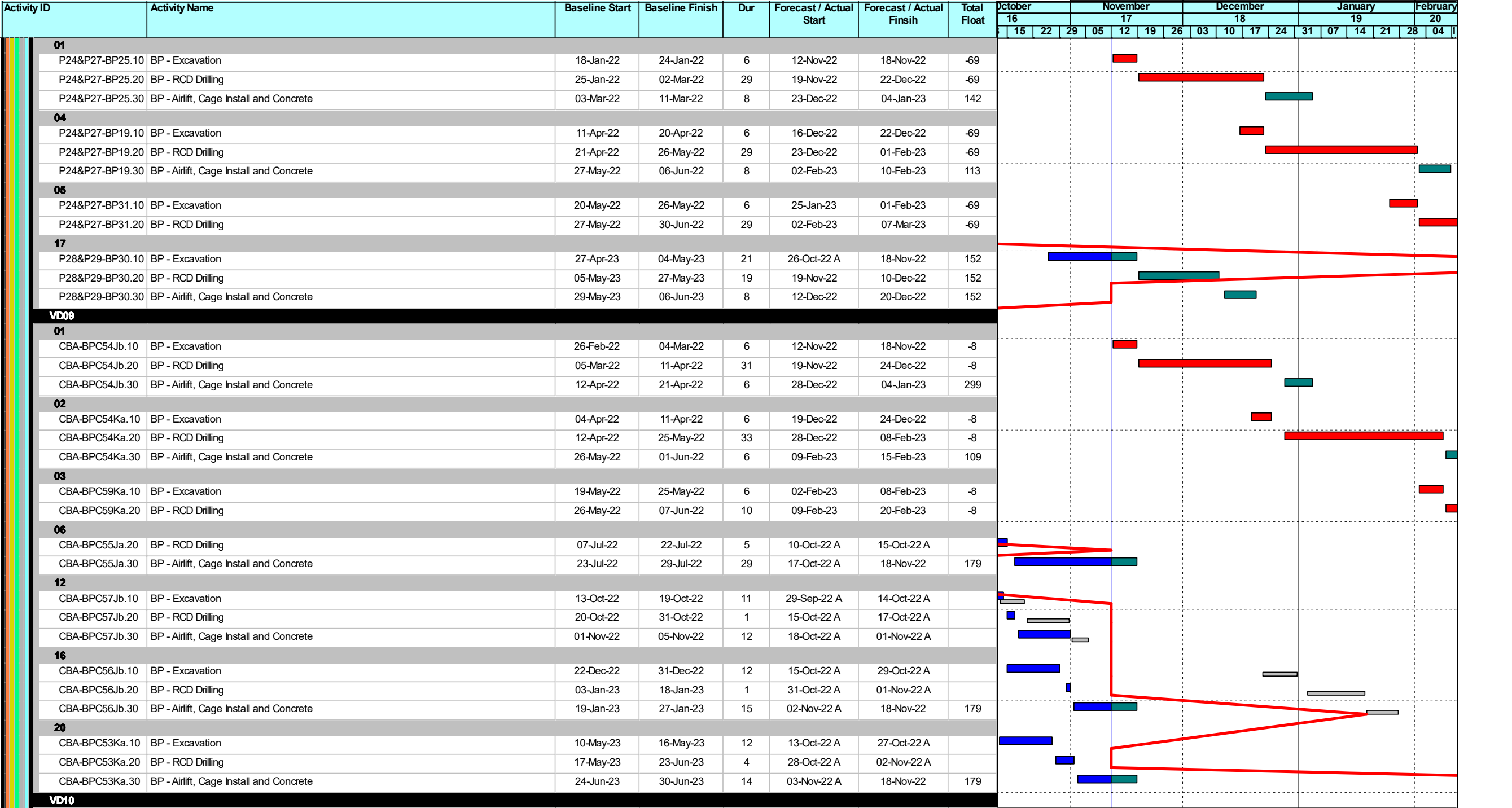
	Planned Bar		Milestone
	Critical Bar		Actual MS
	Baseline		Critical MS

**West Kowloon Cultural District Authority**  
**Piling for Integrated Basement and U/G Road in Zone 2B 2C**  
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	Planned Bar		Milestone
	Critical Bar		Actual MS
	Baseline		Critical MS

**West Kowloon Cultural District Authority**  
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	4-Mar-22	Rev.0	KL	B



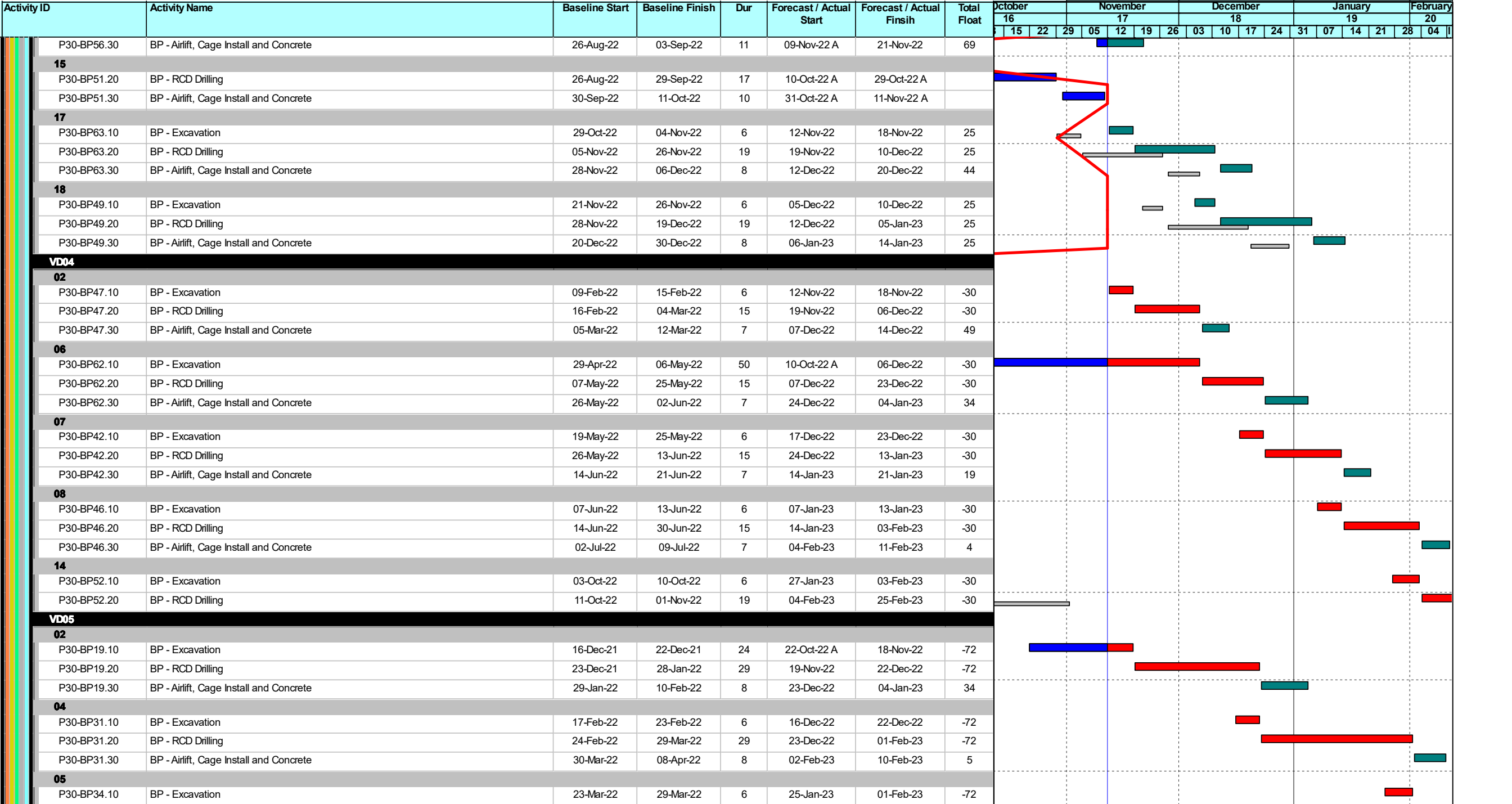
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<b>TD09</b>																																							
<b>01</b>																																							
CBA-BPC54V.10	BP - Excavation	08-Apr-22	14-Apr-22	30	15-Oct-22 A	18-Nov-22	-91																																
CBA-BPC54V.20	BP - RCD Drilling	19-Apr-22	29-Apr-22	10	19-Nov-22	30-Nov-22	-91																																
CBA-BPC54V.30	BP - Airlift, Cage Install and Concrete	30-Apr-22	06-May-22	5	01-Dec-22	06-Dec-22	56																																
<b>Bored Piles</b>																																							
<b>VD01</b>																																							
<b>04</b>																																							
P26-BP12.10	BP - Excavation	09-Apr-22	19-Apr-22	21	26-Oct-22 A	18-Nov-22	-46																																
P26-BP12.20	BP - RCD Drilling	20-Apr-22	25-May-22	29	19-Nov-22	22-Dec-22	-46																																
P26-BP12.30	BP - Airlift, Cage Install and Concrete	26-May-22	04-Jun-22	8	23-Dec-22	04-Jan-23	34																																
<b>11</b>																																							
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<b>18</b>																																							
P26-BP14.10	BP - Excavation	04-Nov-22	10-Nov-22	6	16-Dec-22	22-Dec-22	15																																
P26-BP14.20	BP - RCD Drilling	11-Nov-22	02-Dec-22	19	23-Dec-22	17-Jan-23	15																																
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<b>04</b>																																							
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<b>11</b>																																							
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P30-BP43.30	BP - Airlift, Cage Install and Concrete	06-Feb-23	14-Feb-23	8	12-Dec-22	20-Dec-22	44																																
<b>14</b>																																							
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	Planned Bar		Milestone
	Critical Bar		Actual MS
	Baseline		Critical MS

**West Kowloon Cultural District Authority**  
**Piling for Integrated Basement and U/G Road in Zone 2B 2C**  
**3 Month Rolling Programme as of 11 November 2022**  
 Based on CMWP Rev.0



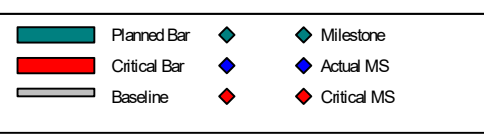
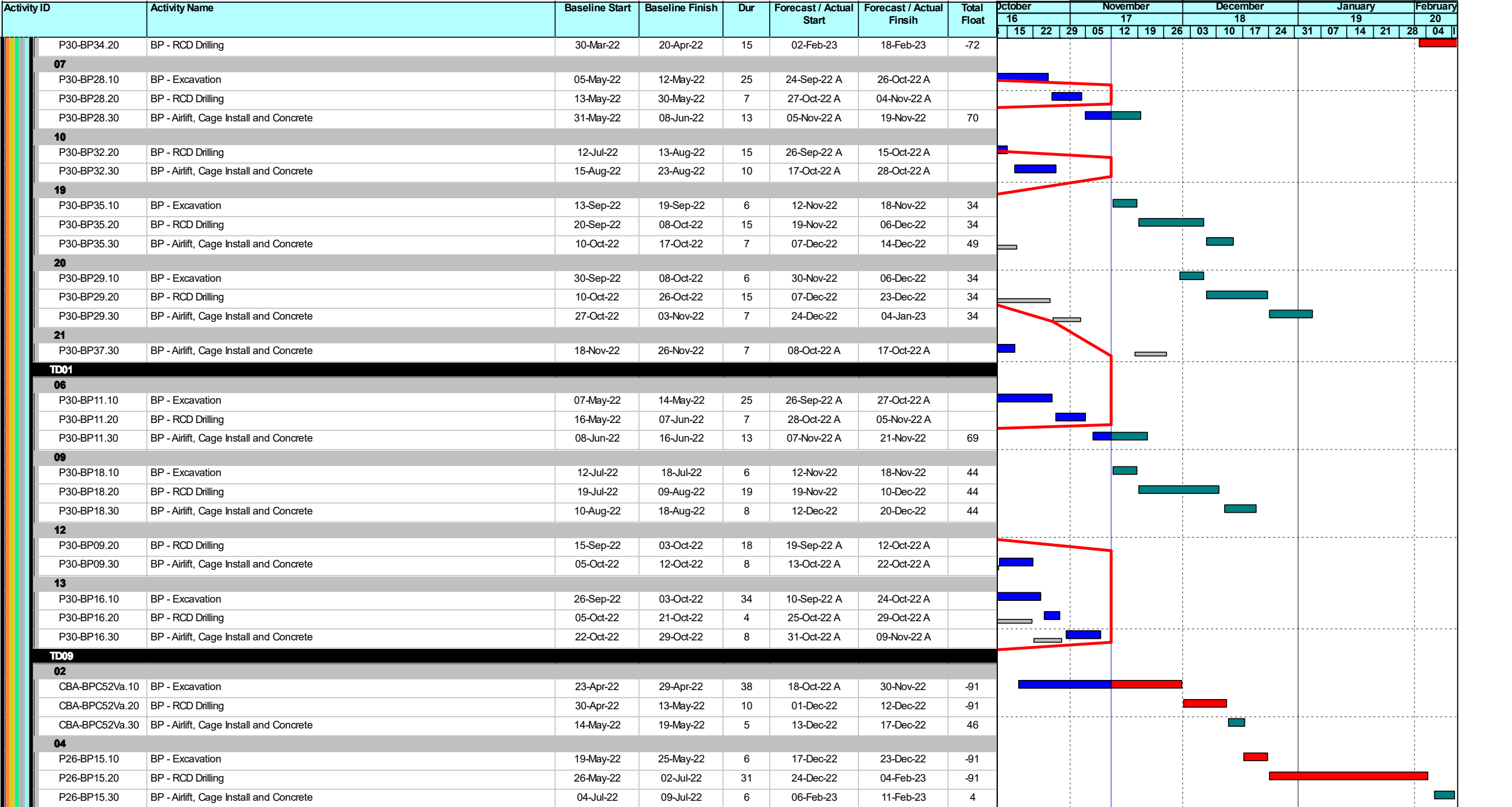
Date	Revision	Checked	Approved
4-Mar-22	Rev.0	KL	B



█ Planned Bar    ◆ Milestone  
█ Critical Bar    ◆ Actual MS  
 Baseline    ◆ Critical MS

**West Kowloon Cultural District Authority**  
**Piling for Integrated Basement and U/G Road in Zone 2B 2C**  
**3 Month Rolling Programme as of 11 November 2022**  
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**West Kowloon Cultural District Authority**  
**Piling for Integrated Basement and U/G Road in Zone 2B 2C**  
**3 Month Rolling Programme as of 11 November 2022**  
 Based on CMWP Rev.0

Date	Revision	Checked	Approved
4-Mar-22	Rev.0	KL	B

Activity ID	Activity Name	Baseline Start	Baseline Finish	Dur	Forecast / Actual Start	Forecast / Actual Finsih	Total Float	October				November				December				January			February		
								16	15	22	29	05	12	19	26	03	10	17	24	31	07	14	21	28	04

<b>05</b>								
P26-BP16.10	BP - Excavation	24-Jun-22	02-Jul-22	7	27-Jan-23	04-Feb-23	-91	
P26-BP16.20	BP - RCD Drilling	04-Jul-22	19-Jul-22	14	06-Feb-23	21-Feb-23	-91	

**KD09 (Section 5)**

**Bored Piles**

<b>VD01</b>								
<b>12</b>								
P23-BP45.10	BP - Excavation	26-Nov-22	02-Dec-22	27	05-Oct-22 A	05-Nov-22 A		
P23-BP45.20	BP - RCD Drilling	03-Dec-22	20-Dec-22	20	07-Nov-22 A	29-Nov-22	51	
P23-BP45.30	BP - Airlift, Cage Install and Concrete	21-Dec-22	30-Dec-22	7	30-Nov-22	07-Dec-22	71	

<b>CD01</b>								
<b>06</b>								
P23-BP40.30	BP - Airlift, Cage Install and Concrete	19-Mar-22	26-Mar-22	10	28-Sep-22 A	12-Oct-22 A		
<b>15</b>								
P23-BP52.20	BP - RCD Drilling	27-May-22	18-Jun-22	20	11-Oct-22 A	03-Nov-22 A		
P23-BP52.30	BP - Airlift, Cage Install and Concrete	20-Jun-22	28-Jun-22	5	04-Nov-22 A	10-Nov-22 A		

<b>CD02</b>								
<b>02</b>								
P23-BP37.10	BP - Excavation	21-Dec-21	29-Dec-21	6	12-Nov-22	18-Nov-22	-84	
P23-BP37.20	BP - RCD Drilling	30-Dec-21	05-Feb-22	29	19-Nov-22	22-Dec-22	-84	
P23-BP37.30	BP - Airlift, Cage Install and Concrete	07-Feb-22	15-Feb-22	8	23-Dec-22	04-Jan-23	50	

<b>03</b>								
P23-BP48.10	BP - Excavation	27-Jan-22	05-Feb-22	6	16-Dec-22	22-Dec-22	-84	
P23-BP48.20	BP - RCD Drilling	07-Feb-22	11-Mar-22	29	23-Dec-22	01-Feb-23	-84	
P23-BP48.30	BP - Airlift, Cage Install and Concrete	12-Mar-22	21-Mar-22	8	02-Feb-23	10-Feb-23	21	

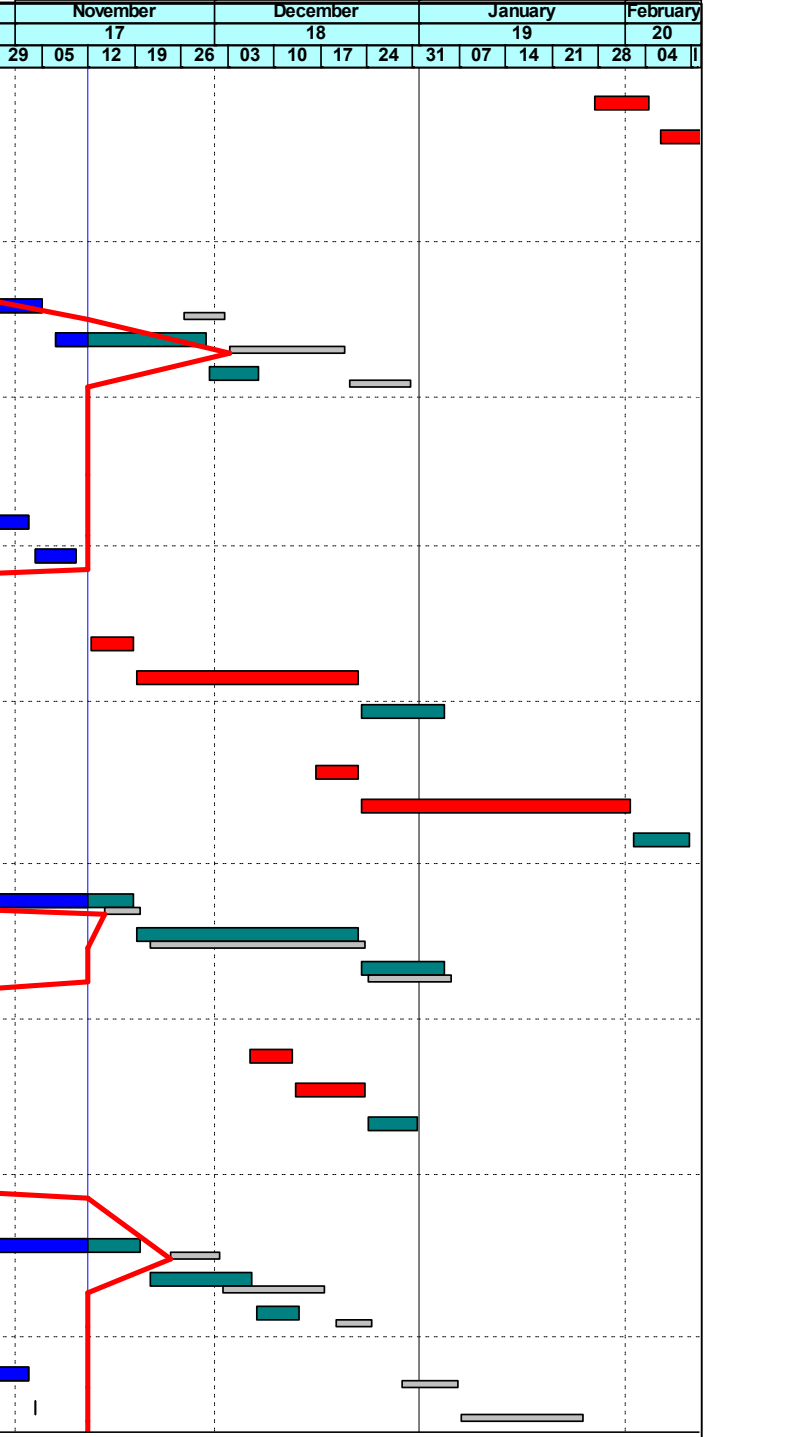
<b>14</b>								
P23-BP47.10	BP - Excavation	14-Nov-22	19-Nov-22	21	26-Oct-22 A	18-Nov-22	50	
P23-BP47.20	BP - RCD Drilling	21-Nov-22	23-Dec-22	29	19-Nov-22	22-Dec-22	50	
P23-BP47.30	BP - Airlift, Cage Install and Concrete	24-Dec-22	05-Jan-23	8	23-Dec-22	04-Jan-23	50	

<b>TD09</b>								
<b>03</b>								
CBA-BPC52U.10	BP - Excavation	06-May-22	13-May-22	6	06-Dec-22	12-Dec-22	-91	
CBA-BPC52U.20	BP - RCD Drilling	14-May-22	25-May-22	10	13-Dec-22	23-Dec-22	-91	
CBA-BPC52U.30	BP - Airlift, Cage Install and Concrete	26-May-22	31-May-22	5	24-Dec-22	31-Dec-22	52	

<b>08</b>								
CBA-BPC52V.30	BP - Airlift, Cage Install and Concrete	29-Aug-22	02-Sep-22	5	11-Oct-22 A	17-Oct-22 A		

<b>14</b>								
CBA-BPC40Sa.10	BP - Excavation	24-Nov-22	01-Dec-22	22	26-Oct-22 A	19-Nov-22	66	
CBA-BPC40Sa.20	BP - RCD Drilling	02-Dec-22	17-Dec-22	14	21-Nov-22	06-Dec-22	66	
CBA-BPC40Sa.30	BP - Airlift, Cage Install and Concrete	19-Dec-22	24-Dec-22	6	07-Dec-22	13-Dec-22	66	

<b>16</b>								
CBA-BPC40Wa.10	BP - Excavation	29-Dec-22	06-Jan-23	24	06-Oct-22 A	03-Nov-22 A		
CBA-BPC40Wa.20	BP - RCD Drilling	07-Jan-23	25-Jan-23	0	04-Nov-22 A	04-Nov-22 A		

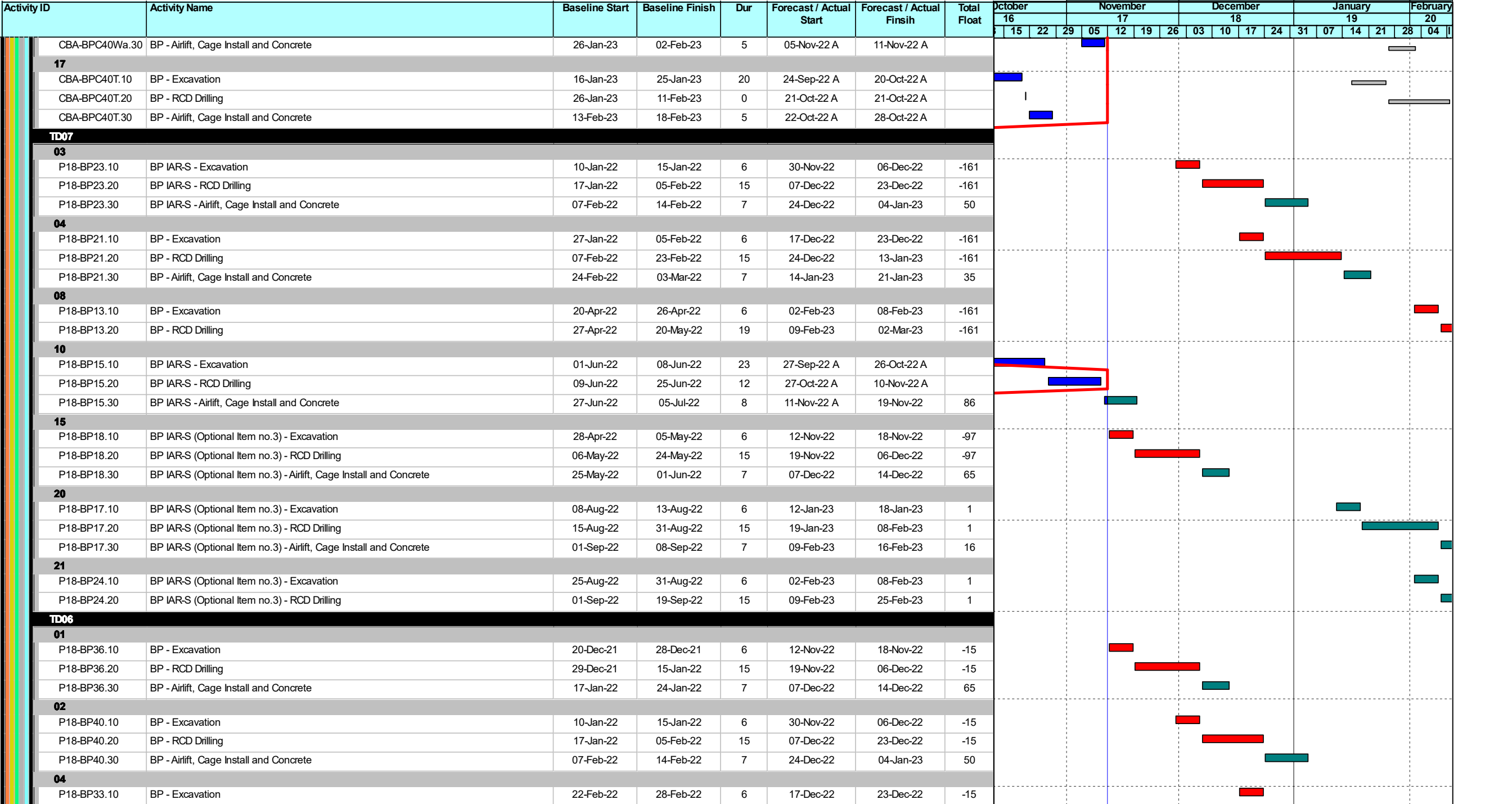


	Planned Bar		Milestone
	Critical Bar		Actual MS
	Baseline		Critical MS

**West Kowloon Cultural District Authority**  
**Piling for Integrated Basement and U/G Road in Zone 2B 2C**  
**3 Month Rolling Programme as of 11 November 2022**  
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Planned Bar   
 Milestone  
 Critical Bar   
 Actual MS  
 Baseline   
 Critical MS

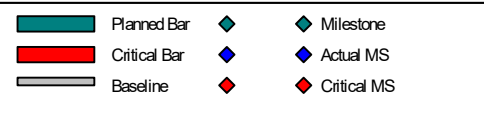
**West Kowloon Cultural District Authority**  
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Date	Revision	Checked	Approved
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Activity ID	Activity Name	Baseline Start	Baseline Finish	Dur	Forecast / Actual Start	Forecast / Actual Finish	Total Float	October				November				December				January				February																	
								16		22		29		05		12		19		26		03		10		17		24		31		07		14		21		28		04	
								1	8	15	22	29	05	12	19	26	03	10	17	24	31	07	14	21	28	04	11	18	25	01	08	15	22	29	05	12	19	26	02	09	16
P18-BP33.20	BP - RCD Drilling	01-Mar-22	17-Mar-22	15	24-Dec-22	13-Jan-23	-15																																		
P18-BP33.30	BP - Airlift, Cage Install and Concrete	18-Mar-22	25-Mar-22	7	14-Jan-23	21-Jan-23	35																																		
<b>05</b>																																									
P18-BP28.10	BP - Excavation	11-Mar-22	17-Mar-22	6	07-Jan-23	13-Jan-23	-15																																		
P18-BP28.20	BP - RCD Drilling	18-Mar-22	04-Apr-22	15	14-Jan-23	03-Feb-23	-15																																		
P18-BP28.30	BP - Airlift, Cage Install and Concrete	06-Apr-22	13-Apr-22	7	04-Feb-23	11-Feb-23	20																																		
<b>06</b>																																									
P18-BP42.10	BP - Excavation	29-Mar-22	04-Apr-22	6	27-Jan-23	03-Feb-23	-15																																		
P18-BP42.20	BP - RCD Drilling	06-Apr-22	26-Apr-22	15	04-Feb-23	21-Feb-23	-15																																		
<b>08</b>																																									
P18-BP20.20	BP - RCD Drilling	21-May-22	08-Jun-22	10	10-Oct-22 A	21-Oct-22 A																																			
P18-BP20.30	BP - Airlift, Cage Install and Concrete	09-Jun-22	16-Jun-22	6	22-Oct-22 A	29-Oct-22 A																																			
<b>10</b>																																									
P18-BP44.10	BP - Excavation	24-Jun-22	30-Jun-22	6	12-Nov-22	18-Nov-22	-42																																		
P18-BP44.20	BP - RCD Drilling	02-Jul-22	23-Jul-22	19	19-Nov-22	10-Dec-22	-42																																		
P18-BP44.30	BP - Airlift, Cage Install and Concrete	25-Jul-22	02-Aug-22	8	12-Dec-22	20-Dec-22	60																																		
<b>11</b>																																									
P18-BP29.10	BP - Excavation	18-Jul-22	23-Jul-22	6	05-Dec-22	10-Dec-22	-42																																		
P18-BP29.20	BP - RCD Drilling	25-Jul-22	10-Aug-22	15	12-Dec-22	30-Dec-22	-42																																		
P18-BP29.30	BP - Airlift, Cage Install and Concrete	11-Aug-22	18-Aug-22	7	31-Dec-22	09-Jan-23	46																																		
<b>12</b>																																									
P18-BP41.10	BP - Excavation	04-Aug-22	10-Aug-22	6	22-Dec-22	30-Dec-22	-42																																		
P18-BP41.20	BP - RCD Drilling	11-Aug-22	27-Aug-22	15	31-Dec-22	18-Jan-23	-42																																		
P18-BP41.30	BP - Airlift, Cage Install and Concrete	29-Aug-22	05-Sep-22	7	19-Jan-23	30-Jan-23	31																																		
<b>13</b>																																									
P18-BP34.10	BP - Excavation	22-Aug-22	27-Aug-22	6	12-Jan-23	18-Jan-23	-42																																		
P18-BP34.20	BP - RCD Drilling	29-Aug-22	15-Sep-22	15	19-Jan-23	08-Feb-23	-42																																		
P18-BP34.30	BP - Airlift, Cage Install and Concrete	16-Sep-22	23-Sep-22	7	09-Feb-23	16-Feb-23	16																																		
<b>14</b>																																									
P18-BP43.10	BP - Excavation	08-Sep-22	15-Sep-22	6	02-Feb-23	08-Feb-23	-42																																		
P18-BP43.20	BP - RCD Drilling	16-Sep-22	10-Oct-22	19	09-Feb-23	02-Mar-23	-42																																		
<b>17</b>																																									
P18-BP30.10	BP (Optional Item no.3) - Excavation	28-Apr-22	05-May-22	6	12-Nov-22	18-Nov-22	11																																		
P18-BP30.20	BP (Optional Item no.3) - RCD Drilling	06-May-22	24-May-22	15	19-Nov-22	06-Dec-22	11																																		
P18-BP30.30	BP (Optional Item no.3) - Airlift, Cage Install and Concrete	25-May-22	01-Jun-22	7	07-Dec-22	14-Dec-22	65																																		
<b>18</b>																																									
P18-BP27.10	BP - Excavation	18-May-22	24-May-22	6	30-Nov-22	06-Dec-22	11																																		
P18-BP27.20	BP - RCD Drilling	25-May-22	11-Jun-22	15	07-Dec-22	23-Dec-22	11																																		
P18-BP27.30	BP - Airlift, Cage Install and Concrete	13-Jun-22	20-Jun-22	7	24-Dec-22	04-Jan-23	50																																		
<b>19</b>																																									
P18-BP37.10	BP - Excavation	06-Jun-22	11-Jun-22	6	17-Dec-22	23-Dec-22	11																																		
P18-BP37.20	BP - RCD Drilling	13-Jun-22	05-Jul-22	19	24-Dec-22	18-Jan-23	11																																		
P18-BP37.30	BP - Airlift, Cage Install and Concrete	06-Jul-22	14-Jul-22	8	19-Jan-23	31-Jan-23	30																																		

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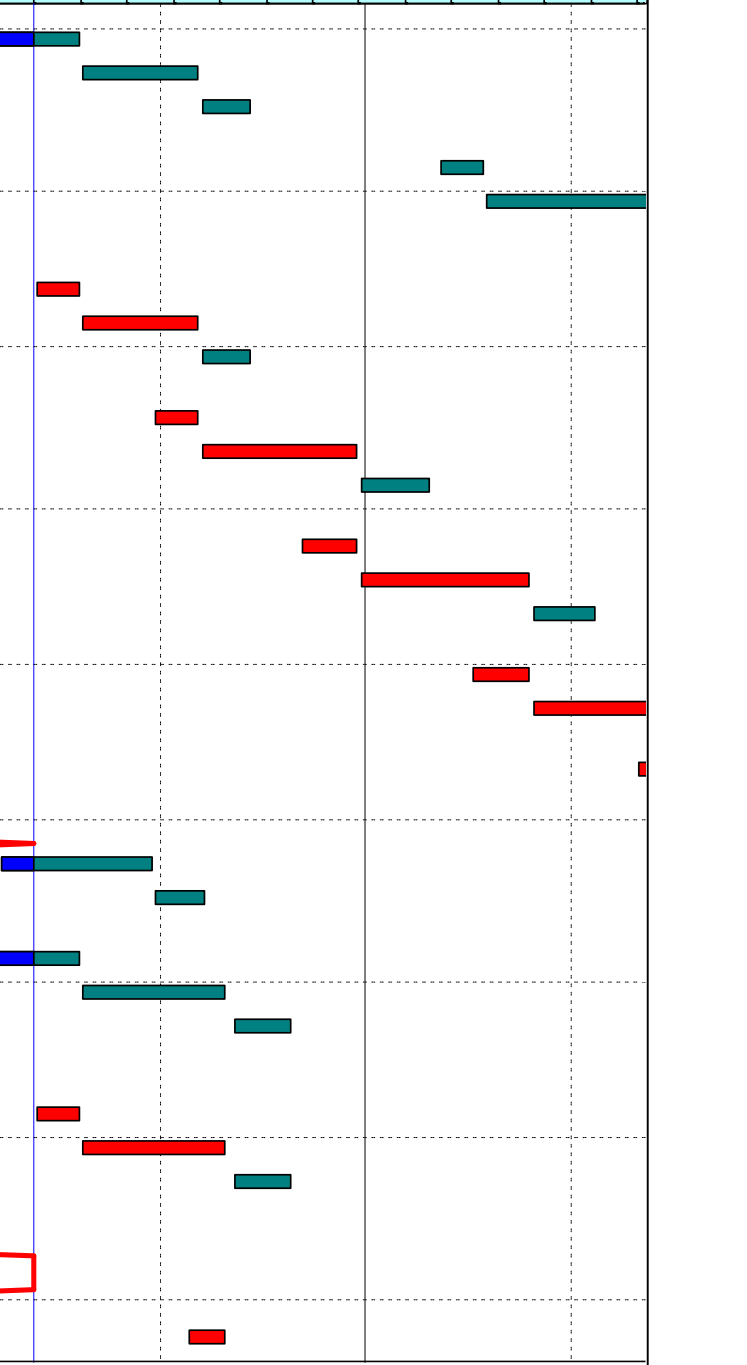


**West Kowloon Cultural District Authority**  
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**3 Month Rolling Programme as of 11 November 2022**  
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Activity ID	Activity Name	Baseline Start	Baseline Finish	Dur	Forecast / Actual Start	Forecast / Actual Finish	Total Float	October				November				December				January				February																			
								16		22		29		05		12		19		26		03		10		17		24		31		07		14		21		28		04		11	
								16	22	29	05	12	19	26	03	10	17	24	31	07	14	21	28	04	11																		

<b>20</b>							
P18-BP35.10	BP - Excavation	28-Jun-22	05-Jul-22	20	27-Oct-22 A	18-Nov-22	45
P18-BP35.20	BP - RCD Drilling	06-Jul-22	22-Jul-22	15	19-Nov-22	06-Dec-22	45
P18-BP35.30	BP - Airlift, Cage Install and Concrete	23-Jul-22	30-Jul-22	7	07-Dec-22	14-Dec-22	65
<b>21</b>							
P18-BP19.10	BP - Excavation	16-Jul-22	22-Jul-22	6	12-Jan-23	18-Jan-23	11
P18-BP19.20	BP - RCD Drilling	23-Jul-22	13-Aug-22	19	19-Jan-23	13-Feb-23	11
<b>TD05</b>							
<b>01</b>							
P18-BP48.10	BP - Excavation	20-Dec-21	28-Dec-21	6	12-Nov-22	18-Nov-22	-125
P18-BP48.20	BP - RCD Drilling	29-Dec-21	15-Jan-22	15	19-Nov-22	06-Dec-22	-125
P18-BP48.30	BP - Airlift, Cage Install and Concrete	17-Jan-22	24-Jan-22	7	07-Dec-22	14-Dec-22	65
<b>02</b>							
P18-BP60.10	BP - Excavation	10-Jan-22	15-Jan-22	6	30-Nov-22	06-Dec-22	-125
P18-BP60.20	BP - RCD Drilling	17-Jan-22	10-Feb-22	19	07-Dec-22	30-Dec-22	-125
P18-BP60.30	BP - Airlift, Cage Install and Concrete	11-Feb-22	19-Feb-22	8	31-Dec-22	10-Jan-23	45
<b>03</b>							
P18-BP63.10	BP - Excavation	04-Feb-22	10-Feb-22	6	22-Dec-22	30-Dec-22	-125
P18-BP63.20	BP - RCD Drilling	11-Feb-22	04-Mar-22	19	31-Dec-22	25-Jan-23	-125
P18-BP63.30	BP - Airlift, Cage Install and Concrete	05-Mar-22	14-Mar-22	8	26-Jan-23	04-Feb-23	26
<b>04</b>							
P18-BP62.10	BP - Excavation	26-Feb-22	04-Mar-22	6	17-Jan-23	25-Jan-23	-125
P18-BP62.20	BP - RCD Drilling	05-Mar-22	26-Mar-22	19	26-Jan-23	17-Feb-23	-125
<b>05</b>							
P18-BP61.10	BP - Excavation	21-Mar-22	26-Mar-22	6	11-Feb-23	17-Feb-23	-125
<b>17</b>							
P18-BP47.10	BP - Excavation	25-Jun-22	02-Jul-22	22	11-Oct-22 A	05-Nov-22 A	
P18-BP47.20	BP - RCD Drilling	04-Jul-22	20-Jul-22	20	07-Nov-22 A	29-Nov-22	32
P18-BP47.30	BP - Airlift, Cage Install and Concrete	21-Jul-22	28-Jul-22	7	30-Nov-22	07-Dec-22	71
<b>20</b>							
P18-BP59.10	BP - Excavation	27-Aug-22	02-Sep-22	24	22-Oct-22 A	18-Nov-22	60
P18-BP59.20	BP - RCD Drilling	03-Sep-22	26-Sep-22	19	19-Nov-22	10-Dec-22	60
P18-BP59.30	BP - Airlift, Cage Install and Concrete	27-Sep-22	07-Oct-22	8	12-Dec-22	20-Dec-22	60
<b>TD04</b>							
<b>05</b>							
P23-BP75.10	BP - Excavation	26-Jan-22	04-Feb-22	6	12-Nov-22	18-Nov-22	-17
P23-BP75.20	BP - RCD Drilling	05-Feb-22	26-Feb-22	19	19-Nov-22	10-Dec-22	-17
P23-BP75.30	BP - Airlift, Cage Install and Concrete	28-Feb-22	08-Mar-22	8	12-Dec-22	20-Dec-22	60
<b>06</b>							
P23-BP73.20	BP - RCD Drilling	28-Feb-22	21-Mar-22	7	11-Oct-22 A	19-Oct-22 A	
P23-BP73.30	BP - Airlift, Cage Install and Concrete	22-Mar-22	30-Mar-22	6	20-Oct-22 A	27-Oct-22 A	
<b>07</b>							
P23-BP97.10	BP - Excavation	15-Mar-22	21-Mar-22	6	05-Dec-22	10-Dec-22	-17



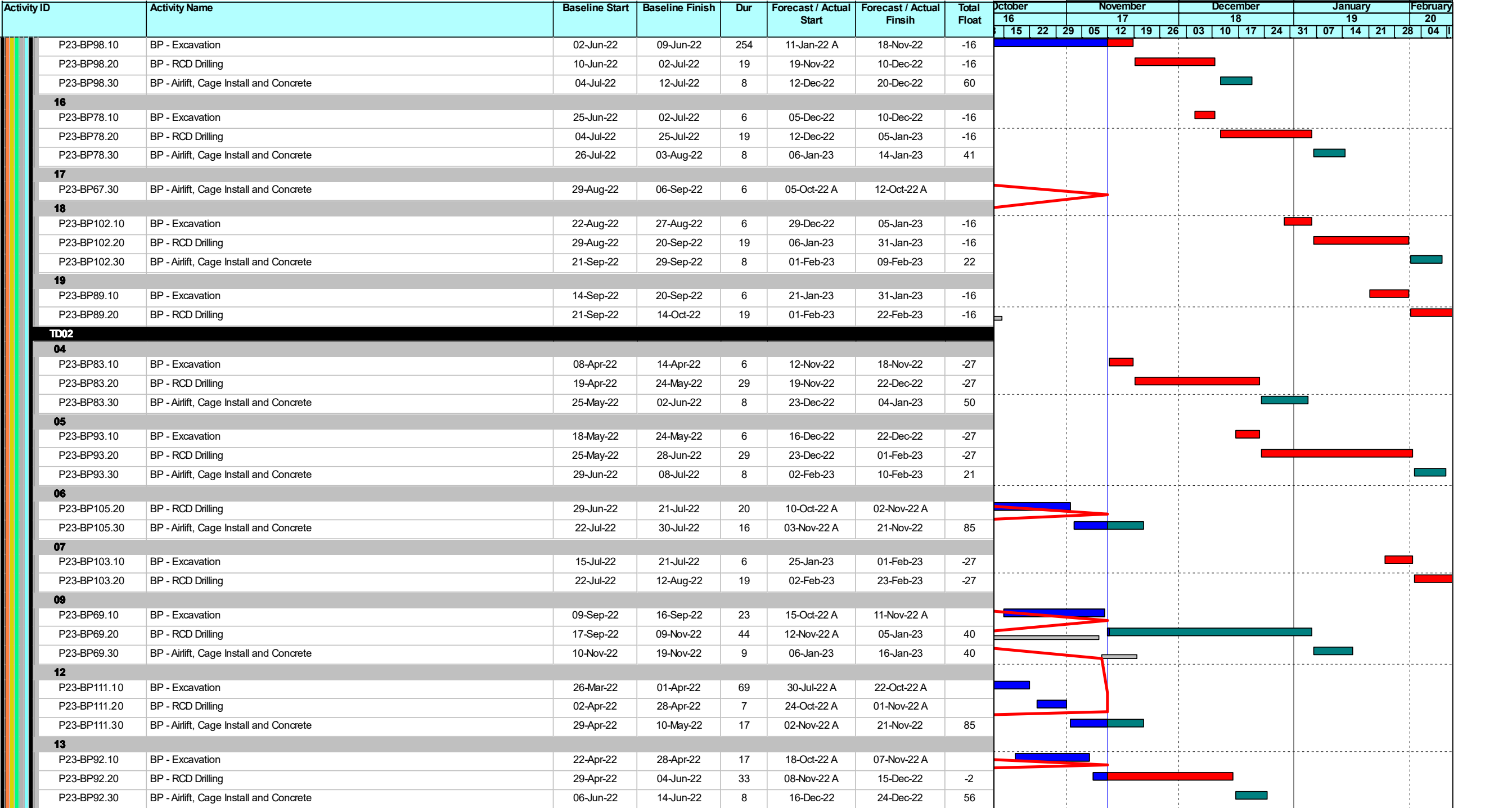
Planned Bar 
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 Actual MS  
 Baseline 
 Critical MS

**West Kowloon Cultural District Authority**  
**Piling for Integrated Basement and U/G Road in Zone 2B 2C**  
**3 Month Rolling Programme as of 11 November 2022**  
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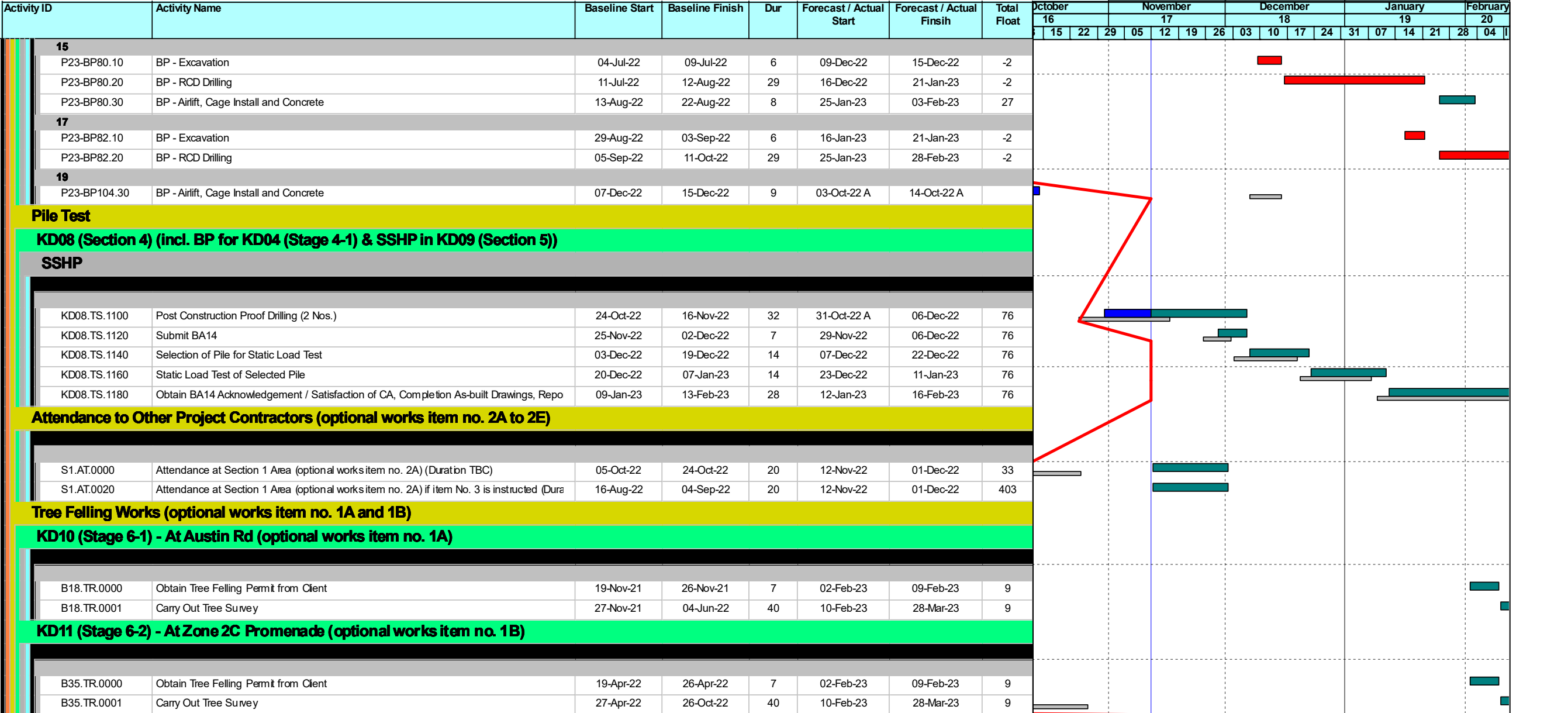




	Planned Bar		Milestone
	Critical Bar		Actual MS
	Baseline		Critical MS

**West Kowloon Cultural District Authority**  
**Piling for Integrated Basement and U/G Road in Zone 2B 2C**  
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	Date	Revision	Checked	Approved
	4-Mar-22	Rev.0	KL	B



Activity ID	Activity Name	Baseline Start	Baseline Finish	Dur	Forecast / Actual Start	Forecast / Actual Finsih	Total Float	November			December				January				February				March	
								17	19	26	18			17	24	31	07	14	21	28	20		25	21
								12	19	26	03	10	17	24	31	07	14	21	28	04	11	18	25	04

**Piling for Integrated Basement and U/G Road in Zone 2B & 2C**

Contract Dates							
Key Dates							
KD for Zone 2B							
KD05	KD05 (Section 1) - 03 Jan 2023			03-Jan-23	0	22-Jul-23*	-200

Optional Works subjected to CA's Instruction							
CO1A	Last CAI date for Optional Works Item No.1A (within 560 Days after Commencement)			02-Feb-23	0	02-Feb-23	1
CO1B	Last CAI date for Optional Works Item No.1B (within 560 Days after Commencement)			02-Feb-23	0	02-Feb-23	1
CO2D	Last CAI date for Optional Works Item No.2D (330 Days to 580 Days after Commencement)			22-Feb-23	0	22-Feb-23	71
CO2E10	Last CAI date for Optional Works Item No.2E (330 Days to 580 Days after Commencement) (NA; item No. 3 not exercised)			22-Feb-23	0	22-Feb-23	301

**Construction Stage**

**File Construction**

**KD03 (Stage 3-1)**

VD09								
CBA-BPC54Ja.1	BP - Excavation			12-Jan-23	18-Jan-23	28	11-Jul-22 A	12-Aug-22 A
CBA-BPC54Ja.2	BP - RCD Drilling			19-Jan-23	27-Feb-23	1	13-Aug-22 A	15-Aug-22 A
CBA-BPC54Ja.3	BP -Airlift, Cage Install and Concrete			28-Feb-23	06-Mar-23	7	16-Aug-22 A	24-Aug-22 A

**KD05 (Section 1)**

**Bored Piles**

**CD05**

P17-BP05.30	BP -Airlift, Cage Install and Concrete			31-Jan-22	10-Feb-22	7	07-Nov-22 A	15-Nov-22 A
<b>10</b>								
P22&P19-BP16.:	BP - RCD Drilling			20-Jun-22	12-Jul-22	70	06-Sep-22 A	30-Nov-22 A
P22&P19-BP16.:	BP -Airlift, Cage Install and Concrete			13-Jul-22	21-Jul-22	6	01-Dec-22 A	08-Dec-22 A

**CD04**

**05**

P17-BP16.20	BP - RCD Drilling			01-Mar-22	17-Mar-22	8	09-Nov-22 A	18-Nov-22 A
P17-BP16.30	BP -Airlift, Cage Install and Concrete			18-Mar-22	25-Mar-22	10	19-Nov-22 A	01-Dec-22 A

**11**

P17-BP06.10	BP - Excavation			23-Jun-22	29-Jun-22	10	17-Nov-22 A	29-Nov-22 A
P17-BP06.20	BP - RCD Drilling			30-Jun-22	18-Jul-22	7	30-Nov-22 A	08-Dec-22 A
P17-BP06.30	BP -Airlift, Cage Install and Concrete			19-Jul-22	26-Jul-22	8	09-Dec-22 A	17-Dec-22

**19**

P17-BP11.10	BP IAR-N - Excavation			19-Aug-22	25-Aug-22	13	02-Dec-22 A	16-Dec-22
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**TD07**

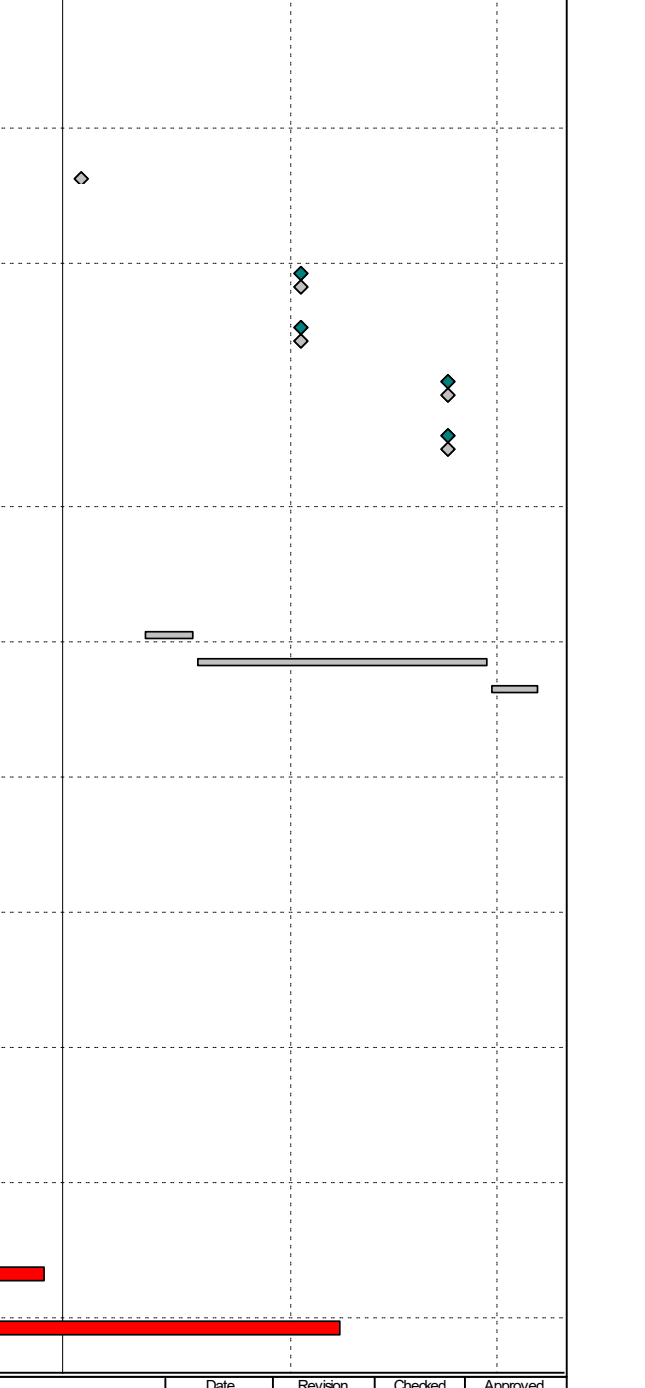
**01**

P18-BP10.10	BP IAR-S - Excavation			19-Nov-21	25-Nov-21	25	04-Nov-22 A	03-Dec-22 A
P18-BP10.20	BP IAR-S - RCD Drilling			26-Nov-21	13-Dec-21	20	05-Dec-22 A	29-Dec-22

**06**

P18-BP05.10	BP - Excavation			07-Mar-22	12-Mar-22	53	01-Dec-22 A	07-Feb-23
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**17**

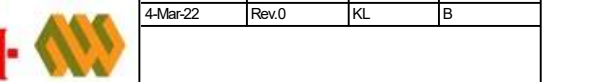


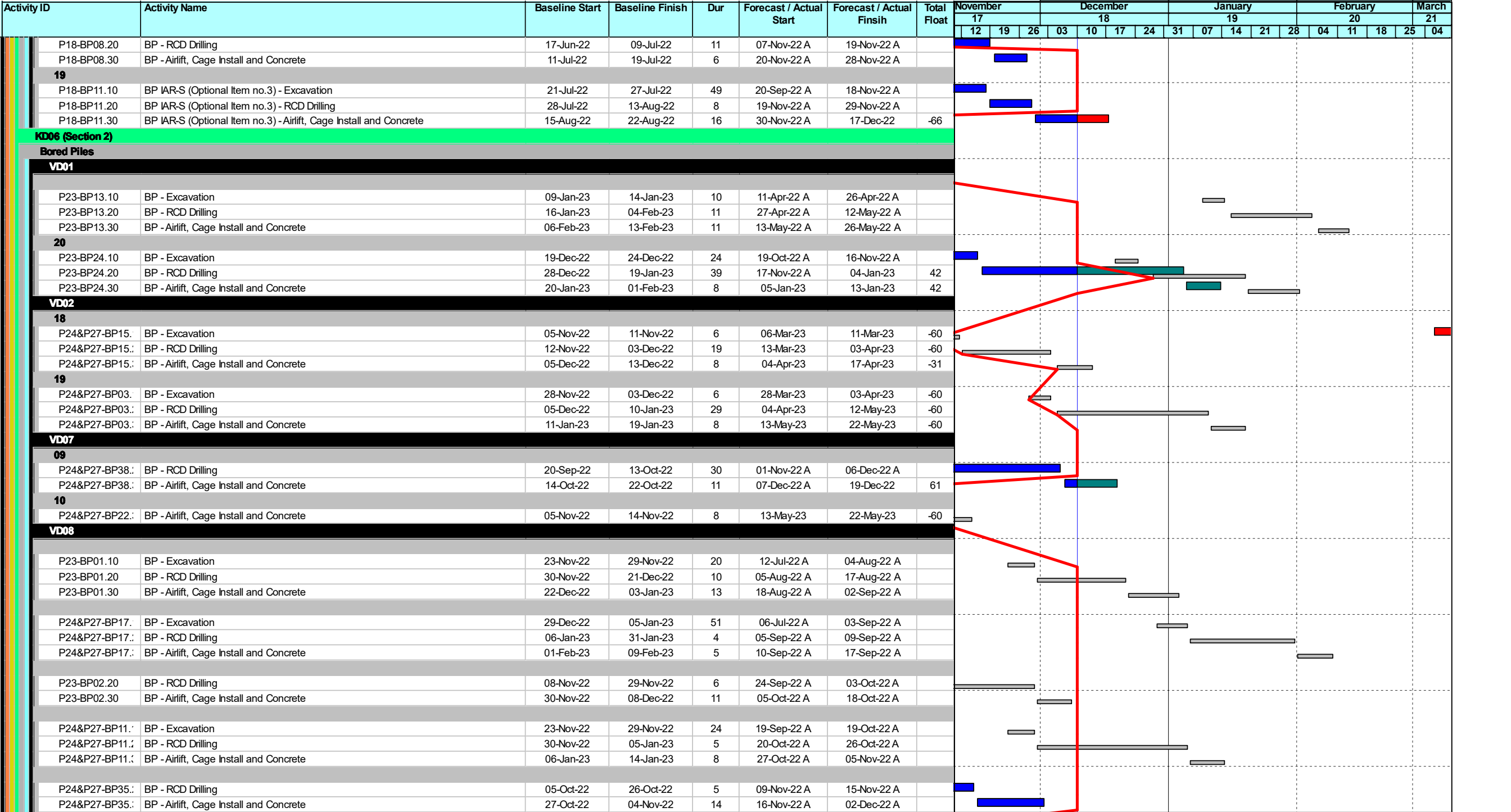
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 Data Date: 10-Dec-22  
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 Page 1 of 13







<span style="color:blue">■</span>	Planned	<span style="color:blue">◆</span>	Planned MS
<span style="color:red">■</span>	Critical	<span style="color:red">◆</span>	Critical MS
<span style="color:black">■</span>	Actual	<span style="color:black">◆</span>	Actual MS

**West Kowloon Cultural District Authority**  
**Piling for Integrated Basement and U/G Road in Zone 2B 2C**  
**3 Month Rolling Programme as of 9 December 2022**  
 Based on CMWP Rev.0

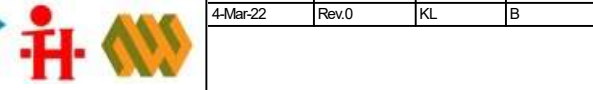
Date	Revision	Checked	Approved
4-Mar-22	Rev.0	KL	B

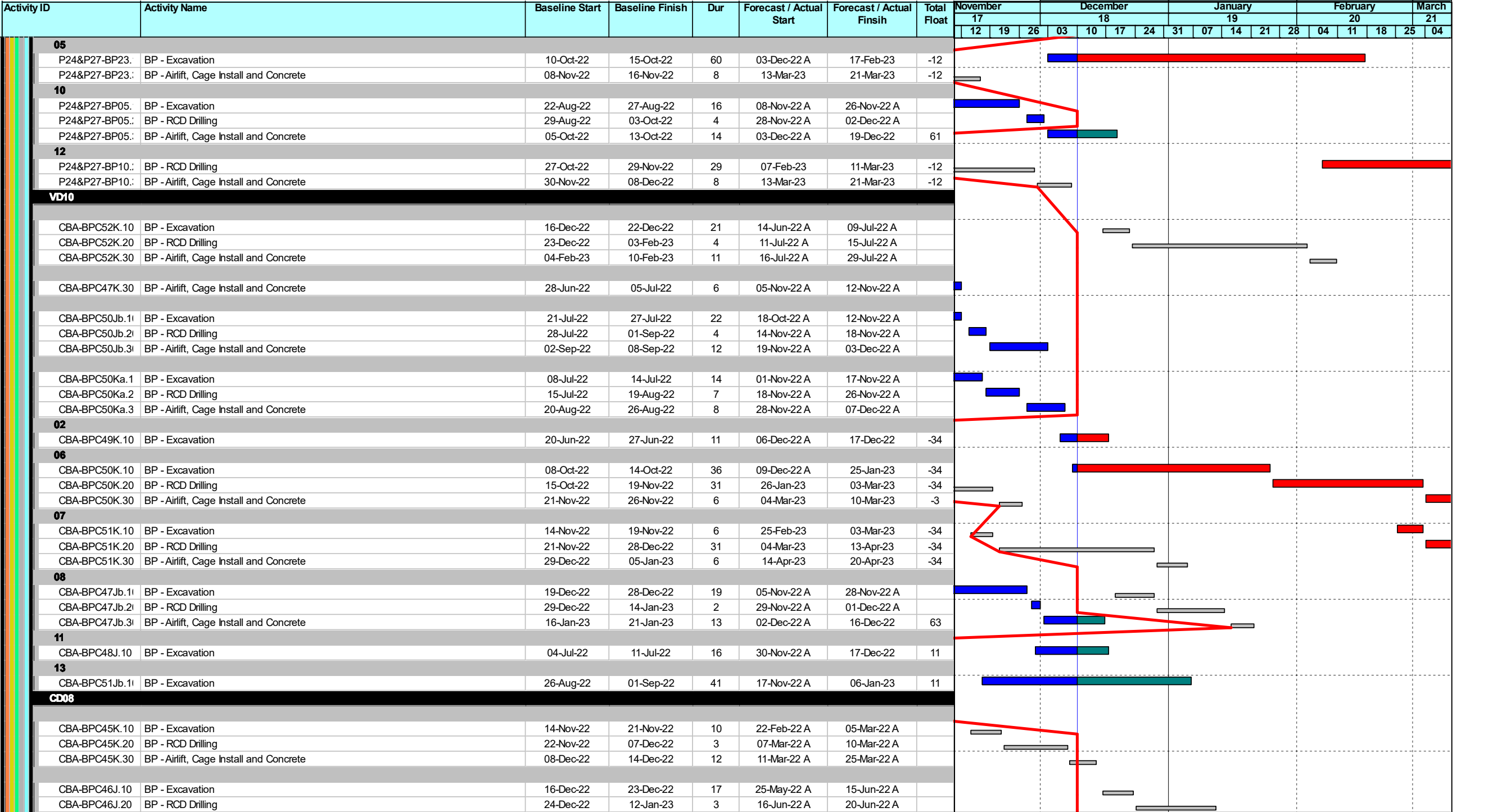










	Planned		Planned MS
	Critical		Critical MS
	Actual		Actual MS

**West Kowloon Cultural District Authority**  
**Piling for Integrated Basement and U/G Road in Zone 2B 2C**  
**3 Month Rolling Programme as of 9 December 2022**  
 Based on CMWP Rev.0

	Date	Revision	Checked	Approved
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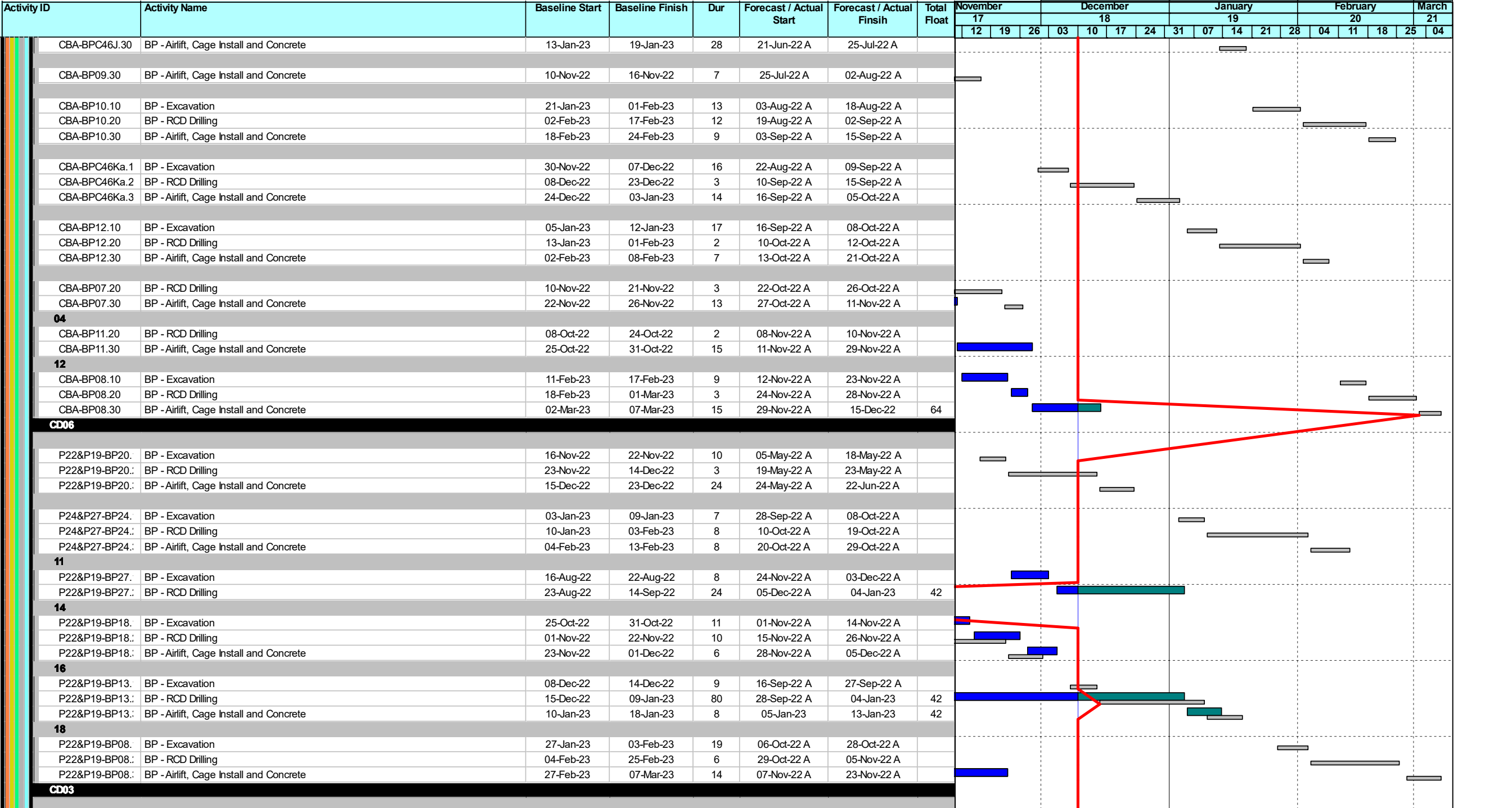


	Planned		Planned MS
	Critical		Critical MS
	Actual		Actual MS

**West Kowloon Cultural District Authority**  
**Piling for Integrated Basement and U/G Road in Zone 2B 2C**  
**3 Month Rolling Programme as of 9 December 2022**  
 Based on CMWP Rev.0



Date	Revision	Checked	Approved
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ID: 2B2C-20221210\_w  
 Data Date: 10-Dec-22  
 Print Date: 14-Dec-22\_12:32  
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	Planned		Planned MS
	Critical		Critical MS
	Actual		Actual MS

**West Kowloon Cultural District Authority**  
**Piling for Integrated Basement and U/G Road in Zone 2B 2C**  
**3 Month Rolling Programme as of 9 December 2022**  
 Based on CMWP Rev.0

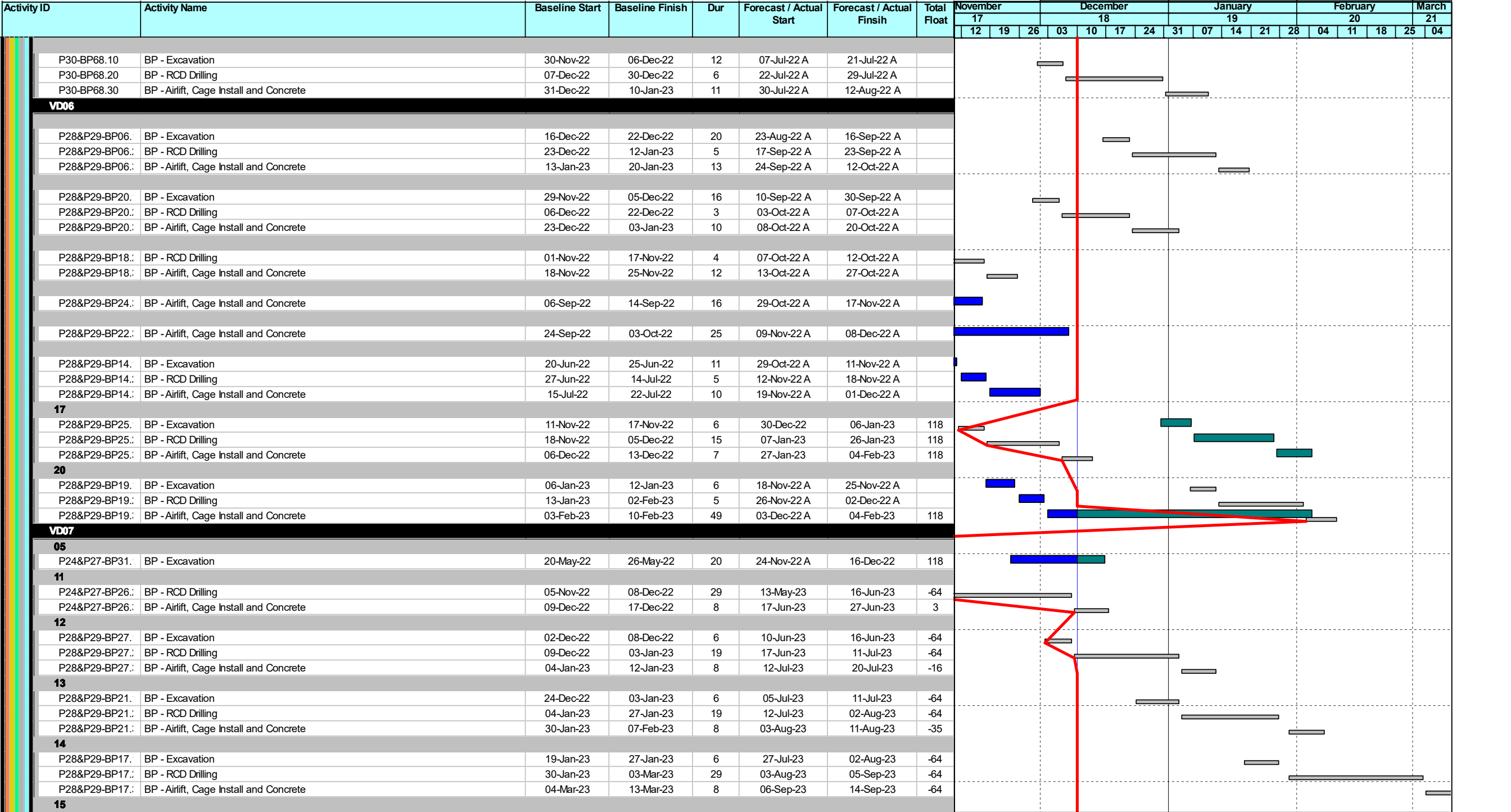
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		4-Mar-22	Rev.0	KL	B

Activity ID	Activity Name	Baseline Start	Baseline Finish	Dur	Forecast / Actual Start	Forecast / Actual Finish	Total Float	November			December				January				February				March	
								17	19	26	18		17	24	31	19		28	20		25	21		
								12	19	26	03	10	17	24	31	07	14	21	28	04	11	18	25	04
P23-BP03.10	BP - Excavation	12-Nov-22	18-Nov-22	11	14-Oct-22 A	27-Oct-22 A																		
P23-BP03.20	BP - RCD Drilling	19-Nov-22	22-Dec-22	11	28-Oct-22 A	10-Nov-22 A																		
P23-BP03.30	BP - Airlift, Cage Install and Concrete	23-Dec-22	04-Jan-23	6	11-Nov-22 A	18-Nov-22 A																		
<b>11</b>																								
P23-BP08.10	BP - Excavation	12-Aug-22	18-Aug-22	23	21-Nov-22 A	16-Dec-22	36																	
<b>14</b>																								
P23-BP16.20	BP - RCD Drilling	28-Oct-22	18-Nov-22	10	31-Oct-22 A	11-Nov-22 A																		
P23-BP16.30	BP - Airlift, Cage Install and Concrete	19-Nov-22	28-Nov-22	12	12-Nov-22 A	26-Nov-22 A																		
<b>KD07 (Section 3)</b>																								
<b>Bored Piles</b>																								
<b>VD01</b>																								
P26-BP09.10	BP - Excavation	30-Jan-23	04-Feb-23	12	07-Nov-22 A	21-Nov-22 A																		
P26-BP09.20	BP - RCD Drilling	06-Feb-23	27-Feb-23	7	22-Nov-22 A	30-Nov-22 A																		
P26-BP09.30	BP - Airlift, Cage Install and Concrete	28-Feb-23	08-Mar-23	16	01-Dec-22 A	19-Dec-22	153																	
<b>17</b>																								
P26-BP07.20	BP - RCD Drilling	08-Oct-22	10-Nov-22	29	17-Dec-22	25-Jan-23	-9																	
P26-BP07.30	BP - Airlift, Cage Install and Concrete	11-Nov-22	19-Nov-22	8	26-Jan-23	04-Feb-23	118																	
<b>VD02</b>																								
P28&P29-BP04.:	BP - Airlift, Cage Install and Concrete	03-Nov-22	10-Nov-22	8	09-Sep-22 A	20-Sep-22 A																		
P28&P29-BP16.:	BP - RCD Drilling	03-Nov-22	19-Nov-22	4	19-Oct-22 A	24-Oct-22 A																		
P28&P29-BP16.:	BP - Airlift, Cage Install and Concrete	21-Nov-22	28-Nov-22	12	25-Oct-22 A	08-Nov-22 A																		
P24&P27-BP07.:	BP - Excavation	04-Jan-23	10-Jan-23	19	20-Oct-22 A	11-Nov-22 A																		
P24&P27-BP07.:	BP - RCD Drilling	11-Jan-23	04-Feb-23	11	12-Nov-22 A	25-Nov-22 A																		
P24&P27-BP07.:	BP - Airlift, Cage Install and Concrete	06-Feb-23	14-Feb-23	11	26-Nov-22 A	09-Dec-22 A																		
<b>05</b>																								
P26-BP01.10	BP - Excavation	16-May-22	21-May-22	76	26-Nov-22 A	01-Mar-23	-13																	
<b>11</b>																								
P26-BP02.10	BP - Excavation	14-Nov-22	19-Nov-22	6	25-May-23	01-Jun-23	-13																	
P26-BP02.20	BP - RCD Drilling	21-Nov-22	23-Dec-22	29	02-Jun-23	07-Jul-23	-13																	
P26-BP02.30	BP - Airlift, Cage Install and Concrete	24-Dec-22	05-Jan-23	8	08-Jul-23	17-Jul-23	-13																	
<b>14</b>																								
P28&P29-BP09.:	BP - Excavation	30-Jun-22	07-Jul-22	32	02-Dec-22 A	11-Jan-23	-60																	
<b>17</b>																								
P24&P27-BP13.:	BP - RCD Drilling	10-Oct-22	11-Nov-22	29	07-Feb-23	11-Mar-23	-60																	
P24&P27-BP13.:	BP - Airlift, Cage Install and Concrete	12-Nov-22	21-Nov-22	8	13-Mar-23	21-Mar-23	80																	
<b>VD03</b>																								
P30-BP57.20	BP - RCD Drilling	01-Nov-22	03-Dec-22	10	08-Apr-22 A	23-Apr-22 A																		
P30-BP57.30	BP - Airlift, Cage Install and Concrete	05-Dec-22	13-Dec-22	9	25-Apr-22 A	06-May-22 A																		
P30-BP65.30	BP - Airlift, Cage Install and Concrete	05-Nov-22	14-Nov-22	6	02-Sep-22 A	09-Sep-22 A																		
<b>07</b>																								
P30-BP70.10	BP - Excavation	28-Jul-22	03-Aug-22	22	22-Nov-22 A	16-Dec-22	102																	
<b>12</b>																								
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P30-BP71.20	BP - RCD Drilling	06-Feb-23	28-Mar-23	44	13-May-23	06-Jul-23	-13																	
<b>VD04</b>																								

	Planned		Planned MS
	Critical		Critical MS
	Actual		Actual MS

**West Kowloon Cultural District Authority**  
**Piling for Integrated Basement and U/G Road in Zone 2B 2C**  
**3 Month Rolling Programme as of 9 December 2022**  
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		4-Mar-22	Rev.0	KL	B

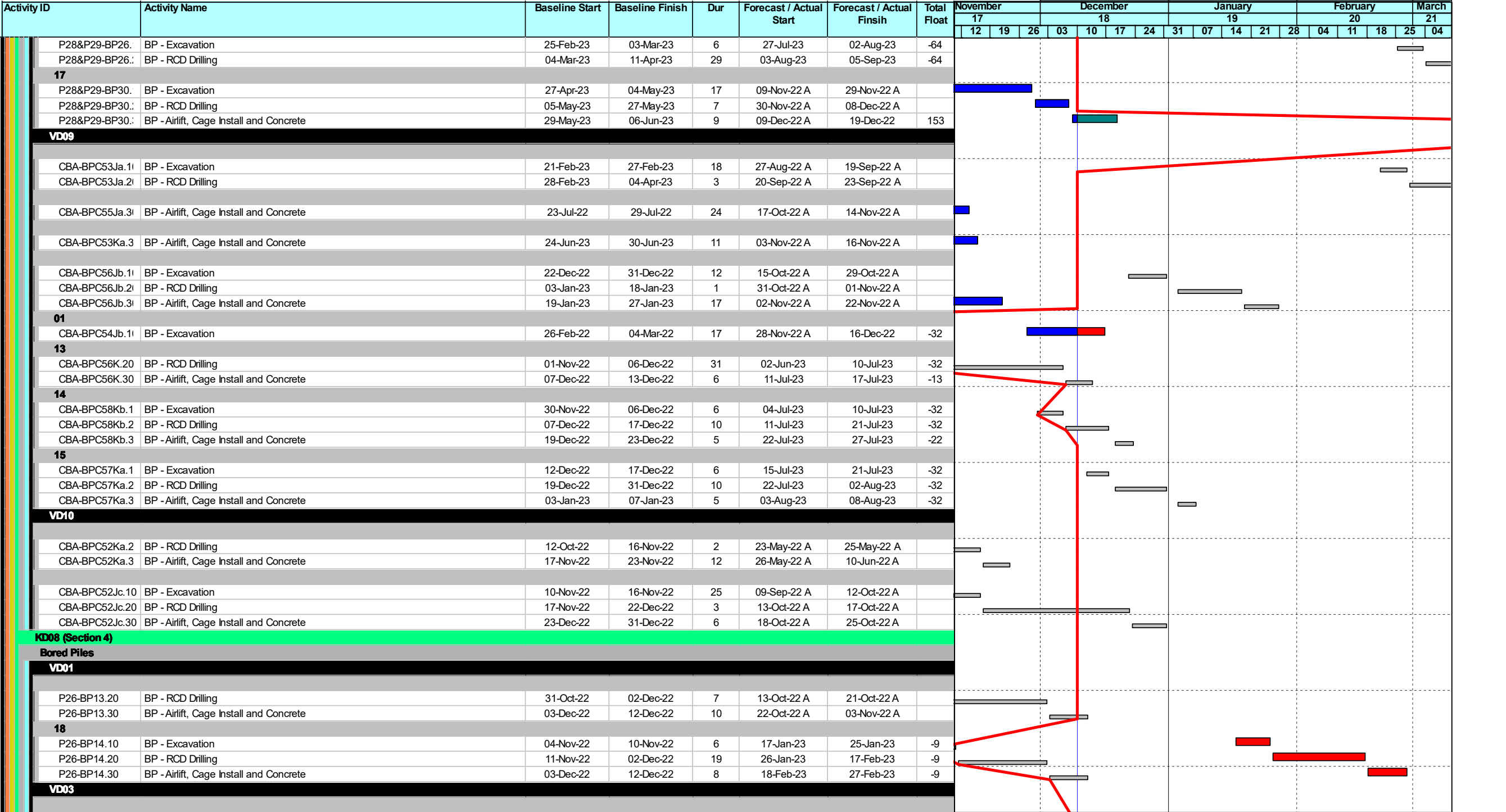


	Planned		Planned MS
	Critical		Critical MS
	Actual		Actual MS

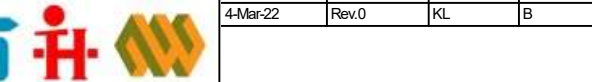
**West Kowloon Cultural District Authority**  
**Piling for Integrated Basement and U/G Road in Zone 2B 2C**  
**3 Month Rolling Programme as of 9 December 2022**  
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	4-Mar-22	Rev.0	KL	B

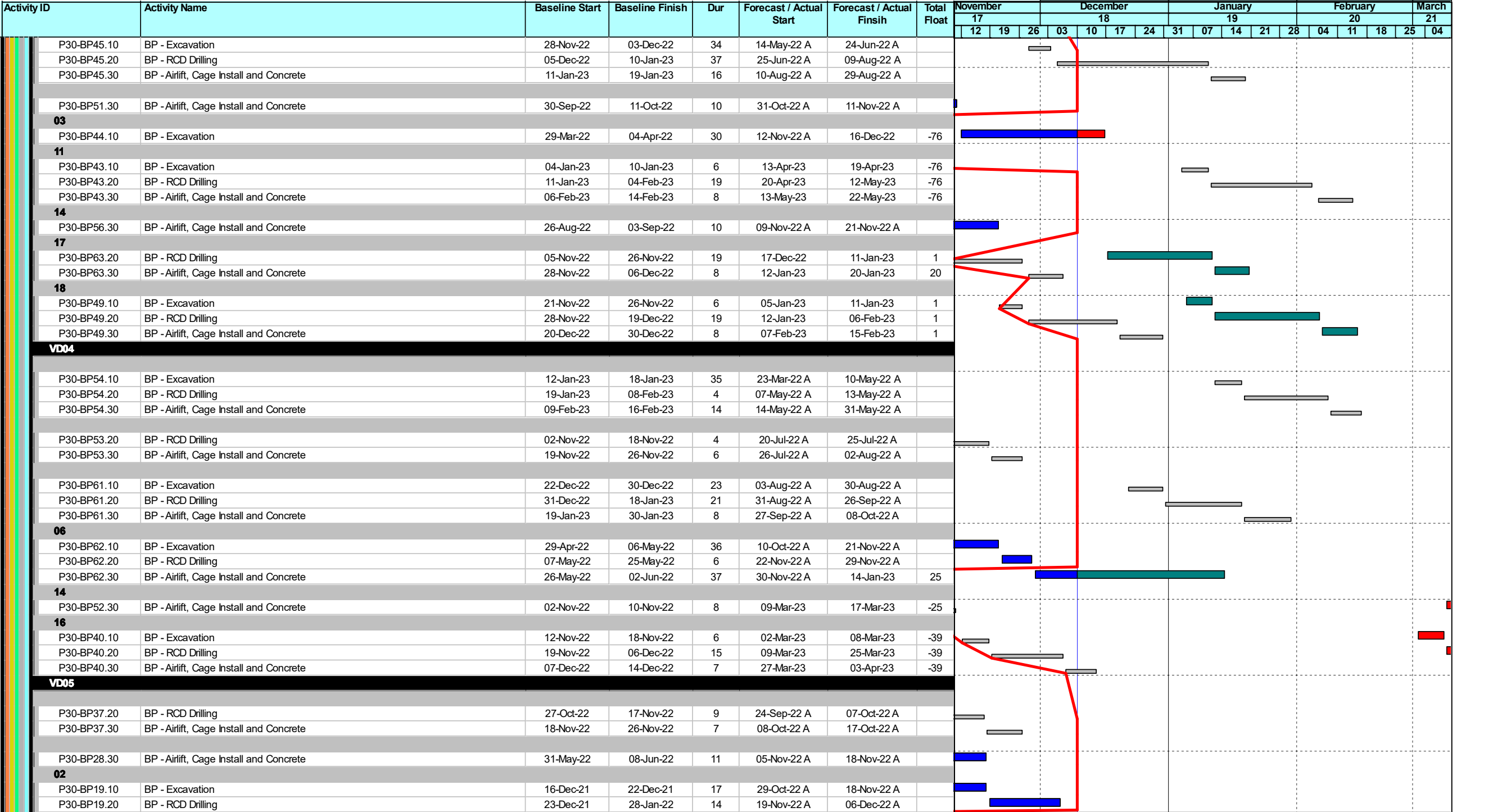





- Planned ◆ Planned MS
- Critical ◆ Critical MS
- Actual ◆ Actual MS



Date	Revision	Checked	Approved
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	Planned		Planned MS
	Critical		Critical MS
	Actual		Actual MS

**West Kowloon Cultural District Authority**  
**Piling for Integrated Basement and U/G Road in Zone 2B 2C**  
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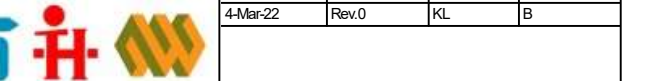


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Activity ID	Activity Name	Baseline Start	Baseline Finish	Dur	Forecast / Actual Start	Forecast / Actual Finish	Total Float	November	December	January	February	March				
								17	18	19	20	21				
								12	19	26	03	10	17	24	31	07
P30-BP19.30	BP - Airlift, Cage Install and Concrete	29-Jan-22	10-Feb-22	11	07-Dec-22 A	19-Dec-22	45									
<b>15</b>																
P30-BP38.20	BP - RCD Drilling	01-Nov-22	03-Dec-22	29	08-Mar-23	14-Apr-23	-67									
P30-BP38.30	BP - Airlift, Cage Install and Concrete	05-Dec-22	13-Dec-22	8	15-Apr-23	24-Apr-23	-53									
<b>16</b>																
P30-BP36.10	BP - Excavation	28-Nov-22	03-Dec-22	6	04-Apr-23	14-Apr-23	-67									
P30-BP36.20	BP - RCD Drilling	05-Dec-22	21-Dec-22	15	15-Apr-23	03-May-23	-67									
P30-BP36.30	BP - Airlift, Cage Install and Concrete	22-Dec-22	31-Dec-22	7	04-May-23	11-May-23	-67									
<b>20</b>																
P30-BP29.10	BP - Excavation	30-Sep-22	08-Oct-22	11	21-Nov-22 A	03-Dec-22 A										
P30-BP29.20	BP - RCD Drilling	10-Oct-22	26-Oct-22	41	05-Dec-22 A	26-Jan-23	10									
<b>TD01</b>																
P30-BP17.10	BP - Excavation	06-Jan-23	12-Jan-23	31	20-Apr-22 A	28-May-22 A										
P30-BP17.20	BP - RCD Drilling	13-Jan-23	07-Feb-23	5	30-May-22 A	06-Jun-22 A										
P30-BP17.30	BP - Airlift, Cage Install and Concrete	08-Feb-23	16-Feb-23	6	08-Jun-22 A	15-Jun-22 A										
P30-BP04.20	BP - RCD Drilling	22-Oct-22	12-Nov-22	5	09-Jul-22 A	15-Jul-22 A										
P30-BP04.30	BP - Airlift, Cage Install and Concrete	14-Nov-22	22-Nov-22	5	16-Jul-22 A	22-Jul-22 A										
P30-BP08.10	BP - Excavation	29-Nov-22	05-Dec-22	20	23-Jun-22 A	18-Jul-22 A										
P30-BP08.20	BP - RCD Drilling	06-Dec-22	22-Dec-22	4	19-Jul-22 A	23-Jul-22 A										
P30-BP08.30	BP - Airlift, Cage Install and Concrete	23-Dec-22	03-Jan-23	5	25-Jul-22 A	30-Jul-22 A										
P30-BP12.10	BP - Excavation	07-Nov-22	12-Nov-22	35	16-Jun-22 A	28-Jul-22 A										
P30-BP12.20	BP - RCD Drilling	14-Nov-22	05-Dec-22	7	29-Jul-22 A	06-Aug-22 A										
P30-BP12.30	BP - Airlift, Cage Install and Concrete	06-Dec-22	14-Dec-22	5	08-Aug-22 A	13-Aug-22 A										
P30-BP10.10	BP - Excavation	16-Dec-22	22-Dec-22	21	23-Jul-22 A	17-Aug-22 A										
P30-BP10.20	BP - RCD Drilling	23-Dec-22	12-Jan-23	8	18-Aug-22 A	27-Aug-22 A										
P30-BP10.30	BP - Airlift, Cage Install and Concrete	13-Jan-23	20-Jan-23	9	29-Aug-22 A	08-Sep-22 A										
P30-BP11.30	BP - Airlift, Cage Install and Concrete	08-Jun-22	16-Jun-22	10	07-Nov-22 A	18-Nov-22 A										
<b>09</b>																
P30-BP18.10	BP - Excavation	12-Jul-22	18-Jul-22	13	14-Nov-22 A	29-Nov-22 A										
P30-BP18.20	BP - RCD Drilling	19-Jul-22	09-Aug-22	5	30-Nov-22 A	06-Dec-22 A										
P30-BP18.30	BP - Airlift, Cage Install and Concrete	10-Aug-22	18-Aug-22	11	07-Dec-22 A	19-Dec-22	45									
<b>TD09</b>																
<b>02</b>																
CBA-BPC52Va.1	BP - Excavation	23-Apr-22	29-Apr-22	23	18-Oct-22 A	14-Nov-22 A										
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CBA-BPC52Va.3	BP - Airlift, Cage Install and Concrete	14-May-22	19-May-22	3	16-Nov-22 A	19-Nov-22 A										
<b>07</b>																
CBA-BPC53V.10	BP - Excavation	29-Jul-22	04-Aug-22	17	15-Nov-22 A	05-Dec-22 A										
CBA-BPC53V.20	BP - RCD Drilling	05-Aug-22	16-Aug-22	3	06-Dec-22 A	09-Dec-22 A										
CBA-BPC53V.30	BP - Airlift, Cage Install and Concrete	17-Aug-22	22-Aug-22	5	10-Dec-22 A	15-Dec-22	48									
<b>11</b>																
P26-BP17.30	BP - Airlift, Cage Install and Concrete	04-Nov-22	10-Nov-22	6	19-May-23	25-May-23	-79									
<b>12</b>																
P26-BP18.20	BP - RCD Drilling	04-Nov-22	19-Nov-22	14	17-May-23	02-Jun-23	-91									
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


Planned	Planned MS
Critical	Critical MS
Actual	Actual MS

**West Kowloon Cultural District Authority**  
**Piling for Integrated Basement and U/G Road in Zone 2B 2C**  
**3 Month Rolling Programme as of 9 December 2022**  
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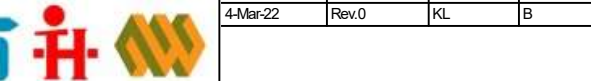


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Activity ID	Activity Name	Baseline Start	Baseline Finish	Dur	Forecast / Actual Start	Forecast / Actual Finsih	Total Float	November			December			January			February			March				
								17	19	26	03	10	17	24	31	07	14	21	28	04	11	18	25	21
								12	19	26	03	10	17	24	31	07	14	21	28	04	11	18	25	04
<b>13</b>																								
CBA-BPC53U.10	BP - Excavation	14-Nov-22	19-Nov-22	6	10-May-23	16-May-23	-86																	
CBA-BPC53U.20	BP - RCD Drilling	21-Nov-22	01-Dec-22	10	17-May-23	29-May-23	-86																	
CBA-BPC53U.30	BP - Airlift, Cage Install and Concrete	02-Dec-22	07-Dec-22	5	30-May-23	03-Jun-23	-86																	
<b>KD09 (Section 5)</b>																								
<b>Bored Piles</b>																								
<b>VD01</b>																								
P23-BP46.10	BP - Excavation	26-Nov-22	02-Dec-22	16	23-Jul-22 A	11-Aug-22 A																		
P23-BP46.20	BP - RCD Drilling	03-Dec-22	24-Dec-22	33	12-Aug-22 A	21-Sep-22 A																		
P23-BP46.30	BP - Airlift, Cage Install and Concrete	28-Dec-22	06-Jan-23	7	22-Sep-22 A	30-Sep-22 A																		
P23-BP45.10	BP - Excavation	26-Nov-22	02-Dec-22	27	05-Oct-22 A	05-Nov-22 A																		
P23-BP45.20	BP - RCD Drilling	03-Dec-22	20-Dec-22	8	07-Nov-22 A	16-Nov-22 A																		
P23-BP45.30	BP - Airlift, Cage Install and Concrete	21-Dec-22	30-Dec-22	7	17-Nov-22 A	25-Nov-22 A																		
<b>13</b>																								
P23-BP34.10	BP - Excavation	14-Dec-22	20-Dec-22	6	25-Apr-23	02-May-23	-70																	
P23-BP34.20	BP - RCD Drilling	21-Dec-22	14-Jan-23	19	03-May-23	24-May-23	-70																	
P23-BP34.30	BP - Airlift, Cage Install and Concrete	16-Jan-23	26-Jan-23	8	25-May-23	03-Jun-23	-70																	
<b>CD01</b>																								
P23-BP52.30	BP - Airlift, Cage Install and Concrete	20-Jun-22	28-Jun-22	5	04-Nov-22 A	10-Nov-22 A																		
<b>CD02</b>																								
P23-BP61.10	BP - Excavation	17-Dec-22	23-Dec-22	13	15-Aug-22 A	30-Aug-22 A																		
P23-BP61.20	BP - RCD Drilling	24-Dec-22	18-Jan-23	11	31-Aug-22 A	14-Sep-22 A																		
P23-BP61.30	BP - Airlift, Cage Install and Concrete	19-Jan-23	31-Jan-23	7	15-Sep-22 A	23-Sep-22 A																		
<b>13</b>																								
P23-BP49.10	BP - Excavation	22-Oct-22	28-Oct-22	15	14-Nov-22 A	01-Dec-22 A																		
P23-BP49.20	BP - RCD Drilling	29-Oct-22	19-Nov-22	26	02-Dec-22 A	04-Jan-23	42																	
P23-BP49.30	BP - Airlift, Cage Install and Concrete	21-Nov-22	29-Nov-22	8	05-Jan-23	13-Jan-23	42																	
<b>14</b>																								
P23-BP47.10	BP - Excavation	14-Nov-22	19-Nov-22	29	26-Oct-22 A	29-Nov-22 A																		
P23-BP47.20	BP - RCD Drilling	21-Nov-22	23-Dec-22	38	30-Nov-22 A	16-Jan-23	32																	
P23-BP47.30	BP - Airlift, Cage Install and Concrete	24-Dec-22	05-Jan-23	8	17-Jan-23	27-Jan-23	32																	
<b>TD09</b>																								
CBA-BPC40U.10	BP - Excavation	10-Dec-22	17-Dec-22	17	20-Jul-22 A	09-Aug-22 A																		
CBA-BPC40U.20	BP - RCD Drilling	19-Dec-22	06-Jan-23	1	10-Aug-22 A	11-Aug-22 A																		
CBA-BPC40U.30	BP - Airlift, Cage Install and Concrete	07-Jan-23	13-Jan-23	5	12-Aug-22 A	18-Aug-22 A																		
CBA-BPC40V.10	BP - Excavation	04-Feb-23	11-Feb-23	21	30-Aug-22 A	24-Sep-22 A																		
CBA-BPC40V.20	BP - RCD Drilling	13-Feb-23	28-Feb-23	0	26-Sep-22 A	26-Sep-22 A																		
CBA-BPC40V.30	BP - Airlift, Cage Install and Concrete	01-Mar-23	07-Mar-23	3	27-Sep-22 A	30-Sep-22 A																		
CBA-BPC40T.10	BP - Excavation	16-Jan-23	25-Jan-23	20	24-Sep-22 A	20-Oct-22 A																		
CBA-BPC40T.20	BP - RCD Drilling	26-Jan-23	11-Feb-23	0	21-Oct-22 A	21-Oct-22 A																		
CBA-BPC40T.30	BP - Airlift, Cage Install and Concrete	13-Feb-23	18-Feb-23	5	22-Oct-22 A	28-Oct-22 A																		
CBA-BPC40Wa.:	BP - Excavation	29-Dec-22	06-Jan-23	24	06-Oct-22 A	03-Nov-22 A																		
CBA-BPC40Wa.:	BP - RCD Drilling	07-Jan-23	25-Jan-23	0	04-Nov-22 A	04-Nov-22 A																		

	Planned		Planned MS
	Critical		Critical MS
	Actual		Actual MS

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								17			18				19				20				21	
								12	19	26	03	10	17	24	31	07	14	21	28	04	11	18	25	04
CBA-BPC40Wa.1	BP - Airlift, Cage Install and Concrete	26-Jan-23	02-Feb-23	5	05-Nov-22 A	11-Nov-22 A																		
<b>14</b>																								
CBA-BPC40Sa.1	BP - Excavation	24-Nov-22	01-Dec-22	13	09-Nov-22 A	24-Nov-22 A																		
CBA-BPC40Sa.2	BP - RCD Drilling	02-Dec-22	17-Dec-22	1	25-Nov-22 A	26-Nov-22 A																		
CBA-BPC40Sa.3	BP - Airlift, Cage Install and Concrete	19-Dec-22	24-Dec-22	2	01-Dec-22 A	03-Dec-22 A																		
<b>TD07</b>																								
<b>10</b>																								
P18-BP15.20	BP IAR-S - RCD Drilling	09-Jun-22	25-Jun-22	12	27-Oct-22 A	10-Nov-22 A																		
P18-BP15.30	BP IAR-S - Airlift, Cage Install and Concrete	27-Jun-22	05-Jul-22	9	11-Nov-22 A	22-Nov-22 A																		
<b>15</b>																								
P18-BP18.10	BP IAR-S (Optional Item no.3) - Excavation	28-Apr-22	05-May-22	18	26-Nov-22 A	16-Dec-22	-121																	
<b>TD06</b>																								
<b>15</b>																								
P18-BP25.30	BP - Airlift, Cage Install and Concrete	02-Nov-22	10-Nov-22	8	27-Apr-23	06-May-23	-47																	
<b>16</b>																								
P18-BP32.20	BP - RCD Drilling	02-Nov-22	23-Nov-22	19	31-Mar-23	26-Apr-23	-47																	
P18-BP32.30	BP - Airlift, Cage Install and Concrete	24-Nov-22	02-Dec-22	8	27-Apr-23	06-May-23	-47																	
<b>18</b>																								
P18-BP27.10	BP - Excavation	18-May-22	24-May-22	18	16-Nov-22 A	07-Dec-22 A																		
P18-BP27.20	BP - RCD Drilling	25-May-22	11-Jun-22	38	08-Dec-22 A	26-Jan-23	-13																	
<b>20</b>																								
P18-BP35.10	BP - Excavation	28-Jun-22	05-Jul-22	19	27-Oct-22 A	18-Nov-22 A																		
P18-BP35.20	BP - RCD Drilling	06-Jul-22	22-Jul-22	33	19-Nov-22 A	29-Dec-22	27																	
<b>TD05</b>																								
<b>17</b>																								
P18-BP47.20	BP - RCD Drilling	04-Jul-22	20-Jul-22	6	07-Nov-22 A	14-Nov-22 A																		
P18-BP47.30	BP - Airlift, Cage Install and Concrete	21-Jul-22	28-Jul-22	9	15-Nov-22 A	25-Nov-22 A																		
<b>20</b>																								
P18-BP59.10	BP - Excavation	27-Aug-22	02-Sep-22	15	07-Nov-22 A	24-Nov-22 A																		
P18-BP59.20	BP - RCD Drilling	03-Sep-22	26-Sep-22	7	25-Nov-22 A	03-Dec-22 A																		
P18-BP59.30	BP - Airlift, Cage Install and Concrete	27-Sep-22	07-Oct-22	13	05-Dec-22 A	19-Dec-22	61																	
<b>TD04</b>																								
<b>09</b>																								
P23-BP95.10	BP - Excavation	17-May-22	23-May-22	76	07-Dec-22 A	11-Mar-23	-41																	
<b>15</b>																								
P23-BP96.10	BP - Excavation	28-May-22	04-Jun-22	14	29-Oct-22 A	15-Nov-22 A																		
P23-BP96.20	BP - RCD Drilling	06-Jun-22	09-Jul-22	7	16-Nov-22 A	24-Nov-22 A																		
P23-BP96.30	BP - Airlift, Cage Install and Concrete	11-Jul-22	19-Jul-22	8	25-Nov-22 A	05-Dec-22 A																		
<b>TD03</b>																								
<b>12</b>																								
P23-BP56.20	BP - RCD Drilling	07-Nov-22	09-Dec-22	16	23-Jul-22 A	11-Aug-22 A																		
P23-BP56.30	BP - Airlift, Cage Install and Concrete	10-Dec-22	19-Dec-22	8	12-Aug-22 A	22-Aug-22 A																		
<b>18</b>																								
P23-BP65.30	BP - Airlift, Cage Install and Concrete	07-Nov-22	15-Nov-22	8	24-May-23	02-Jun-23	-69																	
<b>19</b>																								
P23-BP102.10	BP - Excavation	22-Aug-22	27-Aug-22	17	19-Nov-22 A	09-Dec-22 A																		
P23-BP102.20	BP - RCD Drilling	29-Aug-22	20-Sep-22	63	10-Dec-22 A	28-Feb-23	-21																	
<b>19</b>																								
P23-BP89.10	BP - Excavation	14-Sep-22	20-Sep-22	15	14-Nov-22 A	01-Dec-22 A																		
P23-BP89.20	BP - RCD Drilling	21-Sep-22	14-Oct-22	6	02-Dec-22 A	09-Dec-22 A																		
P23-BP89.30	BP - Airlift, Cage Install and Concrete	15-Oct-22	24-Oct-22	8	10-Dec-22 A	19-Dec-22	61																	

Activity ID	Activity Name	Baseline Start	Baseline Finish	Dur	Forecast / Actual Start	Forecast / Actual Finsih	Total Float	November			December				January				February				March			
								17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	01	02	03	04
								12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30

20							
P23-BP66.30	BP - Airlift, Cage Install and Concrete	07-Nov-22	15-Nov-22	8	23-Mar-23	31-Mar-23	-21
TD02							
P23-BP70.10	BP - Excavation	30-Nov-22	06-Dec-22	20	19-Mar-22 A	13-Apr-22 A	
P23-BP70.20	BP - RCD Drilling	07-Dec-22	12-Jan-23	8	14-Apr-22 A	27-Apr-22 A	
P23-BP70.30	BP - Airlift, Cage Install and Concrete	13-Jan-23	21-Jan-23	7	28-Apr-22 A	07-May-22 A	
P23-BP72.20	BP - RCD Drilling	12-Oct-22	14-Nov-22	11	08-Jun-22 A	21-Jun-22 A	
P23-BP72.30	BP - Airlift, Cage Install and Concrete	15-Nov-22	23-Nov-22	12	22-Jun-22 A	07-Jul-22 A	
P23-BP104.10	BP - Excavation	08-Nov-22	14-Nov-22	32	15-Aug-22 A	22-Sep-22 A	
P23-BP104.20	BP - RCD Drilling	15-Nov-22	06-Dec-22	6	23-Sep-22 A	30-Sep-22 A	
P23-BP104.30	BP - Airlift, Cage Install and Concrete	07-Dec-22	15-Dec-22	9	03-Oct-22 A	14-Oct-22 A	
P23-BP111.30	BP - Airlift, Cage Install and Concrete	29-Apr-22	10-May-22	9	02-Nov-22 A	12-Nov-22 A	
P23-BP105.30	BP - Airlift, Cage Install and Concrete	22-Jul-22	30-Jul-22	12	03-Nov-22 A	17-Nov-22 A	
04							
P23-BP83.10	BP - Excavation	08-Apr-22	14-Apr-22	14	01-Dec-22 A	16-Dec-22	-51
09							
P23-BP69.10	BP - Excavation	09-Sep-22	16-Sep-22	23	15-Oct-22 A	11-Nov-22 A	
P23-BP69.20	BP - RCD Drilling	17-Sep-22	09-Nov-22	5	12-Nov-22 A	18-Nov-22 A	
P23-BP69.30	BP - Airlift, Cage Install and Concrete	10-Nov-22	19-Nov-22	9	19-Nov-22 A	30-Nov-22 A	
13							
P23-BP92.20	BP - RCD Drilling	29-Apr-22	04-Jun-22	22	08-Nov-22 A	03-Dec-22 A	
P23-BP92.30	BP - Airlift, Cage Install and Concrete	06-Jun-22	14-Jun-22	13	05-Dec-22 A	19-Dec-22	61

**Pile Test**

**KD05 (Section 1) (incl. BP for KD01 (Stage1-1))**

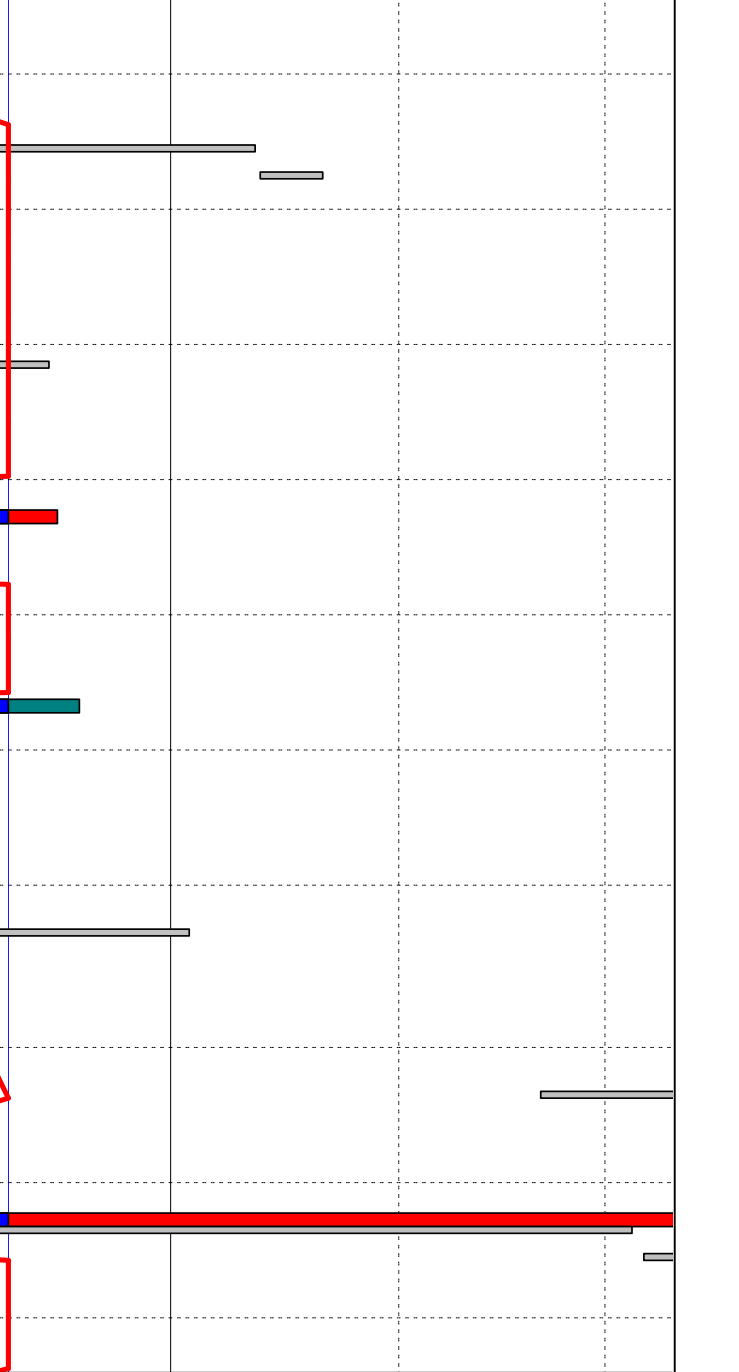
BP							
KD05.TS.1040	Selection of Full Core by BD	27-Oct-22	11-Nov-22	14	16-May-23	01-Jun-23	-161
KD05.TS.1060	Full Core to Proof Drill	12-Nov-22	28-Nov-22	14	02-Jun-23	17-Jun-23	-161
KD05.TS.1080	Obtain BA14 Acknowledgement / Satisfaction of CA, Completion As-built Drawings, Reports & Records	29-Nov-22	03-Jan-23	28	19-Jun-23	22-Jul-23	-161

**KD07 (Section 3) (incl. BP for KD03) (Stage 3-1)**

BP							
KD07.TS.1000	Sonic Logging Test and Interfacing Coring	20-Feb-23	18-Jul-23	120	31-May-23	21-Oct-23	-80

**KD08 (Section 4) (incl. BP for KD04 (Stage 4-1) & SSHP in KD09 (Section 5))**

BP							
KD08.TS.1000	Sonic Logging Test and Interfacing Coring	10-Oct-22	04-Mar-23	292	04-Jul-22 A	27-Jun-23	-91
KD08.TS.1020	Submit BA14	06-Mar-23	13-Mar-23	7	28-Jun-23	06-Jul-23	-91
SSHP							
KD08.TS.1100	Post Construction Proof Drilling (2 Nos.)	24-Oct-22	16-Nov-22	13	31-Oct-22 A	15-Nov-22 A	



Planned	Planned MS
Critical	Critical MS
Actual	Actual MS

		Date	Revision	Checked	Approved
		4-Mar-22	Rev.0	KL	B

Activity ID	Activity Name	Baseline Start	Baseline Finish	Dur	Forecast / Actual Start	Forecast / Actual Finsih	Total Float	November				December				January				February				March			
								17				18				19				20				21			
								12	19	26	03	10	17	24	31	07	14	21	28	04	11	18	25	04			
KD08.TS.1120	Submit BA14	25-Nov-22	02-Dec-22	28	16-Nov-22 A	17-Dec-22	66																				
KD08.TS.1140	Selection of Pile for Static Load Test	03-Dec-22	19-Dec-22	14	19-Dec-22	06-Jan-23	66																				
KD08.TS.1160	Static Load Test of Selected Pile	20-Dec-22	07-Jan-23	14	07-Jan-23	25-Jan-23	66																				
KD08.TS.1180	Obtain BA14 Acknowledgement / Satisfaction of CA, Completion As-built Drawings, Reports & Records	09-Jan-23	13-Feb-23	28	26-Jan-23	28-Feb-23	66																				
<b>Attendance to Other Project Contractors (optional works item no. 2A to 2E)</b>																											
S4.AT.0000	Attendance at Section 4 Area (optional works item no. 2D) (Duration TBC)	22-Feb-23	13-Mar-23	20	22-Feb-23	13-Mar-23	71																				
S5.AT.0040	Attendance at Section 5 Area (optional works item no. 2E) if item No. 3 is instructed (Duration TBC)	22-Feb-23	13-Mar-23	20	22-Feb-23	13-Mar-23	301																				

	Planned		Planned MS
	Critical		Critical MS
	Actual		Actual MS

**West Kowloon Cultural District Authority**  
**Piling for Integrated Basement and U/G Road in Zone 2B 2C**  
**3 Month Rolling Programme as of 9 December 2022**  
 Based on CMWP Rev.0



Date	Revision	Checked	Approved
4-Mar-22	Rev.0	KL	B

Activity ID	Activity Name	Baseline Start	Baseline Finish	Dur	Forecast / Actual Start	Forecast / Actual Finsih	Total Float	December				January				February				March				April
								18				19				20				21				22
								10	17	24	31	07	14	21	28	04	11	18	25	04	11	18	25	01

**Piling for Integrated Basement and U/G Road in Zone 2B & 2C**

**Contract Dates**

**Optional Works subjected to CA's Instruction**

CO1A	Last CAI date for Optional Works Item No.1A (within 560 Days after Commencement)	02-Feb-23		0	02-Feb-23		1
CO1B	Last CAI date for Optional Works Item No.1B (within 560 Days after Commencement)	02-Feb-23		0	02-Feb-23		1
CO2D	Last CAI date for Optional Works Item No.2D (330 Days to 580 Days after Commencement)	22-Feb-23		0	22-Feb-23		71
CO2E	Last CAI date for Optional Works Item No.2E (330 Days to 600 Days after Commencement)	14-Mar-23		0	14-Mar-23		71

**Construction Stage**

**File Construction**

**KD05 (Section 1)**

**Bored Piles**

**CD04**

**02**

P17-BP12.10	BP IAR-N - Excavation	03-Dec-22	09-Dec-22	6	07-Jan-23	13-Jan-23	-107
P17-BP12.20	BP IAR-N - RCD Drilling	10-Dec-22	29-Dec-22	15	14-Jan-23	03-Feb-23	-107
P17-BP12.30	BP IAR-N - Airlift, Cage Install and Concrete	30-Dec-22	07-Jan-23	7	04-Feb-23	11-Feb-23	-92

**03**

P17-BP17.10	BP IAR-N - Excavation	21-Dec-22	29-Dec-22	26	31-Dec-22 A	03-Feb-23	-107
P17-BP17.20	BP IAR-N - RCD Drilling	30-Dec-22	17-Jan-23	15	04-Feb-23	21-Mar-23	-107
P17-BP17.30	BP IAR-N - Airlift, Cage Install and Concrete	18-Jan-23	27-Jan-23	7	22-Feb-23	01-Mar-23	-107

**04**

P17-BP11.10	BP IAR-N - Excavation	11-Jan-23	17-Jan-23	7	02-Dec-22 A	10-Dec-22 A	
P17-BP11.20	BP IAR-N - RCD Drilling	18-Jan-23	07-Feb-23	6	12-Dec-22 A	19-Dec-22 A	
P17-BP11.30	BP IAR-N - Airlift, Cage Install and Concrete	08-Feb-23	15-Feb-23	56	20-Dec-22 A	01-Mar-23	-107

**05**

P17-BP13.10	BP IAR-N - Excavation	03-Feb-23	09-Feb-23	6	03-Feb-23	09-Feb-23	-104
P17-BP13.20	BP IAR-N - RCD Drilling	10-Feb-23	27-Feb-23	15	01-Feb-23	17-Feb-23	-104
P17-BP13.30	BP IAR-N - Airlift, Cage Install and Concrete	28-Feb-23	07-Mar-23	7	18-Feb-23	25-Feb-23	-104

**CD05**

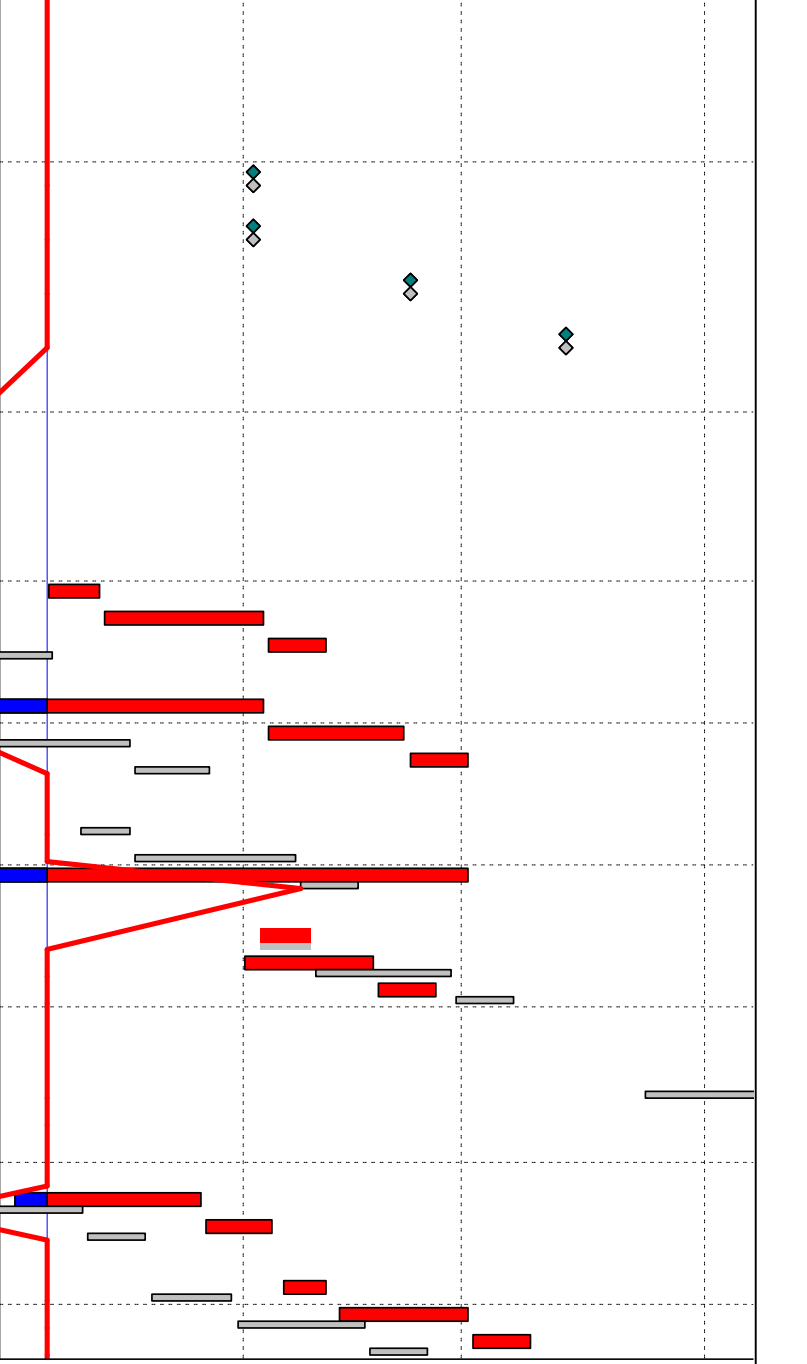
P17-BP06.20	BP - RCD Drilling	24-Mar-23	14-Apr-23	7	30-Nov-22 A	08-Dec-22 A	
P17-BP06.30	BP - Airlift, Cage Install and Concrete	15-Apr-23	22-Apr-23	7	09-Dec-22 A	17-Dec-22 A	

**02**

P17-BP07.10	BP - Excavation	15-Dec-22	21-Dec-22	9	19-Dec-22 A	31-Dec-22 A	
P17-BP07.20	BP - RCD Drilling	22-Dec-22	11-Jan-23	19	03-Jan-23 A	26-Jan-23	-129
P17-BP07.30	BP - Airlift, Cage Install and Concrete	12-Jan-23	19-Jan-23	7	27-Jan-23	04-Feb-23	-129

**03**

P17-BP02.10	BP - Excavation	20-Jan-23	30-Jan-23	6	06-Feb-23	11-Feb-23	-129
P17-BP02.20	BP - RCD Drilling	31-Jan-23	16-Feb-23	15	13-Feb-23	01-Mar-23	-129
P17-BP02.30	BP - Airlift, Cage Install and Concrete	17-Feb-23	24-Feb-23	7	02-Mar-23	09-Mar-23	-114



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 Data Date: 07-Jan-23  
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 Page 1 of 16

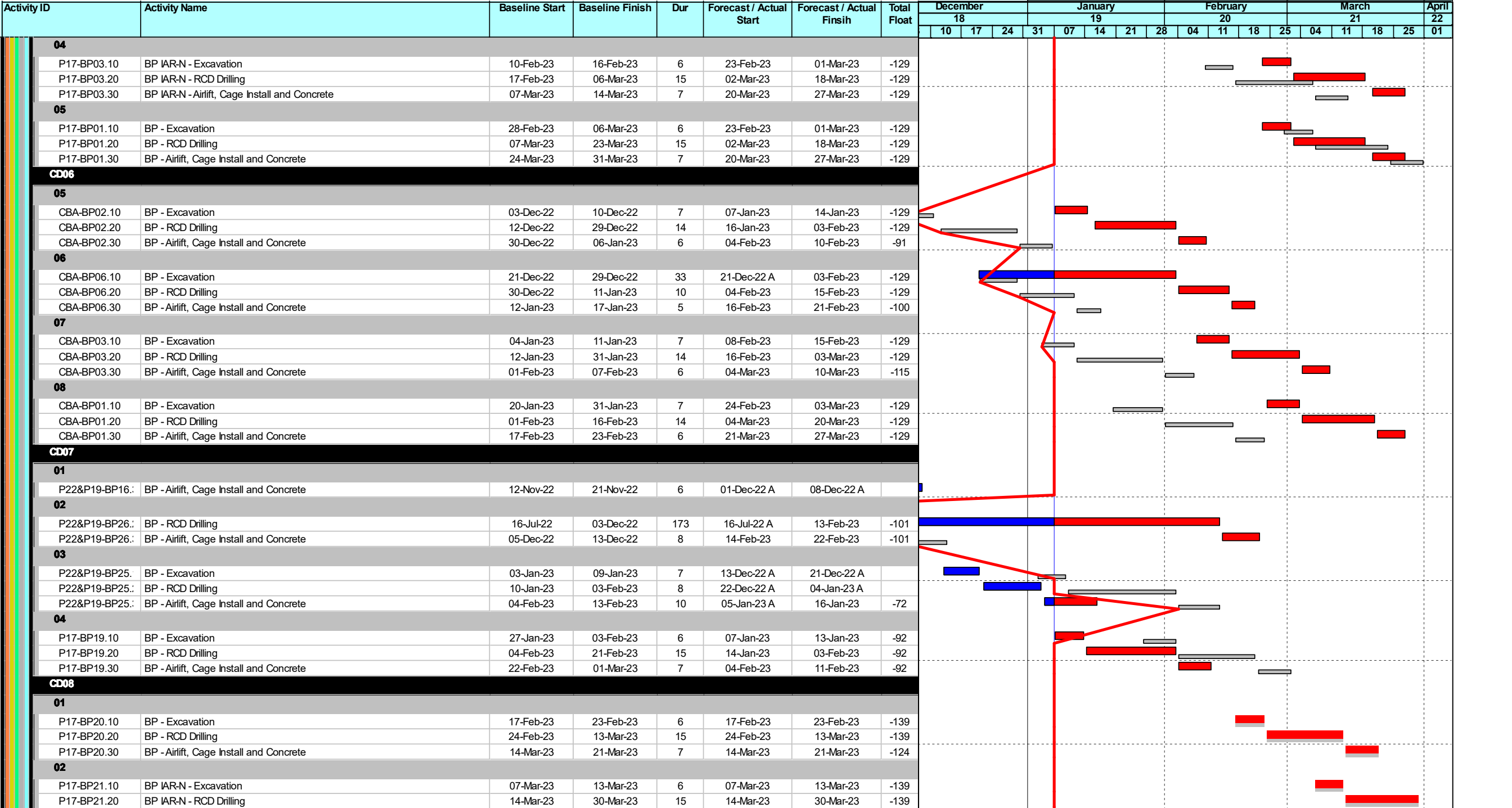
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<span style="color: red;">■</span> Critical	<span style="color: red;">◆</span> Critical MS
<span style="color: blue;">■</span> Actual	<span style="color: blue;">◆</span> Actual MS

**West Kowloon Cultural District Authority**  
**Piling for Integrated Basement and U/G Road in Zone 2B 2C**  
**3 Month Rolling Programme as of 6 January 2023**  
**Based on CMWP Rev.0 (3rd Draft)**



Date	Revision	Checked	Approved
4-Mar-22	R0	KL	B
02-Dec-22	R03D	KL	C

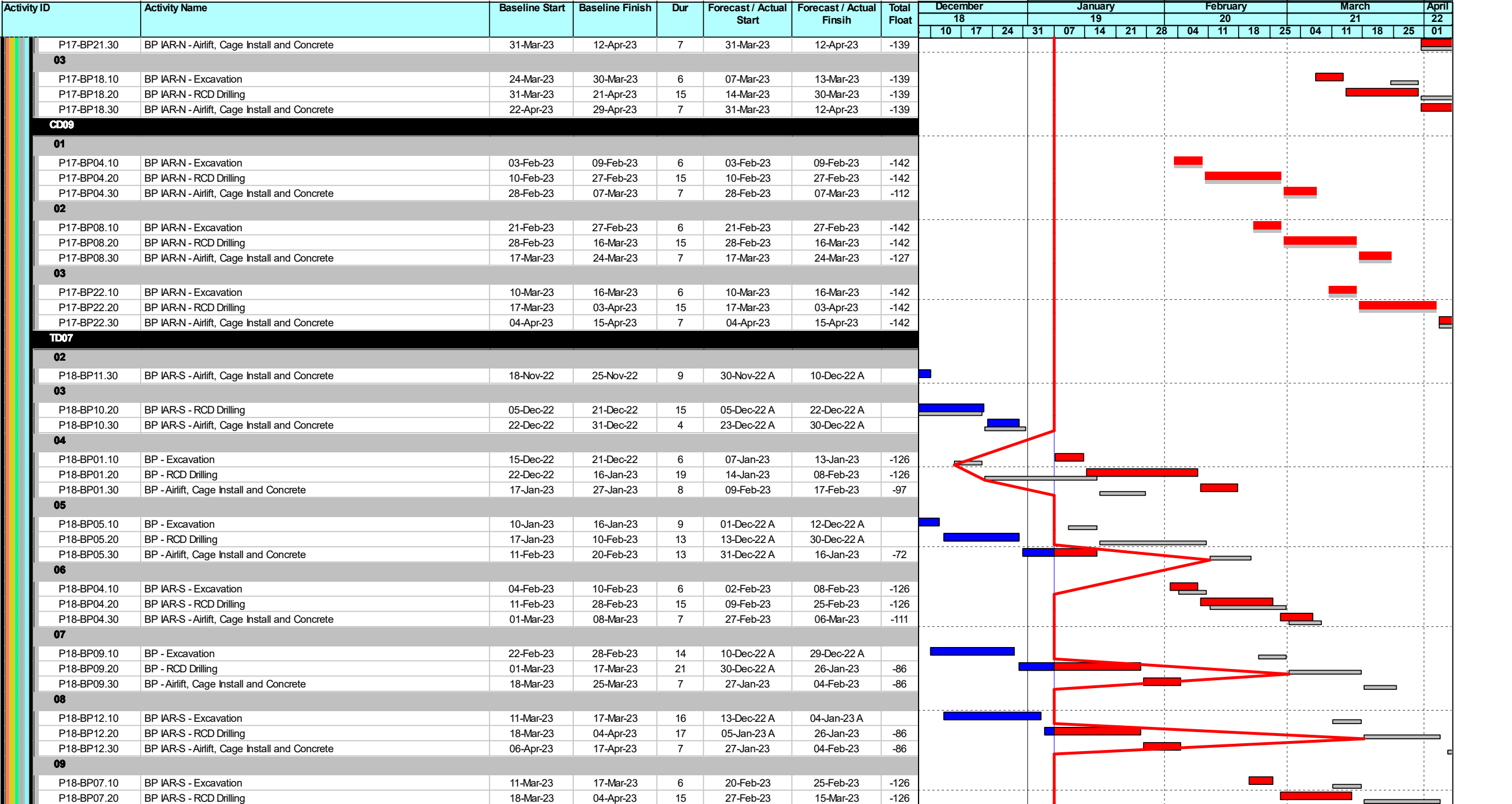




	Planned		Planned MS
	Critical		Critical MS
	Actual		Actual MS

**West Kowloon Cultural District Authority**  
**Piling for Integrated Basement and U/G Road in Zone 2B 2C**  
**3 Month Rolling Programme as of 6 January 2023**  
 Based on CMWP Rev.0 (3rd Draft)

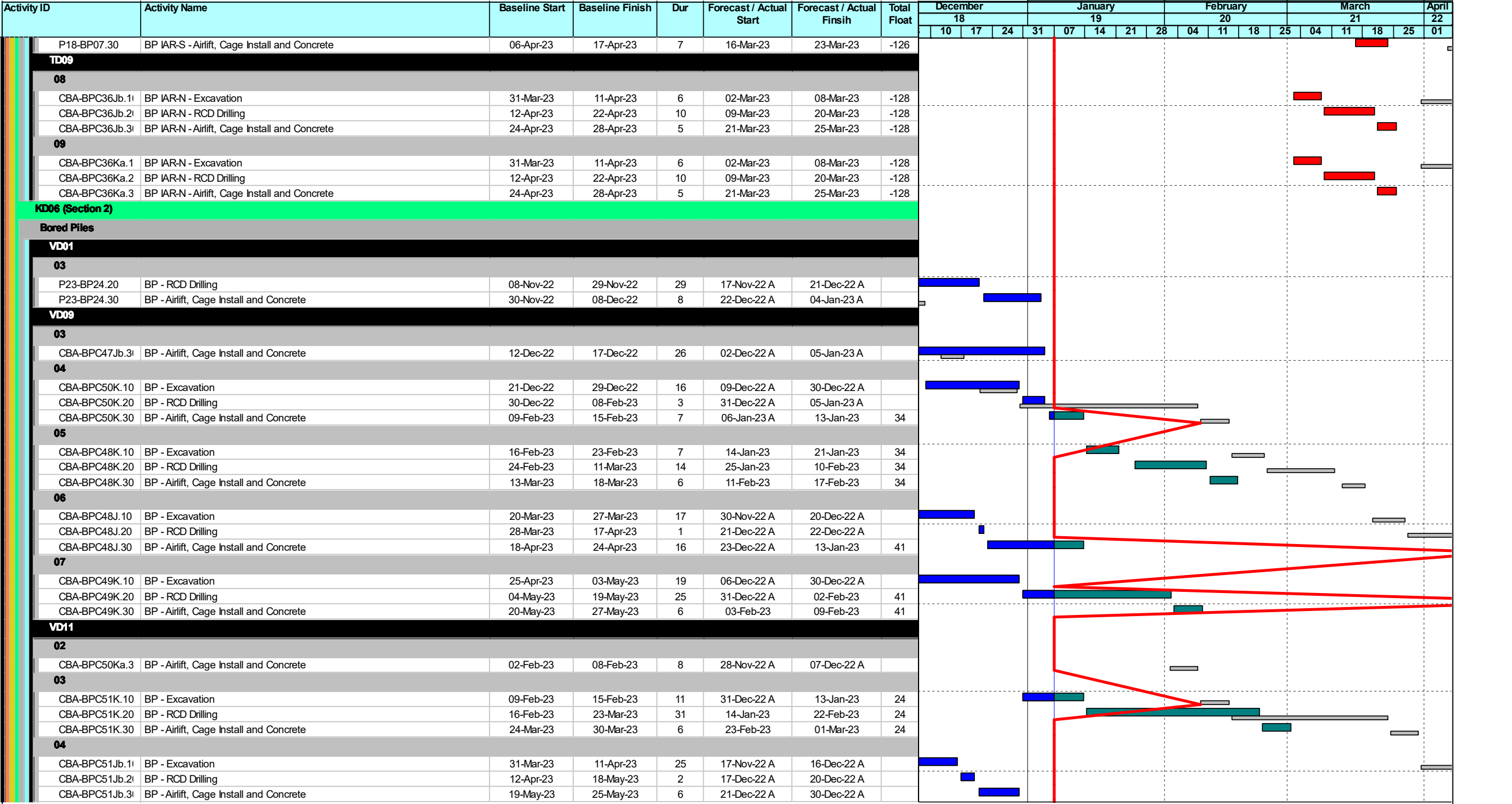
	Date	Revision	Checked	Approved
	4-Mar-22	R0	KL	B
	02-Dec-22	R03D	KL	C



	Planned		Planned MS
	Critical		Critical MS
	Actual		Actual MS

**West Kowloon Cultural District Authority**  
**Piling for Integrated Basement and U/G Road in Zone 2B 2C**  
**3 Month Rolling Programme as of 6 January 2023**  
**Based on CMWP Rev.0 (3rd Draft)**

	Date	Revision	Checked	Approved
	4-Mar-22	R0	KL	B
	02-Dec-22	R03D	KL	C



	Planned		Planned MS
	Critical		Critical MS
	Actual		Actual MS

**West Kowloon Cultural District Authority**  
**Piling for Integrated Basement and U/G Road in Zone 2B 2C**  
**3 Month Rolling Programme as of 6 January 2023**  
**Based on CMWP Rev.0 (3rd Draft)**



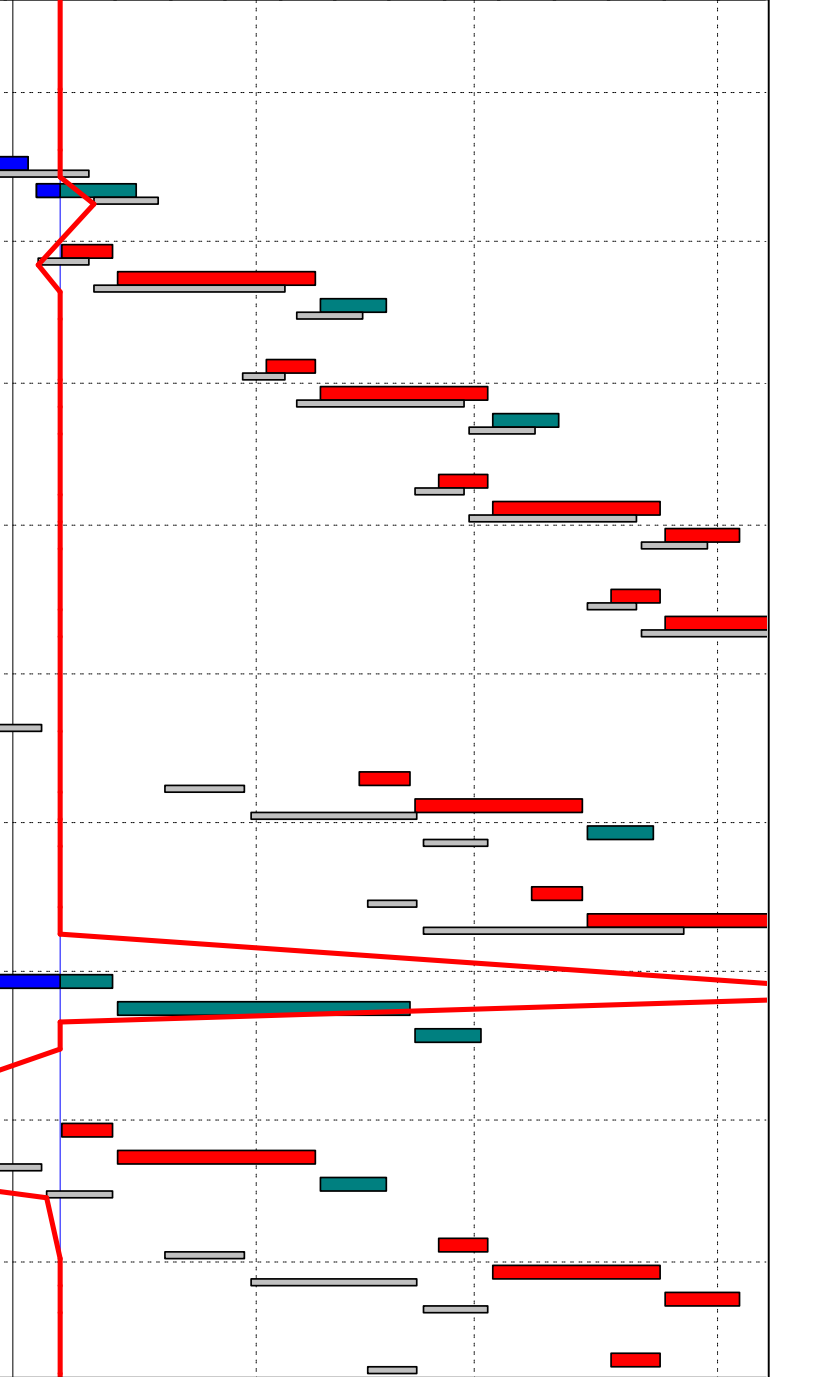
Date	Revision	Checked	Approved
4-Mar-22	R0	KL	B
02-Dec-22	R03D	KL	C

Activity ID	Activity Name	Baseline Start	Baseline Finish	Dur	Forecast / Actual Start	Forecast / Actual Finsih	Total Float	December				January				February				March				April
								18				19				20				21				22
								10	17	24	31	07	14	21	28	04	11	18	25	04	11	18	25	01

VD14							
02							
P24&P27-BP38.:	BP - Airlift, Cage Install and Concrete	18-Nov-22	26-Nov-22	11	07-Dec-22 A	20-Dec-22 A	
03							
P24&P27-BP23.:	BP - Excavation	09-Dec-22	15-Dec-22	13	03-Dec-22 A	19-Dec-22 A	
P24&P27-BP23.:	BP - RCD Drilling	16-Dec-22	10-Jan-23	9	20-Dec-22 A	03-Jan-23 A	
P24&P27-BP23.:	BP - Airlift, Cage Install and Concrete	11-Jan-23	19-Jan-23	11	04-Jan-23 A	16-Jan-23	59
04							
P24&P27-BP33.:	BP - Excavation	04-Jan-23	10-Jan-23	6	07-Jan-23	13-Jan-23	-61
P24&P27-BP33.:	BP - RCD Drilling	11-Jan-23	04-Feb-23	19	14-Jan-23	08-Feb-23	-61
P24&P27-BP33.:	BP - Airlift, Cage Install and Concrete	06-Feb-23	14-Feb-23	8	09-Feb-23	17-Feb-23	34
05							
P24&P27-BP15.:	BP - Excavation	30-Jan-23	04-Feb-23	6	02-Feb-23	08-Feb-23	-61
P24&P27-BP15.:	BP - RCD Drilling	06-Feb-23	27-Feb-23	19	09-Feb-23	02-Mar-23	-61
P24&P27-BP15.:	BP - Airlift, Cage Install and Concrete	28-Feb-23	08-Mar-23	8	03-Mar-23	11-Mar-23	15
06							
P24&P27-BP22.:	BP - Excavation	21-Feb-23	27-Feb-23	6	24-Feb-23	02-Mar-23	-61
P24&P27-BP22.:	BP - RCD Drilling	28-Feb-23	21-Mar-23	19	03-Mar-23	24-Mar-23	-61
P24&P27-BP22.:	BP - Airlift, Cage Install and Concrete	22-Mar-23	30-Mar-23	8	25-Mar-23	03-Apr-23	-4
07							
P24&P27-BP16.:	BP - Excavation	15-Mar-23	21-Mar-23	6	18-Mar-23	24-Mar-23	-61
P24&P27-BP16.:	BP - RCD Drilling	22-Mar-23	17-Apr-23	19	25-Mar-23	20-Apr-23	-61

VD15							
03							
P24&P27-BP05.:	BP - Airlift, Cage Install and Concrete	23-Dec-22	04-Jan-23	10	03-Dec-22 A	15-Dec-22 A	
05							
P24&P27-BP29.:	BP - Excavation	20-Jan-23	30-Jan-23	6	14-Feb-23	20-Feb-23	-53
P24&P27-BP29.:	BP - RCD Drilling	31-Jan-23	21-Feb-23	19	21-Feb-23	14-Mar-23	-53
P24&P27-BP29.:	BP - Airlift, Cage Install and Concrete	22-Feb-23	02-Mar-23	8	15-Mar-23	23-Mar-23	5
06							
P24&P27-BP03.:	BP - Excavation	15-Feb-23	21-Feb-23	6	08-Mar-23	14-Mar-23	-53
P24&P27-BP03.:	BP - RCD Drilling	22-Feb-23	27-Mar-23	29	15-Mar-23	21-Apr-23	-53
08							
P24&P27-BP04.:	BP - Excavation	28-Apr-23	05-May-23	22	16-Dec-22 A	13-Jan-23	24
P24&P27-BP04.:	BP - RCD Drilling	06-May-23	09-Jun-23	29	14-Jan-23	20-Feb-23	24
P24&P27-BP04.:	BP - Airlift, Cage Install and Concrete	10-Jun-23	19-Jun-23	8	21-Feb-23	01-Mar-23	24

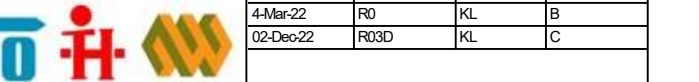
CD01							
02							
P23-BP14.10	BP - Excavation	03-Dec-22	09-Dec-22	6	07-Jan-23	13-Jan-23	-73
P23-BP14.20	BP - RCD Drilling	10-Dec-22	04-Jan-23	19	14-Jan-23	08-Feb-23	-73
P23-BP14.30	BP - Airlift, Cage Install and Concrete	05-Jan-23	13-Jan-23	8	09-Feb-23	17-Feb-23	34
04							
P23-BP09.10	BP - Excavation	20-Jan-23	30-Jan-23	6	24-Feb-23	02-Mar-23	-73
P23-BP09.20	BP - RCD Drilling	31-Jan-23	21-Feb-23	19	03-Mar-23	24-Mar-23	-73
P23-BP09.30	BP - Airlift, Cage Install and Concrete	22-Feb-23	02-Mar-23	8	25-Mar-23	03-Apr-23	-4
05							
P23-BP26.10	BP - Excavation	15-Feb-23	21-Feb-23	6	18-Mar-23	24-Mar-23	-73

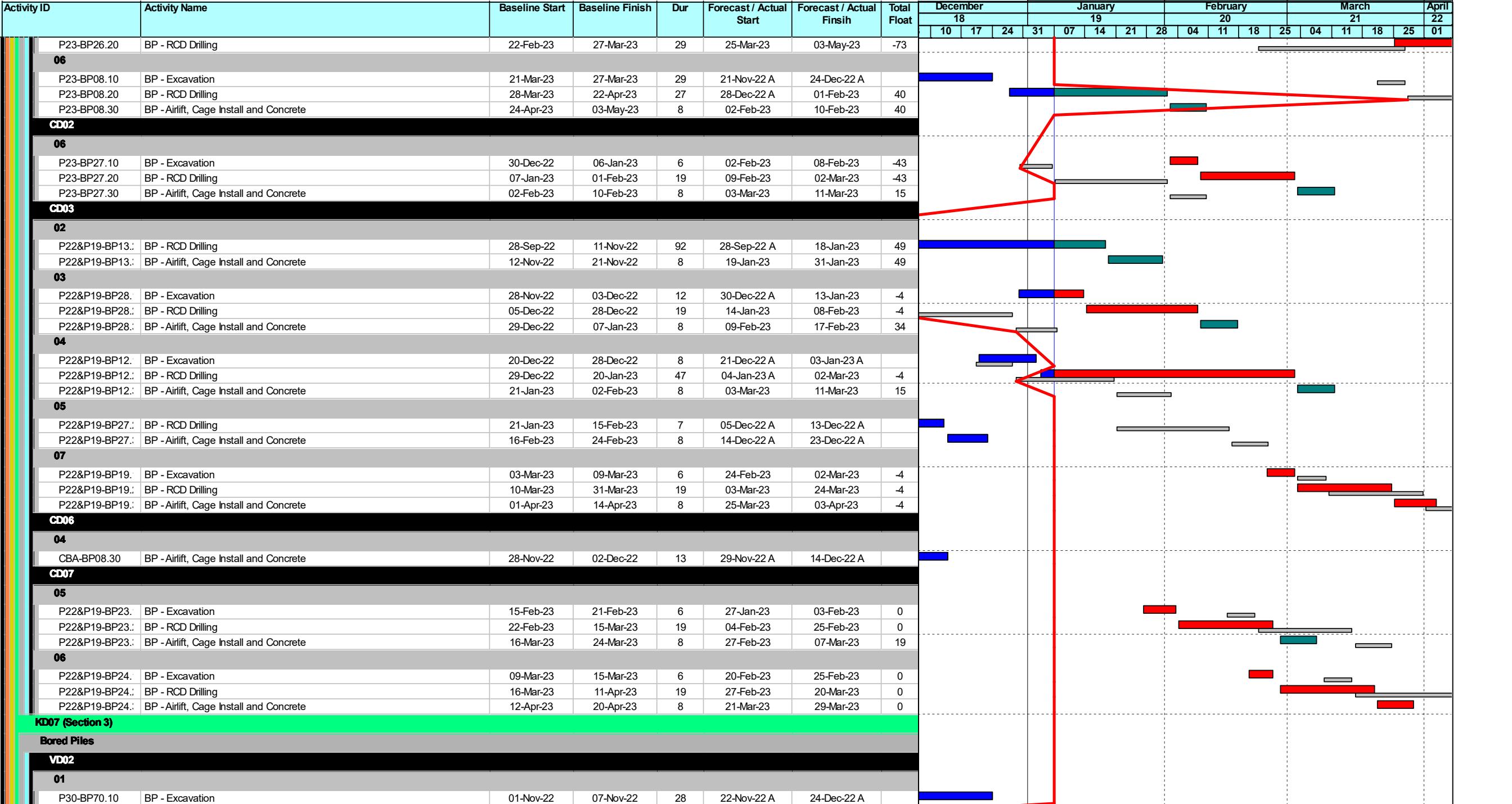


	Planned		Planned MS
	Critical		Critical MS
	Actual		Actual MS

**West Kowloon Cultural District Authority**  
**Piling for Integrated Basement and U/G Road in Zone 2B 2C**  
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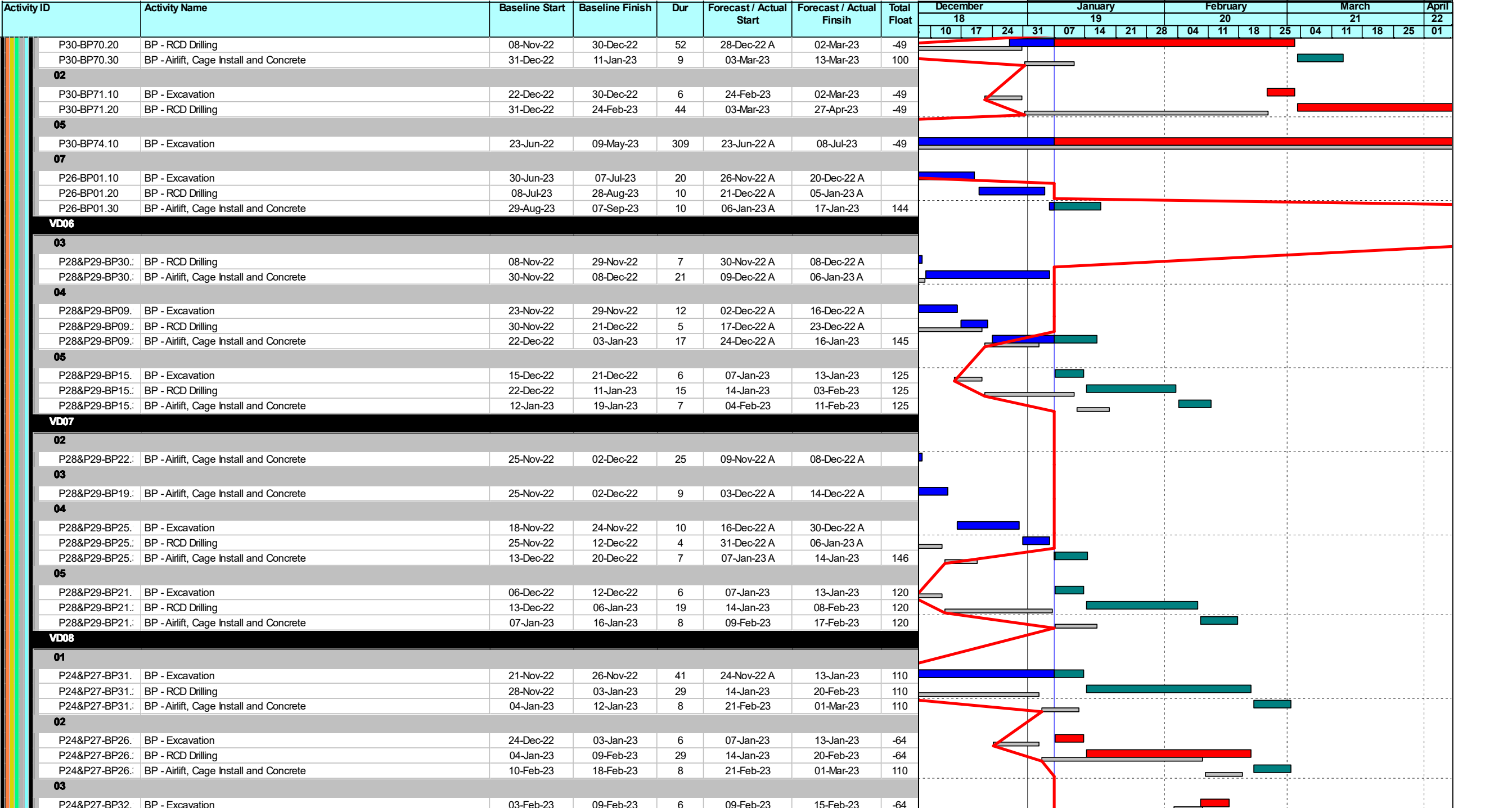
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 Data Date: 07-Jan-23  
 Print Date: 11-Jan-23\_10:49  
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- Planned ◆ Planned MS
- Critical ◆ Critical MS
- Actual ◆ Actual MS

**West Kowloon Cultural District Authority**  
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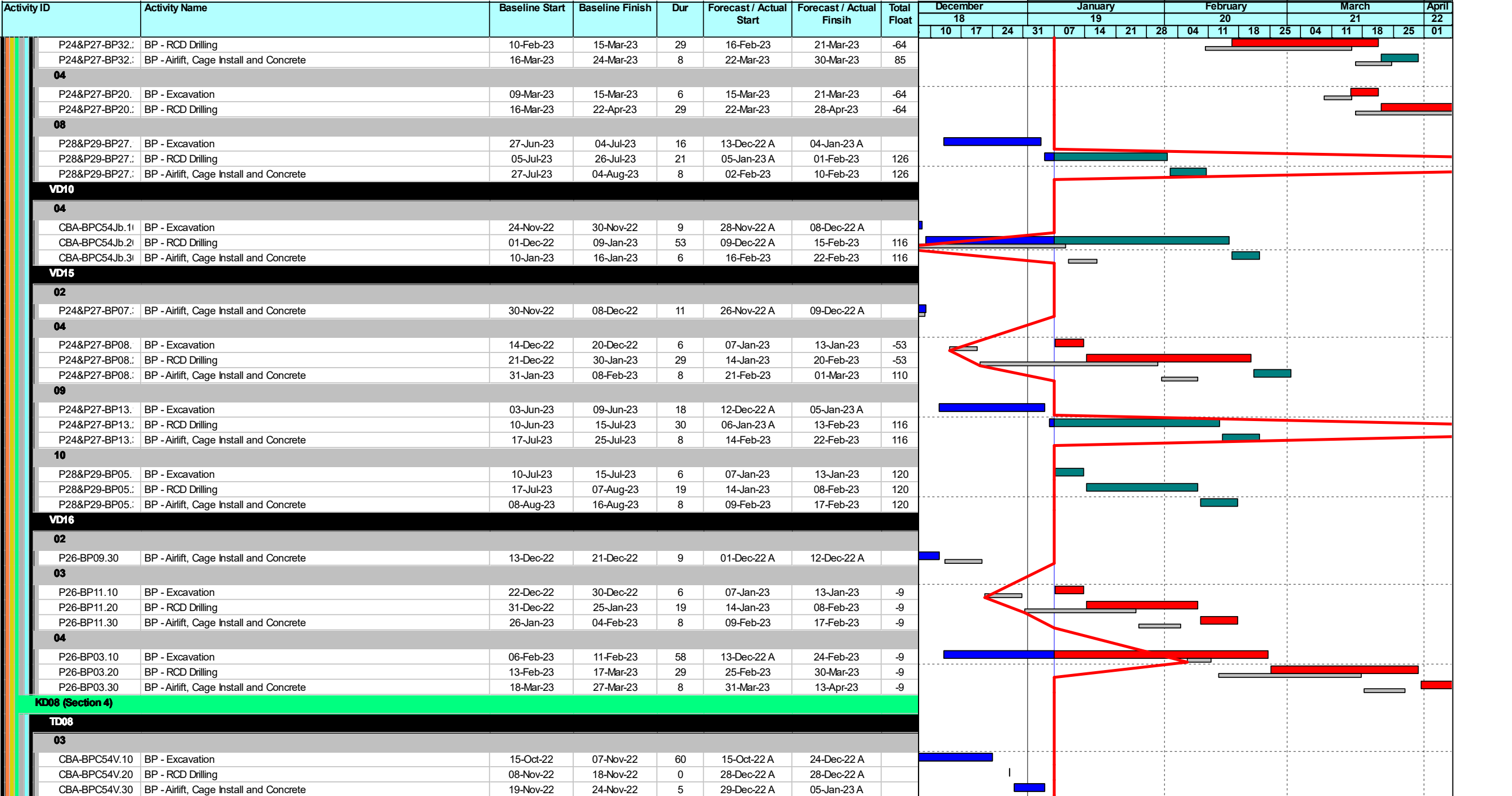


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	Critical		Critical MS
	Actual		Actual MS

**West Kowloon Cultural District Authority**  
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	Planned		Planned MS
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	Actual		Actual MS

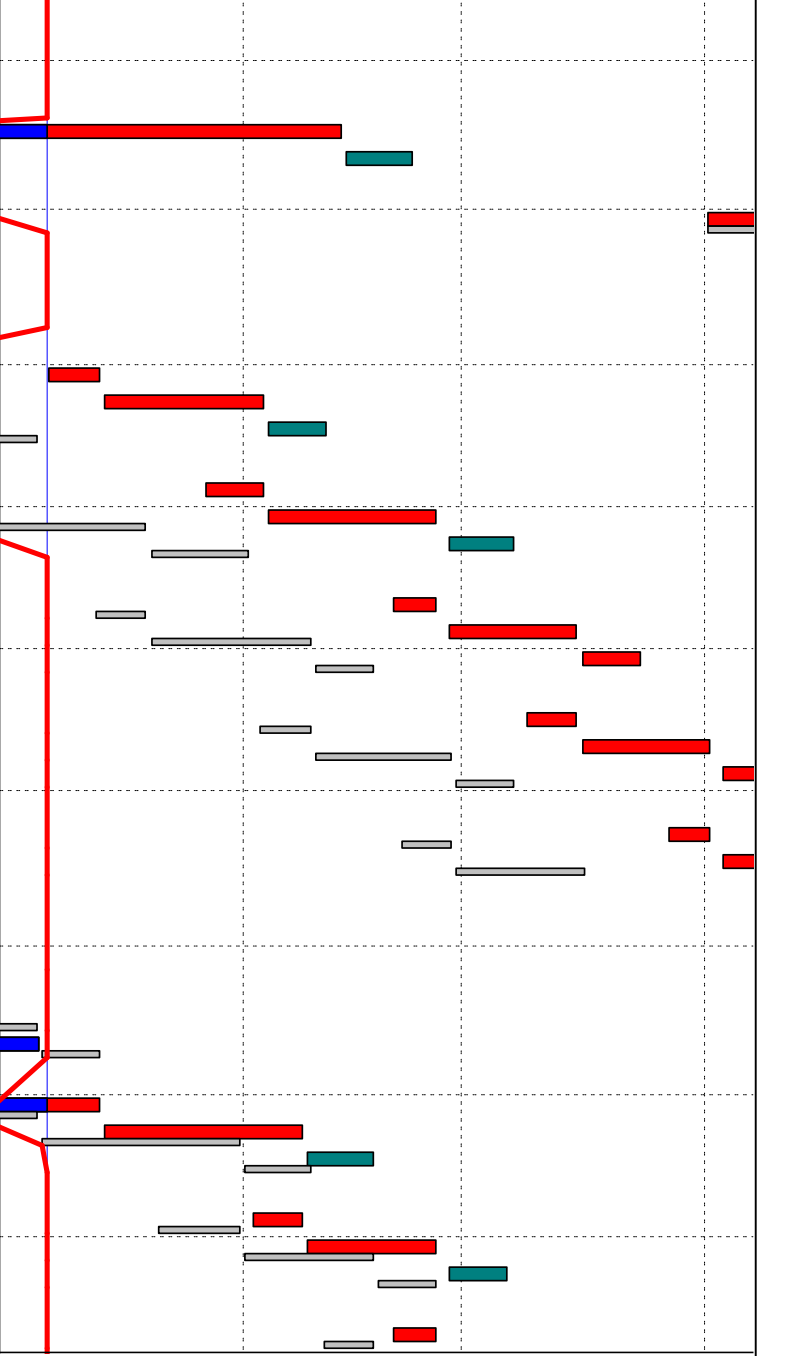
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Activity ID	Activity Name	Baseline Start	Baseline Finish	Dur	Forecast / Actual Start	Forecast / Actual Finsih	Total Float	December 18				January 19				February 20				March 21				April 22
								10	17	24	31	07	14	21	28	04	11	18	25	04	11	18	25	01

Bored Piles							
VD01							
04							
P26-BP12.10	BP - Excavation	01-Nov-22	07-Nov-22	37	04-Nov-22 A	17-Dec-22 A	
P26-BP12.20	BP - RCD Drilling	08-Nov-22	10-Dec-22	43	19-Dec-22 A	13-Feb-23	-25
P26-BP12.30	BP - Airlift, Cage Install and Concrete	12-Dec-22	20-Dec-22	8	14-Feb-23	22-Feb-23	13
06							
P26-BP14.10	BP - Excavation	01-Apr-23	12-Apr-23	6	01-Apr-23	12-Apr-23	-52
VD03							
01							
P30-BP62.30	BP - Airlift, Cage Install and Concrete	25-Nov-22	02-Dec-22	11	30-Nov-22 A	13-Dec-22 A	
02							
P30-BP34.10	BP - Excavation	01-Dec-22	07-Dec-22	6	07-Jan-23	13-Jan-23	-62
P30-BP34.20	BP - RCD Drilling	08-Dec-22	24-Dec-22	15	14-Jan-23	03-Feb-23	-62
P30-BP34.30	BP - Airlift, Cage Install and Concrete	28-Dec-22	05-Jan-23	7	04-Feb-23	11-Feb-23	22
03							
P30-BP52.10	BP - Excavation	19-Dec-22	24-Dec-22	6	27-Jan-23	03-Feb-23	-62
P30-BP52.20	BP - RCD Drilling	28-Dec-22	19-Jan-23	19	04-Feb-23	25-Feb-23	-62
P30-BP52.30	BP - Airlift, Cage Install and Concrete	20-Jan-23	01-Feb-23	8	27-Feb-23	07-Mar-23	2
04							
P30-BP46.10	BP - Excavation	13-Jan-23	19-Jan-23	6	20-Feb-23	25-Feb-23	-62
P30-BP46.20	BP - RCD Drilling	20-Jan-23	09-Feb-23	15	27-Feb-23	15-Mar-23	-62
P30-BP46.30	BP - Airlift, Cage Install and Concrete	10-Feb-23	17-Feb-23	7	16-Mar-23	23-Mar-23	-12
05							
P30-BP47.10	BP - Excavation	03-Feb-23	09-Feb-23	6	09-Mar-23	15-Mar-23	-62
P30-BP47.20	BP - RCD Drilling	10-Feb-23	27-Feb-23	15	16-Mar-23	01-Apr-23	-62
P30-BP47.30	BP - Airlift, Cage Install and Concrete	28-Feb-23	07-Mar-23	7	03-Apr-23	14-Apr-23	-27
06							
P30-BP40.10	BP - Excavation	21-Feb-23	27-Feb-23	6	27-Mar-23	01-Apr-23	-62
P30-BP40.20	BP - RCD Drilling	28-Feb-23	16-Mar-23	15	03-Apr-23	24-Apr-23	-62
VD04							
02							
P30-BP19.30	BP - Airlift, Cage Install and Concrete	12-Dec-22	20-Dec-22	14	07-Dec-22 A	23-Dec-22 A	
03							
P30-BP29.20	BP - RCD Drilling	16-Dec-22	05-Jan-23	16	05-Dec-22 A	23-Dec-22 A	
P30-BP29.30	BP - Airlift, Cage Install and Concrete	06-Jan-23	13-Jan-23	8	24-Dec-22 A	06-Jan-23 A	
04							
P30-BP25.10	BP - Excavation	29-Dec-22	05-Jan-23	15	24-Dec-22 A	13-Jan-23	-61
P30-BP25.20	BP - RCD Drilling	06-Jan-23	31-Jan-23	19	14-Jan-23	08-Feb-23	-61
P30-BP25.30	BP - Airlift, Cage Install and Concrete	01-Feb-23	09-Feb-23	8	09-Feb-23	17-Feb-23	17
05							
P30-BP36.10	BP - Excavation	21-Jan-23	31-Jan-23	6	02-Feb-23	08-Feb-23	-61
P30-BP36.20	BP - RCD Drilling	01-Feb-23	17-Feb-23	15	09-Feb-23	25-Feb-23	-61
P30-BP36.30	BP - Airlift, Cage Install and Concrete	18-Feb-23	25-Feb-23	7	27-Feb-23	06-Mar-23	3
06							
P30-BP31.10	BP - Excavation	11-Feb-23	17-Feb-23	6	20-Feb-23	25-Feb-23	-61



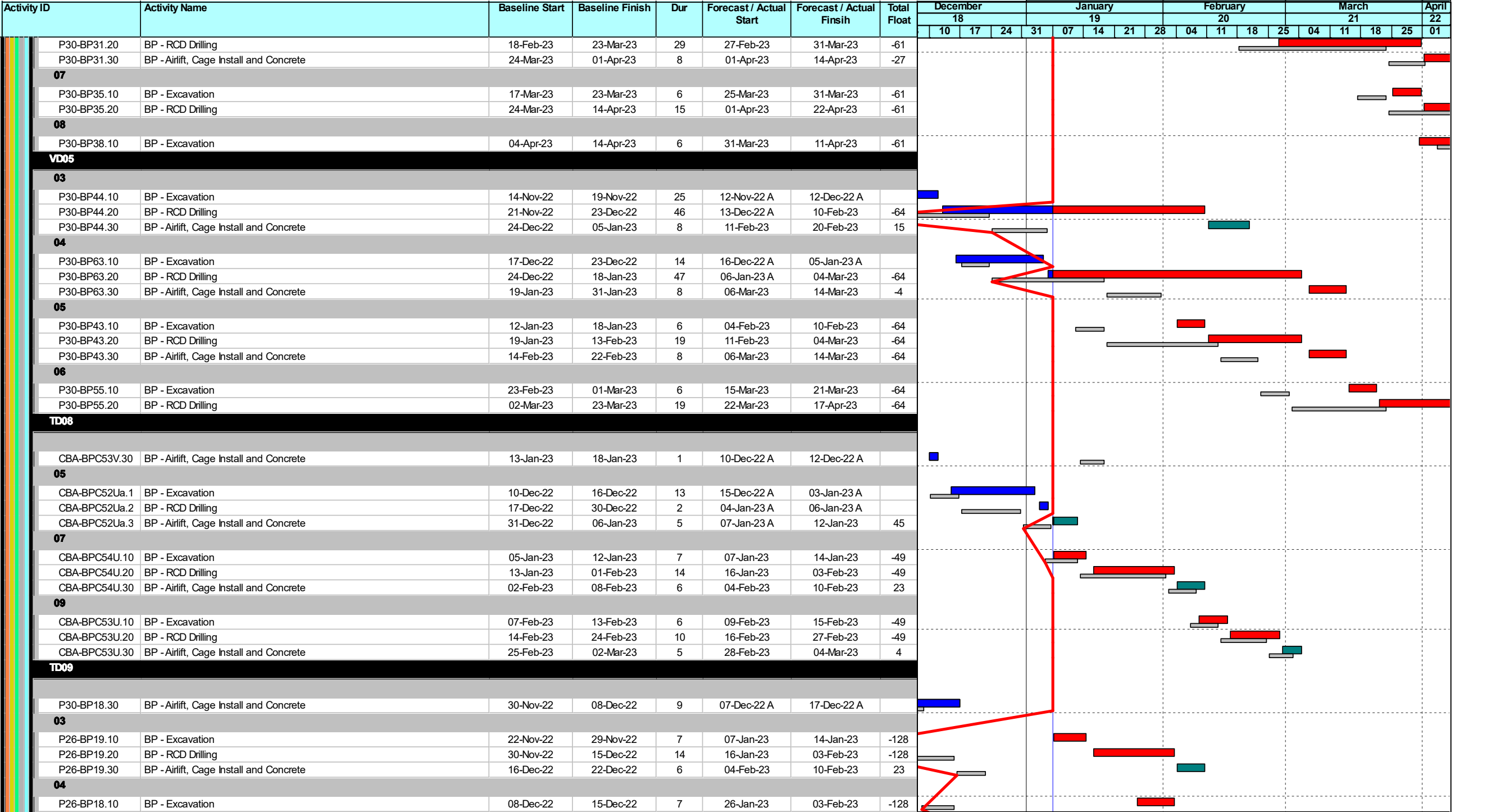
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	Critical		Critical MS
	Actual		Actual MS

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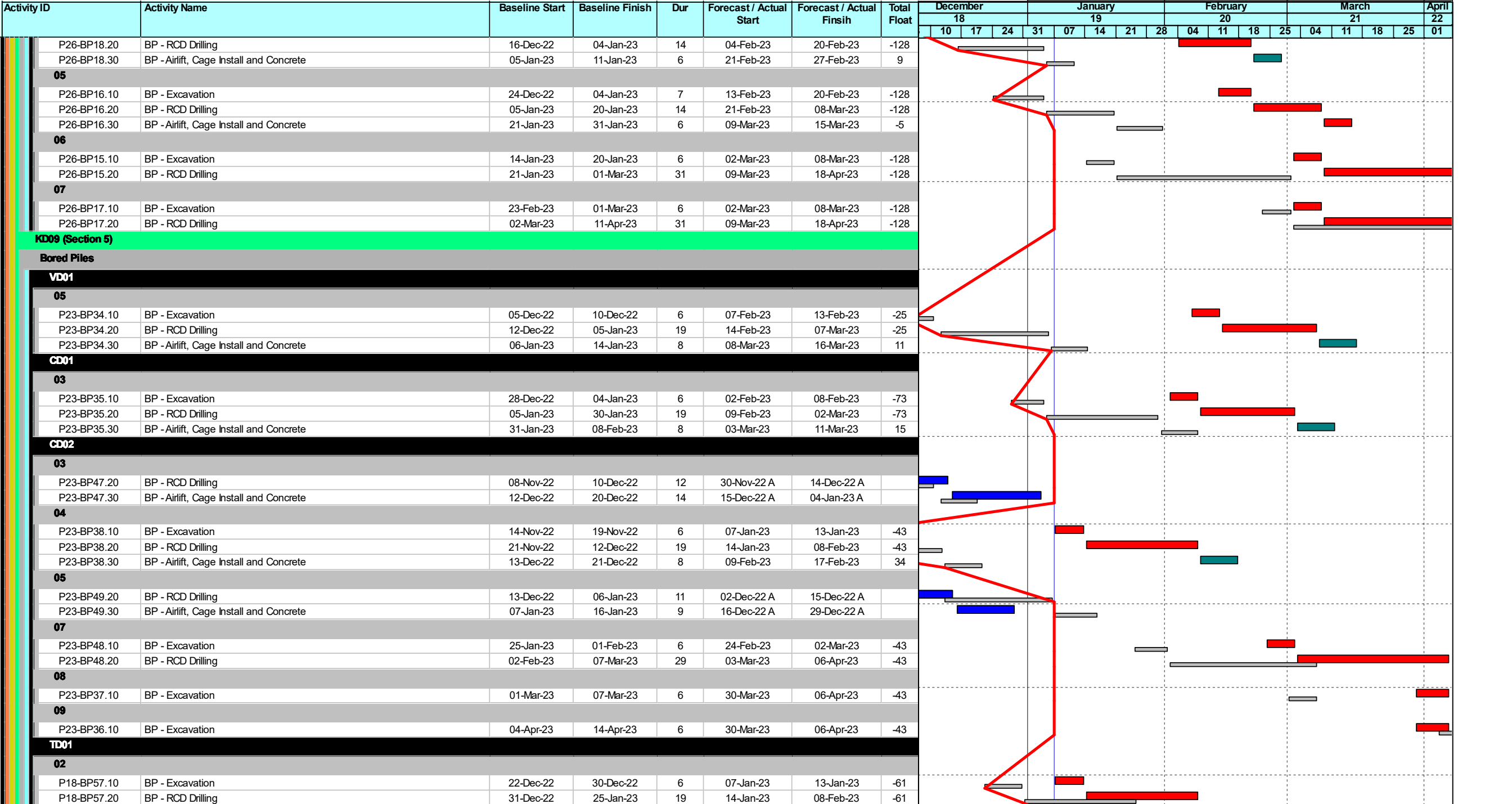




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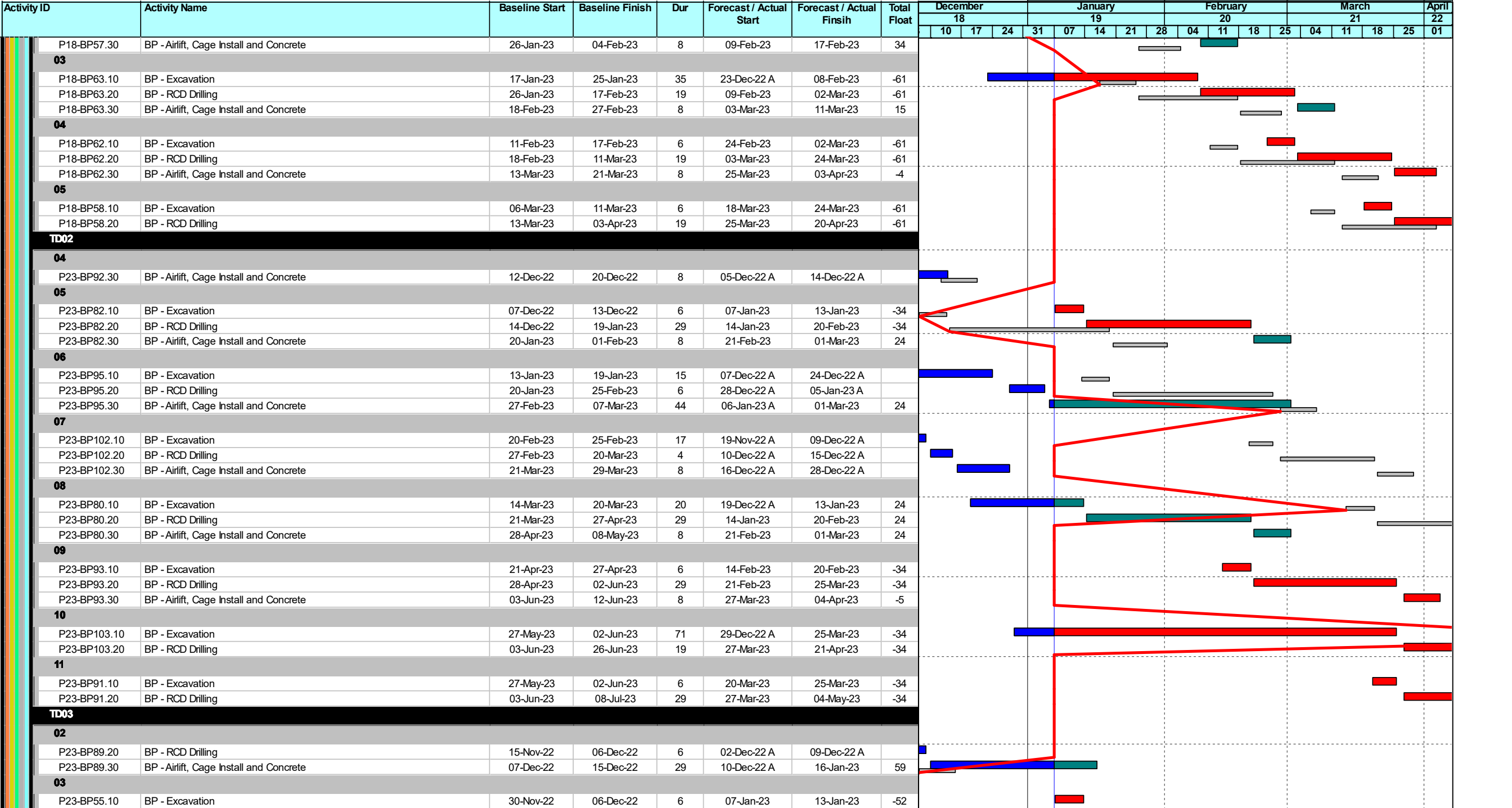


	Planned		Planned MS
	Critical		Critical MS
	Actual		Actual MS

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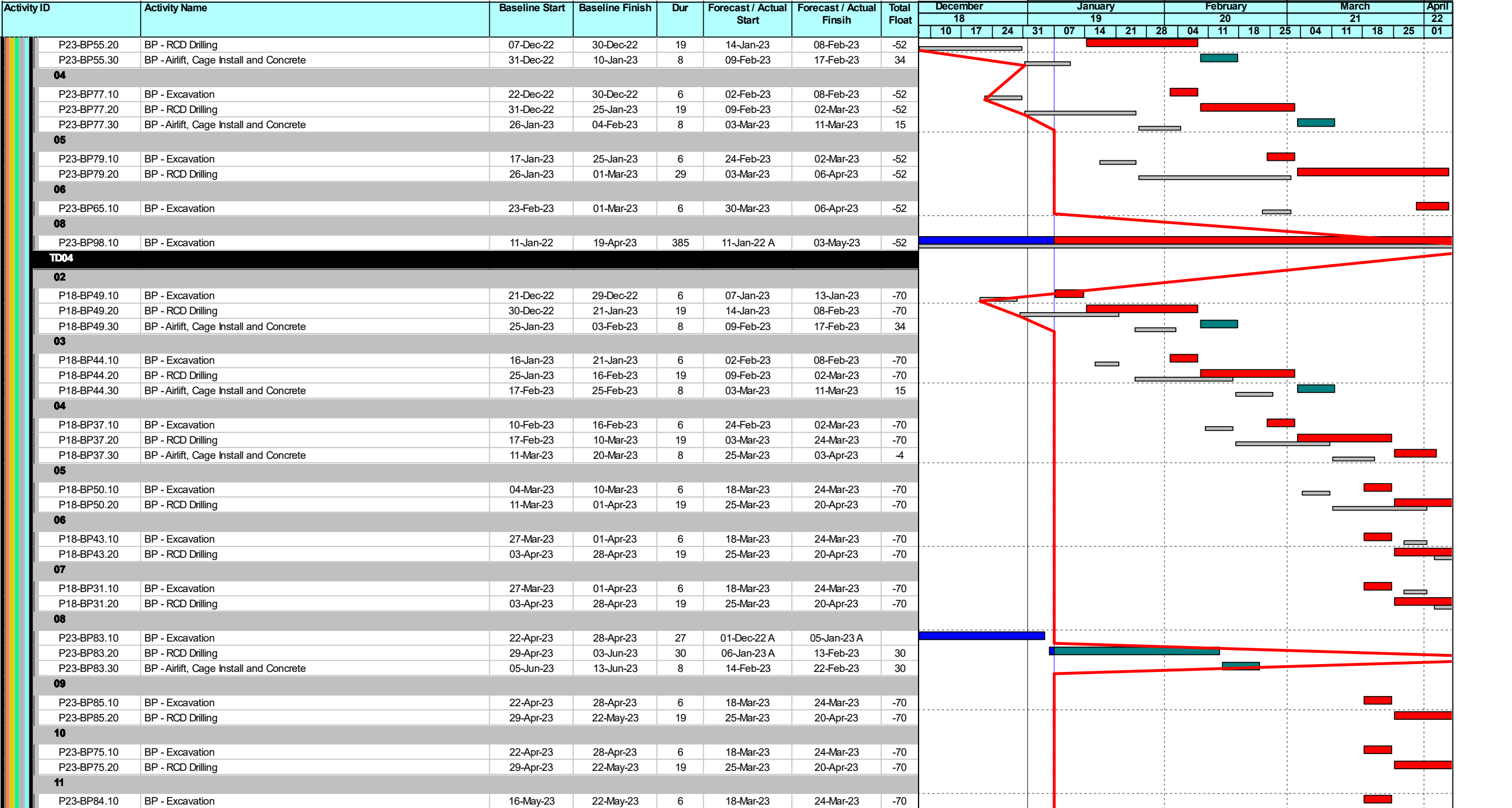
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
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	Critical		Critical MS
	Actual		Actual MS

**West Kowloon Cultural District Authority**  
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	Actual		Actual MS

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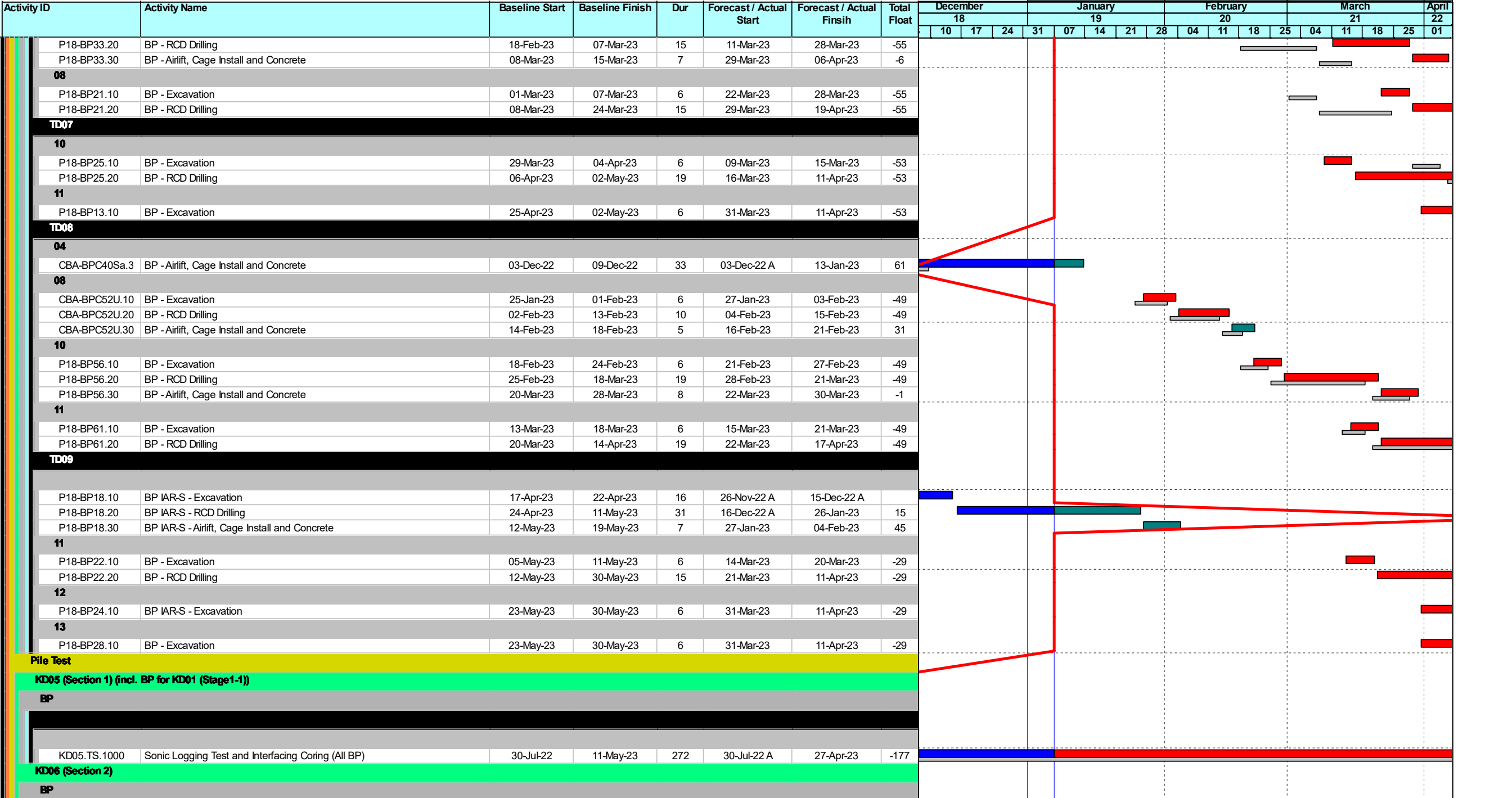
Activity ID	Activity Name	Baseline Start	Baseline Finish	Dur	Forecast / Actual Start	Forecast / Actual Finsih	Total Float	December				January				February				March				April			
								18				19				20				21				22			
								10	17	24	31	07	14	21	28	04	11	18	25	04	11	18	25	01			
P23-BP84.20	BP - RCD Drilling	23-May-23	27-Jun-23	29	25-Mar-23	03-May-23	-70	[Gantt Chart Bar]																			
<b>TD05</b>																											
<b>02</b>																											
P18-BP59.30	BP - Airlift, Cage Install and Concrete	03-Jan-23	11-Jan-23	10	05-Dec-22 A	16-Dec-22 A		[Gantt Chart Bar]																			
<b>03</b>																											
P18-BP30.10	BP - Excavation	23-Dec-22	31-Dec-22	6	07-Jan-23	13-Jan-23	-68	[Gantt Chart Bar]																			
P18-BP30.20	BP - RCD Drilling	03-Jan-23	19-Jan-23	15	14-Jan-23	03-Feb-23	-68	[Gantt Chart Bar]																			
P18-BP30.30	BP - Airlift, Cage Install and Concrete	20-Jan-23	31-Jan-23	7	04-Feb-23	11-Feb-23	39	[Gantt Chart Bar]																			
<b>04</b>																											
P18-BP42.10	BP - Excavation	13-Jan-23	19-Jan-23	6	27-Jan-23	03-Feb-23	-68	[Gantt Chart Bar]																			
P18-BP42.20	BP - RCD Drilling	20-Jan-23	09-Feb-23	15	04-Feb-23	21-Feb-23	-68	[Gantt Chart Bar]																			
P18-BP42.30	BP - Airlift, Cage Install and Concrete	10-Feb-23	17-Feb-23	7	22-Feb-23	01-Mar-23	24	[Gantt Chart Bar]																			
<b>05</b>																											
P18-BP54.10	BP - Excavation	03-Feb-23	09-Feb-23	6	15-Feb-23	21-Feb-23	-68	[Gantt Chart Bar]																			
P18-BP54.20	BP - RCD Drilling	10-Feb-23	03-Mar-23	19	22-Feb-23	15-Mar-23	-68	[Gantt Chart Bar]																			
P18-BP54.30	BP - Airlift, Cage Install and Concrete	04-Mar-23	13-Mar-23	8	16-Mar-23	24-Mar-23	4	[Gantt Chart Bar]																			
<b>06</b>																											
P18-BP64.10	BP - Excavation	25-Feb-23	03-Mar-23	6	09-Mar-23	15-Mar-23	-68	[Gantt Chart Bar]																			
P18-BP64.20	BP - RCD Drilling	04-Mar-23	25-Mar-23	19	16-Mar-23	11-Apr-23	-68	[Gantt Chart Bar]																			
<b>07</b>																											
P18-BP36.10	BP - Excavation	20-Mar-23	25-Mar-23	6	31-Mar-23	11-Apr-23	-68	[Gantt Chart Bar]																			
<b>08</b>																											
P18-BP48.10	BP - Excavation	11-Apr-23	17-Apr-23	21	02-Dec-22 A	29-Dec-22 A		[Gantt Chart Bar]																			
P18-BP48.20	BP - RCD Drilling	18-Apr-23	05-May-23	21	30-Dec-22 A	26-Jan-23	45	[Gantt Chart Bar]																			
P18-BP48.30	BP - Airlift, Cage Install and Concrete	06-May-23	13-May-23	7	27-Jan-23	04-Feb-23	45	[Gantt Chart Bar]																			
<b>TD06</b>																											
<b>02</b>																											
P18-BP35.20	BP - RCD Drilling	08-Nov-22	24-Nov-22	17	19-Nov-22 A	09-Dec-22 A		[Gantt Chart Bar]																			
P18-BP35.30	BP - Airlift, Cage Install and Concrete	25-Nov-22	02-Dec-22	9	10-Dec-22 A	21-Dec-22 A		[Gantt Chart Bar]																			
<b>03</b>																											
P18-BP23.10	BP IAR-S - Excavation	26-Nov-22	02-Dec-22	6	07-Jan-23	13-Jan-23	-55	[Gantt Chart Bar]																			
P18-BP23.20	BP IAR-S - RCD Drilling	03-Dec-22	20-Dec-22	15	14-Jan-23	03-Feb-23	-55	[Gantt Chart Bar]																			
P18-BP23.30	BP IAR-S - Airlift, Cage Install and Concrete	23-Dec-22	03-Jan-23	7	07-Feb-23	14-Feb-23	37	[Gantt Chart Bar]																			
<b>04</b>																											
P18-BP27.10	BP - Excavation	14-Dec-22	20-Dec-22	18	16-Nov-22 A	07-Dec-22 A		[Gantt Chart Bar]																			
P18-BP27.20	BP - RCD Drilling	21-Dec-22	10-Jan-23	13	08-Dec-22 A	23-Dec-22 A		[Gantt Chart Bar]																			
P18-BP27.30	BP - Airlift, Cage Install and Concrete	11-Jan-23	18-Jan-23	6	24-Dec-22 A	04-Jan-23 A		[Gantt Chart Bar]																			
<b>05</b>																											
P18-BP17.10	BP IAR-S - Excavation	04-Jan-23	10-Jan-23	6	27-Jan-23	03-Feb-23	-55	[Gantt Chart Bar]																			
P18-BP17.20	BP IAR-S - RCD Drilling	11-Jan-23	31-Jan-23	15	04-Feb-23	21-Feb-23	-55	[Gantt Chart Bar]																			
P18-BP17.30	BP IAR-S - Airlift, Cage Install and Concrete	01-Feb-23	08-Feb-23	7	22-Feb-23	01-Mar-23	24	[Gantt Chart Bar]																			
<b>06</b>																											
P18-BP29.10	BP - Excavation	21-Jan-23	31-Jan-23	6	15-Feb-23	21-Feb-23	-55	[Gantt Chart Bar]																			
P18-BP29.20	BP - RCD Drilling	01-Feb-23	17-Feb-23	15	22-Feb-23	10-Mar-23	-55	[Gantt Chart Bar]																			
P18-BP29.30	BP - Airlift, Cage Install and Concrete	18-Feb-23	25-Feb-23	7	11-Mar-23	18-Mar-23	9	[Gantt Chart Bar]																			
<b>07</b>																											
P18-BP33.10	BP - Excavation	11-Feb-23	17-Feb-23	6	04-Mar-23	10-Mar-23	-55	[Gantt Chart Bar]																			

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	Critical		Critical MS
	Actual		Actual MS

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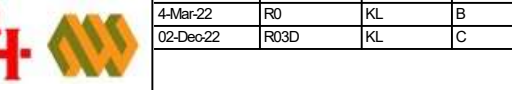
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Activity ID	Activity Name	Baseline Start	Baseline Finish	Dur	Forecast / Actual Start	Forecast / Actual Finsih	Total Float	December				January				February				March				April
								18				19				20				21				22
								10	17	24	31	07	14	21	28	04	11	18	25	04	11	18	25	01
KD06.TS.1000	Sonic Logging Test and Interfacing Coring (All BP)	27-Jul-22	12-Jul-23	351	27-Jul-22 A	12-Jul-23	-93																	
<b>KD07 (Section 3) (incl. BP for KD03) (Stage 3-1)</b>																								
<b>BP</b>																								
KD07.TS.1000	Sonic Logging Test and Interfacing Coring (All BP)	14-Jun-23	11-Oct-23	306	10-Dec-22 A	11-Oct-23	-74																	
<b>KD08 (Section 4) (incl. BP for KD04 (Stage 4-1) &amp; SSHP in KD09 (Section 5))</b>																								
<b>BP</b>																								
KD08.TS.1000	Sonic Logging Test and Interfacing Coring (All BP)	04-Jul-22	11-Jun-23	343	04-Jul-22 A	11-Jun-23	-82																	
<b>SSHP</b>																								
KD08.TS.1120	Submit BA14	15-Nov-22	21-Nov-22	7	07-Jan-23	13-Jan-23	73																	
KD08.TS.1140	Selection of Pile for Static Load Test	22-Nov-22	05-Dec-22	14	14-Jan-23	27-Jan-23	73																	
KD08.TS.1160	Static Load Test of Selected Pile	06-Dec-22	19-Dec-22	14	28-Jan-23	10-Feb-23	73																	
KD08.TS.1180	Obtain BA14 Acknowledgement / Satisfaction of CA, Completion As-built Drawings, Reports & Records	20-Dec-22	16-Jan-23	28	11-Feb-23	10-Mar-23	73																	
<b>KD09 (Section 5) (incl. BP for KD02 (Stage 5-1))</b>																								
<b>BP</b>																								
KD09.TS.1000	Sonic Logging Test and Interfacing Coring (All BP)	23-May-22	12-Aug-23	413	23-May-22 A	09-Jul-23	-90																	
<b>Attendance to Other Project Contractors (optional works item no. 2A to 2E)</b>																								
S4.AT.0000	Attendance at Section 4 Area (optional works item no. 2D) (Duration TBC)	22-Feb-23	13-Mar-23	20	22-Feb-23	13-Mar-23	71																	
S5.AT.0000	Attendance at Section 5 Area (optional works item no. 2E) (Duration TBC)	14-Mar-23	02-Apr-23	20	14-Mar-23	02-Apr-23	71																	

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## **C. Environmental Mitigation Measures – Implementation Status**



**Table C-1: Environmental Mitigation Measures Implementation Status**

		Implementation Stage					
		Zone 2A			Zone 2B & 2C		
EM&A Ref.	Recommendation Measures	Nov 2022	Dec 2022	Jan 2023	Nov 2022	Dec 2022	Jan 2023
<b>Air Quality Impact (Construction)</b>							
2.1	<b>General Dust Control Measures</b> Frequent water spraying for active construction areas (12 times a day or once every one hour), including Heavy construction activities such as construction of buildings or roads, drilling, ground excavation, cut and fill operations (i.e., earth moving)	✓	✓	✓	✓	✓	✓
2.1	<b>Best Practice For Dust Control</b> The relevant best practices for dust control as stipulated in the Air Pollution Control (construction Dust) Regulation should be adopted to further reduce the construction dust impacts from the Project. These best practices include: <i>Good Site Management</i> <ul style="list-style-type: none"> <li>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.</li> </ul>	✓	Obs	✓	Obs	Obs	✓

		Implementation Stage					
		Zone 2A			Zone 2B & 2C		
EM&A Ref.	Recommendation Measures	Nov 2022	Dec 2022	Jan 2023	Nov 2022	Dec 2022	Jan 2023
	<i>Disturbed Parts of the Roads</i>	✓	✓	✓	✓	✓	✓
	<ul style="list-style-type: none"> <li>Each and every main temporary access should be paved with concrete, bituminous hardcore materials or metal plates and kept clear of dusty materials; or</li> <li>Unpaved parts of the road should be sprayed with water or a dust suppression chemical so as to keep the entire road surface wet.</li> </ul>	✓	✓	✓	Obs	Obs	Obs
	<i>Exposed Earth</i>	N/A	N/A	N/A	N/A	N/A	N/A
	<ul style="list-style-type: none"> <li>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.</li> </ul>						
	<i>Loading, Unloading or Transfer of Dusty Materials</i>	✓	✓	✓	✓	✓	✓
	<ul style="list-style-type: none"> <li>All dusty materials should be sprayed with water immediately prior to any loading or transfer operation so as to keep the dusty material wet.</li> </ul>						
	<i>Debris Handling</i>	✓	✓	✓	✓	✓	✓
	<ul style="list-style-type: none"> <li>Any debris should be covered entirely by impervious sheeting or stored in a debris collection area sheltered on the top and the three sides.</li> <li>Before debris is dumped into a chute, water should be sprayed so that it remains wet when it is dumped.</li> </ul>	N/A	N/A	N/A	N/A	N/A	N/A
	<i>Transport of Dusty Materials</i>	✓	✓	✓	✓	✓	✓
	<ul style="list-style-type: none"> <li>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.</li> </ul>						

EM&A Ref.	Recommendation Measures	Implementation Stage					
		Zone 2A			Zone 2B & 2C		
		Nov 2022	Dec 2022	Jan 2023	Nov 2022	Dec 2022	Jan 2023
	<i>Wheel washing</i>	✓	✓	✓	✓	✓	✓
	<ul style="list-style-type: none"> <li>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.</li> </ul>						
	<i>Use of vehicles</i>	✓	✓	✓	✓	✓	✓
	<ul style="list-style-type: none"> <li>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.</li> <li>Immediately before leaving the construction site, every vehicle should be washed to remove any dusty materials from its body and wheels.</li> <li>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.</li> </ul>	✓	✓	✓	✓	✓	✓
	<i>Site hoarding</i>	✓	✓	✓	✓	✓	✓
	<ul style="list-style-type: none"> <li>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.</li> </ul>						

2.1 **Best Practicable Means for Cement Works (Concrete Batching Plant)**

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:

EM&A Ref.	Recommendation Measures	Implementation Stage					
		Zone 2A			Zone 2B & 2C		
		Nov 2022	Dec 2022	Jan 2023	Nov 2022	Dec 2022	Jan 2023
	<i>Exhaust from Dust Arrestment Plant</i>	N/A	N/A	N/A	N/A	N/A	N/A
	<ul style="list-style-type: none"> <li>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</li> </ul>						
	<i>Emission Limits</i>	N/A	N/A	N/A	N/A	N/A	N/A
	<ul style="list-style-type: none"> <li>All emissions to air, other than steam or water vapour, shall be colourless and free from persistent mist or smoke</li> </ul>						
	<i>Engineering Design/Technical Requirements</i>	N/A	N/A	N/A	N/A	N/A	N/A
	<ul style="list-style-type: none"> <li>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</li> </ul>						
	<p><b>Non-Road Mobile Machinery (NRMM):</b> All NRMMs operating on-site which are subject to emission control of Air Pollution Control (Non-road Mobile Machinery) (Emission) Regulation are approved/exempted (as the case may be) and affixed with the requisite approval/exemption labels.</p>	✓	✓	✓	Obs, Rem	Obs, Rem	Obs, Rem
<b>Noise Impact (Construction)</b>							
3.1	<b>Good Site Practice</b>						
	<ul style="list-style-type: none"> <li>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:</li> <li>only well-maintained plant to be operated on-site and plant should be serviced regularly during the construction works;</li> </ul>	✓	✓	✓	✓	✓	✓

		Implementation Stage					
		Zone 2A			Zone 2B & 2C		
EM&A Ref.	Recommendation Measures	Nov 2022	Dec 2022	Jan 2023	Nov 2022	Dec 2022	Jan 2023
	<ul style="list-style-type: none"> <li>machines and plant that may be in intermittent use to be shut down between work periods or should be throttled down to a minimum</li> <li>plant known to emit noise strongly in one direction, should, where possible, be orientated to direct noise away from the NSRs;</li> <li>mobile plant should be sited as far away from NSRs as possible; and</li> <li>material stockpiles and other structures to be effectively utilised, where practicable, to screen noise from on-site construction activities.</li> </ul>	✓	✓	✓	✓	✓	✓
3.1	<p><b>Adoption of Quieter PME</b></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 <b>Table 4.26</b> in the EIA report. It should be noted that the silenced PME selected for assessment can be found in Hong Kong.</p>	✓	✓	✓	✓	✓	✓
3.1	<p><b>Use of Movable Noise Barriers</b></p> <p>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.</p>	✓	✓	✓	Obs, Rem	Obs, Rem	Obs
3.1	<p><b>Use of Noise Enclosure/ Acoustic Shed</b></p> <p>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.</p>	✓	✓	✓	Obs	Obs	Obs

		Implementation Stage					
		Zone 2A			Zone 2B & 2C		
EM&A Ref.	Recommendation Measures	Nov 2022	Dec 2022	Jan 2023	Nov 2022	Dec 2022	Jan 2023
3.1	<p><b>Use of Noise Insulating Fabric</b></p> <p>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.</p>	✓	✓	✓	✓	✓	✓
3.1	<p><b>Scheduling of Construction Works outside School Examination Periods</b></p> <p>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.</p>	✓	✓	✓	✓	✓	✓
<b>Water Quality Impact (Construction)</b>							
4.1	<p><b>Construction site runoff and drainage</b></p> <p>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:</p> <ul style="list-style-type: none"> <li>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;</li> </ul>	✓	✓	✓	✓	✓	Obs

		Implementation Stage					
		Zone 2A			Zone 2B & 2C		
EM&A Ref.	Recommendation Measures	Nov 2022	Dec 2022	Jan 2023	Nov 2022	Dec 2022	Jan 2023
	<ul style="list-style-type: none"> <li>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.</li> </ul>	✓	✓	✓	✓	✓	✓
	<ul style="list-style-type: none"> <li>All drainage facilities and erosion and sediment control structures should be regularly inspected and maintained to ensure proper and efficient operation at all times and particularly during rainstorms. Deposited silt and grit should be regularly removed, at the onset of and after each rainstorm to ensure that these facilities are functioning properly at all times.</li> </ul>	Obs	✓	✓	Obs	Obs	Obs
	<ul style="list-style-type: none"> <li>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.</li> </ul>	✓	✓	✓	✓	✓	✓
	<ul style="list-style-type: none"> <li>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.</li> </ul>	✓	✓	✓	✓	✓	✓

		Implementation Stage					
		Zone 2A			Zone 2B & 2C		
EM&A Ref.	Recommendation Measures	Nov 2022	Dec 2022	Jan 2023	Nov 2022	Dec 2022	Jan 2023
	<ul style="list-style-type: none"> <li>Open stockpiles of construction materials or construction wastes onsite 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.</li> </ul>	✓	Obs	✓	Obs	Obs	✓
	<ul style="list-style-type: none"> <li>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.</li> </ul>	✓	✓	✓	✓	✓	✓
	<ul style="list-style-type: none"> <li>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.</li> </ul>	✓	✓	✓	✓	✓	✓
	<ul style="list-style-type: none"> <li>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.</li> </ul>	N/A	N/A	N/A	N/A	N/A	N/A
4.1	<p><b>Barging facilities and activities</b></p> <p>Recommendations for good site practices during operation of the proposed barging point include:</p>						
	<ul style="list-style-type: none"> <li>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;</li> </ul>	N/A	N/A	N/A	N/A	N/A	N/A



		Implementation Stage					
		Zone 2A			Zone 2B & 2C		
EM&A Ref.	Recommendation Measures	Nov 2022	Dec 2022	Jan 2023	Nov 2022	Dec 2022	Jan 2023
	<ul style="list-style-type: none"> <li>Loading of barges and hoppers should be controlled to prevent splashing of material into the surrounding water. Barges or hoppers should not be filled to a level that will cause the overflow of materials or polluted water during loading or transportation;</li> <li>All hopper barges should be fitted with tight fitting seals to their bottom openings to prevent leakage of material; and</li> <li>Construction activities should not cause foam, oil, grease, scum, litter or other objectionable matter to be present on the water within the site.</li> </ul>	N/A	N/A	N/A	N/A	N/A	N/A
4.1	<p><b>Sewage effluent from construction workforce</b></p> <p>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.</p>	✓	✓		✓	✓	
4.1	<p><b>General construction activities</b></p> <ul style="list-style-type: none"> <li>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.</li> <li>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.</li> </ul>	✓	✓	Rem	✓	Obs	Obs
		✓	Obs	✓	Obs	Obs	Obs
<b>Waste Management Implications (Construction)</b>							

		Implementation Stage					
		Zone 2A			Zone 2B & 2C		
EM&A Ref.	Recommendation Measures	Nov 2022	Dec 2022	Jan 2023	Nov 2022	Dec 2022	Jan 2023
6.1	<b>Good Site Practices</b>						
	<ul style="list-style-type: none"> <li>Recommendations for good site practices during the construction activities include:</li> <li>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</li> <li>Training of site personnel in proper waste management and chemical handling procedures</li> <li>Provision of sufficient waste disposal points and regular collection of waste</li> <li>Appropriate measures to minimise windblown litter and dust/odour during transportation of waste by either covering trucks or by transporting wastes in enclosed containers</li> <li>Provision of wheel washing facilities before the trucks leaving the works area so as to minimise dust introduction to public roads</li> <li>Well planned delivery programme for offsite disposal such that adverse environmental impact from transporting the inert or non-inert C&amp;D materials is not anticipated</li> </ul>	✓	✓	✓	Obs	Obs	Obs
		✓	✓	✓	✓	✓	✓
		✓	✓	✓	✓	✓	✓
		✓	✓	✓	✓	✓	✓
		✓	✓	✓	✓	✓	✓
6.1	<b>Waste Reduction Measures</b>						
	Recommendations to achieve waste reduction include:						
	<ul style="list-style-type: none"> <li>Sort inert C&amp;D material to recover any recyclable portions such as metals</li> <li>Segregation and storage of different types of waste in different containers or skips to enhance reuse or recycling of materials and their proper disposal</li> <li>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</li> </ul>	✓	✓	✓	✓	✓	✓
		✓	✓	✓	✓	✓	✓
		✓	✓	✓	✓	✓	✓

		Implementation Stage					
		Zone 2A			Zone 2B & 2C		
EM&A Ref.	Recommendation Measures	Nov 2022	Dec 2022	Jan 2023	Nov 2022	Dec 2022	Jan 2023
	<ul style="list-style-type: none"> <li>Proper site practices to minimise the potential for damage or contamination of inert C&amp;D materials</li> <li>Plan the use of construction materials carefully to minimise amount of waste generated and avoid unnecessary generation of wastes</li> </ul>	✓	Obs	✓	Obs	Obs	✓
6.1	<p><b>Inert and Non-inert C&amp;D Materials</b></p> <p>In order to minimise impacts resulting from collection and transportation of inert C&amp;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&amp;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"> <li>The surplus inert C&amp;D material will be disposed of at the Government's PFRFs for beneficial use by other projects in Hong Kong.</li> <li>Liaison with the CEDD Public Fill Committee (PFC) on the allocation of space for disposal of the inert C&amp;D materials at PFRF is underway. No construction work is allowed to proceed until all issues on management of inert C&amp;D materials have been resolved and all relevant arrangements have been endorsed by the relevant authorities including PFC and EPD.</li> <li>The C&amp;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.</li> </ul>	✓	✓	✓	✓	✓	✓

		Implementation Stage					
		Zone 2A			Zone 2B & 2C		
EM&A Ref.	Recommendation Measures	Nov 2022	Dec 2022	Jan 2023	Nov 2022	Dec 2022	Jan 2023
	<ul style="list-style-type: none"> <li>In order to monitor the disposal of inert and non-inert C&amp;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 &amp; 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.</li> </ul>	✓	✓	✓	✓	✓	✓
6.1	<b>Chemical Waste</b> <ul style="list-style-type: none"> <li>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.</li> </ul>	✓	✓	✓	✓	✓	✓

		Implementation Stage					
		Zone 2A			Zone 2B & 2C		
EM&A Ref.	Recommendation Measures	Nov 2022	Dec 2022	Jan 2023	Nov 2022	Dec 2022	Jan 2023
	<ul style="list-style-type: none"> <li>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.</li> </ul>	✓	✓	✓	✓	✓	✓
6.1	<p><b>General Refuse</b></p> <p>General refuse should be stored in enclosed bins or compaction units separated from inert C&amp;D materials. A reputable waste collector should be employed by the Contractor to remove general refuse from the site, separately from inert C&amp;D materials. Preferably an enclosed and covered area should be provided to reduce the occurrence of 'wind blown' light material.</p>	✓	✓	✓	Obs	Obs	Obs
<b>Land Contamination (Construction)</b>							
7.1	<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. The following measures are proposed for excavation and transportation of contaminated material:</p> <ul style="list-style-type: none"> <li>To minimize the chance for construction workers to come into contact with any contaminated materials, bulk earth-moving excavation equipment should be employed;</li> </ul>	N/A	N/A	N/A	N/A	N/A	N/A

		Implementation Stage					
		Zone 2A			Zone 2B & 2C		
EM&A Ref.	Recommendation Measures	Nov 2022	Dec 2022	Jan 2023	Nov 2022	Dec 2022	Jan 2023
	<ul style="list-style-type: none"> <li>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;</li> <li>Stockpiling of contaminated excavated materials on site should be avoided as far as possible;</li> <li>The use of contaminated soil for landscaping purpose should be avoided unless pre-treatment was carried out;</li> <li>Vehicles containing any contaminated excavated materials should be suitably covered to reduce dust emissions and/or release of contaminated wastewater;</li> <li>Truck bodies and tailgates should be sealed to stop any discharge;</li> <li>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;</li> <li>Speed control for trucks carrying contaminated materials should be exercised;</li> <li>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</li> <li>Maintain records of waste generation and disposal quantities and disposal arrangements.</li> </ul>	N/A	N/A	N/A	N/A	N/A	N/A
		N/A	N/A	N/A	N/A	N/A	N/A
		N/A	N/A	N/A	N/A	N/A	N/A
		N/A	N/A	N/A	N/A	N/A	N/A
		N/A	N/A	N/A	N/A	N/A	N/A
		N/A	N/A	N/A	N/A	N/A	N/A
		N/A	N/A	N/A	N/A	N/A	N/A
		N/A	N/A	N/A	N/A	N/A	N/A
		N/A	N/A	N/A	N/A	N/A	N/A
		N/A	N/A	N/A	N/A	N/A	N/A
		N/A	N/A	N/A	N/A	N/A	N/A
		N/A	N/A	N/A	N/A	N/A	N/A
<b>Ecological Impact (Construction)</b>							
No mitigation measure is required.							
<b>Landscape and Visual Impact (Construction)</b>							

		Implementation Stage					
		Zone 2A			Zone 2B & 2C		
EM&A Ref.	Recommendation Measures	Nov 2022	Dec 2022	Jan 2023	Nov 2022	Dec 2022	Jan 2023
Table 9.1 (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.	✓	✓	✓	✓	✓	✓
Table 9.1 (CM2)	Compensatory tree planting shall be incorporated to the proposed project and maximize the new tree, shrubs and other vegetation planting to compensate tree felled and vegetation removed. Also, implementation of compensatory planting should be of a ratio not less than 1:1 in terms of quality and quantity within the site.	N/A	N/A	N/A	N/A	N/A	N/A
Table 9.1 (CM3)	Buffer trees for screening purposes to soften the hard architectural and engineering structures and facilities.	N/A	N/A	N/A	N/A	N/A	N/A
Table 9.1 (CM4)	Softscape treatments such as vertical green wall panel /planting of climbing and/or weeping plants, etc, to maximize the green coverage and soften the hard architectural and engineering structures and facilities.	N/A	N/A	N/A	N/A	N/A	N/A
Table 9.1 (CM5)	Roof greening by means of intensive and extensive green roof to maximize the green coverage and improve aesthetic appeal and visual quality of the building/structure.	N/A	N/A	N/A	N/A	N/A	N/A
Table 9.1 (CM6)	Sensitive streetscape design should be incorporated along all new roads and streets.	N/A	N/A	N/A	N/A	N/A	N/A
Table 9.1 (CM7)	Structure, ornamental planting shall be provided along amenity strips to enhance the landscape quality.	N/A	N/A	N/A	N/A	N/A	N/A
Table 9.1 (CM8)	Landscape design shall be incorporated to architectural and engineering structures in order to provide aesthetically pleasing designs.	N/A	N/A	N/A	N/A	N/A	N/A
Table 9.1 (CM9)	Minimize the structure of marine facilities to be built on the seabed and foreshore in order to minimize the affected extent to the waterbody	N/A	N/A	N/A	N/A	N/A	N/A

		Implementation Stage					
		Zone 2A			Zone 2B & 2C		
EM&A Ref.	Recommendation Measures	Nov 2022	Dec 2022	Jan 2023	Nov 2022	Dec 2022	Jan 2023
Table 9.2 (MCP1)	Use of decorative screen hoarding/boards	✓	✓	✓	✓	✓	✓
Table 9.2 (MCP2)	Early introduction of landscape treatments	N/A	N/A	N/A	N/A	N/A	N/A
Table 9.2 (MCP3)	Adoption of light colour for the temporary ventilation shafts for the basement during the transition period.	N/A	N/A	N/A	N/A	N/A	N/A
Table 9.2 (MCP4)	Control of night time lighting	✓	✓	✓	✓	✓	✓
Table 9.2 (MCP5)	Use of greenery such as grass cover for the temporary open areas will help achieve the visual balance and soften the hard edges of the structures.	N/A	N/A	N/A	N/A	N/A	N/A

N/A - Not Applicable

✓ - Implemented

Obs - Observed

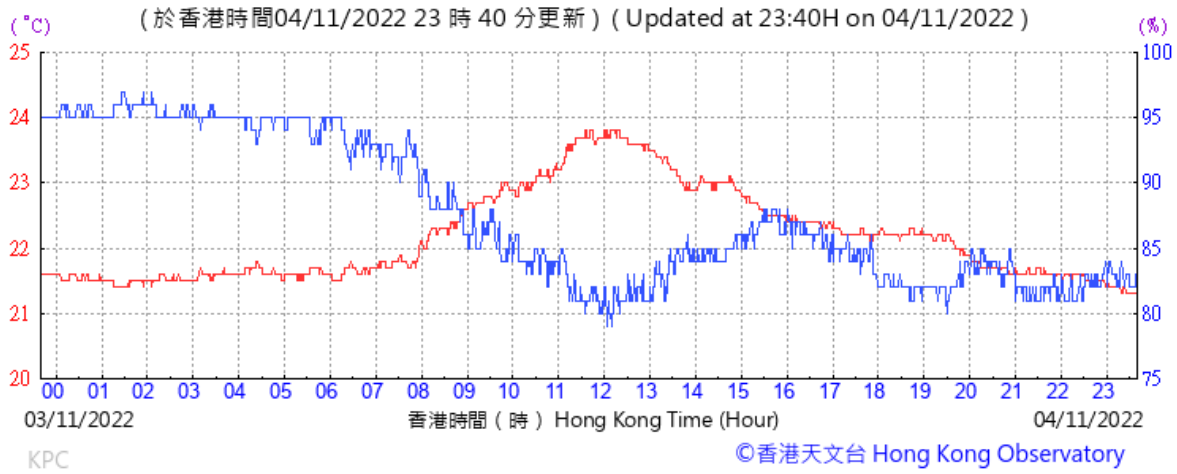
Rem - Reminder



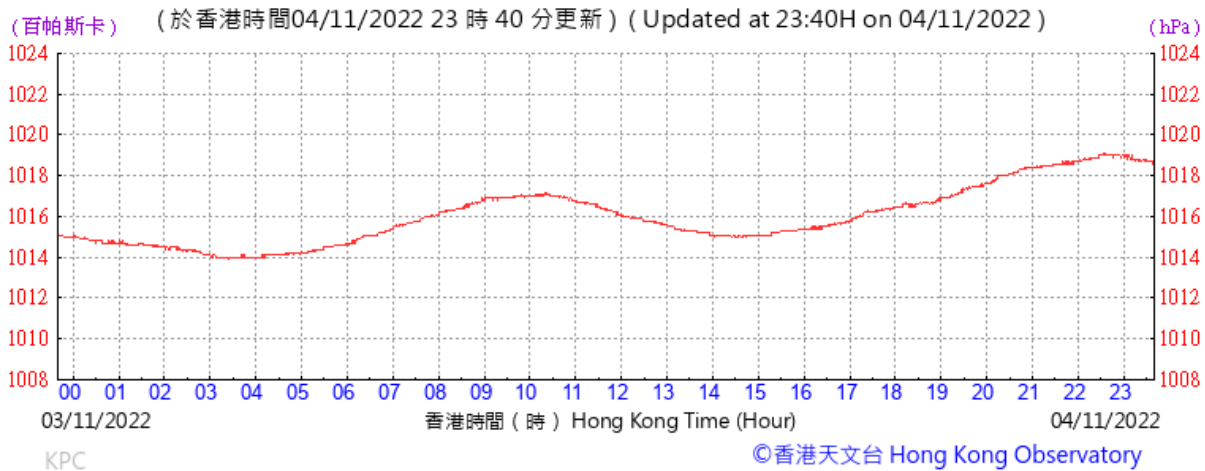
## **D. Meteorological Data Extracted from Hong Kong Observatory**

# Extract of Meteorological Observations for King's Park Automatic Weather Station, November 2022

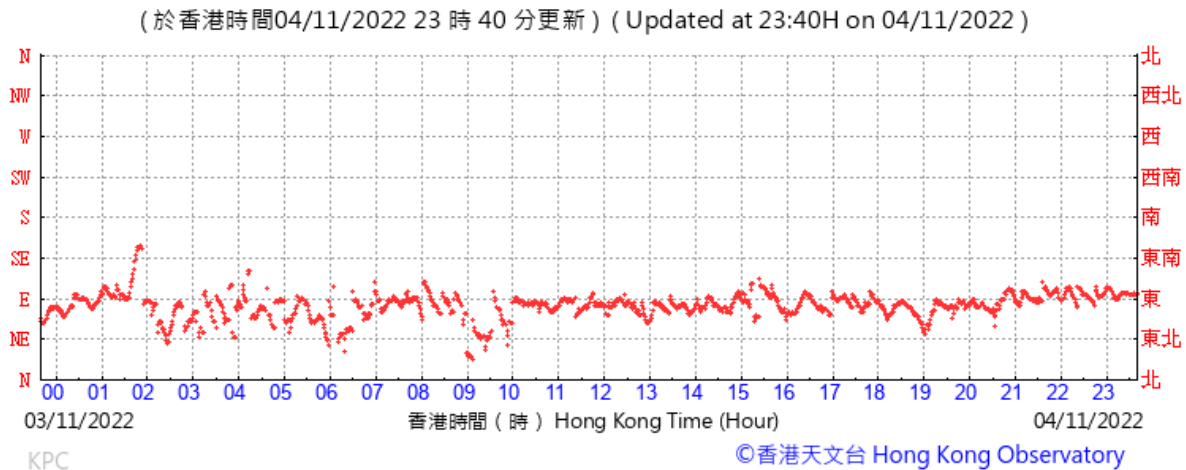
Temperature/Humidity:



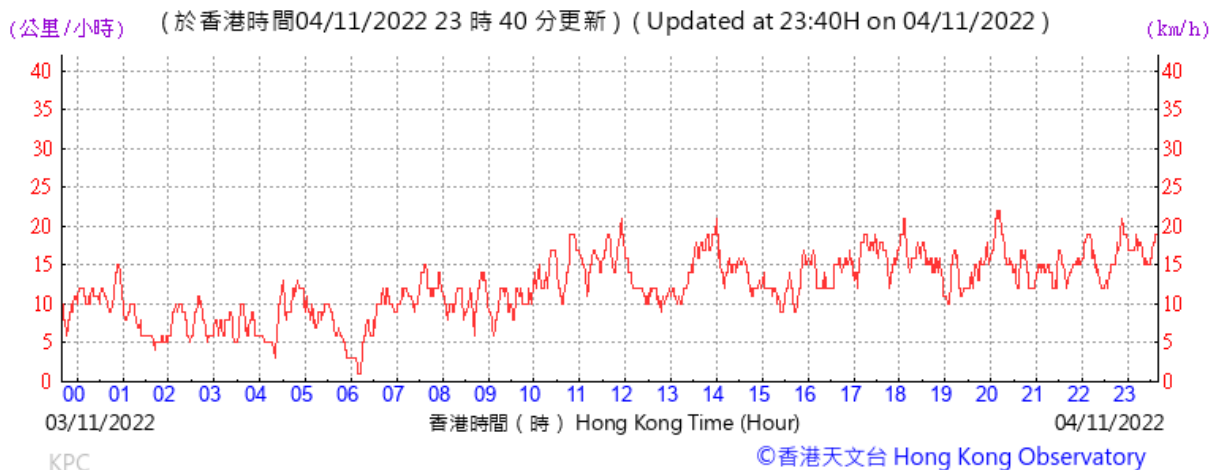
Pressure:



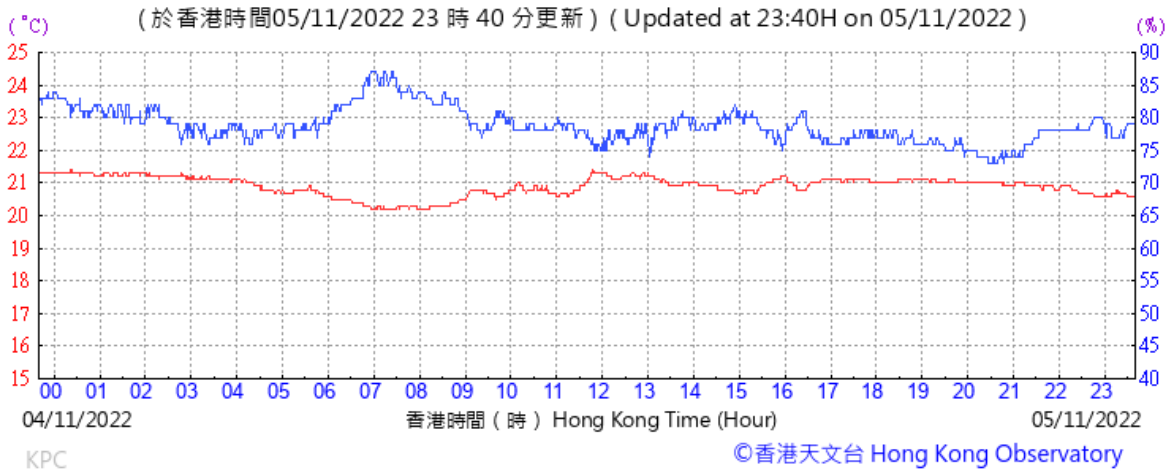
Wind Direction:



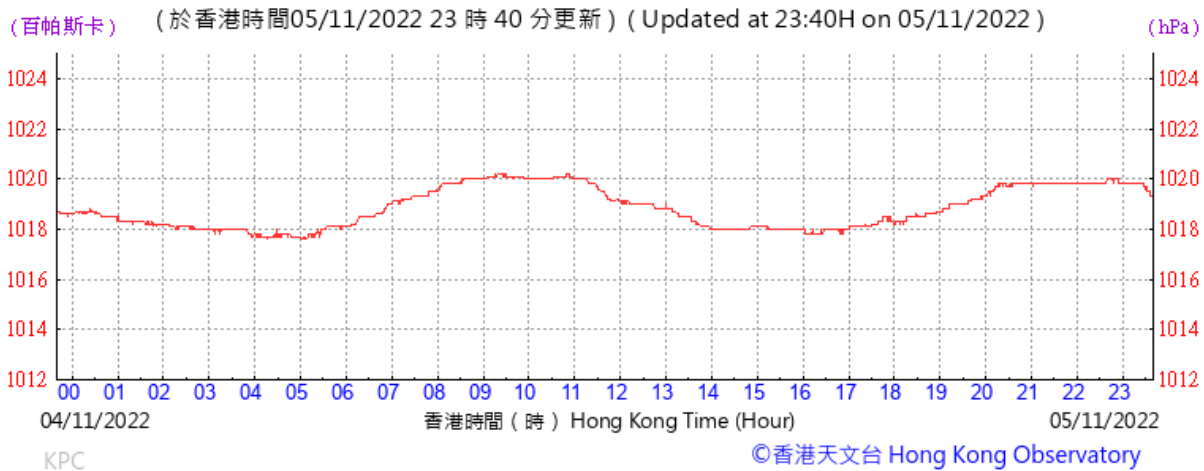
Wind Speed:



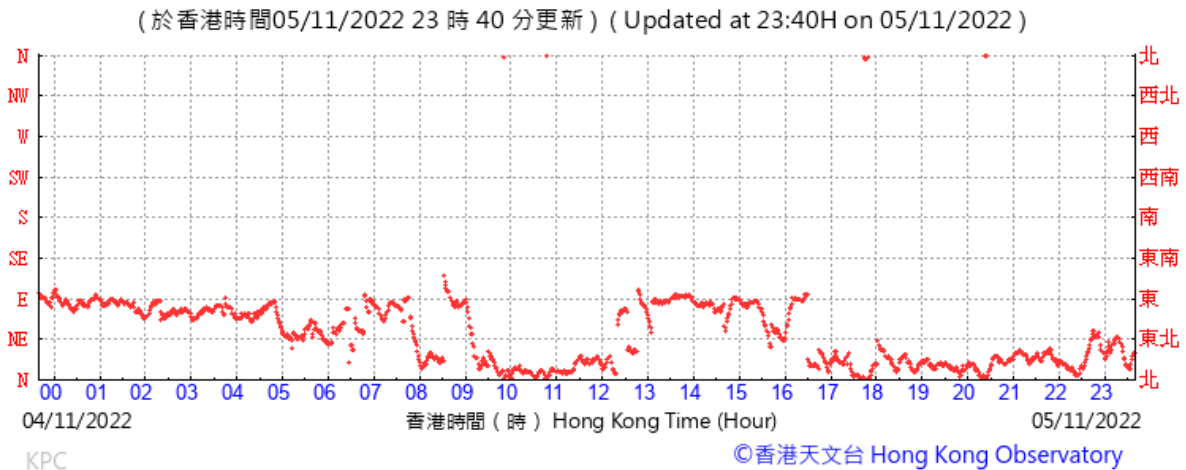
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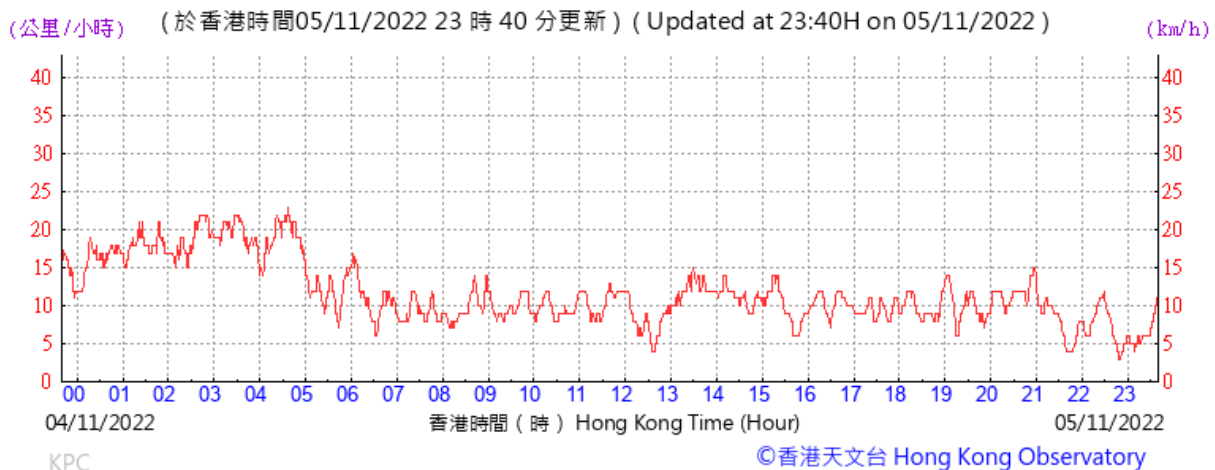
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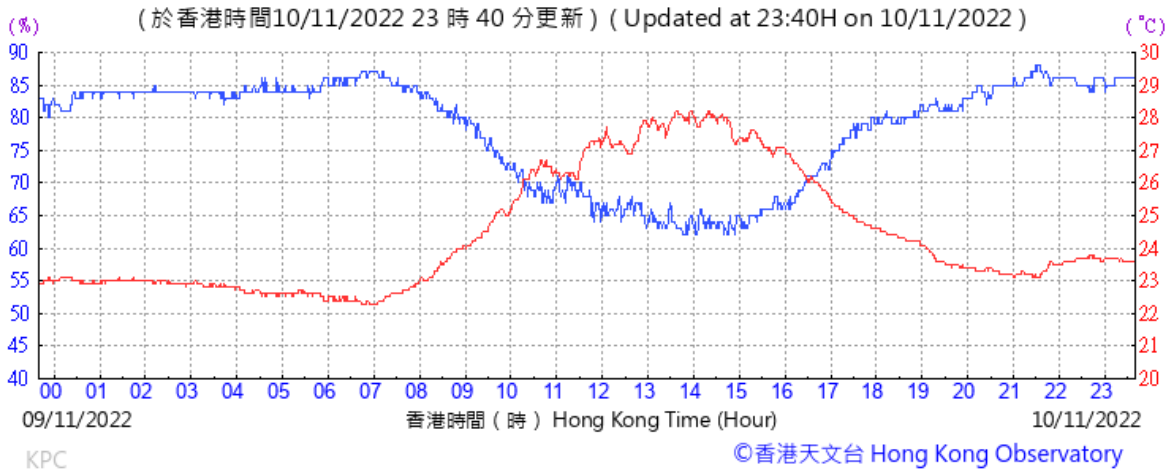
Wind Direction:



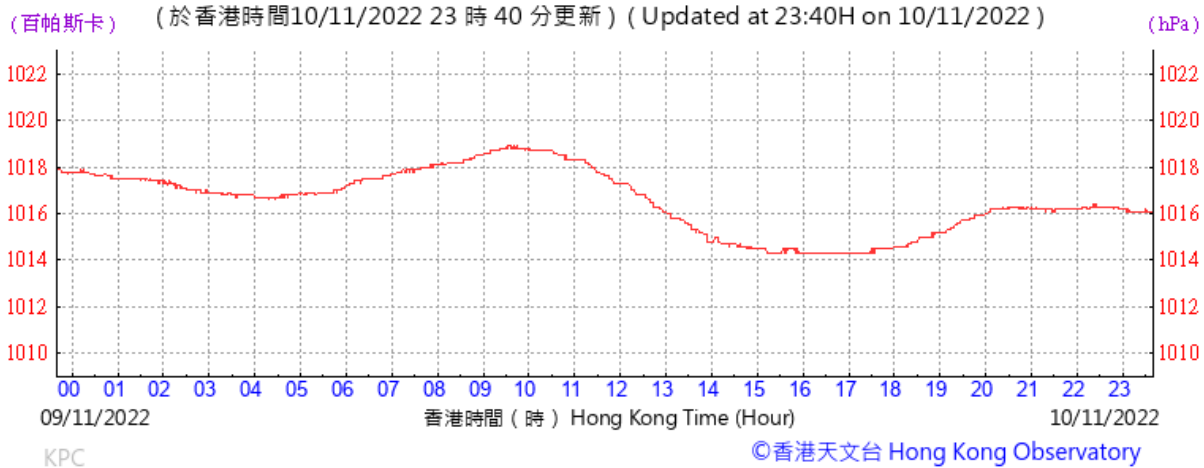
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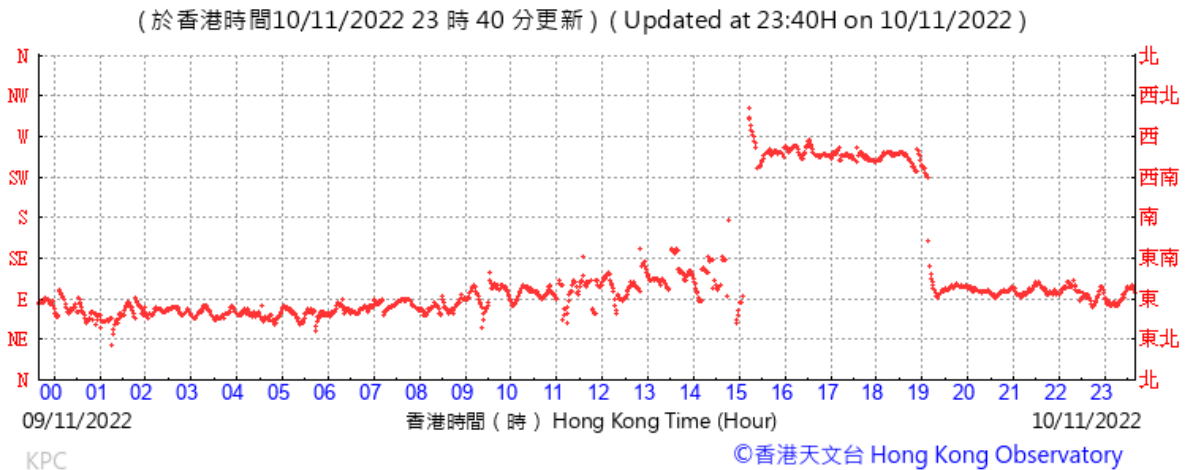
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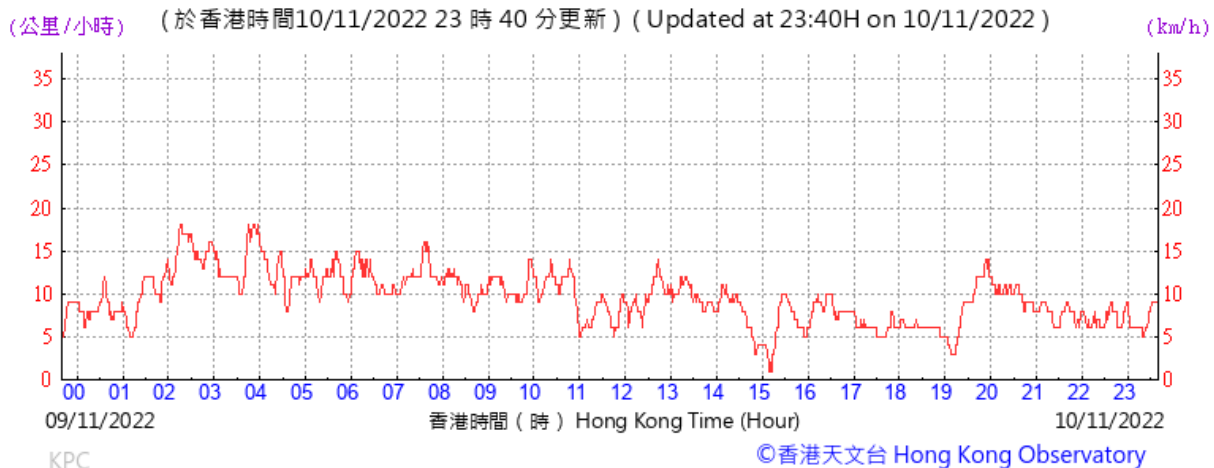
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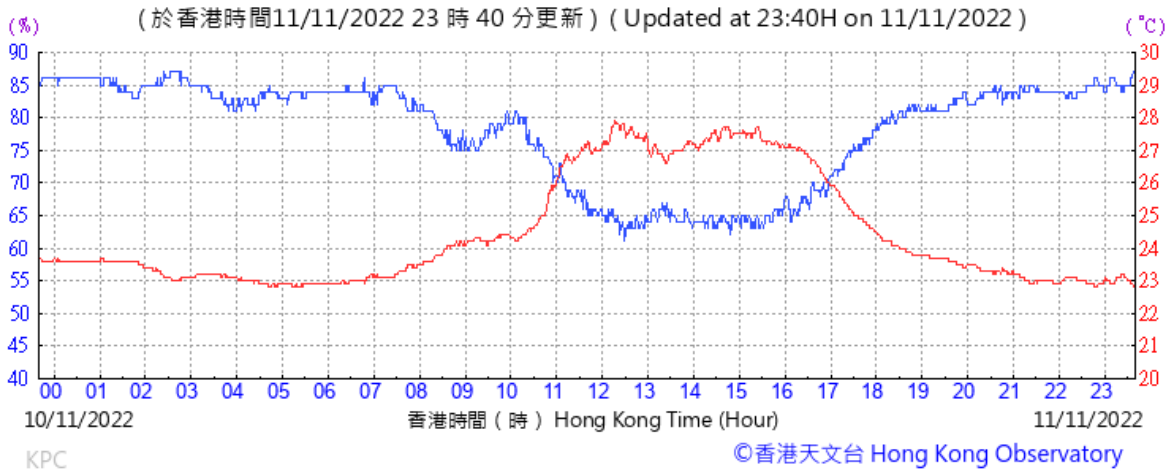
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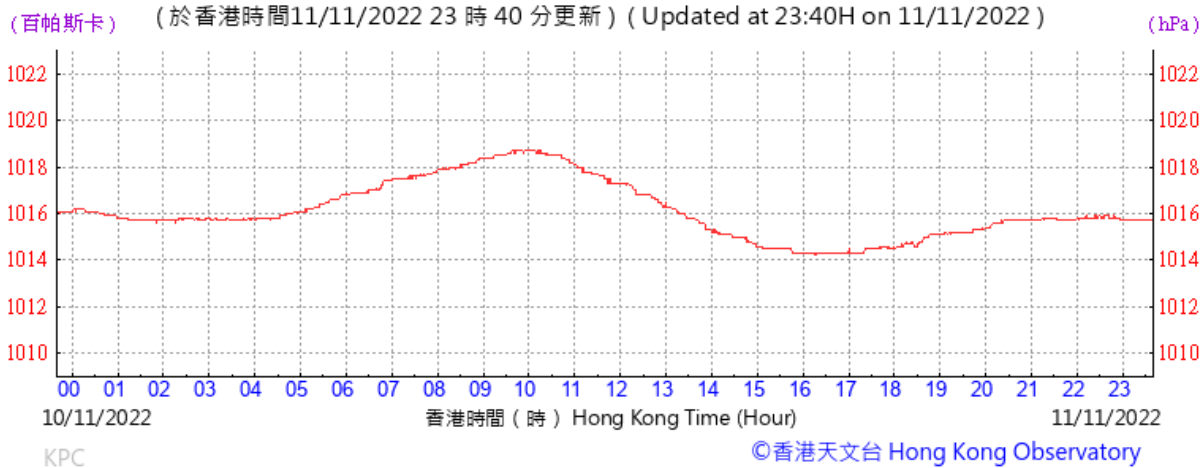
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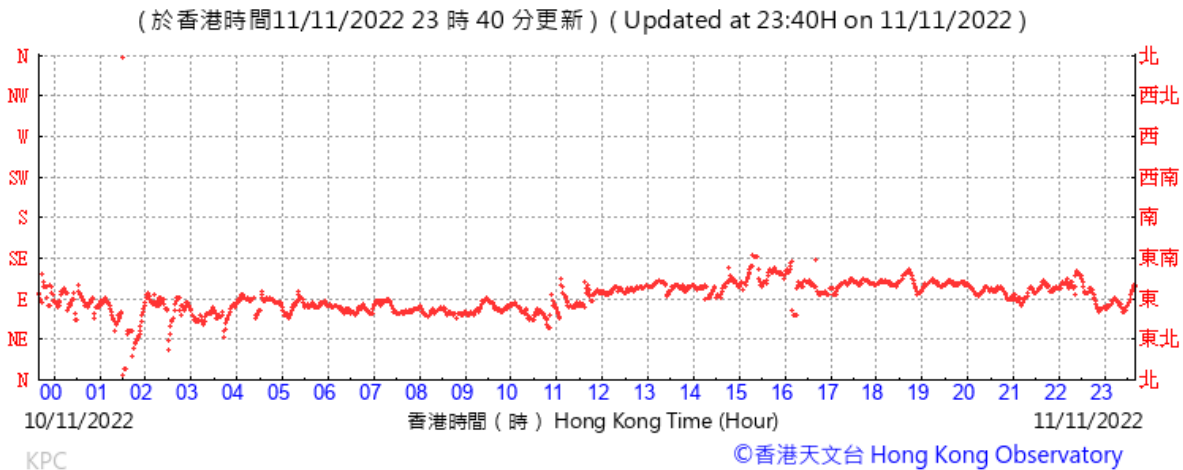
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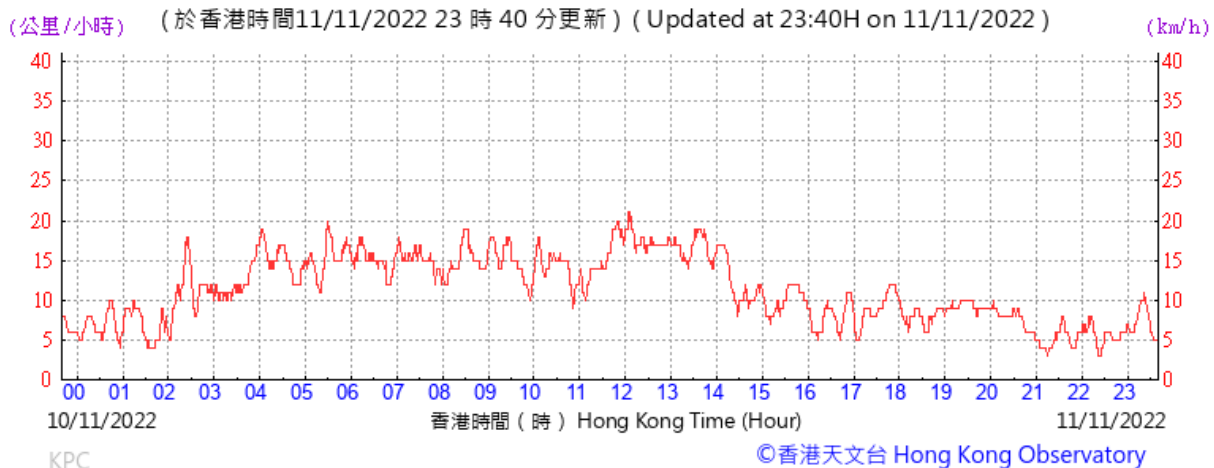
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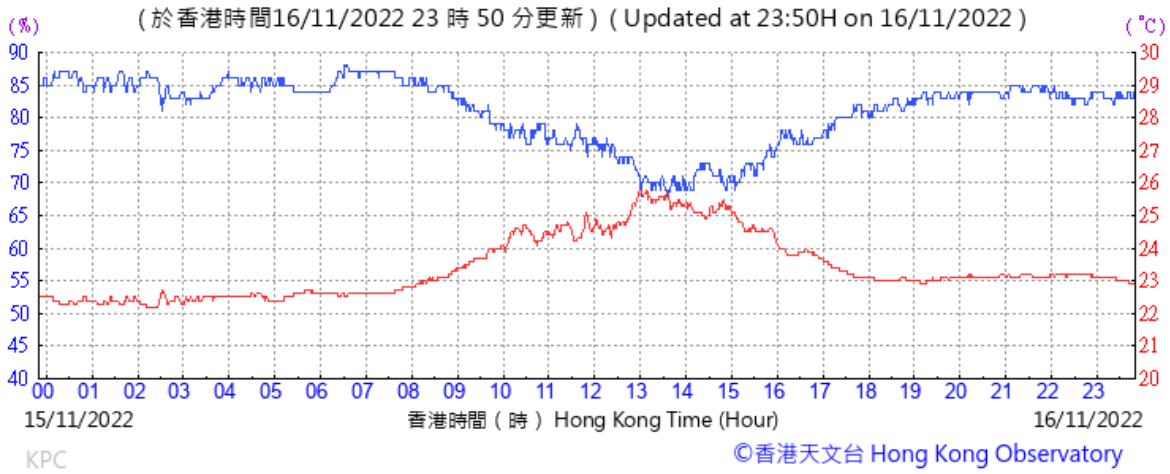
Wind Direction:



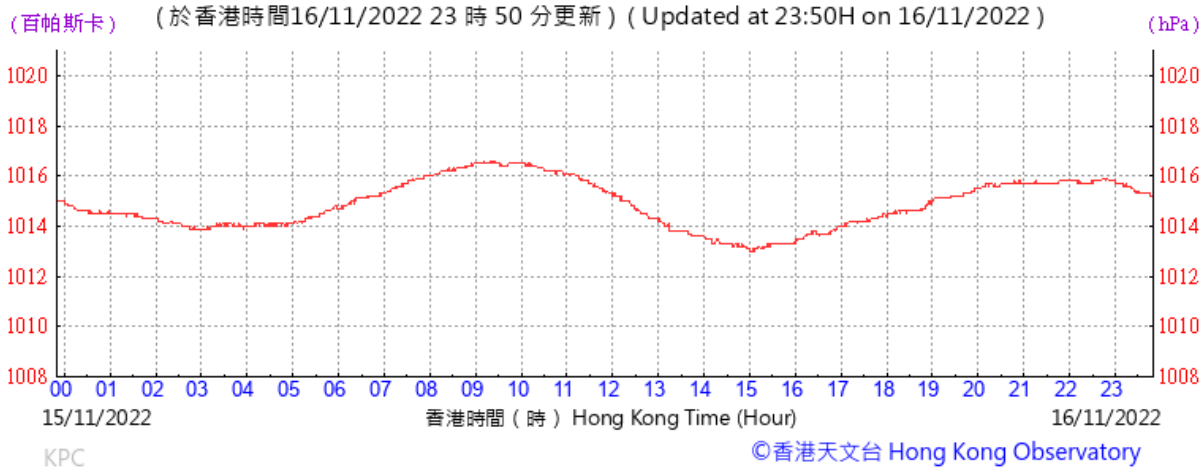
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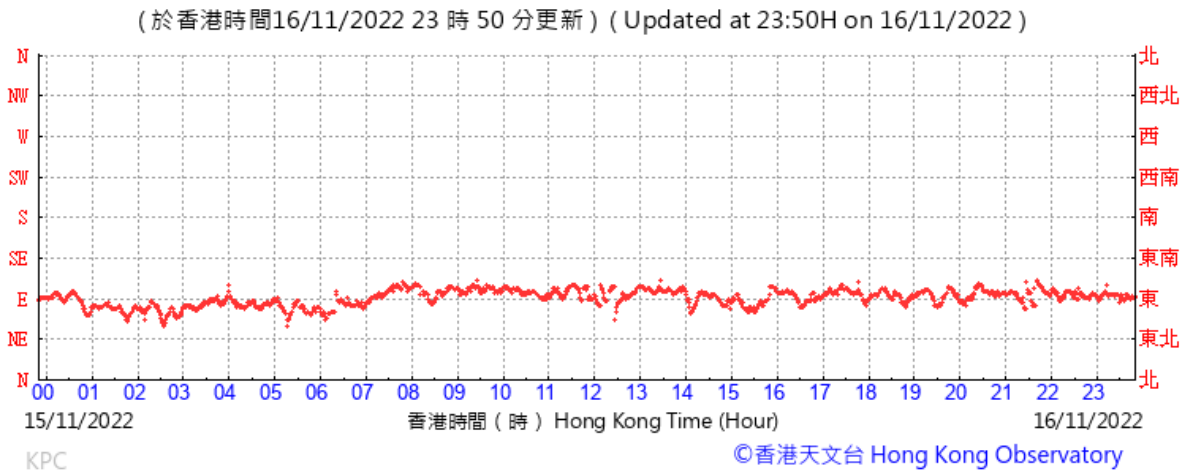
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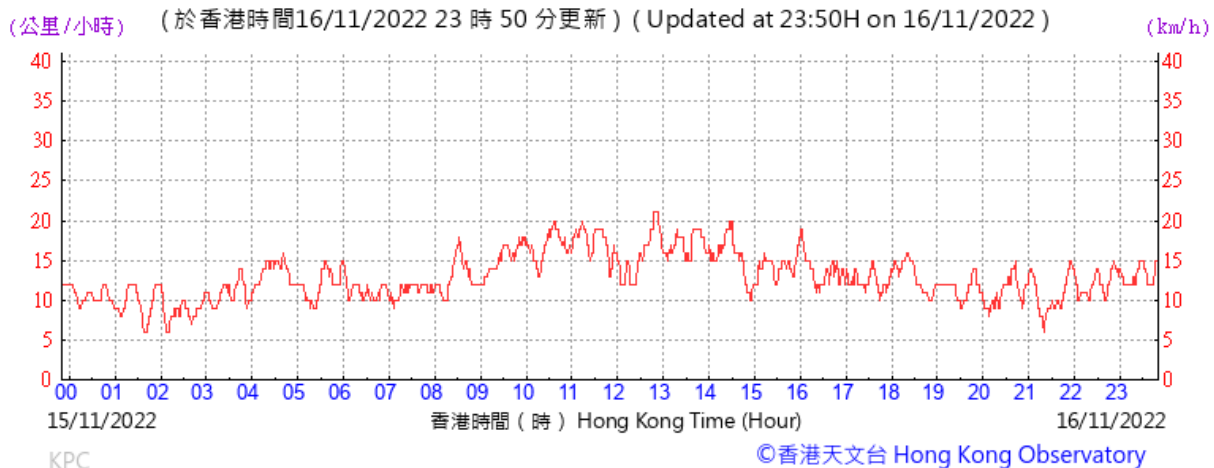
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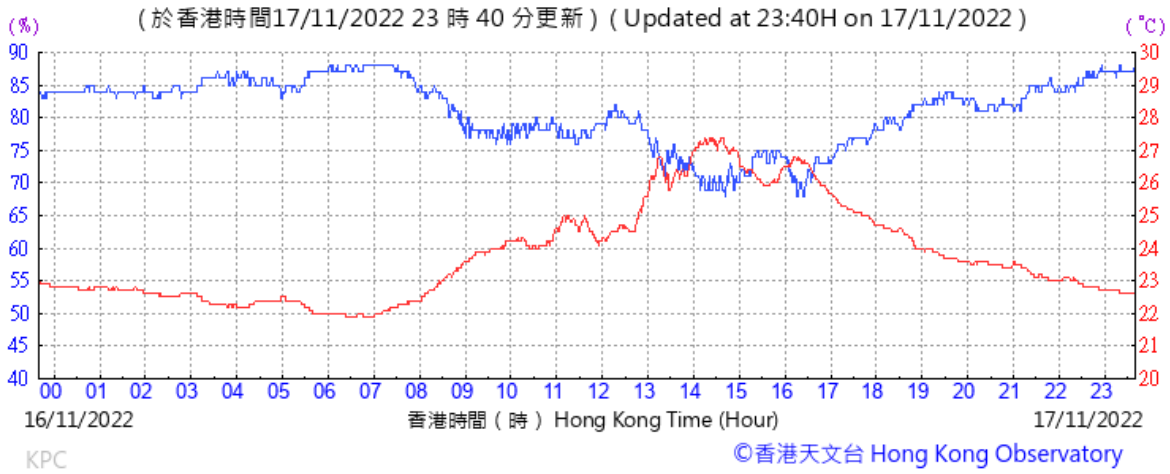
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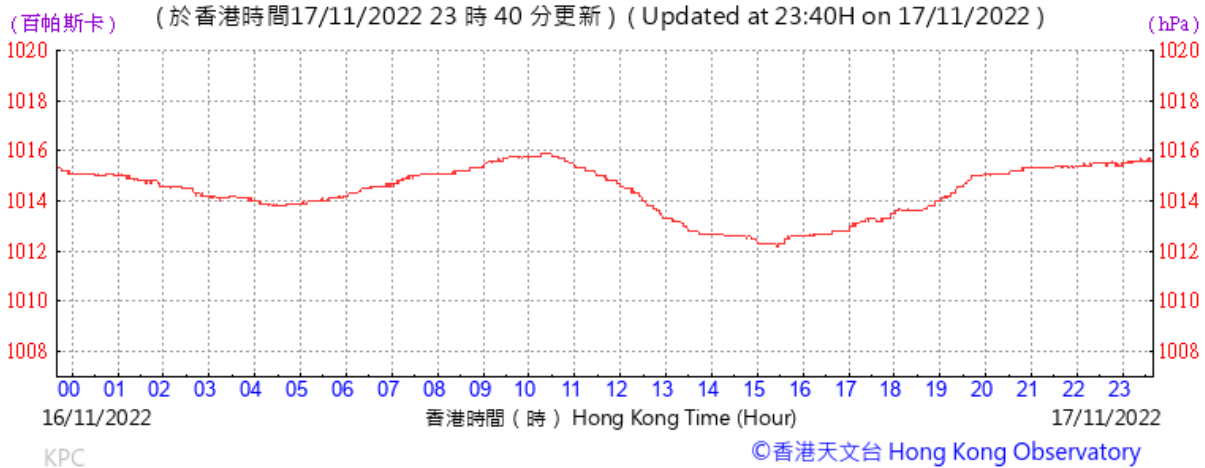
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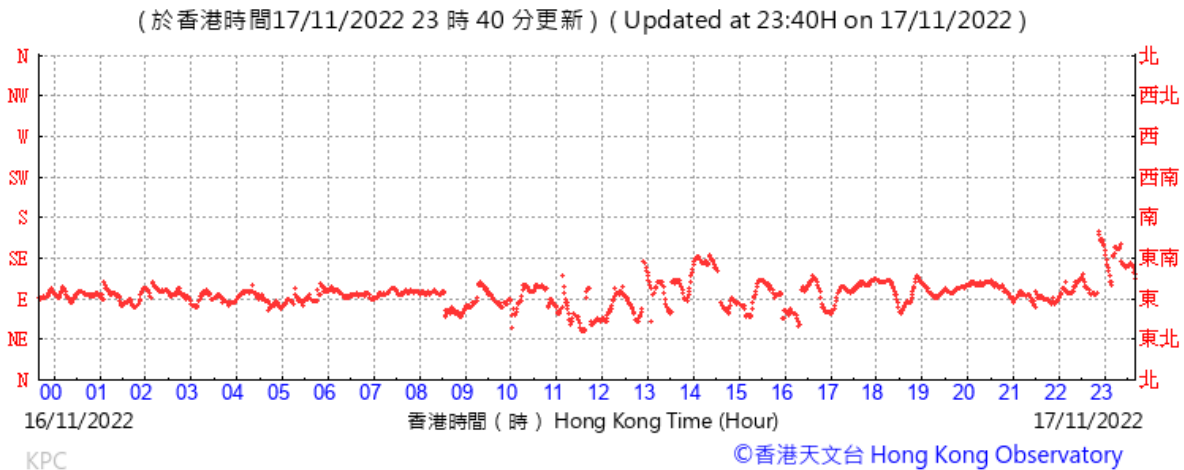
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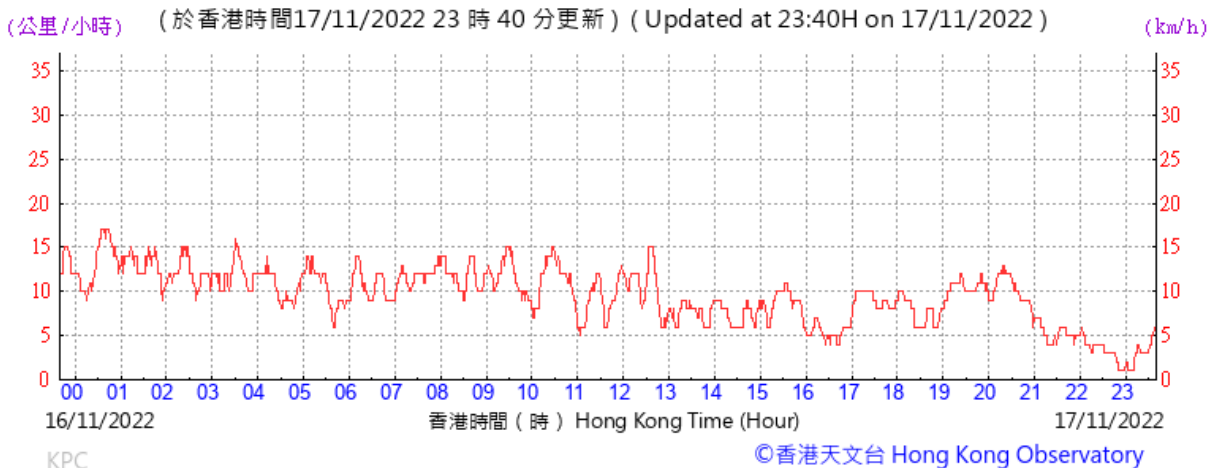
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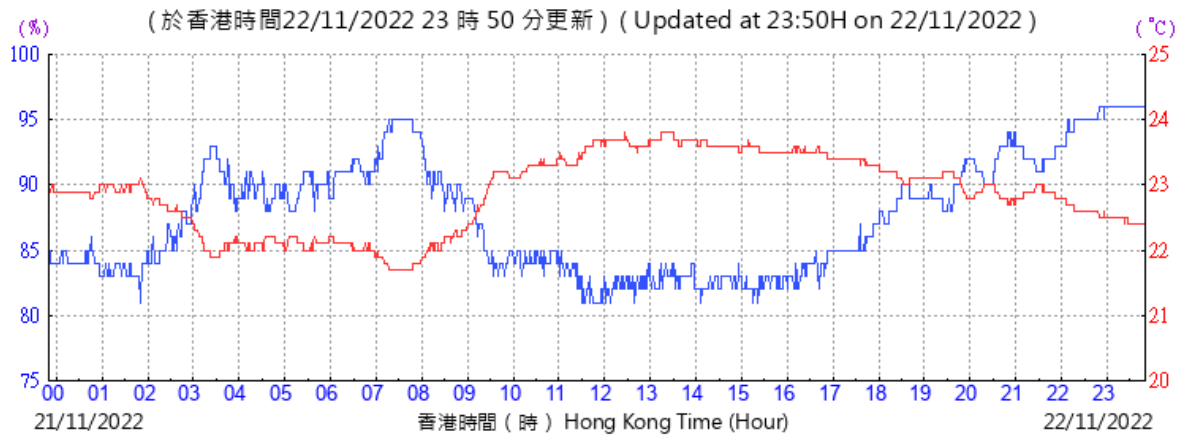
Wind Direction:



Wind Speed:



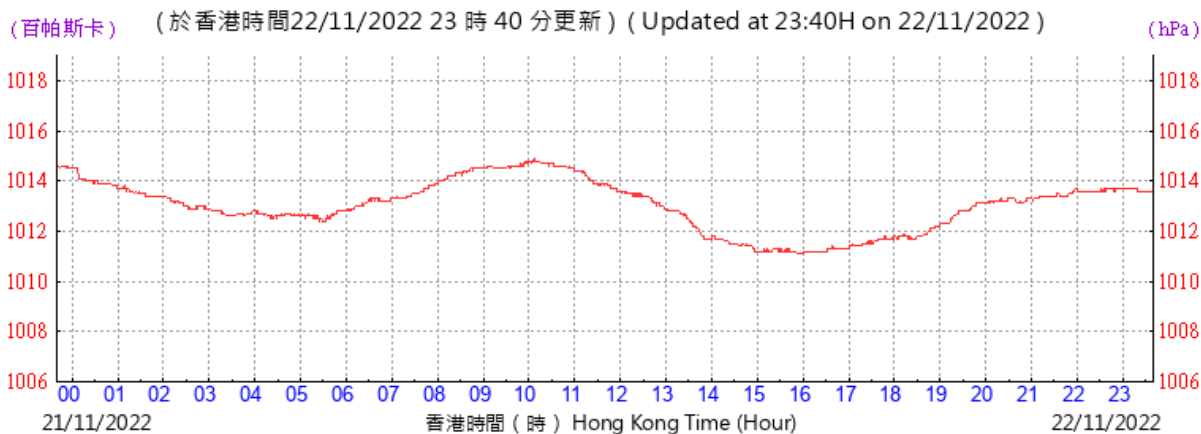
Temperature/Humidity:



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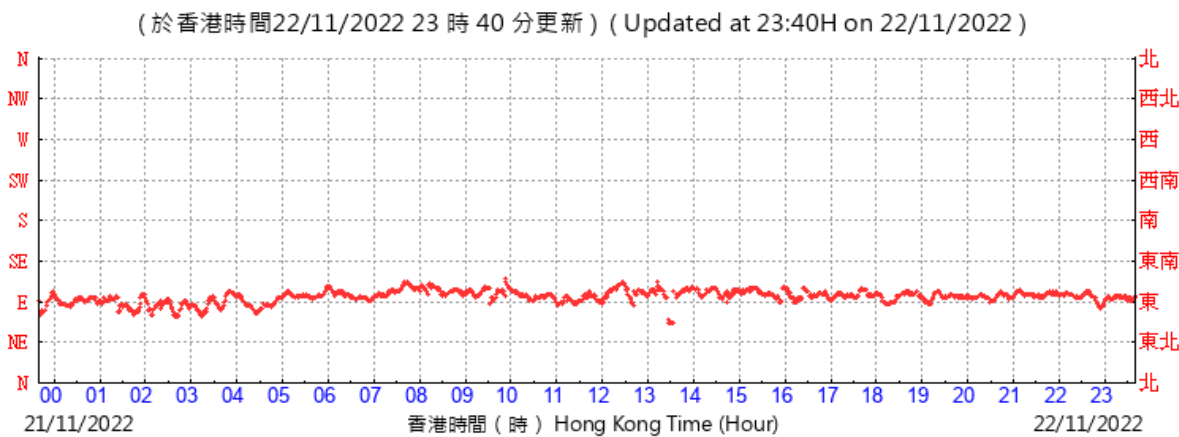
Pressure:



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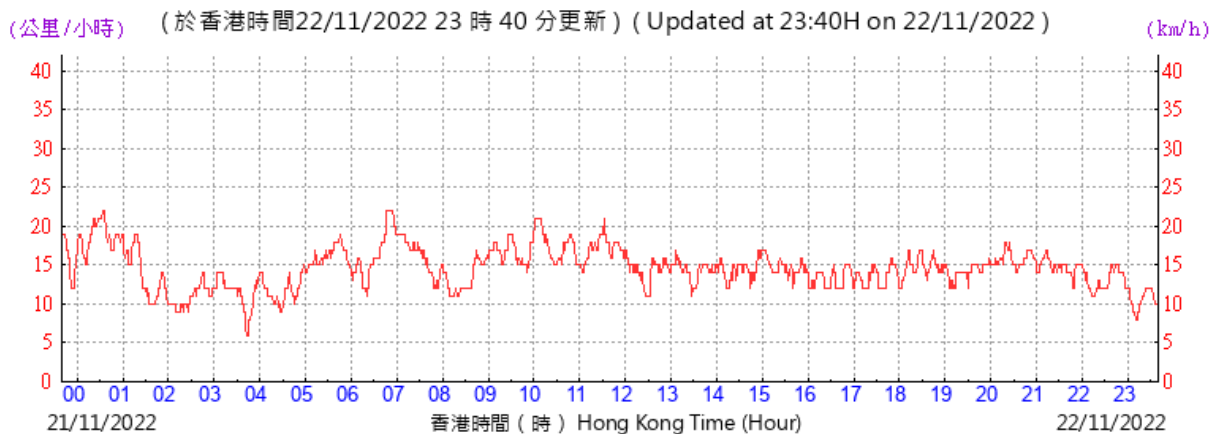
Wind Direction:



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Wind Speed:

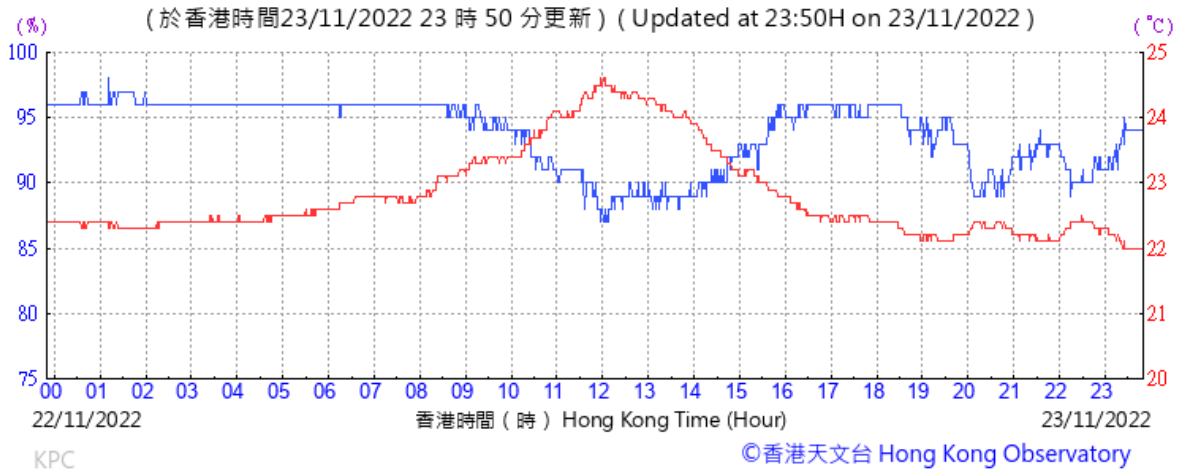


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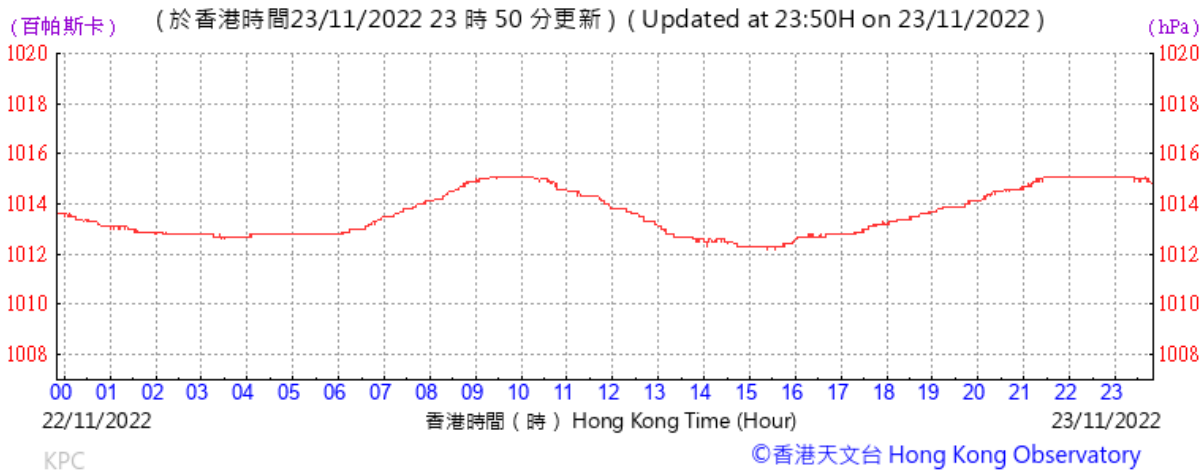
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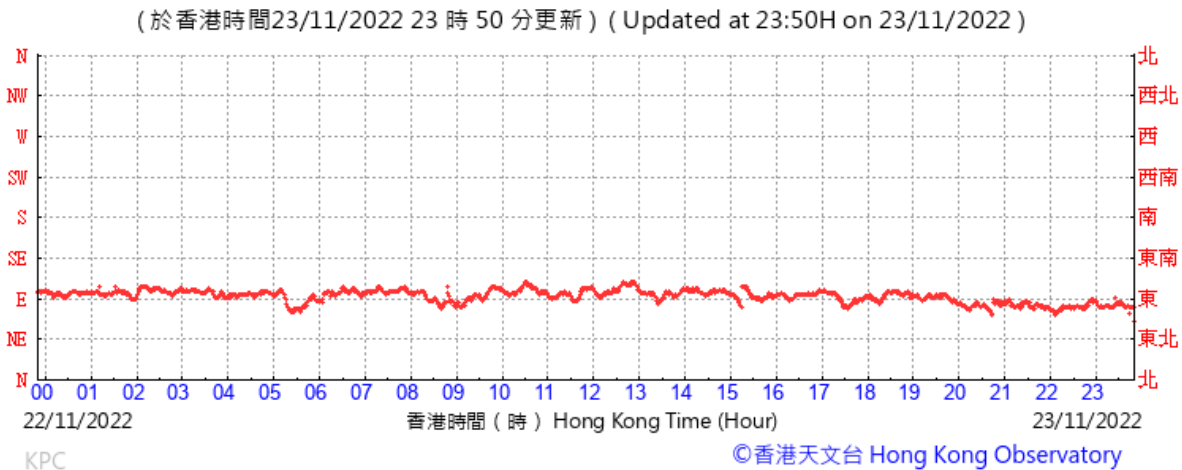
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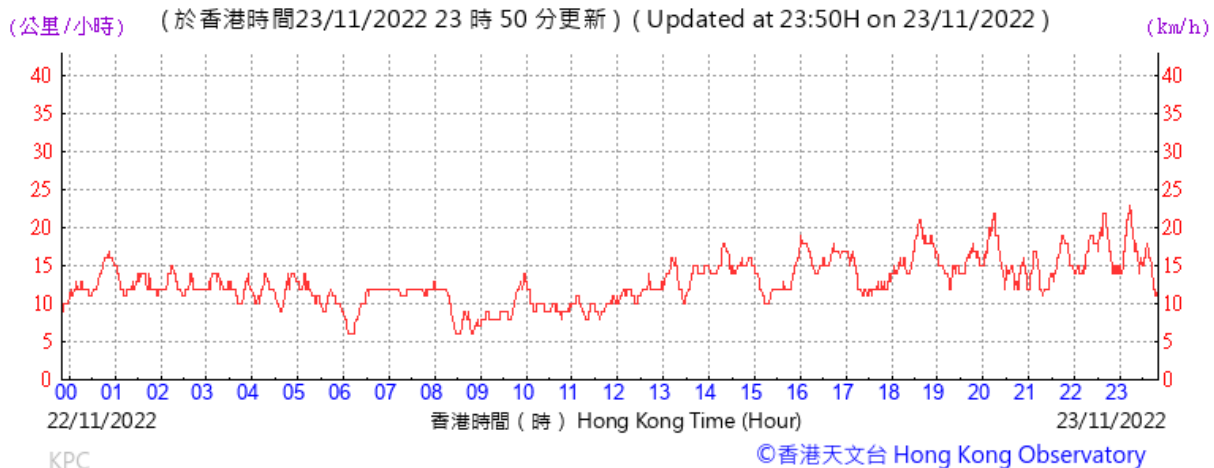
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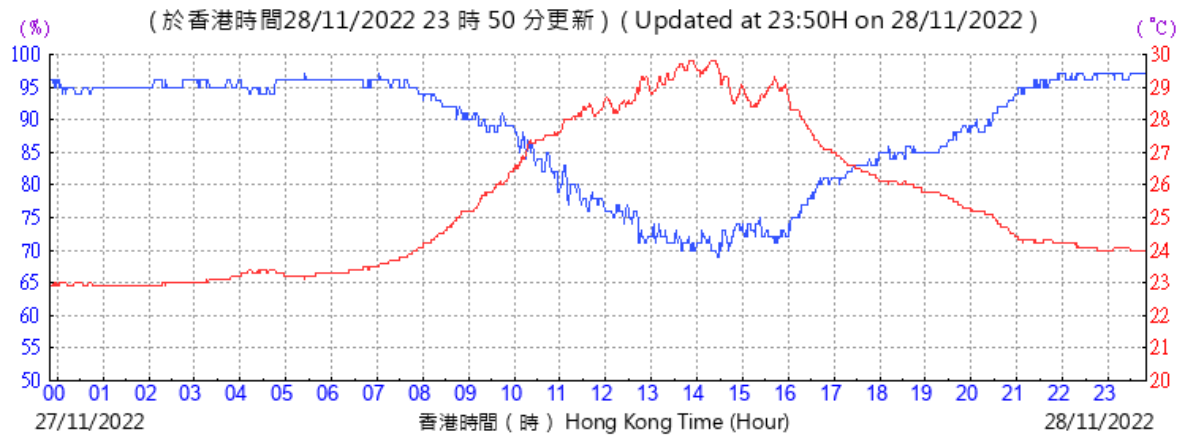
Wind Direction:



Wind Speed:



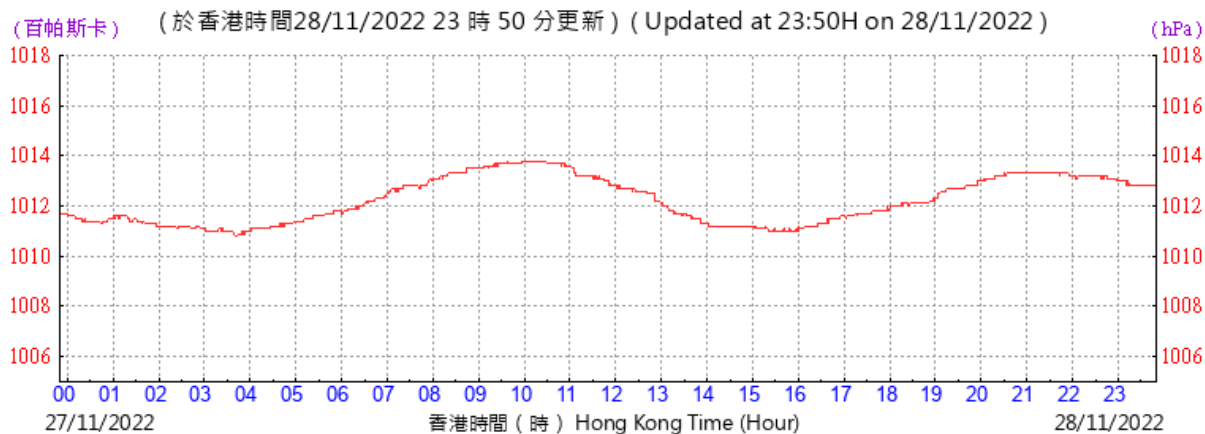
Temperature/Humidity:



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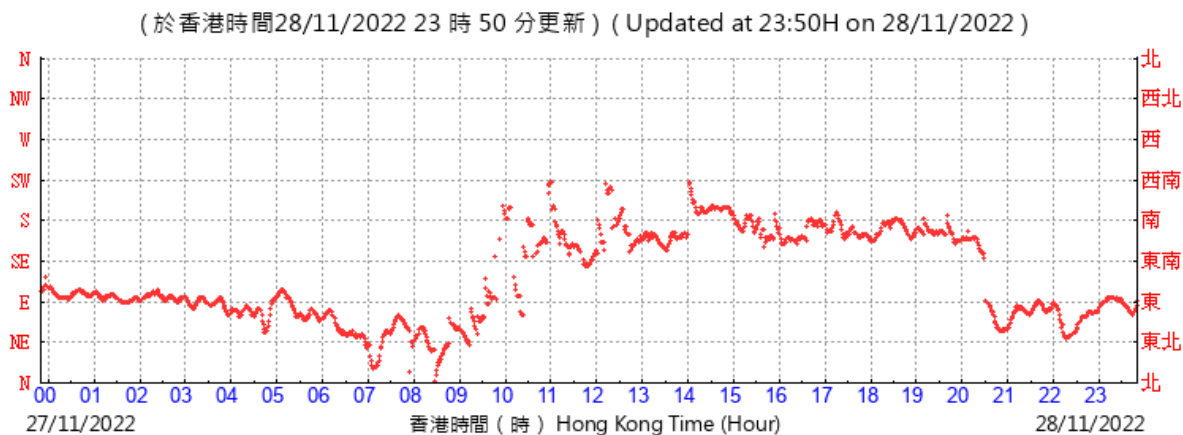
Pressure:



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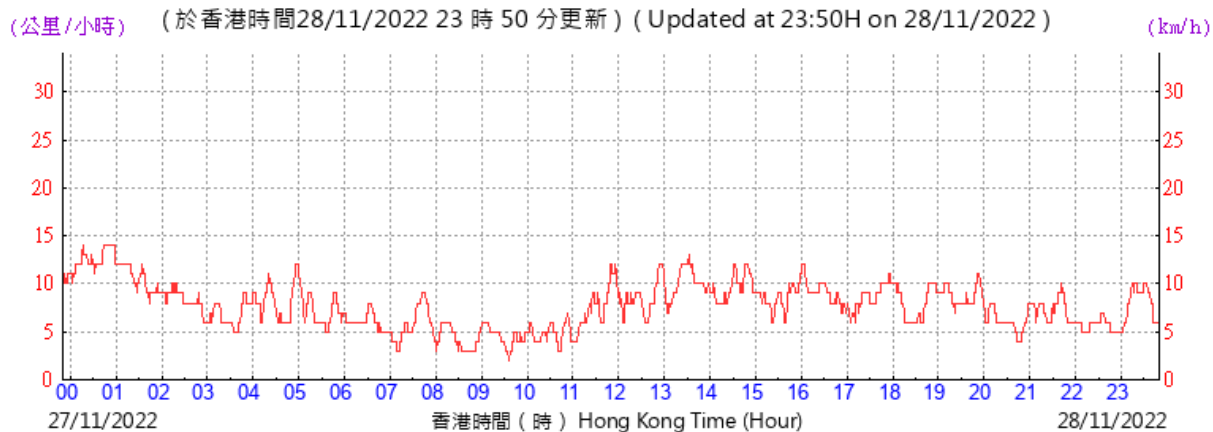
Wind Direction:



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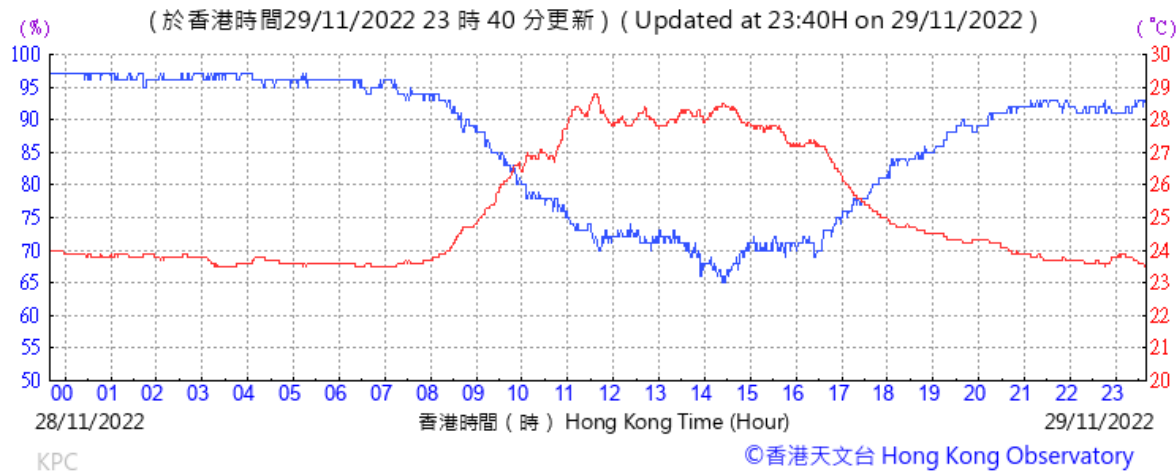
Wind Speed:



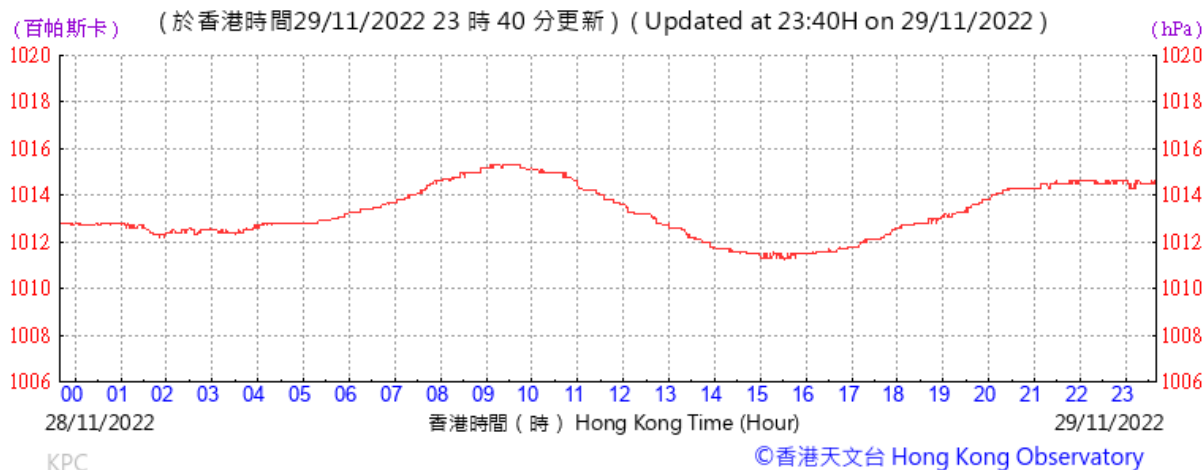
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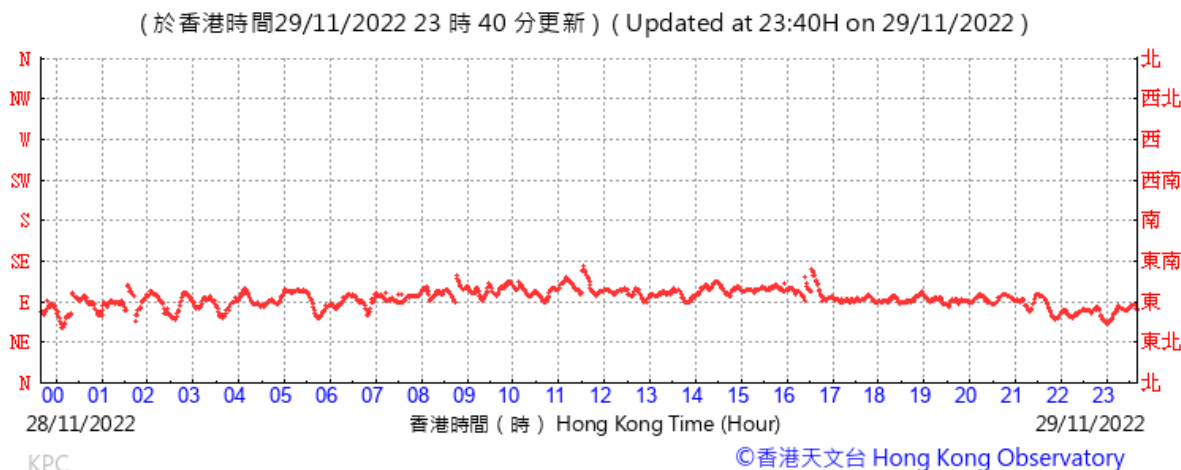
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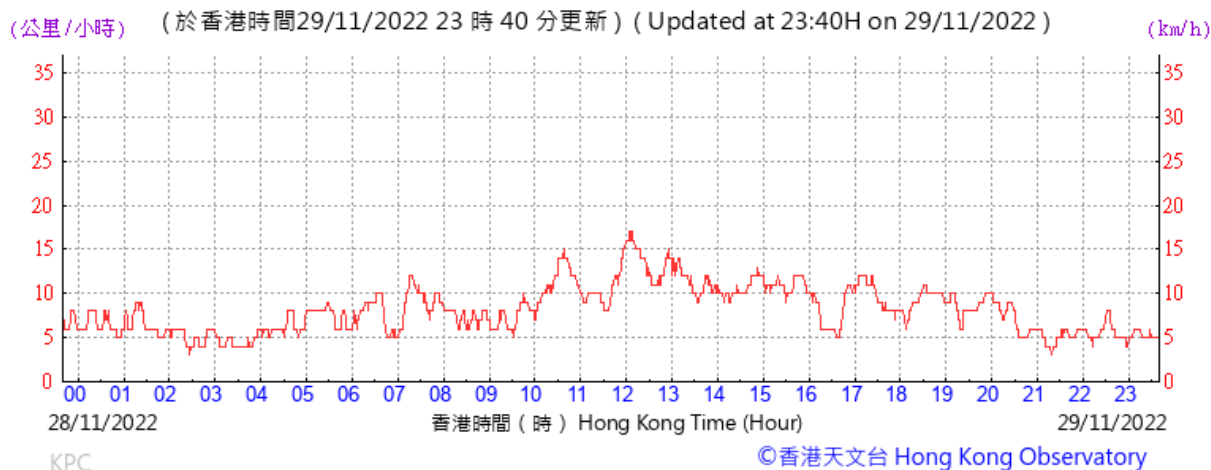
Pressure:



Wind Direction:

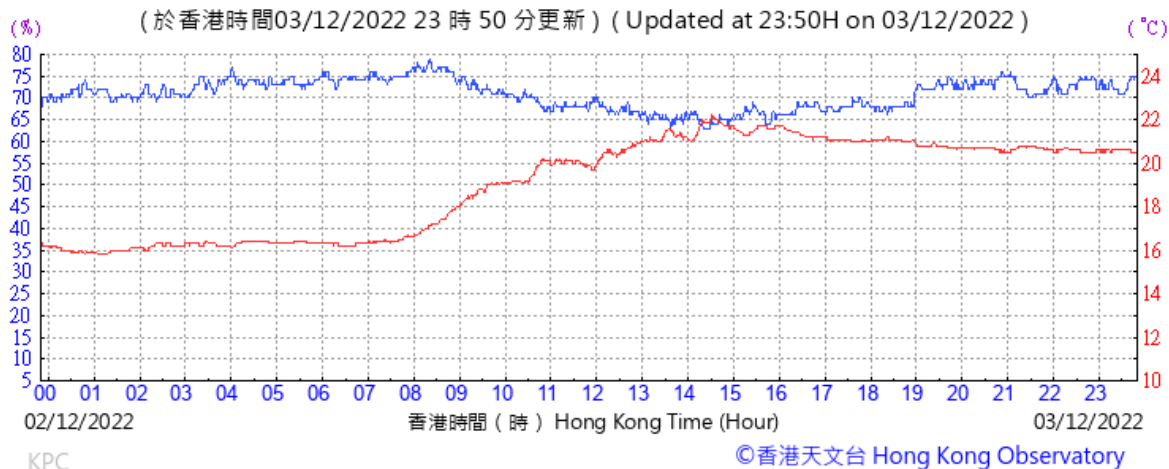


Wind Speed:

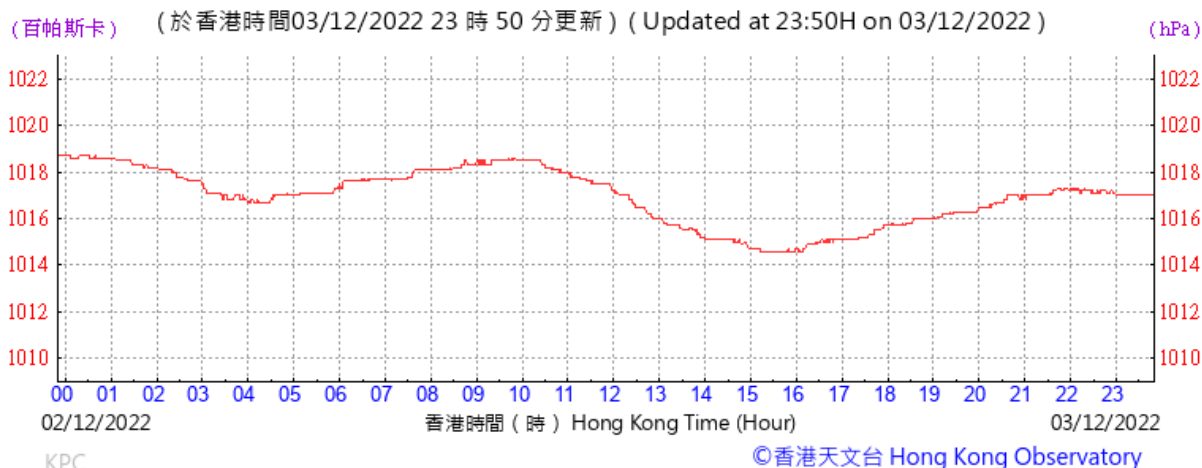


# Extract of Meteorological Observations for King's Park Automatic Weather Station, December 2022

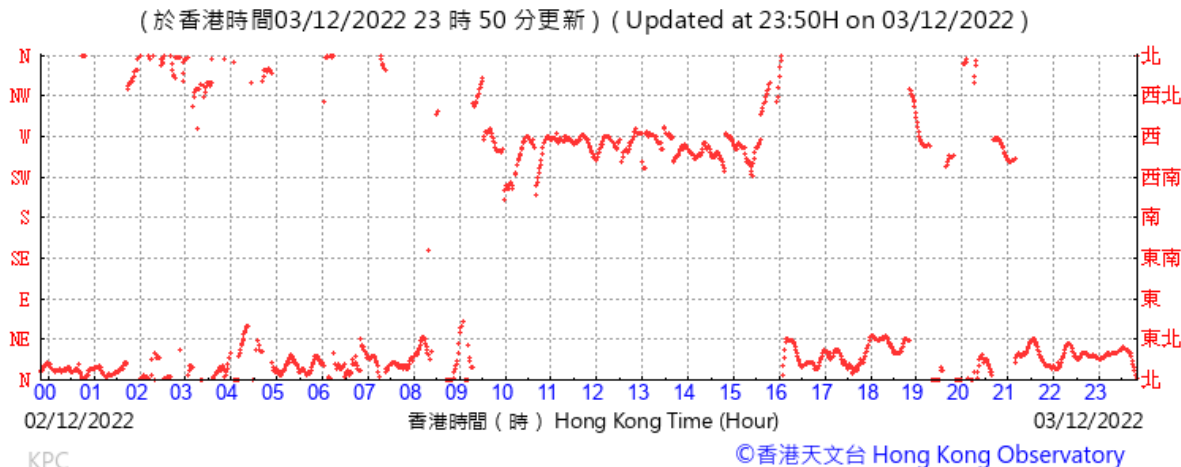
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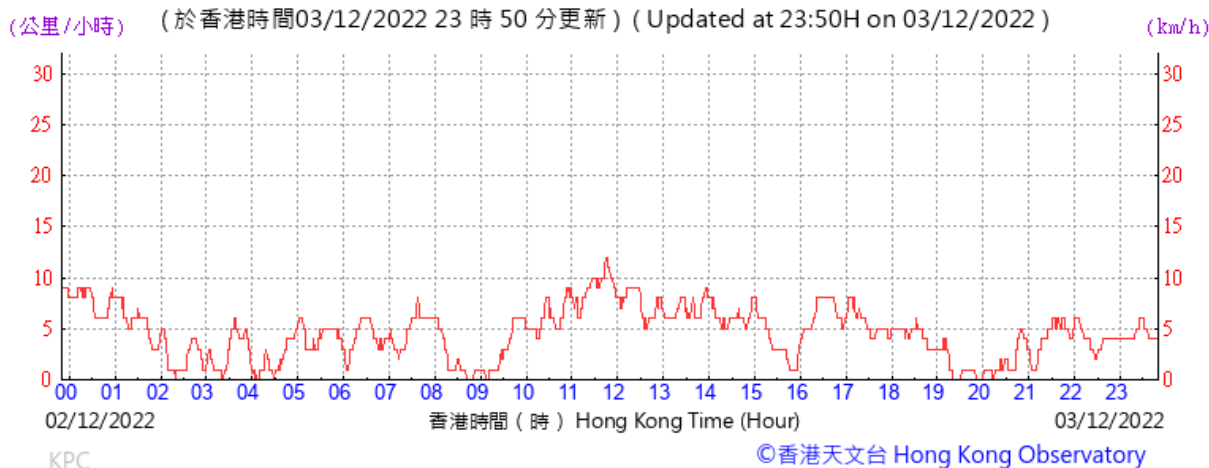
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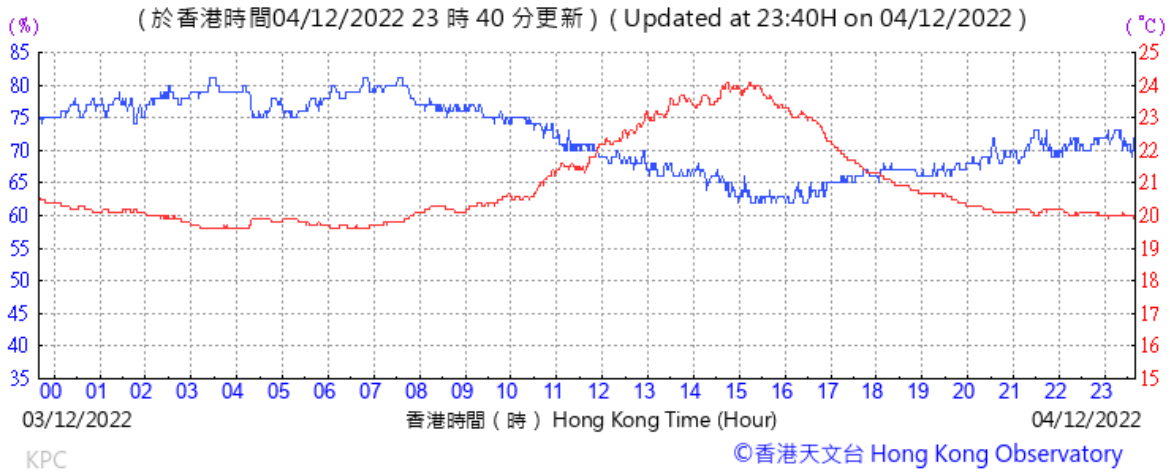
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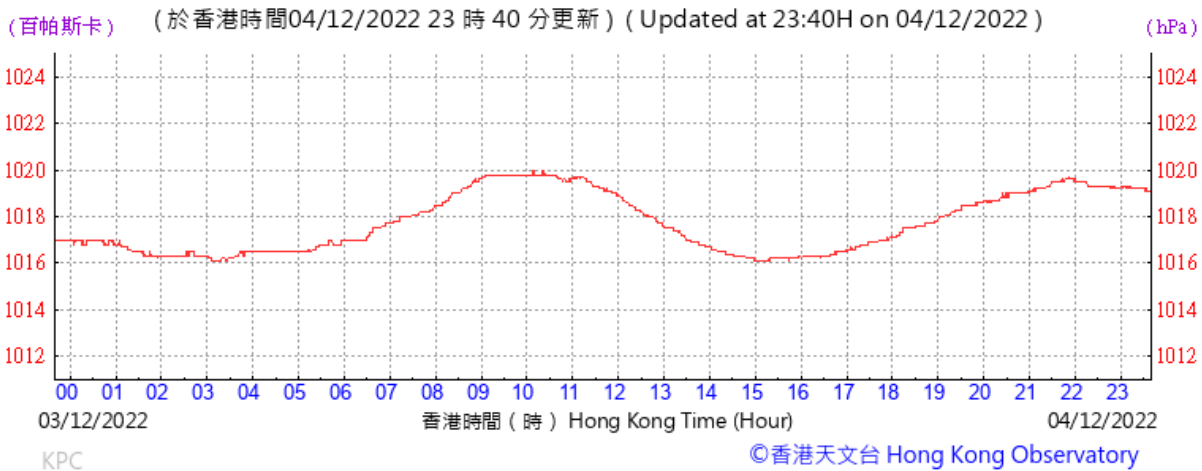
Wind Speed:



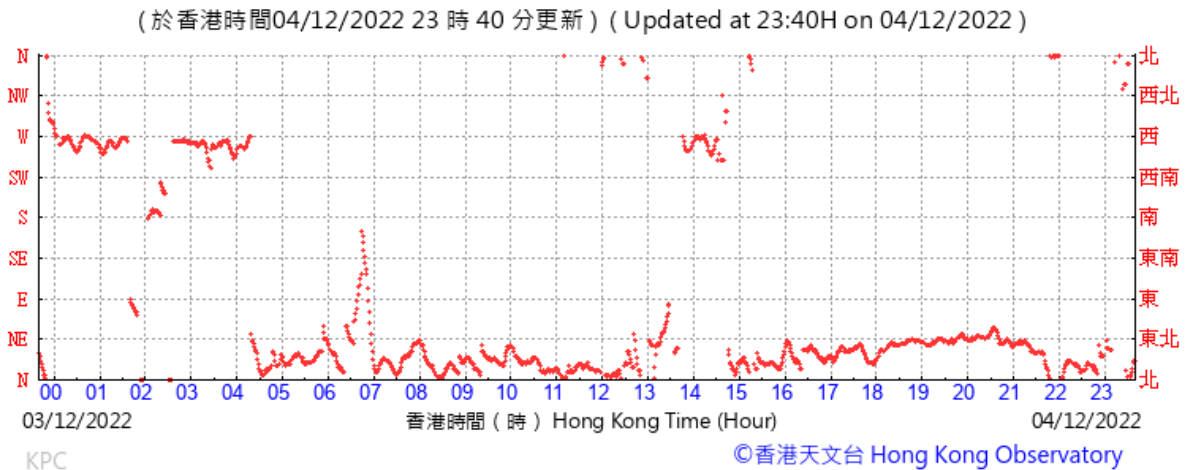
Temperature/Humidity:



Pressure:



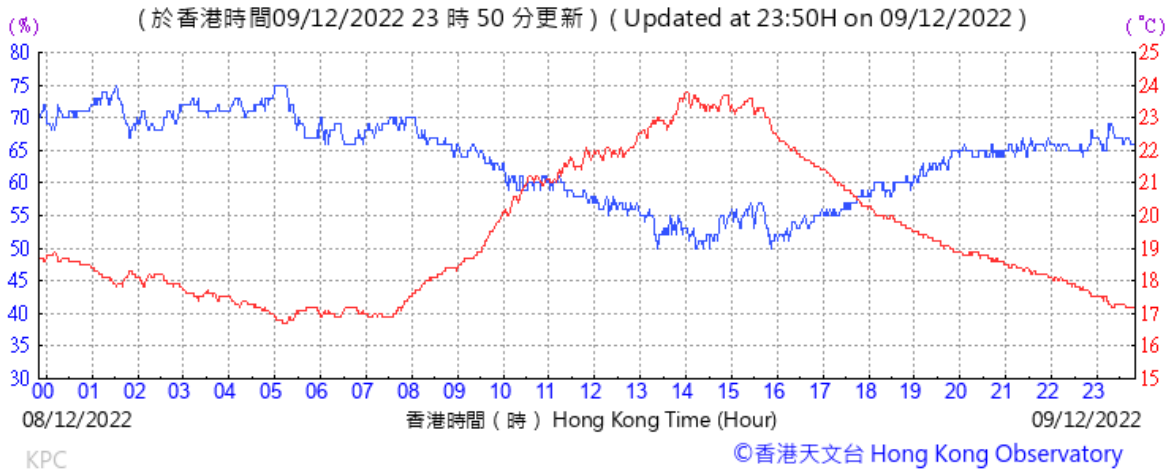
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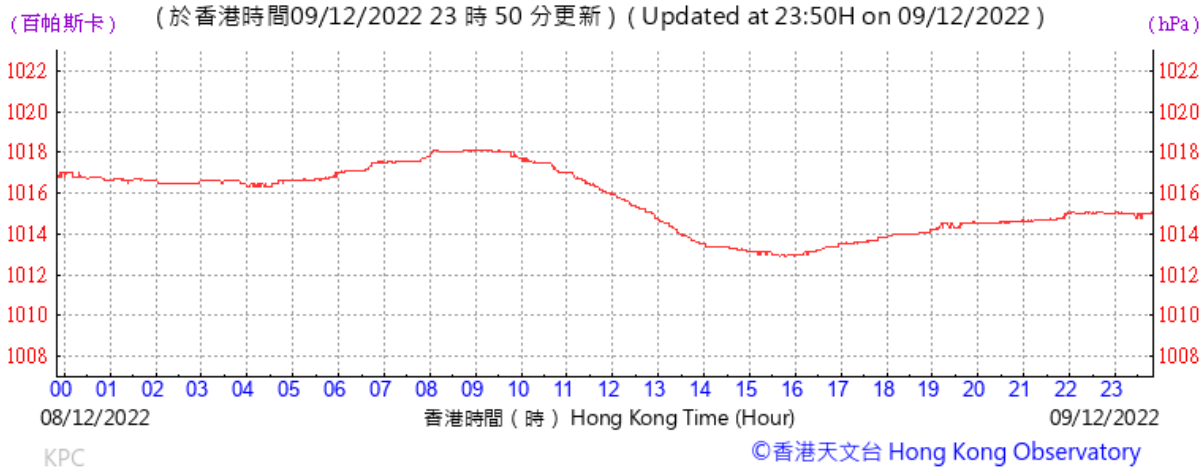
Wind Speed:



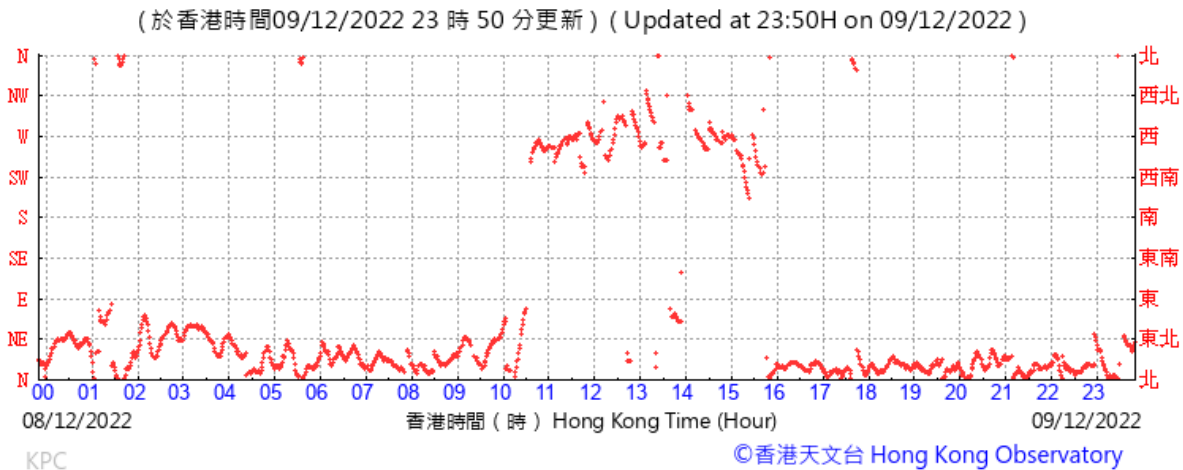
Temperature/Humidity:



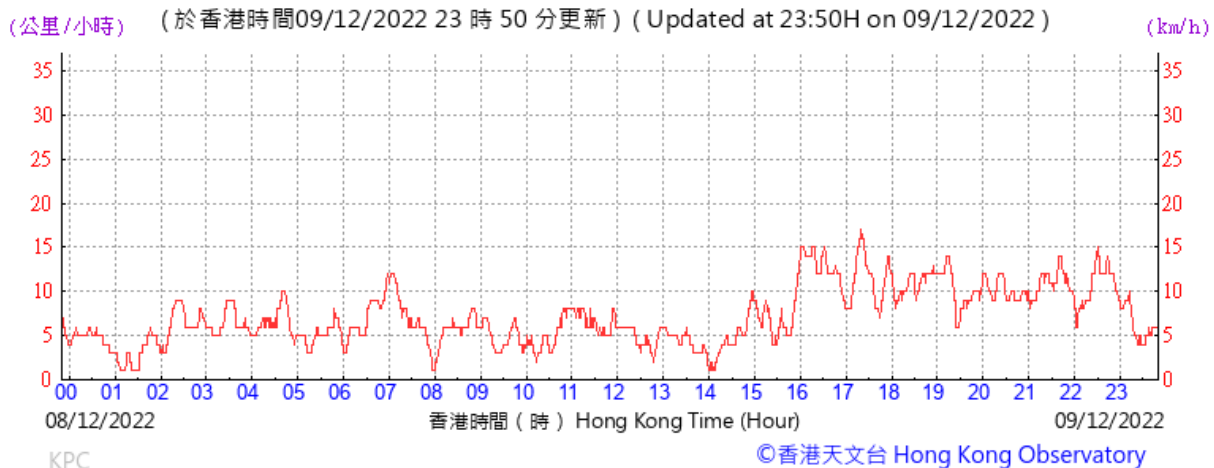
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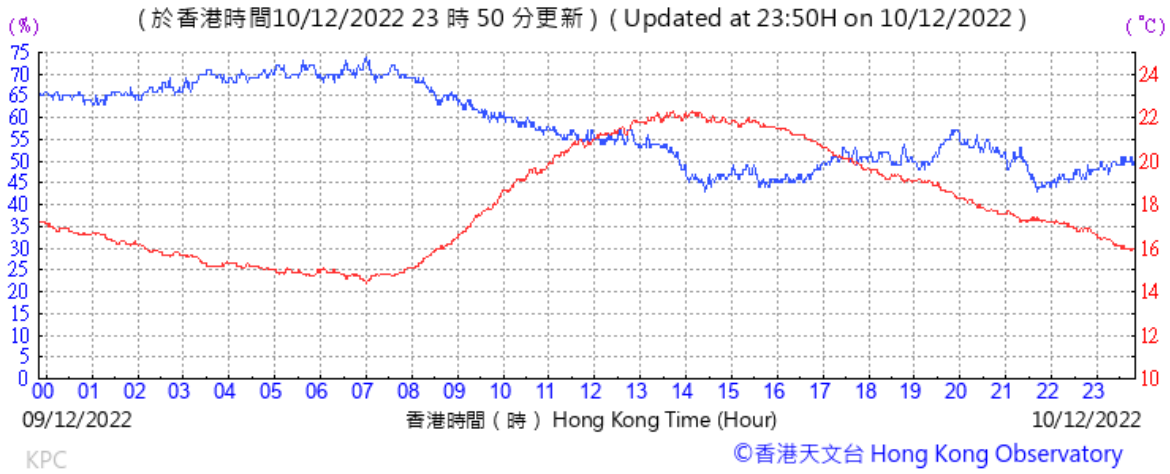
Wind Direction:



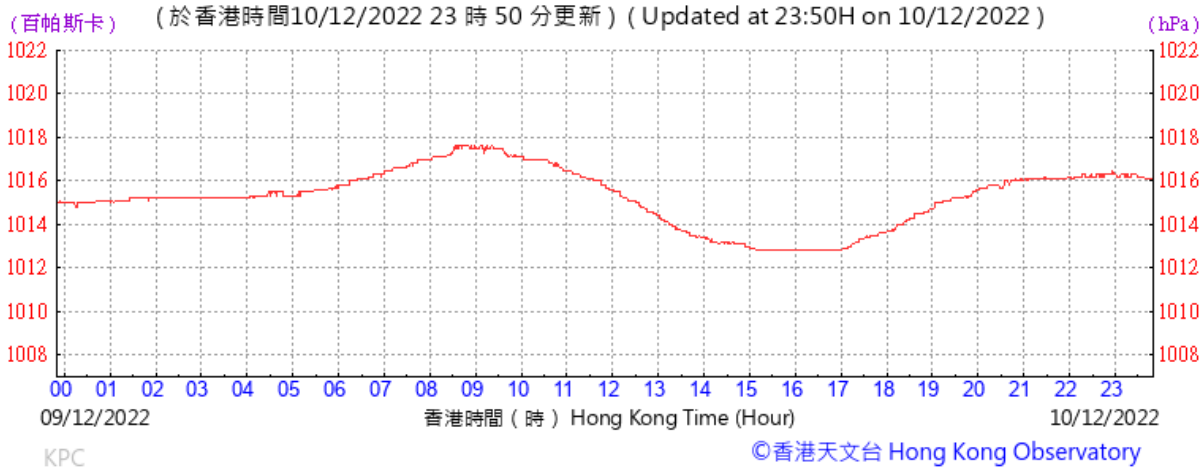
Wind Speed:



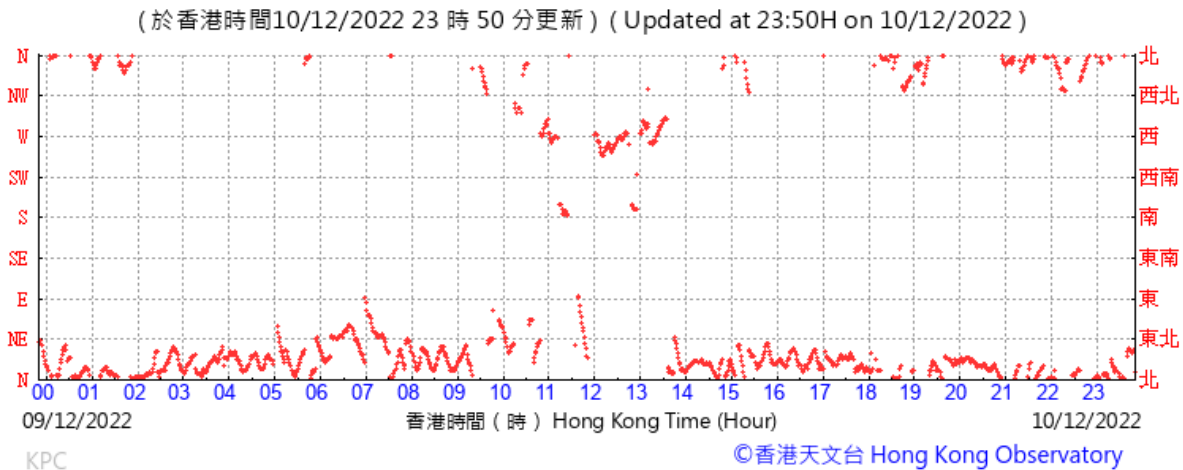
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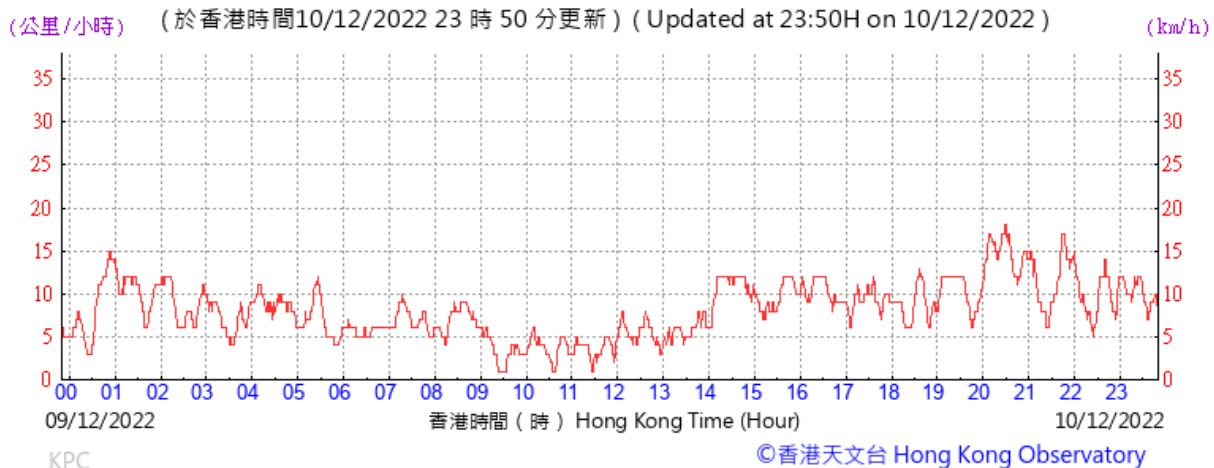
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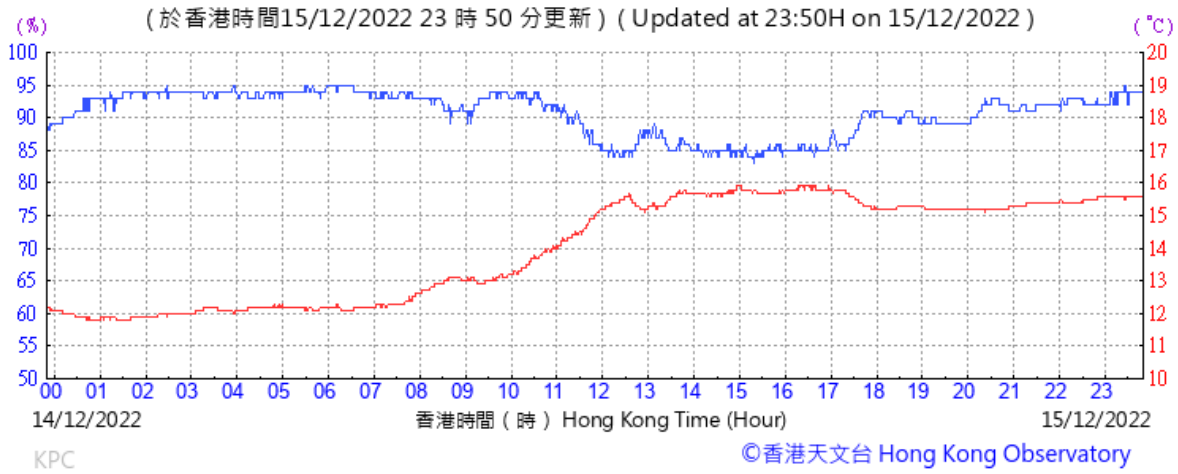
Wind Direction:



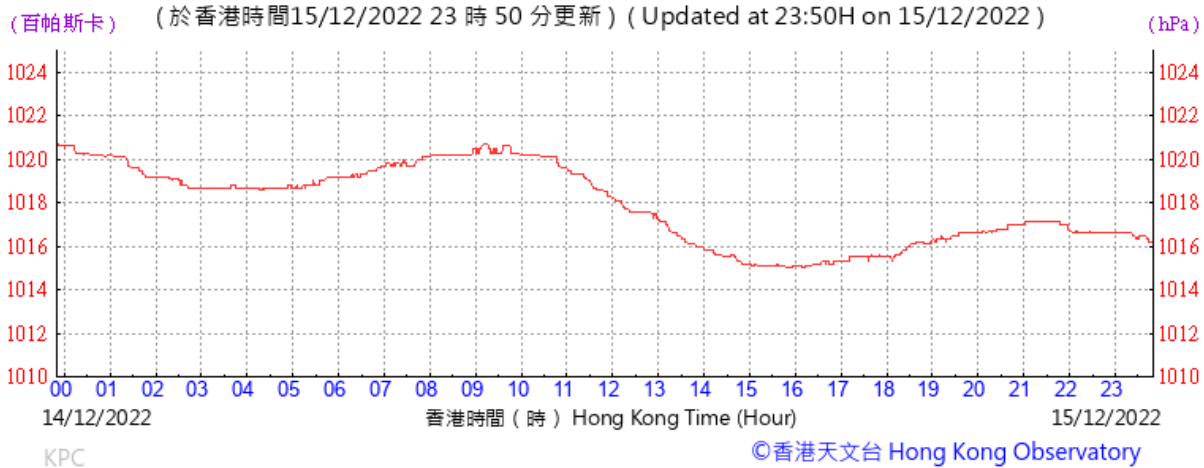
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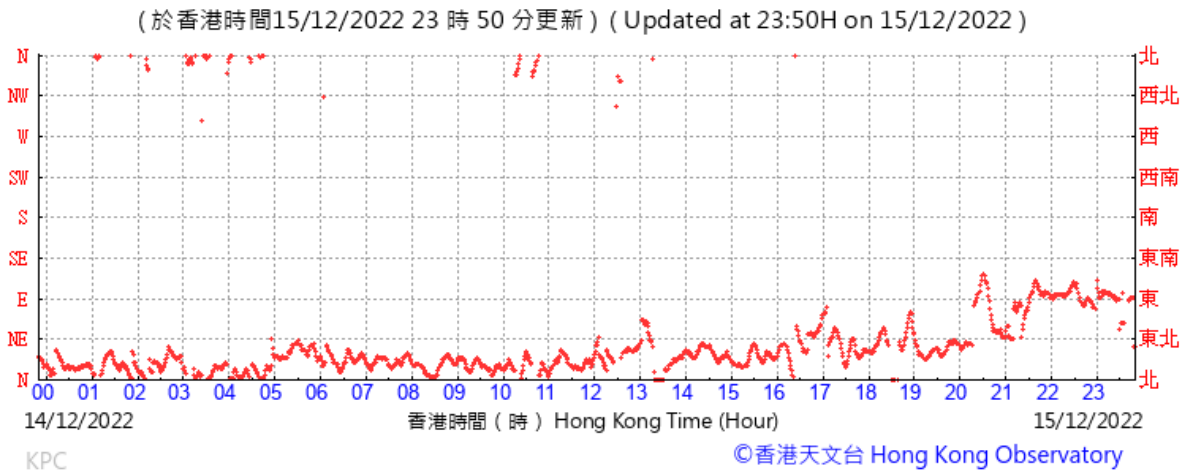
Temperature/Humidity:



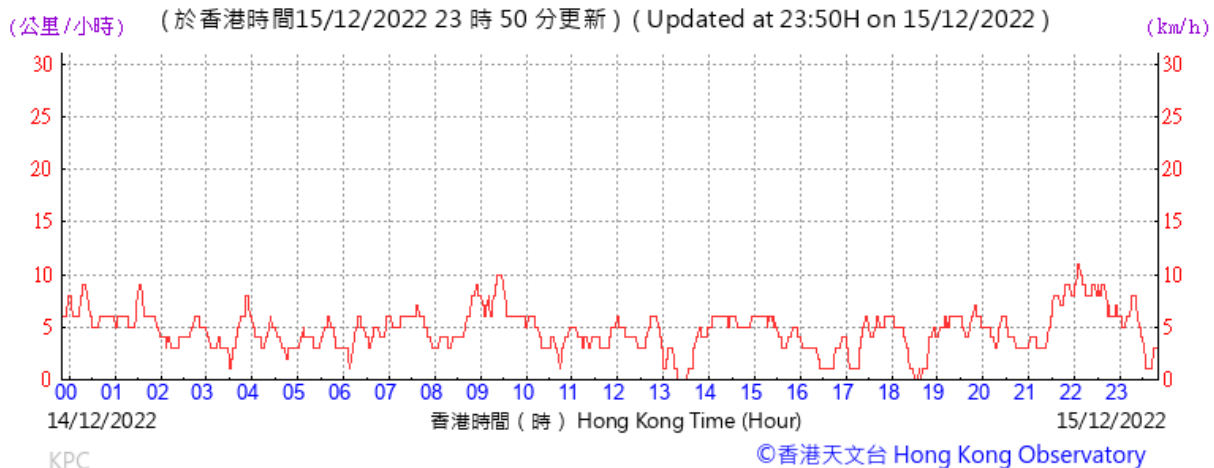
Pressure:



Wind Direction:

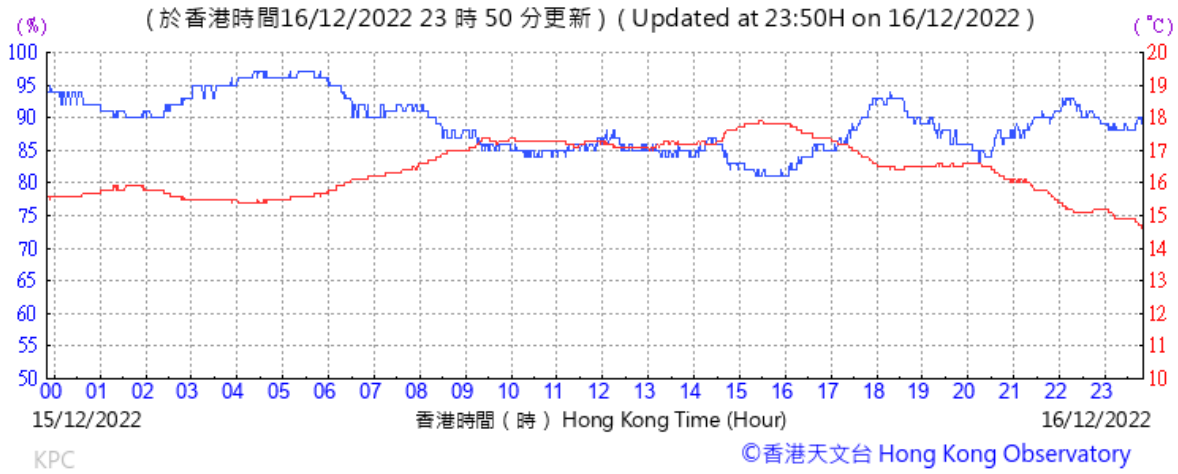


Wind Speed:

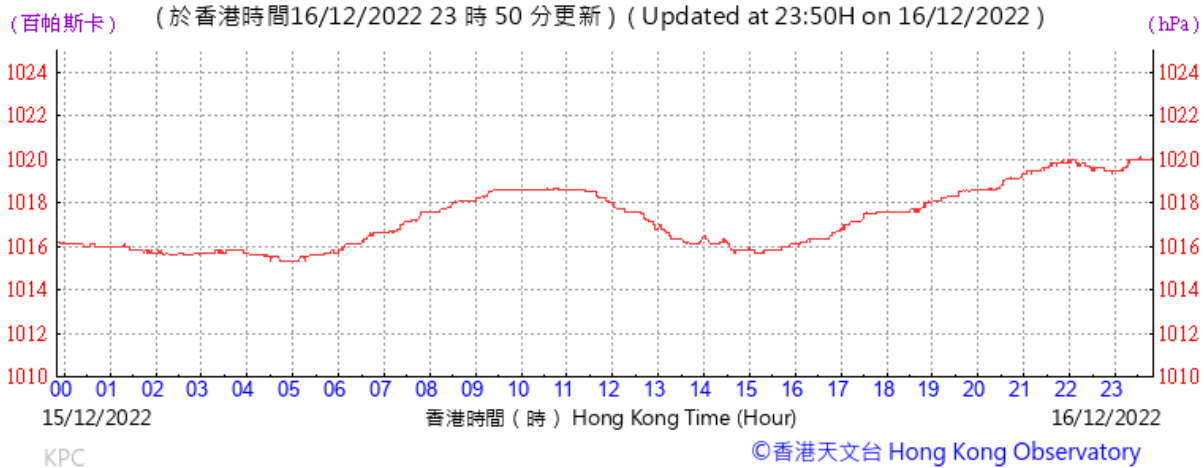




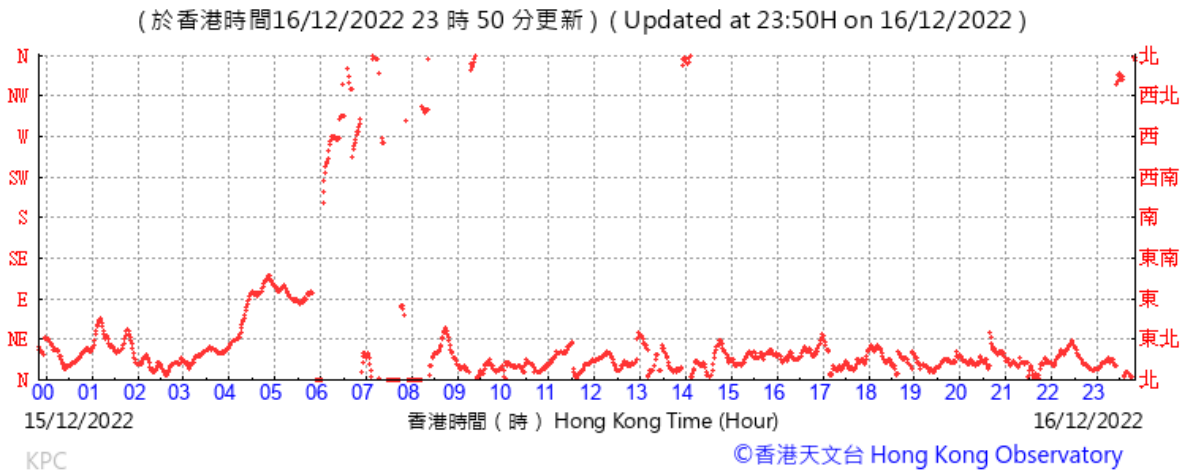
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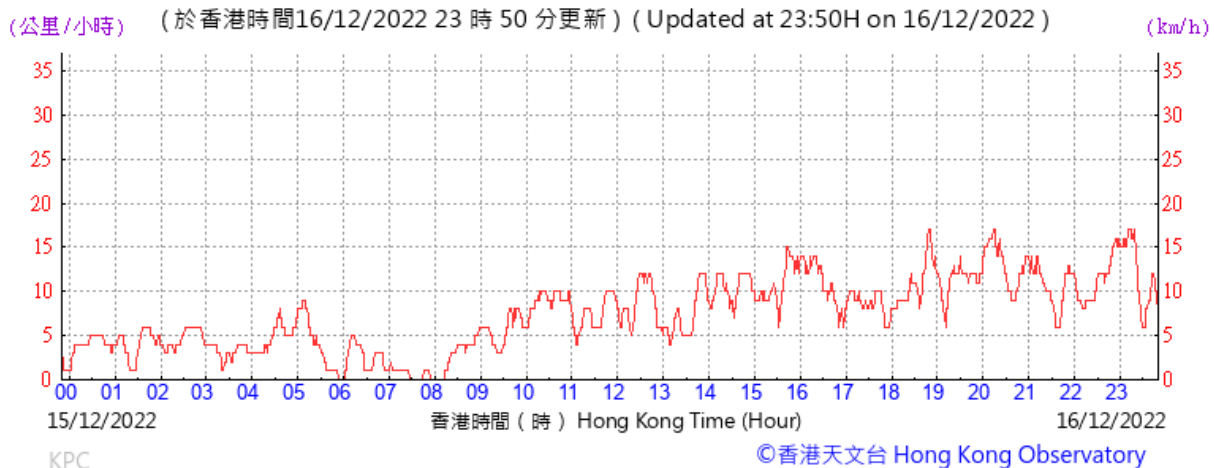
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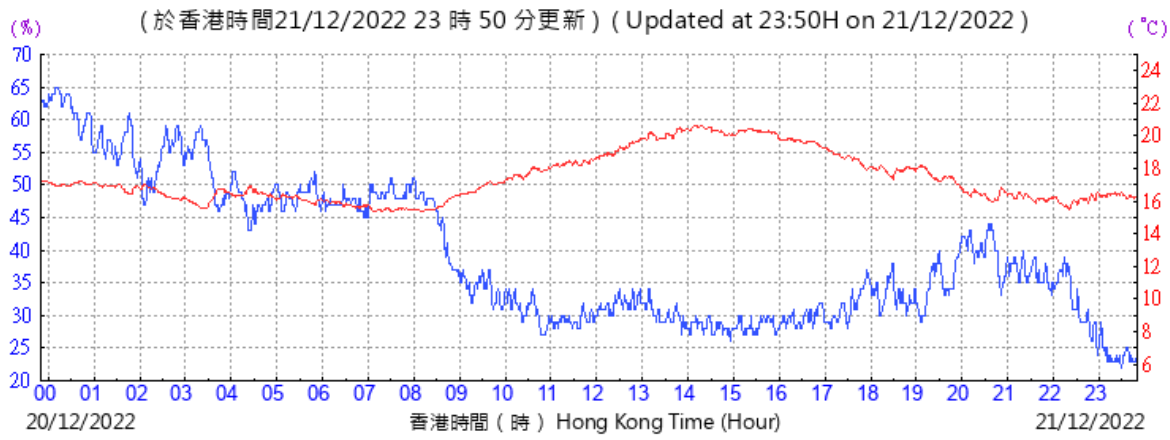
Wind Direction:



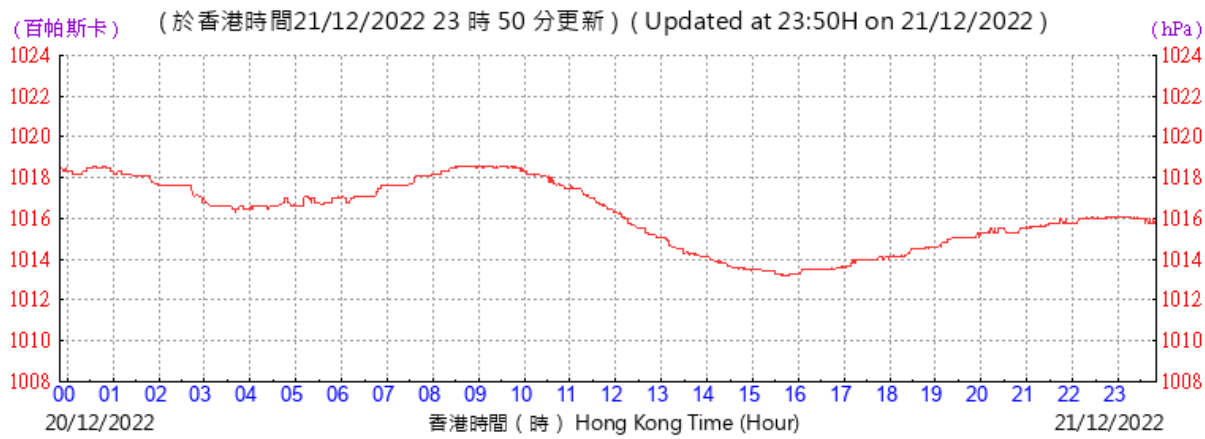
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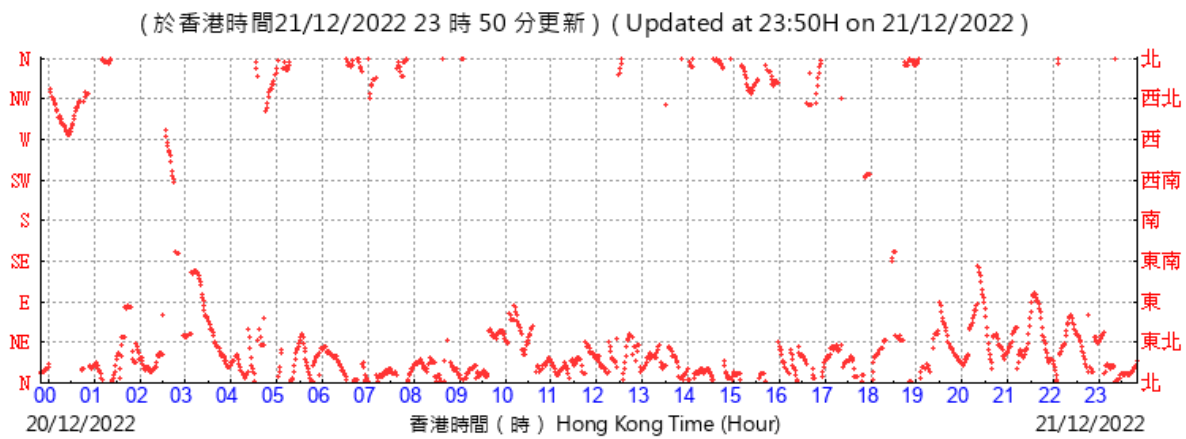
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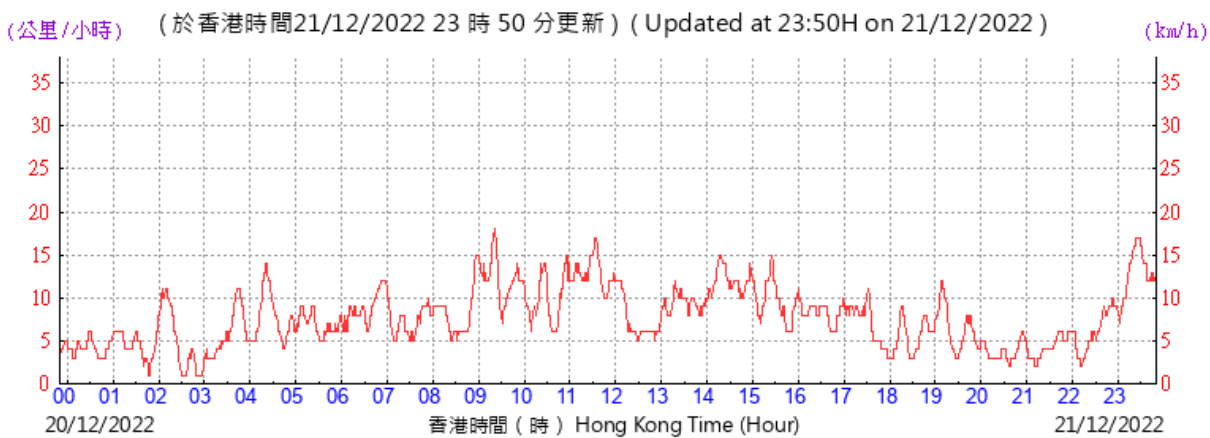
KPC  
Pressure:



KPC  
Wind Direction:



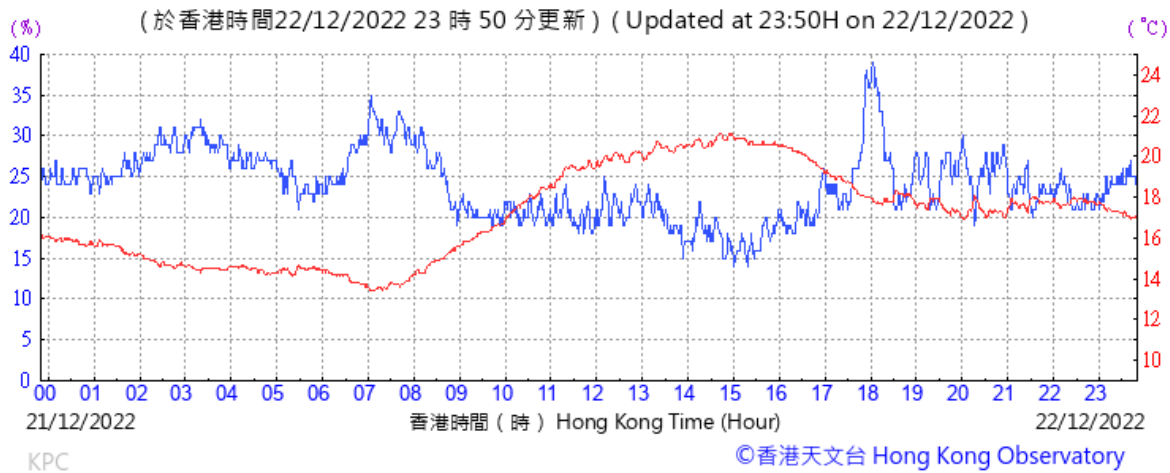
KPC  
Wind Speed:



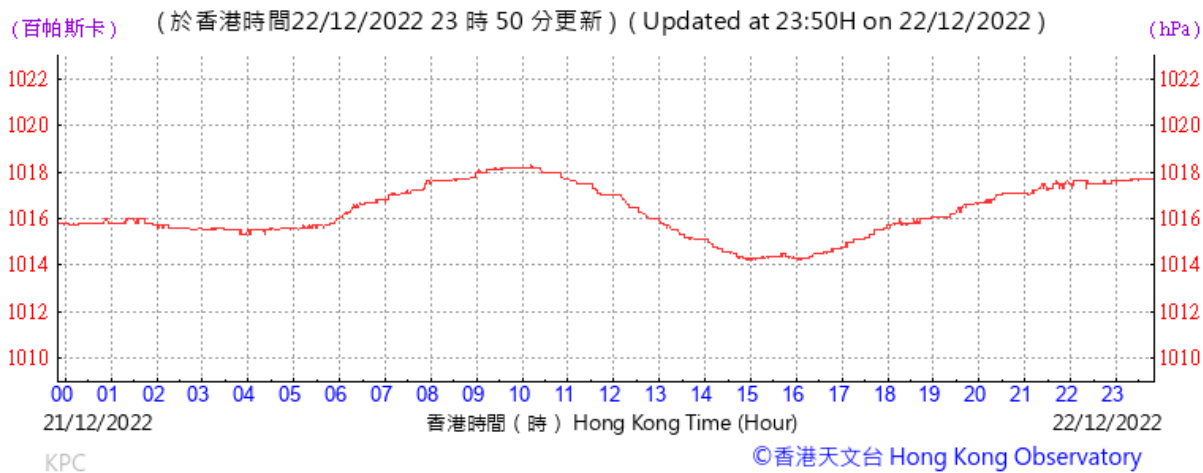
KPC

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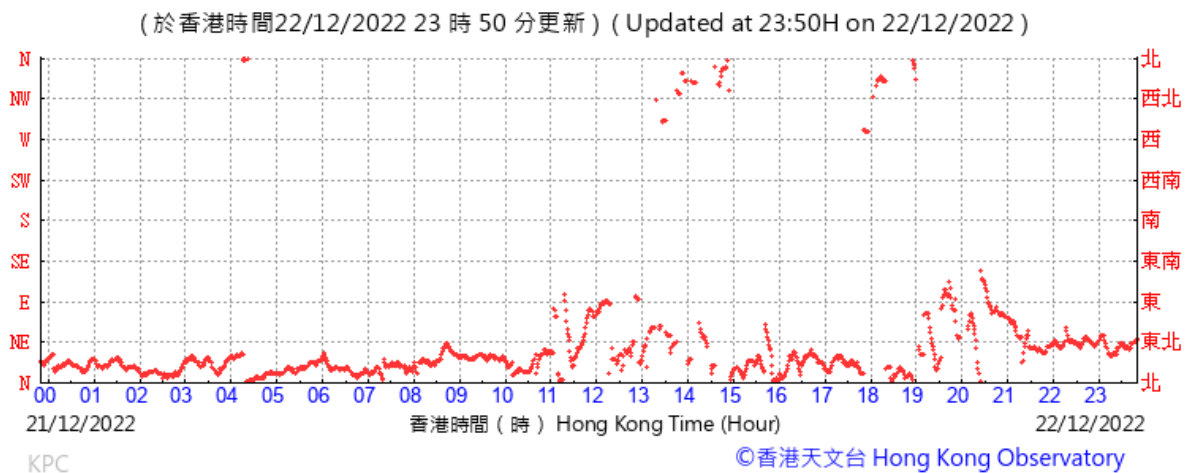
Temperature/Humidity:



Pressure:



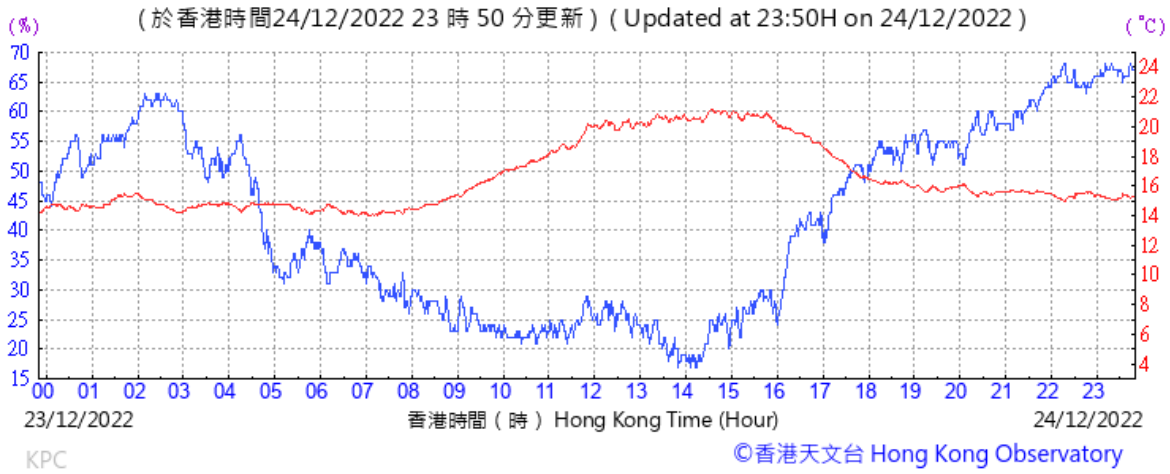
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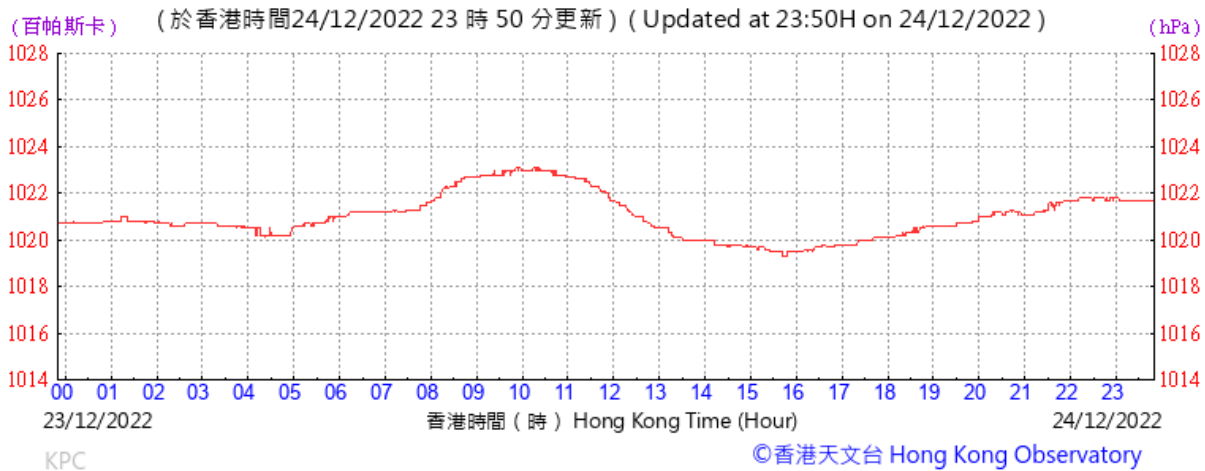
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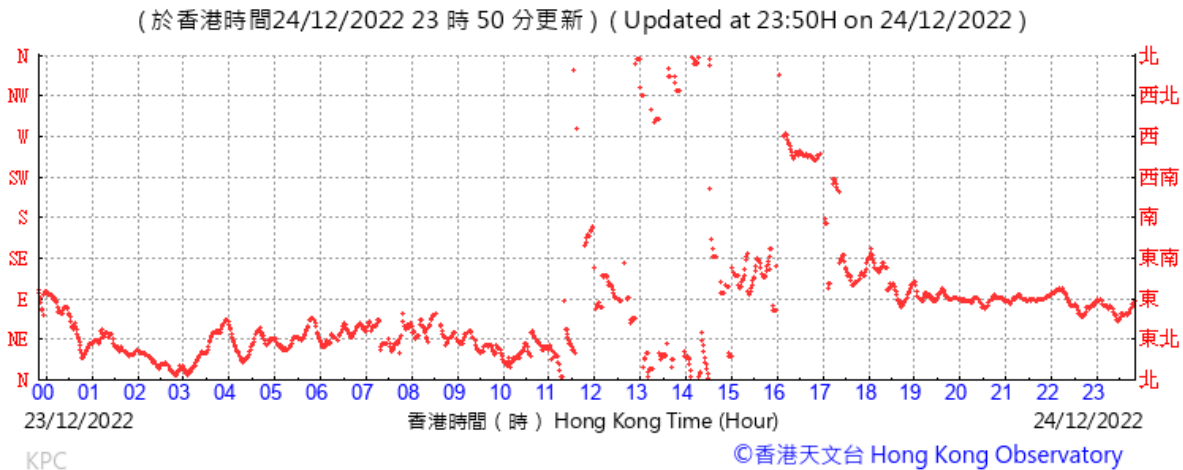
Temperature/Humidity:



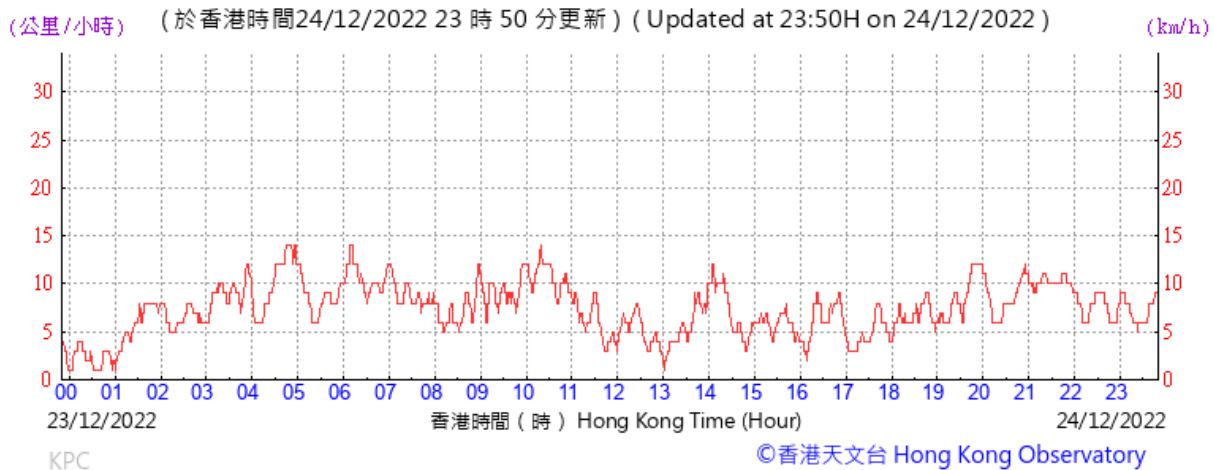
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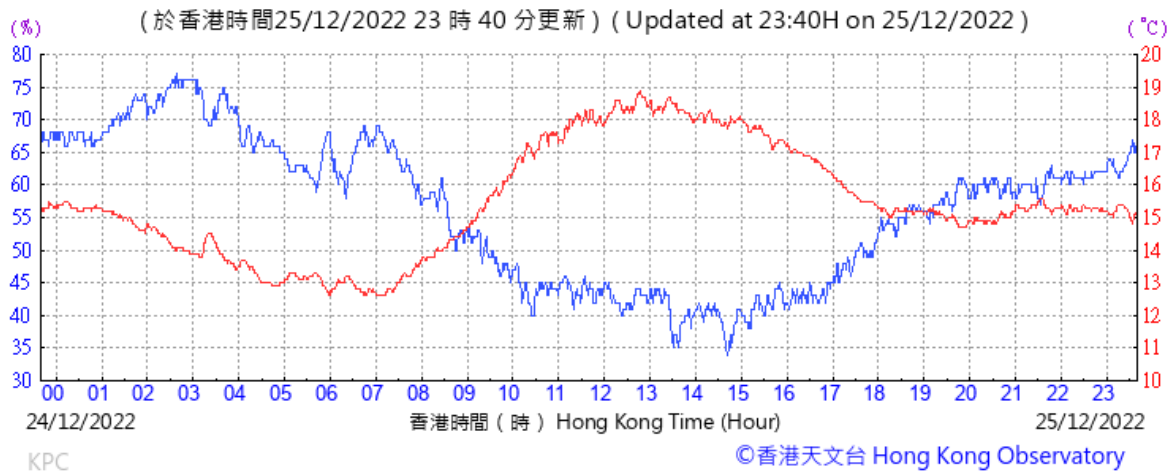
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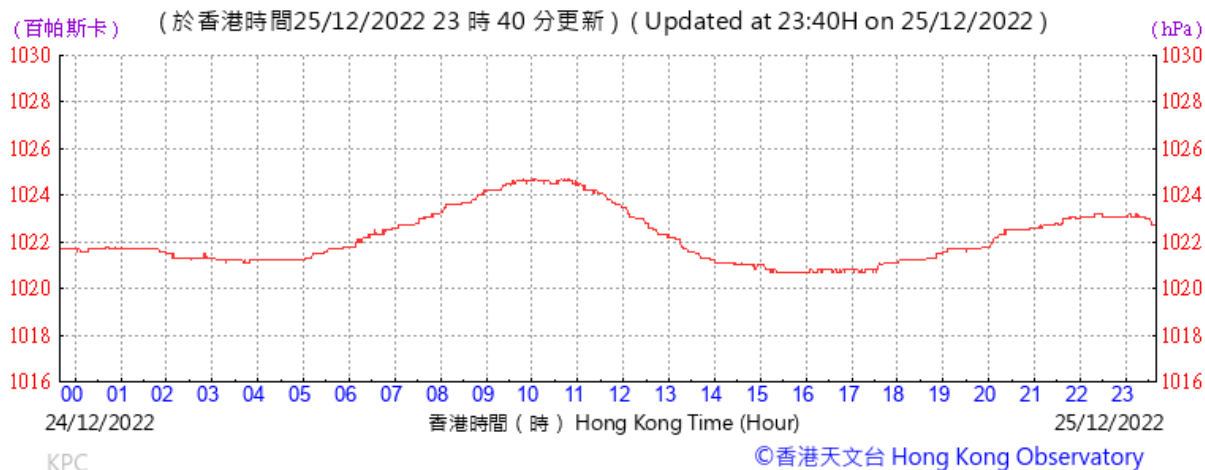
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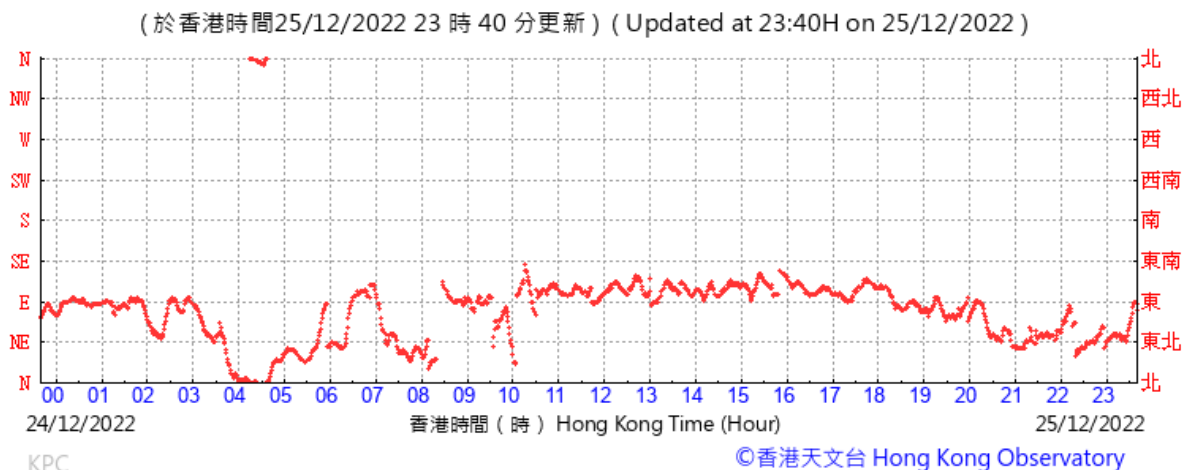
Temperature/Humidity:



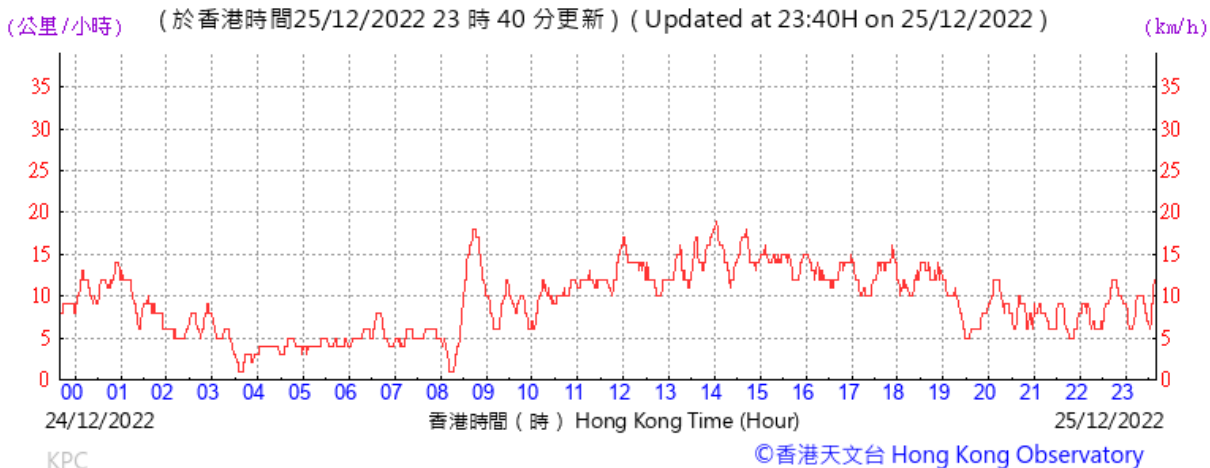
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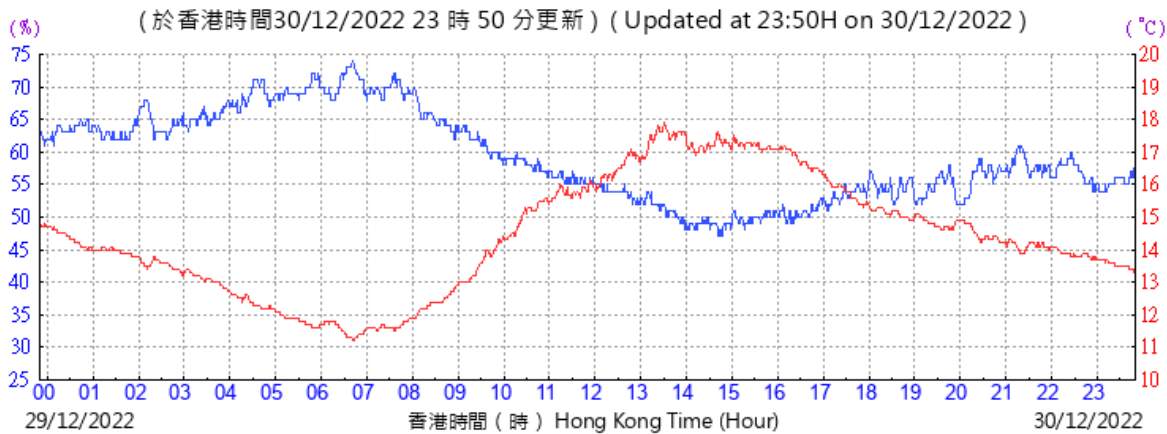
Wind Direction:



Wind Speed:



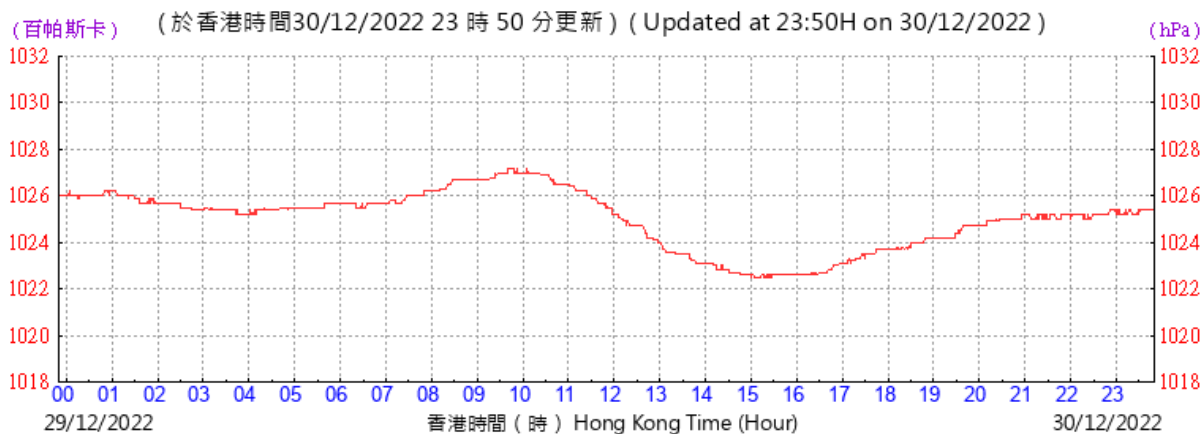
Temperature/Humidity:



KPC

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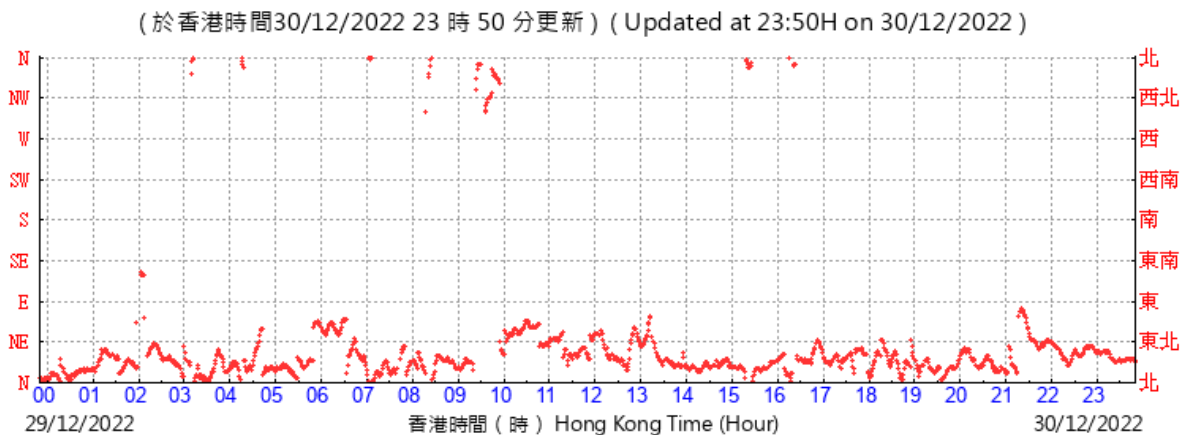
Pressure:



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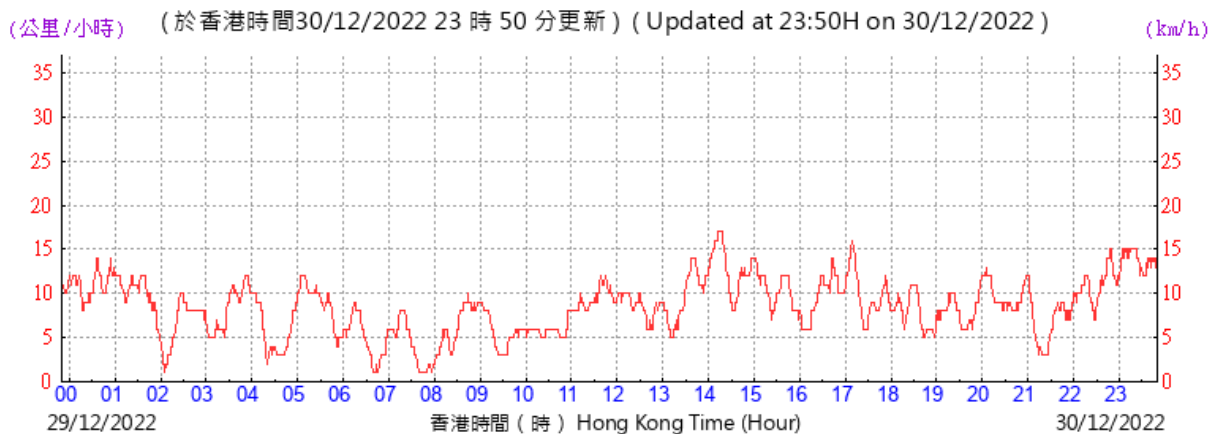
Wind Direction:



KPC

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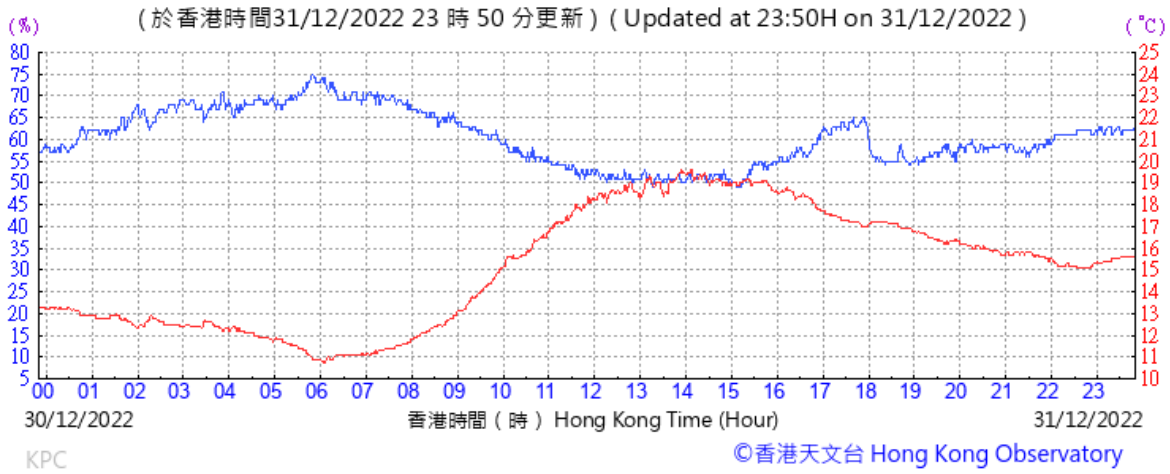
Wind Speed:



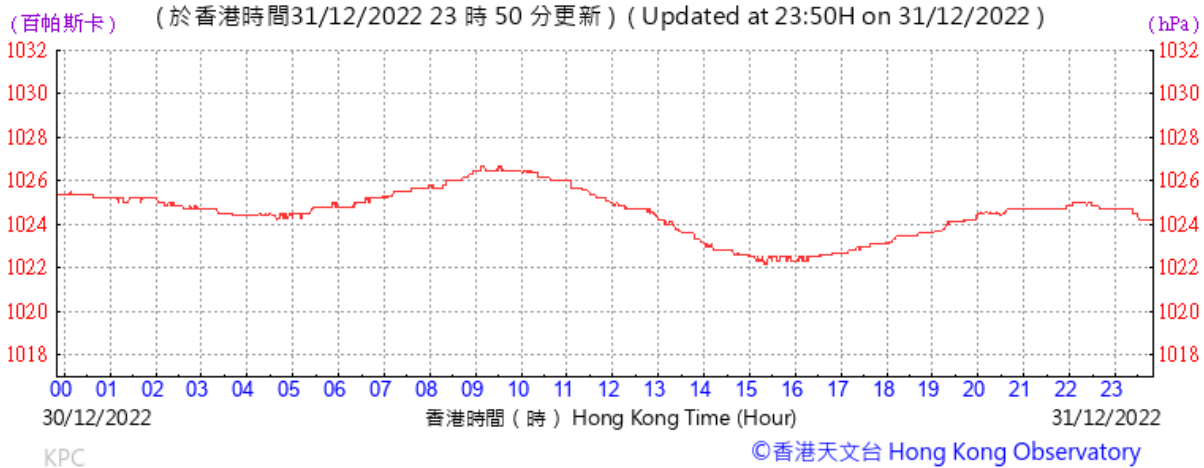
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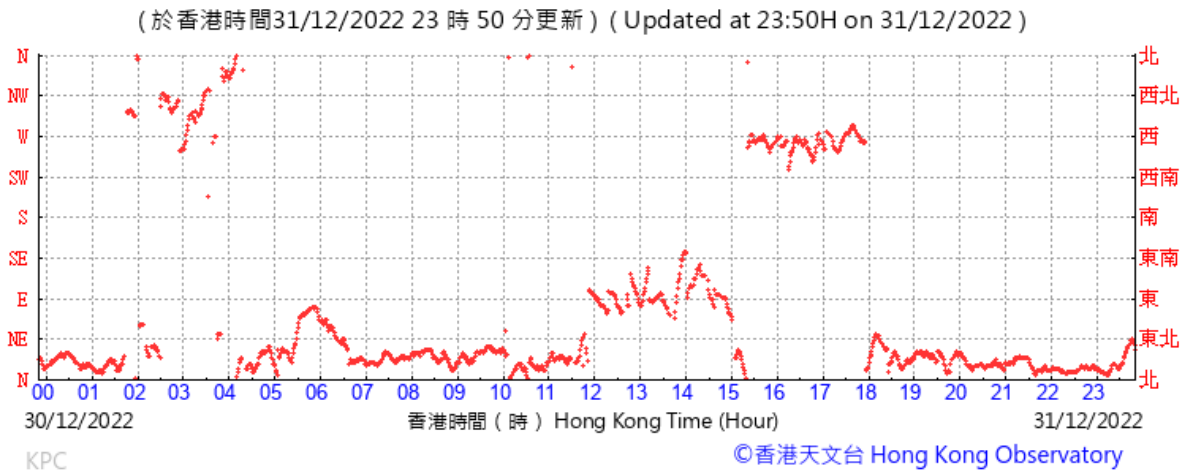
Temperature/Humidity:



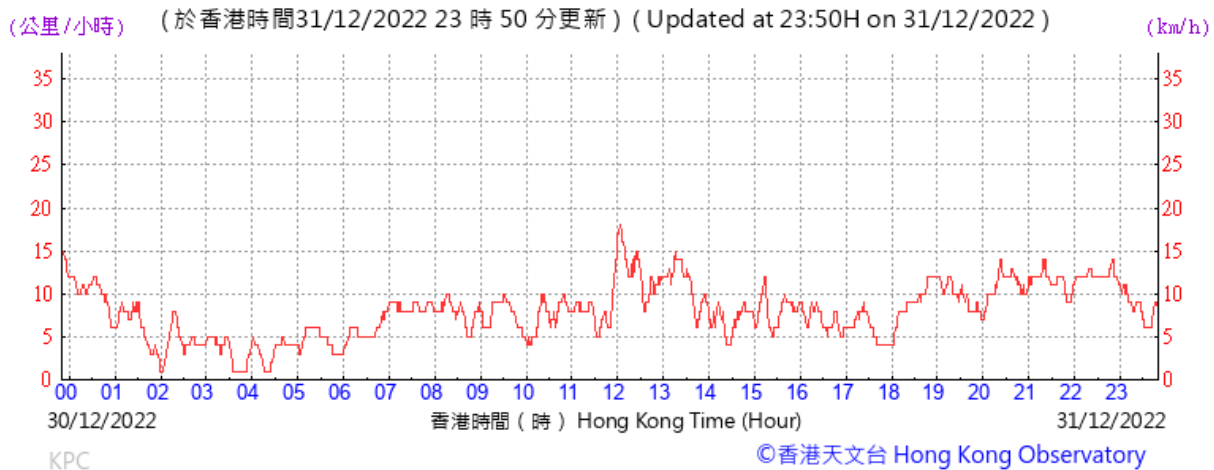
Pressure:



Wind Direction:

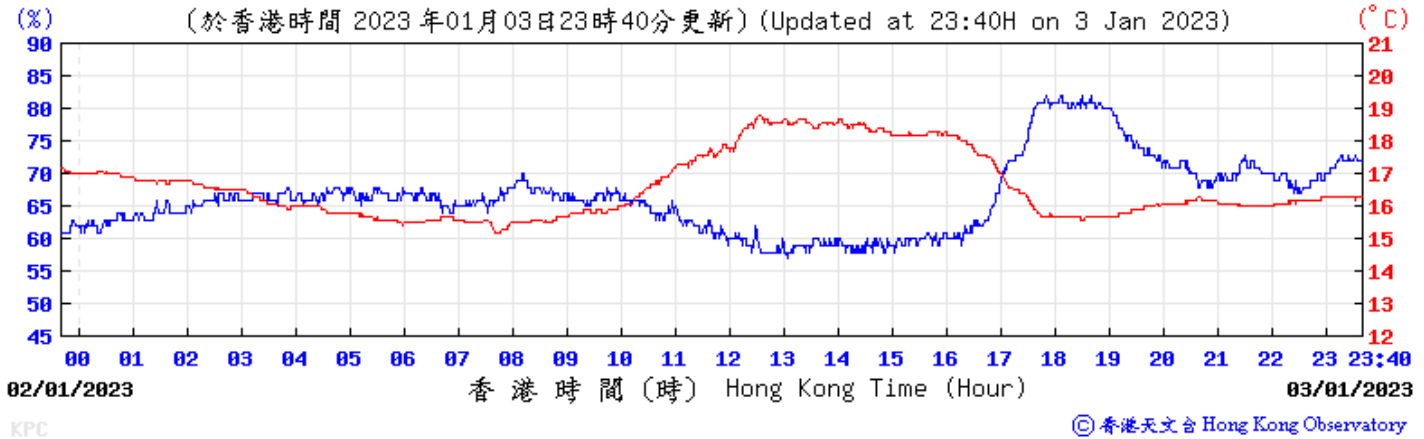


Wind Speed:

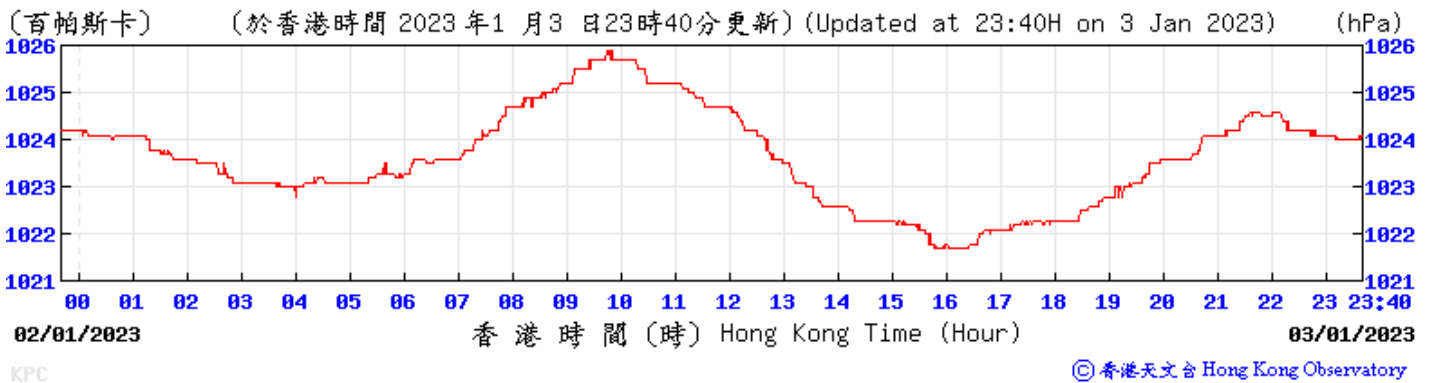


# Extract of Meteorological Observations for King's Park Automatic Weather Station, January 2023

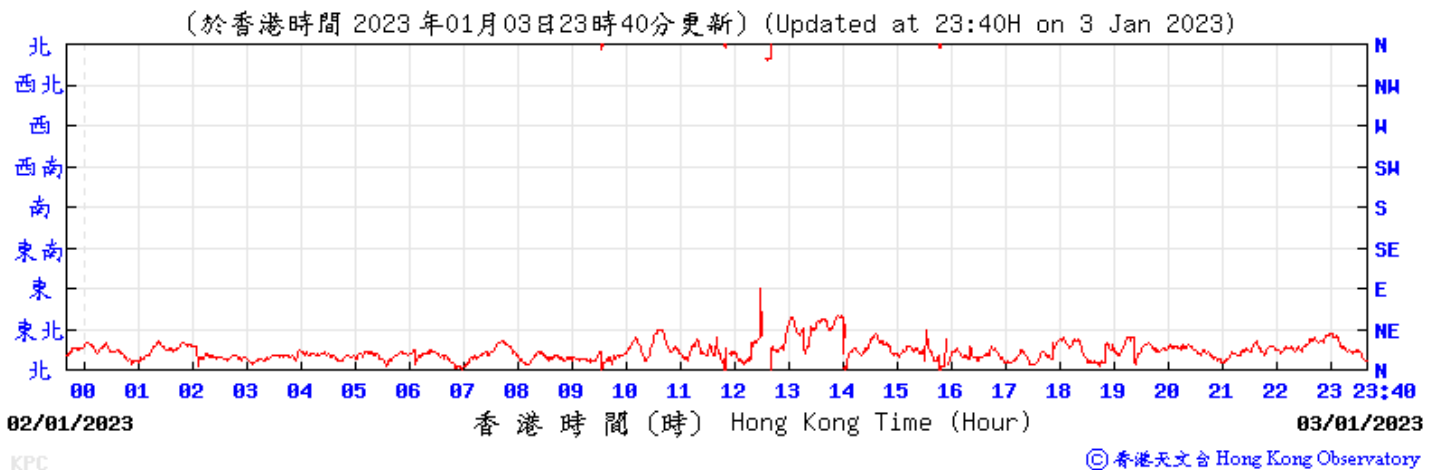
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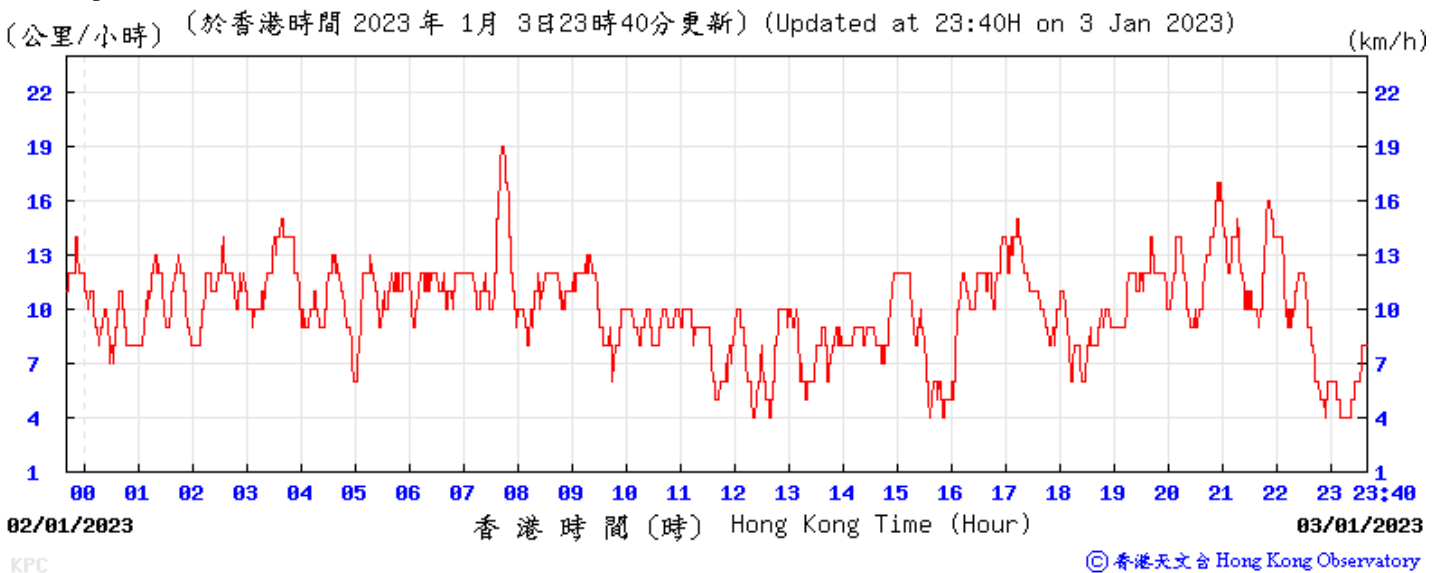
## Pressure:



## Wind Direction:

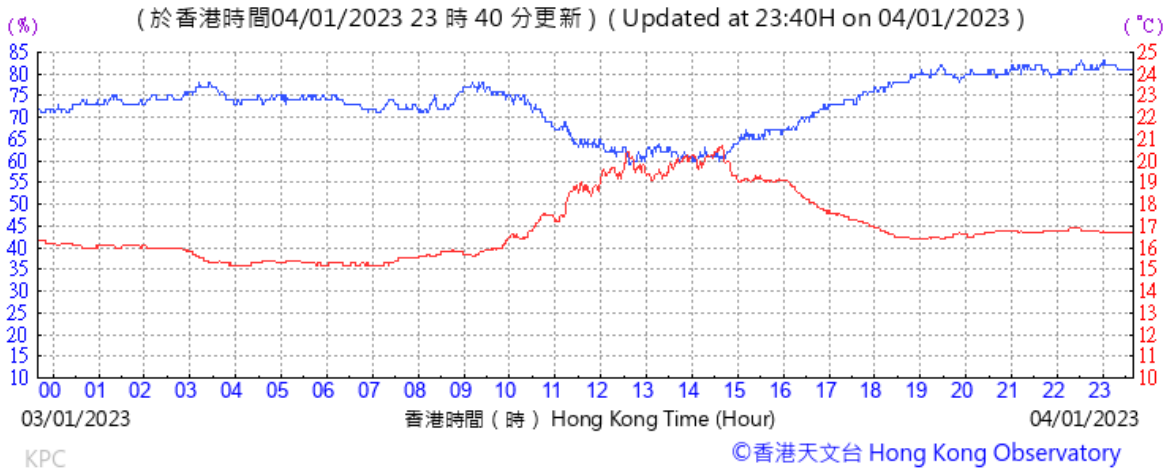


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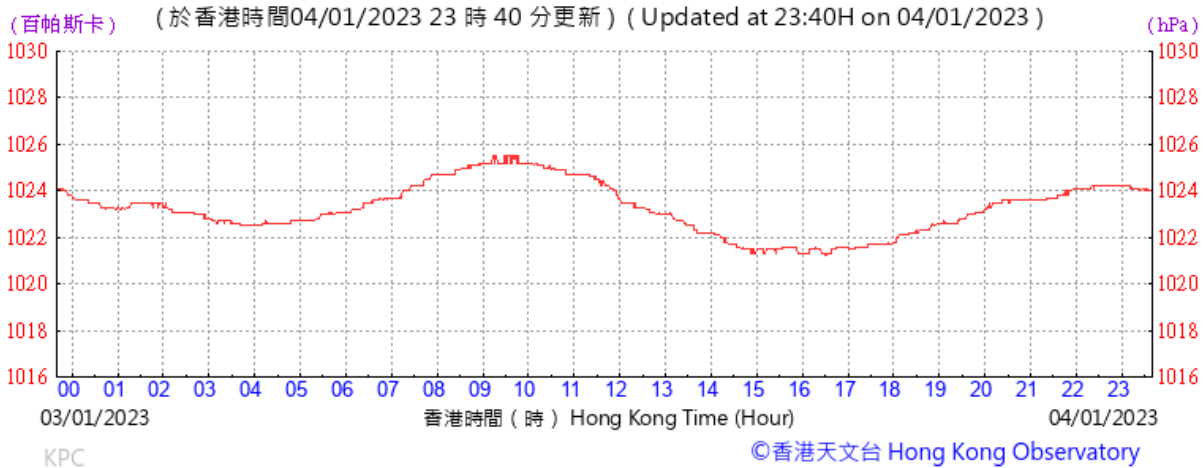




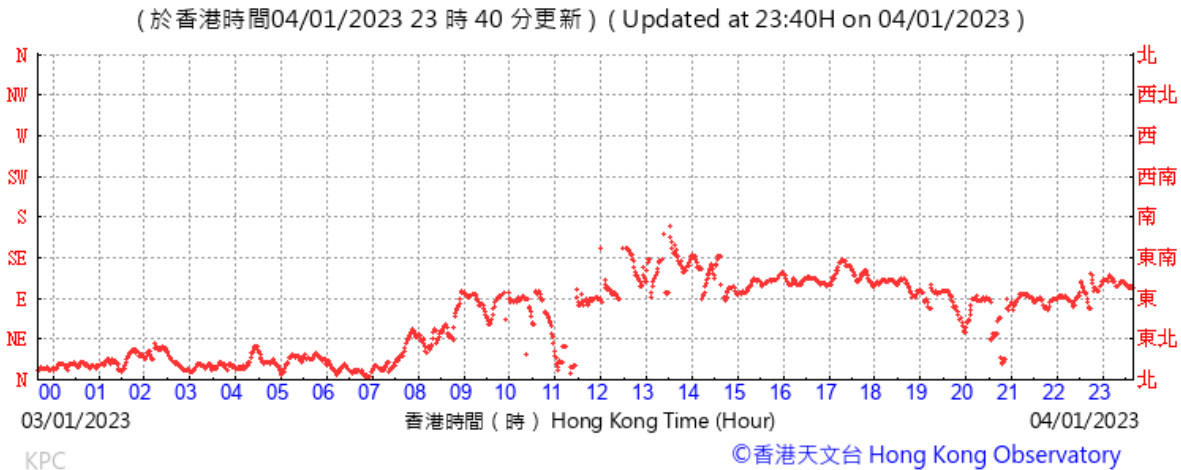
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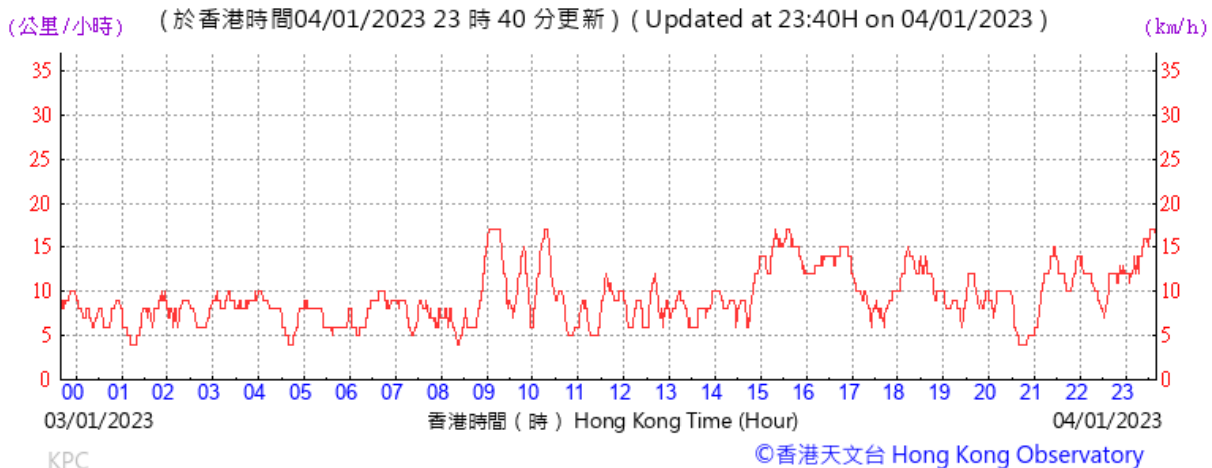
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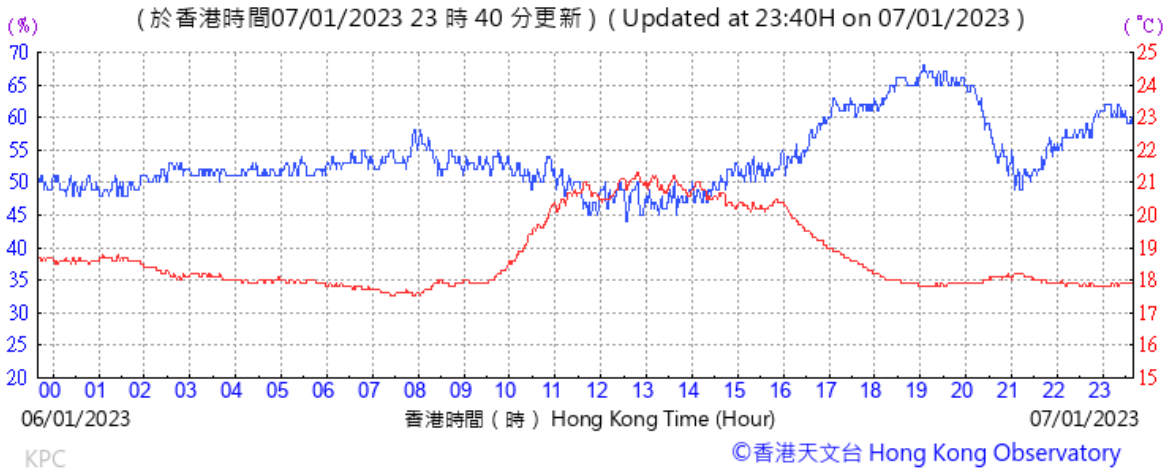
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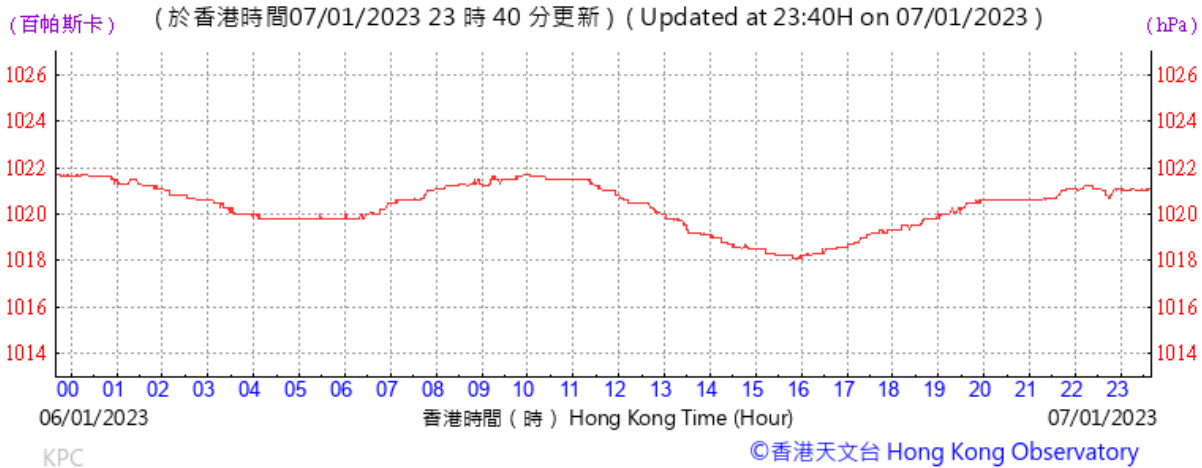
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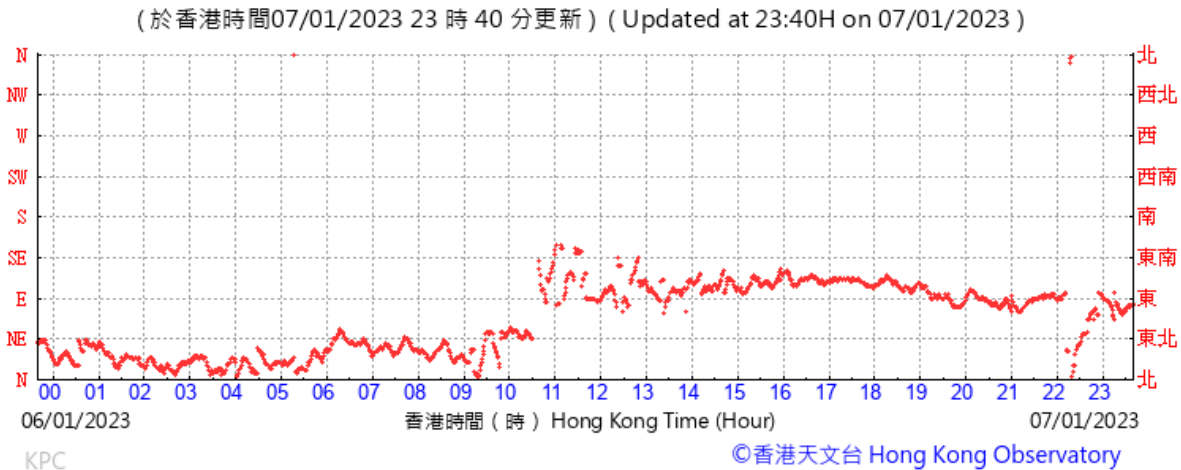
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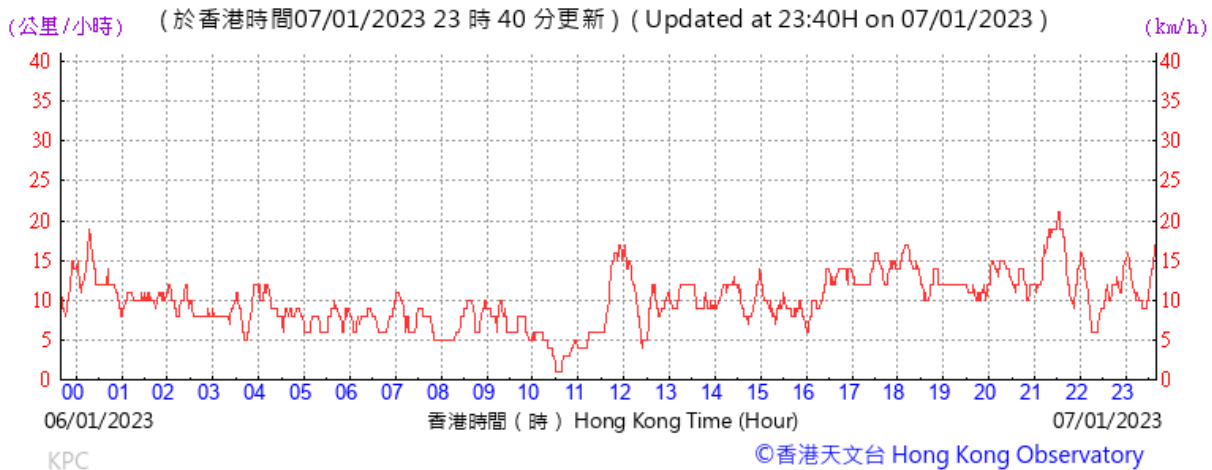
Pressure:



Wind Direction:



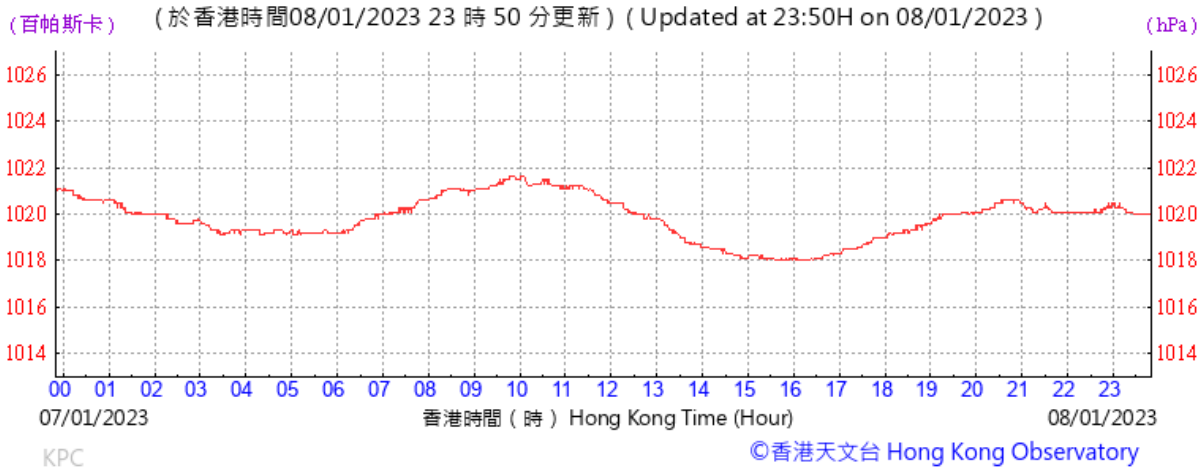
Wind Speed:



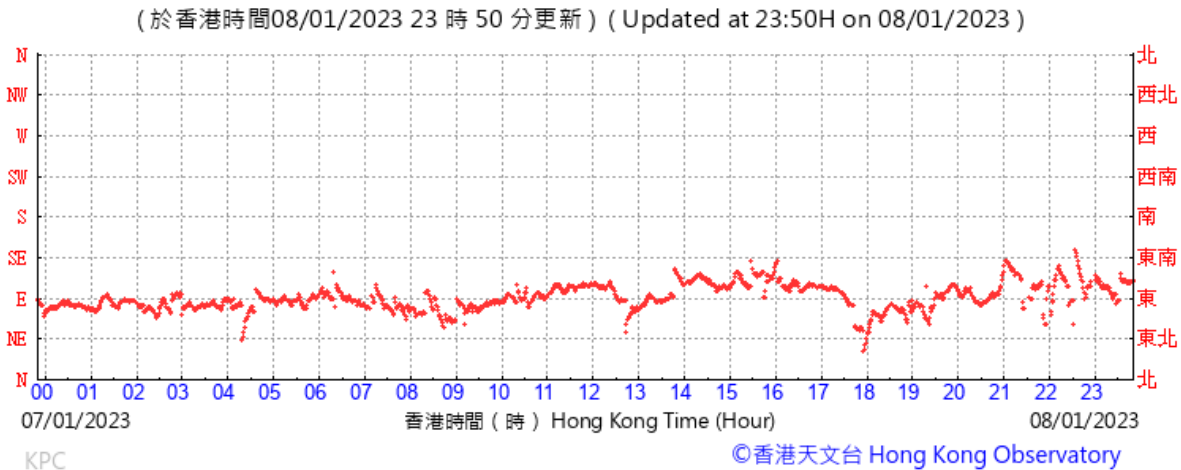
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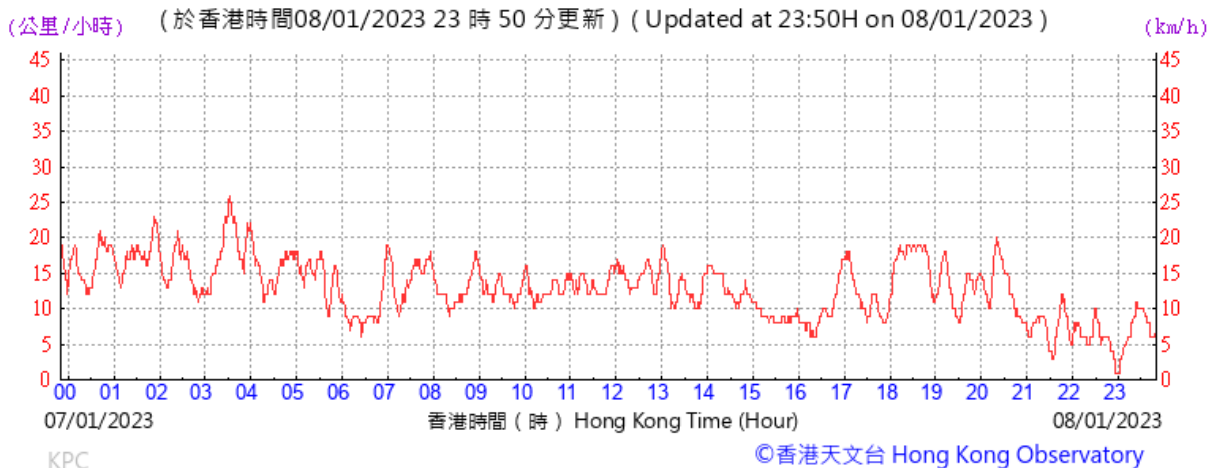
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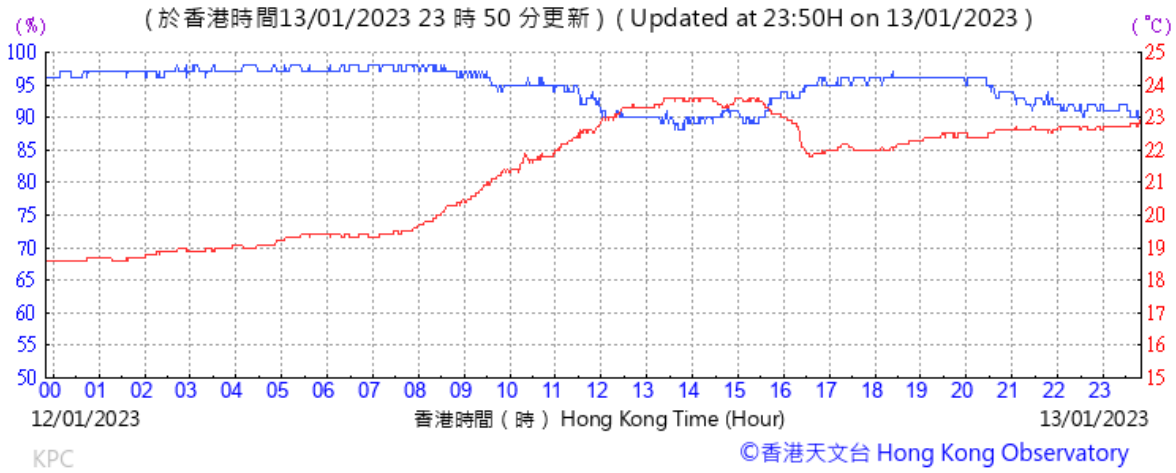
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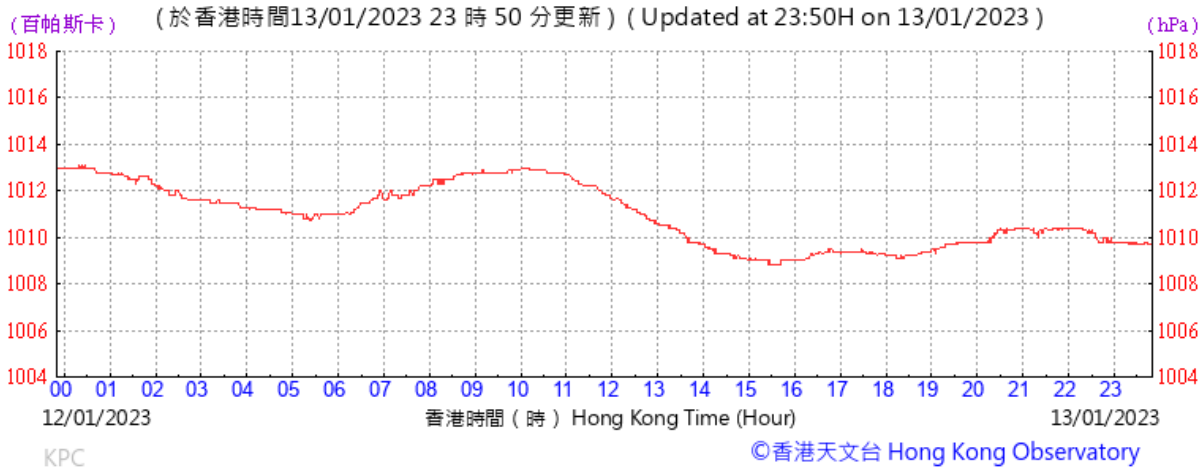
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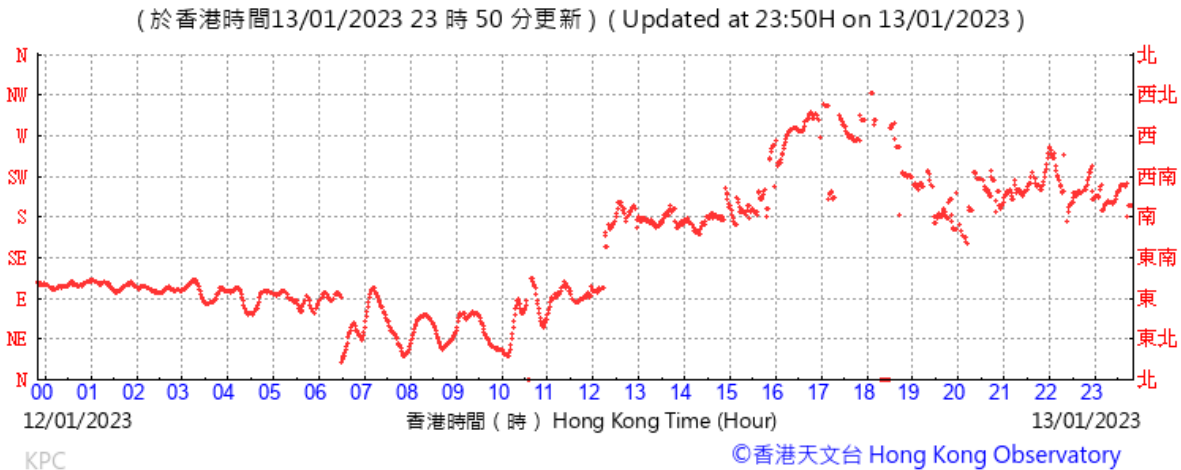
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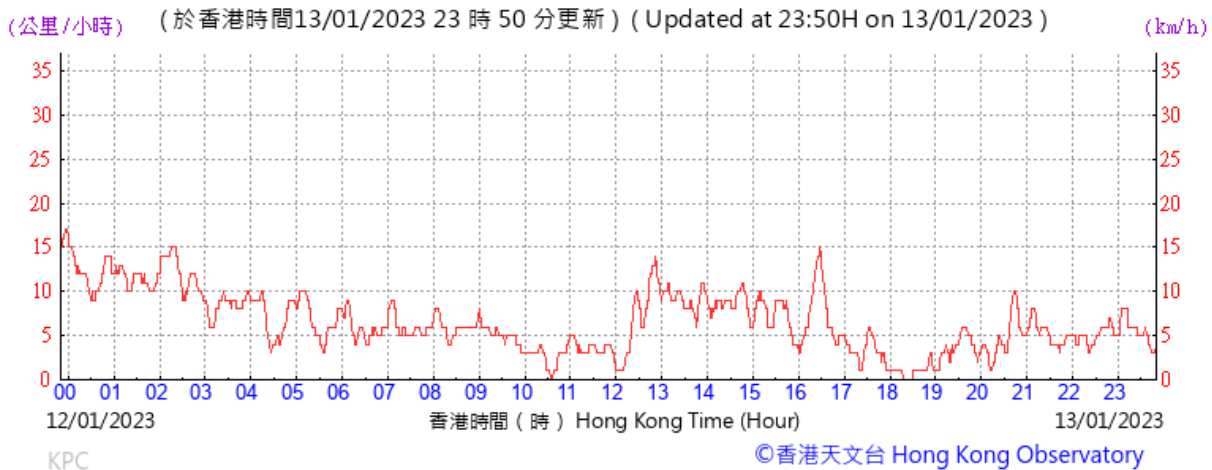
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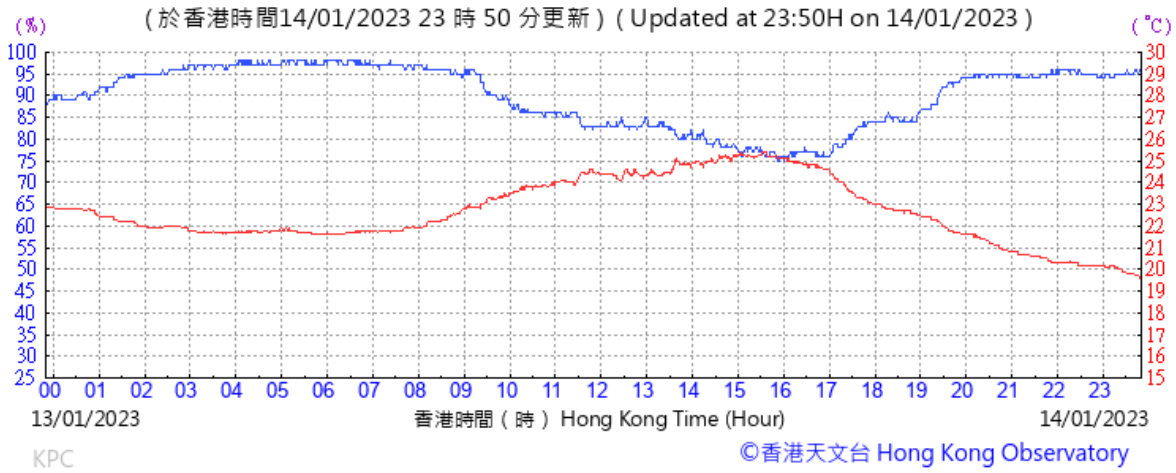
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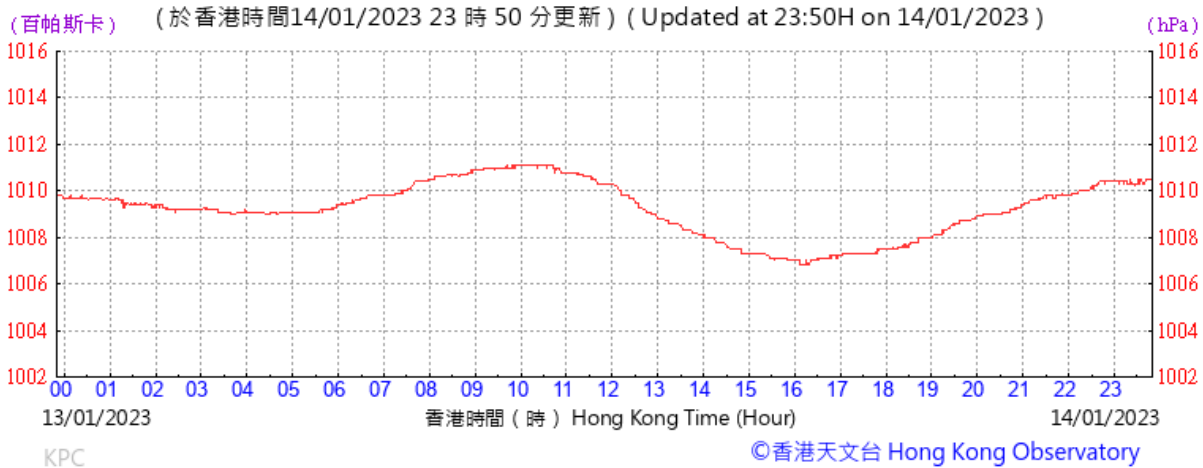
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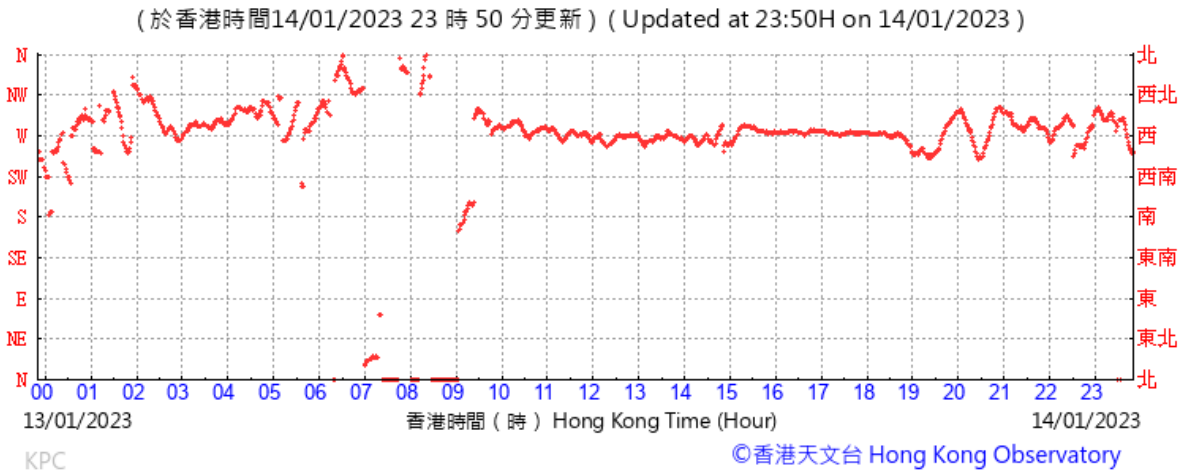
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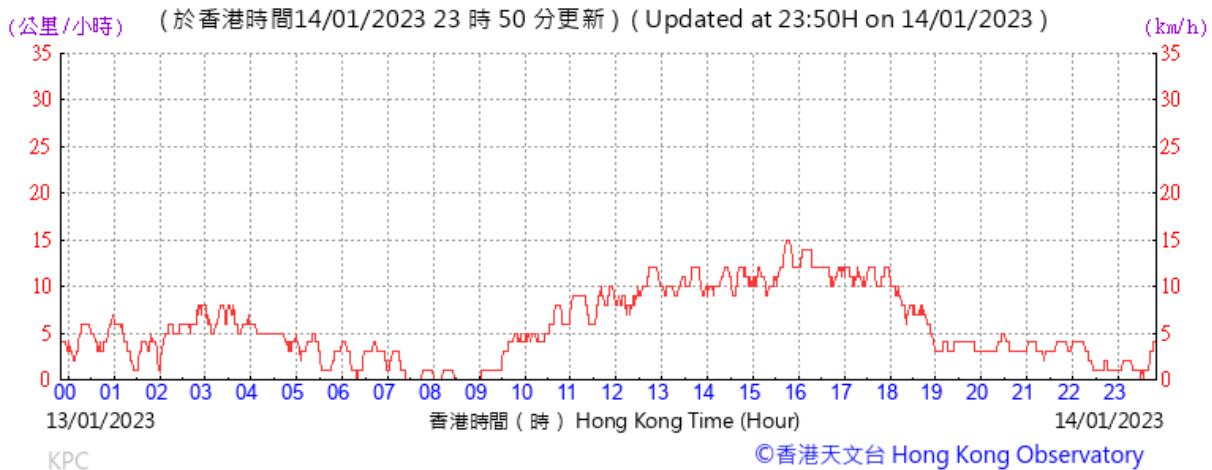
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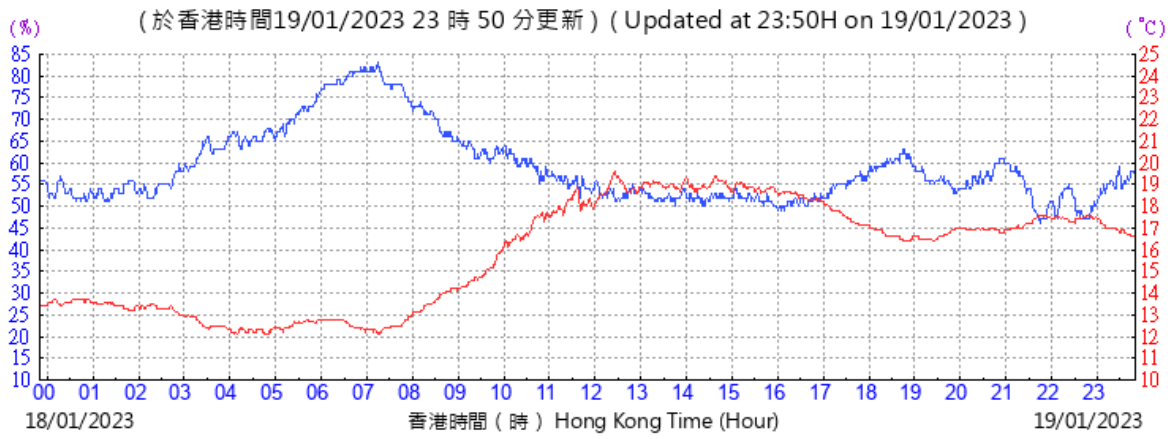
Wind Direction:



Wind Speed:



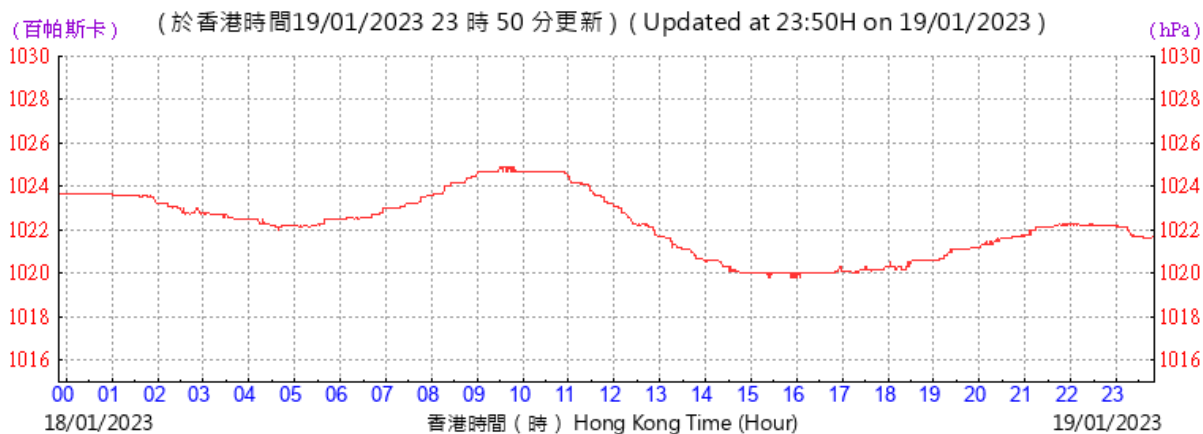
Temperature/Humidity:



KPC

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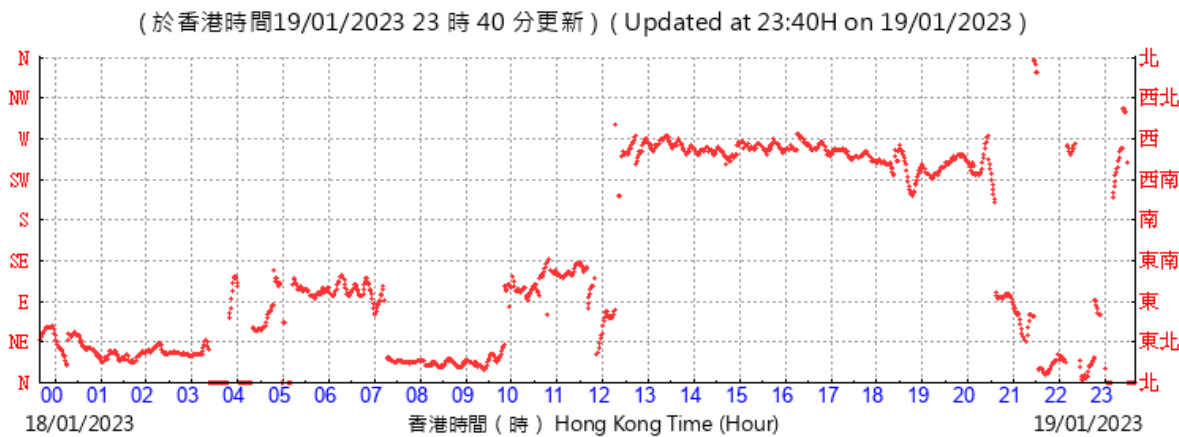
Pressure:



KPC

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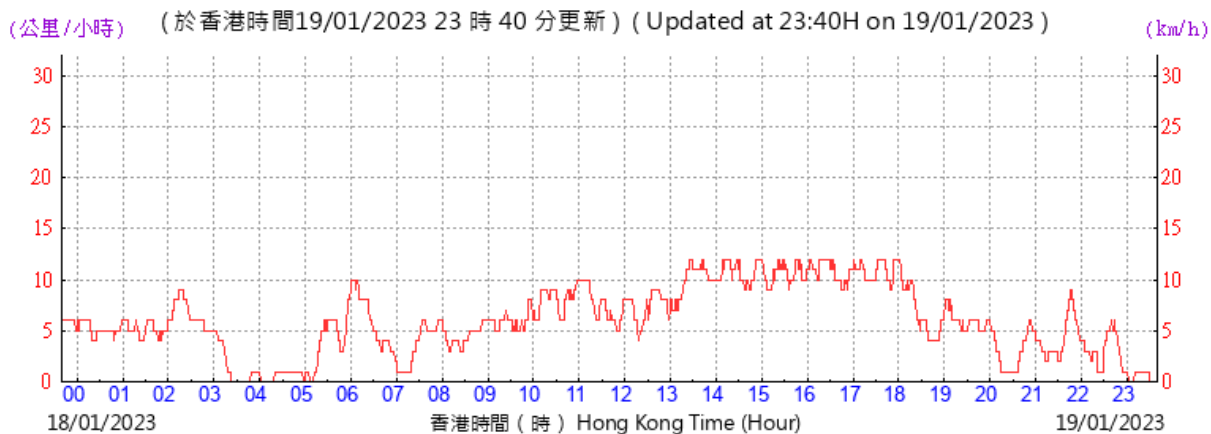
Wind Direction:



KPC

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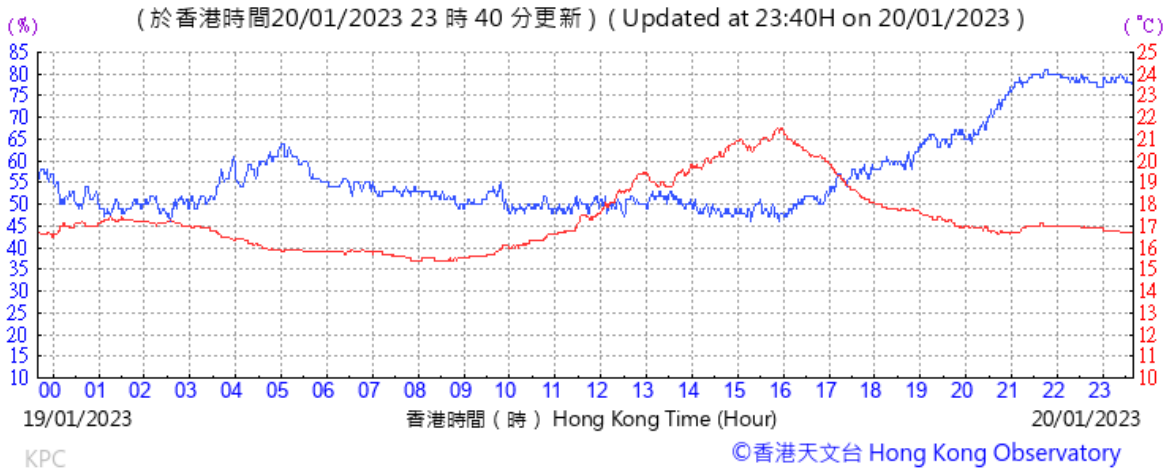
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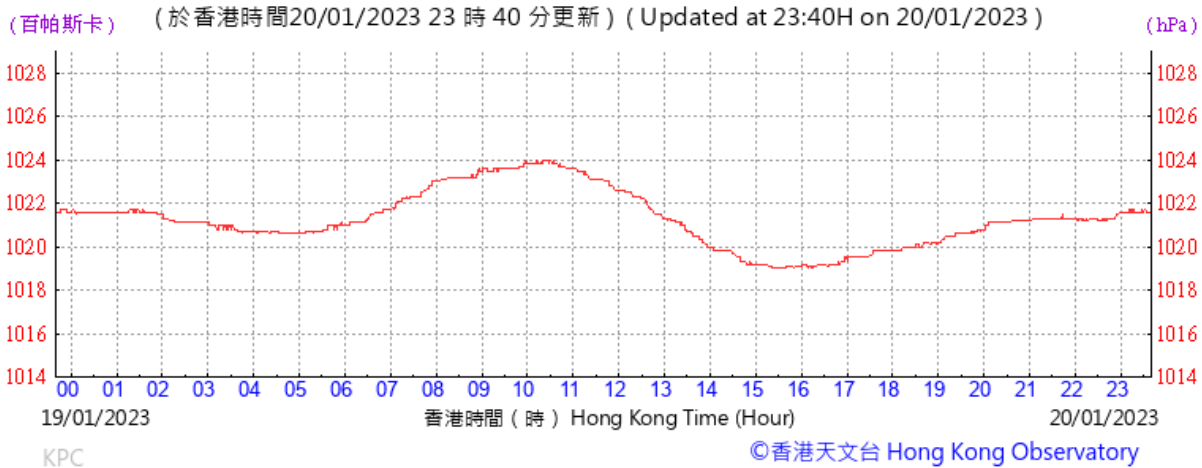
KPC

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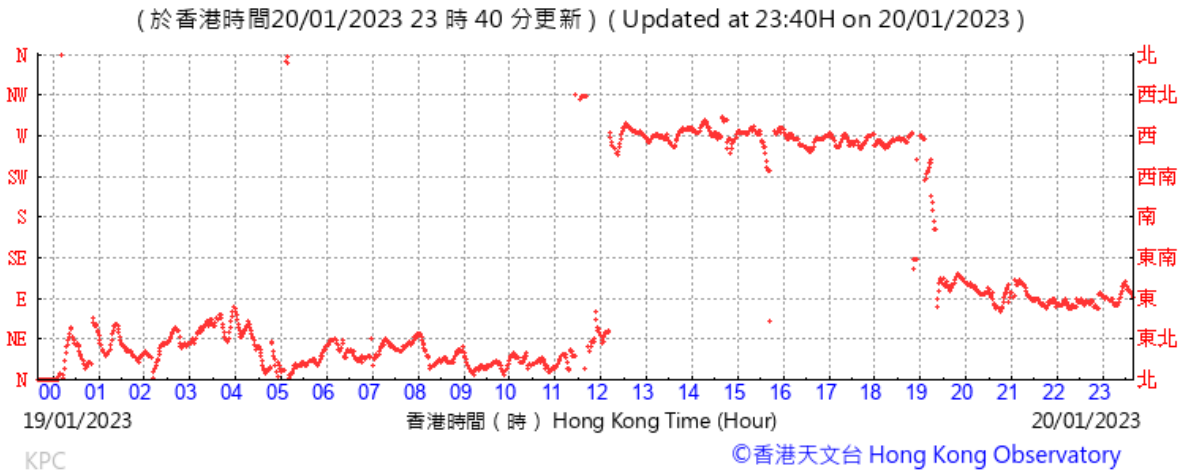
Temperature/Humidity:



Pressure:



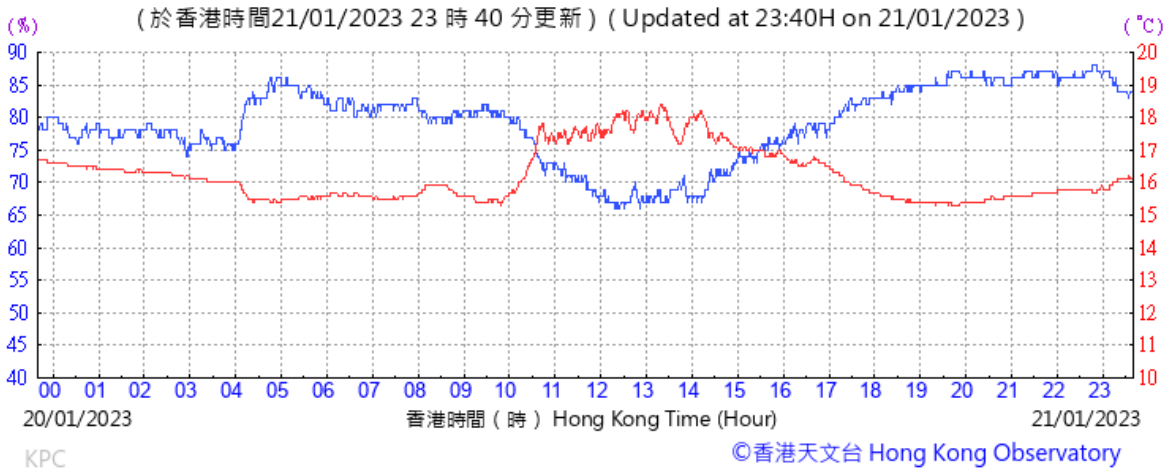
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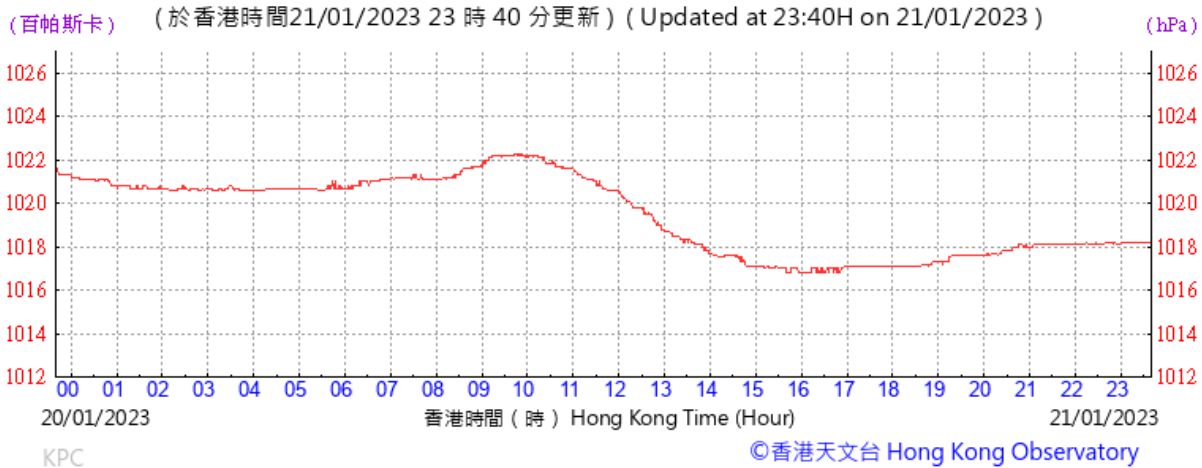
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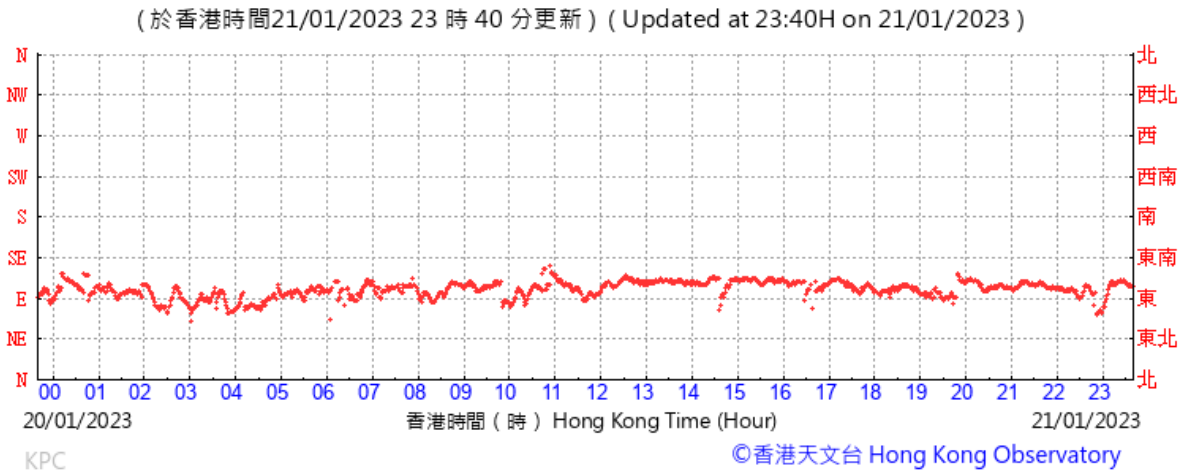
Temperature/Humidity:



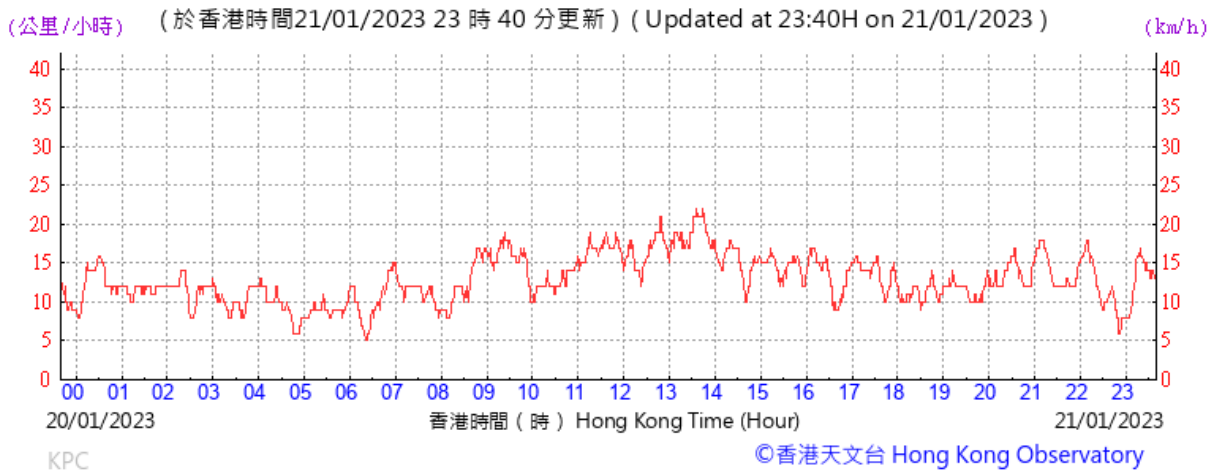
Pressure:



Wind Direction:

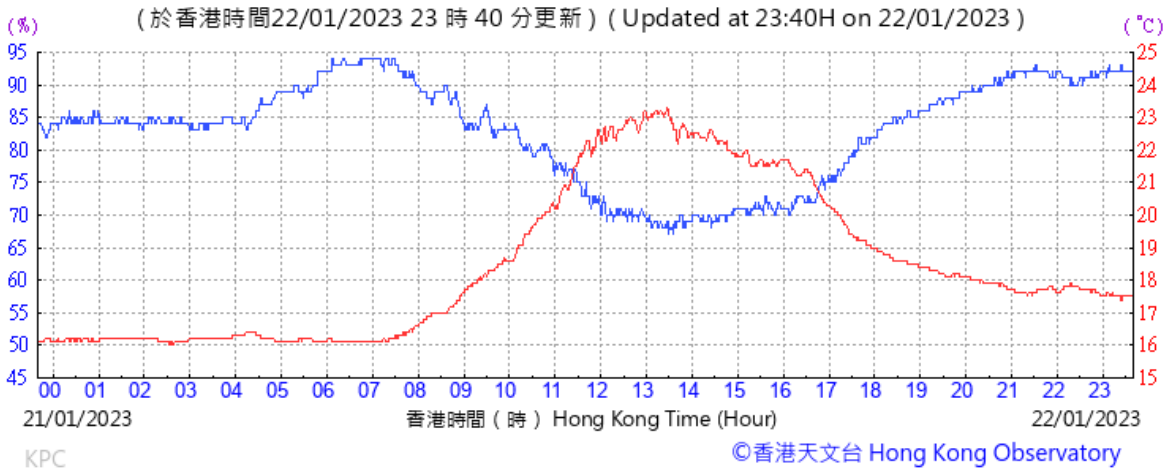


Wind Speed:

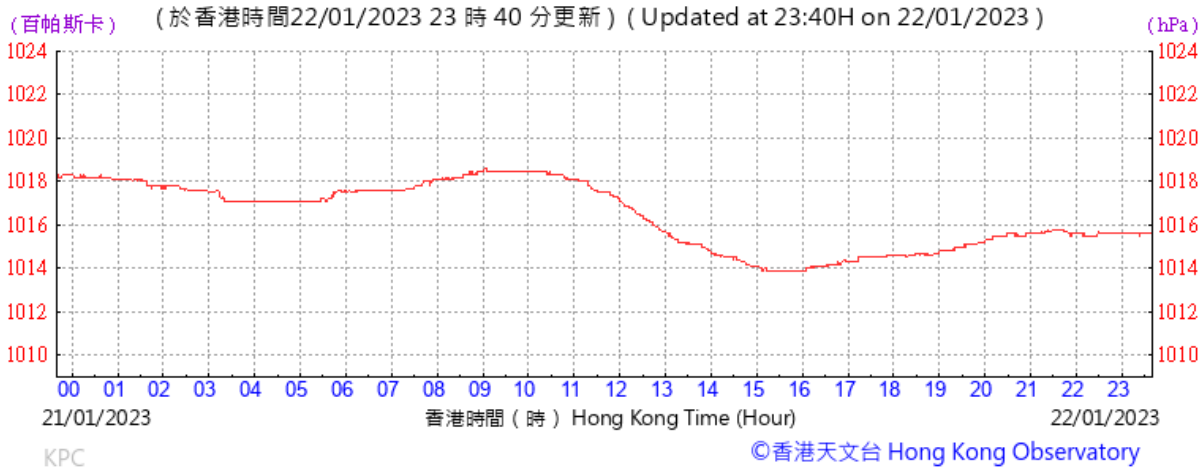




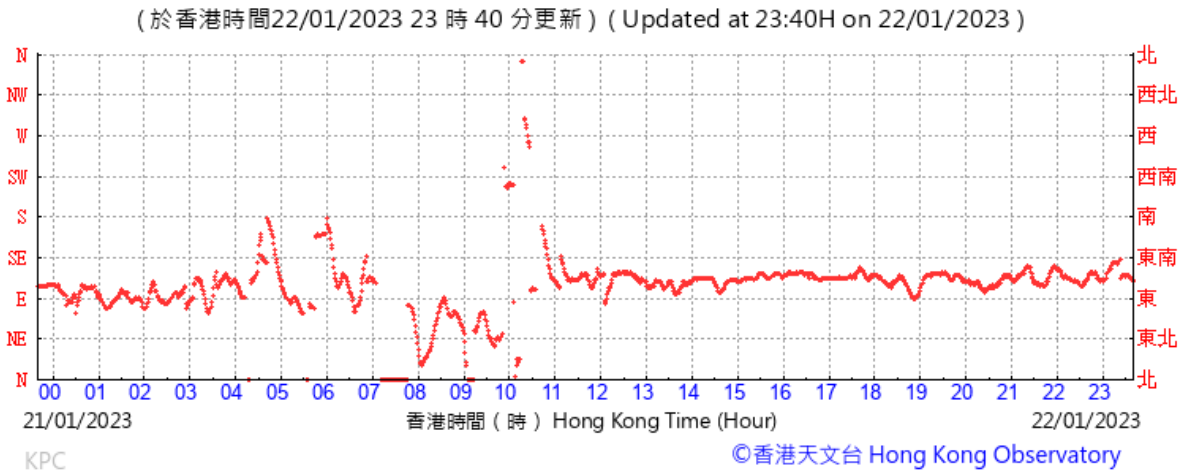
Temperature/Humidity:



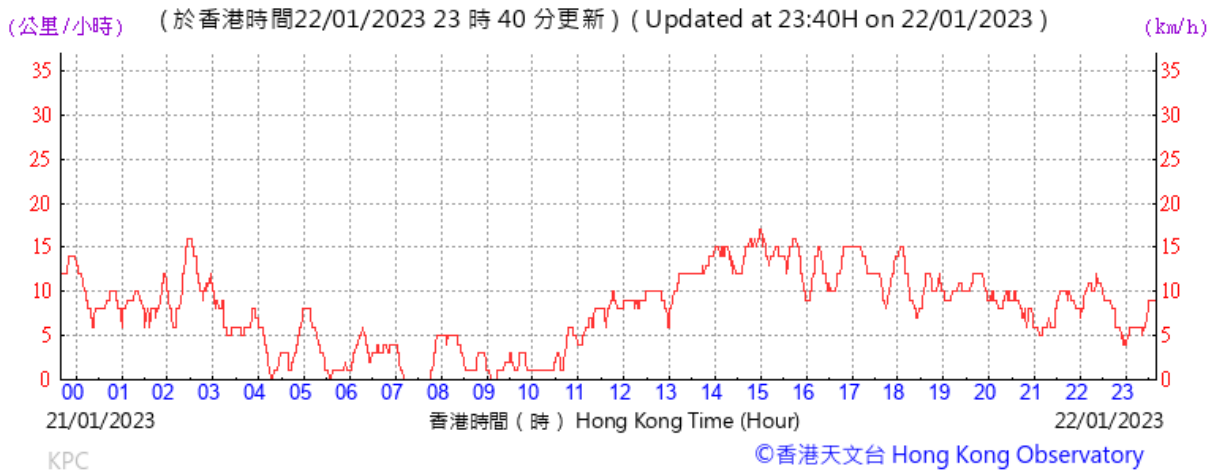
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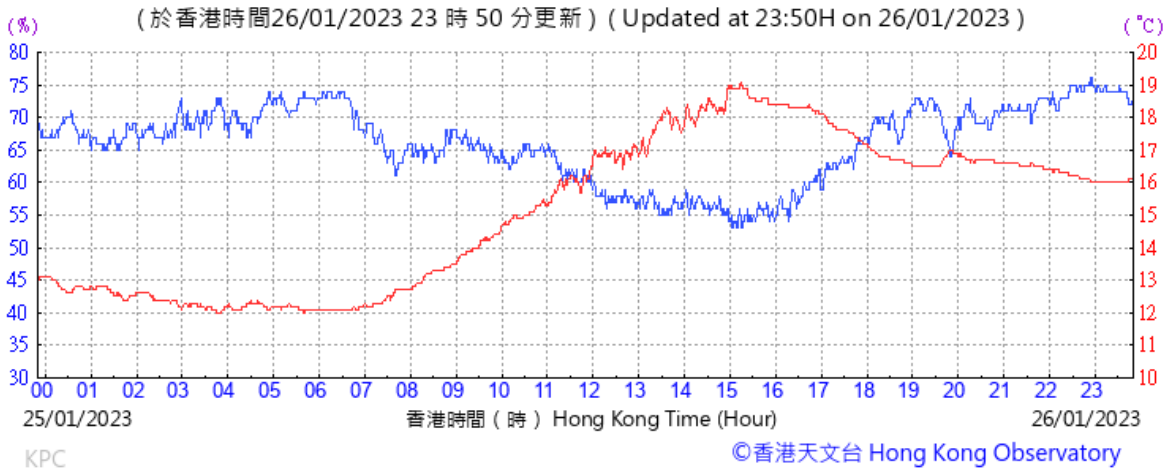
Wind Direction:



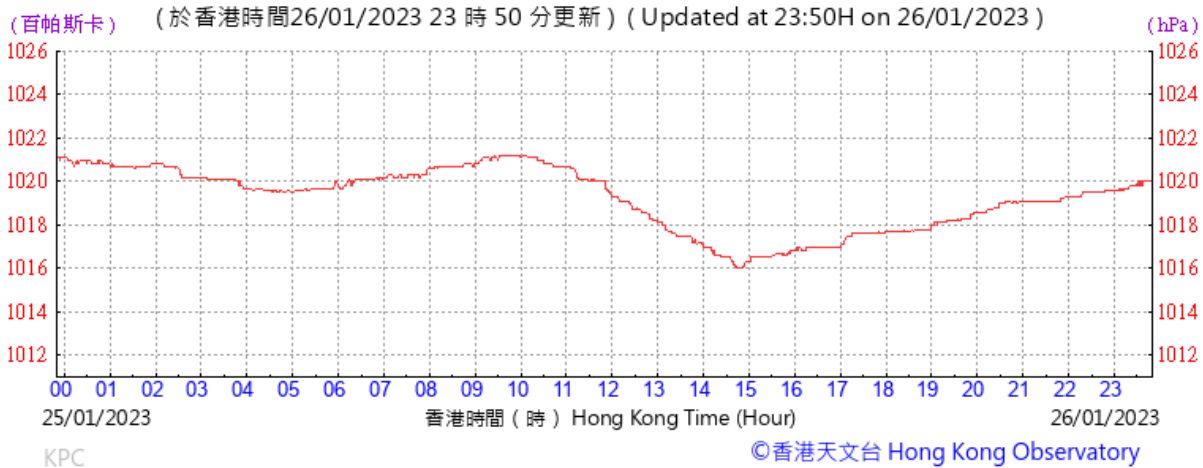
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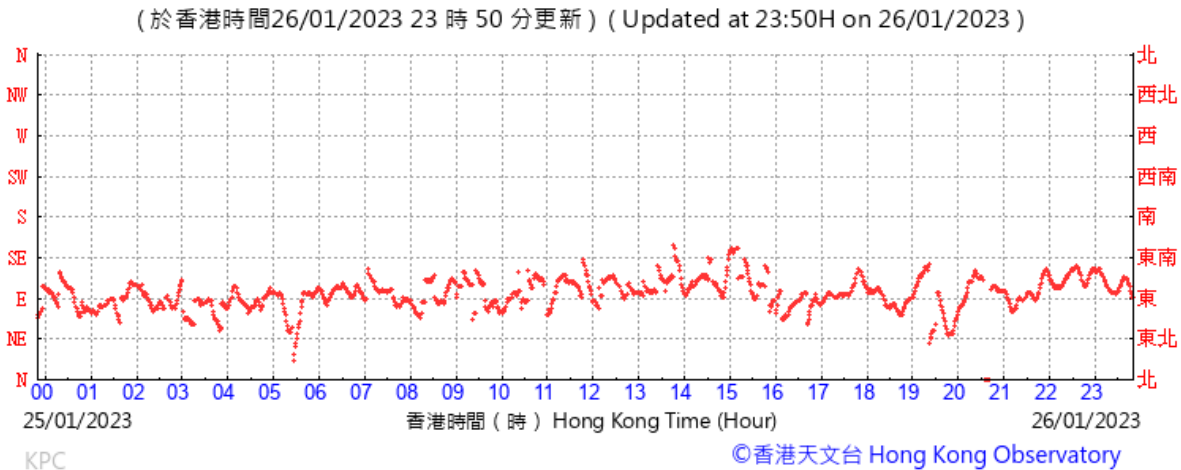
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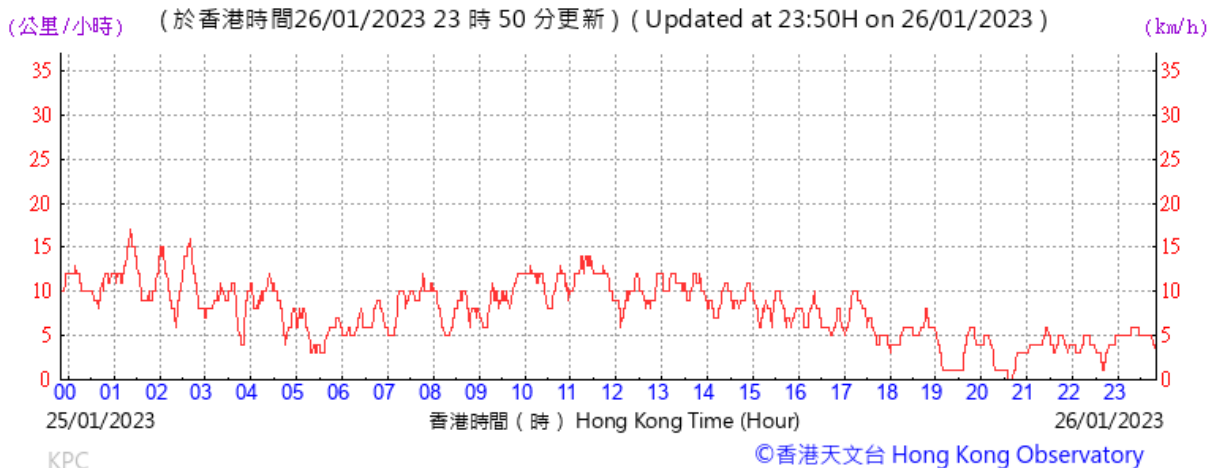
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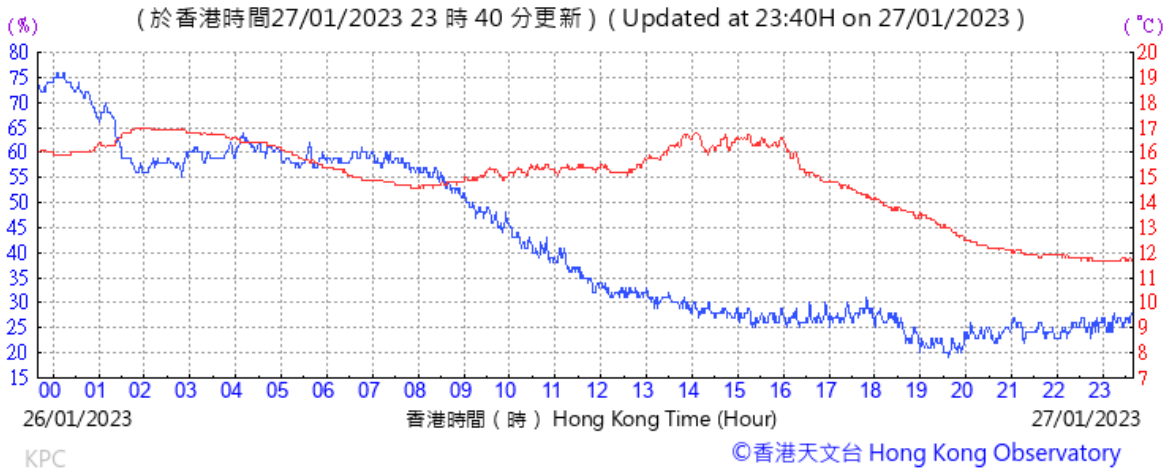
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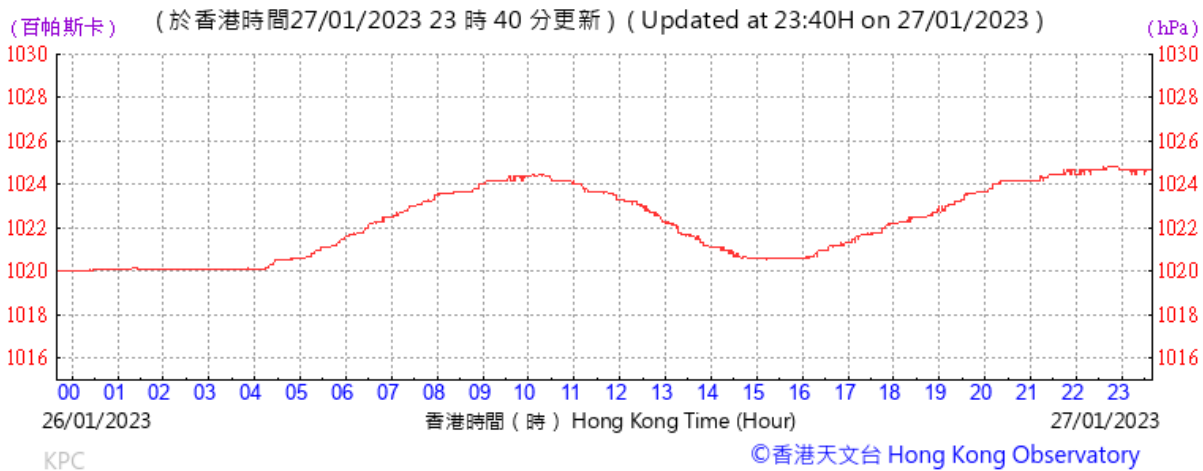
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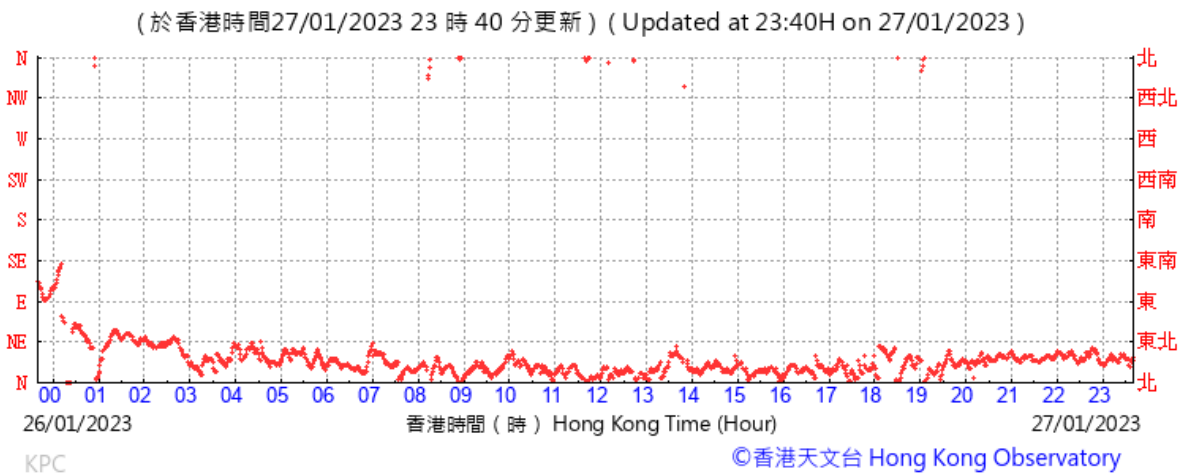
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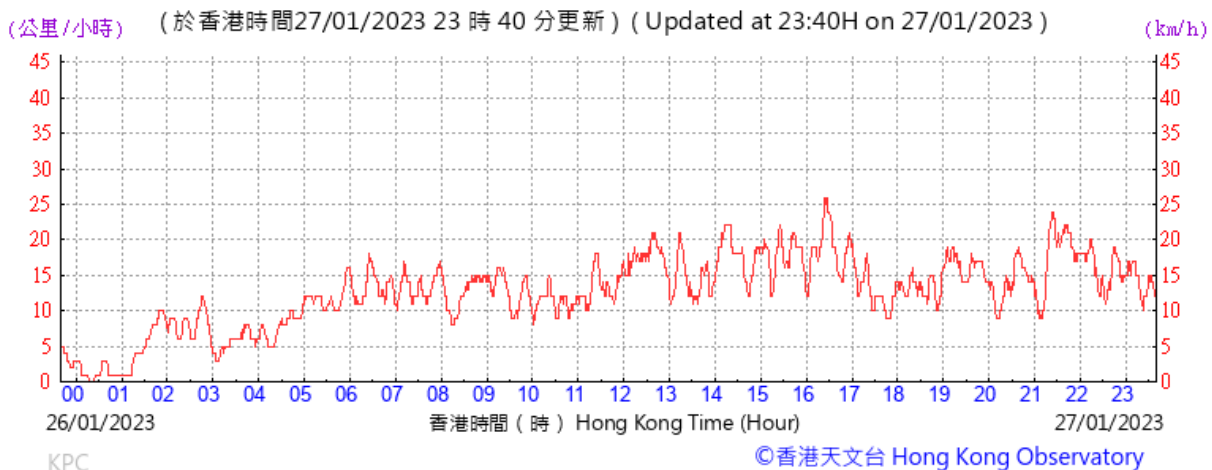
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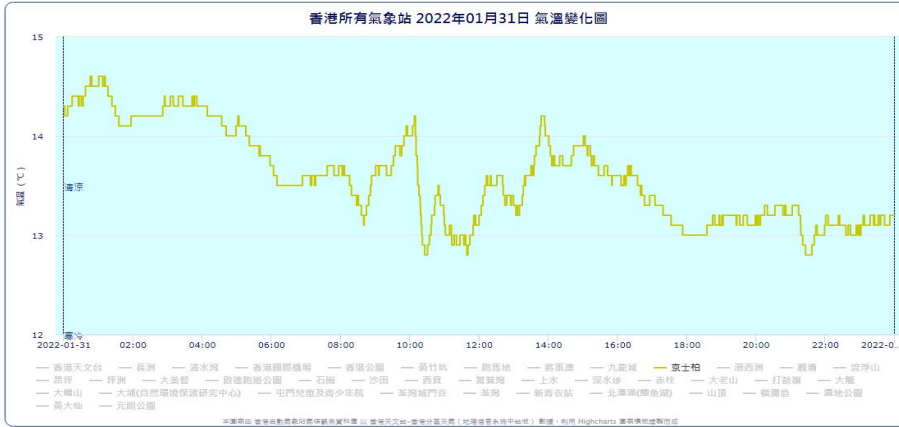
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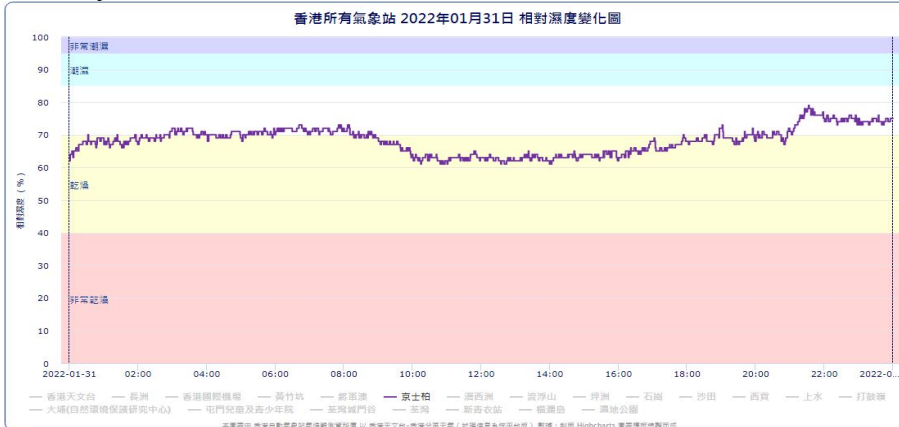
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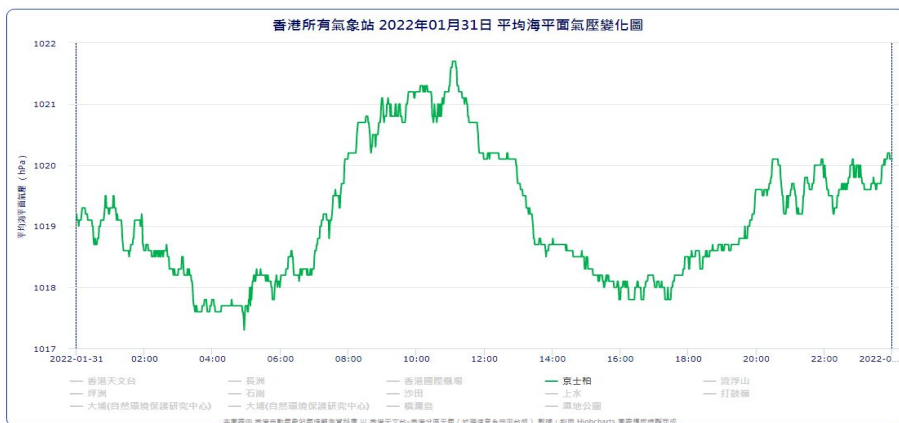
Temperature:



Humidity:

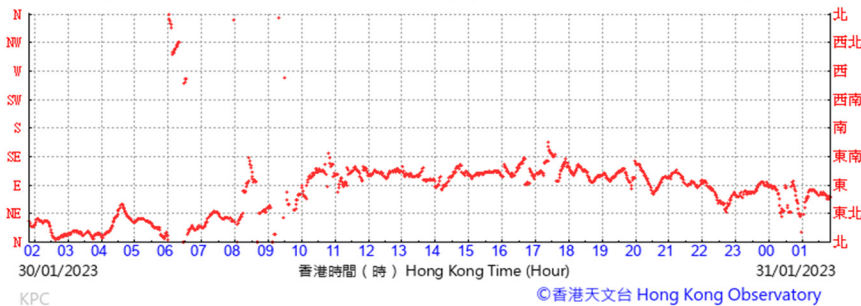


Pressure:



Wind Direction:

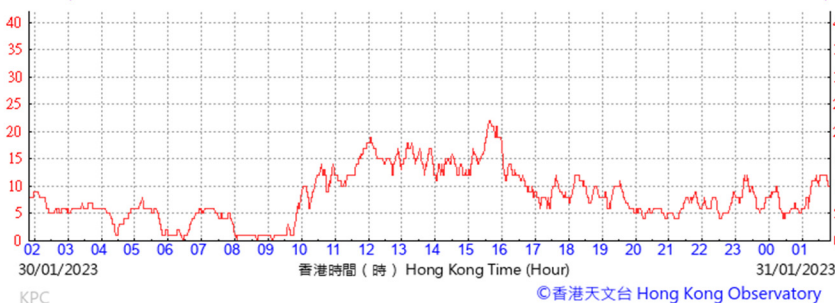
(於香港時間31/01/2023 01 時 50 分更新) (Updated at 01:50H on 31/01/2023)



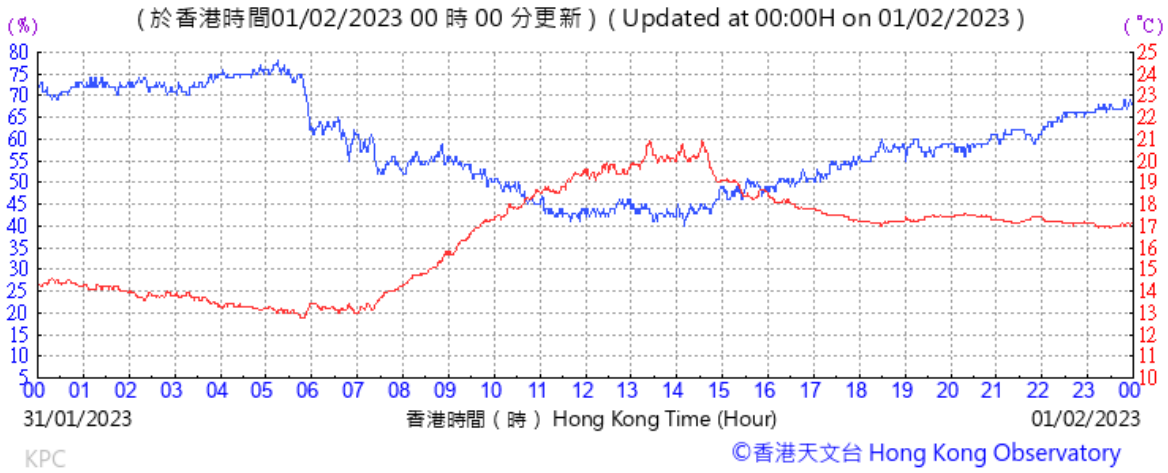
Wind Speed:

(公里/小時) (於香港時間31/01/2023 01 時 50 分更新) (Updated at 01:50H on 31/01/2023)

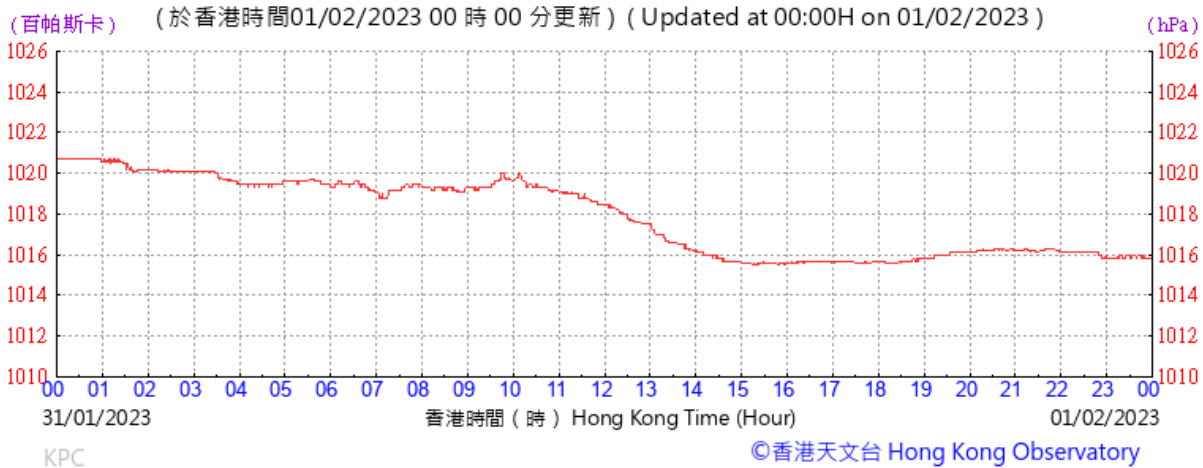
(km/h)



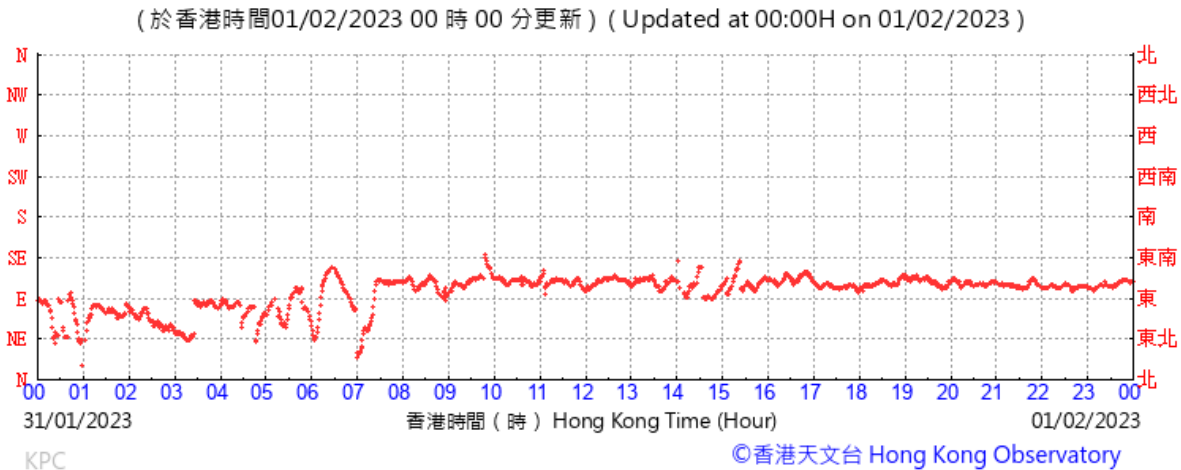
Temperature/Humidity:



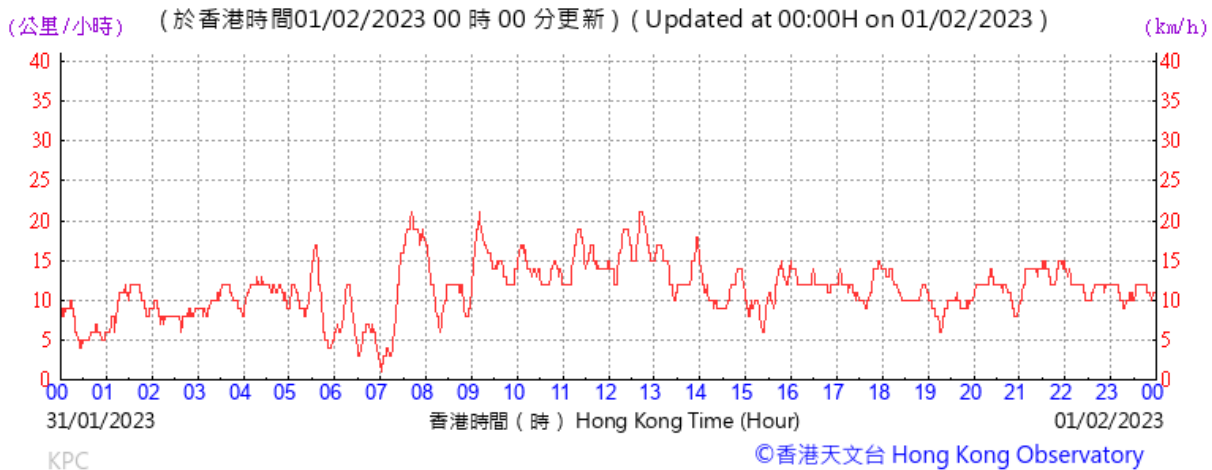
Pressure:



Wind Direction:



Wind Speed:

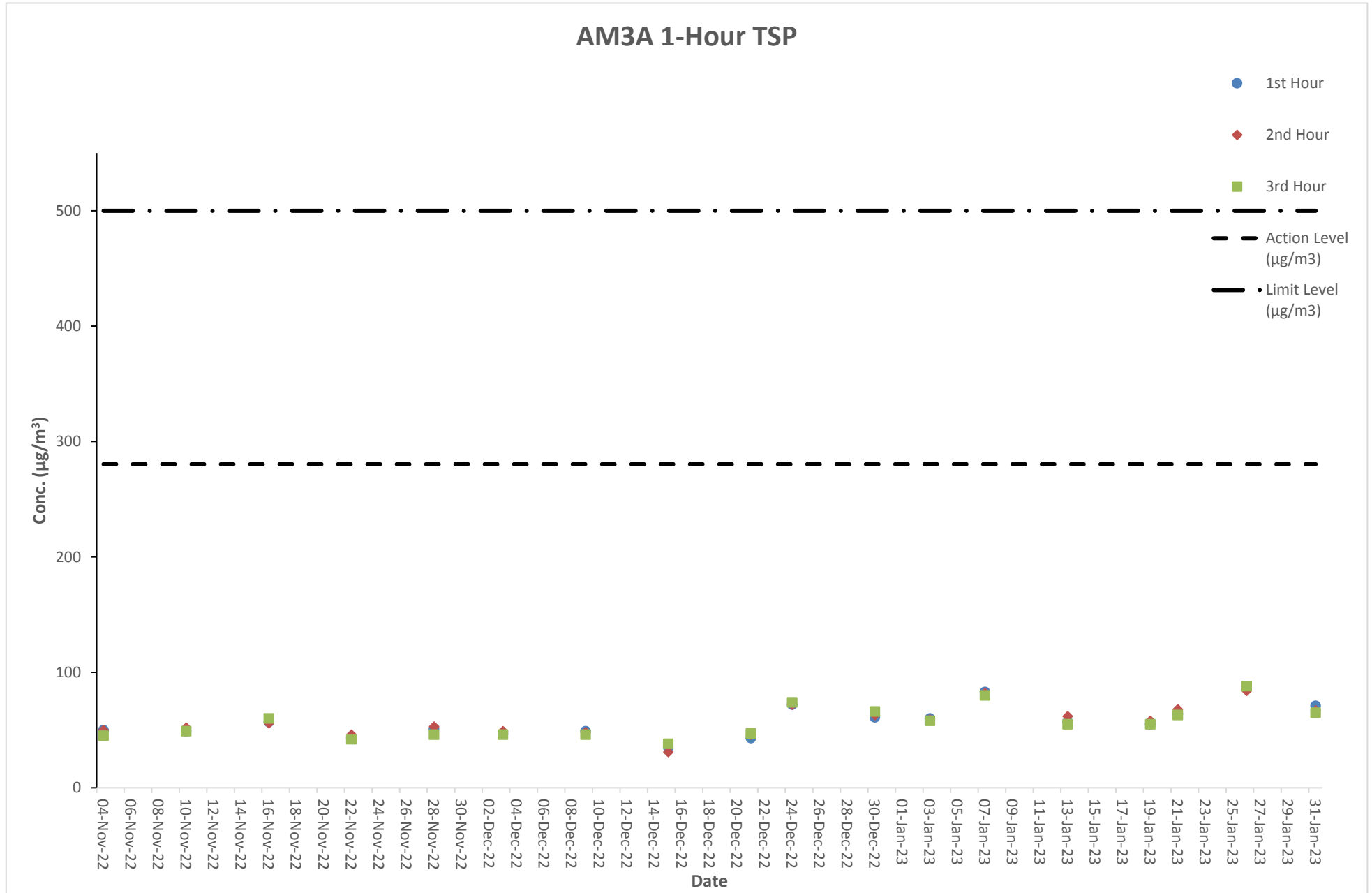


## **E. Graphical Plots of the Monitoring Results**

**Air Quality Monitoring Result at Station AM3A (1-hour TSP)**

Date	Weather Condition	Time	Conc. ( $\mu\text{g}/\text{m}^3$ )			Action Level ( $\mu\text{g}/\text{m}^3$ )	Limit Level ( $\mu\text{g}/\text{m}^3$ )
			1 <sup>st</sup> Hour	2 <sup>nd</sup> Hour	3 <sup>rd</sup> Hour		
04-Nov-22	Cloudy	14:05 - 17:05	50	50	45	280.4	500
10-Nov-22	Fine	8:01 - 11:01	49	52	49	280.4	500
16-Nov-22	Fine	14:09 - 17:09	57	56	60	280.4	500
22-Nov-22	Cloudy	8:08 - 11:08	43	46	42	280.4	500
28-Nov-22	Fine	14:00 - 17:00	51	53	46	280.4	500
03-Dec-22	Fine	8:03 - 11:03	47	49	46	280.4	500
09-Dec-22	Fine	14:06 - 17:06	49	48	46	280.4	500
15-Dec-22	Cloudy	8:01 - 11:01	35	31	38	280.4	500
21-Dec-22	Cloudy	14:07 - 17:07	43	46	47	280.4	500
24-Dec-22	Fine	8:05 - 11:05	72	72	74	280.4	500
30-Dec-22	Fine	14:10 - 17:10	61	63	66	280.4	500
03-Jan-23	Cloudy	8:01 - 11:01	60	59	58	280.4	500
07-Jan-23	Fine	14:09 - 17:09	83	82	80	280.4	500
13-Jan-23	Cloudy	8:06 - 11:06	57	62	55	280.4	500
19-Jan-23	Fine	14:02 - 17:02	55	58	55	280.4	500
21-Jan-23	Cloudy	8:04 - 11:04	64	68	63	280.4	500
26-Jan-23	Fine	14:05 - 17:05	87	84	88	280.4	500
31-Jan-23	Fine	8:03 - 11:03	71	67	65	280.4	500

Graphical Presentation of Air Quality Monitoring Result at Station AM3A (1-hour TSP)

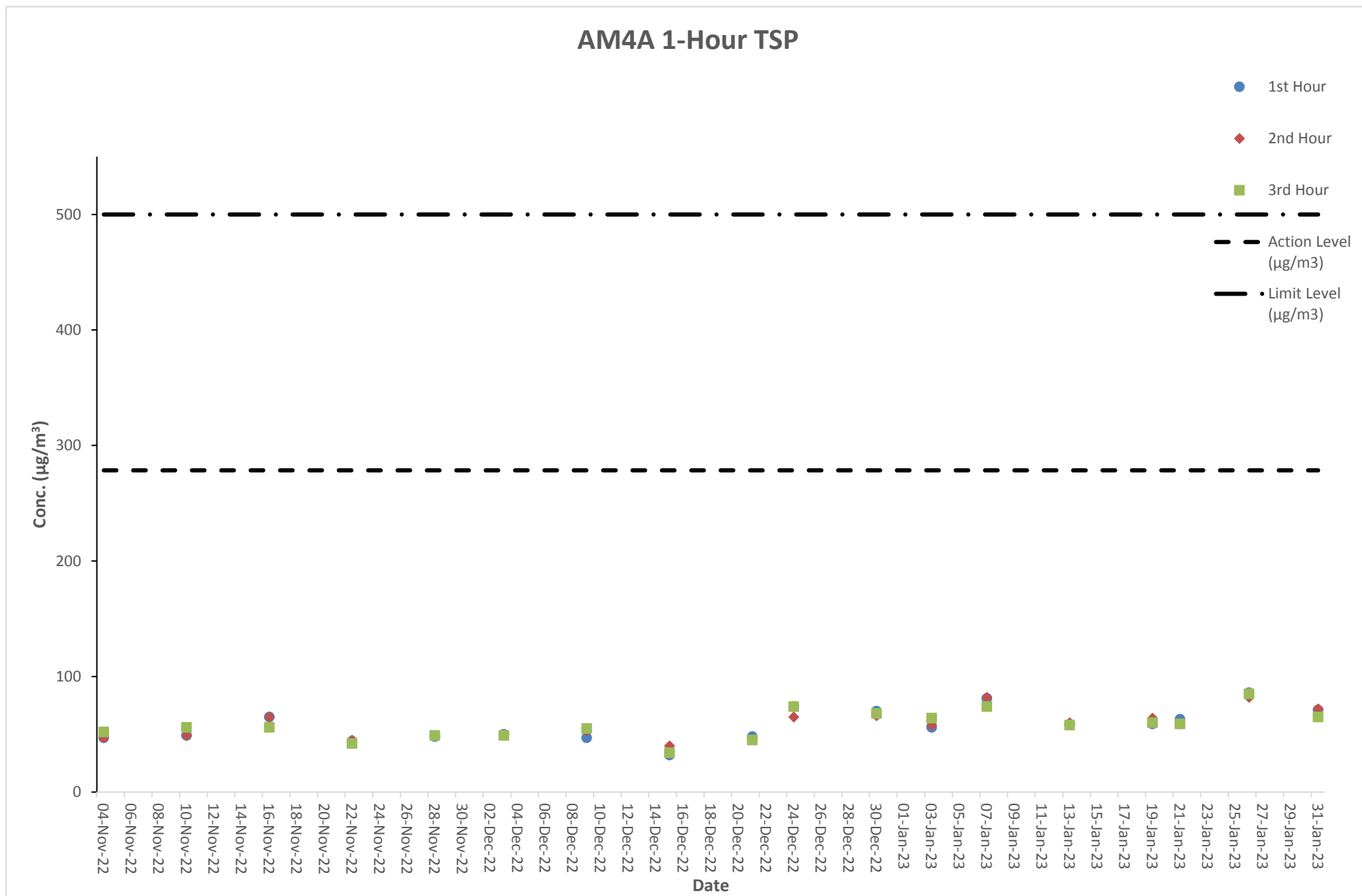




**Air Quality Monitoring Result at Station AM4A (1-hour TSP)**

Date	Weather Condition	Time	Conc. ( $\mu\text{g}/\text{m}^3$ )			Action Level ( $\mu\text{g}/\text{m}^3$ )	Limit Level ( $\mu\text{g}/\text{m}^3$ )
			1 <sup>st</sup> Hour	2 <sup>nd</sup> Hour	3 <sup>rd</sup> Hour		
04-Nov-22	Cloudy	14:13 - 17:13	47	47	52	278.5	500
10-Nov-22	Fine	8:09 - 11:09	49	49	56	278.5	500
16-Nov-22	Fine	14:17 - 17:17	65	65	56	278.5	500
22-Nov-22	Cloudy	8:16 - 11:16	44	45	42	278.5	500
28-Nov-22	Fine	14:08 - 17:08	48	49	49	278.5	500
03-Dec-22	Fine	8:11 - 11:11	50	50	49	278.5	500
09-Dec-22	Fine	14:14 - 17:14	47	53	55	278.5	500
15-Dec-22	Cloudy	8:09 - 11:09	32	40	34	278.5	500
21-Dec-22	Cloudy	14:15 - 17:15	48	46	45	278.5	500
24-Dec-22	Fine	8:13 - 11:13	74	65	74	278.5	500
30-Dec-22	Fine	14:18 - 17:18	70	66	68	278.5	500
03-Jan-23	Cloudy	8:09 - 11:09	56	58	64	278.5	500
07-Jan-23	Fine	14:17 - 17:17	81	82	74	278.5	500
13-Jan-23	Cloudy	8:14 - 11:14	58	60	58	278.5	500
19-Jan-23	Fine	14:10 - 17:10	59	64	60	278.5	500
21-Jan-23	Cloudy	8:12 - 11:12	63	59	59	278.5	500
26-Jan-23	Fine	14:13 - 17:13	86	82	85	278.5	500
31-Jan-23	Fine	8:11 - 11:11	71	72	65	278.5	500

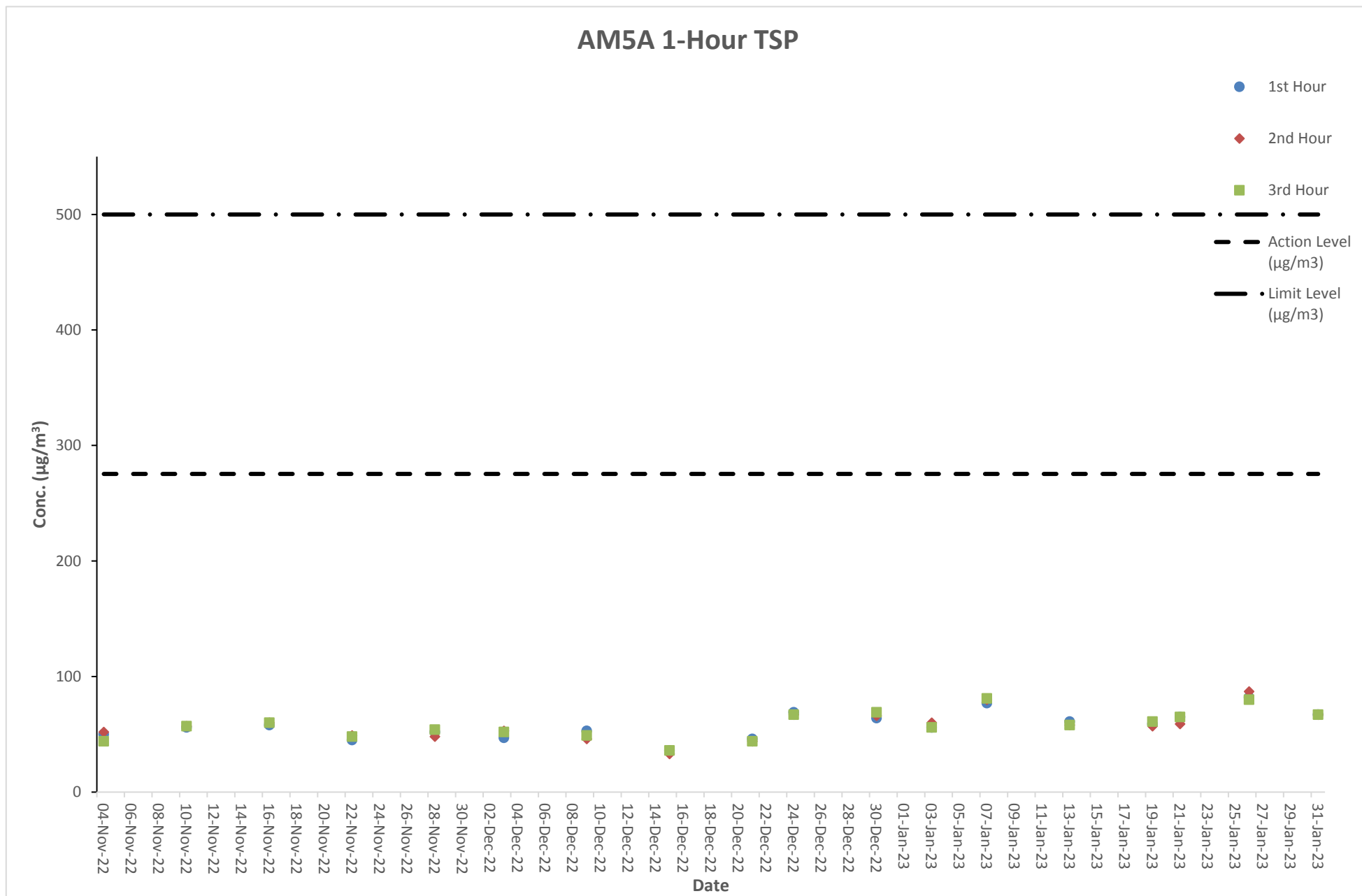
# Graphical Presentation of Air Quality Monitoring Result at Station AM4A (1-hour TSP)



**Air Quality Monitoring Result at Station AM5A (1-hour TSP)**

Date	Weather Condition	Time	Conc. ( $\mu\text{g}/\text{m}^3$ )			Action Level ( $\mu\text{g}/\text{m}^3$ )	Limit Level ( $\mu\text{g}/\text{m}^3$ )
			1 <sup>st</sup> Hour	2 <sup>nd</sup> Hour	3 <sup>rd</sup> Hour		
04-Nov-22	Cloudy	14:28 - 17:28	50	52	44	275.4	500
10-Nov-22	Fine	8:26 - 11:26	56	57	57	275.4	500
16-Nov-22	Fine	14:32 - 17:32	58	60	60	275.4	500
22-Nov-22	Cloudy	8:33 - 11:33	45	49	48	275.4	500
28-Nov-22	Fine	14:23 - 17:23	52	48	54	275.4	500
03-Dec-22	Fine	8:26 - 11:26	47	53	52	275.4	500
09-Dec-22	Fine	14:31 - 17:31	53	46	49	275.4	500
15-Dec-22	Cloudy	8:24 - 11:24	36	33	36	275.4	500
21-Dec-22	Cloudy	14:32 - 17:32	46	44	44	275.4	500
24-Dec-22	Fine	8:28 - 11:28	69	67	67	275.4	500
30-Dec-22	Fine	14:26 - 17:26	64	66	69	275.4	500
03-Jan-23	Cloudy	8:24 - 11:24	56	60	56	275.4	500
07-Jan-23	Fine	14:34 - 17:34	77	80	81	275.4	500
13-Jan-23	Cloudy	8:29 - 11:29	61	58	58	275.4	500
19-Jan-23	Fine	14:27 - 17:27	59	57	61	275.4	500
21-Jan-23	Cloudy	8:27 - 11:27	65	59	65	275.4	500
26-Jan-23	Fine	14:30 - 17:30	82	87	80	275.4	500
31-Jan-23	Fine	8:28 - 11:28	67	67	67	275.4	500

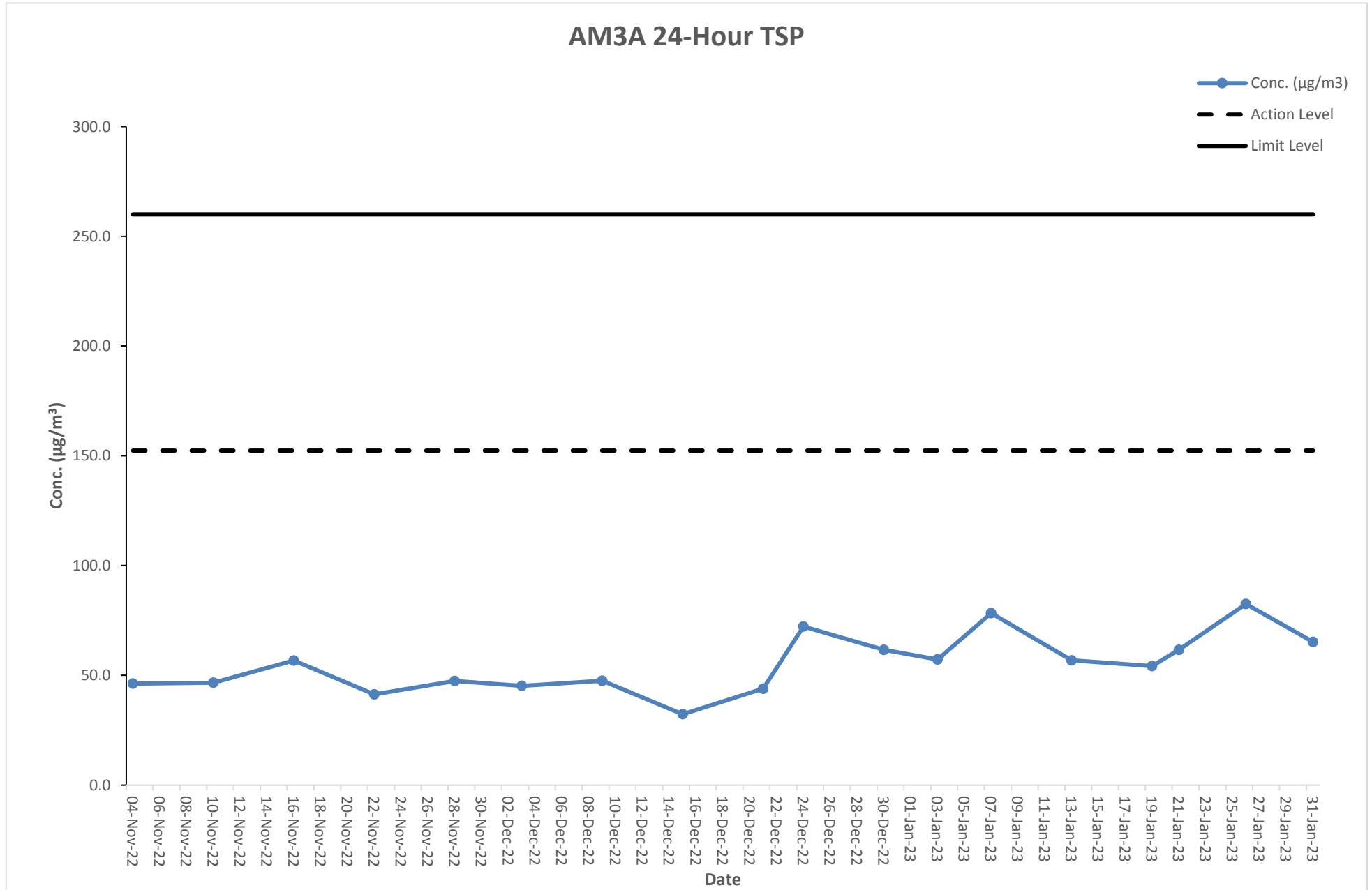
# Graphical Presentation of Air Quality Monitoring Result at Station AM5A (1-hour TSP)



**Air Quality Monitoring Result at Station AM3A (24-hour TSP)**

Start		Finish		Filter Weight (g)		Elapsed Time Reading		Sampling Time (hrs)	Flow Rate (m <sup>3</sup> /min)			Conc. (µg/m <sup>3</sup> )	Weather Condition	Action Level	Limit Level
Date	Time	Date	Time	Initial	Final	Initial	Final		Initial	Final	Average				
04-Nov-22	10:00	05-Nov-22	10:00	2.8064	2.8807	4325.8	4349.8	24	1.12	1.12	1.12	46.2	Rainy	152.4	260
10-Nov-22	10:00	11-Nov-22	10:00	2.8077	2.8827	4349.8	4373.8	24	1.12	1.12	1.12	46.6	Sunny	152.4	260
16-Nov-22	10:00	17-Nov-22	10:00	2.8029	2.8942	4373.8	4397.8	24	1.12	1.12	1.12	56.7	Sunny	152.4	260
22-Nov-22	10:00	23-Nov-22	10:00	2.8018	2.8682	4397.8	4421.8	24	1.12	1.12	1.12	41.3	Rainy	152.4	260
28-Nov-22	10:00	29-Nov-22	10:00	2.8031	2.8793	4421.8	4445.8	24	1.12	1.12	1.12	47.4	Cloudy	152.4	260
03-Dec-22	10:00	04-Dec-22	10:00	2.8068	2.8795	4445.8	4469.8	24	1.12	1.12	1.12	45.2	Sunny	152.4	260
09-Dec-22	10:00	10-Dec-22	10:00	2.8044	2.8809	4469.8	4493.8	24	1.12	1.12	1.12	47.5	Sunny	152.4	260
15-Dec-22	10:00	16-Dec-22	10:00	2.8057	2.8576	4493.8	4517.8	24	1.12	1.12	1.12	32.3	Rainy	152.4	260
21-Dec-22	10:00	22-Dec-22	10:00	2.8062	2.8768	4517.8	4541.8	24	1.12	1.12	1.12	43.9	Cloudy	152.4	260
24-Dec-22	10:00	25-Dec-22	10:00	2.8079	2.9242	4541.8	4565.8	24	1.12	1.12	1.12	72.2	Sunny	152.4	260
30-Dec-22	10:00	31-Dec-22	10:00	2.8086	2.9077	4565.8	4589.8	24	1.12	1.12	1.12	61.6	Sunny	152.4	260
03-Jan-23	10:00	04-Jan-23	10:00	2.8066	2.8986	4590.8	4614.8	24	1.12	1.12	1.12	57.2	Cloudy	152.4	260
07-Jan-23	10:00	08-Jan-23	10:00	2.8057	2.9317	4614.8	4638.8	24	1.12	1.12	1.12	78.3	Sunny	152.4	260
13-Jan-23	10:00	14-Jan-23	10:00	2.8066	2.8979	4638.8	4662.8	24	1.12	1.12	1.12	56.8	Rainy	152.4	260
19-Jan-23	10:00	20-Jan-23	10:00	2.8086	2.8958	4662.8	4686.8	24	1.12	1.12	1.12	54.2	Sunny	152.4	260
21-Jan-23	10:00	22-Jan-23	10:00	2.8025	2.9016	4686.8	4710.8	24	1.12	1.12	1.12	61.6	Cloudy	152.4	260
26-Jan-23	10:00	27-Jan-23	10:00	2.8024	2.9352	4710.8	4734.8	24	1.12	1.12	1.12	82.5	Sunny	152.4	260
31-Jan-23	10:00	01-Feb-23	10:00	2.8089	2.9138	4734.8	4758.8	24	1.12	1.12	1.12	65.2	Sunny	152.4	260

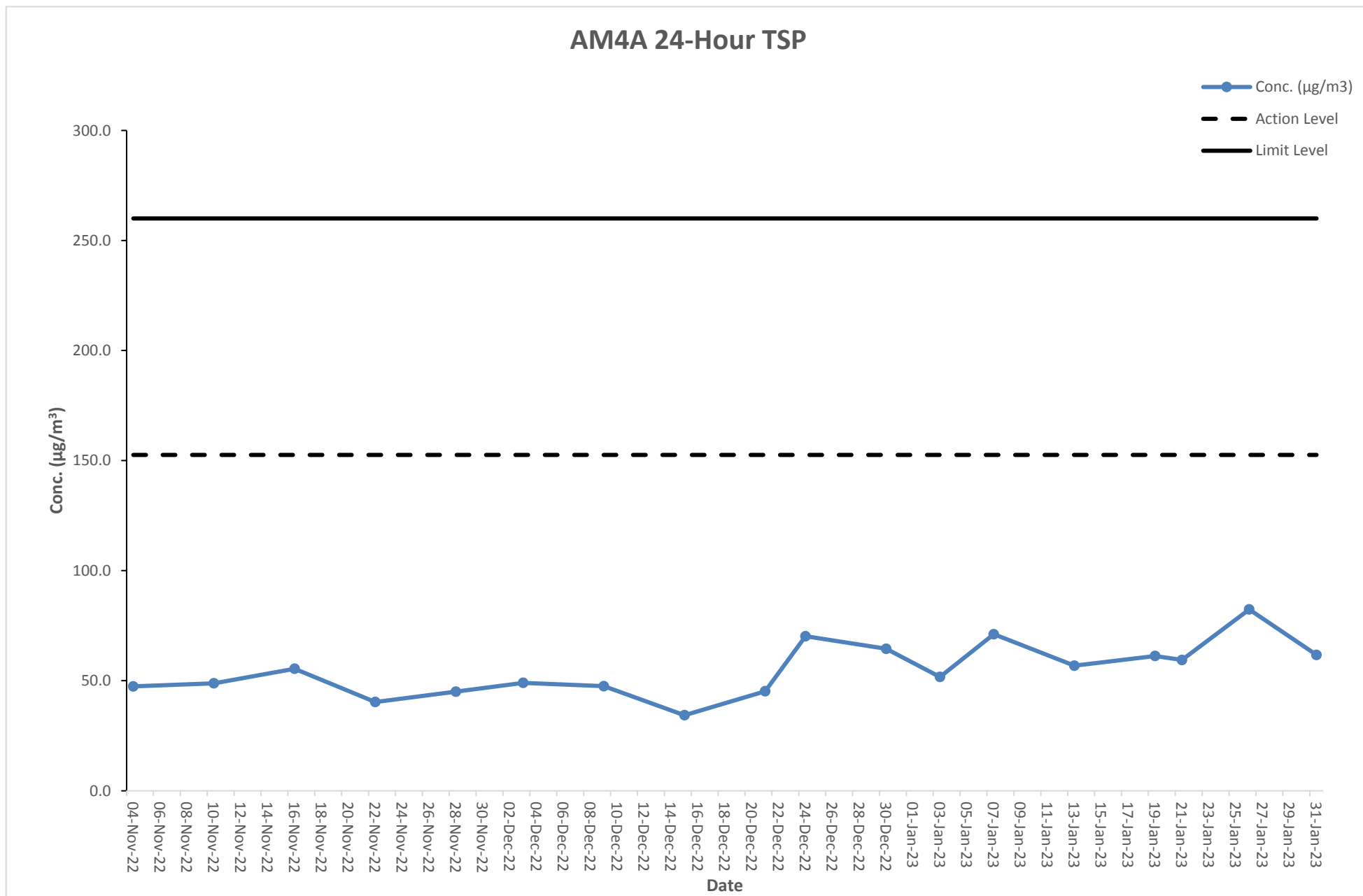
# Graphical Presentation of Air Quality Monitoring Result at Station AM3A (24-hour TSP)



**Air Quality Monitoring Result at Station AM4A (24-hour TSP)**

Start		Finish		Filter Weight (g)		Elapsed Time Reading		Sampling Time (hrs)	Flow Rate (m <sup>3</sup> /min)			Conc. (µg/m <sup>3</sup> )	Weather Condition	Action Level	Limit Level
Date	Time	Date	Time	Initial	Final	Initial	Final		Initial	Final	Average				
04-Nov-22	10:00	05-Nov-22	10:00	2.8083	2.8845	4745.4	4769.4	24	1.12	1.12	1.12	47.4	Rainy	152.6	260
10-Nov-22	10:00	11-Nov-22	10:00	2.8085	2.8869	4769.4	4793.4	24	1.12	1.12	1.12	48.8	Sunny	152.6	260
16-Nov-22	10:00	17-Nov-22	10:00	2.8046	2.8938	4793.4	4817.4	24	1.12	1.12	1.12	55.4	Sunny	152.6	260
22-Nov-22	10:00	23-Nov-22	10:00	2.8072	2.8721	4817.4	4841.4	24	1.12	1.12	1.12	40.3	Rainy	152.6	260
28-Nov-22	10:00	29-Nov-22	10:00	2.8083	2.8807	4841.4	4865.4	24	1.12	1.12	1.12	45.0	Cloudy	152.6	260
03-Dec-22	10:00	04-Dec-22	10:00	2.8022	2.8811	4865.4	4889.4	24	1.12	1.12	1.12	49.0	Sunny	152.6	260
09-Dec-22	10:00	10-Dec-22	10:00	2.8063	2.8828	4889.4	4913.4	24	1.12	1.12	1.12	47.5	Sunny	152.6	260
15-Dec-22	10:00	16-Dec-22	10:00	2.8032	2.8584	4913.4	4937.4	24	1.12	1.12	1.12	34.3	Rainy	152.6	260
21-Dec-22	10:00	22-Dec-22	10:00	2.8074	2.8801	4937.4	4961.4	24	1.12	1.12	1.12	45.2	Cloudy	152.6	260
24-Dec-22	10:00	25-Dec-22	10:00	2.8037	2.9167	4961.4	4985.4	24	1.12	1.12	1.12	70.2	Sunny	152.6	260
30-Dec-22	10:00	31-Dec-22	10:00	2.8088	2.9126	4985.4	5009.4	24	1.12	1.12	1.12	64.5	Sunny	152.6	260
03-Jan-23	10:00	04-Jan-23	10:00	2.8074	2.8905	5010.4	5034.4	24	1.12	1.12	1.12	51.7	Cloudy	152.6	260
07-Jan-23	10:00	08-Jan-23	10:00	2.8065	2.9210	5034.4	5058.4	24	1.12	1.12	1.12	71.1	Sunny	152.6	260
13-Jan-23	10:00	14-Jan-23	10:00	2.8089	2.9003	5058.4	5082.4	24	1.12	1.12	1.12	56.8	Rainy	152.6	260
19-Jan-23	10:00	20-Jan-23	10:00	2.8034	2.9019	5082.4	5106.4	24	1.12	1.12	1.12	61.2	Sunny	152.6	260
21-Jan-23	10:00	22-Jan-23	10:00	2.8062	2.9019	5106.4	5130.4	24	1.12	1.12	1.12	59.4	Cloudy	152.6	260
26-Jan-23	10:00	27-Jan-23	10:00	2.8085	2.9410	5130.4	5154.4	24	1.12	1.12	1.12	82.4	Sunny	152.6	260
31-Jan-23	10:00	01-Feb-23	10:00	2.8058	2.9052	5154.4	5178.4	24	1.12	1.12	1.12	61.7	Sunny	152.6	260

# Graphical Presentation of Air Quality Monitoring Result at Station AM4A (24-hour TSP)

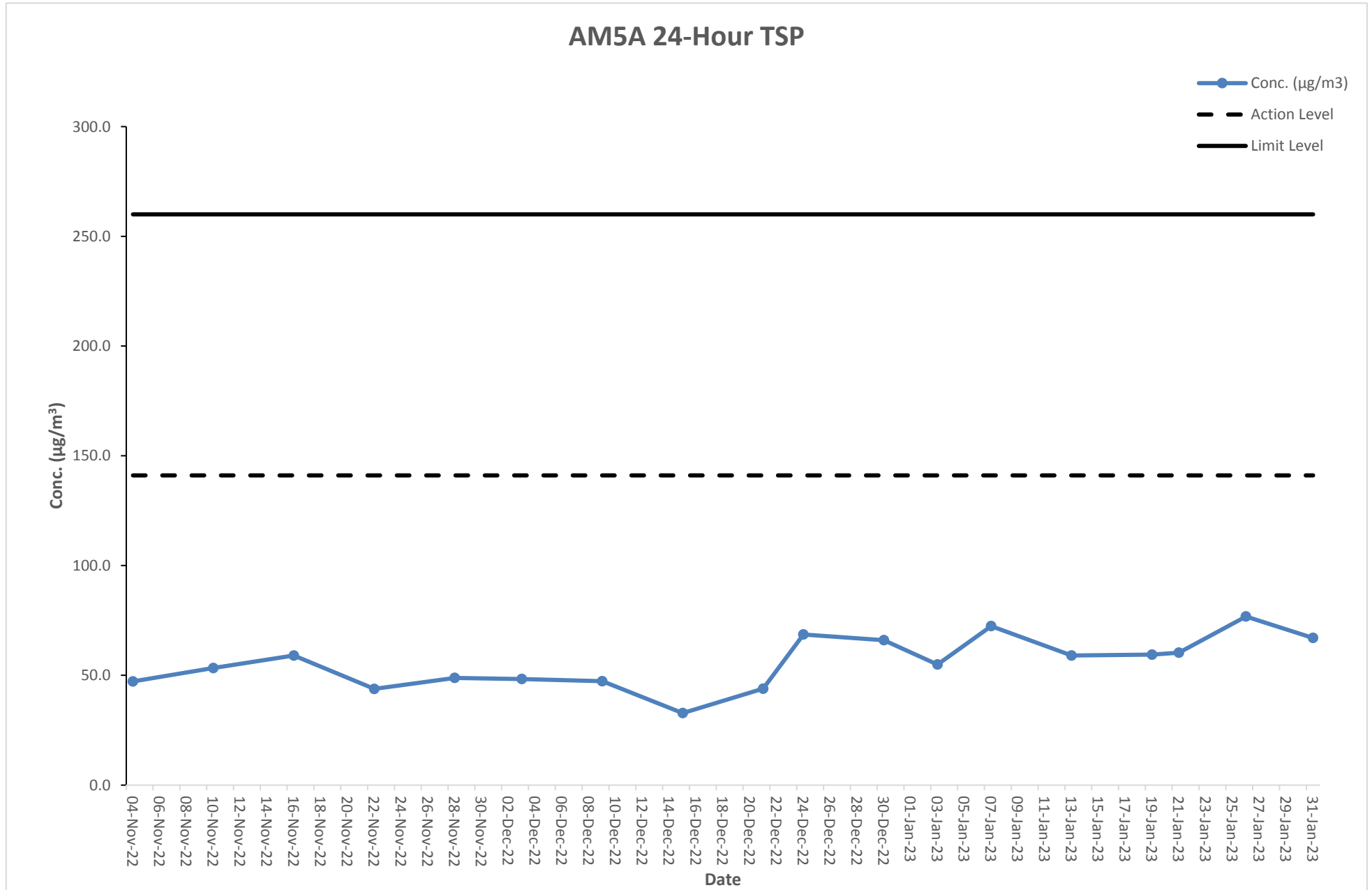




**Air Quality Monitoring Result at Station AM5A (24-hour TSP)**

Start		Finish		Filter Weight (g)		Elapsed Time Reading		Sampling Time (hrs)	Flow Rate (m <sup>3</sup> /min)			Conc. (µg/m <sup>3</sup> )	Weather Condition	Action Level	Limit Level
Date	Time	Date	Time	Initial	Final	Initial	Final		Initial	Final	Average				
04-Nov-22	10:00	05-Nov-22	10:00	2.8037	2.8796	4885.6	4909.6	24	1.12	1.12	1.12	47.2	Rainy	141.1	260
10-Nov-22	10:00	11-Nov-22	10:00	2.8043	2.8900	4909.6	4933.6	24	1.12	1.12	1.12	53.3	Sunny	141.1	260
16-Nov-22	10:00	17-Nov-22	10:00	2.8060	2.9008	4933.6	4957.6	24	1.12	1.12	1.12	59.0	Sunny	141.1	260
22-Nov-22	10:00	23-Nov-22	10:00	2.8046	2.8750	4957.6	4981.6	24	1.12	1.12	1.12	43.8	Rainy	141.1	260
28-Nov-22	10:00	29-Nov-22	10:00	2.8067	2.8853	4981.6	5005.6	24	1.12	1.12	1.12	48.8	Cloudy	141.1	260
03-Dec-22	10:00	04-Dec-22	10:00	2.8036	2.8813	5005.6	5029.6	24	1.12	1.12	1.12	48.3	Sunny	141.1	260
09-Dec-22	10:00	10-Dec-22	10:00	2.8055	2.8816	5029.6	5053.6	24	1.12	1.12	1.12	47.3	Sunny	141.1	260
15-Dec-22	10:00	16-Dec-22	10:00	2.8062	2.8589	5053.6	5077.6	24	1.12	1.12	1.12	32.8	Rainy	141.1	260
21-Dec-22	10:00	22-Dec-22	10:00	2.8062	2.8769	5077.6	5101.6	24	1.12	1.12	1.12	43.9	Cloudy	141.1	260
24-Dec-22	10:00	25-Dec-22	10:00	2.8048	2.9153	5101.6	5125.6	24	1.12	1.12	1.12	68.6	Sunny	141.1	260
30-Dec-22	10:00	31-Dec-22	10:00	2.8019	2.9082	5125.6	5149.6	24	1.12	1.12	1.12	66.0	Sunny	141.1	260
03-Jan-23	10:00	04-Jan-23	10:00	2.8023	2.8907	5150.6	5174.6	24	1.12	1.12	1.12	54.9	Cloudy	141.1	260
07-Jan-23	10:00	08-Jan-23	10:00	2.8049	2.9214	5174.6	5198.6	24	1.12	1.12	1.12	72.4	Sunny	141.1	260
13-Jan-23	10:00	14-Jan-23	10:00	2.8061	2.9010	5198.6	5222.6	24	1.12	1.12	1.12	59.0	Rainy	141.1	260
19-Jan-23	10:00	20-Jan-23	10:00	2.8049	2.9006	5222.6	5246.6	24	1.12	1.12	1.12	59.4	Sunny	141.1	260
21-Jan-23	10:00	22-Jan-23	10:00	2.8079	2.9049	5246.6	5270.6	24	1.12	1.12	1.12	60.3	Cloudy	141.1	260
26-Jan-23	10:00	27-Jan-23	10:00	2.8040	2.9276	5270.6	5294.6	24	1.12	1.12	1.12	76.8	Sunny	141.1	260
31-Jan-23	10:00	01-Feb-23	10:00	2.8058	2.9137	5294.6	5318.6	24	1.12	1.12	1.12	67.0	Sunny	141.1	260

# Graphical Presentation of Air Quality Monitoring Result at Station AM5A (24-hour TSP)

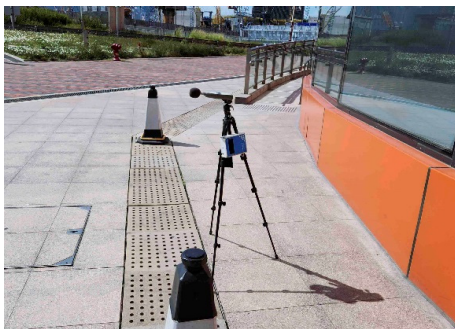


**Noise Monitoring Result at Station NM2A**

Date	Time	Measured L10 dB(A)	Measured L90 dB(A)	Leq (30 min.) dB(A)
04-Nov-22	14:35	63.2	58.9	61.8
04-Nov-22	14:40	64.5	59.7	
04-Nov-22	14:45	63.1	59.3	
04-Nov-22	14:50	63.8	58.9	
04-Nov-22	14:55	64.0	59.0	
04-Nov-22	15:00	63.7	58.7	
10-Nov-22	8:31	63.9	60.4	61.7
10-Nov-22	8:36	63.5	59.1	
10-Nov-22	8:41	63.9	59.0	
10-Nov-22	8:46	62.8	59.6	
10-Nov-22	8:51	62.8	58.9	
10-Nov-22	8:56	63.2	59.0	
16-Nov-22	14:39	63.1	60.2	61.8
16-Nov-22	14:44	62.9	60.2	
16-Nov-22	14:49	62.8	60.2	
16-Nov-22	14:54	63.4	58.7	
16-Nov-22	14:59	64.2	60.4	
16-Nov-22	15:04	64.5	59.5	
22-Nov-22	8:38	62.9	59.8	61.7
22-Nov-22	8:43	63.4	58.7	
22-Nov-22	8:48	64.6	58.7	
22-Nov-22	8:53	63.0	59.5	
22-Nov-22	8:58	63.8	59.3	
22-Nov-22	9:03	64.7	59.1	
28-Nov-22	14:30	63.6	59.1	61.7
28-Nov-22	14:35	64.7	59.5	
28-Nov-22	14:40	64.1	58.7	
28-Nov-22	14:45	64.3	59.2	
28-Nov-22	14:50	64.1	60.3	
28-Nov-22	14:55	63.8	59.9	
03-Dec-22	8:33	63.6	60.0	61.9
03-Dec-22	8:38	63.6	59.6	
03-Dec-22	8:43	63.3	59.6	
03-Dec-22	8:48	64.6	59.4	
03-Dec-22	8:53	64.1	59.4	
03-Dec-22	8:58	62.9	58.7	
09-Dec-22	14:36	64.6	60.5	61.9
09-Dec-22	14:41	63.2	60.0	
09-Dec-22	14:46	62.8	59.8	
09-Dec-22	14:51	64.0	59.8	
09-Dec-22	14:56	64.1	60.0	
09-Dec-22	15:01	64.4	60.0	
15-Dec-22	8:31	63.5	58.9	61.9
15-Dec-22	8:36	63.6	59.6	
15-Dec-22	8:41	64.6	59.1	
15-Dec-22	8:46	63.2	60.1	
15-Dec-22	8:51	62.9	59.1	
15-Dec-22	8:56	63.2	59.8	
21-Dec-22	14:37	62.8	60.5	61.8
21-Dec-22	14:42	63.6	60.2	
21-Dec-22	14:47	64.3	59.2	
21-Dec-22	14:52	62.8	60.0	
21-Dec-22	14:57	63.3	60.5	
21-Dec-22	15:02	63.3	60.2	
24-Dec-22	8:35	64.7	58.9	61.8
24-Dec-22	8:40	63.6	60.0	
24-Dec-22	8:45	63.4	59.8	
24-Dec-22	8:50	64.0	58.7	
24-Dec-22	8:55	64.0	58.8	
24-Dec-22	9:00	64.3	58.6	

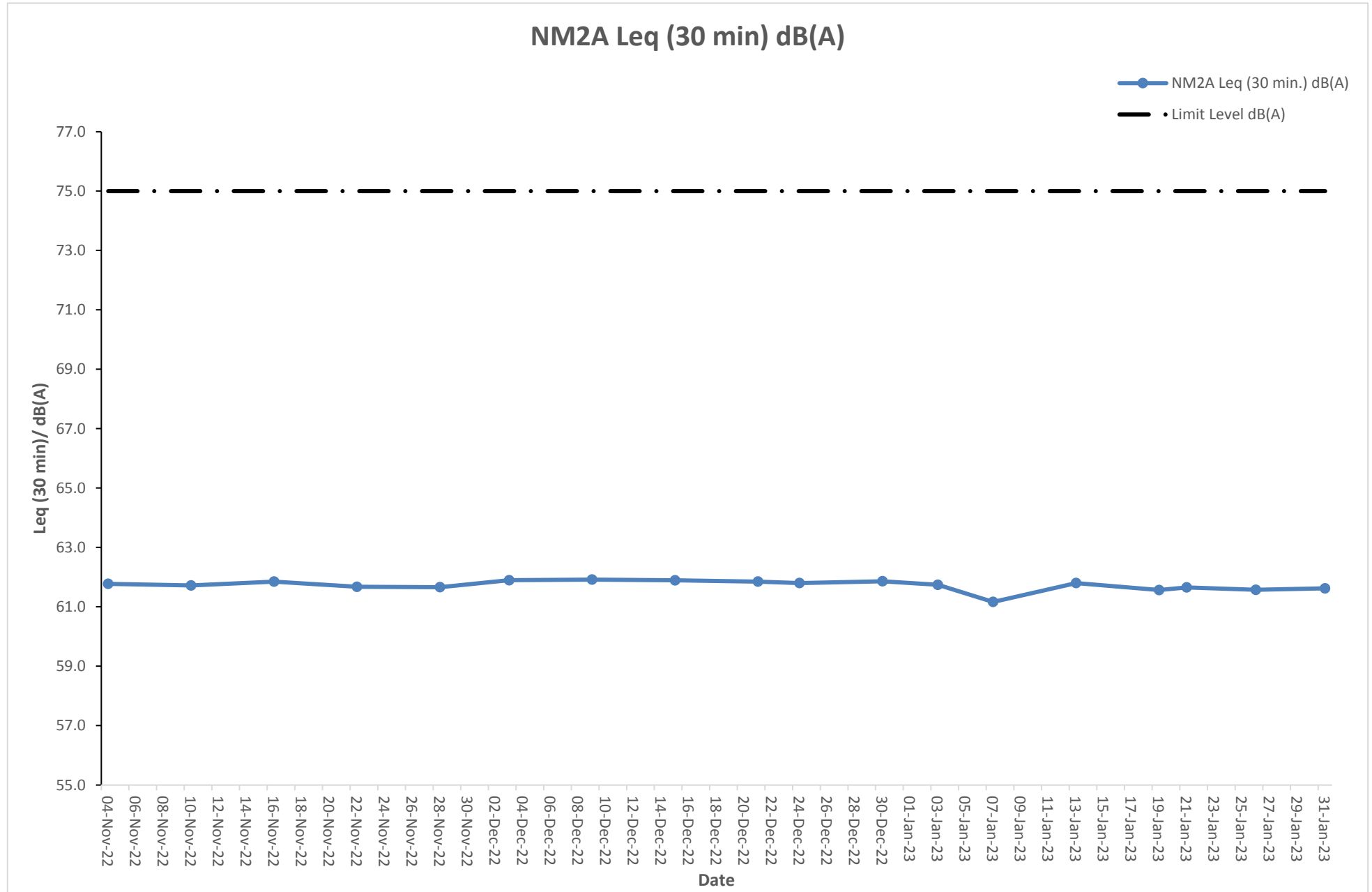
**Noise Monitoring Result at Station NM2A**

Date	Time	Measured L10 dB(A)	Measured L90 dB(A)	Leq (30 min.) dB(A)
30-Dec-22	14:40	64.4	59.0	61.9
30-Dec-22	14:45	63.8	58.6	
30-Dec-22	14:50	64.2	60.4	
30-Dec-22	14:55	63.1	59.8	
30-Dec-22	15:00	64.5	58.7	
30-Dec-22	15:05	63.8	60.2	
03-Jan-23	8:31	64.3	59.5	61.7
03-Jan-23	8:36	64.5	59.2	
03-Jan-23	8:41	64.4	60.4	
03-Jan-23	8:46	64.3	59.1	
03-Jan-23	8:51	63.7	58.8	
03-Jan-23	8:56	64.7	59.4	61.2
07-Jan-23	14:39	64.4	59.9	
07-Jan-23	14:44	64.5	60.2	
07-Jan-23	14:49	63.6	60.4	
07-Jan-23	14:54	63.4	59.3	
07-Jan-23	14:59	62.9	58.8	
07-Jan-23	15:04	64.5	59.0	
13-Jan-23	8:36	63.5	58.6	61.8
13-Jan-23	8:41	63.5	59.3	
13-Jan-23	8:46	64.7	59.7	
13-Jan-23	8:51	64.5	60.5	
13-Jan-23	8:56	64.4	59.3	
13-Jan-23	9:01	63.9	58.6	
19-Jan-23	14:32	63.1	58.9	61.6
19-Jan-23	14:37	63.6	59.2	
19-Jan-23	14:42	62.9	60.0	
19-Jan-23	14:47	64.7	60.3	
19-Jan-23	14:52	63.5	59.2	
19-Jan-23	14:57	63.9	58.7	
21-Jan-23	8:34	64.2	60.5	61.7
21-Jan-23	8:39	63.8	60.0	
21-Jan-23	8:44	62.8	58.6	
21-Jan-23	8:49	64.5	59.3	
21-Jan-23	8:54	63.8	58.9	
21-Jan-23	8:59	63.9	60.3	
26-Jan-23	14:35	64.1	59.8	61.6
26-Jan-23	14:40	64.4	60.4	
26-Jan-23	14:45	63.0	60.4	
26-Jan-23	14:50	64.3	58.7	
26-Jan-23	14:55	63.1	60.5	
26-Jan-23	15:00	64.4	60.0	
31-Jan-23	8:03	63.5	60.3	61.6
31-Jan-23	8:08	64.5	59.4	
31-Jan-23	8:13	63.9	60.4	
31-Jan-23	8:18	63.3	59.0	
31-Jan-23	8:23	64.3	59.8	
31-Jan-23	8:28	63.5	58.7	



The station set-up of a façade measurement at station NM2A.

# Graphical Presentation of Noise Monitoring Result at Station NM2A



**Noise Monitoring Result at Station NM3A**

Date	Time	Measured L10 dB(A)	Measured L90 dB(A)	Leq (30 min.) dB(A)
04-Nov-22	16:05	63.8	58.8	62.5
04-Nov-22	16:10	63.7	58.4	
04-Nov-22	16:15	63.5	59.0	
04-Nov-22	16:20	64.0	58.0	
04-Nov-22	16:25	65.1	58.3	
04-Nov-22	16:30	65.1	59.6	
10-Nov-22	10:04	63.9	58.2	61.7
10-Nov-22	10:09	65.4	59.1	
10-Nov-22	10:14	64.2	58.9	
10-Nov-22	10:19	64.3	59.7	
10-Nov-22	10:24	63.8	59.6	
10-Nov-22	10:29	64.6	58.0	
16-Nov-22	16:09	65.4	58.1	62.8
16-Nov-22	16:14	64.9	59.6	
16-Nov-22	16:19	64.3	58.5	
16-Nov-22	16:24	65.2	59.9	
16-Nov-22	16:29	64.4	59.8	
16-Nov-22	16:34	65.4	58.3	
22-Nov-22	10:11	64.3	59.0	62.3
22-Nov-22	10:16	64.8	59.1	
22-Nov-22	10:21	63.6	58.8	
22-Nov-22	10:26	65.4	59.8	
22-Nov-22	10:31	64.2	59.1	
22-Nov-22	10:36	64.2	59.4	
28-Nov-22	16:00	64.9	58.7	62.4
28-Nov-22	16:05	64.4	59.5	
28-Nov-22	16:10	64.5	59.0	
28-Nov-22	16:15	65.2	59.0	
28-Nov-22	16:20	63.5	59.8	
28-Nov-22	16:25	64.6	58.3	
03-Dec-22	10:03	63.6	58.0	62.3
03-Dec-22	10:08	64.7	58.9	
03-Dec-22	10:13	64.8	59.6	
03-Dec-22	10:18	64.1	58.6	
03-Dec-22	10:23	65.0	59.6	
03-Dec-22	10:28	64.9	59.3	
09-Dec-22	16:09	64.5	59.8	62.6
09-Dec-22	16:14	64.9	59.1	
09-Dec-22	16:19	63.5	59.7	
09-Dec-22	16:24	64.7	58.9	
09-Dec-22	16:29	64.6	59.7	
09-Dec-22	16:34	63.7	59.9	
15-Dec-22	10:01	64.5	59.5	62.5
15-Dec-22	10:06	65.4	59.7	
15-Dec-22	10:11	64.6	59.6	
15-Dec-22	10:16	64.2	58.7	
15-Dec-22	10:21	64.2	59.6	
15-Dec-22	10:26	65.1	59.4	
21-Dec-22	16:10	64.1	58.9	62.2
21-Dec-22	16:15	64.9	58.0	
21-Dec-22	16:20	63.5	59.5	
21-Dec-22	16:25	64.5	58.8	
21-Dec-22	16:30	65.3	58.8	
21-Dec-22	16:35	65.2	58.5	
24-Dec-22	10:05	63.8	58.7	62.8
24-Dec-22	10:10	64.3	58.0	
24-Dec-22	10:15	64.1	59.4	
24-Dec-22	10:20	65.0	58.2	
24-Dec-22	10:25	64.6	58.3	
24-Dec-22	10:30	65.2	58.3	

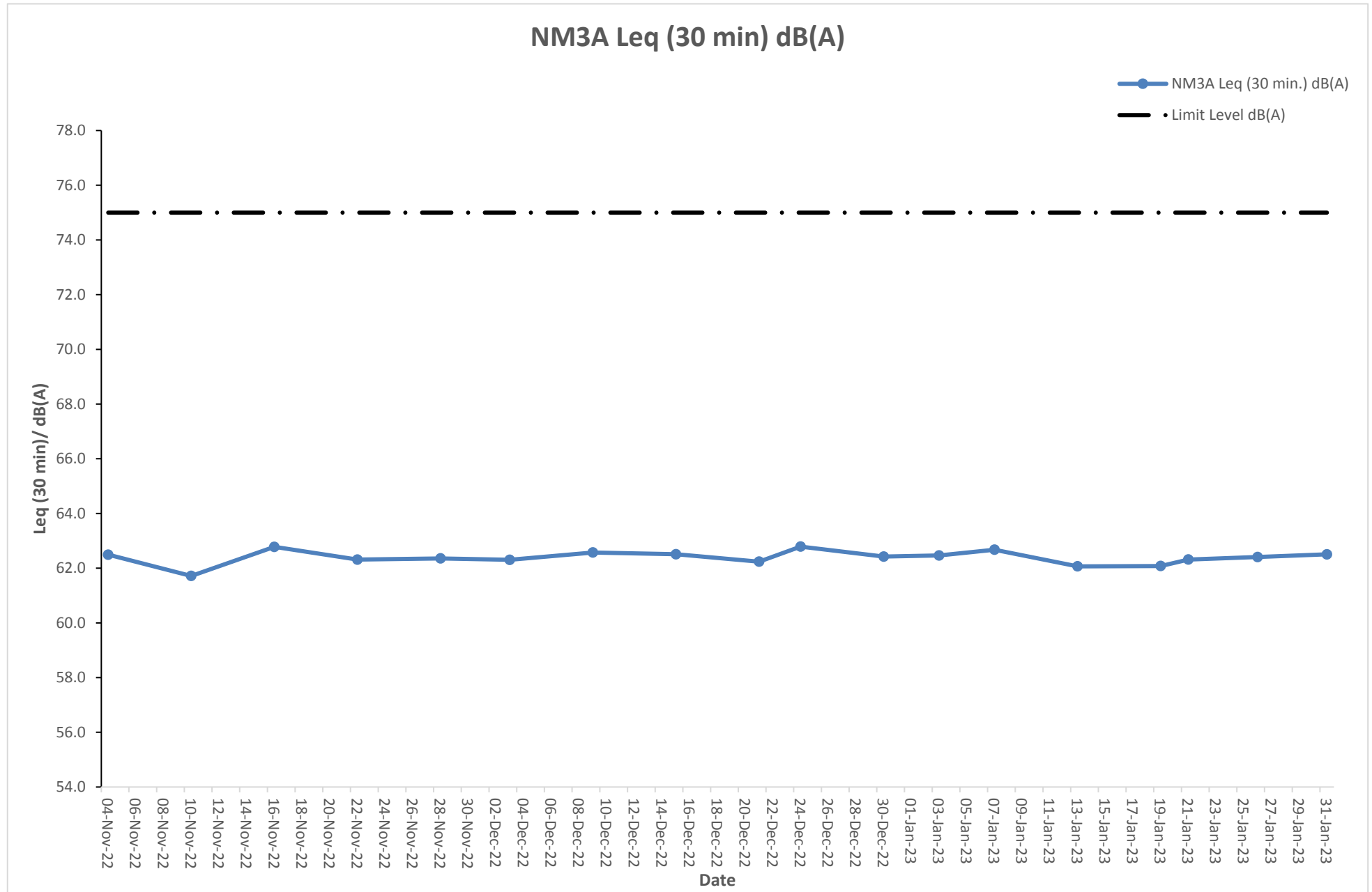
**Noise Monitoring Result at Station NM3A**

Date	Time	Measured L10 dB(A)	Measured L90 dB(A)	Leq (30 min.) dB(A)
30-Dec-22	16:22	63.7	58.6	62.4
30-Dec-22	16:27	64.6	58.7	
30-Dec-22	16:32	64.4	58.6	
30-Dec-22	16:37	63.9	59.2	
30-Dec-22	16:42	65.3	58.3	
30-Dec-22	16:47	65.2	59.5	
03-Jan-23	10:01	64.1	58.1	62.5
03-Jan-23	10:06	65.3	58.4	
03-Jan-23	10:11	64.5	58.0	
03-Jan-23	10:16	64.5	59.4	
03-Jan-23	10:21	63.8	58.7	
03-Jan-23	10:26	64.3	58.9	
07-Jan-23	16:12	64.1	58.9	62.7
07-Jan-23	16:17	64.5	58.4	
07-Jan-23	16:22	64.1	59.7	
07-Jan-23	16:27	65.1	58.3	
07-Jan-23	16:32	63.9	58.4	
07-Jan-23	16:37	63.9	58.7	
13-Jan-23	10:06	65.3	58.9	62.1
13-Jan-23	10:11	65.0	58.7	
13-Jan-23	10:16	64.6	59.8	
13-Jan-23	10:21	65.0	59.5	
13-Jan-23	10:26	65.3	58.3	
13-Jan-23	10:31	65.2	58.5	
19-Jan-23	16:05	64.1	59.7	62.1
19-Jan-23	16:10	65.1	58.6	
19-Jan-23	16:15	64.2	58.7	
19-Jan-23	16:20	63.7	58.9	
19-Jan-23	16:25	63.9	59.0	
19-Jan-23	16:30	64.2	58.4	
21-Jan-23	10:04	65.2	59.2	62.3
21-Jan-23	10:09	65.3	58.4	
21-Jan-23	10:14	64.7	58.7	
21-Jan-23	10:19	65.3	59.7	
21-Jan-23	10:24	64.2	59.1	
21-Jan-23	10:29	65.0	58.5	
26-Jan-23	16:17	64.1	59.1	62.4
26-Jan-23	16:22	63.7	58.1	
26-Jan-23	16:27	65.0	58.1	
26-Jan-23	16:32	63.7	58.3	
26-Jan-23	16:37	64.9	59.5	
26-Jan-23	16:42	64.4	59.3	
31-Jan-23	9:45	64.8	59.8	62.5
31-Jan-23	9:50	64.6	58.7	
31-Jan-23	9:55	63.5	59.8	
31-Jan-23	10:00	64.7	59.1	
31-Jan-23	10:05	64.9	59.6	
31-Jan-23	10:10	63.9	58.7	



The station set-up of a façade measurement at station NM3A.

# Graphical Presentation of Noise Monitoring Result at Station NM3A





**Noise Monitoring Result at Station NM4A**

Date	Time	Measured L10 dB(A)	Measured L90 dB(A)	Leq (30 min.) dB(A)
04-Nov-22	16:40	63.8	59.7	61.5
04-Nov-22	16:45	63.2	59.7	
04-Nov-22	16:50	62.7	60.3	
04-Nov-22	16:55	63.1	59.2	
04-Nov-22	17:00	63.3	60.0	
04-Nov-22	17:05	63.7	60.6	
10-Nov-22	10:39	63.3	59.5	61.4
10-Nov-22	10:44	63.3	58.8	
10-Nov-22	10:49	64.3	58.8	
10-Nov-22	10:54	63.8	59.7	
10-Nov-22	10:59	63.3	60.3	
10-Nov-22	11:04	63.4	59.8	
16-Nov-22	16:44	62.6	60.3	61.8
16-Nov-22	16:49	63.0	60.2	
16-Nov-22	16:54	63.3	60.6	
16-Nov-22	16:59	64.3	60.0	
16-Nov-22	17:04	64.3	60.1	
16-Nov-22	17:09	62.6	60.3	
22-Nov-22	10:46	62.7	59.8	61.9
22-Nov-22	10:51	62.8	59.3	
22-Nov-22	10:56	62.6	60.2	
22-Nov-22	11:01	63.7	60.6	
22-Nov-22	11:06	63.9	58.8	
22-Nov-22	11:11	63.3	58.9	
28-Nov-22	16:35	63.5	60.5	61.9
28-Nov-22	16:40	64.3	59.6	
28-Nov-22	16:45	62.5	60.2	
28-Nov-22	16:50	64.1	59.4	
28-Nov-22	16:55	62.7	60.0	
28-Nov-22	17:00	62.6	59.1	
03-Dec-22	10:38	63.5	59.6	61.6
03-Dec-22	10:43	64.2	59.5	
03-Dec-22	10:48	63.8	60.2	
03-Dec-22	10:53	62.7	59.7	
03-Dec-22	10:58	63.6	58.9	
03-Dec-22	11:03	63.6	59.1	
09-Dec-22	16:44	63.4	58.9	61.7
09-Dec-22	16:49	64.1	60.4	
09-Dec-22	16:54	63.1	59.5	
09-Dec-22	16:59	63.3	59.9	
09-Dec-22	17:04	63.7	59.6	
09-Dec-22	17:09	62.5	60.1	
15-Dec-22	10:36	63.8	60.6	61.8
15-Dec-22	10:41	64.4	59.6	
15-Dec-22	10:46	62.8	59.9	
15-Dec-22	10:51	62.8	58.9	
15-Dec-22	10:56	62.7	59.6	
15-Dec-22	11:01	63.1	59.3	
21-Dec-22	16:45	62.9	59.9	61.8
21-Dec-22	16:50	63.5	60.1	
21-Dec-22	16:55	63.3	59.0	
21-Dec-22	17:00	62.5	59.1	
21-Dec-22	17:05	64.2	60.5	
21-Dec-22	17:10	62.6	60.2	
24-Dec-22	10:40	64.4	60.5	61.5
24-Dec-22	10:45	63.6	60.5	
24-Dec-22	10:50	62.9	59.9	
24-Dec-22	10:55	63.0	59.1	
24-Dec-22	11:00	63.2	60.1	
24-Dec-22	11:05	62.8	60.4	

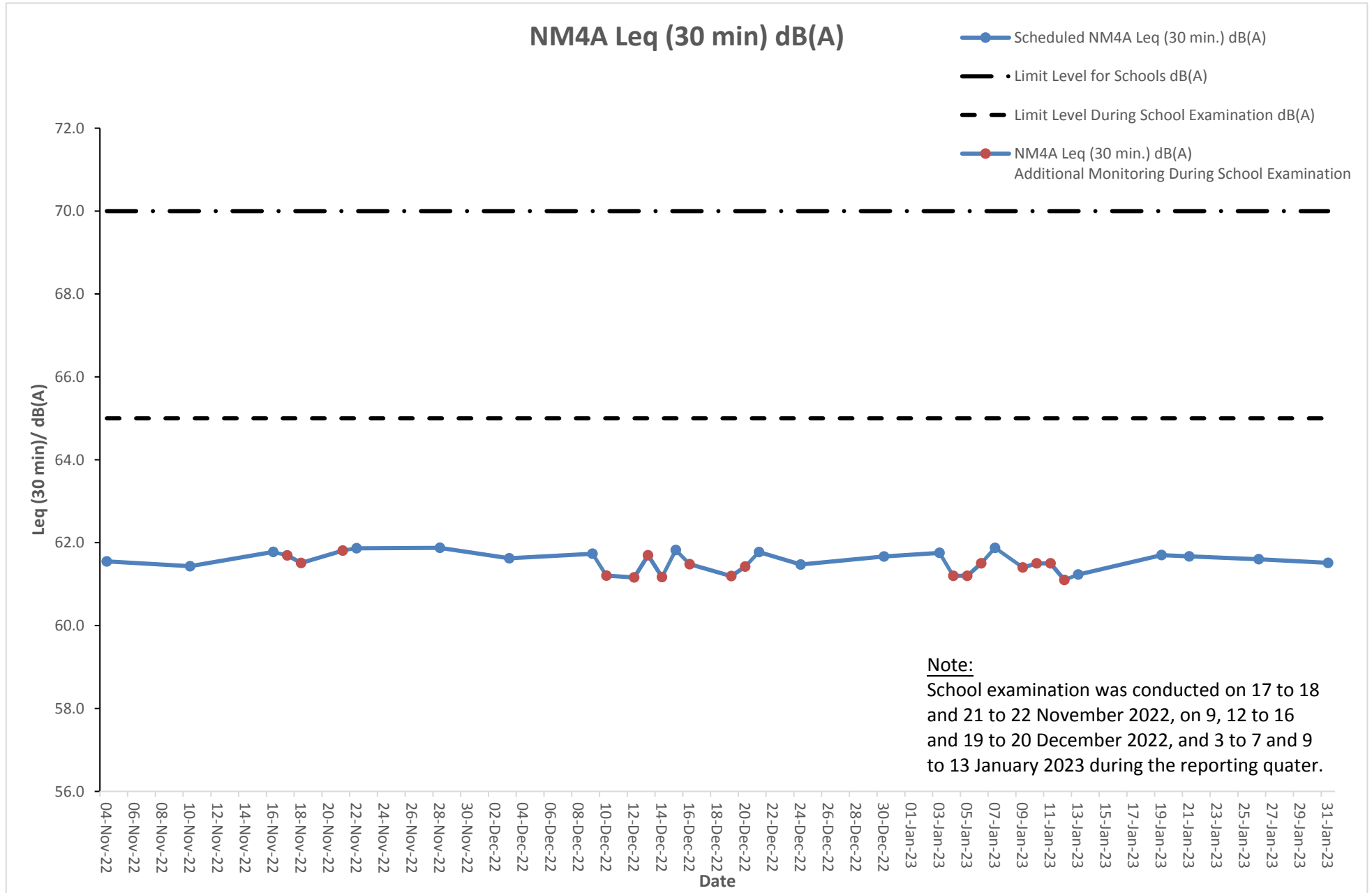
**Noise Monitoring Result at Station NM4A**

Date	Time	Measured L10 dB(A)	Measured L90 dB(A)	Leq (30 min.) dB(A)
30-Dec-22	16:57	63.6	59.1	61.7
30-Dec-22	17:02	63.5	60.2	
30-Dec-22	17:07	63.4	59.8	
30-Dec-22	17:12	62.8	59.8	
30-Dec-22	17:17	63.3	60.2	
30-Dec-22	17:22	63.3	60.6	
03-Jan-23	10:36	64.3	60.2	61.8
03-Jan-23	10:41	63.7	60.5	
03-Jan-23	10:46	62.8	59.7	
03-Jan-23	10:51	63.6	60.6	
03-Jan-23	10:56	63.8	59.8	
03-Jan-23	11:01	63.5	60.4	61.9
07-Jan-23	16:47	63.5	60.5	
07-Jan-23	16:52	62.5	59.0	
07-Jan-23	16:57	63.6	60.2	
07-Jan-23	17:02	62.5	60.0	
07-Jan-23	17:07	63.2	58.9	
07-Jan-23	17:12	63.6	59.5	
13-Jan-23	10:41	64.2	59.6	61.2
13-Jan-23	10:46	63.9	60.2	
13-Jan-23	10:51	62.7	59.2	
13-Jan-23	10:56	63.7	60.1	
13-Jan-23	11:01	64.0	60.2	
13-Jan-23	11:06	63.3	60.4	61.7
19-Jan-23	16:40	63.6	60.3	
19-Jan-23	16:45	62.6	59.4	
19-Jan-23	16:50	63.6	60.3	
19-Jan-23	16:55	63.3	59.2	
19-Jan-23	17:00	63.3	60.2	
19-Jan-23	17:05	62.8	60.0	61.7
21-Jan-23	10:39	63.9	60.2	
21-Jan-23	10:44	63.7	58.8	
21-Jan-23	10:49	62.7	59.5	
21-Jan-23	10:54	63.8	60.6	
21-Jan-23	10:59	64.1	60.2	
21-Jan-23	11:04	63.3	60.1	61.6
26-Jan-23	16:52	63.6	58.8	
26-Jan-23	16:57	62.5	59.8	
26-Jan-23	17:02	64.3	59.5	
26-Jan-23	17:07	64.1	60.5	
26-Jan-23	17:12	62.5	59.3	
26-Jan-23	17:17	63.8	59.9	61.5
31-Jan-23	10:20	64.3	60.6	
31-Jan-23	10:25	62.8	60.2	
31-Jan-23	10:30	62.6	60.4	
31-Jan-23	10:35	63.7	60.4	
31-Jan-23	10:40	63.5	60.2	
31-Jan-23	10:45	63.5	59.3	



The station set-up of a façade measurement at station NM4A.

**Graphical Presentation of Noise Monitoring Result at Station NM4A**



**Noise Monitoring Result at Station NM5A**

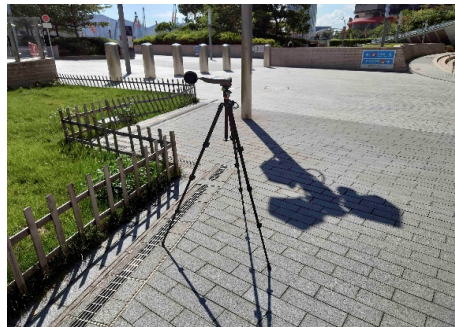
Date	Time	Measured L10 dB(A)	Measured L90 dB(A)	Leq (30 min.) dB(A)	Leq (30 min.) +3 dB(A)
04-Nov-22	15:25	62.7	58.3	61.4	64.4
04-Nov-22	15:30	63.0	58.2		
04-Nov-22	15:35	64.1	58.6		
04-Nov-22	15:40	63.1	58.8		
04-Nov-22	15:45	63.3	59.6		
04-Nov-22	15:50	63.3	59.0		
10-Nov-22	9:23	64.1	58.3	61.5	64.5
10-Nov-22	9:28	62.9	58.1		
10-Nov-22	9:33	63.0	59.3		
10-Nov-22	9:38	64.2	59.2		
10-Nov-22	9:43	62.3	59.5		
10-Nov-22	9:48	63.2	58.3		
16-Nov-22	15:29	63.8	59.6	61.0	64.0
16-Nov-22	15:34	63.4	59.2		
16-Nov-22	15:39	62.9	57.8		
16-Nov-22	15:44	62.3	58.3		
16-Nov-22	15:49	62.9	59.6		
16-Nov-22	15:54	62.6	58.6		
22-Nov-22	9:30	62.7	57.9	61.4	64.4
22-Nov-22	9:35	63.6	59.6		
22-Nov-22	9:40	62.4	59.2		
22-Nov-22	9:45	63.7	59.6		
22-Nov-22	9:50	63.6	58.1		
22-Nov-22	9:55	64.2	58.1		
28-Nov-22	15:20	62.4	58.2	60.8	63.8
28-Nov-22	15:25	64.1	59.5		
28-Nov-22	15:30	64.2	58.6		
28-Nov-22	15:35	63.2	59.7		
28-Nov-22	15:40	62.3	59.6		
28-Nov-22	15:45	63.8	59.0		
03-Dec-22	9:23	62.6	57.9	61.5	64.5
03-Dec-22	9:28	63.6	58.6		
03-Dec-22	9:33	64.0	58.4		
03-Dec-22	9:38	64.1	59.2		
03-Dec-22	9:43	62.5	57.9		
03-Dec-22	9:48	62.4	58.9		
09-Dec-22	15:28	63.5	59.4	61.1	64.1
09-Dec-22	15:33	63.1	59.0		
09-Dec-22	15:38	63.4	58.7		
09-Dec-22	15:43	62.7	59.6		
09-Dec-22	15:48	63.0	59.1		
09-Dec-22	15:53	62.4	59.4		
15-Dec-22	9:21	63.0	59.1	60.9	63.9
15-Dec-22	9:26	62.6	59.7		
15-Dec-22	9:31	63.4	59.3		
15-Dec-22	9:36	64.0	57.9		
15-Dec-22	9:41	63.2	58.7		
15-Dec-22	9:46	63.7	59.3		
21-Dec-22	15:29	64.2	57.8	61.2	64.2
21-Dec-22	15:34	62.5	58.4		
21-Dec-22	15:39	62.7	59.1		
21-Dec-22	15:44	62.8	58.6		
21-Dec-22	15:49	62.5	59.6		
21-Dec-22	15:54	64.0	59.5		
24-Dec-22	9:25	64.2	59.6	61.5	64.5
24-Dec-22	9:30	63.8	59.4		
24-Dec-22	9:35	63.8	59.6		
24-Dec-22	9:40	63.3	58.5		
24-Dec-22	9:45	63.8	59.4		
24-Dec-22	9:50	63.9	59.1		

**Noise Monitoring Result at Station NM5A**

Date	Time	Measured L10 dB(A)	Measured L90 dB(A)	Leq (30 min.) dB(A)	Leq (30 min.) +3 dB(A)
30-Dec-22	15:41	63.4	59.5	61.2	64.2
30-Dec-22	15:46	62.6	58.3		
30-Dec-22	15:51	64.0	59.3		
30-Dec-22	15:56	62.5	59.4		
30-Dec-22	16:01	63.7	58.5		
30-Dec-22	16:06	63.6	59.4		
03-Jan-23	9:21	63.1	58.4	61.5	64.5
03-Jan-23	9:26	63.2	59.1		
03-Jan-23	9:31	62.9	59.4		
03-Jan-23	9:36	62.4	58.9		
03-Jan-23	9:41	63.9	58.3		
03-Jan-23	9:46	64.2	59.2	60.9	63.9
07-Jan-23	15:31	63.8	59.4		
07-Jan-23	15:36	64.2	58.9		
07-Jan-23	15:41	62.3	58.6		
07-Jan-23	15:46	63.5	58.7		
07-Jan-23	15:51	63.0	58.2		
07-Jan-23	15:56	62.9	58.9		
13-Jan-23	9:26	63.2	58.7	61.4	64.4
13-Jan-23	9:31	64.1	58.7		
13-Jan-23	9:36	63.1	57.9		
13-Jan-23	9:41	63.1	58.6		
13-Jan-23	9:46	64.2	59.2		
13-Jan-23	9:51	64.1	58.8	61.7	64.7
19-Jan-23	15:24	64.1	59.7		
19-Jan-23	15:29	62.8	58.8		
19-Jan-23	15:34	62.3	59.3		
19-Jan-23	15:39	62.9	58.2		
19-Jan-23	15:44	63.9	58.1		
19-Jan-23	15:49	62.8	59.2	61.5	64.5
21-Jan-23	9:24	62.8	58.8		
21-Jan-23	9:29	63.9	59.3		
21-Jan-23	9:34	63.8	57.8		
21-Jan-23	9:39	64.0	58.4		
21-Jan-23	9:44	63.0	59.4		
21-Jan-23	9:49	63.8	58.8	61.0	64.0
26-Jan-23	15:36	63.2	58.3		
26-Jan-23	15:41	64.0	58.3		
26-Jan-23	15:46	63.7	58.2		
26-Jan-23	15:51	63.2	59.7		
26-Jan-23	15:56	62.8	59.1		
26-Jan-23	16:01	63.3	58.9	61.5	64.5
31-Jan-23	9:04	62.3	59.6		
31-Jan-23	9:09	62.6	58.7		
31-Jan-23	9:14	62.8	58.5		
31-Jan-23	9:19	62.5	59.4		
31-Jan-23	9:24	63.0	57.8		
31-Jan-23	9:29	62.4	58.4		

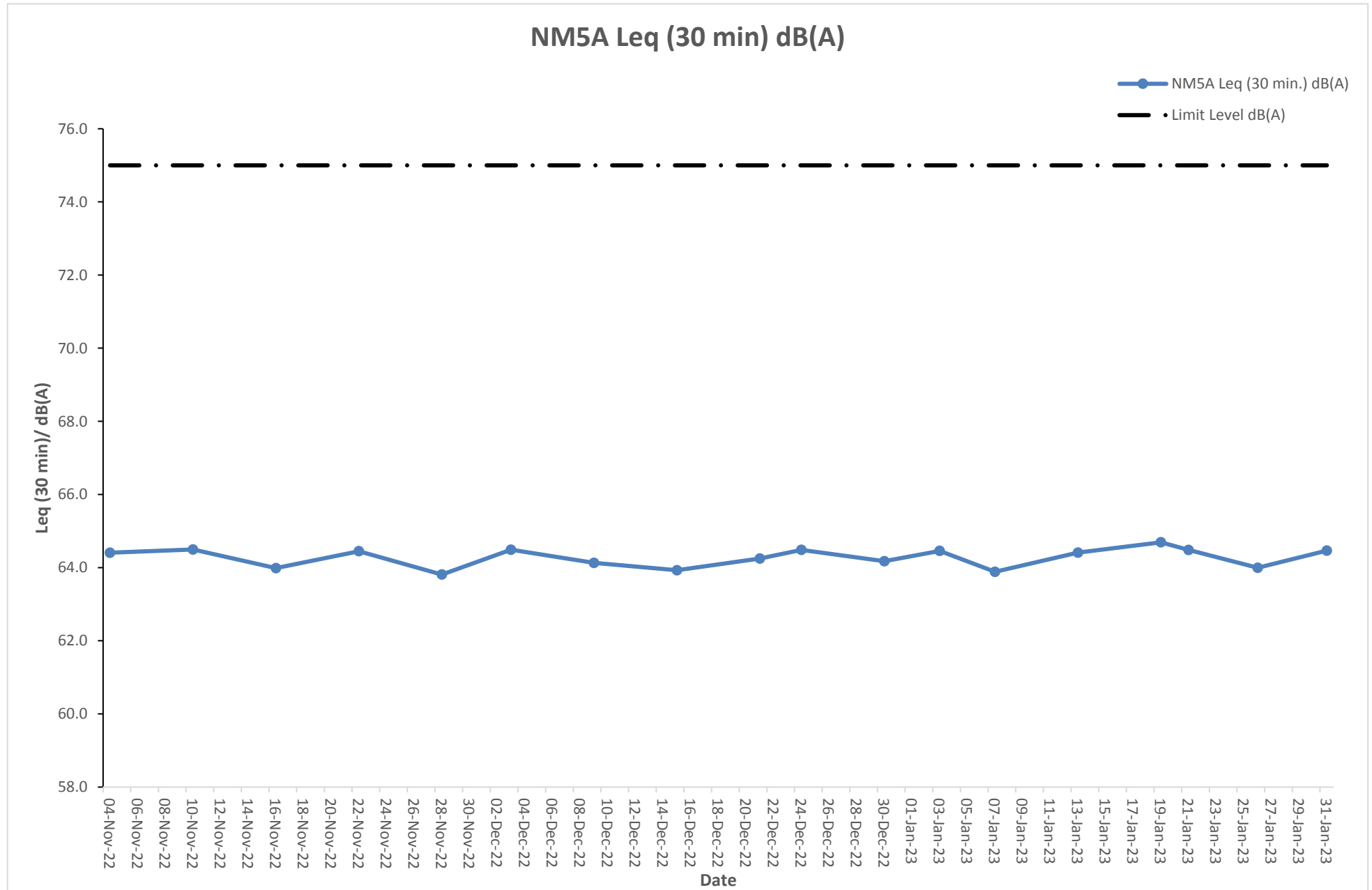
**Remarks:**

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



The station set-up of a free-field measurement at station NM5A.

# Graphical Presentation of Noise Monitoring Result at Station NM5A



## F. Waste Flow table

**Zone 2A**





**Table F-1: Monthly Waste Flow Table for Zone 2A**

Month	Actual Quantities of Inert C&D Materials Generated Monthly							Actual Quantities of C&D Materials 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 Srotting 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)
Aug	113.62	0.00	0.00	0.00	113.62	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.20
Sep	142.39	0.00	37.09	0.00	99.55	5.75	0.00	0.00	0.00	0.00	0.00	0.00	13.82
Oct	67.20	0.00	67.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.68
Nov	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.66
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.02
<b>Sub-total (2022)</b>	<b>7880.60</b>	<b>0.00</b>	<b>224.29</b>	<b>1077.83</b>	<b>6572.73</b>	<b>5.75</b>	<b>0.00</b>	<b>19.88</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.80</b>	<b>108.37</b>
<b>2023</b>													
Jan	1987.03	0.00	0.00	1987.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.96
<b>Sub-total (2023)</b>	<b>1987.03</b>	<b>0.00</b>	<b>0.00</b>	<b>1987.03</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>1.96</b>
<b>Total</b>	<b>98423.83</b>	<b>0.00</b>	<b>1497.01</b>	<b>13795.84</b>	<b>83125.23</b>	<b>5.75</b>	<b>1246.44</b>	<b>240.28</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>3.40</b>	<b>499.85</b>

Note:

- 0 tonne and 0 tonne of inert C&D material were disposed of as public fill to Tseung Kwan O Area 137 Public Fill and Tuen Mun Area 38 respectively in the reporting quarter.
- For inert C&D materials reused in other projects, the project refers to (1) Lung Kwu Sheung Tan.

**Zone 2B & 2C**

**Table F-2: Monthly Waste Flow Table for Zone 2B & 2C**

Month	Actual Quantities of Inert C&D Materials Generated Monthly							Actual Quantities of C&D Materials 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 Srotting 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)
<b>2021</b>													
Sep	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Oct	22.58	22.58	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.19
Nov	9265.04	10.45	125.93	0.00	9128.66	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.12
Dec	13462.30	62.94	1041.17	0.00	12358.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.62
Sub-total (2021)	22749.92	95.97	1167.10	0.00	21486.85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	43.93
<b>2022</b>													
Jan	17427.64	0.00	2091.32	100.04	15236.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.60
Feb	18230.98	0.00	991.53	1719.99	15519.46	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.90
Mar	24777.12	0.00	2176.32	11721.21	10879.59	0.00	0.00	0.00	0.00	0.00	0.00	1.40	16.15
Apr	32749.58	0.00	2409.00	22393.87	7946.71	0.00	0.00	0.00	0.00	0.00	0.00	0.00	16.79
May	31115.05	0.00	3141.32	15121.57	12852.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.31
Jun	30747.96	0.00	3120.62	14645.87	12981.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	15.84
Jul	34017.48	0.00	3444.43	10214.91	20358.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.43
Aug	38065.92	0.00	3272.46	3610.61	31182.85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	29.99
Sep	38896.62	0.00	3664.45	2790.24	32441.93	0.00	0.00	15.80	0.00	0.00	0.00	0.00	29.88
Oct	41174.38	0.00	4340.02	2447.22	34387.14	0.00	0.00	86.63	0.00	0.00	0.00	0.00	28.50
Nov	40031.63	0.00	4149.91	1021.06	34860.66	0.00	0.00	0.00	0.00	0.00	0.00	0.00	36.54
Dec	42615.90	0.00	4242.02	1655.36	36718.52	0.00	0.00	10.23	0.00	0.00	0.00	0.00	36.04
Sub-total (2022)	389850.25	0.00	37043.39	87441.95	265364.91	0.00	0.00	112.66	0.00	0.00	0.00	1.40	254.97

<b>2023</b>													
Jan	35248.24	0.00	2711.85	1182.55	31353.84	0.00	0.00	0.00	0.00	0.00	0.00	0.00	22.92
Sub-total (2023)	35248.24	0.00	2711.85	1182.55	31353.84	0.00	0.00	0.00	0.00	0.00	0.00	0.00	22.92
<b>Total</b>	<b>447848.40</b>	<b>95.97</b>	<b>40922.33</b>	<b>88624.50</b>	<b>318205.60</b>	<b>0.00</b>	<b>0.00</b>	<b>112.66</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>1.40</b>	<b>321.82</b>

Note:

-53028.90 tonnes and 49904.12 tonnes of inert C&D material were disposed of as public fill to Tseung Kwan O Area 137 Public Fill and Tuen Mun Area 38 respectively in the reporting month.

-For inert C&D material reused in other projects, the projects refer to (1)Sai Sha(Site B) and (2)Poly U.

## **G. 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. 3 October 2020 for Zone 2A Foundation, Excavation and Lateral Support Works; 30 September 2021 for Zone 2B & 2C Piling Works) to the end of the reporting quarter and are summarized in the **Table G-1** and **Table G-2** below respectively.

**Table G-1: Statistics for complaints, notifications of summons and successful prosecutions for Zone 2A Foundation, Excavation and Lateral Support Works**

Reporting Period	Cumulative Statistics		
	Complaints	Notifications of summons	Successful prosecutions
This reporting quarter (Nov 22 – Jan 23)	2	0	0
From 03 October 2020 to end of the reporting quarter	43	0	0

**Table G-2: Statistics for complaints, notifications of summons and successful prosecutions for Zone 2B & 2C Piling Works**

Reporting Period	Cumulative Statistics		
	Complaints	Notifications of summons	Successful prosecutions
This reporting quarter (Nov 22 – Jan 23)	2	0	0
From 30 September 2021 to end of the reporting quarter	28	0	0

**END OF THE REPORT**