


# Leader and JEC Joint Venture

**Contract No. DC/2009/23**  
**HATS Stage 2A – Upgrading of**  
**Preliminary Treatment Works at**  
**North Point, Wan Chai East and Central**

**Monthly Environmental**  
**Monitoring and Audit Report**  
**December 2016**

**(Version 1.0)**

Certified By   
(Environmental Team Leader)

REMARKS:

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

CINOTECH accepts no responsibility for changes made to this report by third parties

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**Our Reference**  
GCB/AFK/DC/bw/  
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**Contract No. DC/2009/23 – Upgrading of Preliminary Treatment Works at  
North Point, Wan Chai East and Central**

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**Condition 4.4 – Monthly EM&A Report for December 2016 (no. 71) Version 1.0**

12 January 2017

**By Post**

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Dear Sir,

I refer to the captioned Monthly EM&A Report for December 2016 (version 1.0) submitted by ETL on 12 January 2017 via email. In accordance with Condition 4.4 of Environmental Permit No. EP-322/2008/G, I hereby verify the captioned Monthly EM&A Report.

Yours faithfully  
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## ABBREVIATION AND ACRONYM

|           |  |
|-----------|--|
| AL Levels | Action and Limit Levels                          |
| DSD       | Drainage Services Department                     |
| E / ER    | Engineer/Engineer's Representative               |
| EIA       | Environmental Impact Assessment                  |
| EM&A      | Environmental Monitoring and Audit               |
| EMIS      | Environmental Mitigation Implementation Schedule |
| EP        | Environmental Permit                             |
| EPD       | Environmental Protection Department              |
| ET        | Environmental Team                               |
| HATS 2A   | Harbour Area Treatment Scheme Stage 2A           |
| HVS       | High Volume Sampler                              |
| IEC       | Independent Environmental Checker                |
| RE        | Resident Engineer                                |
| RH        | Relative Humidity                                |
| QA/QC     | Quality Assurance / Quality Control              |
| SLM       | Sound Level Meter                                |
| WMP       | Waste Management Plan                            |

## EXECUTIVE SUMMARY

### Introduction

1. This is the 71<sup>st</sup> Monthly Environmental Monitoring and Audit (EM&A) Report prepared by Cinotech Consultants Limited for DSD Contract No. DC/2009/23 “HATS Stage 2A – Upgrading of Preliminary Treatment Works at North Point, Wan Chai East and Central” (The Project) which documents the key information of EM&A and environmental monitoring works by Contract DC/2009/23 HATS Stage 2A with the Environmental Permit (Permit No. EP-322/2008/G) for December 2016.
2. The site activities undertaken for in the reporting month included:
  - Wan Chai East PTW:
    - Sewage Pump replacement work;
    - Construction of road and drainage;
    - Steel frame construction for upgrading the DO unit at the inlet pumping station;
    - Construction of boundary wall.
  - North Point PTW
    - Interim Operation for North Point PTW - Fine Screen & Grit Trap Building;
    - Construction of Manholes and Laying Associated Pipes near FSGT Building;
    - Construction of Manhole FM1 and Sewage Pipes behind DO Building;
    - Construction of Boundary Wall bedside King's Road Playground;
    - Construction of Grasscrete;
    - Installation of Green Roof.
  - Central PTW
    - Interim Operation for North Point PTW - Fine Screen & Grit Trap Building;
    - Installation of Access Link Bridge;
    - Construction of road and drainage;
    - Construction of boundary wall.

### Environmental Monitoring Works

3. The environmental monitoring works of the Project was conducted by the ET for the Contract: DC/2009/23 under HATS 2A with the Environmental Permit (Permit No. EP-322/2008/G) and in accordance with the EM&A Manual. The monitoring results were checked and reviewed. Site audits were conducted once per week. The implementation of the environmental mitigation measures, Event Action Plans and environmental complaint handling procedures were also checked.
4. Since the monitoring of air quality monitoring station at Chan's Creative School (AM1), Hong Kong & Islands Regional Office, WSD (AM2), Wan Chai East PTW (AM3), a location next to Sheung Wan Fire Station (AM4\_2); and noise monitoring station at Chan's Creative School (NM1), Hyde Building (NM2) and Goldfield Building (NM3) were handed over to Contract No. DC/2009/23 from Contract No. DC/2007/23 in October 2015. The air quality and noise monitoring stations were set up by Cinotech Consultants Limited (ET for Contract No. DC/2009/23 for HATS 2A) to monitor the air quality and noise in the vicinity of the sensitive receivers starting from October 2015. The environmental monitoring schedule for the next reporting month is shown in **Appendix B**.
5. Summary of the non-compliance of the reporting month is tabulated in **Table I**.

**Table I Summary Table for Non-compliance Recorded in the Reporting Month**

| Monitoring Station | Parameter | No. of Exceedance |             | No. of Exceedance Due to the Project |             | Action Taken |
|--------------------|-----------|-------------------|-------------|--------------------------------------|-------------|--------------|
|                    |           | Action Level      | Limit Level | Action Level                         | Limit Level |              |
| AM1                | 1-hr TSP  | 0                 | 0           | 0                                    | 0           | N/A          |
|                    | 24-hr TSP | 0                 | 0           | 0                                    | 0           | N/A          |
| AM2                | 1-hr TSP  | 0                 | 0           | 0                                    | 0           | N/A          |
|                    | 24-hr TSP | 0                 | 0           | 0                                    | 0           | N/A          |
| AM3                | 1-hr TSP  | 0                 | 0           | 0                                    | 0           | N/A          |
|                    | 24-hr TSP | 0                 | 0           | 0                                    | 0           | N/A          |
| AM4_2              | 1-hr TSP  | 0                 | 0           | 0                                    | 0           | N/A          |
|                    | 24-hr TSP | 0                 | 0           | 0                                    | 0           | N/A          |
| NM1                | Noise     | 0                 | 2           | 0                                    | 0           | N/A          |
| NM2                | Noise     | 0                 | 3           | 0                                    | 0           | N/A          |
| NM3                | Noise     | 0                 | 1           | 0                                    | 0           | N/A          |

Note: Since the site area where air monitoring station AM4 was located had to be returned to DSD for another Works Contract, AM4 was relocated to AM4\_2 on 24 September 2012.

#### *1-hour TSP Monitoring*

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

#### *24-hour TSP Monitoring*

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

#### *Construction Noise*

8. All Construction Noise monitoring was conducted as scheduled in the reporting month. No Action Level exceedance was recorded, while two non-project related Limit Level exceedance were recorded during the daytime noise monitoring on 12<sup>th</sup> December 2016 and during the restricted hour noise monitoring on 12<sup>th</sup> December 2016 by the ET of this Project at NM1; three non-project related Limit Level exceedances were recorded during the daytime noise monitoring on 6<sup>th</sup> December 2016 and during the restricted hour noise monitoring on 4<sup>th</sup> & 29<sup>th</sup> December 2016 by the ET of this Project at NM2; and one non-project related Limit Level exceedances was recorded during the daytime noise monitoring on 29<sup>th</sup> December 2016 by the ET of this Project at NM3. Details of the exceedance could be referred to **Appendix G & H**.

#### **Environmental Licenses and Permits**

9. Licenses/Permits granted to the Project include the Environmental Permit (EP) and Registered as a Chemical Waste Producer for North Point, Wan Chai East and Central PTWs sites; water discharge licenses of North Point, Wan Chai East and Central PTWs; also the Construction Noise Permits for construction works at Wan Chai East PTW and Central PTW.

**Environmental Mitigation Implementation Schedule**

10. According to the EIA Report Section 3.74, 4.56, 6.384, 9.154 and 13.44, air quality, noise, water quality, waste management and landscape and visual would be the key environmental issues and mitigation measures shall be implemented during the construction phase. Details of the implementation of mitigation measures are provided in the **Appendix L**.

**Key Information in the Reporting Month**

11. Summary of key information in the reporting month is tabulated in **Table II**.

**Table II Summary Table for Key Information in the Reporting Month**

| Event  | Event Details |   | Action Taken                         | Status     | Remark |
|--|---------------|---|--------------------------------------|------------|--------|
|  | Number        | Nature  |                                      |            |        |
| Complaint received                                   | 0             | ---   | N/A                                  | N/A        | ---    |
| Status of submissions under EP                       | 1             | Monthly Environmental Monitoring and Audit Report for November 2016 | Submitted to EPD on 14 December 2016 | No Comment | ---    |
| Notifications of any summons & prosecutions received | 0             | ---   | N/A                                  | N/A        | ---    |

**Summary of Complaints and Prosecutions**

12. No environmentally related summons, prosecutions or complaints were received for the Project in the reporting month.

13. There were no environmentally related summons, prosecutions or complaints were received since the commencement of the Project. The Complaint Log is presented in **Appendix M**.

**Future Key Issues**

14. Major site activities for the coming two months include:

Wan Chai East PTW:

- Sewage Pump replacement work;
- Construction of road and drainage;
- Steel frame construction for upgrading the DO unit at the inlet pumping station;
- Construction of boundary wall.

North Point PTW

- Interim Operation for North Point PTW - Fine Screen & Grit Trap Building;
- Construction of Manholes and Laying Associated Pipes near FSGT Building;
- Construction of Manhole FM1 and Sewage Pipes behind DO Building;
- Construction of Boundary Wall bedside King's Road Playground;
- Construction of Grasscrete;
- Installation of Green Roof.



Central PTW

- Interim Operation for North Point PTW - Fine Screen & Grit Trap Building;
  - Installation of Access Link Bridge;
  - Construction of road and drainage;
  - Construction of boundary wall.
15. The environmental concerns in coming months are mainly dust emission in the dry season. Other concerns including noise generated from construction works; dust emission due to strong wind erosion and vehicle movements, and inappropriate storage of construction equipments within the tree protective zones.

## 1. INTRODUCTION

### Background

- 1.1 The Project ‘HATS Stage 2A - Upgrading of Preliminary Treatment Works at North Point, Wan Chai East and Central with Contract No: DC/2009/23’ mainly comprises the following major works:
- Decommissioning, demolition and removal of existing structures and buildings, including the associated E&M works;
  - Relocation of sewers, control room, workshop equipment and the associated E&M works; and
  - Construction of new buildings and structures.
- 1.2 The general location plan of the Project is shown in **Figure 1A** to **1C**.
- 1.3 The Project is under Harbour Area Treatment Scheme (HATS) Stage 2A and is a designated project (Register No. : AEIAR-121/2008). The environmental permit: (Permit No. EP-322/2008/G) which was issued on 9<sup>th</sup> May 2014 to the Drainage Services Department (hereinafter called the DSD) as the Permit Holder.
- 1.4 Leader and JEC Joint Venture (hereafter called the LJJV) was commissioned by the DSD to undertake the construction of the Contract No. DC/2009/23 “Upgrading of Preliminary Treatment Works at North Point, Wan Chai East and Central”. The date of commencement of construction of the Project is on 14<sup>th</sup> February 2011.
- 1.5 Cinotech Consultants Limited was commissioned by LJJV to undertake the Environmental Monitoring and Audit (EM&A) works for the project and was appointed as the Environmental Team (ET) of the Project under Condition 2.1 of the EP.
- 1.6 This is the 71<sup>st</sup> monthly EM&A report summarizing the EM&A works conducted for the Project in December 2016.

### Project Organizations

- 1.7 The contacts of the Project are shown in **Table 1.1** and the organization chart of ET for Contract is shown in **Figure 2**.

**Table 1.1 Key Project Contacts**

| Party                             | Role                      | Name                  | Position                                | Phone No. |
|-----------------------------------|---------------------------|-----------------------|---|-----------|
| Drainage Services Department      | Project Proponent         | Mr. Vincent Y.K. Wong | Senior Engineer 2                       | 2159 3406 |
| Ove Arup & Partners Hong Kong Ltd | Engineer’s Representative | Mr. Ted Tang          | Principal Resident Engineer             | 2370-4311 |
|                                   | Coordinator               | Ms. Natalie Kwok      | Resident Engineer                       | 6794 8844 |
| Cinotech                          | Environmental Team        | Dr. Priscilla Choy    | ET Leader                               | 2151 2089 |
|                                   |                           | Ms. Janet Wai         | Project Coordinator & Audit Team Leader | 2157 3879 |

| Party                        | Role                              | Name              | Position                          | Phone No. |
|------------------------------|-----------------------------------|-------------------|-----------------------------------|-----------|
| Mott MacDonald               | Independent Environmental Checker | Dr. Anne Kerr     | Independent Environmental Checker | 2828 5757 |
| Leader and JEC Joint Venture | Contractor                        | Mr. Kelvin Cheung | Site Agent                        | 9650 9410 |
|                              |                                   | Mr. Cyrus Chan    | Environmental Officer             | 9650 9410 |

## Construction Programme

1.8 The site activities undertaken in the reporting month included:

### Wan Chai East PTW:

- Sewage Pump replacement work;
- Construction of road and drainage;
- Steel frame construction for upgrading the DO unit at the inlet pumping station;
- Construction of boundary wall.

### North Point PTW

- Interim Operation for North Point PTW - Fine Screen & Grit Trap Building;
- Construction of Manholes and Laying Associated Pipes near FSGT Building;
- Construction of Manhole FM1 and Sewage Pipes behind DO Building;
- Construction of Boundary Wall bedside King's Road Playground;
- Construction of Grasscrete;
- Installation of Green Roof.

### Central PTW

- Interim Operation for North Point PTW - Fine Screen & Grit Trap Building;
- Installation of Access Link Bridge;
- Construction of road and drainage;
- Construction of boundary wall.

## Summary of EM&A Requirements

1.9 The EM&A programme requires construction phase monitoring for air quality and construction noise, landscape and visual and environmental site audit. The EM&A requirements for each parameter are described in the following sections, including:

- All monitoring parameters;
- Action and Limit levels for all environmental parameters;
- Event Action Plans;
- Environmental mitigation measures, as recommended in the project EIA study final report; and
- Environmental requirements in contract documents.

1.10 The advice on the implementation status of environmental protection and pollution control/mitigation measures is summarized in **Section 4** of this report.

1.11 This report presents the monitoring results, observations, locations, equipment, period, for required monitoring parameter namely dust, noise levels, and audit works conducted for the Project in December 2016. For the methodology and QA/QC procedures of the monitoring parameters, please refer to the **Section 2.5 & 3.5** of this report.

## 2. AIR QUALITY

### Monitoring Requirements

- 2.1 1-hour and 24-hour TSP monitoring were conducted to monitor the air quality. **Appendix A** shows the established Action/Limit Levels for the environmental monitoring works.

### Monitoring Locations

- 2.2 Four designated monitoring stations, AM1, AM2, AM3 and AM4\_2 were selected for impact dust monitoring for the Project. **Table 2.1** describes the air quality monitoring locations, which are also depicted in **Figure 1A** to **1C**.

**Table 2.1 Locations for Air Quality Monitoring**

| Monitoring Station | Monitored by | Location of Measurement                    |
|--------------------|--------------|--|
| AM1                | DC/2009/23   | Chan's Creative School                     |
| AM2                |              | Hong Kong & Islands Regional Office, WSD   |
| AM3                |              | Wan Chai East PTW                          |
| AM4_2              |              | A Location next to Sheung Wan Fire Station |

Note: Since the site area where air monitoring station AM4 was located had to be returned to DSD for another Works Contract, AM4 was relocated to AM4\_2 on 24 September 2012.

### Monitoring Equipment

- 2.3 Both 1-hour TSP monitoring and continuous 24-hour TSP impact air quality monitoring were performed and complied with the specifications stipulated in the approved EM&A Manual. **Table 2.2** summarizes the equipment used in the impact air monitoring programme. Copies of calibration certificates are provided in **Appendix C** of this report.

**Table 2.2 Air Quality Monitoring Equipment**

| Equipment        | Model and Make                                | Quantity |
|------------------|---|----------|
| HVS Samplers     | GMWS 2310 HVS, Model GS-2310-105              | 1        |
|                  | Tisch Environmental, Inc.; Model no. TE-5170  | 3        |
| Laser Dust Meter | Sibata; Model no. LD-3B                       | 4        |
| Calibrator       | Tisch Environmental, Inc.; Model no. TE-5025A | 1        |

### Monitoring Parameters, Frequency and Duration

- 2.4 **Table 2.3** summarizes the monitoring parameters and frequencies of impact dust monitoring for the whole construction period. The air quality monitoring schedule for the reporting period is shown in **Appendix B**.

**Table 2.3 Impact Dust Monitoring Parameters, Frequency and Duration**

| Monitoring Station       | Parameter   | Period        | Frequency             |
|--------------------------|-------------|---------------|-----------------------|
| All monitoring locations | 1-hour TSP  | 0700-1900 hrs | 3 times/ every 6 days |
|                          | 24-hour TSP | 0000-2400 hrs | once in every 6 days  |

### Monitoring Methodology and QA/QC Procedure

- 2.5 Weather data was recorded during the monitoring period and is shown in **Appendix D**. The data was obtained from the Meteorological Observations from Hong Kong Observatory Station. The general weather conditions (i.e. sunny, cloudy or rainy) were recorded by the field staff's observation on the monitoring day.

#### Monitoring Methodology and QA/QC Procedure

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

*(Equipment: Sibata; Model no. LD-3B)*

#### Measuring Procedures

- 2.6 The measuring procedures of the 1-hour dust meters were in accordance with the Manufacturer's Instruction Manual as follows:
- Pull up the air sampling inlet cover
  - Change the Mode 0 to BG with once
  - Push Start/Stop switch once
  - Turn the knob to SENSL.ADJ and press it
  - Push Start/Stop switch once
  - Return the knob to the position MEASURE slowly
  - Push the timer set switch to set measuring time
  - Remove the cap and make a measurement

#### Maintenance/Calibration

- 2.7 The following maintenance/calibration was required for the direct dust meters:
- Check the meter at a 3-month interval and calibrate the meter at a 1-year interval throughout all stages of the air quality monitoring.

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

#### Instrumentation

- 2.8 High volume (HVS) samplers (Model no. TE-5170 and GS-2310-105) completed with appropriate sampling inlets were employed for 24-hour TSP monitoring. The sampler was composed of a motor, a filter holder, a flow controller and a sampling inlet and its performance specification complied with that required by USEPA Standard Title 40, Code of Federation Regulations Chapter 1 (Part 50).

#### Operating/Analytical Procedures

2.9 Operating/analytical procedures for the operation of HVS were as follows:

- A horizontal platform was provided with appropriate support to secure the samplers against gusty wind.
  - No two samplers were placed less than 2 meters apart.
  - The distance between the sampler and an obstacle, such as buildings, was at least twice the height that the obstacle protrudes above the sampler.
  - A minimum of 2 meters of separation from walls, parapets and penthouses was required for rooftop samples.
  - A minimum of 2 meters separation from any supporting structure, measured horizontally was required.
  - No furnaces or incineration flues were nearby.
  - Airflow around the sampler was unrestricted.
  - The sampler was more than 20 meters from the drip line.
  - Any wire fence and gate, to protect the sampler, should not cause any obstruction during monitoring.
- 2.10 Prior to the commencement of the dust sampling, the flow rate of the high volume sampler was properly set (between 1.1 m<sup>3</sup>/min. and 1.4 m<sup>3</sup>/min.) in accordance with the manufacturer's instruction to within the range recommended in USEPA Standard Title 40, CFR Part 50.
- 2.11 Fiberglass filters were used which have a collection efficiency of larger than 99% for particles of 0.3 µm diameter.
- 2.12 The power supply was checked to ensure the sampler worked properly. On sampling, the sampler was operated for 5 minutes to establish thermal equilibrium before placing any filter media at the designated air monitoring station.
- 2.13 The filter holding frame was then removed by loosening the four nuts and a weighted and conditioned filter was carefully centered with the stamped number upwards, on a supporting screen.
- 2.14 The filter was aligned on the screen so that the gasket formed an airtight seal on the outer edges of the filter. Then the filter holding frame was tightened to the filter holder with swing bolts. The applied pressure should be sufficient to avoid air leakage at the edges.
- 2.15 The shelter lid was closed and secured with the aluminum strip.
- 2.16 The timer was then programmed. Information was recorded on the record sheet, which included the starting time, the weather condition and the filter number (the initial weight of the filter paper can be found out by using the filter number).
- 2.17 After sampling, the filter was removed and sent to the laboratory for weighing. The elapsed time was also recorded.
- 2.18 Before weighing, all filters were equilibrated in a conditioning environment for 24 hours. The conditioning environment temperature should be between 25°C and 30°C and not vary by more than ±3°C; the relative humidity (RH) should be < 50% and not vary by more than ±5%. A convenient working RH is 40%.

Maintenance/Calibration

2.19 The following maintenance/calibration was required for the HVS:

- The high volume motors and their accessories were properly maintained. Appropriate maintenance such as routine motor brushes replacement and electrical wiring checking were made to ensure that the equipment and necessary power supply are in good working condition.

2.22 High volume samplers were calibrated at bi-monthly intervals using Calibration Kit (Tisch Environmental, Inc.; Model no. TE-5025A) throughout all stages of the air quality monitoring.

**Results and Observations**

2.23 **Table 2.4** summarizes the monitoring results at AM1, AM2, AM3 and AM4\_2 in reporting month.

**Table 2.4 Summary of 1-hour and 24-hour TSP Monitoring Result in Reporting Month**

| Air Quality Monitoring Station | Average $\mu\text{g}/\text{m}^3$ | Range $\mu\text{g}/\text{m}^3$ | Action Level $\mu\text{g}/\text{m}^3$ | Limit Level $\mu\text{g}/\text{m}^3$ |
|--------------------------------|----------------------------------|--------------------------------|---------------------------------------|--------------------------------------|
| 1 hour TSP                     |                                  |                                |                                       |                                      |
| AM1                            | 151                              | 109 – 208                      | 340                                   | 500                                  |
| AM2                            | 145                              | 107 – 188                      | 352                                   |                                      |
| AM3                            | 143                              | 100 – 187                      | 355                                   |                                      |
| AM4_2                          | 164                              | 118 – 225                      | 393                                   |                                      |
| 24 hours TSP                   |                                  |                                |                                       |                                      |
| AM1                            | 85                               | 49 – 160                       | 185                                   | 260                                  |
| AM2                            | 127                              | 89 – 149                       | 182                                   |                                      |
| AM3                            | 120                              | 100 – 138                      | 181                                   |                                      |
| AM4_2                          | 123                              | 110 – 143                      | 211                                   |                                      |

Note: Since the site area where air monitoring station AM4 was located had to be returned to DSD for another Works Contract, AM4 was relocated to AM4\_2 on 24 September 2012.

2.24 All 1-hour TSP monitoring was conducted as scheduled in the reporting month. No Action/Limit Level exceedance was recorded. Summary of exceedance is presented in **Appendix G**.

2.25 All 24-hour TSP monitoring was conducted as scheduled in the reporting month. No Action/Limit Level exceedance was recorded. Summary of exceedance is presented in **Appendix G**.

2.26 The detailed monitoring data and graphical presentations of 1-hour and 24-hour TSP monitoring results could be referred to **Appendix E** of this report.

2.27 According to field observations during site inspection, the identified dust sources at the monitoring stations were mainly from loading of material, vehicles movement and construction works in site.

### 3 NOISE

#### Monitoring Requirements

3.1 Three noise monitoring stations, namely NM1, NM2 and NM3 were designated in the EM&A Manual for impact monitoring. **Appendix A** shows the established Action and Limit Levels for the environmental monitoring works.

#### Monitoring Locations

3.2 Noise monitoring was conducted at three designated monitoring stations as listed in **Table 3.1**, which are also depicted in **Figure 1A to 1C**

**Table 3.1 Location of Noise Monitoring Stations**

| Monitoring Station | Monitored By | Location of Measurement |
|--------------------|--------------|-------------------------|
| NM1                | DC/2009/23   | Chan's Creative School  |
| NM2                |              | Hyde Building           |
| NM3                |              | Goldfield Building      |

#### Monitoring Equipment

3.3 Integrating Sound Level Meter was used for noise monitoring. The meter is a Type 1 sound level meter capable of giving a continuous readout of the noise level readings including equivalent continuous sound pressure level ( $L_{eq}$ ) and percentile sound pressure level ( $L_x$ ) and also complied with International Electrotechnical Commission Publications 651:1979 (Type 1) and 804:1985 (Type 1) specifications. **Table 3.2** summarizes the noise monitoring equipments. Copies of calibration certificates are provided in **Appendix C** of this report.

**Table 3.2 Noise Monitoring Equipment**

| Equipment                     | Model and Make | Quantity |
|-------------------------------|----------------|----------|
| Integrating Sound Level Meter | SVAN 955       | 1        |
|                               | SVAN 957       | 4        |
| Calibrator                    | SV30A          | 3        |
|                               | B&K 4231       | 2        |

#### Monitoring Parameters, Frequency and Duration

3.4 Table 3.3 summarizes the monitoring parameters, frequency and total duration of monitoring. The noise monitoring schedule is shown in **Appendix B**.

**Table 3.3 Noise Monitoring Parameters, Frequency and Duration**

| Monitoring Stations | Parameter                   | Period                     | Frequency     |
|---------------------|-----------------------------|----------------------------|---------------|
| NM1<br>NM2          | $L_{eq}$ (30 min.)<br>dB(A) | 0700-1900 hrs. on weekdays | Once per week |



|     |                                    |  |
|-----|------------------------------------|--|
|     | $L_{eq}(5 \text{ min.})$<br>dB(A)  | Restricted hours (1900-2300 on all days and 0700-2300 on general holidays and Sundays) |
| NM3 | $L_{eq}(30 \text{ min.})$<br>dB(A) | 0700-1900 hrs. on weekdays   |

**Monitoring Methodology and QA/QC Procedures**

- The Sound Level Meter was generally set on a tripod at a height of 1.2 m above the ground, depending to the actual monitoring condition.
- For free field measurement (if any), the meter was positioned away from any nearby reflective surfaces. All records for free field noise levels were adjusted with a correction of +3 dB(A).
- The battery condition was checked to ensure the correct functioning of the meter.
- Parameters such as frequency weighting, the time weighting and the measurement time were set as follows:
  - frequency weighting : A
  - time weighting : Fast
  - time measurement : 30 minutes / 5 minutes
- Prior to and after each noise measurement, the meter was calibrated using a Calibrator for 94.0 dB at 1000 Hz. If the difference in the calibration level before and after measurement was more than 1.0 dB, the measurement would be considered invalid and repeat of noise measurement would be required after re-calibration or repair of the equipment.
- The wind speed was frequently checked with the portable wind meter.
- At the end of the monitoring period, the  $L_{eq}$ ,  $L_{90}$  and  $L_{10}$  were recorded. In addition, site conditions and noise sources were recorded on a standard record sheet.
- Noise measurement was paused during periods of high intrusive noise if possible and observation was recorded when intrusive noise was not avoided.
- Noise monitoring was cancelled in the presence of fog, rain, and wind with a steady speed exceeding 5 m/s, or wind with gusts exceeding 10 m/s.

**Results and Observations**

3.5 **Table 3.4** summarizes the daytime noise monitoring results at NM1, NM2 and NM3 in reporting month.

**Table 3.4 Summary of Daytime Noise Monitoring Results in Reporting Month**

| For the time period 0700-1900 hrs. on weekdays |   |   |
|--|---|---|
| Monitoring Station                             | Range, dB(A)<br>$L_{eq}(30 \text{ min.})$ | Limit Level ,dB(A)<br>$L_{eq}(30 \text{ min.})$ |
| NM1  | 67 – 70                                   | 70.0 */69.0**                                   |
| NM2  | 73 – 75                                   | 75.0  |
| NM3  | 71 – 76                                   |   |

\* 70 dB(A) was adopted as the Limit Level during school normal teaching period in the reporting period.

\*\* 69 dB(A) was adopted as the Limit Level during the examination period at NM1 because of the Baseline Monitoring Report, the average  $L_{Aeq,30min}$  measured at NM1 between

0700 and 1900 hours is 69.0 dB(A), exceeded the Limit Level of daytime construction noise during the examination periods (65 dB(A)).

- 3.6 **Table 3.5** summarizes the restricted hours noise monitoring results at NM1 and NM2 in reporting month.

**Table 3.5 Summary of Restricted Hours Noise Monitoring Results in Reporting Month**

| Restricted hours (1900-2300 on all days and 0700-2300 on general holidays and Sundays) |  |  |
|--|--|--|
| Monitoring Station   | Range, dB(A)<br>L <sub>eq</sub> (5 min.) | Limit Level ,dB(A)<br>L <sub>eq</sub> (5 min.) |
| NM1  | 67 – 73                                  | 70.0 *   |
| NM2  | 68 – 71                                  | 70.0 *   |

Note: No class was held at the school during all the measurement period

\* 70dB (A) was adopted as the Limit Level during restricted hours in the reporting period.

- 3.7 The construction noise monitoring at the designated locations was conducted by the ET of Contract DC/2009/23 as scheduled in the reporting month.
- 3.8 Excavation works were conducted during day time at North Point PTW. No construction work was conducted during the restricted hours under the Project in the reporting month.
- 3.9 All Construction Noise monitoring was conducted as scheduled in the reporting month. No Action Level exceedance was recorded, while two non-project related Limit Level exceedance were recorded during the daytime noise monitoring on 12<sup>th</sup> December 2016 and during the restricted hour noise monitoring on 12<sup>th</sup> December 2016 by the ET of this Project at NM1; three non-project related Limit Level exceedances were recorded during the daytime noise monitoring on 6<sup>th</sup> December 2016 and during the restricted hour noise monitoring on 4<sup>th</sup> & 29<sup>th</sup> December 2016 by the ET of this Project at NM2; and one non-project related Limit Level exceedances was recorded during the daytime noise monitoring on 29<sup>th</sup> December 2016 by the ET of this Project at NM3. Details of the exceedance could be referred to **Appendix G & H**.
- 3.10 The detailed monitoring data and graphical presentations of noise monitoring results could be referred to **Appendix F** of this report.
- 3.11 The major noise sources identified at the designated noise monitoring stations were traffic noise and construction activities.

## **4 ENVIRONMENTAL AUDIT**

### **Site Audits**

- 4.1 Site audits were carried out on a weekly basis to monitor the timely implementation of proper environmental management practices and mitigation measures in the Project site.
- 4.2 Environmental site audits were conducted on 7<sup>th</sup>, 16<sup>th</sup>, 21<sup>st</sup> and 28<sup>th</sup> December 2016. No non-compliance was observed during the site audits.
- 4.3 Site inspections were undertaken to ensure and check that the implementation and maintenance of landscape and visual mitigation measures are being properly carried out in the reporting month in accordance to section 14.1 of the EM&A Manual. No non-compliance was observed during the site inspections.
- 4.4 The summaries of site audits are attached in **Appendix I**.

### **Review of Environmental Monitoring Procedures**

- 4.5 The monitoring works were conducted by the monitoring team of Contract DC/2009/23. The monitoring procedures were reviewed by its ET.

### **Status of Environmental Licensing and Permitting**

- 4.6 All permits/licenses obtained for the Contract DC/2009/23 are summarized in **Table 4.1**.

**Table 4.1 Summary of Environmental Licensing and Permit Status for Contract DC/2009/23**

| Ref. No.                                  | Valid Period |            | Details  | Status |
|---|--------------|------------|--|--------|
|   | From         | To         |  |        |
| <b>Water Discharge License</b>            |              |            |  |        |
| WT000254<br>00-2016                       | 1/9/2016     | 30/9/2021  | Location: North Point PTW  | Valid  |
| WT000254<br>14-2016                       | 1/9/2016     | 30/9/2021  | Location: Central PTW  |        |
| <b>Registered Chemical Waste Producer</b> |              |            |  |        |
| 5213-153-<br>L2743-01                     | 15/2/2011    | N/A        | Location: North Point PTW  | Valid  |
| 5213-115-<br>L2737-01                     | 26/1/2011    | N/A        | Location: Wan Chai East PTW  |        |
| 5213-134-<br>L2745-01                     | 16/2/2011    | N/A        | Location: Central PTW  |        |
| <b>Construction Noise Permit</b>          |              |            |  |        |
| GW-<br>RS0516-13                          | 29/5/2013    | 28/11/2013 | Construction Noise Permit for the use of Powered Mechanical Equipment for the purpose of carrying out construction work other than percussive piling and/or the carrying out of prescribed construction work at North Point Preliminary Treatment Works Plant House, Man Hong Street, North Point, Hong Kong | Expiry |
| GW-<br>RS0906-13                          | 23/8/2013    | 22/11/2013 | Construction Noise Permit for the use of Powered Mechanical Equipment for the purpose of carrying out construction work other than percussive piling and/or the carrying out of prescribed construction work at North Point Preliminary Treatment Works Plant House, Man Hong Street, North Point, Hong Kong | Expiry |
| GW-<br>RS1387-13                          | 5/12/2013    | 21/5/2014  | Construction Noise Permit for the use of Powered Mechanical Equipment for the purpose of carrying out construction work other than percussive piling and/or the carrying out of prescribed construction work at North Point Preliminary Treatment Works Plant House, Man Hong Street, North Point, Hong Kong | Expiry |
| GW-<br>RS0424-14                          | 5/5/2014     | 5/7/2014   | Construction Noise Permit for the use of Powered Mechanical Equipment for the purpose of carrying out construction work other than percussive piling and/or the carrying out of prescribed construction work at North Point Preliminary Treatment Works Plant House, Man Hong Street, North Point, Hong Kong | Expiry |

| Ref. No.                              | Valid Period |            | Details  | Status |
|---------------------------------------|--------------|------------|--|--------|
|                                       | From         | To         |  |        |
| GW-RS0643-14                          | 3/7/2014     | 30/9/2014  | Construction Noise Permit for the use of Powered Mechanical Equipment for the purpose of carrying out construction work other than percussive piling and/or the carrying out of prescribed construction work at Wan Chai East Preliminary Treatment Works, Wan Chai, Hong Kong               | Expiry |
| GW-RS1078-14                          | 10/10/2014   | 9/4/2015   | Construction Noise Permit for the use of Powered Mechanical Equipment for the purpose of carrying out construction work other than percussive piling and/or the carrying out of prescribed construction work at Wan Chai East Preliminary Treatment Works, Wan Chai, Hong Kong               | Expiry |
| GW-RS0179-15                          | 25/2/2015    | 23/5/2015  | Construction Noise Permit for the use of Powered Mechanical Equipment for the purpose of carrying out construction work other than percussive piling and/or the carrying out of prescribed construction work at Central Preliminary Treatment Works, Western Fire Services Street, Hong Kong | Expiry |
| GW-RS0484-15                          | 8/5/2015     | 3/8/2015   | Construction Noise Permit for the use of Powered Mechanical Equipment for the purpose of carrying out construction work other than percussive piling and/or the carrying out of prescribed construction work at Wan Chai East Preliminary Treatment Works, Wan Chai, Hong Kong               | Expiry |
| GW-RS0567-15                          | 26/5/2015    | 23/11/2015 | Construction Noise Permit for the use of Powered Mechanical Equipment for the purpose of carrying out construction work other than percussive piling and/or the carrying out of prescribed construction work at Central Preliminary Treatment Works, Western Fire Services Street, Hong Kong | Expiry |
| <b>Special Waste Admission Ticket</b> |              |            |  |        |
| 13436                                 | 24/11/2016   | 23/11/2017 | Location: Central PTW  | Valid  |
| 13437                                 | 24/11/2016   | 23/11/2017 | Location: North Point PTW  | Valid  |

### Status of Waste Management

- 4.7 The amount of wastes generated by the activities of the Project in the reporting month is shown in **Appendix J**.

### Implementation Status of Environmental Mitigation Measures

4.8 Details of the implementation of mitigation measures are provided in the **Appendix L**.

4.9 During the weekly environmental site inspections in the reporting period, no non-conformance was identified. The observations and recommendations for the Projects are summarized in **Table 4.2**.

**Table 4.2 Observations and Recommendations of Site Audit**

| Parameters                        | Date/Ref. Number | Observations  | Follow Up Action   |
|-----------------------------------|------------------|---|--|
| <b>Water Quality</b>              | --               | --  | --   |
| <b>Air Quality</b>                | 161207-R02       | The dusty stockpile should be covered by impervious material to prevent the dust emission at North Point-PTW.                   | The dusty stockpile was covered by impervious material at North Point-PTW.                                       |
|                                   | 161207-R03       | The silt/sand should be cleared properly near the site entrance of Central-PTW.   | Please refer to 161216-R01.  |
|                                   | 161216-R01       | The silt/sand should be cleared properly near the site entrance of Central-PTW.   | Please refer to 161221-R01.  |
|                                   | 161216-R02       | The exposed area should be sprayed with water to prevent the dust emission in the site area of North Point-PTW and Central-PTW. | The exposed area is observed wet in the site area of North Point-PTW and Central-PTW during the site inspection. |
|                                   | 161221-R01       | The silt/sand should be cleared properly near the site entrance of Central-PTW.   | Please refer to 161228-R05.  |
|                                   | 161228-R03       | The dusty materials should be covered by impervious material to prevent the dust emission at Wan Chai-PTW and Central-PTW.      | The follow up action will be reported during site inspections in January 2017.                                   |
|                                   | 161228-R05       | The silt/sand should be cleared properly near the site entrance of Central-PTW.   | The silt/sand was cleared properly near the site entrance of Central-PTW.  |
| <b>Waste/ Chemical Management</b> | 161207-R04       | The drip trays should be provided for the chemical containers to prevent the chemical leakage at Central-PTW.                   | The chemical containers were not observed at Central-PTW.  |
|                                   | 161216-R02       | Properly clear the oil stain at Central-PTW.  | The oil stain was cleared and not observed at Central-PTW.   |
|                                   | 161228-R01       | The general refuse should be cleared regularly to prevent the accumulation at North Point-PTW, Wan Chai-PTW and Central-PTW.    | The general refuse was cleared regularly and reduced at North Point-PTW, Wan Chai-PTW and Central-PTW.           |
| <b>Noise</b>                      | --               | --  | --   |
| <b>Landscape and Visual</b>       | 161207-R01       | The construction materials should be placed far away from the tree protection area/existing trees at North Point-PTW.           | The construction materials were removed from the tree protection area/existing trees at North Point-PTW.         |
|                                   | 161228-R02       | The construction material should be placed far away from the tree protection area of North Point-PTW and Wan Chai-PTW.          | The construction material was cleared in the tree protection area of North Point-PTW and Wan Chai-PTW.           |
|                                   | 161228-R04       | The fence should be provided and enhanced for the existing tree at Wan Chai-PTW.  | The follow up action will be reported during site inspections in January 2017.                                   |

|                             |    |    |    |
|-----------------------------|----|----|----|
| <b>Permit/<br/>Licenses</b> | -- | -- | -- |
|-----------------------------|----|----|----|

**Implementation Status of Event Action Plans**

4.10 The Event Action Plans for air quality and noise are presented in **Appendix K**.

1-hr TSP

4.11 No Action/Limit Level exceedance was recorded.

24-hr TSP

4.12 No Action/Limit Level exceedance was recorded.

Construction Noise

4.13 No Action Level exceedance was recorded, while two non-project related Limit Level exceedance were recorded during the daytime noise monitoring on 12<sup>th</sup> December 2016 and during the restricted hour noise monitoring on 12<sup>th</sup> December 2016 by the ET of this Project at NM1; three non-project related Limit Level exceedances were recorded during the daytime noise monitoring on 6<sup>th</sup> December 2016 and during the restricted hour noise monitoring on 4<sup>th</sup> & 29<sup>th</sup> December 2016 by the ET of this Project at NM2; and one non-project related Limit Level exceedances was recorded during the daytime noise monitoring on 29<sup>th</sup> December 2016 by the ET of this Project at NM3. Details of the exceedance could be referred to **Appendix G & H**.

Landscape and Visual

4.14 No non-compliance was recorded.

**Summary of Complaints and Prosecutions**

4.15 No environmentally related summons, prosecutions or complaints were received for the Project in the reporting month.

4.16 There were no environmentally related summons, prosecutions or complaints were received since the commencement of the Project. The Complaint Log is presented in **Appendix M**.

## 5. FUTURE KEY ISSUES

### Key Issues for the Coming Month

5.1 Key environmental issues in the coming month include:

- Generation of dust from stockpiles of excavated and dusty materials, unpaved site area and vehicle movement, roadwork, excavation works and loading and unloading dusty materials on-site;
- Noise from operation of equipment and machinery on-site;
- Provision well maintenance on the storage facilities of chemicals/fuel and chemical waste/waste oil on-site;
- Ponding water generated in pre-drillings;
- Drainage system should be well designed and maintained to prevent flooding and silty water getting into the public area during and after rainstorm;
- Silty surface runoff generated from the site area; and
- Silt and dust getting into the public area by the leaving site vehicles at the site exits without adequate wheel washing facilities.

### Monitoring Schedule for the Next Month

5.2 The tentative environmental monitoring schedules for the next month are shown in **Appendix B**.

5.3 Construction Activities for the Next Two Months:

#### Wan Chai East PTW:

- Sewage Pump replacement work;
- Construction of road and drainage;
- Steel frame construction for upgrading the DO unit at the inlet pumping station;
- Construction of boundary wall.

#### North Point PTW

- Interim Operation for North Point PTW - Fine Screen & Grit Trap Building;
- Construction of Manholes and Laying Associated Pipes near FSGT Building;
- Construction of Manhole FM1 and Sewage Pipes behind DO Building;
- Construction of Boundary Wall bedside King's Road Playground;
- Construction of Grasscrete;
- Installation of Green Roof.

#### Central PTW

- Interim Operation for North Point PTW - Fine Screen & Grit Trap Building;
- Installation of Access Link Bridge;
- Construction of road and drainage;
- Construction of boundary wall.

5.4 The tentative construction program is provided in **Appendix N**.



## 6. CONCLUSIONS AND RECOMMENDATIONS

### Conclusions

- 6.1 Environmental monitoring and audit works were performed in the reporting month and all monitoring results were checked and reviewed.

#### 1-hour TSP Monitoring

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

#### 24-hour TSP Monitoring

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

#### Construction Noise Monitoring

- 6.4 All Construction Noise monitoring was conducted as scheduled in the reporting month. No Action Level exceedance was recorded, while two non-project related Limit Level exceedance were recorded during the daytime noise monitoring on 12<sup>th</sup> December 2016 and during the restricted hour noise monitoring on 12<sup>th</sup> December 2016 by the ET of this Project at NM1; three non-project related Limit Level exceedances were recorded during the daytime noise monitoring on 6<sup>th</sup> December 2016 and during the restricted hour noise monitoring on 4<sup>th</sup> & 29<sup>th</sup> December 2016 by the ET of this Project at NM2; and one non-project related Limit Level exceedances was recorded during the daytime noise monitoring on 29<sup>th</sup> December 2016 by the ET of this Project at NM3. Details of the exceedance could be referred to **Appendix G & H**.

#### Environmental Audit

- 6.5 Environmental site audits were conducted as weekly basis in the reporting month. No non-compliance was recorded.

#### Complaint and Prosecution

- 6.6 No environmentally related summons, prosecutions or complaints were received for the Project in the reporting month.

### **Recommendations for the coming reporting month:**

- 6.7 According to the environmental audit performed in the reporting month, the following recommendations were made for coming reporting month:

#### *Air Quality*

- To provide the impervious material for the stockpile of dusty material to prevent the dust emission in the site;
- Proper clear the silt/sand near the site entrance to prevent the muddy water runoff from the site; and

- To provide water spraying for the exposed area to prevent the dust emission in the site.

#### *Noise Impact*

- To inspect the noise sources inside the site;
- To follow up any exceedance caused by the construction works;
- To space out noisy equipment and position the equipment as far away as possible from sensitive receivers;
- To provide temporary noise barriers for operations of noisy equipment near the noise sensitive receivers in an appropriate location;
- To provide adequate lubricant on mechanical equipments to reduce frictional noise;
- To ensure the doors of the air compressors are closed; and
- To well maintain the mechanical equipments / machineries to avoid abnormal noise nuisance.

#### *Waste/Chemical Management*

- To provide the drip tray for the chemical containers to prevent the chemical leakage in the site;
- Proper clear the oil stain as chemical waste in the site; and
- Regular clear the general refuse to prevent the accumulation in the site.

#### *Landscape and Visual*

- To place construction materials far away from the tree protection area in the site; and
- To enhance the fence for the tree protection area in the site.

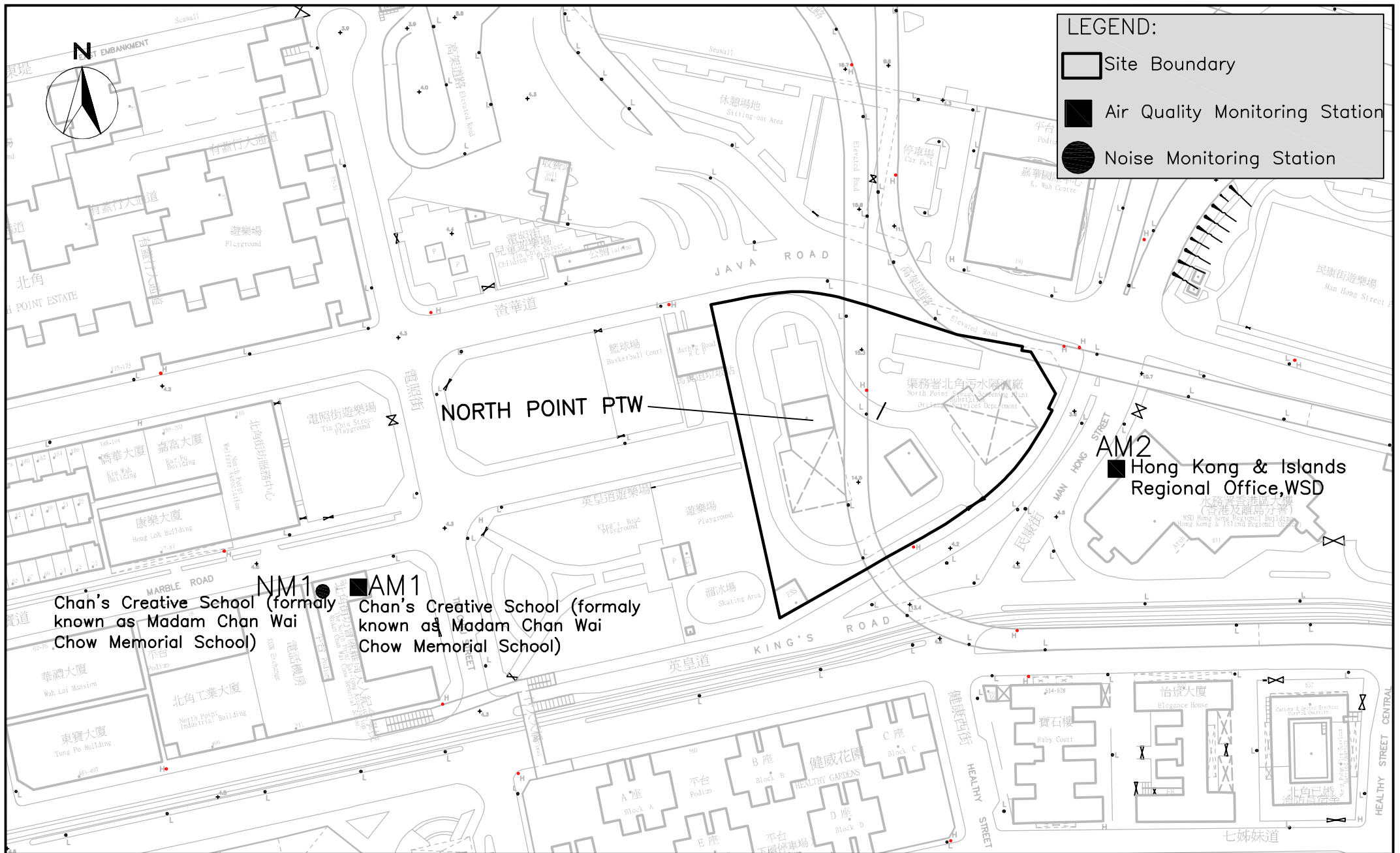
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## FIGURES

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**LEGEND:**

- Site Boundary
- Air Quality Monitoring Station
- Noise Monitoring Station

**NM1** **AM1**  
 Chan's Creative School (formally known as Madam Chan Wai Chow Memorial School)

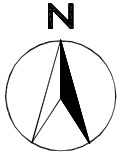
**AM2**  
 Hong Kong & Islands Regional Office, WSD

**NORTH POINT PTW**



Contract No. DC/2009/23 – Harbour Area Treatment Stage 2A  
 – Upgrading of Preliminary Treatment Works at North Point,  
 Wan Chai East and Central  
**Impact Air Quality & Noise Monitoring Stations (North Point)**

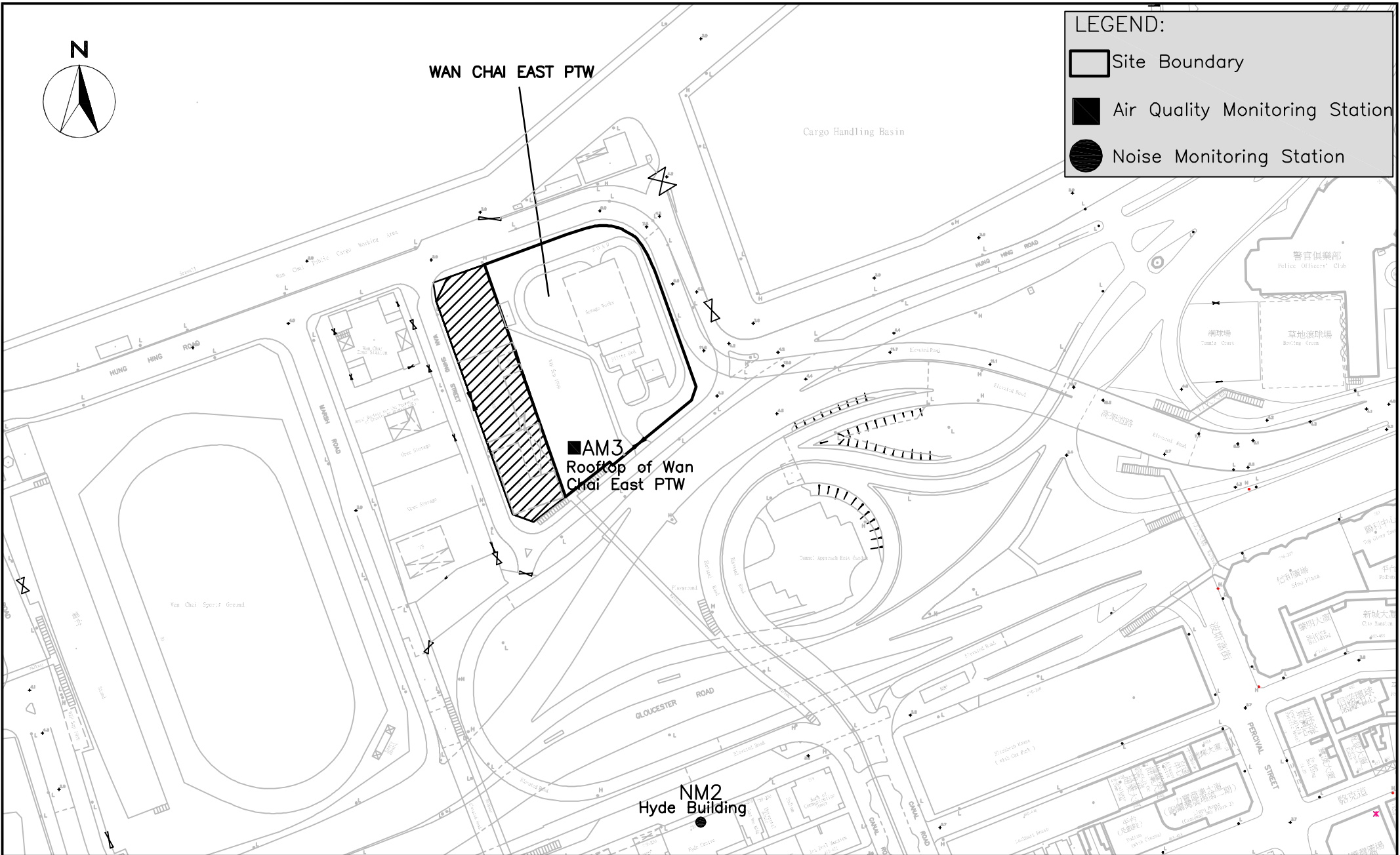
|             |         |            |             |          |
|-------------|---------|------------|-------------|----------|
| SCALE       | N.T.S   | DATE       | 11 MAR 2011 |          |
| CHECK       | GL      | DRAWN      | TW          |          |
| PROJECT NO. | MA11003 | FIGURE NO. | 1A          | REV<br>— |



WAN CHAI EAST PTW

**LEGEND:**

- Site Boundary
- Air Quality Monitoring Station
- Noise Monitoring Station



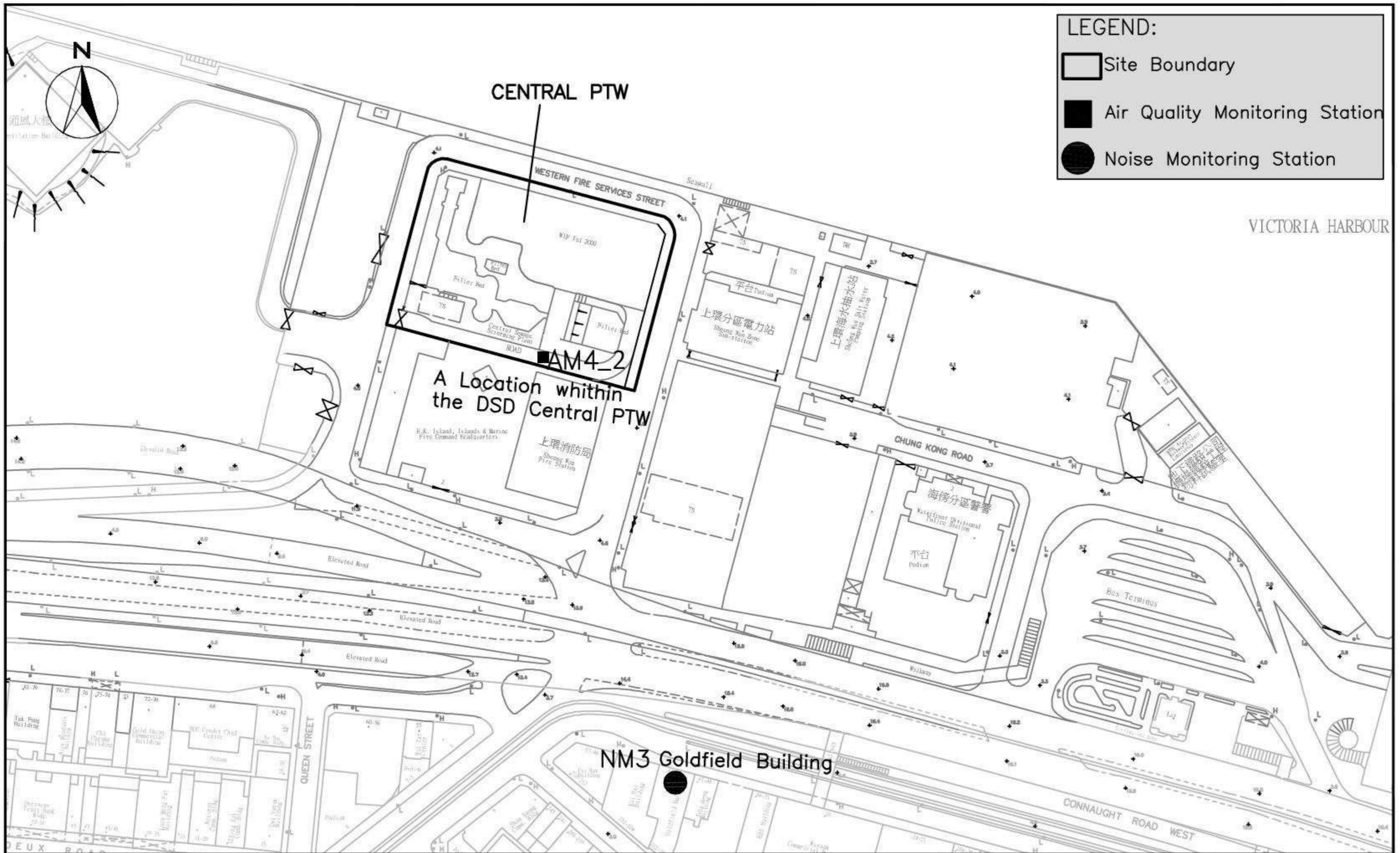
Contract No. DC/2009/23 – Harbour Area Treatment Stage 2A  
 – Upgrading of Preliminary Treatment Works at North Point,  
 Wan Chai East and Central

**Impact Air Quality & Noise Monitoring Stations (Wan Chai East)**



|             |         |            |             |
|-------------|---------|------------|-------------|
| SCALE       | N.T.S   | DATE       | 11 MAR 2011 |
| CHECK       | GL      | DRAWN      | TW          |
| PROJECT NO. | MA11003 | FIGURE NO. | 1B          |
|             |         | REV        | —           |





**LEGEND:**

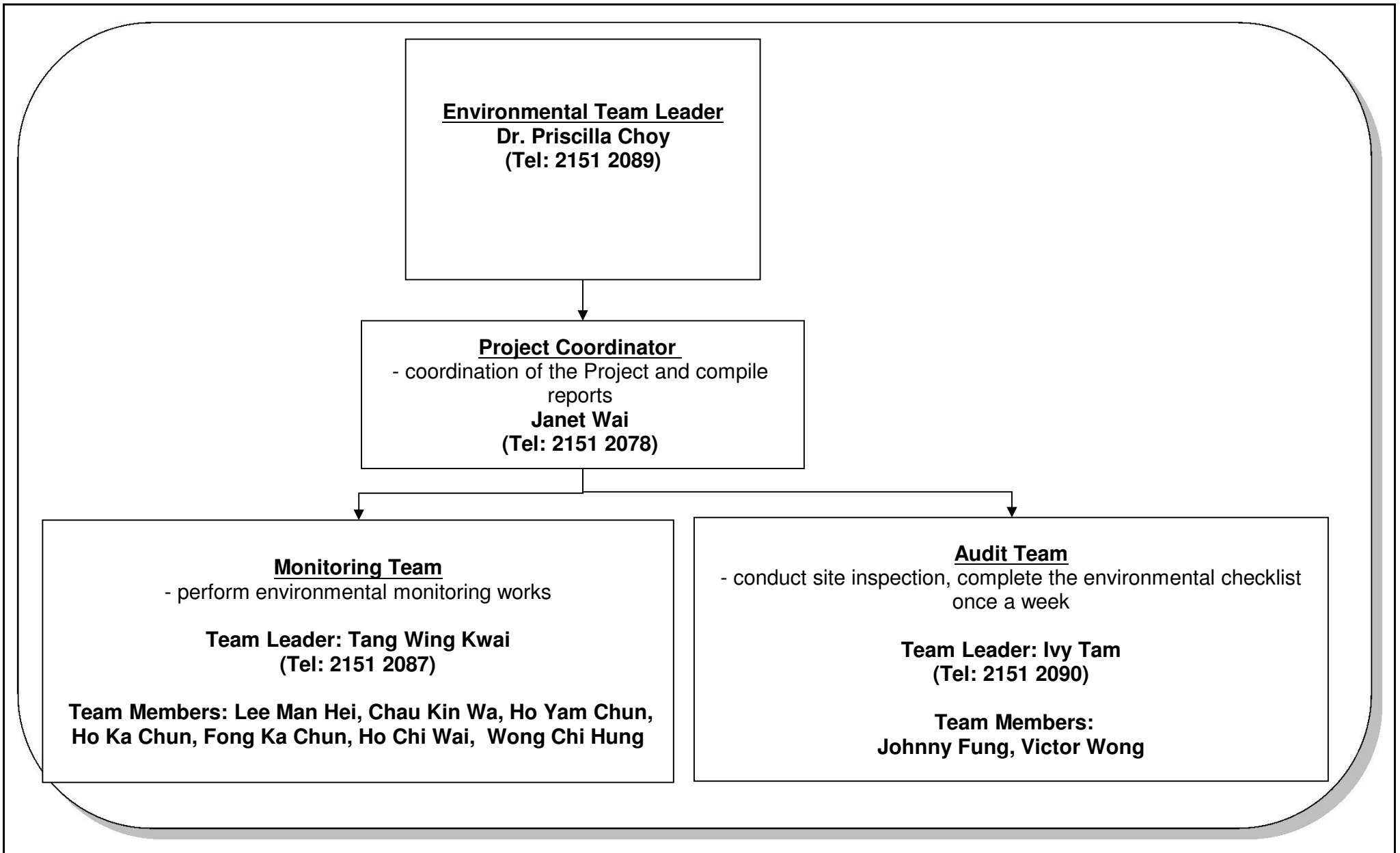
- Site Boundary
- Air Quality Monitoring Station
- Noise Monitoring Station

VICTORIA HARBOUR

Contract No. DC/2009/23 – Harbour Area Treatment Stage 2A  
 – Upgrading of Preliminary Treatment Works at North Point,  
 Wan Chai East and Central  
**Impact Air Quality & Noise Monitoring Stations (Central)**

|             |         |            |             |
|-------------|---------|------------|-------------|
| SCALE       | N.T.S   | DATE       | 11 MAR 2011 |
| CHECK       | GL      | DRAWN      | TW          |
| PROJECT NO. | MA11003 | FIGURE NO. | 1C          |
|             |         | REV        | —           |





|       |  |       |        |             |         |          |
|-------|--|-------|--------|-------------|---------|----------|
| Title | Contract No. DC/2009/23  | Scale | N.T.S  | Project No. | MA11003 | CINOTECH |
|       | HATS Stage 2A – Upgrading of Preliminary Treatment Works at North Point, Wanchai East and Central<br>ET's Organization Chart | Date  | Mar-15 | Figure      | 2       |          |

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**APPENDIX A  
ACTION AND LIMIT LEVELS FOR AIR  
QUALITY AND NOISE**

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## Appendix A Action and Limit Levels

**Table A-1 Action and Limit Levels for 1-Hour TSP and 24-Hour TSP**

| Monitoring Stations | Action Level ( $\mu\text{g}/\text{m}^3$ ) |         | Limit Level ( $\mu\text{g}/\text{m}^3$ ) |         |
|---------------------|---|---------|--|---------|
|                     | 1-hour                                    | 24-hour | 1-hour                                   | 24-hour |
| AM1                 | 340                                       | 185     | 500                                      | 260     |
| AM2                 | 352                                       | 182     |  |         |
| AM3                 | 355                                       | 181     |  |         |
| AM4_2               | 393                                       | 211     |  |         |

**Table A-2 Action and Limit Level for Construction Noise**

| Monitoring Stations | Time Period  | Action Level                              | Limit Level in dB(A) |
|---------------------|--|---|----------------------|
| NM1                 | 0700-1900 hours on normal weekdays   | When one documented complaint is received | 70 */69**            |
|                     | Restricted hours (1900-2300 on all days and 0700-2300 on general holidays and Sundays) |   | 70 ***               |
| NM2                 | 0700-1900 hours on normal weekdays   |   | 75                   |
|                     | Restricted hours (1900-2300 on all days and 0700-2300 on general holidays and Sundays) |   | 70 ***               |
| NM3                 | 0700-1900 hours on normal weekdays   |   | 75                   |

Notes: If works are to be carried out during restricted hours, the conditions stipulated in the Construction Noise Permit (CNP) issued by the Noise Control Authority have to be followed.

\* 70 dB(A) was adopted as the Limit Level during school normal teaching period in the reporting period.

\*\* 69 dB(A) was adopted as the Limit Level during the examination period at NM1 because of the Baseline Monitoring Report, the average LAeq,30min measured at NM1 between 0700 and 1900 hours is 69.0 dB(A), exceeded the Limit Level of daytime construction noise during the examination periods (65 dB(A)).

\*\*\* 70 dB(A) was adopted as the Limit Level during restricted hours in the reporting period

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**APPENDIX B  
ENVIRONMENTAL MONITORING  
SCHEDULES**

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**Contract No. DC/2009/23**  
**Upgrading of PTWs at North Point, Wan Chai East and Central**  
**Impact Air Quality and Noise Monitoring for December 2016**

| Sunday   | Monday   | Tuesday  | Wednesday                             | Thursday   | Friday                                | Saturday |
|--|--|--|---------------------------------------|--|---------------------------------------|----------|
|  |  |  |                                       | 1-Dec  | 2-Dec                                 | 3-Dec    |
|  |  |  |                                       |  |                                       |          |
| <b>4-Dec</b>   | 5-Dec  | 6-Dec  | 7-Dec                                 | 8-Dec  | 9-Dec                                 | 10-Dec   |
| Noise (NM1 & NM2)<br>(during daytime on sundays/public holidays) | 24 hrs TSP<br>(AM1, AM2, AM3 & AM4_2)  | 1 hr TSP<br>(AM1, AM2, AM3 & AM4_2)<br>Noise (NM1, NM2 & NM3)<br>(Daytime) |                                       |  | 24 hrs TSP<br>(AM1, AM2, AM3 & AM4_2) |          |
| <b>11-Dec</b>  | 12-Dec   | 13-Dec   | 14-Dec                                | 15-Dec   | 16-Dec                                | 17-Dec   |
|  | 1 hr TSP<br>(AM1, AM2, AM3 & AM4_2)<br>Noise (NM1 & NM2)<br>(Daytime & Evening time)<br>Noise (NM3)(Daytime) |  | 24 hrs TSP<br>(AM1, AM2, AM3 & AM4_2) | 1 hr TSP<br>(AM1, AM2, AM3 & AM4_2)  |                                       |          |
| <b>18-Dec</b>  | 19-Dec   | 20-Dec   | 21-Dec                                | 22-Dec   | 23-Dec                                | 24-Dec   |
| Noise (NM1 & NM2)<br>(during daytime on sundays/public holidays) | 24 hrs TSP<br>(AM1, AM2, AM3 & AM4_2)  | 1 hr TSP<br>(AM1, AM2, AM3 & AM4_2)<br>Noise (NM1, NM2 & NM3)<br>(Daytime) |                                       | 24 hrs TSP<br>(AM1, AM2, AM3 & AM4_2)  | 1 hr TSP<br>(AM1, AM2, AM3 & AM4_2)   |          |
| <b>25-Dec</b>  | <b>26-Dec</b>  | <b>27-Dec</b>  | 28-Dec                                | 29-Dec   | 30-Dec                                | 31-Dec   |
|  |  |  | 24 hrs TSP<br>(AM1, AM2, AM3 & AM4_2) | 1 hr TSP<br>(AM1, AM2, AM3 & AM4_2)<br>Noise (NM1 & NM2)<br>(Daytime & Evening time)<br>Noise (NM3)(Daytime) |                                       |          |

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

**Air Quality Monitoring Station**

AM1 - Works site boundary of DC/2009/23  
 AM2 - Hong Kong & Islands Regional Office, WSD  
 AM3 - Wan Chai East PTW  
 AM4\_2 - A Location within the DSD Central PTW

**Noise Monitoring Station**

NM1 - Chan's Creative School  
 NM2 - Hyde Building  
 NM3 - Goldfield Building

**Contract No. DC/2009/23**  
**Upgrading of PTWs at North Point, Wan Chai East and Central**  
**Tentative Impact Air Quality and Noise Monitoring for January 2017**

| Sunday   | Monday   | Tuesday  | Wednesday  | Thursday   | Friday                                | Saturday      |
|--|--|--|--|--|---------------------------------------|---------------|
| <b>1-Jan</b>   | <b>2-Jan</b>   | 3-Jan  | 4-Jan  | 5-Jan  | 6-Jan                                 | 7-Jan         |
|  | Noise (NM1 & NM2)<br>(during daytime on sundays/public holidays)           | 24 hrs TSP<br>(AM1, AM2, AM3 & AM4_2)  | 1 hr TSP<br>(AM1, AM2, AM3 & AM4_2)<br>Noise (NM1, NM2 & NM3)<br>(Daytime) |  |                                       |               |
| <b>8-Jan</b>   | 9-Jan  | 10-Jan   | 11-Jan   | 12-Jan   | 13-Jan                                | 14-Jan        |
|  | 24 hrs TSP<br>(AM1, AM2, AM3 & AM4_2)                                      | 1 hr TSP<br>(AM1, AM2, AM3 & AM4_2)<br>Noise (NM1 & NM2)<br>(Daytime & Evening time)<br>Noise (NM3)(Daytime) |  |  | 24 hrs TSP<br>(AM1, AM2, AM3 & AM4_2) |               |
| <b>15-Jan</b>  | 16-Jan   | 17-Jan   | 18-Jan   | 19-Jan   | 20-Jan                                | 21-Jan        |
| Noise (NM1 & NM2)<br>(during daytime on sundays/public holidays) | 1 hr TSP<br>(AM1, AM2, AM3 & AM4_2)<br>Noise (NM1, NM2 & NM3)<br>(Daytime) |  |  | 24 hrs TSP<br>(AM1, AM2, AM3 & AM4_2)  | 1 hr TSP<br>(AM1, AM2, AM3 & AM4_2)   |               |
| <b>22-Jan</b>  | 23-Jan   | 24-Jan   | 25-Jan   | 26-Jan   | 27-Jan                                | <b>28-Jan</b> |
|  |  |  | 24 hrs TSP<br>(AM1, AM2, AM3 & AM4_2)                                      | 1 hr TSP<br>(AM1, AM2, AM3 & AM4_2)<br>Noise (NM1 & NM2)<br>(Daytime & Evening time)<br>Noise (NM3)(Daytime) | 24 hrs TSP<br>(AM1, AM2, AM3 & AM4_2) |               |
| <b>29-Jan</b>  | <b>30-Jan</b>  | <b>31-Jan</b>  |  |  |                                       |               |
|  |  |  |  |  |                                       |               |

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

**Air Quality Monitoring Station**

AM1 - Works site boundary of DC/2009/23  
 AM2 - Hong Kong & Islands Regional Office, WSD  
 AM3 - Wan Chai East PTW  
 AM4\_2 - A Location within the DSD Central PTW

**Noise Monitoring Station**

NM1 - Chan's Creative School  
 NM2 - Hyde Building  
 NM3 - Goldfield Building

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**APPENDIX C  
COPIES OF CALIBRATION  
CERTIFICATES**

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# High-Volume TSP Sampler 5-POINT CALIBRATION DATA SHEET

**CINOTECH**

File No. MA11003/46/0008

Station: AMI - Chan's Creative School Operator: WK  
 Date: 18-Nov-16 Next Due Date: 17-Jan-17  
 Equipment No.: A-01-46 Serial No. 1315

| Ambient Condition   |       |                     |       |
|---------------------|-------|---------------------|-------|
| Temperature, Ta (K) | 296.7 | Pressure, Pa (mmHg) | 764.4 |

| Orifice Transfer Standard Information |          |  |        |               |          |
|---------------------------------------|----------|--|--------|---------------|----------|
| Serial No.:                           | 2896     | Slope, mc (CFM)  | 0.0598 | Intercept, bc | -0.05079 |
| Last Calibration Date:                | 4-Mar-16 | $mc \times Qstd + bc = [\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$ |        |               |          |
| Next Calibration Date:                | 3-Mar-17 | $Qstd = \{[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2} - bc\} / mc$  |        |               |          |

| Calibration of TSP Sampler |                                    |  |                     |                                |   |
|----------------------------|------------------------------------|--|---------------------|--------------------------------|---|
| Calibration Point          | Orifice                            |  |                     | HVS                            |   |
|                            | $\Delta H$ (orifice), in. of water | $[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$ | Qstd (CFM) X - axis | $\Delta W$ (HVS), in. of water | $[\Delta W \times (Pa/760) \times (298/Ta)]^{1/2}$ Y-axis |
| 1                          | 12.8                               | 3.60   | 60.99               | 8.2                            | 2.88  |
| 2                          | 10.5                               | 3.26   | 55.32               | 6.9                            | 2.64  |
| 3                          | 7.7                                | 2.79   | 47.50               | 5.0                            | 2.25  |
| 4                          | 5.0                                | 2.25   | 38.44               | 3.2                            | 1.80  |
| 5                          | 3.1                                | 1.77   | 30.45               | 1.9                            | 1.39  |

By Linear Regression of Y on X

Slope, mw = 0.0492 Intercept, bw = -0.0992

Correlation coefficient\* = 0.9996

\*If Correlation Coefficient < 0.990, check and recalibrate.

### Set Point Calculation

From the TSP Field Calibration Curve, take Qstd = 43 CFM

From the Regression Equation, the "Y" value according to

$$mw \times Qstd + bw = [\Delta W \times (Pa/760) \times (298/Ta)]^{1/2}$$

Therefore, Set Point;  $W = (mw \times Qstd + bw)^2 \times (760 / Pa) \times (Ta / 298) =$  4.02

Remarks: \_\_\_\_\_

Conducted by: Wk Tang Signature: Kwai  
 Checked by: [Signature] Signature: \_\_\_\_\_

Date: 18/11/16  
 Date: 18 November 2016

# High-Volume TSP Sampler

## 5-POINT CALIBRATION DATA SHEET

**CINOTECH**

File No. MA11003/44/0008

Station: AM2 - Hong Kong & Islands Regional Office, WSD Operator: WK  
 Date: 18-Nov-16 Next Due Date: 17-Jan-17  
 Equipment No.: A-01-44 Serial No. 1316

| Ambient Condition   |       |                     |     |
|---------------------|-------|---------------------|-----|
| Temperature, Ta (K) | 298.1 | Pressure, Pa (mmHg) | 764 |

| Orifice Transfer Standard Information |          |  |        |               |          |
|---------------------------------------|----------|--|--------|---------------|----------|
| Serial No.:                           | 2896     | Slope, mc (CFM)  | 0.0598 | Intercept, bc | -0.05079 |
| Last Calibration Date:                | 4-Mar-16 | $mc \times Qstd + bc = [\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$ |        |               |          |
| Next Calibration Date:                | 3-Mar-17 | $Qstd = \{[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2} - bc\} / mc$  |        |               |          |

| Calibration of TSP Sampler |                                    |  |                        |                                |   |
|----------------------------|------------------------------------|--|------------------------|--------------------------------|---|
| Calibration Point          | Orifice                            |  |                        | HVS                            |   |
|                            | $\Delta H$ (orifice), in. of water | $[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$ | Qstd (CFM)<br>X - axis | $\Delta W$ (HVS), in. of water | $[\Delta W \times (Pa/760) \times (298/Ta)]^{1/2}$ Y-axis |
| 1                          | 12.8                               | 3.59   | 60.84                  | 8.1                            | 2.85  |
| 2                          | 10.5                               | 3.25   | 55.18                  | 6.7                            | 2.59  |
| 3                          | 7.9                                | 2.82   | 47.98                  | 5.1                            | 2.26  |
| 4                          | 5.2                                | 2.29   | 39.08                  | 3.3                            | 1.82  |
| 5                          | 3.1                                | 1.77   | 30.37                  | 2.0                            | 1.42  |

**By Linear Regression of Y on X**

Slope, mw = 0.0474 Intercept, bw = -0.0210

Correlation coefficient\* = 0.9999

\*If Correlation Coefficient < 0.990, check and recalibrate.

**Set Point Calculation**

From the TSP Field Calibration Curve, take Qstd = 43 CFM

From the Regression Equation, the "Y" value according to

$$mw \times Qstd + bw = [\Delta W \times (Pa/760) \times (298/Ta)]^{1/2}$$

Therefore, Set Point; W =  $(mw \times Qstd + bw)^2 \times (760 / Pa) \times (Ta / 298) =$  4.04

Remarks: \_\_\_\_\_

Conducted by: W.K. Tang

Signature: \_\_\_\_\_

Date: 18/11/16

Checked by: ta

Signature: \_\_\_\_\_

Date: 18 November 2016

*Kwan*

# High-Volume TSP Sampler 5-POINT CALIBRATION DATA SHEET

**CINOTECH**

File No. MA11003/48/0008

Station: AM3 - Wan Chai East PTW Operator: WK  
 Date: 18-Nov-16 Next Due Date: 17-Jan-17  
 Equipment No.: A-01-48 Serial No. 1792

| Ambient Condition   |       |                     |     |
|---------------------|-------|---------------------|-----|
| Temperature, Ta (K) | 298.9 | Pressure, Pa (mmHg) | 761 |

| Orifice Transfer Standard Information |          |  |        |               |          |
|---------------------------------------|----------|--|--------|---------------|----------|
| Serial No.:                           | 2896     | Slope, mc (CFM)  | 0.0598 | Intercept, bc | -0.05079 |
| Last Calibration Date:                | 4-Mar-16 | $mc \times Qstd + bc = [\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$ |        |               |          |
| Next Calibration Date:                | 3-Mar-17 | $Qstd = \{[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2} - bc\} / mc$  |        |               |          |

| Calibration of TSP Sampler |                                    |  |                     |                                |   |
|----------------------------|------------------------------------|--|---------------------|--------------------------------|---|
| Calibration Point          | Orifice                            |  |                     | HVS                            |   |
|                            | $\Delta H$ (orifice), in. of water | $[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$ | Qstd (CFM) X - axis | $\Delta W$ (HVS), in. of water | $[\Delta W \times (Pa/760) \times (298/Ta)]^{1/2}$ Y-axis |
| 1                          | 11.6                               | 3.40   | 57.77               | 7.5                            | 2.74  |
| 2                          | 9.9                                | 3.14   | 53.43               | 6.7                            | 2.59  |
| 3                          | 7.8                                | 2.79   | 47.52               | 4.9                            | 2.21  |
| 4                          | 5.3                                | 2.30   | 39.32               | 3.4                            | 1.84  |
| 5                          | 3.4                                | 1.84   | 31.66               | 2.1                            | 1.45  |

**By Linear Regression of Y on X**  
 Slope, mw = 0.0501 Intercept, bw = -0.1377  
 Correlation coefficient\* = 0.9984  
 \*If Correlation Coefficient < 0.990, check and recalibrate.

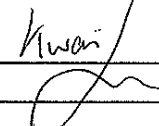
**Set Point Calculation**

From the TSP Field Calibration Curve, take Qstd = 43 CFM  
 From the Regression Equation, the "Y" value according to

$$mw \times Qstd + bw = [\Delta W \times (Pa/760) \times (298/Ta)]^{1/2}$$

Therefore, Set Point;  $W = (mw \times Qstd + bw)^2 \times (760 / Pa) \times (Ta / 298) =$  4.08

Remarks: \_\_\_\_\_

Conducted by: Wk. Tang Signature:  Date: 18/11/16  
 Checked by: Ar Signature: \_\_\_\_\_ Date: 18 November 2016



# High-Volume TSP Sampler 5-POINT CALIBRATION DATA SHEET

CINOTECH

File No. MA11003/15/0007

Station: AM4\_2 - A location within the DSD Central PTW Operator: WK  
 Date: 18-Nov-16 Next Due Date: 17-Jan-17  
 Equipment No.: A-01-15 Serial No. 10576

| Ambient Condition   |       |                     |     |
|---------------------|-------|---------------------|-----|
| Temperature, Ta (K) | 302.5 | Pressure, Pa (mmHg) | 758 |

| Orifice Transfer Standard Information |          |  |        |               |          |
|---------------------------------------|----------|--|--------|---------------|----------|
| Serial No.:                           | 2896     | Slope, mc (CFM)  | 0.0598 | Intercept, bc | -0.05079 |
| Last Calibration Date:                | 4-Mar-16 | $mc \times Qstd + bc = [\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$ |        |               |          |
| Next Calibration Date:                | 3-Mar-17 | $Qstd = \{[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2} - bc\} / mc$  |        |               |          |

| Calibration of TSP Sampler |                                    |  |                     |                                |   |
|----------------------------|------------------------------------|--|---------------------|--------------------------------|---|
| Calibration Point          | Orifice                            |  |                     | HVS                            |   |
|                            | $\Delta H$ (orifice), in. of water | $[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$ | Qstd (CFM) X - axis | $\Delta W$ (HVS), in. of water | $[\Delta W \times (Pa/760) \times (298/Ta)]^{1/2}$ Y-axis |
| 1                          | 11.6                               | 3.38   | 57.31               | 7.8                            | 2.77  |
| 2                          | 9.7                                | 3.09   | 52.48               | 6.2                            | 2.47  |
| 3                          | 7.3                                | 2.68   | 45.64               | 4.7                            | 2.15  |
| 4                          | 5.1                                | 2.24   | 38.29               | 3.4                            | 1.83  |
| 5                          | 3.2                                | 1.77   | 30.51               | 2.0                            | 1.40  |

By Linear Regression of Y on X

Slope, mw = 0.0496 Intercept, bw = -0.1028

Correlation coefficient\* = 0.9987

\*If Correlation Coefficient < 0.990, check and recalibrate.

### Set Point Calculation

From the TSP Field Calibration Curve, take Qstd = 43 CFM

From the Regression Equation, the "Y" value according to

$$mw \times Qstd + bw = [\Delta W \times (Pa/760) \times (298/Ta)]^{1/2}$$

Therefore, Set Point;  $W = (mw \times Qstd + bw)^2 \times (760 / Pa) \times (Ta / 298) =$  4.20

Remarks: \_\_\_\_\_

Conducted by: Wk Tang Signature: Kwan  
 Checked by: [Signature] Signature: \_\_\_\_\_

Date: 18/11/16  
 Date: 18 November 2016



TISCH ENVIRONMENTAL, INC.  
 145 SOUTH MIAMI AVE  
 VILLAGE OF CLEVELAND, OH  
 45002  
 513.467.9000  
 877.263.7610 TOLL FREE  
 513.467.9009 FAX

ORIFICE TRANSFER STANDARD CERTIFICATION WORKSHEET TE-5025A

Date - Mar 04, 2016 Rootsmeter S/N 0438320 Ta (K) - 295  
 Operator Tisch Orifice I.D. - 2896 Pa (mm) - 755.65

| PLATE OR Run # | VOLUME START (m3) | VOLUME STOP (m3) | DIFF VOLUME (m3) | DIFF TIME (min) | METER DIFF Hg (mm) | ORFICE DIFF H2O (in.) |
|----------------|-------------------|------------------|------------------|-----------------|--------------------|-----------------------|
| 1              | NA                | NA               | 1.00             | 1.4340          | 3.2                | 2.00                  |
| 2              | NA                | NA               | 1.00             | 1.0250          | 6.4                | 4.00                  |
| 3              | NA                | NA               | 1.00             | 0.9150          | 7.9                | 5.00                  |
| 4              | NA                | NA               | 1.00             | 0.8770          | 8.7                | 5.50                  |
| 5              | NA                | NA               | 1.00             | 0.7210          | 12.7               | 8.00                  |

DATA TABULATION

| Vstd            | (x axis) Qstd | (y axis) | Va              | (x axis) Qa | (y axis) |
|-----------------|---------------|----------|-----------------|-------------|----------|
| 1.0001          | 0.6974        | 1.4173   | 0.9957          | 0.6944      | 0.8836   |
| 0.9959          | 0.9716        | 2.0044   | 0.9915          | 0.9674      | 1.2496   |
| 0.9938          | 1.0861        | 2.2410   | 0.9894          | 1.0814      | 1.3971   |
| 0.9928          | 1.1320        | 2.3503   | 0.9885          | 1.1271      | 1.4653   |
| 0.9875          | 1.3696        | 2.8346   | 0.9831          | 1.3636      | 1.7672   |
| Qstd slope (m)  | =             | 2.11176  | Qa slope (m)    | =           | 1.32235  |
| intercept (b)   | =             | -0.05079 | intercept (b)   | =           | -0.03166 |
| coefficient (r) | =             | 0.99982  | coefficient (r) | =           | 0.99982  |

y axis = SQRT[H2O(Pa/760) (298/Ta)]

y axis = SQRT[H2O(Ta/Pa)]

CALCULATIONS

Vstd = Diff. Vol [(Pa-Diff. Hg)/760] (298/Ta)  
 Qstd = Vstd/Time

Va = Diff Vol [(Pa-Diff Hg)/Pa]  
 Qa = Va/Time

For subsequent flow rate calculations:

Qstd = 1/m{ [SQRT(H2O(Pa/760) (298/Ta))] - b}  
 Qa = 1/m{ [SQRT H2O(Ta/Pa)] - b}

**TEST REPORT**

**APPLICANT:** Cinotech Consultants Limited  
Room 1710, Technology Park,  
18 On Lai Street,  
Shatin, NT, Hong Kong

|                  |             |
|------------------|-------------|
| Test Report No.: | C/A/161104A |
| Date of Issue:   | 2016-11-07  |
| Date Received:   | 2016-11-04  |
| Date Tested:     | 2016-11-04  |
| Date Completed:  | 2016-11-07  |
| Next Due Date:   | 2017-01-06  |

**ATTN:** Mr. W. K. Tang

Page: 1 of 1

**Certificate of Calibration**

**Item for Calibration:**

|                               |                           |
|-------------------------------|---------------------------|
| Description                   | : Laser Dust Monitor      |
| Manufacturer                  | : Sibata                  |
| Model No.                     | : LD-3B                   |
| Serial No.                    | : 853944                  |
| Sensitivity (K) 1 CPM         | : 0.001 mg/m <sup>3</sup> |
| Sen. Adjustment Scale Setting | : 685 CPM                 |
| Equipment No.                 | : A-02-04                 |

**Test Conditions:**

|                   |                     |
|-------------------|---------------------|
| Room Temperature  | : 22 degree Celsius |
| Relative Humidity | : 61 %              |

**Test Specifications & Methodology:**

1. Instruction and Operation Manual High Volume Sampler, Andersen Samplers, Inc.
2. In-house method in according to the instruction manual: The Laser Dust Monitor was compared with a calibrated High Volume Sampler and the result was used to generate the Correlation Factor (CF) between the Laser Dust Monitor and High Volume Sampler.

**Results:**

|                         |        |
|-------------------------|--------|
| Correlation Factor (CF) | 0.0034 |
|-------------------------|--------|

\*\*\*\*\*

*PREPARED AND CHECKED BY:*

For and On Behalf of **WELLAB Ltd.**

  
**PATRICK TSE**  
 Laboratory Manager

**TEST REPORT**

**APPLICANT:** Cinotech Consultants Limited  
Room 1710, Technology Park,  
18 On Lai Street,  
Shatin, NT, Hong Kong

|                  |             |
|------------------|-------------|
| Test Report No.: | C/A/161104B |
| Date of Issue:   | 2016-11-07  |
| Date Received:   | 2016-11-04  |
| Date Tested:     | 2016-11-04  |
| Date Completed:  | 2016-11-07  |
| Next Due Date:   | 2017-01-06  |

**ATTN:** Mr. W. K. Tang

Page: 1 of 1

**Certificate of Calibration**

**Item for Calibration:**

|                               |                           |
|-------------------------------|---------------------------|
| Description                   | : Laser Dust Monitor      |
| Manufacturer                  | : Sibata                  |
| Model No.                     | : LD-3B                   |
| Serial No.                    | : 014750                  |
| Sensitivity (K) 1 CPM         | : 0.001 mg/m <sup>3</sup> |
| Sen. Adjustment Scale Setting | : 790 CPM                 |
| Equipment No.                 | : A-02-06                 |

**Test Conditions:**

|                   |                     |
|-------------------|---------------------|
| Room Temperature  | : 22 degree Celsius |
| Relative Humidity | : 61 %              |

**Test Specifications & Methodology:**

1. Instruction and Operation Manual High Volume Sampler, Andersen Samplers, Inc.
2. In-house method in according to the instruction manual: The Laser Dust Monitor was compared with a calibrated High Volume Sampler and the result was used to generate the Correlation Factor (CF) between the Laser Dust Monitor and High Volume Sampler.

**Results:**

|                         |        |
|-------------------------|--------|
| Correlation Factor (CF) | 0.0032 |
|-------------------------|--------|

\*\*\*\*\*

*PREPARED AND CHECKED BY:*

For and On Behalf of **WELLAB Ltd.**

  
**PATRICK TSE**  
Laboratory Manager

**TEST REPORT**

**APPLICANT:** Cinotech Consultants Limited  
Room 1710, Technology Park,  
18 On Lai Street,  
Shatin, NT, Hong Kong

|                  |             |
|------------------|-------------|
| Test Report No.: | C/A/161104C |
| Date of Issue:   | 2016-11-07  |
| Date Received:   | 2016-11-04  |
| Date Tested:     | 2016-11-04  |
| Date Completed:  | 2016-11-07  |
| Next Due Date:   | 2017-01-06  |

**ATTN:** Mr. W. K. Tang

Page: 1 of 1

|                                   |
|-----------------------------------|
| <b>Certificate of Calibration</b> |
|-----------------------------------|

**Item for Calibration:**

|                               |                           |
|-------------------------------|---------------------------|
| Description                   | : Laser Dust Monitor      |
| Manufacturer                  | : Sibata                  |
| Model No.                     | : LD-3B                   |
| Serial No.                    | : 541146                  |
| Sensitivity (K) 1 CPM         | : 0.001 mg/m <sup>3</sup> |
| Sen. Adjustment Scale Setting | : 625 CPM                 |
| Equipment No.                 | : A-02-07                 |

**Test Conditions:**

|                   |                     |
|-------------------|---------------------|
| Room Temperature  | : 22 degree Celsius |
| Relative Humidity | : 61 %              |

**Test Specifications & Methodology:**

1. Instruction and Operation Manual High Volume Sampler, Andersen Samplers, Inc.
2. In-house method in according to the instruction manual: The Laser Dust Monitor was compared with a calibrated High Volume Sampler and the result was used to generate the Correlation Factor (CF) between the Laser Dust Monitor and High Volume Sampler.

**Results:**

|                         |        |
|-------------------------|--------|
| Correlation Factor (CF) | 0.0031 |
|-------------------------|--------|

\*\*\*\*\*

*PREPARED AND CHECKED BY:*

For and On Behalf of **WELLAB Ltd.**

  
**PATRICK TSE**  
 Laboratory Manager

**TEST REPORT**

**APPLICANT:** Cinotech Consultants Limited  
Room 1710, Technology Park,  
18 On Lai Street,  
Shatin, NT, Hong Kong

|                  |            |
|------------------|------------|
| Test Report No.: | C/161028C  |
| Date of Issue:   | 2016-10-31 |
| Date Received:   | 2016-10-28 |
| Date Tested:     | 2016-10-28 |
| Date Completed:  | 2016-10-31 |
| Next Due Date:   | 2016-12-30 |

**ATTN:** Mr. W. K. Tang

Page: 1 of 1

**Certificate of Calibration**

**Item for Calibration:**

|                               |                           |
|-------------------------------|---------------------------|
| Description                   | : Laser Dust Monitor      |
| Manufacturer                  | : Sibata                  |
| Model No.                     | : LD-3B                   |
| Serial No.                    | : 095029                  |
| Sensitivity (K) 1 CPM         | : 0.001 mg/m <sup>3</sup> |
| Sen. Adjustment Scale Setting | : 551 CPM                 |
| Equipment No.                 | : A-02-10                 |

**Test Conditions:**

|                   |                     |
|-------------------|---------------------|
| Room Temperature  | : 21 degree Celsius |
| Relative Humidity | : 64 %              |

**Test Specifications & Methodology:**

1. Instruction and Operation Manual High Volume Sampler, Andersen Samplers, Inc.
2. In-house method in according to the instruction manual: The Laser Dust Monitor was compared with a calibrated High Volume Sampler and the result was used to generate the Correlation Factor (CF) between the Laser Dust Monitor and High Volume Sampler.

**Results:**

|                         |        |
|-------------------------|--------|
| Correlation Factor (CF) | 0.0038 |
|-------------------------|--------|

\*\*\*\*\*

*PREPARED AND CHECKED BY:*

For and On Behalf of **WELLAB Ltd.**

  
**PATRICK TSE**  
 Laboratory Manager

## TEST REPORT

**APPLICANT:** Cinotech Consultants Limited  
Room 1710, Technology Park,  
18 On Lai Street,  
Shatin, NT, Hong Kong

|                  |            |
|------------------|------------|
| Test Report No.: | C/N/151231 |
| Date of Issue:   | 2016-01-04 |
| Date Received:   | 2015-12-31 |
| Date Tested:     | 2015-12-31 |
| Date Completed:  | 2016-01-04 |
| Next Due Date:   | 2017-01-03 |

**ATTN:** Mr. W. K. Tang

Page: 1 of 1

### Certificate of Calibration

**Item for calibration:**

|                |   |
|----------------|---|
| Description    | : 'SVANTEK' Integrating Sound Level Meter |
| Manufacturer   | : SVANTEK                                 |
| Model No.      | : SVAN 955                                |
| Serial No.     | : 14303                                   |
| Microphone No. | : 35222                                   |
| Equipment No.  | : N-08-05                                 |

**Test conditions:**

|                   |                     |
|-------------------|---------------------|
| Room Temperature  | : 22 degree Celsius |
| Relative Humidity | : 53%               |

**Test Specifications:**

Performance checking at 94 and 114 dB

**Methodology:**

In-house method, according to manufacturer instruction manual

**Results:**

| Reference Set Point, dB | Instrument Readings, dB |
|-------------------------|-------------------------|
| 94                      | 94.0                    |
| 114                     | 114.0                   |

Remark: 1) This report supersedes the one dated 2012/01/21 with certificate number C/N/120120/1.

*PREPARED AND CHECKED BY:*

For and On Behalf of **WELLAB Ltd.**



**PATRICK TSE**

Laboratory Manager

## TEST REPORT

**APPLICANT:** Cinotech Consultants Limited  
Room 1710, Technology Park,  
18 On Lai Street,  
Shatin, NT, Hong Kong

|                  |             |
|------------------|-------------|
| Test Report No.: | C/N/160826A |
| Date of Issue:   | 2016-08-29  |
| Date Received:   | 2016-08-26  |
| Date Tested:     | 2016-08-26  |
| Date Completed:  | 2016-08-29  |
| Next Due Date:   | 2017-08-28  |

**ATTN:** Mr. W.K. Tang

Page: 1 of 1

### Certificate of Calibration

**Item for calibration:**

|                |   |
|----------------|---|
| Description    | : 'SVANTEK' Integrating Sound Level Meter |
| Manufacturer   | : SVANTEK                                 |
| Model No.      | : SVAN 957                                |
| Serial No.     | : 21455                                   |
| Microphone No. | : 43730                                   |
| Equipment No.  | : N-08-07                                 |

**Test conditions:**

|                   |                     |
|-------------------|---------------------|
| Room Temperature  | : 25 degree Celsius |
| Relative Humidity | : 57%               |

**Test Specifications:**

Performance checking at 94 and 114 dB

**Methodology:**

In-house method, according to manufacturer instruction manual

**Results:**

| Reference Set Point, dB | Instrument Readings, dB |
|-------------------------|-------------------------|
| 94                      | 94.0                    |
| 114                     | 114.0                   |

*PREPARED AND CHECKED BY:*  
For and On Behalf of **WELLAB Ltd.**

  
**PATRICK TSE**  
Laboratory Manager



### TEST REPORT

**APPLICANT:** Cinotech Consultants Limited  
Room 1710, Technology Park,  
18 On Lai Street,  
Shatin, NT, Hong Kong

|                  |             |
|------------------|-------------|
| Test Report No.: | C/N/160819B |
| Date of Issue:   | 2016-08-22  |
| Date Received:   | 2016-08-19  |
| Date Tested:     | 2016-08-19  |
| Date Completed:  | 2016-08-22  |
| Next Due Date:   | 2017-08-21  |

**ATTN:** Mr. W.K. Tang

Page: 1 of 1

### Certificate of Calibration

**Item for calibration:**

|                |   |
|----------------|---|
| Description    | : 'SVANTEK' Integrating Sound Level Meter |
| Manufacturer   | : SVANTEK                                 |
| Model No.      | : SVAN 957                                |
| Serial No.     | : 21459                                   |
| Microphone No. | : 43676                                   |
| Equipment No.  | : N-08-08                                 |

**Test conditions:**

|                   |                     |
|-------------------|---------------------|
| Room Temperature  | : 24 degree Celsius |
| Relative Humidity | : 58%               |

**Test Specifications:**

Performance checking at 94 and 114 dB

**Methodology:**

In-house method, according to manufacturer instruction manual

**Results:**

| Reference Set Point, dB | Instrument Readings, dB |
|-------------------------|-------------------------|
| 94                      | 94.0                    |
| 114                     | 114.0                   |

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For and On Behalf of **WELLAB Ltd.**



**PATRICK TSE**

Laboratory Manager

## TEST REPORT

**APPLICANT:** Cinotech Consultants Limited  
Room 1710, Technology Park,  
18 On Lai Street,  
Shatin, NT, Hong Kong

|                  |             |
|------------------|-------------|
| Test Report No.: | C/N/160819C |
| Date of Issue:   | 2016-08-22  |
| Date Received:   | 2016-08-19  |
| Date Tested:     | 2016-08-19  |
| Date Completed:  | 2016-08-22  |
| Next Due Date:   | 2017-08-21  |

**ATTN:** Mr. W.K. Tang

Page: 1 of 1

### Certificate of Calibration

**Item for calibration:**

|                |   |
|----------------|---|
| Description    | : 'SVANTEK' Integrating Sound Level Meter |
| Manufacturer   | : SVANTEK                                 |
| Model No.      | : SVAN 957                                |
| Serial No.     | : 21460                                   |
| Microphone No. | : 43679                                   |
| Equipment No.  | : N-08-09                                 |

**Test conditions:**

|                   |                     |
|-------------------|---------------------|
| Room Temperature  | : 24 degree Celsius |
| Relative Humidity | : 58%               |

**Test Specifications:**

Performance checking at 94 and 114 dB

**Methodology:**

In-house method, according to manufacturer instruction manual

**Results:**

| Reference Set Point, dB | Instrument Readings, dB |
|-------------------------|-------------------------|
| 94                      | 94.0                    |
| 114                     | 114.0                   |

*PREPARED AND CHECKED BY:*

For and On Behalf of **WELLAB Ltd.**



**PATRICK TSE**

Laboratory Manager

## TEST REPORT

**APPLICANT:** Cinotech Consultants Limited  
Room 1710, Technology Park,  
18 On Lai Street,  
Shatin, NT, Hong Kong

|                  |             |
|------------------|-------------|
| Test Report No.: | C/N/161128B |
| Date of Issue:   | 2016-11-30  |
| Date Received:   | 2016-11-28  |
| Date Tested:     | 2016-11-28  |
| Date Completed:  | 2016-11-30  |
| Next Due Date:   | 2017-11-29  |

**ATTN:** Mr. W.K. Tang

Page: 1 of 1

### Certificate of Calibration

**Item for calibration:**

|                |   |
|----------------|---|
| Description    | : 'SVANTEK' Integrating Sound Level Meter |
| Manufacturer   | : SVANTEK                                 |
| Model No.      | : SVAN 957                                |
| Serial No.     | : 23851                                   |
| Microphone No. | : 48532                                   |
| Equipment No.  | : N-08-12                                 |

**Test conditions:**

|                   |                     |
|-------------------|---------------------|
| Room Temperature  | : 21 degree Celsius |
| Relative Humidity | : 66%               |

**Test Specifications:**

Performance checking at 94 and 114 dB

**Methodology:**

In-house method, according to manufacturer instruction manual

**Results:**

| Reference Set Point, dB | Instrument Readings, dB |
|-------------------------|-------------------------|
| 94                      | 94.0                    |
| 114                     | 114.0                   |

*PREPARED AND CHECKED BY:*

For and On Behalf of **WELLAB Ltd.**

  
\_\_\_\_\_  
**PATRICK TSE**  
Laboratory Manager

## TEST REPORT

**APPLICANT:** Cinotech Consultants Limited  
Room 1710, Technology Park,  
18 On Lai Street,  
Shatin, NT, Hong Kong

|                  |             |
|------------------|-------------|
| Test Report No.: | C/N/160930A |
| Date of Issue:   | 2016-10-03  |
| Date Received:   | 2016-09-30  |
| Date Tested:     | 2016-09-30  |
| Date Completed:  | 2016-10-03  |
| Next Due Date:   | 2017-10-02  |

**ATTN:** Mr. W.K. Tang

Page: 1 of 1

### Item for calibration:

|               |                         |
|---------------|-------------------------|
| Description   | : Acoustical Calibrator |
| Manufacturer  | : SVANTEK               |
| Model No.     | : SV30A                 |
| Serial No.    | : 24803                 |
| Equipment No. | : N-09-03               |

### Test conditions:

|                   |                     |
|-------------------|---------------------|
| Room Temperature  | : 25 degree Celsius |
| Relative Humidity | : 60%               |

### Methodology:

The Sound Level Calibrator has been calibrated in accordance with the documented procedures and using standard(s) and instrument(s) which are recommended by the manufacturer, or equivalent.

### Results:

| Sound Pressure Level (1kHz) | Measured SPL | Tolerance      |
|-----------------------------|--------------|----------------|
| At 94 dB SPL                | 94.0         | 94.0 ± 0.1 dB  |
| At 114 dB SPL               | 114.0        | 114.0 ± 0.1 dB |

PREPARED AND CHECKED BY:

For and On Behalf of **WELLAB Ltd.**



**PATRICK TSE**

Laboratory Manager

## TEST REPORT

**APPLICANT:** Cinotech Consultants Limited  
Room 1710, Technology Park,  
18 On Lai Street,  
Shatin, NT, Hong Kong

|                  |             |
|------------------|-------------|
| Test Report No.: | C/N/160930B |
| Date of Issue:   | 2016-10-03  |
| Date Received:   | 2016-09-30  |
| Date Tested:     | 2016-09-30  |
| Date Completed:  | 2016-10-03  |
| Next Due Date:   | 2017-10-02  |

**ATTN:** Mr. W.K. Tang

Page: 1 of 1

### Item for calibration:

|               |                         |
|---------------|-------------------------|
| Description   | : Acoustical Calibrator |
| Manufacturer  | : SVANTEK               |
| Model No.     | : SV30A                 |
| Serial No.    | : 24791                 |
| Equipment No. | : N-09-04               |

### Test conditions:

|                   |                     |
|-------------------|---------------------|
| Room Temperature  | : 25 degree Celsius |
| Relative Humidity | : 60%               |

### Methodology:

The Sound Level Calibrator has been calibrated in accordance with the documented procedures and using standard(s) and instrument(s) which are recommended by the manufacturer, or equivalent.

### Results:

| Sound Pressure Level (1kHz) | Measured SPL | Tolerance      |
|-----------------------------|--------------|----------------|
| At 94 dB SPL                | 94.0         | 94.0 ± 0.1 dB  |
| At 114 dB SPL               | 114.0        | 114.0 ± 0.1 dB |

*PREPARED AND CHECKED BY:*  
For and On Behalf of **WELLAB Ltd.**

  
**BATRICK TSE**  
Laboratory Manager

## TEST REPORT

**APPLICANT:** Cinotech Consultants Limited  
Room 1710, Technology Park,  
18 On Lai Street,  
Shatin, NT, Hong Kong

|                  |             |
|------------------|-------------|
| Test Report No.: | C/N/160930C |
| Date of Issue:   | 2016-10-03  |
| Date Received:   | 2016-09-30  |
| Date Tested:     | 2016-09-30  |
| Date Completed:  | 2016-10-03  |
| Next Due Date:   | 2017-10-02  |

**ATTN:** Mr. W.K. Tang

Page: 1 of 1

### Item for calibration:

|               |                         |
|---------------|-------------------------|
| Description   | : Acoustical Calibrator |
| Manufacturer  | : SVANTEK               |
| Model No.     | : SV30A                 |
| Serial No.    | : 24780                 |
| Equipment No. | : N-09-05               |

### Test conditions:

|                   |                     |
|-------------------|---------------------|
| Room Temperature  | : 25 degree Celsius |
| Relative Humidity | : 60%               |

### Methodology:

The Sound Level Calibrator has been calibrated in accordance with the documented procedures and using standard(s) and instrument(s) which are recommended by the manufacturer, or equivalent.

### Results:

| Sound Pressure Level (1kHz) | Measured SPL | Tolerance      |
|-----------------------------|--------------|----------------|
| At 94 dB SPL                | 94.0         | 94.0 ± 0.1 dB  |
| At 114 dB SPL               | 114.0        | 114.0 ± 0.1 dB |

PREPARED AND CHECKED BY:

For and On Behalf of **WELLAB Ltd.**



**PATRICK TSE**

Laboratory Manager

## TEST REPORT

**APPLICANT:** Cinotech Consultants Limited  
Room 1710, Technology Park,  
18 On Lai Street,  
Shatin, NT, Hong Kong

|                  |              |
|------------------|--------------|
| Test Report No.: | C/N/161104/1 |
| Date of Issue:   | 2016-11-07   |
| Date Received:   | 2016-11-04   |
| Date Tested:     | 2016-11-04   |
| Date Completed:  | 2016-11-07   |
| Next Due Date:   | 2017-11-06   |

**ATTN:** Mr. W.K. Tang

Page: 1 of 1

### Item for calibration:

|               |                         |
|---------------|-------------------------|
| Description   | : Acoustical Calibrator |
| Manufacturer  | : Brüel & Kjær          |
| Model No.     | : 4231                  |
| Serial No.    | : 2326353               |
| Equipment No. | : N-02-01               |

### Test conditions:

|                   |                     |
|-------------------|---------------------|
| Room Temperature  | : 21 degree Celsius |
| Relative Humidity | : 62 %              |

### Methodology:

The sound calibrator has been calibrated in accordance with the documented procedures and using standard(s) and instrument(s) which are recommended by the manufacturer, or equivalent.

### Results:

| Sound Pressure Level (1kHz) | Measured SPL | Tolerance      |
|-----------------------------|--------------|----------------|
| At 94 dB SPL                | 94.0         | 94.0 ± 0.1 dB  |
| At 114 dB SPL               | 114.0        | 114.0 ± 0.1 dB |

*PREPARED AND CHECKED BY:*  
For and On Behalf of **WELLAB Ltd.**

  
**PATRICK TSE**  
Laboratory Manager

## TEST REPORT

**APPLICANT:** Cinotech Consultants Limited  
Room 1710, Technology Park,  
18 On Lai Street,  
Shatin, NT, Hong Kong

|                  |             |
|------------------|-------------|
| Test Report No.: | C/N/160819D |
| Date of Issue:   | 2016-08-22  |
| Date Received:   | 2016-08-19  |
| Date Tested:     | 2016-08-19  |
| Date Completed:  | 2016-08-22  |
| Next Due Date:   | 2017-08-21  |

**ATTN:** Mr. W.K. Tang

Page: 1 of 1

### Certificate of Calibration

**Item for calibration:**

|               |                         |
|---------------|-------------------------|
| Description   | : Acoustical Calibrator |
| Manufacturer  | : Brüel & Kjær          |
| Model No.     | : 4231                  |
| Serial No.    | : 2412367               |
| Equipment No. | : N-02-03               |

**Test conditions:**

|                   |                     |
|-------------------|---------------------|
| Room Temperature  | : 24 degree Celsius |
| Relative Humidity | : 58%               |

**Methodology:**

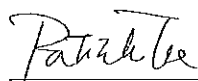
The Sound Level Calibrator has been calibrated in accordance with the documented procedures and using standard(s) and instrument(s) which are recommended by the manufacturer, or equivalent.

**Results:**

| Sound Pressure Level (1kHz) | Measured SPL | Tolerance      |
|-----------------------------|--------------|----------------|
| At 94 dB SPL                | 94.0         | 94.0 ± 0.1 dB  |
| At 114 dB SPL               | 114.0        | 114.0 ± 0.1 dB |

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For and On Behalf of **WELLAB Ltd.**



**PATRICK TSE**

Laboratory Manager



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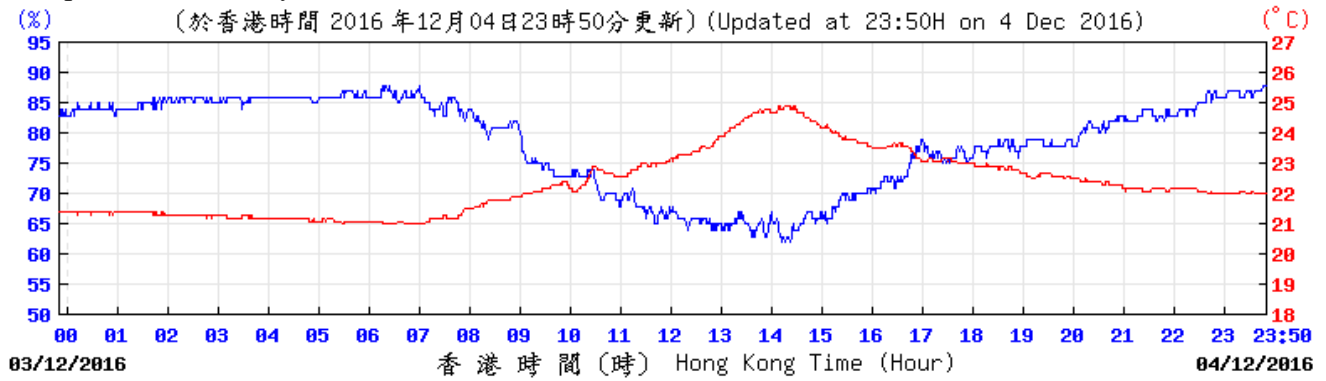
**APPENDIX D  
METEOROLOGICAL DATA ON  
MONITORING DATES**

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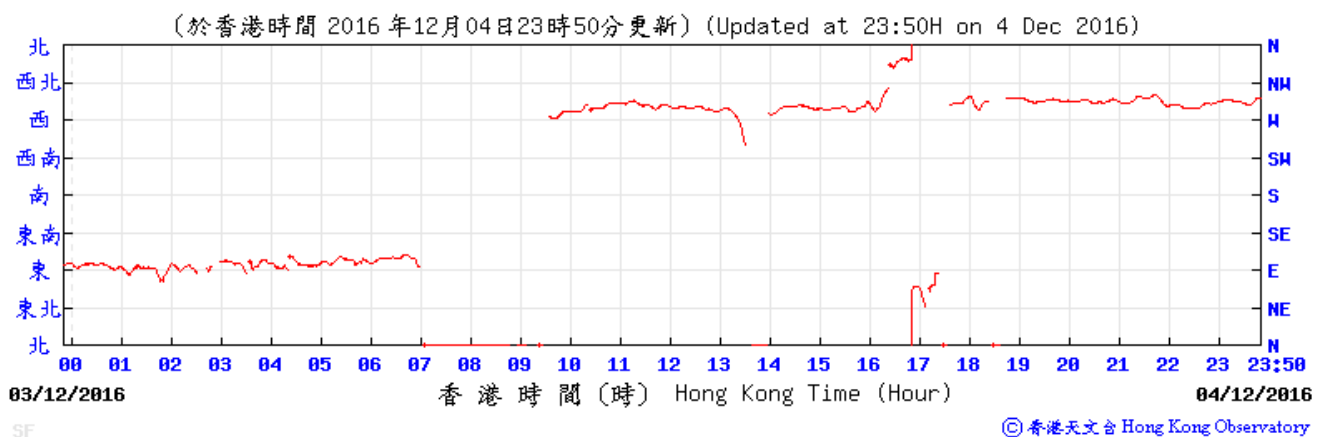
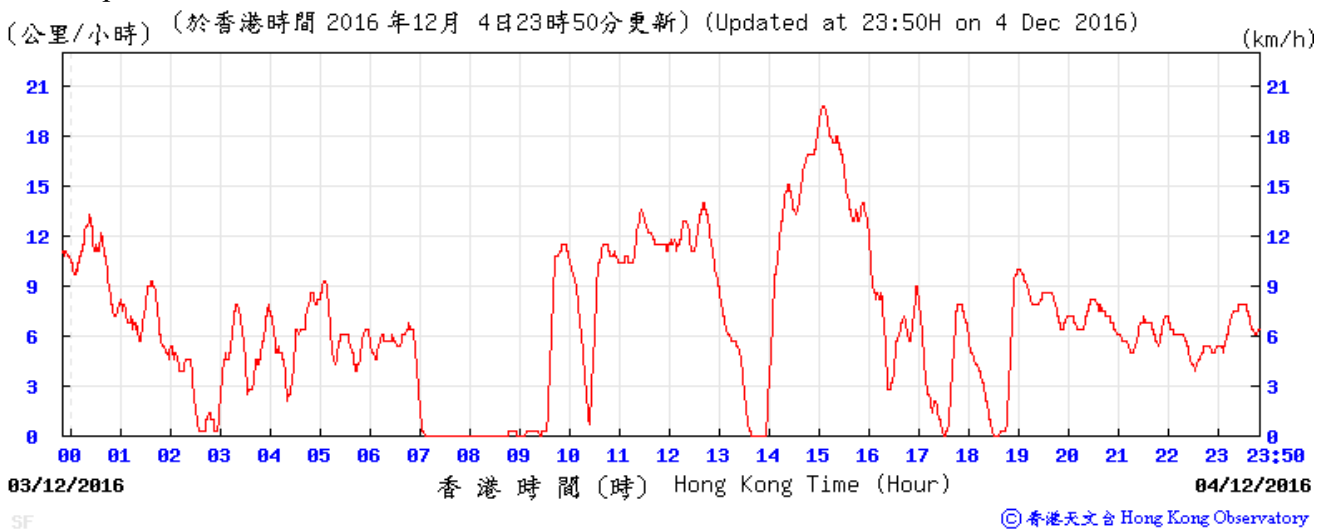
---

**Appendix D**  
**Meteorological Data Recorded from HKO Station (4 December 2016)**  
 (Source: [www.hko.gov.hk](http://www.hko.gov.hk))

Temperature/Humidity:



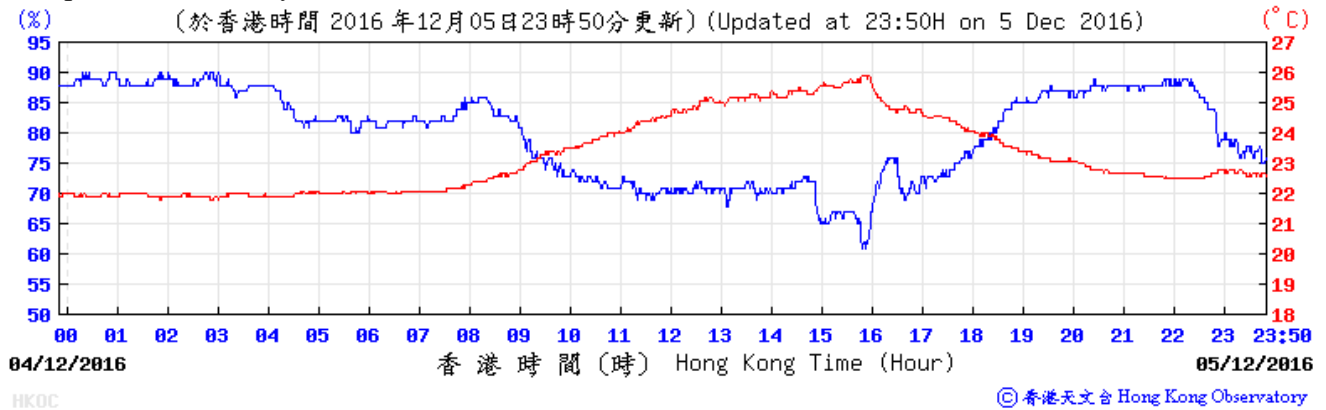
Wind Speed and Direction:



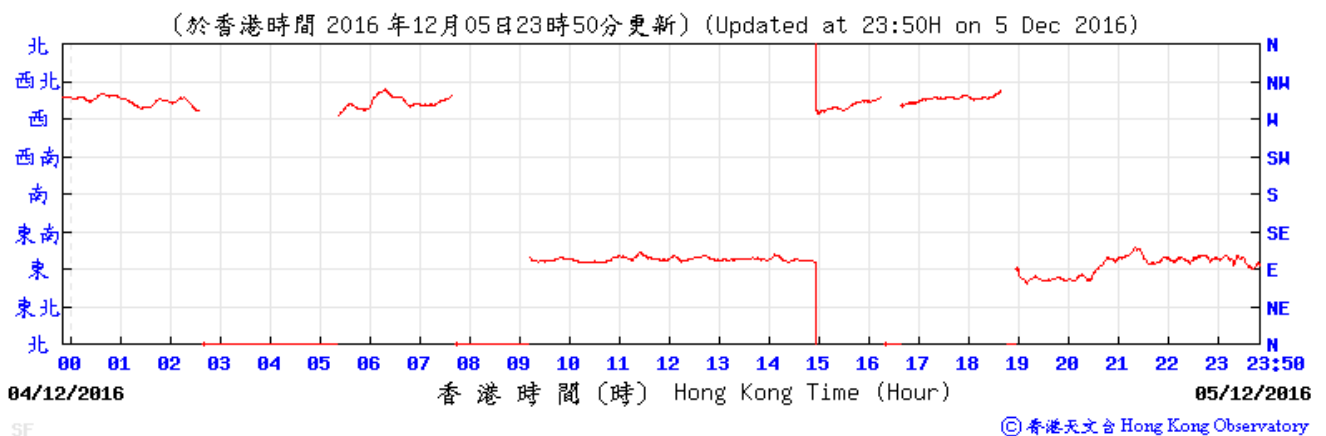
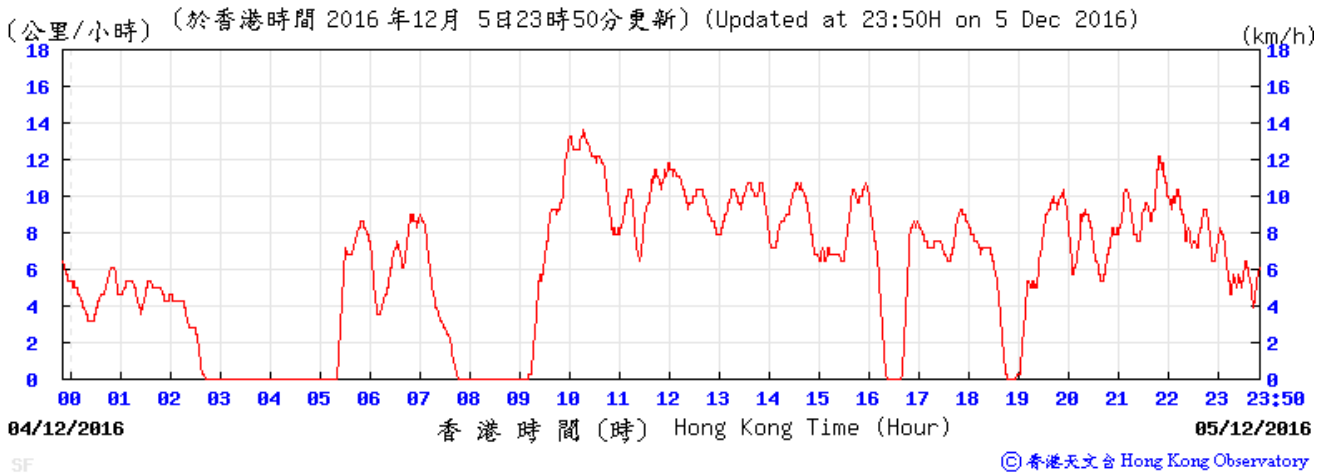
### Meteorological Data Recorded from HKO Station (5 December 2016)

(Source: [www.hko.gov.hk](http://www.hko.gov.hk))

#### Temperature/Humidity:



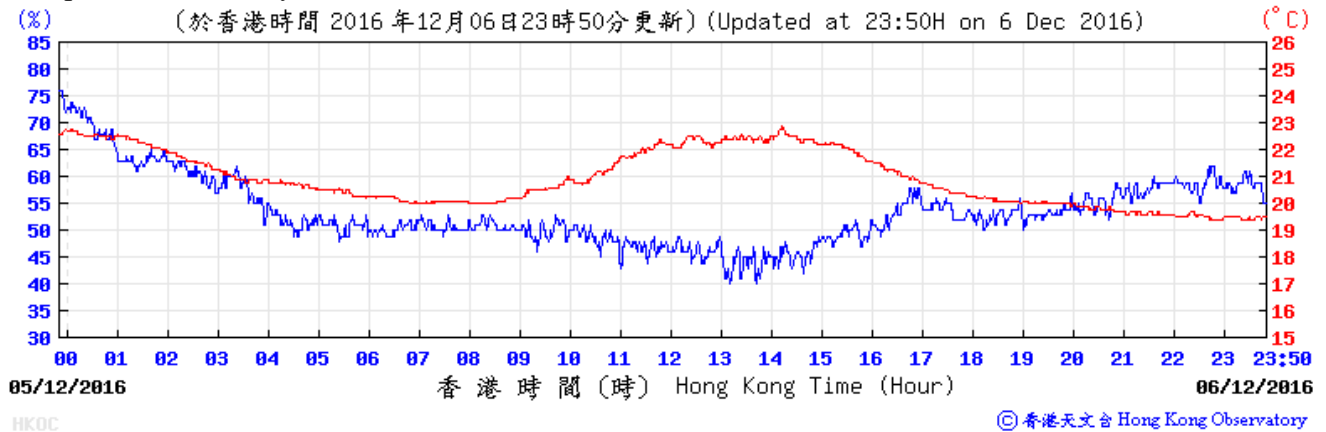
#### Wind Speed and Direction:



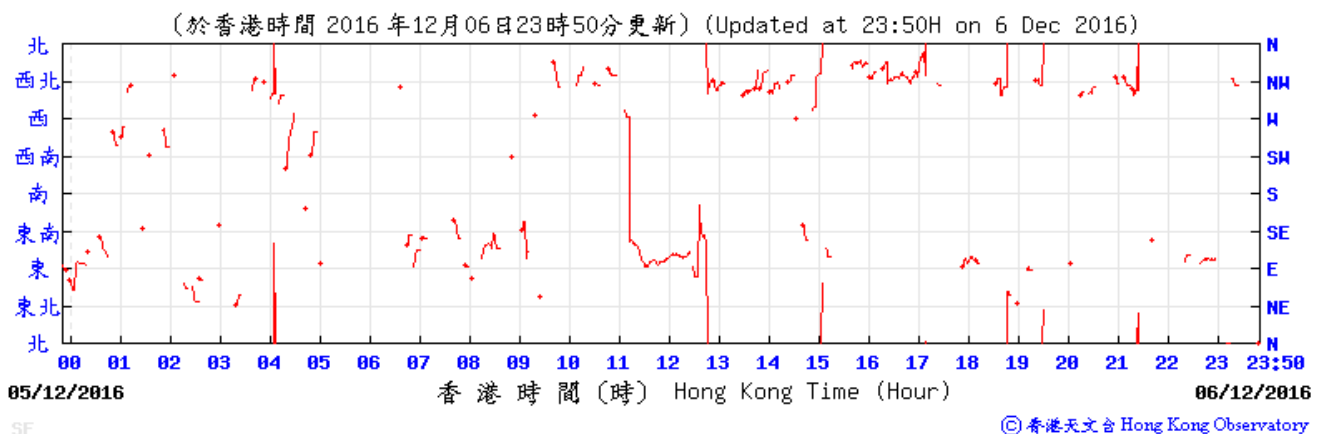
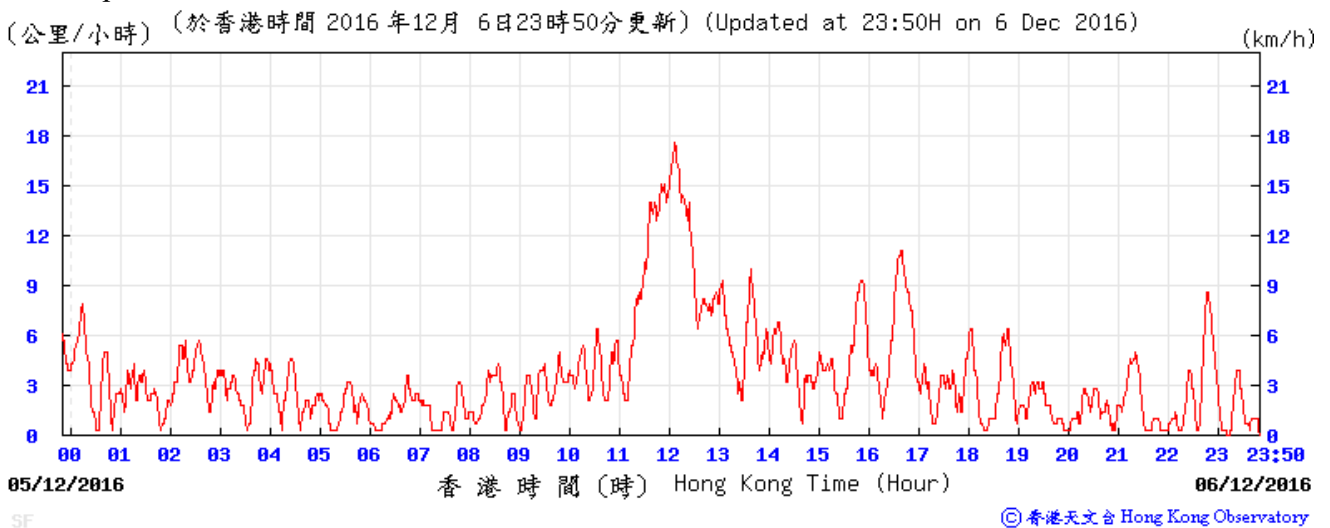
### Meteorological Data Recorded from HKO Station (6 December 2016)

(Source: [www.hko.gov.hk](http://www.hko.gov.hk))

#### Temperature/Humidity:



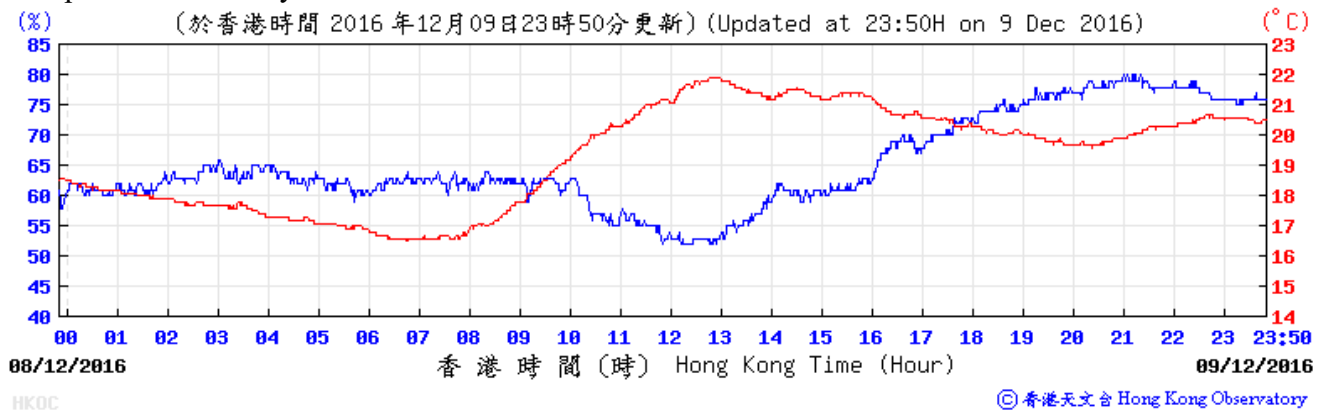
#### Wind Speed and Direction:



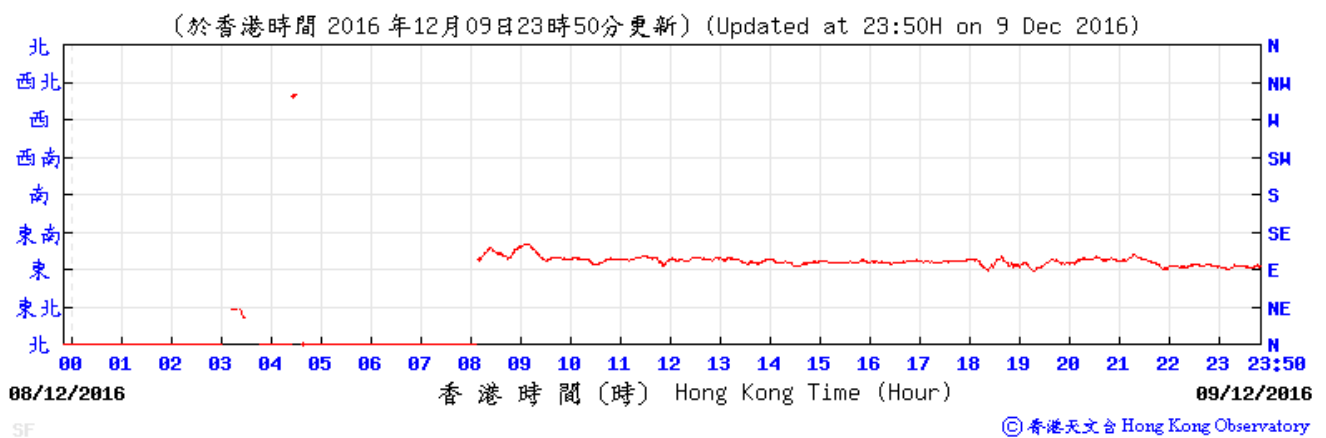
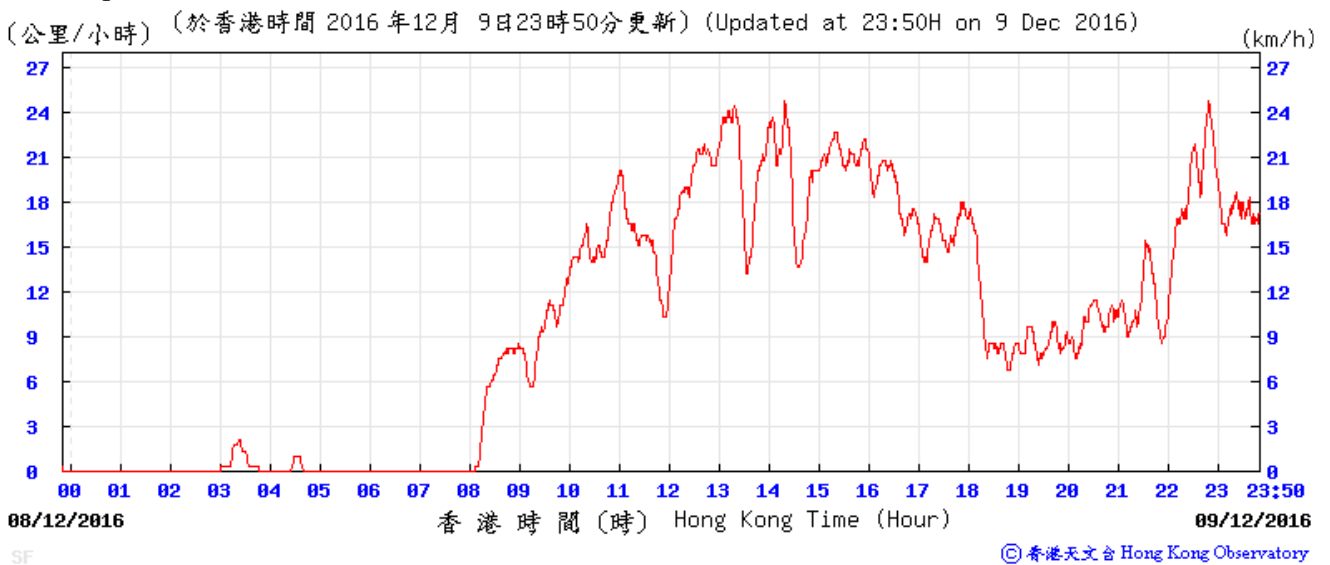
### Meteorological Data Recorded from HKO Station (9 December 2016)

(Source: [www.hko.gov.hk](http://www.hko.gov.hk))

#### Temperature/Humidity:



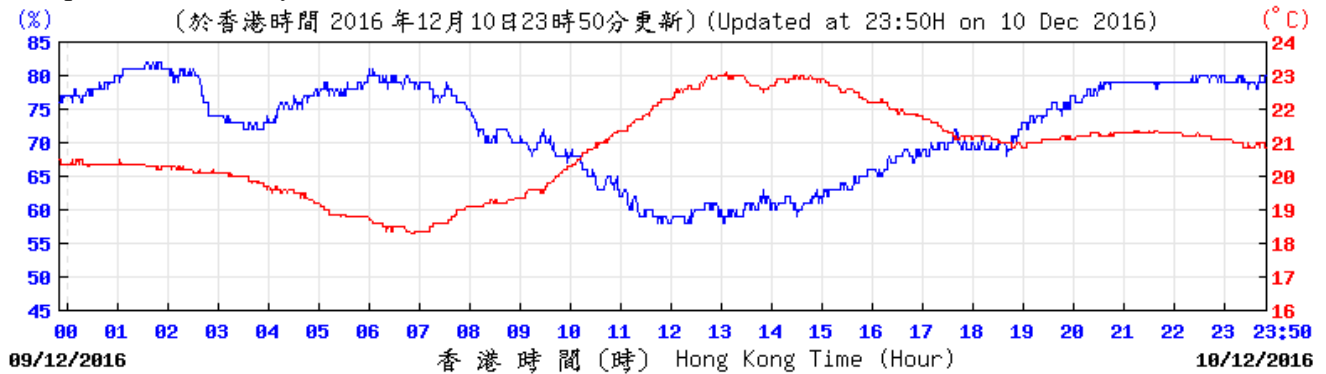
#### Wind Speed and Direction:



### Meteorological Data Recorded from HKO Station (10 December 2016)

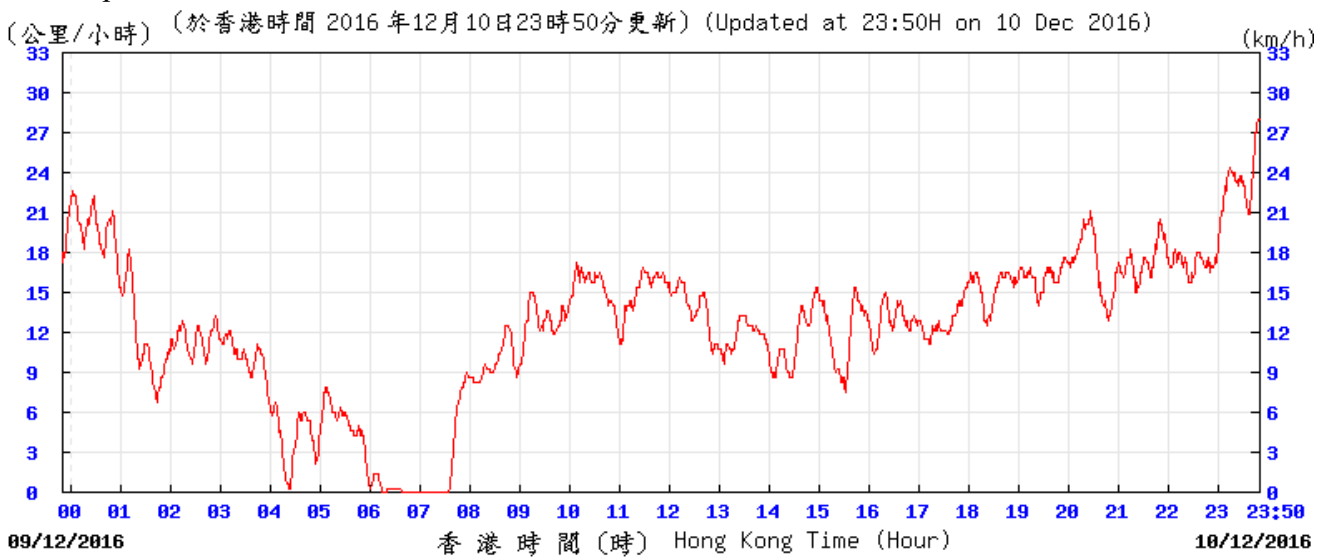
(Source: [www.hko.gov.hk](http://www.hko.gov.hk))

#### Temperature/Humidity:

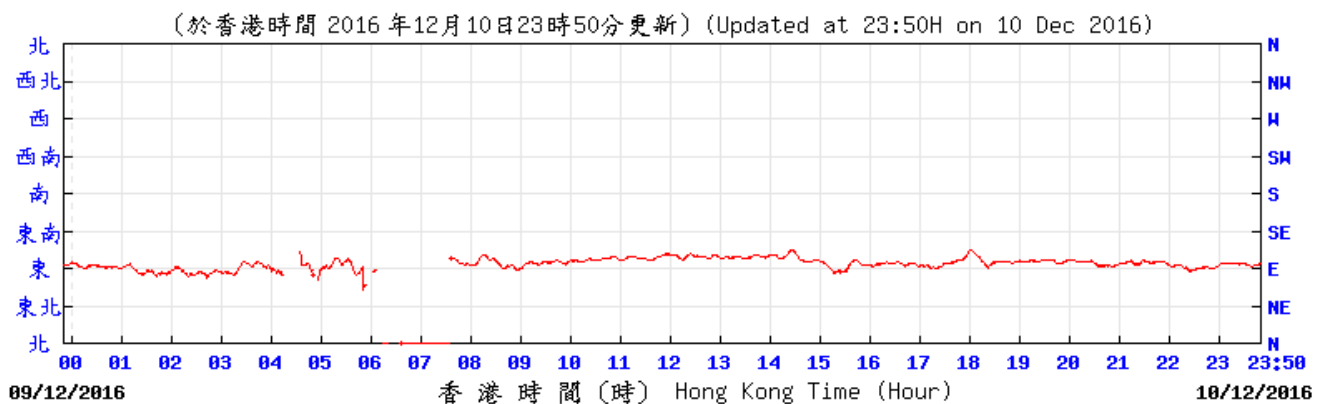


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#### Wind Speed and Direction:



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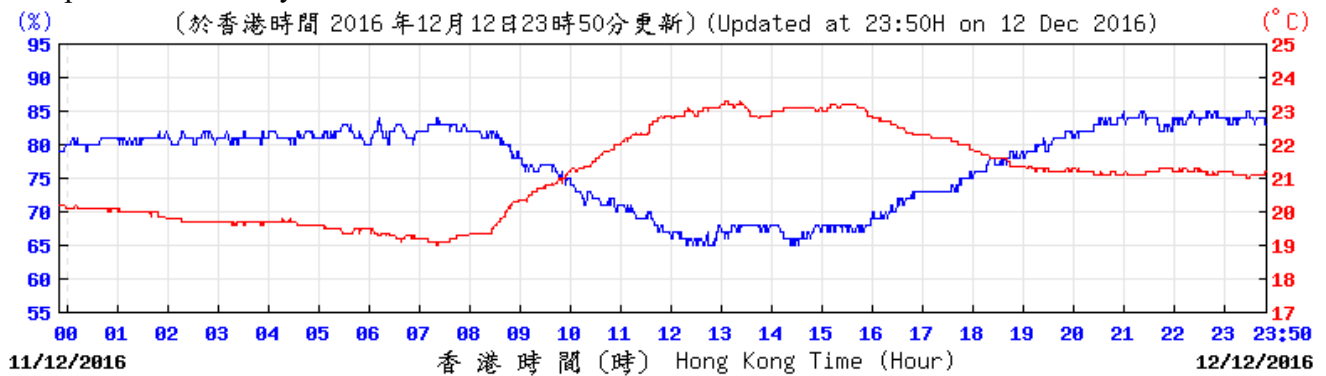


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### Meteorological Data Recorded from HKO Station (12 December 2016)

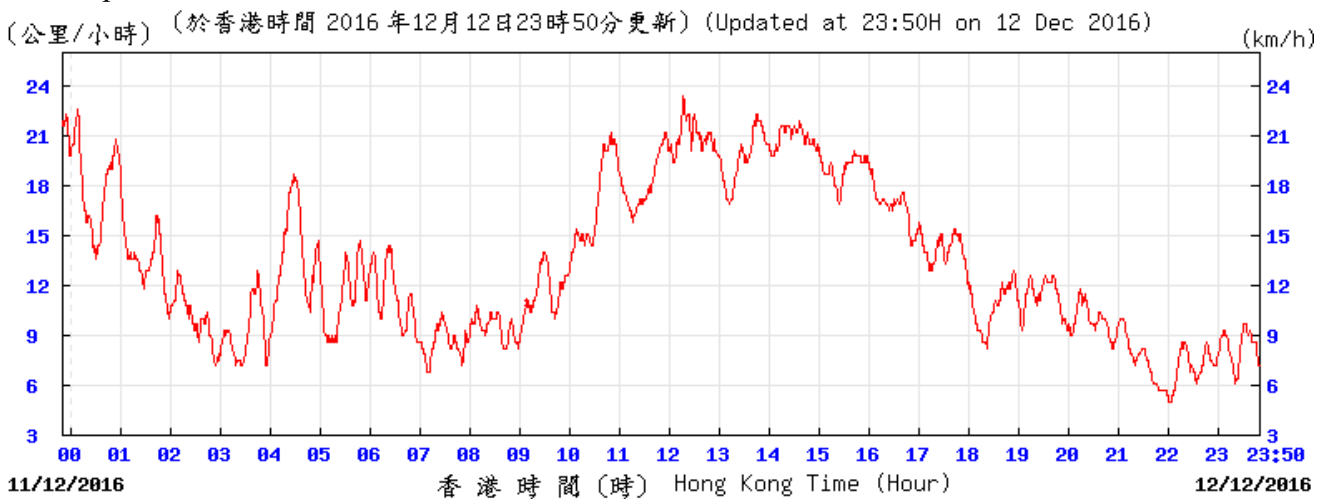
(Source: [www.hko.gov.hk](http://www.hko.gov.hk))

#### Temperature/Humidity:



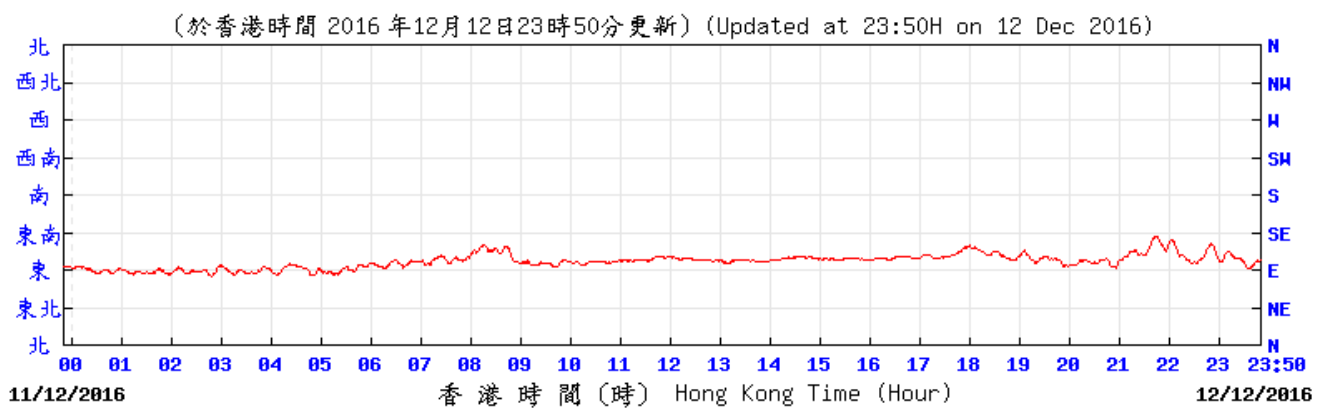
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#### Wind Speed and Direction:



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SF



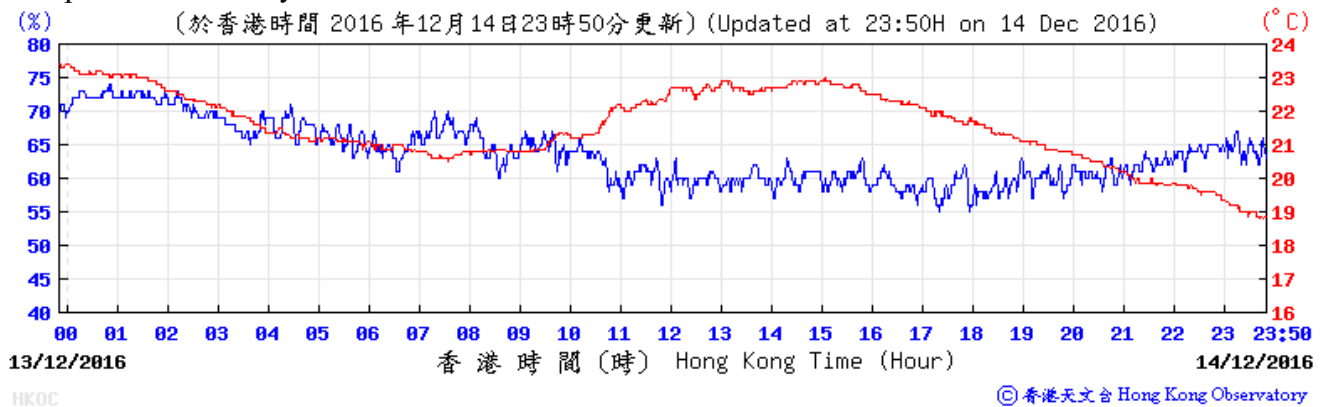
© 香港天文台 Hong Kong Observatory

SF

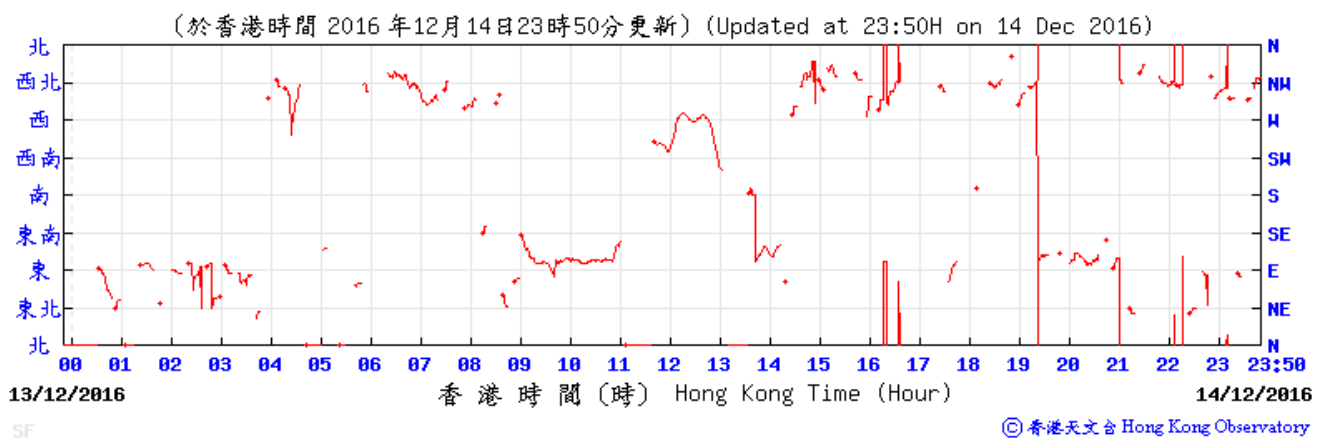
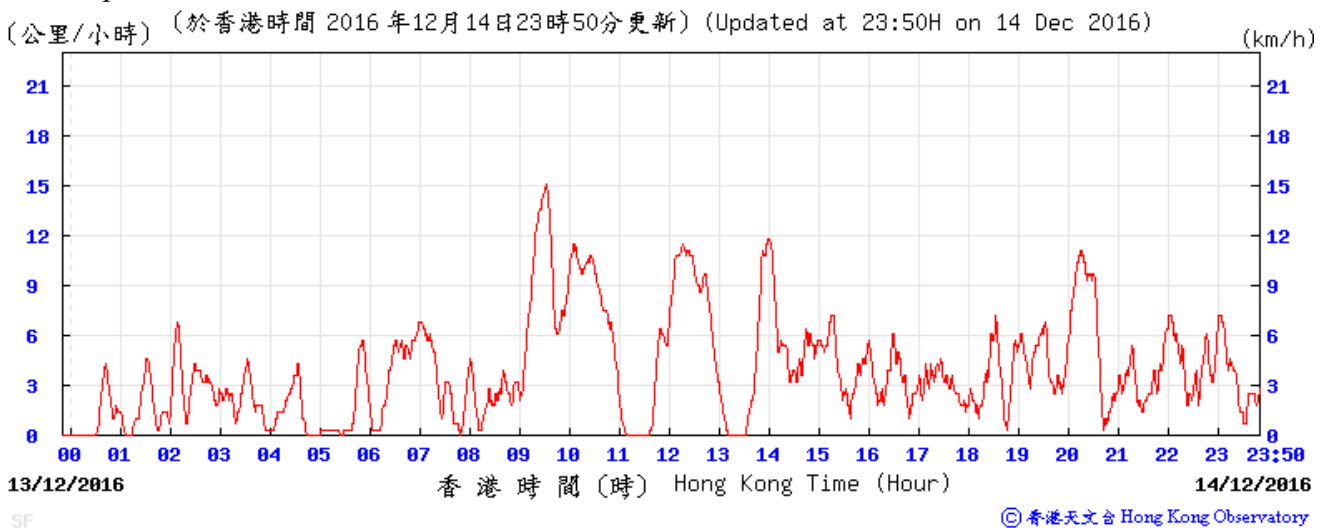
### Meteorological Data Recorded from HKO Station (14 December 2016)

(Source: [www.hko.gov.hk](http://www.hko.gov.hk))

#### Temperature/Humidity:



#### Wind Speed and Direction:

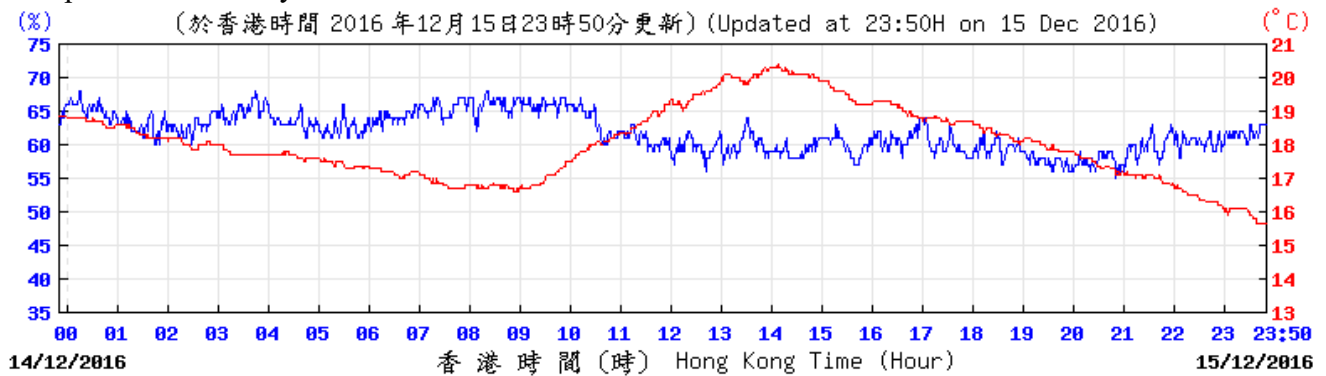




### Meteorological Data Recorded from HKO Station (15 December 2016)

(Source: [www.hko.gov.hk](http://www.hko.gov.hk))

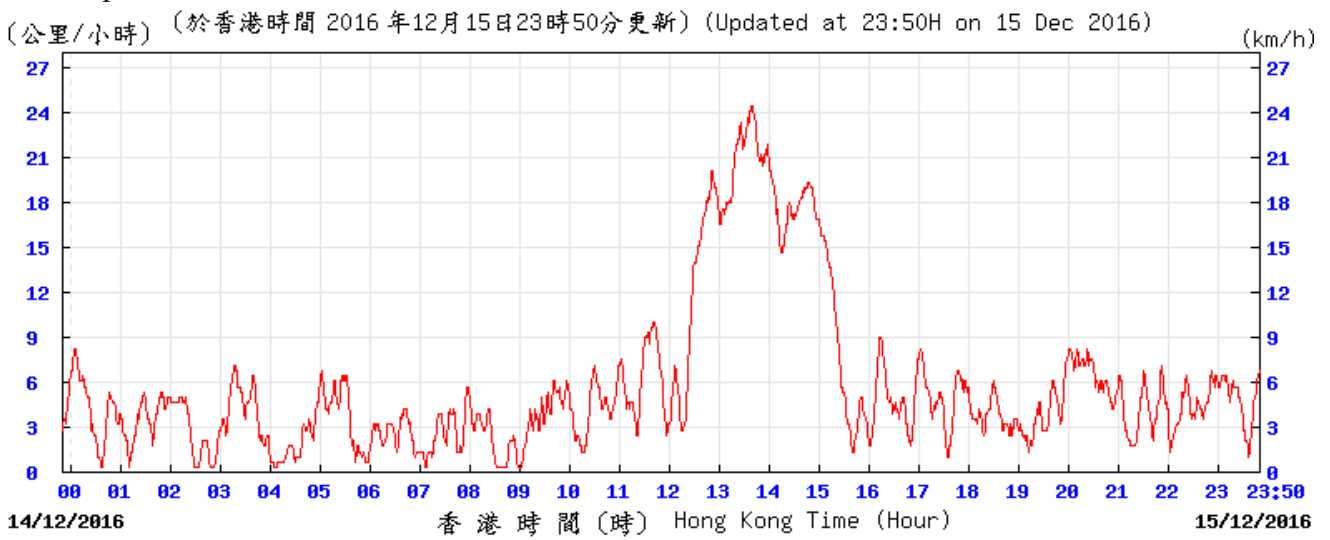
#### Temperature/Humidity:



HKOC

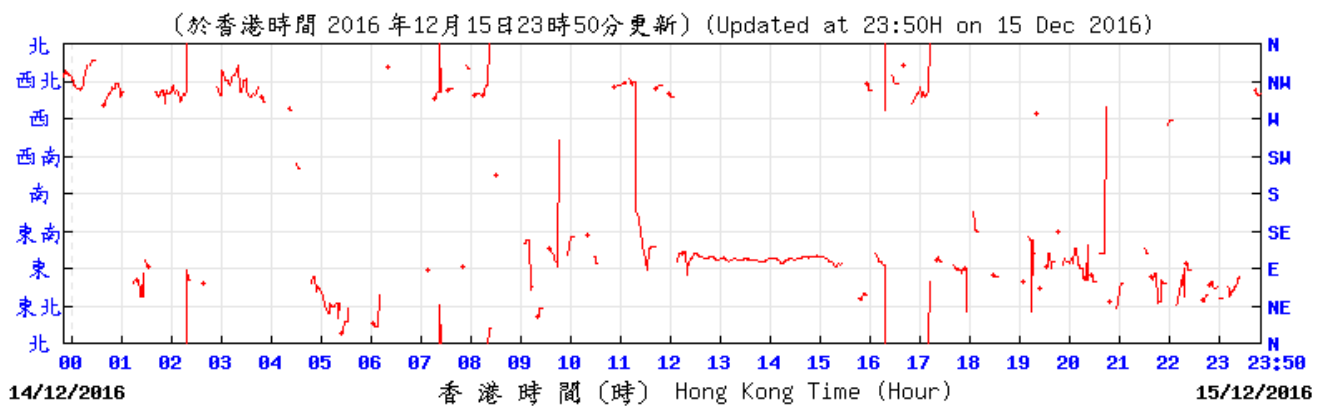
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#### Wind Speed and Direction:



SF

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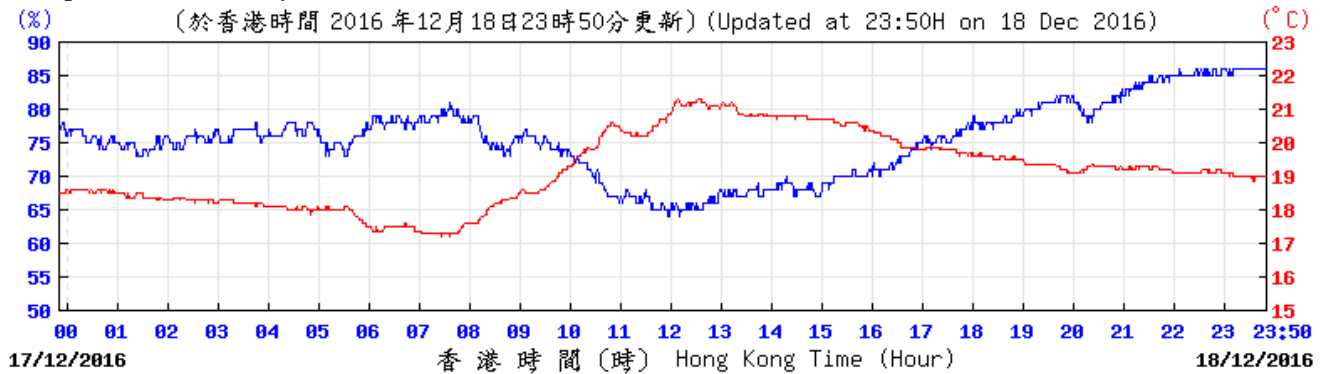
SF

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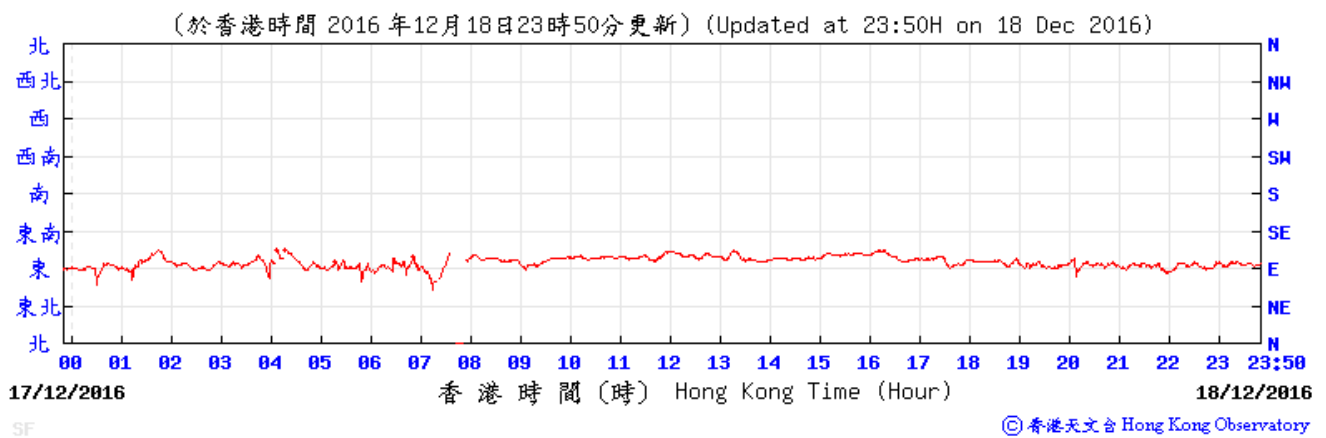
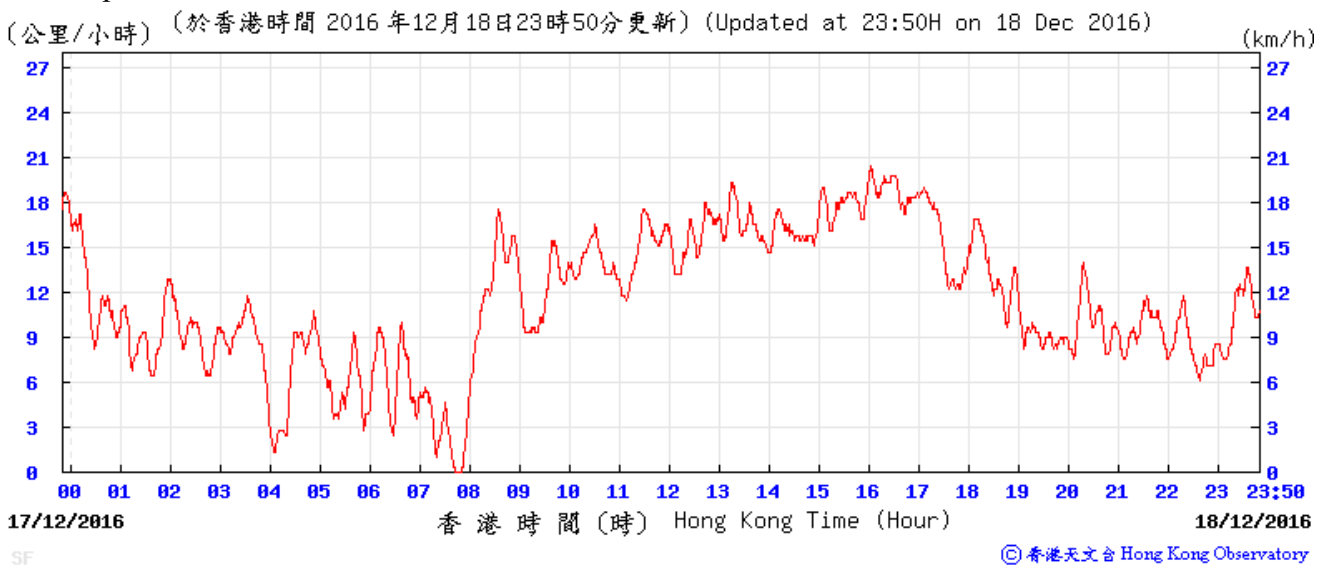
### Meteorological Data Recorded from HKO Station (18 December 2016)

(Source: [www.hko.gov.hk](http://www.hko.gov.hk))

#### Temperature/Humidity:



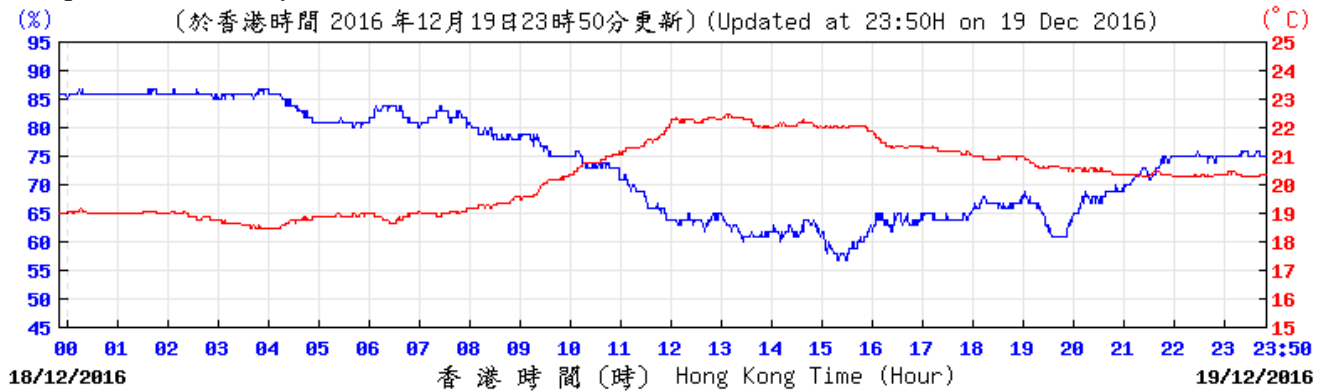
#### Wind Speed and Direction:



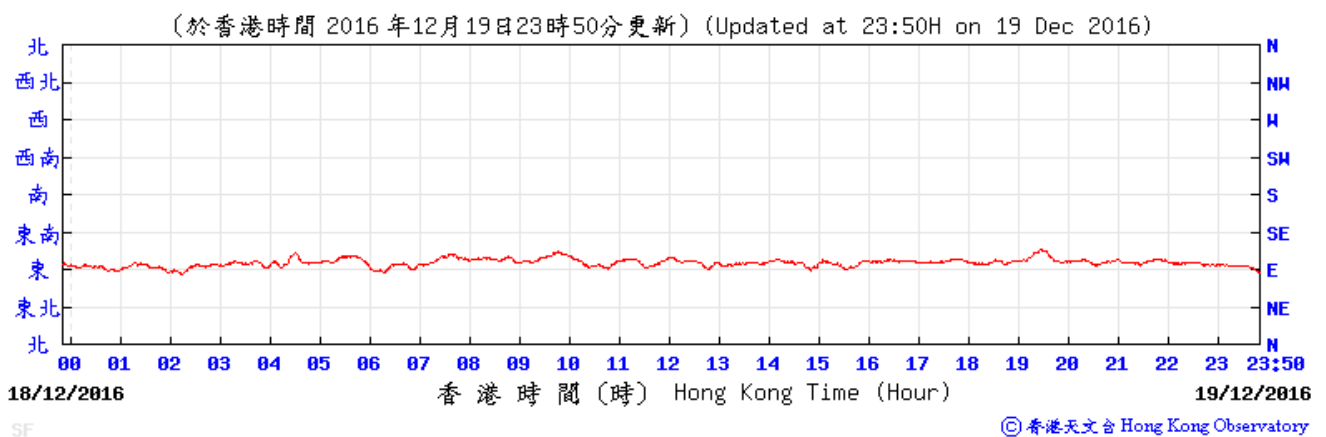
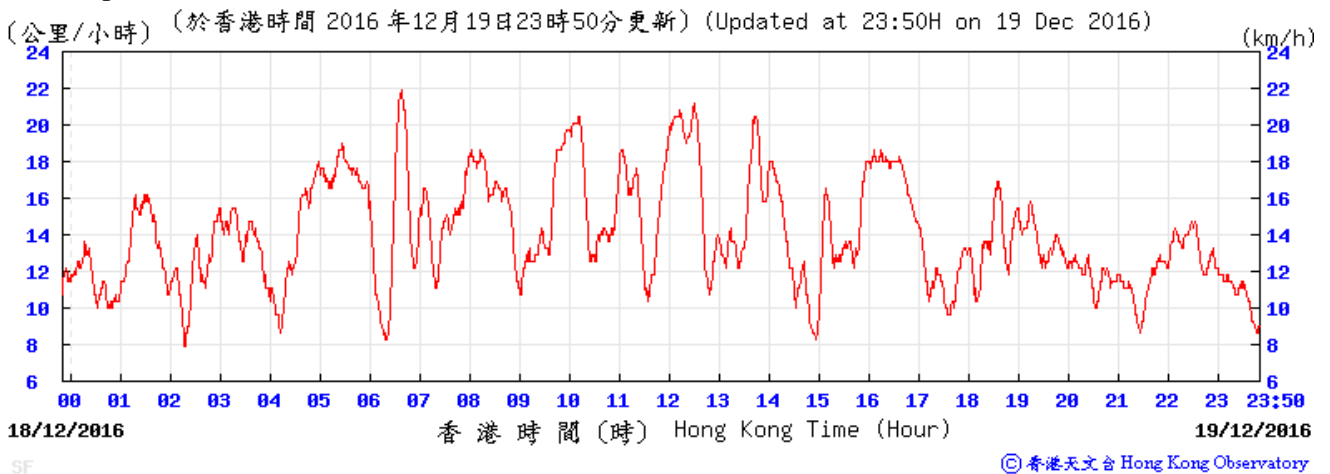
**Meteorological Data Recorded from HKO Station (19 December 2016)**

(Source: [www.hko.gov.hk](http://www.hko.gov.hk))

Temperature/Humidity:



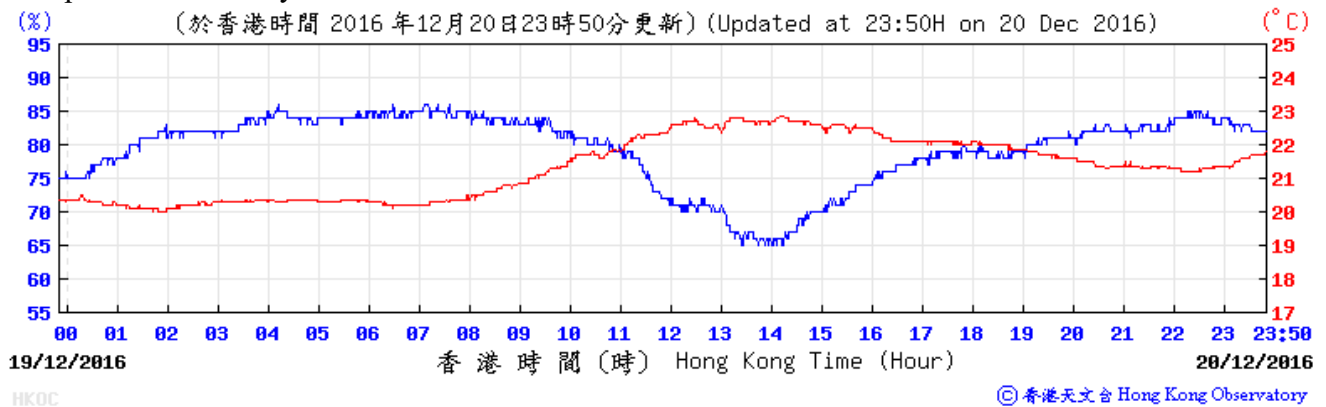
Wind Speed and Direction:



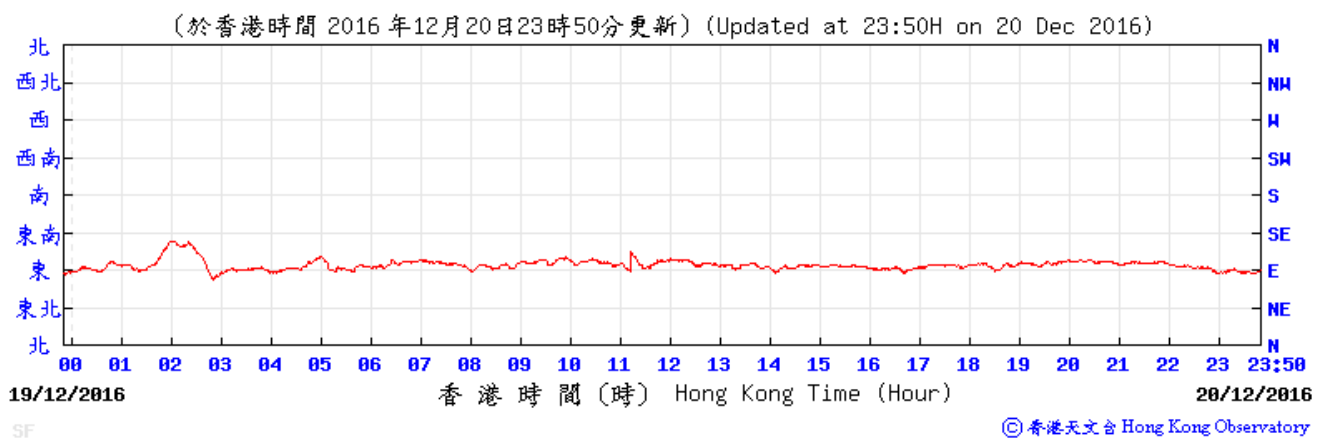
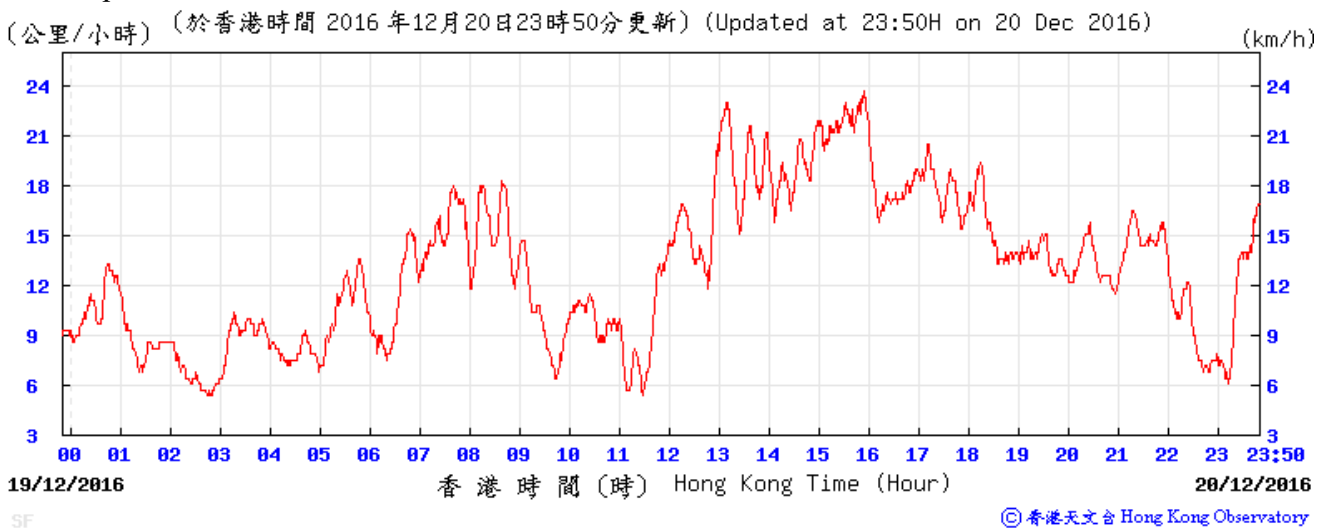
**Meteorological Data Recorded from HKO Station (20 December 2016)**

(Source: [www.hko.gov.hk](http://www.hko.gov.hk))

Temperature/Humidity:



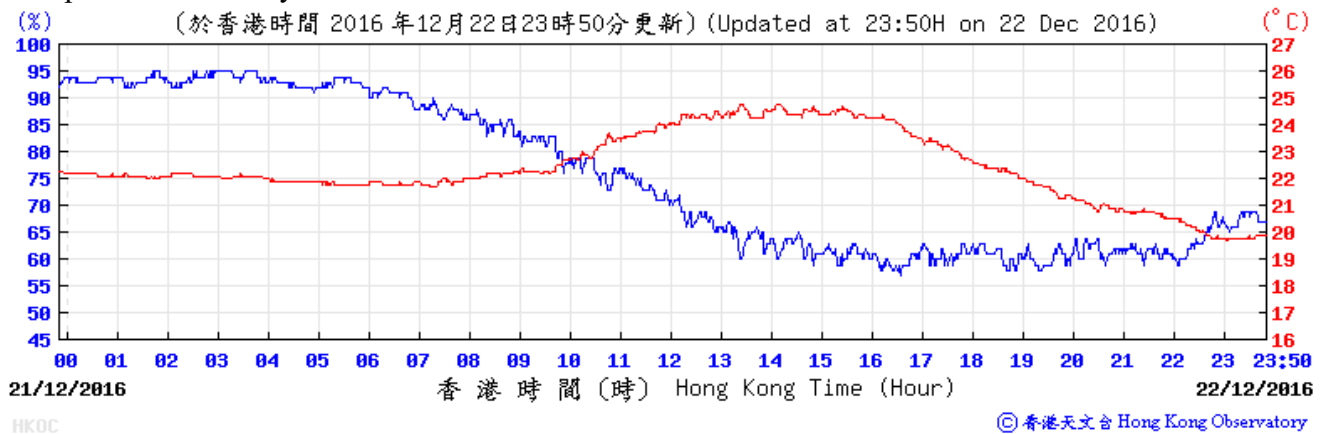
Wind Speed and Direction:



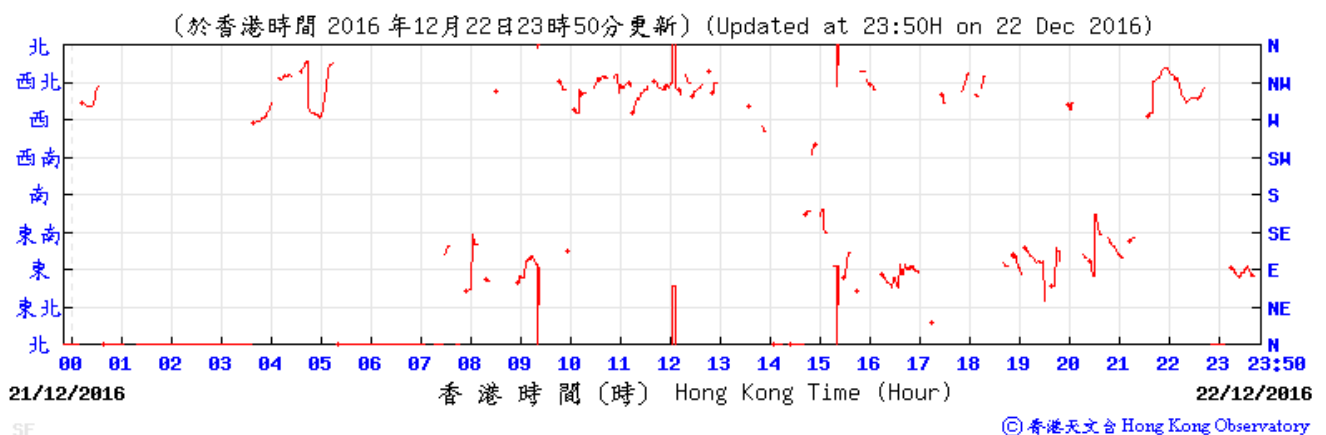
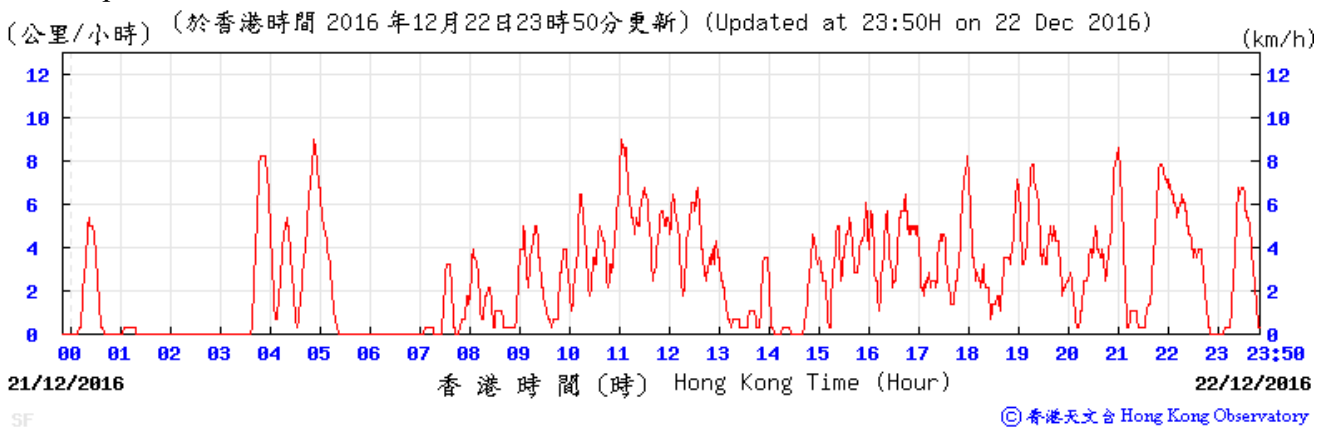
### Meteorological Data Recorded from HKO Station (22 December 2016)

(Source: [www.hko.gov.hk](http://www.hko.gov.hk))

#### Temperature/Humidity:



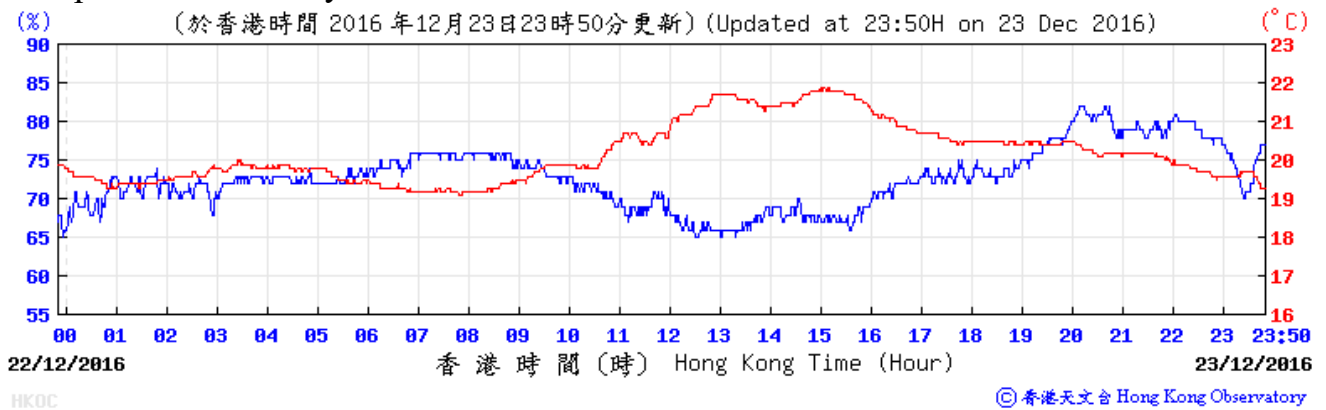
#### Wind Speed and Direction:



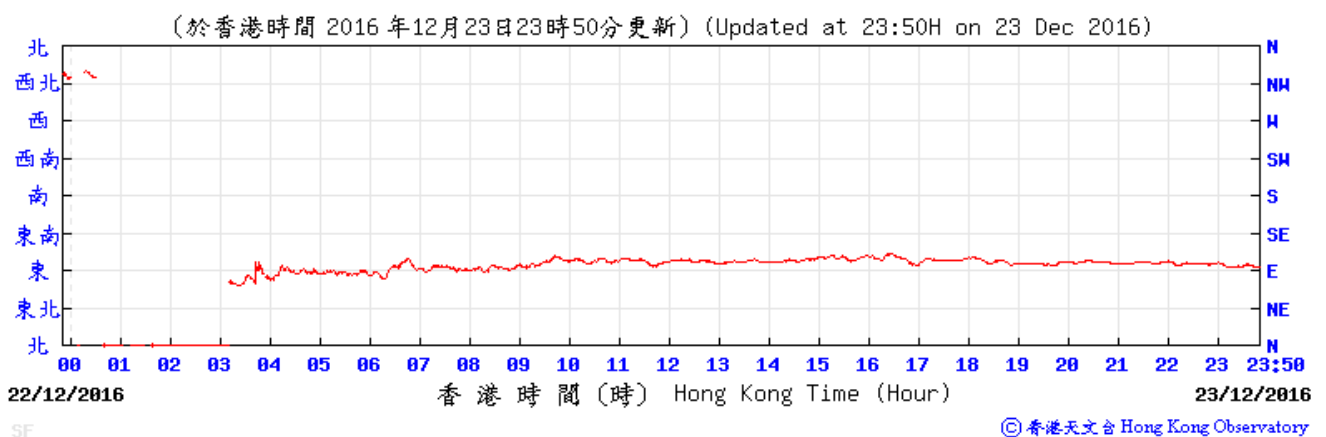
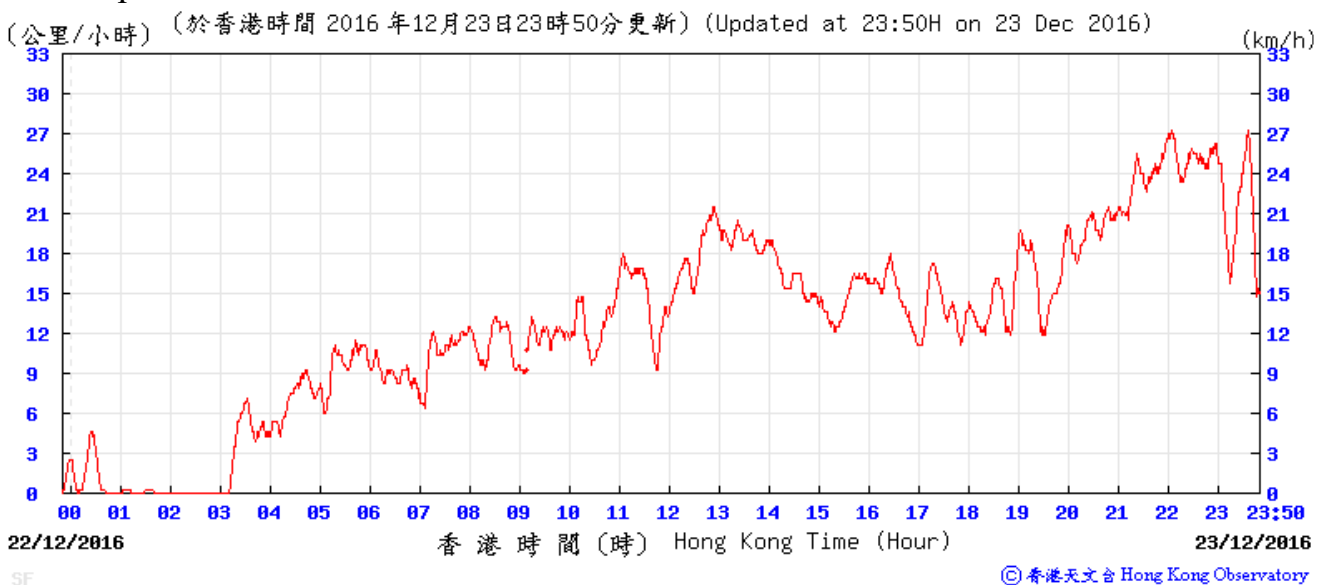
### Meteorological Data Recorded from HKO Station (23 December 2016)

(Source: [www.hko.gov.hk](http://www.hko.gov.hk))

#### Temperature/Humidity:



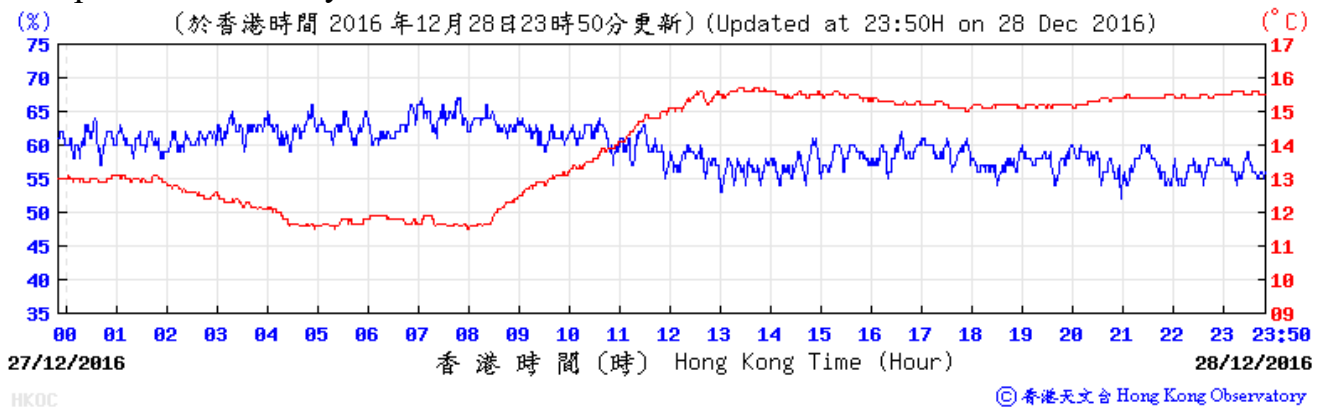
#### Wind Speed and Direction:



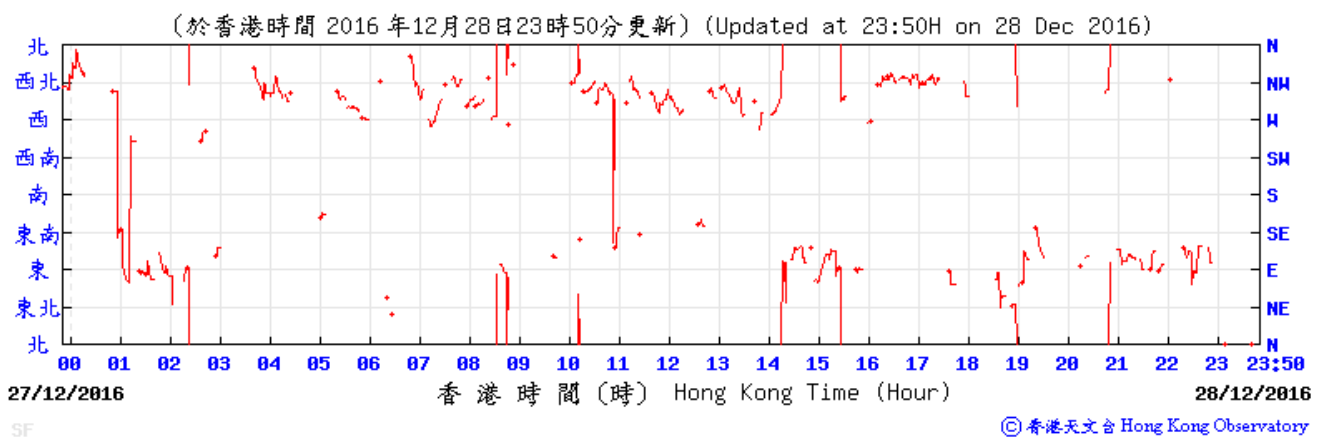
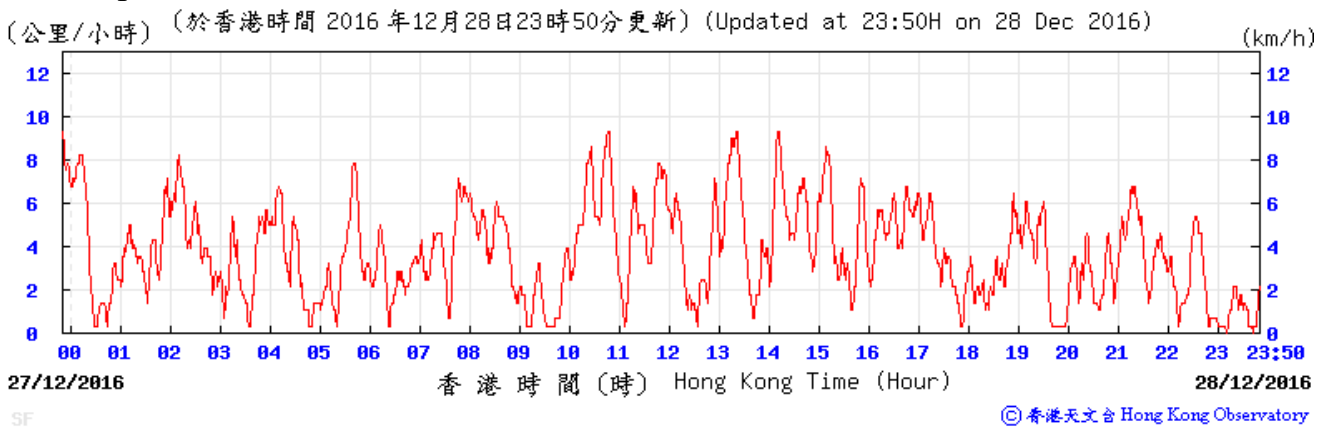
### Meteorological Data Recorded from HKO Station (28 December 2016)

(Source: [www.hko.gov.hk](http://www.hko.gov.hk))

#### Temperature/Humidity:



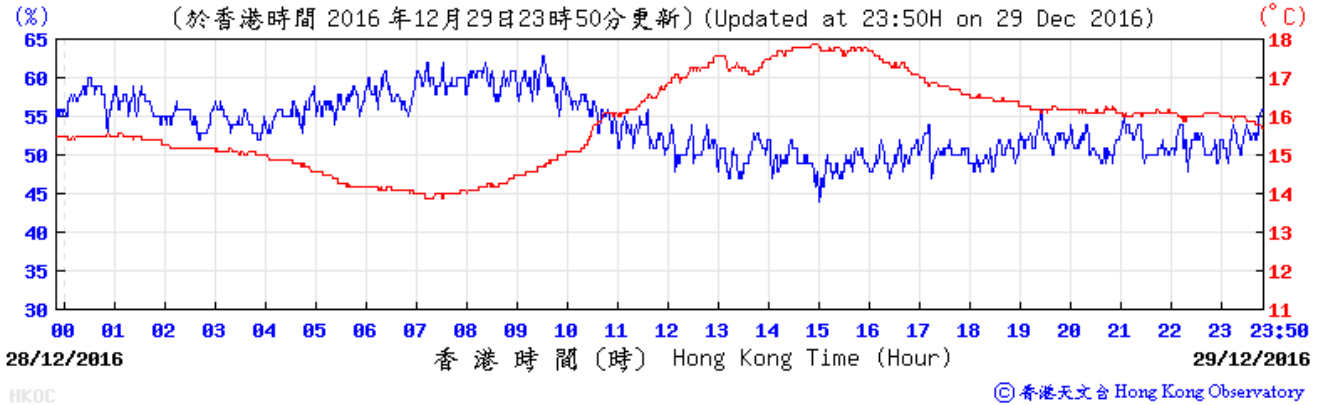
#### Wind Speed and Direction:



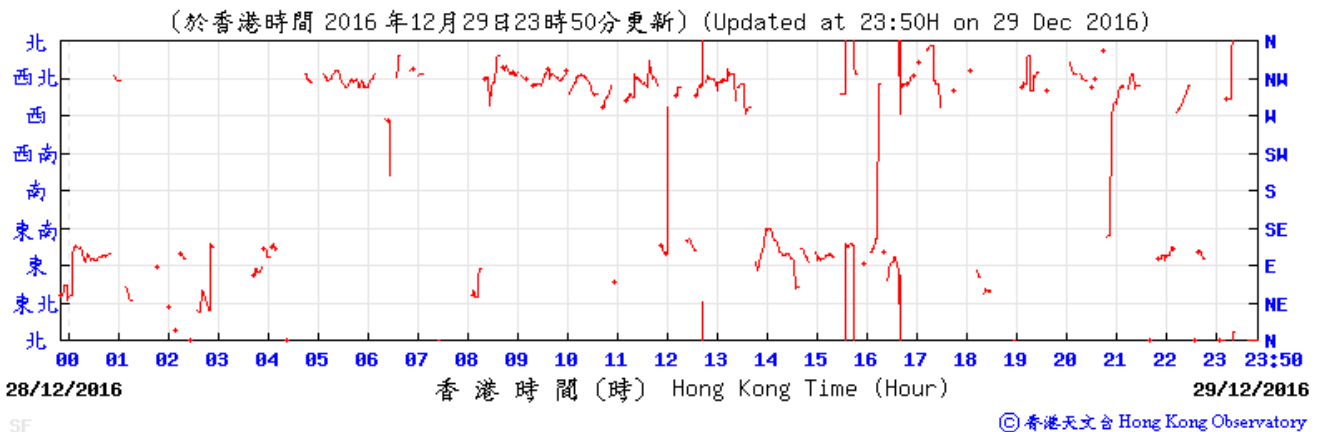
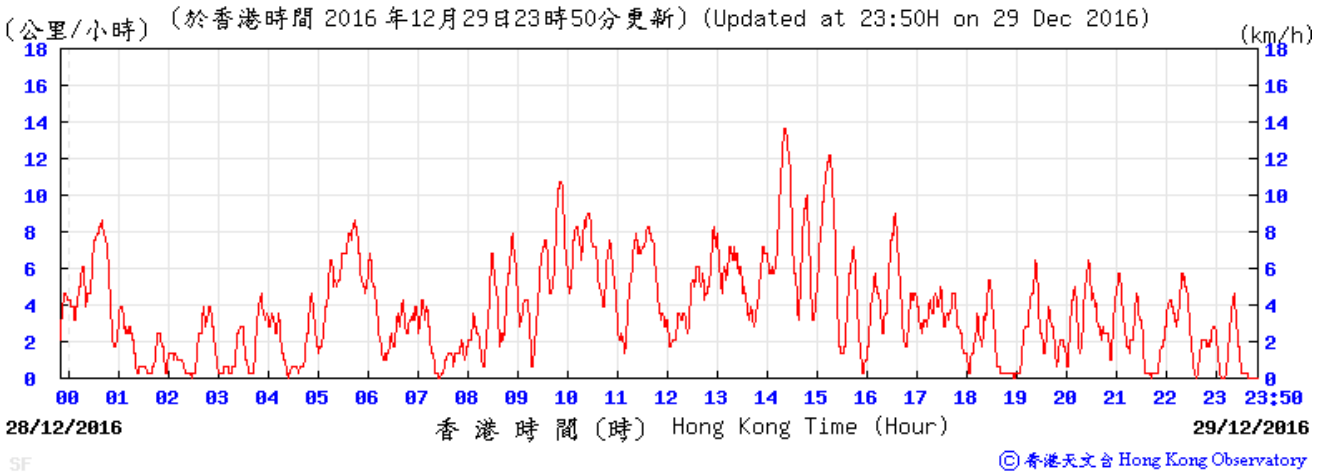
### Meteorological Data Recorded from HKO Station (29 December 2016)

(Source: [www.hko.gov.hk](http://www.hko.gov.hk))

#### Temperature/Humidity:



#### Wind Speed and Direction:





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**APPENDIX E  
1-HOUR AND 24-HOUR TSP  
MONITORING RESULTS AND  
GRAPHICAL PRESENTATIONS**

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## Appendix E - 1-hour TSP Monitoring Results

| Location AM1 - Chan's Creative School |       |         |  |
|---------------------------------------|-------|---------|--|
| Date                                  | Time  | Weather | Particulate Concentration ( $\mu\text{g}/\text{m}^3$ ) |
| 6-Dec-16                              | 9:00  | Cloudy  | 133.7  |
| 6-Dec-16                              | 10:00 | Cloudy  | 149.2  |
| 6-Dec-16                              | 11:00 | Cloudy  | 136.1  |
| 12-Dec-16                             | 13:00 | Sunny   | 190.8  |
| 12-Dec-16                             | 14:00 | Sunny   | 197.2  |
| 12-Dec-16                             | 15:00 | Sunny   | 208.4  |
| 15-Dec-16                             | 8:30  | Cloudy  | 147.9  |
| 15-Dec-16                             | 9:30  | Cloudy  | 153.5  |
| 15-Dec-16                             | 10:30 | Cloudy  | 152.8  |
| 20-Dec-16                             | 13:00 | Cloudy  | 109.9  |
| 20-Dec-16                             | 14:00 | Cloudy  | 108.9  |
| 20-Dec-16                             | 15:00 | Cloudy  | 109.6  |
| 23-Dec-16                             | 13:00 | Sunny   | 117.0  |
| 23-Dec-16                             | 14:00 | Sunny   | 122.7  |
| 23-Dec-16                             | 15:00 | Sunny   | 121.2  |
| 29-Dec-16                             | 13:00 | Sunny   | 183.8  |
| 29-Dec-16                             | 14:00 | Sunny   | 187.3  |
| 29-Dec-16                             | 15:00 | Sunny   | 180.1  |
|                                       |       | Average | 150.6  |
|                                       |       | Maximum | 208.4  |
|                                       |       | Minimum | 108.9  |

| Location AM2 - Hong Kong & Islands Regional Office, WSD |       |         |  |
|---|-------|---------|--|
| Date  | Time  | Weather | Particulate Concentration ( $\mu\text{g}/\text{m}^3$ ) |
| 6-Dec-16  | 9:00  | Cloudy  | 124.8  |
| 6-Dec-16  | 10:00 | Cloudy  | 130.1  |
| 6-Dec-16  | 11:00 | Cloudy  | 128.0  |
| 12-Dec-16   | 13:00 | Sunny   | 163.2  |
| 12-Dec-16   | 14:00 | Sunny   | 163.8  |
| 12-Dec-16   | 15:00 | Sunny   | 165.3  |
| 15-Dec-16   | 9:00  | Cloudy  | 181.3  |
| 15-Dec-16   | 9:00  | Cloudy  | 188.2  |
| 15-Dec-16   | 9:00  | Cloudy  | 184.4  |
| 20-Dec-16   | 9:00  | Cloudy  | 111.2  |
| 20-Dec-16   | 10:00 | Cloudy  | 110.2  |
| 20-Dec-16   | 11:00 | Cloudy  | 112.6  |
| 23-Dec-16   | 13:10 | Sunny   | 106.6  |
| 23-Dec-16   | 14:10 | Sunny   | 109.4  |
| 23-Dec-16   | 15:10 | Sunny   | 108.8  |
| 29-Dec-16   | 13:00 | Sunny   | 177.5  |
| 29-Dec-16   | 14:00 | Sunny   | 171.3  |
| 29-Dec-16   | 15:00 | Sunny   | 168.1  |
|   |       | Average | 144.7  |
|   |       | Maximum | 188.2  |
|   |       | Minimum | 106.6  |

## Appendix E - 1-hour TSP Monitoring Results

| Location AM3 - Wan Chai East PTW |       |         |  |
|----------------------------------|-------|---------|--|
| Date                             | Time  | Weather | Particulate Concentration ( $\mu\text{g}/\text{m}^3$ ) |
| 6-Dec-16                         | 13:00 | Cloudy  | 100.0  |
| 6-Dec-16                         | 14:00 | Cloudy  | 109.3  |
| 6-Dec-16                         | 15:00 | Cloudy  | 114.6  |
| 12-Dec-16                        | 8:40  | Sunny   | 162.0  |
| 12-Dec-16                        | 9:40  | Sunny   | 171.9  |
| 12-Dec-16                        | 10:40 | Sunny   | 170.8  |
| 15-Dec-16                        | 13:00 | Cloudy  | 180.0  |
| 15-Dec-16                        | 14:00 | Cloudy  | 186.4  |
| 15-Dec-16                        | 15:00 | Cloudy  | 187.1  |
| 20-Dec-16                        | 13:00 | Cloudy  | 105.2  |
| 20-Dec-16                        | 14:00 | Cloudy  | 103.1  |
| 20-Dec-16                        | 15:00 | Cloudy  | 104.7  |
| 23-Dec-16                        | 9:00  | Sunny   | 120.9  |
| 23-Dec-16                        | 10:00 | Sunny   | 121.9  |
| 23-Dec-16                        | 11:00 | Sunny   | 124.3  |
| 29-Dec-16                        | 13:00 | Sunny   | 164.0  |
| 29-Dec-16                        | 14:00 | Sunny   | 183.9  |
| 29-Dec-16                        | 15:00 | Sunny   | 166.7  |
|                                  |       | Average | 143.2  |
|                                  |       | Maximum | 187.1  |
|                                  |       | Minimum | 100.0  |

| Location AM4_2 - A Location next to Sheung Wan Fire Station |       |         |  |
|---|-------|---------|--|
| Date  | Time  | Weather | Particulate Concentration ( $\mu\text{g}/\text{m}^3$ ) |
| 6-Dec-16  | 13:00 | Cloudy  | 118.1  |
| 6-Dec-16  | 14:00 | Cloudy  | 121.9  |
| 6-Dec-16  | 15:00 | Cloudy  | 125.8  |
| 12-Dec-16   | 8:30  | Sunny   | 150.1  |
| 12-Dec-16   | 9:30  | Sunny   | 152.8  |
| 12-Dec-16   | 10:30 | Sunny   | 154.9  |
| 15-Dec-16   | 13:30 | Cloudy  | 208.4  |
| 15-Dec-16   | 14:30 | Cloudy  | 197.5  |
| 15-Dec-16   | 15:30 | Cloudy  | 209.4  |
| 20-Dec-16   | 9:00  | Cloudy  | 134.8  |
| 20-Dec-16   | 10:00 | Cloudy  | 129.8  |
| 20-Dec-16   | 11:00 | Cloudy  | 131.2  |
| 23-Dec-16   | 8:30  | Sunny   | 162.4  |
| 23-Dec-16   | 9:30  | Sunny   | 155.8  |
| 23-Dec-16   | 10:30 | Sunny   | 148.8  |
| 29-Dec-16   | 13:00 | Sunny   | 217.3  |
| 29-Dec-16   | 14:00 | Sunny   | 224.8  |
| 29-Dec-16   | 15:00 | Sunny   | 203.7  |
|   |       | Average | 163.8  |
|   |       | Maximum | 224.8  |
|   |       | Minimum | 118.1  |

## Appendix E - 24-hour TSP Monitoring Results

### Location AM1 - Chan's Creative School

| Start Date | Start Time | Weather Condition | Air Temp. (K) | Filter Weight (g) |        | Particulate Weight (g) | Elapse Time |        | Sampling Time(hrs.) | Flow Rate (m <sup>3</sup> /min.) |       | Av. flow (m <sup>3</sup> /min) | Total vol. (m <sup>3</sup> ) | Conc. (µg/m <sup>3</sup> ) | Filter ID no. |
|------------|------------|-------------------|---------------|-------------------|--------|------------------------|-------------|--------|---------------------|----------------------------------|-------|--------------------------------|------------------------------|----------------------------|---------------|
|            |            |                   |               | Initial           | Final  |                        | Initial     | Final  |                     | Initial                          | Final |                                |                              |                            |               |
| 5-Dec-16   | 9:00       | Sunny             | 295.0         | 3.6000            | 3.7454 | 0.1454                 | 1178.3      | 1202.3 | 24.0                | 1.22                             | 1.22  | 1.22                           | 1754.1                       | 82.9                       | 161201/011    |
| 9-Dec-16   | 9:00       | Sunny             | 289.9         | 3.5809            | 3.8628 | 0.2819                 | 1202.3      | 1226.3 | 24.0                | 1.23                             | 1.23  | 1.23                           | 1767.6                       | 159.5                      | 161202/059    |
| 14-Dec-16  | 9:00       | Sunny             | 293.3         | 3.6084            | 3.7463 | 0.1379                 | 1226.3      | 1250.3 | 24.0                | 1.22                             | 1.22  | 1.22                           | 1759.9                       | 78.4                       | 161103/060    |
| 19-Dec-16  | 9:00       | Sunny             | 294.5         | 3.6150            | 3.7448 | 0.1298                 | 1250.3      | 1274.3 | 24.0                | 1.22                             | 1.22  | 1.22                           | 1757.1                       | 73.9                       | 161203/049    |
| 22-Dec-16  | 9:00       | Sunny             | 294.8         | 3.6246            | 3.7101 | 0.0855                 | 1274.3      | 1298.3 | 24.0                | 1.22                             | 1.22  | 1.22                           | 1754.2                       | 48.7                       | 161203/010    |
| 28-Dec-16  | 9:00       | Sunny             | 284.7         | 3.5936            | 3.7091 | 0.1155                 | 1298.3      | 1322.3 | 24.0                | 1.24                             | 1.24  | 1.24                           | 1789.6                       | 64.5                       | 161203/024    |
|            |            |                   |               |                   |        |                        |             |        |                     |                                  |       |                                | Min                          | 48.7                       |               |
|            |            |                   |               |                   |        |                        |             |        |                     |                                  |       |                                | Max                          | 159.5                      |               |
|            |            |                   |               |                   |        |                        |             |        |                     |                                  |       |                                | Average                      | 84.6                       |               |

### Location AM2 - Hong Kong & Islands Regional Office, WSD

| Start Date | Start Time | Weather Condition | Air Temp. (K) | Filter Weight (g) |        | Particulate Weight (g) | Elapse Time |         | Sampling Time(hrs.) | Flow Rate (m <sup>3</sup> /min.) |       | Av. flow (m <sup>3</sup> /min) | Total vol. (m <sup>3</sup> ) | Conc. (µg/m <sup>3</sup> ) | Filter ID no. |
|------------|------------|-------------------|---------------|-------------------|--------|------------------------|-------------|---------|---------------------|----------------------------------|-------|--------------------------------|------------------------------|----------------------------|---------------|
|            |            |                   |               | Initial           | Final  |                        | Initial     | Final   |                     | Initial                          | Final |                                |                              |                            |               |
| 5-Dec-16   | 9:00       | Sunny             | 295.4         | 3.5167            | 3.7784 | 0.2617                 | 11458.0     | 11482.0 | 24.0                | 1.22                             | 1.22  | 1.22                           | 1751.8                       | 149.4                      | 161201/010    |
| 9-Dec-16   | 9:00       | Sunny             | 290.5         | 3.6116            | 3.8710 | 0.2594                 | 11482.0     | 11506.0 | 24.0                | 1.23                             | 1.23  | 1.23                           | 1765.9                       | 146.9                      | 161202/060    |
| 14-Dec-16  | 9:00       | Sunny             | 293.8         | 3.5994            | 3.8259 | 0.2265                 | 11506.0     | 11530.0 | 24.0                | 1.22                             | 1.22  | 1.22                           | 1758.7                       | 128.8                      | 161103/061    |
| 19-Dec-16  | 9:00       | Sunny             | 295.8         | 3.3151            | 3.5616 | 0.2465                 | 11530.0     | 11554.0 | 24.0                | 1.22                             | 1.22  | 1.22                           | 1751.9                       | 140.7                      | 161002/098    |
| 22-Dec-16  | 9:00       | Sunny             | 294.3         | 3.6244            | 3.7810 | 0.1566                 | 11554.0     | 11578.0 | 24.0                | 1.22                             | 1.22  | 1.22                           | 1754.7                       | 89.2                       | 161203/009    |
| 28-Dec-16  | 9:00       | Sunny             | 283.9         | 3.5712            | 3.7583 | 0.1871                 | 11578.0     | 11602.0 | 24.0                | 1.24                             | 1.24  | 1.24                           | 1791.7                       | 104.4                      | 161203/025    |
|            |            |                   |               |                   |        |                        |             |         |                     |                                  |       |                                | Min                          | 89.2                       |               |
|            |            |                   |               |                   |        |                        |             |         |                     |                                  |       |                                | Max                          | 149.4                      |               |
|            |            |                   |               |                   |        |                        |             |         |                     |                                  |       |                                | Average                      | 126.6                      |               |

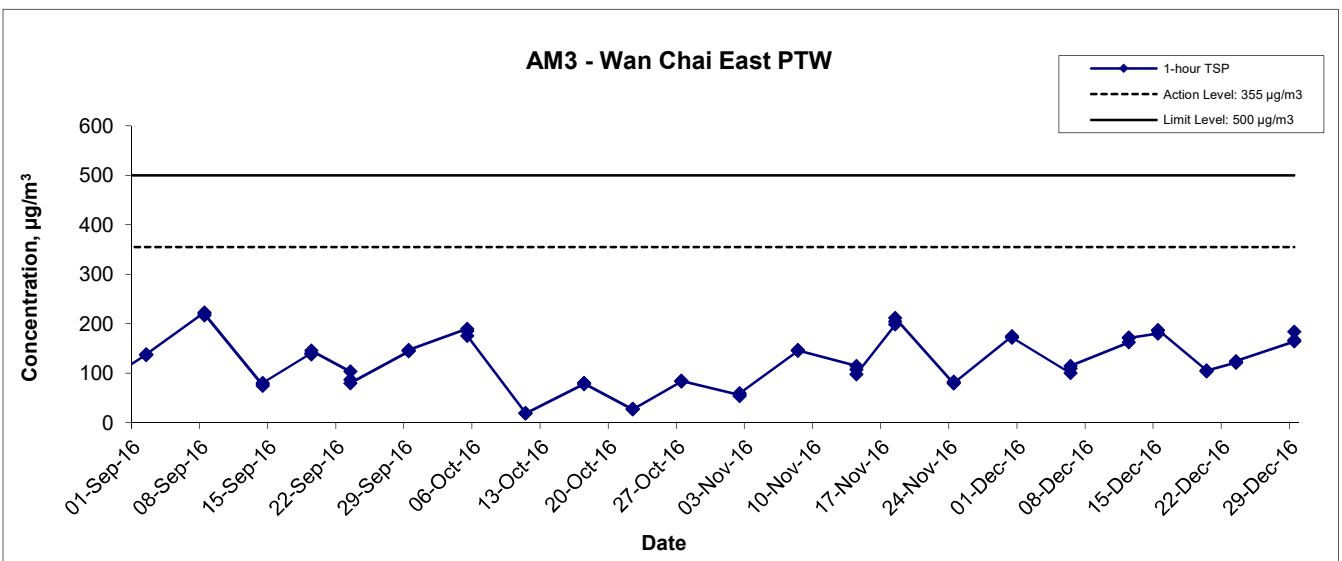
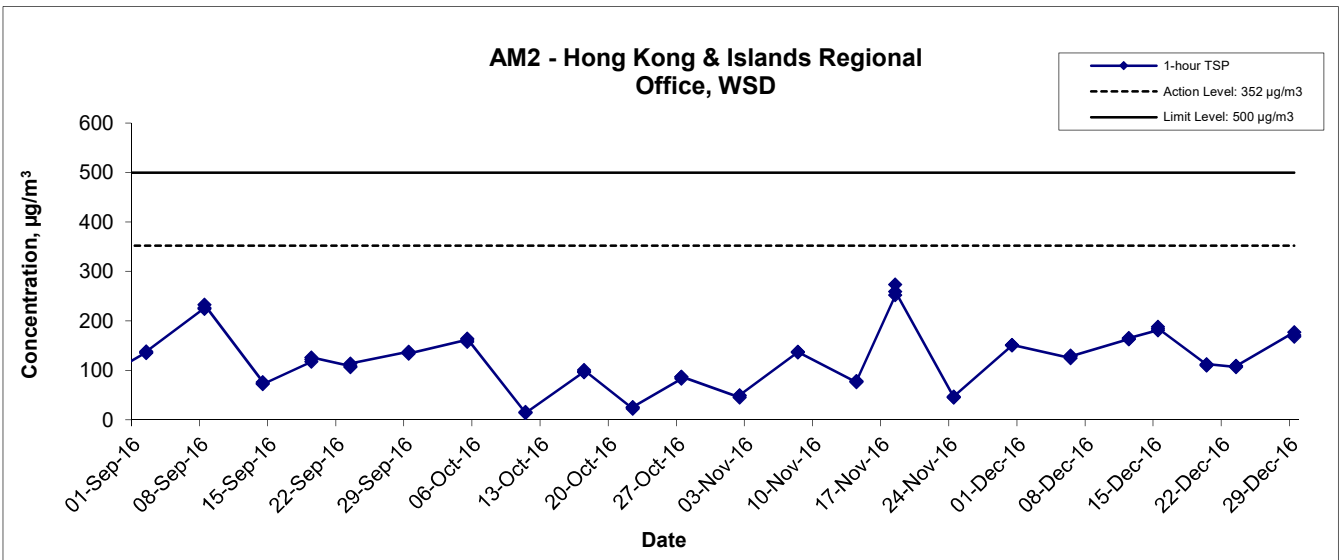
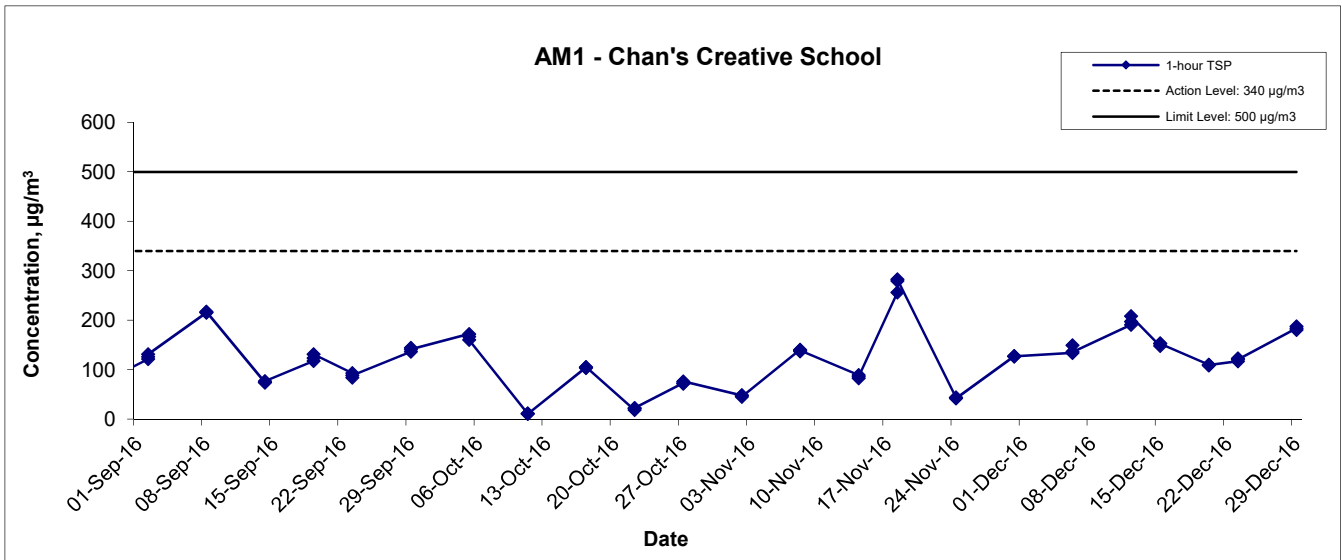
### Location AM3 - Wan Chai East PTW

| Start Date | Start Time | Weather Condition | Air Temp. (K) | Filter Weight (g) |        | Particulate Weight (g) | Elapse Time |        | Sampling Time(hrs.) | Flow Rate (m <sup>3</sup> /min.) |       | Av. flow (m <sup>3</sup> /min) | Total vol. (m <sup>3</sup> ) | Conc. (µg/m <sup>3</sup> ) | Filter ID no. |
|------------|------------|-------------------|---------------|-------------------|--------|------------------------|-------------|--------|---------------------|----------------------------------|-------|--------------------------------|------------------------------|----------------------------|---------------|
|            |            |                   |               | Initial           | Final  |                        | Initial     | Final  |                     | Initial                          | Final |                                |                              |                            |               |
| 5-Dec-16   | 9:00       | Sunny             | 294.9         | 3.6185            | 3.8635 | 0.2450                 | 7759.9      | 7783.9 | 24.0                | 1.23                             | 1.23  | 1.23                           | 1774.4                       | 138.1                      | 161201/012    |
| 9-Dec-16   | 9:00       | Sunny             | 290.3         | 3.5991            | 3.7770 | 0.1779                 | 7783.9      | 7807.9 | 24.0                | 1.24                             | 1.24  | 1.24                           | 1785.7                       | 99.6                       | 161202/061    |
| 14-Dec-16  | 9:00       | Sunny             | 293.4         | 3.5764            | 3.7556 | 0.1792                 | 7807.9      | 7831.9 | 24.0                | 1.24                             | 1.24  | 1.24                           | 1780.7                       | 100.6                      | 161202/083    |
| 19-Dec-16  | 9:00       | Sunny             | 294.7         | 3.5921            | 3.8323 | 0.2402                 | 7831.9      | 7855.9 | 24.0                | 1.23                             | 1.23  | 1.23                           | 1775.2                       | 135.3                      | 161204/027    |
| 22-Dec-16  | 9:00       | Sunny             | 293.6         | 3.6070            | 3.8047 | 0.1977                 | 7855.9      | 7879.9 | 24.0                | 1.23                             | 1.23  | 1.23                           | 1777.7                       | 111.2                      | 161203/011    |
| 28-Dec-16  | 9:00       | Sunny             | 284.4         | 3.6012            | 3.8457 | 0.2445                 | 7879.9      | 7903.9 | 24.0                | 1.26                             | 1.26  | 1.26                           | 1810.5                       | 135.0                      | 161203/026    |
|            |            |                   |               |                   |        |                        |             |        |                     |                                  |       |                                | Min                          | 99.6                       |               |
|            |            |                   |               |                   |        |                        |             |        |                     |                                  |       |                                | Max                          | 138.1                      |               |
|            |            |                   |               |                   |        |                        |             |        |                     |                                  |       |                                | Average                      | 120.0                      |               |

### Location AM4\_2 - A Location next to Sheung Wan Fire Station

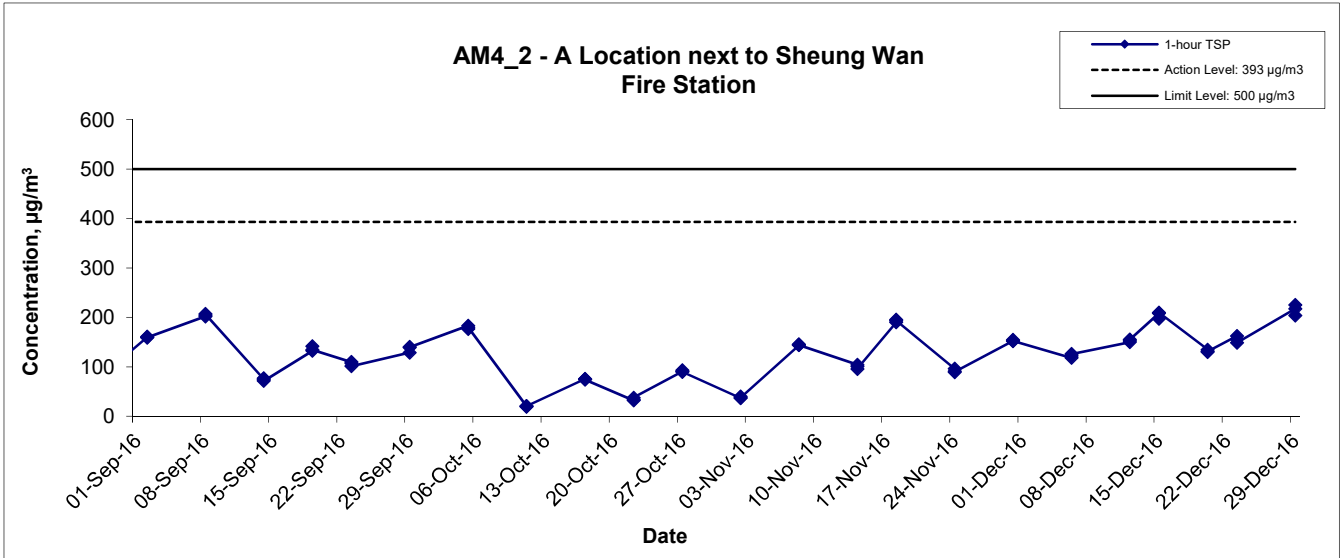
| Start Date | Start Time | Weather Condition | Air Temp. (K) | Filter Weight (g) |        | Particulate Weight (g) | Elapse Time |       | Sampling Time(hrs.) | Flow Rate (m <sup>3</sup> /min.) |       | Av. flow (m <sup>3</sup> /min) | Total vol. (m <sup>3</sup> ) | Conc. (µg/m <sup>3</sup> ) | Filter ID no. |
|------------|------------|-------------------|---------------|-------------------|--------|------------------------|-------------|-------|---------------------|----------------------------------|-------|--------------------------------|------------------------------|----------------------------|---------------|
|            |            |                   |               | Initial           | Final  |                        | Initial     | Final |                     | Initial                          | Final |                                |                              |                            |               |
| 5-Dec-16   | 9:00       | Sunny             | 295.8         | 3.6335            | 3.8456 | 0.2121                 | 674.0       | 698.0 | 24.0                | 1.24                             | 1.24  | 1.24                           | 1782.4                       | 119.0                      | 161201/013    |
| 9-Dec-16   | 9:00       | Sunny             | 289.6         | 3.6084            | 3.8538 | 0.2454                 | 698.0       | 722.0 | 24.0                | 1.25                             | 1.25  | 1.25                           | 1798.8                       | 136.4                      | 161202/062    |
| 14-Dec-16  | 9:00       | Sunny             | 293.3         | 3.6065            | 3.8626 | 0.2561                 | 722.0       | 746.0 | 24.0                | 1.24                             | 1.24  | 1.24                           | 1790.1                       | 143.1                      | 161103/058    |
| 19-Dec-16  | 9:00       | Sunny             | 294.1         | 3.5820            | 3.7788 | 0.1968                 | 744.2       | 768.2 | 24.0                | 1.24                             | 1.24  | 1.24                           | 1786.7                       | 110.1                      | 161203/051    |
| 22-Dec-16  | 9:00       | Sunny             | 294.5         | 3.6111            | 3.8161 | 0.2050                 | 768.2       | 792.2 | 24.0                | 1.24                             | 1.24  | 1.24                           | 1785.2                       | 114.8                      | 161203/008    |
| 28-Dec-16  | 9:00       | Sunny             | 283.4         | 3.5992            | 3.8070 | 0.2078                 | 792.2       | 816.2 | 24.0                | 1.27                             | 1.27  | 1.27                           | 1824.0                       | 113.9                      | 161103/053    |
|            |            |                   |               |                   |        |                        |             |       |                     |                                  |       |                                | Min                          | 110.1                      |               |
|            |            |                   |               |                   |        |                        |             |       |                     |                                  |       |                                | Max                          | 143.1                      |               |
|            |            |                   |               |                   |        |                        |             |       |                     |                                  |       |                                | Average                      | 122.9                      |               |

### 1-hr TSP Concentration Levels



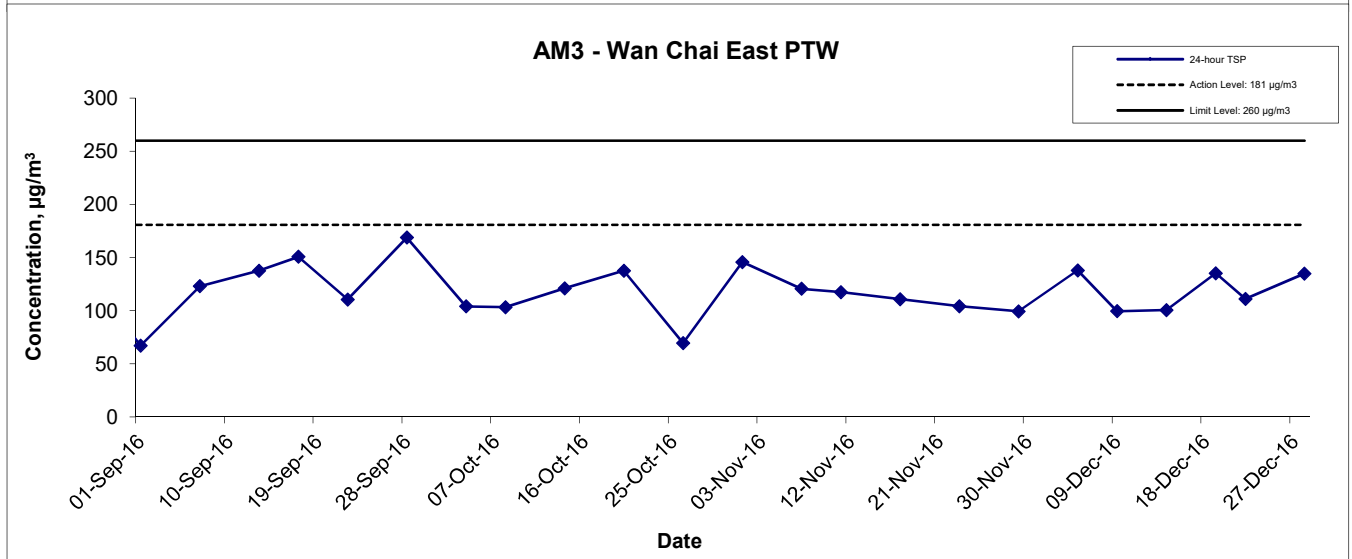
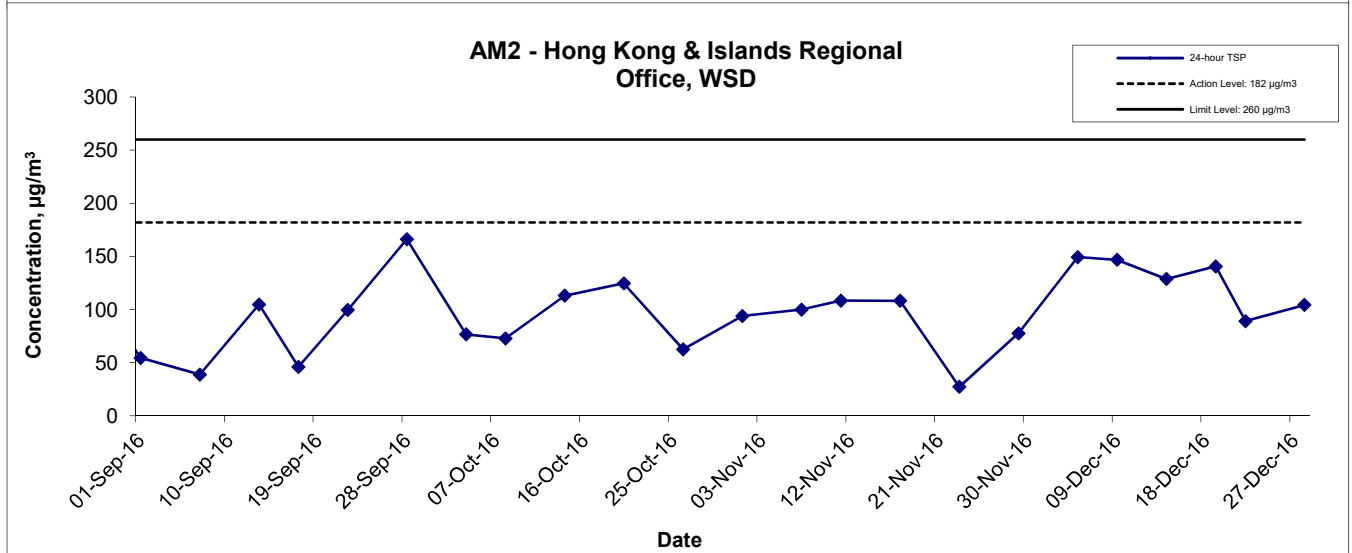
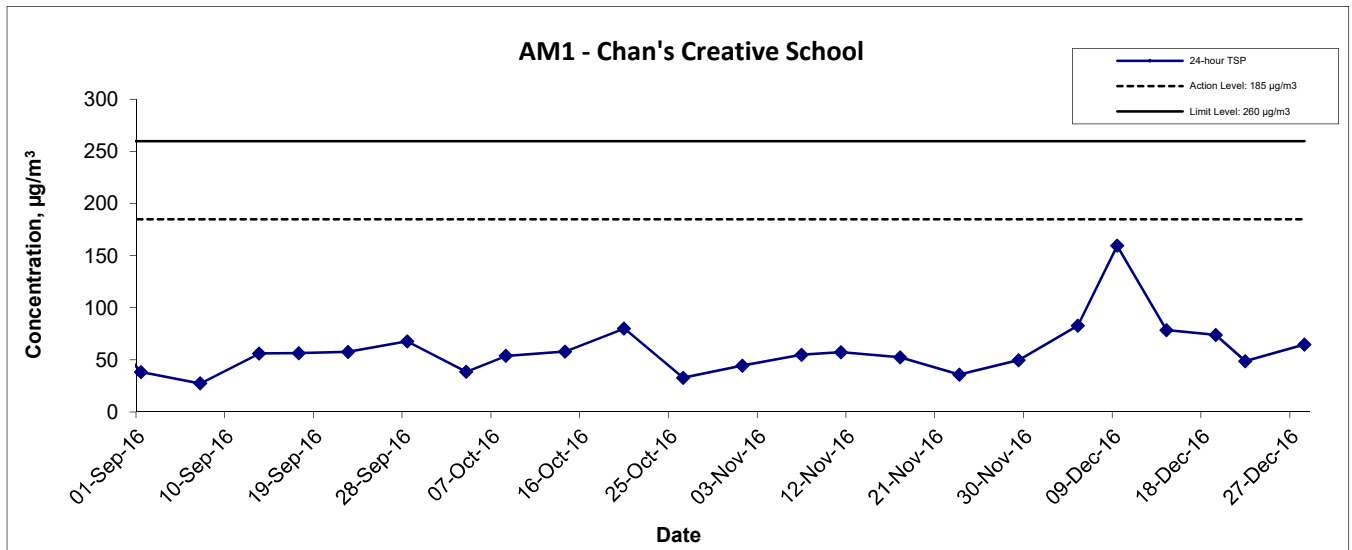
|   |  |  |          |                     |  |                 |
|---|--|--|----------|---------------------|--|-----------------|
| Title   | Contract No. DC/2009/23  |  | Scale    | Project No. MA11003 |  | <b>CINOTECH</b> |
|   | HATS 2A – Upgrading of Preliminary Treatment Works at North Point, Wan Chai East and Central |  |          | N.T.S               |  |                 |
| Graphical Presentation of 1-hour TSP Monitoring Results | Date   |  | Appendix |                     |  |                 |
|   | Dec 16   |  | E        |                     |  |                 |

### 1-hr TSP Concentration Levels



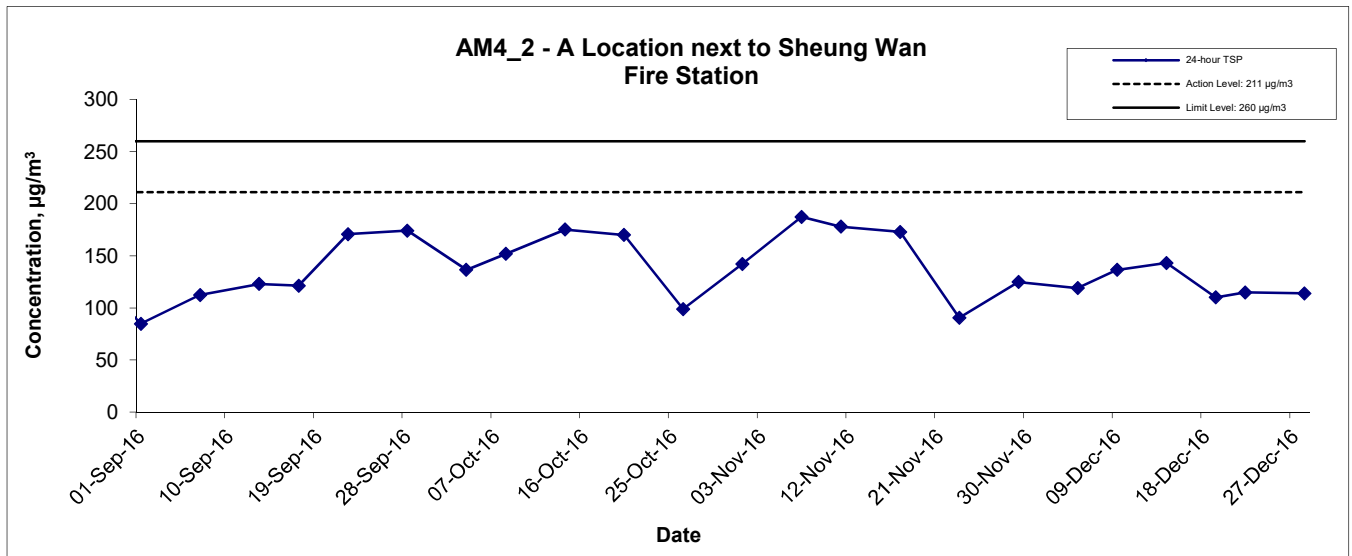
|   |                |                        |  |
|---|----------------|------------------------|--|
| Title<br>Contract No. DC/2009/23<br>HATS 2A – Upgrading of Preliminary Treatment Works at North Point, Wan Chai East and Central<br>Graphical Presentation of 1-hour TSP Monitoring Results | Scale<br>N.T.S | Project No.<br>MA11003 |  |
|   | Date<br>Dec 16 | Appendix<br>E          |  |

## 24-hr TSP Concentration Levels



|  |       |                 |  |
|--|-------|-----------------|--|
| Title<br>Contract No. DC/2009/23<br>HATS 2A – Upgrading of Preliminary Treatment Works at North Point, Wan Chai East and Central<br>Graphical Presentation of 24-hour TSP Monitoring Results | Scale | Project No.     |  |
|  | Date  | N.T.S<br>Dec-16 |  |

### 24-hr TSP Concentration Levels



|  |                |                        |  |
|--|----------------|------------------------|--|
| Title<br>Contract No. DC/2009/23<br>HATS 2A – Upgrading of Preliminary Treatment Works at North Point, Wan Chai East and Central<br>Graphical Presentation of 24-hour TSP Monitoring Results | Scale<br>N.T.S | Project No.<br>MA11003 |  |
|  | Date<br>Dec-16 | Appendix<br>E          |  |



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**APPENDIX F  
NOISE MONITORING RESULTS AND  
GRAPHICAL PRESENTATIONS**

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## Appendix F - Noise Monitoring Results

(0700-1900 hrs on Normal Weekdays)

| Location NM1 - Chan's Creative School |       |         |                       |                 |                 |
|---------------------------------------|-------|---------|-----------------------|-----------------|-----------------|
| Date                                  | Time  | Weather | Unit: dB (A) (30-min) |                 |                 |
|                                       |       |         | Measured Noise Level  |                 |                 |
|                                       |       |         | L <sub>eq</sub>       | L <sub>10</sub> | L <sub>90</sub> |
| 6-Dec-16                              | 9:10  | Cloudy  | 68.9                  | 70.1            | 66.8            |
| 12-Dec-16                             | 13:25 | Sunny   | 70.3                  | 71.8            | 68.0            |
| 20-Dec-16                             | 13:30 | Cloudy  | 66.9                  | 68.8            | 64.1            |
| 29-Dec-16                             | 13:15 | Sunny   | 67.0                  | 68.7            | 64.6            |

| Location NM2 - Hyde Building |       |         |                       |                 |                 |
|------------------------------|-------|---------|-----------------------|-----------------|-----------------|
| Date                         | Time  | Weather | Unit: dB (A) (30-min) |                 |                 |
|                              |       |         | Measured Noise Level  |                 |                 |
|                              |       |         | L <sub>eq</sub>       | L <sub>10</sub> | L <sub>90</sub> |
| 6-Dec-16                     | 14:30 | Cloudy  | 75.1                  | 76.6            | 74.0            |
| 12-Dec-16                    | 11:05 | Sunny   | 73.0                  | 73.9            | 72.0            |
| 20-Dec-16                    | 11:00 | Cloudy  | 74.6                  | 75.8            | 72.4            |
| 29-Dec-16                    | 13:15 | Sunny   | 73.1                  | 74.2            | 72.0            |

| Location NM3 - Goldfield Building |       |         |                       |                 |                 |
|-----------------------------------|-------|---------|-----------------------|-----------------|-----------------|
| Date                              | Time  | Weather | Unit: dB (A) (30-min) |                 |                 |
|                                   |       |         | Measured Noise Level  |                 |                 |
|                                   |       |         | L <sub>eq</sub>       | L <sub>10</sub> | L <sub>90</sub> |
| 6-Dec-16                          | 13:15 | Cloudy  | 71.4                  | 73.8            | 69.8            |
| 12-Dec-16                         | 9:10  | Sunny   | 65.5                  | 67.4            | 63.1            |
| 20-Dec-16                         | 9:30  | Cloudy  | 74.4                  | 75.8            | 72.9            |
| 29-Dec-16                         | 15:15 | Sunny   | 75.8                  | 77.4            | 74.0            |

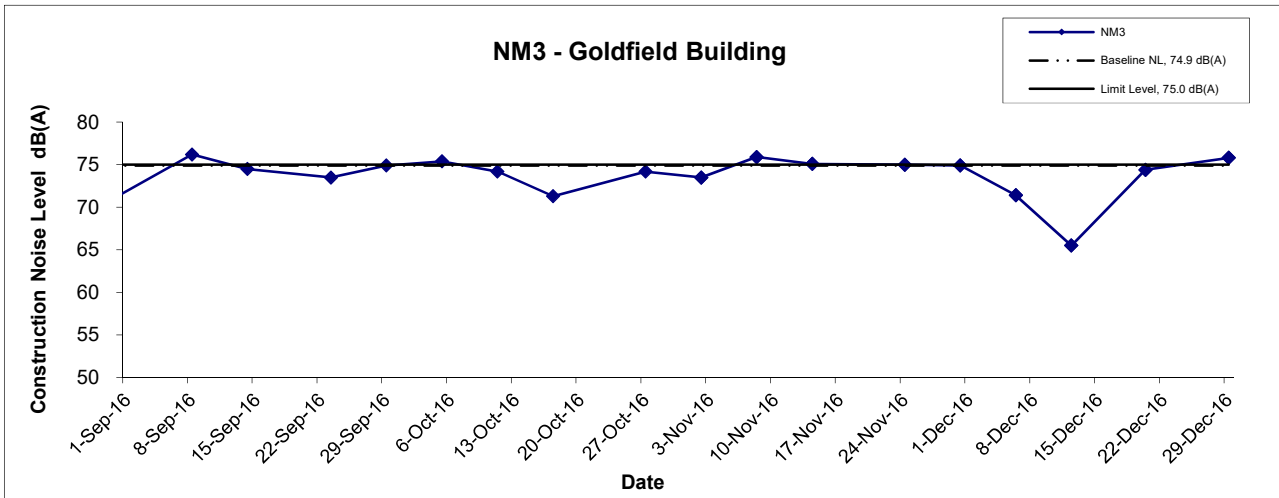
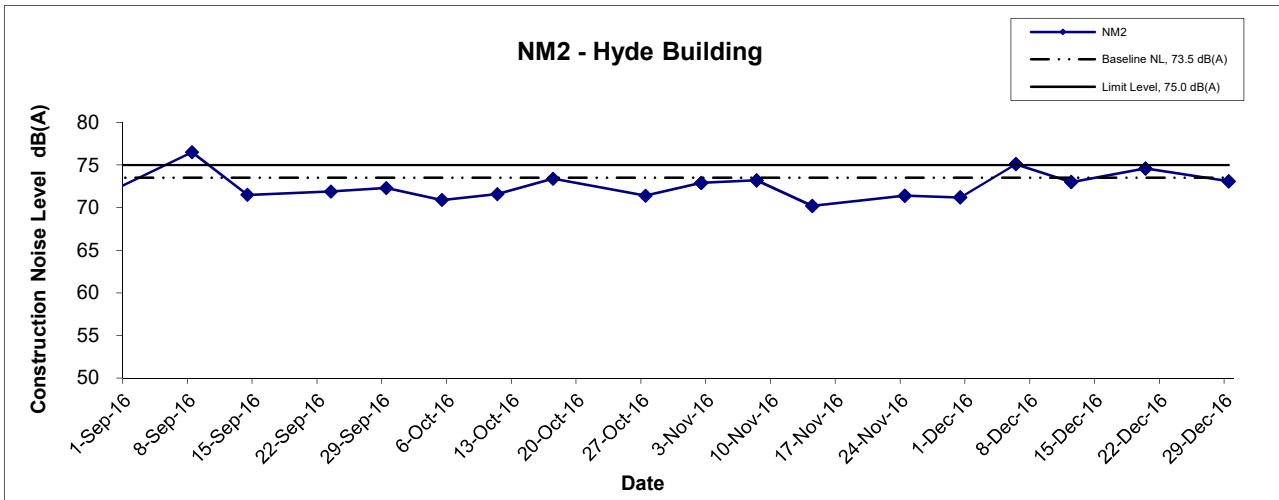
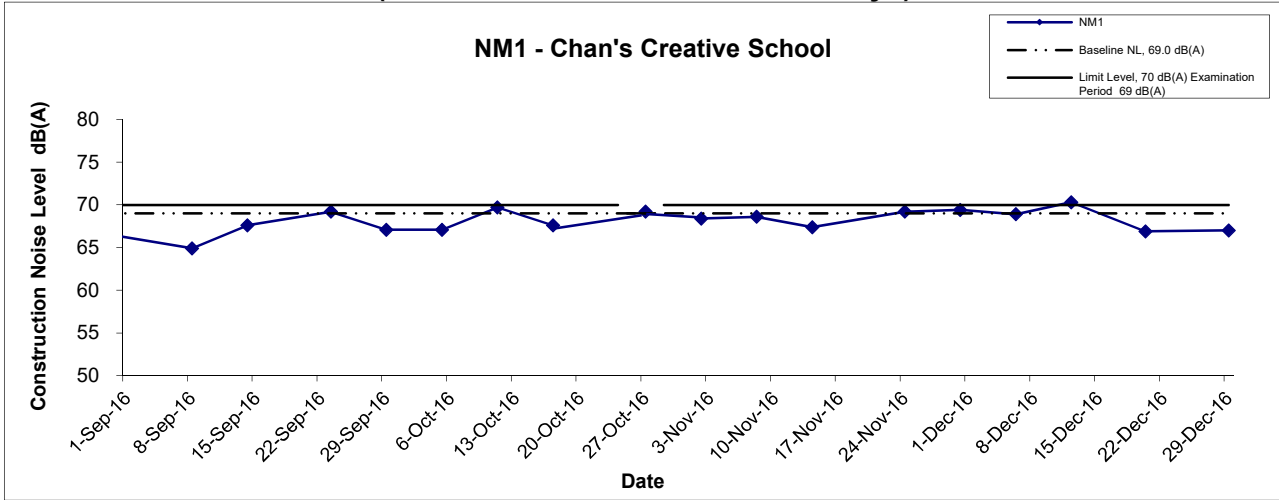
(Restricted Hours - 07:00 to 23:00 holidays & 19:00 to 23:00 on all other days )

| Location NM1 - Chan's Creative School |       |         |                 |                 |                 |
|---------------------------------------|-------|---------|-----------------|-----------------|-----------------|
| Date                                  | Time  | Weather | dB (A) (5-min)  |                 |                 |
|                                       |       |         | L <sub>eq</sub> | L <sub>10</sub> | L <sub>90</sub> |
| 4-Dec-16                              | 13:00 | Cloudy  | 68.2            | 71.3            | 65.0            |
|                                       | 13:05 |         | 67.9            | 70.8            | 64.7            |
|                                       | 13:10 |         | 68.5            | 71.5            | 65.1            |
| 12-Dec-16                             | 19:45 | Sunny   | 72.9            | 73.9            | 72.0            |
|                                       | 19:50 |         | 72.8            | 73.9            | 72.1            |
|                                       | 19:55 |         | 72.8            | 73.9            | 72.1            |
| 18-Dec-16                             | 13:00 | Sunny   | 67.6            | 69.2            | 64.7            |
|                                       | 13:05 |         | 68.0            | 69.9            | 64.9            |
|                                       | 13:10 |         | 68.6            | 70.4            | 65.3            |
| 29-Dec-16                             | 19:25 | Fine    | 66.6            | 68.7            | 59.2            |
|                                       | 19:30 |         | 67.6            | 70.4            | 61.2            |
|                                       | 19:35 |         | 68.1            | 71.0            | 60.7            |

| Location NM2 - Hyde Building |       |         |                 |                 |                 |
|------------------------------|-------|---------|-----------------|-----------------|-----------------|
| Date                         | Time  | Weather | dB (A) (5-min)  |                 |                 |
|                              |       |         | L <sub>eq</sub> | L <sub>10</sub> | L <sub>90</sub> |
| 4-Dec-16                     | 14:00 | Cloudy  | 69.4            | 70.9            | 68.0            |
|                              | 14:05 |         | 70.4            | 71.6            | 68.2            |
|                              | 14:10 |         | 69.6            | 70.8            | 68.0            |
| 12-Dec-16                    | 19:00 | Sunny   | 68.8            | 71.4            | 66.1            |
|                              | 19:05 |         | 68.9            | 71.4            | 66.1            |
|                              | 19:10 |         | 68.8            | 71.5            | 66.1            |
| 18-Dec-16                    | 14:00 | Sunny   | 69.4            | 70.9            | 65.8            |
|                              | 14:05 |         | 69.6            | 70.5            | 66.9            |
|                              | 14:10 |         | 68.4            | 70.4            | 65.9            |
| 29-Dec-16                    | 20:00 | Fine    | 71.1            | 72.0            | 70.1            |
|                              | 20:05 |         | 71.1            | 71.9            | 70.1            |
|                              | 20:10 |         | 71.4            | 72.8            | 70.1            |

## Noise Levels

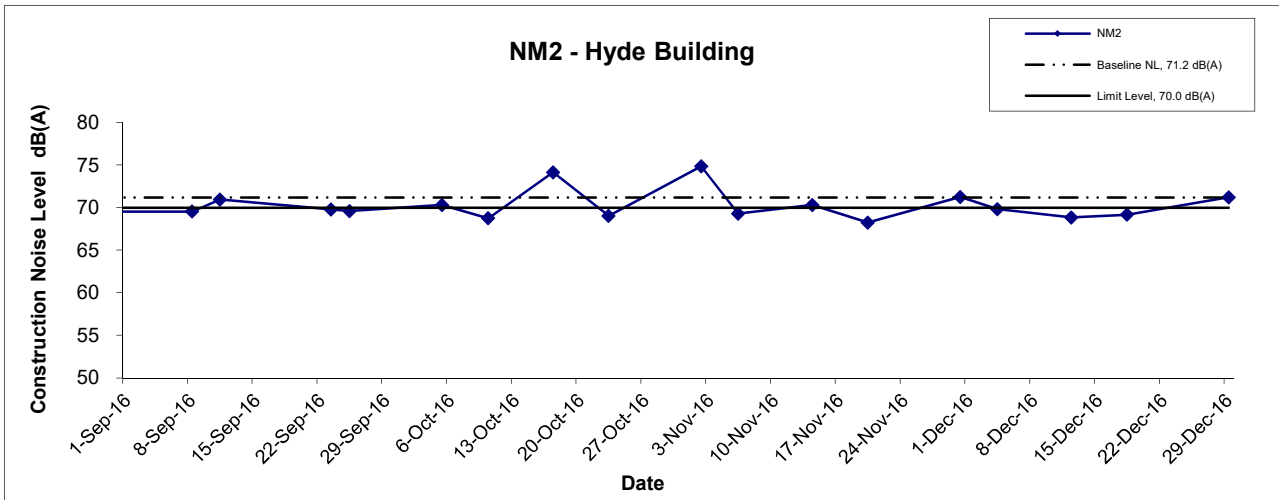
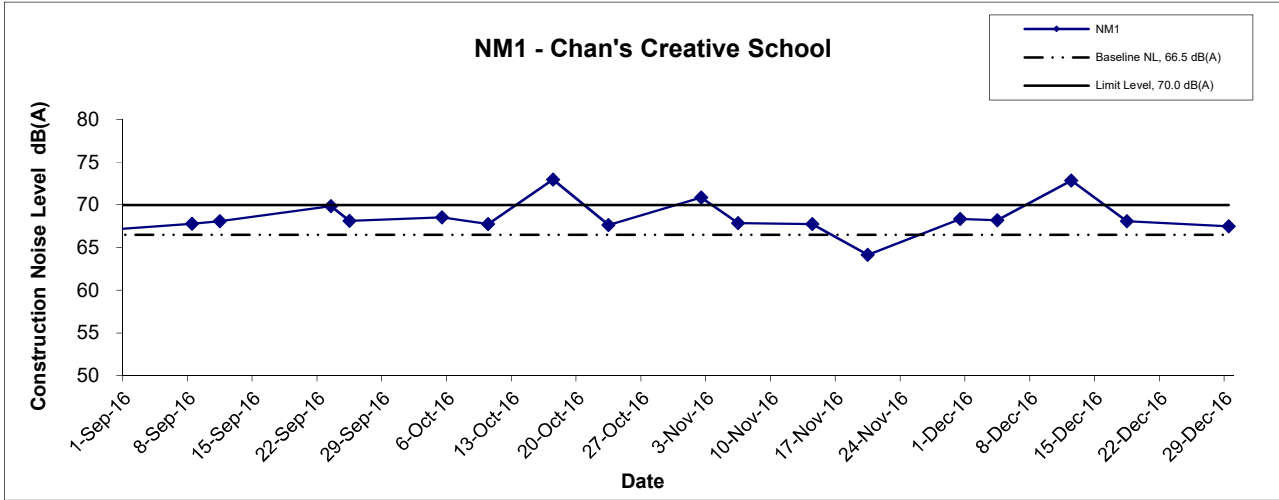
**(0700-1900 hrs on Normal Weekdays)**



|   |                |                        |  |
|---|----------------|------------------------|--|
| Title<br>Contract No. DC/2009/23<br>HATS 2A – Upgrading Works at North Point,<br>Wan Chai East and Central<br><br>Graphical Presentation of Noise Monitoring Result | Scale<br>N.T.S | Project<br>No. MA11003 |  |
|   | Date<br>Dec 16 | Appendix<br>F          |  |

## Noise Levels

**(Restricted Hours - 07:00 - 23:00 holidays & 19:00 - 23:00 on all other days )**



|   |                |                        |  |
|---|----------------|------------------------|--|
| Title<br>Contract No. DC/2009/23<br>HATS 2A – Upgrading Works at North Point,<br>Wan Chai East and Central<br><br>Graphical Presentation of Noise Monitoring Result | Scale<br>N.T.S | Project<br>No. MA11003 |  |
|   | Date<br>Dec 16 | Appendix<br>F          |  |

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**APPENDIX G**  
**SUMMARY OF EXCEEDANCE**

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## APPENDIX G – SUMMARY OF EXCEEDANCE

**Reporting Month:** December 2016

- a) Exceedance Report for 1-hr TSP (NIL)**
- b) Exceedance Report for 24-hr TSP (NIL)**
- c) Exceedance Report for Construction Noise (6)**

No Action Level exceedance was recorded, two non-project related Limit Level exceedance were recorded during the daytime noise monitoring on 12<sup>th</sup> December 2016 and during the restricted hour noise monitoring on 12<sup>th</sup> December 2016 by the ET of this Project at NM1; three non-project related Limit Level exceedances were recorded during the daytime noise monitoring on 6<sup>th</sup> December 2016 and during the restricted hour noise monitoring on 4<sup>th</sup> & 29<sup>th</sup> December 2016 by the ET of this Project at NM2; and one non-project related Limit Level exceedances was recorded during the daytime noise monitoring on 29<sup>th</sup> December 2016 by the ET of this Project at NM3.

According to the information provided by the Contractor, no construction plant for the Contract No. DC/2009/23 was operated during the daytime period on 12<sup>th</sup> December 2016 at North Point Preliminary Treatment Works under DC/2009/23, on 6<sup>th</sup> December 2016 at Wan Chai East Preliminary Treatment Works under DC/2009/23, on 29<sup>th</sup> December 2016 at Central Preliminary Treatment Works under DC/2009/23; and no construction works were carried out during the restricted hours period on 12<sup>th</sup> December 2016 at North Point Preliminary Treatment Works under DC/2009/23, on 4<sup>th</sup> & 29<sup>th</sup> December 2016 at Wan Chai East Preliminary Treatment Works under DC/2009/23.

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**APPENDIX H**  
**SUMMARY OF EXCEEDANCE REPORT**

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**Contract No. DC/2009/23 – HATS Stage 2A**

**Upgrading of Preliminary Treatment Works at North Point, Wan Chai East and Central**  
Report No. 161204\_noise\_NM2\_RN

Date of Measurement: 4<sup>th</sup> December 2016

Time of Measurement: 14:00 (3 consecutive 5-min measurements)

| Location | Parameter          | Measured Level (Leq dB(A)) | Action Level                              | Limit Level (Leq dB(A)) | Level exceeded |
|----------|--------------------|----------------------------|---|-------------------------|----------------|
| NM2      | Construction Noise | 69.4                       | When one documented complaint is received | 70.0*                   | Limit          |
|          |                    | 70.4                       |   |                         |                |
|          |                    | 69.6                       |   |                         |                |

\* 70dB (A) was adopted as the Limit Level during restricted hours in December 2016.

**Remarks**

(a) Statement of exceedance(s)

Construction noise measured at NM2(Wan Chai East PTW) - The roof of Hyde Building exceeded the construction noise limit (70dB(A)) during the restricted hour (07:00 to 23:00 holidays & 19:00 to 23:00 on all other days).

(b) Cause of exceedance(s)

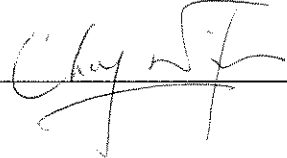
The exceedance was considered not due to the Contract No. DC/2009/23 based on the following reason(s):-

- 1) During the continuous measurements, the major noise source was the traffic noise.
- 2) According to information provided by the Contractor, no construction works for the Contract No. DC/2009/23 was carried out during the restricted hours noise monitoring.
- 3) Comparing with the similar monitoring period during the baseline noise monitoring, the average of the noise level on 4<sup>th</sup> December 2016 is well within the range of baseline noise levels (68.6 – 76.8dB(A)).

Therefore, the exceedance was considered to be non-project related.

(c) Conclusions and Recommendations:

- The exceedance was considered not due to the Contract No. DC/2009/23.
- The Contractor was reminded to review the effectiveness of the implemented noise mitigation measures from time to time during different construction phases.

ETL Signature: 

Date: 11 January 2017



**Contract No. DC/2009/23 – HATS Stage 2A**

**Upgrading of Preliminary Treatment Works at North Point, Wan Chai East and Central**

Report No. 161206\_noise\_NM2

Date of Measurement: 6<sup>th</sup> December 2016

Time of Measurement: 14:30 (30-min measurement)

| Location | Parameter          | Measured Level (Leq dB(A)) | Action Level                              | Limit Level (Leq dB(A)) | Level exceeded |
|----------|--------------------|----------------------------|---|-------------------------|----------------|
| NM2      | Construction Noise | 75.1                       | When one documented complaint is received | 75.0                    | Limit          |

**Remarks**

(a) Statement of exceedance(s)

Construction noise measured at NM2(Wan Chai East PTW) - The roof of Hyde Building exceeded the construction noise limit (75dB(A)) during the daytime (07:00 to 19:00 on normal weekdays).

(b) Cause of exceedance(s)

The exceedance was considered not due to the Contract No. DC/2009/23 based on the following reason(s):-

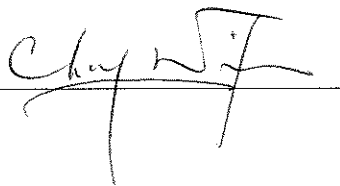
- 1) During the continuous measurements, the major noise source was the traffic noise.
- 2) According to information provided by the Contractor, no construction plant for the Contract No. DC/2009/23 was operated during the daytime noise monitoring.
- 3) Comparing with the similar monitoring period during the baseline noise monitoring, the average of the noise level on 6<sup>th</sup> December 2016 is well within the range of baseline noise levels (70.6 – 76.3dB(A)).

Therefore, the exceedance was considered to be non-project related.

(c) Conclusions and Recommendations:

- The exceedance was considered not due to the Contract No. DC/2009/23.
- The Contractor was reminded to review the effectiveness of the implemented noise mitigation measures from time to time during different construction phases.

ETL Signature: \_\_\_\_\_



Date: \_\_\_\_\_ 10 January 2017 \_\_\_\_\_

**Contract No. DC/2009/23 – HATS Stage 2A**

**Upgrading of Preliminary Treatment Works at North Point, Wan Chai East and Central**

Report No. 161212\_noise\_NM1

Date of Measurement: 12<sup>th</sup> December 2016

Time of Measurement: 13:25 (30-min measurement)

| Location | Parameter          | Measured Level (Leq dB(A)) | Action Level                              | Limit Level (Leq dB(A)) | Level exceeded |
|----------|--------------------|----------------------------|---|-------------------------|----------------|
| NM1      | Construction Noise | 70.3                       | When one documented complaint is received | 70.0*                   | Limit          |

\* 70dB (A) was adopted as the Limit Level during school normal teaching period in December 2016.

**Remarks**

(a) Statement of exceedance(s)

Construction noise measured at NM1(North Point PTW) - Rooftop of Chan's Creative School exceeded the construction noise limit (69dB(A)) during school teaching period in the daytime (07:00 to 19:00 on normal weekdays).

(b) Cause of exceedance(s)

The exceedance was considered not due to the Contract No. DC/2009/23 based on the following reason(s):-

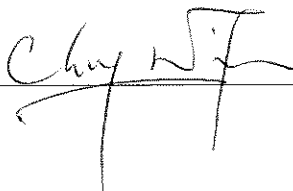
- 1) During the continuous measurements, the major noise source was the traffic noise.
- 2) According to information provided by the Contractor, no noise construction plant for the Contract No. DC/2009/23 was operated during school teaching period in daytime noise monitoring.
- 3) Comparing with the similar monitoring period during the baseline noise monitoring, the average of the noise level on 12<sup>th</sup> December 2016 is well within the range of baseline noise levels (66.2 – 71.7dB(A)).

Therefore, the exceedance was considered to be non-project related.

(c) Conclusions and Recommendations:

- The exceedance was considered not due to the Contract No. DC/2009/23.
- The Contractor was reminded to review the effectiveness of the implemented noise mitigation measures from time to time during different construction phases.

ETL Signature: \_\_\_\_\_



Date: \_\_\_\_\_

10 January 2017

**Contract No. DC/2009/23 – HATS Stage 2A**

**Upgrading of Preliminary Treatment Works at North Point, Wan Chai East and Central**

Report No. 161212\_noise\_NM1\_RN

Date of Measurement: 12<sup>th</sup> December 2016

Time of Measurement: 19:45 (3 consecutive 5-min measurements)

| Location | Parameter          | Measured Level (Leq dB(A)) | Action Level                              | Limit Level (Leq dB(A)) | Level exceeded |
|----------|--------------------|----------------------------|---|-------------------------|----------------|
| NMI      | Construction Noise | 72.9                       | When one documented complaint is received | 70.0*                   | Limit          |
|          |                    | 72.8                       |   |                         |                |
|          |                    | 72.8                       |   |                         |                |

\* 70dB (A) was adopted as the Limit Level during restricted hours in December 2016.

**Remarks**

(a) Statement of exceedance(s)

Construction noise measured at NM1(North Point PTW) - Pedestrian walkway adjacent to Chan's Creative School boundary along Tin Chiu Street exceeded the construction noise limit (70dB(A)) during the restricted hour (07:00 to 23:00 holidays & 19:00 to 23:00 on all other days).

(b) Cause of exceedance(s)

The exceedance was considered not due to the Contract No. DC/2009/23 based on the following reason(s):-

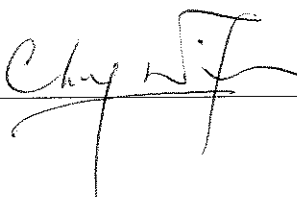
- 1) During the continuous measurements, the major noise source was the traffic noise.
- 2) According to information provided by the Contractor, no construction works for the Contract No. DC/2009/23 was carried out during the restricted hours noise monitoring.
- 3) Comparing with the similar monitoring period during the baseline noise monitoring, the average of the noise level on 12<sup>th</sup> December 2016 is well within the range of baseline noise levels (61.7 – 73.0dB(A)).

Therefore, the exceedance was considered to be non-project related.

(c) Conclusions and Recommendations:

- The exceedance was considered not due to the Contract No. DC/2009/23.
- The Contractor was reminded to review the effectiveness of the implemented noise mitigation measures from time to time during different construction phases.

ETL Signature: \_\_\_\_\_



Date: \_\_\_\_\_10 January 2017\_\_\_\_\_

**Contract No. DC/2009/23 – HATS Stage 2A**

**Upgrading of Preliminary Treatment Works at North Point, Wan Chai East and Central**

Report No. 161229\_noise\_NM2\_RN

Date of Measurement: 29<sup>th</sup> December 2016

Time of Measurement: 20:00 (3 consecutive 5-min measurements)

| Location | Parameter          | Measured Level (Leq dB(A)) | Action Level                              | Limit Level (Leq dB(A)) | Level exceeded |
|----------|--------------------|----------------------------|---|-------------------------|----------------|
| NM2      | Construction Noise | 71.1                       | When one documented complaint is received | 70.0*                   | Limit          |
|          |                    | 71.1                       |   |                         |                |
|          |                    | 71.4                       |   |                         |                |

\* 70dB (A) was adopted as the Limit Level during restricted hours in December 2016.

**Remarks**

(a) Statement of exceedance(s)

Construction noise measured at NM2(Wan Chai East PTW) - The roof of Hyde Building exceeded the construction noise limit (70dB(A)) during the restricted hour (07:00 to 23:00 holidays & 19:00 to 23:00 on all other days).

(b) Cause of exceedance(s)

The exceedance was considered not due to the Contract No. DC/2009/23 based on the following reason(s):-

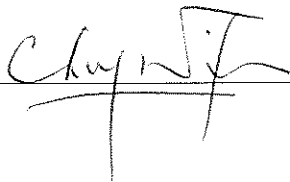
- 1) During the continuous measurements, the major noise source was the traffic noise.
- 2) According to information provided by the Contractor, no construction works for the Contract No. DC/2009/23 was carried out during the restricted hours noise monitoring.
- 3) Comparing with the similar monitoring period during the baseline noise monitoring, the average of the noise level on 29<sup>th</sup> December 2016 is well within the range of baseline noise levels (68.6 – 76.8dB(A)).

Therefore, the exceedance was considered to be non-project related.

(c) Conclusions and Recommendations:

- The exceedance was considered not due to the Contract No. DC/2009/23.
- The Contractor was reminded to review the effectiveness of the implemented noise mitigation measures from time to time during different construction phases.

ETL Signature: \_\_\_\_\_



Date: \_\_\_\_\_

10 January 2017

**Contract No. DC/2009/23 – HATS Stage 2A**

**Upgrading of Preliminary Treatment Works at North Point, Wan Chai East and Central**

Report No. 161229\_noise\_NM3

Date of Measurement: 29<sup>th</sup> December 2016

Time of Measurement: 15:15 (30-min measurement)

| Location | Parameter          | Measured Level (Leq dB(A)) | Action Level                              | Limit Level (Leq dB(A)) | Level exceeded |
|----------|--------------------|----------------------------|---|-------------------------|----------------|
| NM3      | Construction Noise | 75.8                       | When one documented complaint is received | 75.0                    | Limit          |

**Remarks**

(a) Statement of exceedance(s)

Construction noise measured at NM3(Central PTW) - The roof of Goldfield Building exceeded the construction noise limit (75dB(A)) during the daytime (07:00 to 19:00 on normal weekdays).

(b) Cause of exceedance(s)

The exceedance was considered not due to the Contract No. DC/2009/23 based on the following reason(s):-

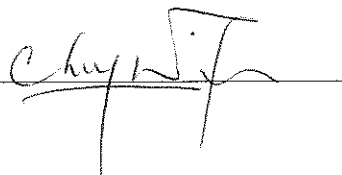
- 1) During the continuous measurements, the major noise source was the traffic noise.
- 2) According to the information from the Contractor of DC/2009/23, no construction plant for the Contract No. DC/2009/23 was operated during the daytime noise monitoring.
- 3) Comparing with the similar monitoring period during the baseline noise monitoring, the average of the noise level on 29<sup>th</sup> December 2016 is well within the range of baseline noise levels (71.2 – 80.6dB(A)).

Therefore, the exceedance was considered to be non-project related.

(c) Conclusions and Recommendations:

- The exceedance was considered not due to the Contract No. DC/2009/23.
- The Contractor was reminded to review the effectiveness of the implemented noise mitigation measures from time to time during different construction phases.

ETL Signature: \_\_\_\_\_



Date: \_\_\_\_\_

10 January 2017

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**APPENDIX I  
SITE AUDIT SUMMARY**

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Record Summary of Environmental Site Inspection

Inspection Information

|                            |                             |
|----------------------------|-----------------------------|
| Checklist Reference Number | 161207                      |
| Date                       | 7 December 2016 (Wednesday) |
| Time                       | 9:30 – 12:00                |

| Ref. No. | Non-Compliance  | Related Item No. |
|----------|-----------------|------------------|
| -        | None identified | -                |

| Ref. No.   | Remarks/Observations  | Related Item No. |
|------------|---|------------------|
| 161207-R01 | <p><b>Part A - Water Quality</b></p> <ul style="list-style-type: none"> <li>No environmental deficiency was identified during the site inspection.</li> </ul> <p><b>Part B – Landscape and Visual</b></p> <ul style="list-style-type: none"> <li>The construction materials should be placed far away from the tree protection area/existing trees at North Point-PTW.</li> </ul>   | B 1              |
| 161207-R02 | <p><b>Part C - Air Quality</b></p> <ul style="list-style-type: none"> <li>The dusty stockpile should be covered by impervious material to prevent the dust emission at North Point-PTW.</li> </ul>  | C 6              |
| 161207-R03 | <ul style="list-style-type: none"> <li>The silt/sand should be cleared properly near the site entrance of Central-PTW.</li> </ul>   | C 3              |
| 161207-R04 | <p><b>Part D – Noise</b></p> <ul style="list-style-type: none"> <li>No environmental deficiency was identified during the site inspection.</li> </ul> <p><b>Part E –Waste / Chemical Management</b></p> <ul style="list-style-type: none"> <li>The drip trays should be provided for the chemical containers to prevent the chemical leakage at Central-PTW.</li> </ul> <p><b>Part F - Permit / Licenses</b></p> <ul style="list-style-type: none"> <li>No environmental deficiency was identified during the site inspection.</li> </ul> <p><b>Follow up:</b></p> <ul style="list-style-type: none"> <li>For previous audit session (Ref. No. 161130), all environmental deficiencies were improved by the Contractor.</li> </ul> <p><b>Remark:</b></p> <ul style="list-style-type: none"> <li>--</li> </ul> | E 7ii            |

|             | Name               | Signature   | Date            |
|-------------|--------------------|---|-----------------|
| Recorded by | Janet Wai          |  | 7 December 2016 |
| Checked by  | Dr. Priscilla Choy |  | 7 December 2016 |

Contract No: DC/2009/23

**HATS 2A - Upgrading of PTWs at North Point, Wan Chai East and Central**

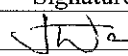

**Record Summary of Environmental Site Inspection**

**Inspection Information**

|                            |                           |
|----------------------------|---------------------------|
| Checklist Reference Number | 161216                    |
| Date                       | 16 December 2016 (Friday) |
| Time                       | 9:30 – 12:00              |

| Ref. No. | Non-Compliance  | Related Item No. |
|----------|-----------------|------------------|
| -        | None identified | -                |

| Ref. No.   | Remarks/Observations  | Related Item No. |
|------------|---|------------------|
| 161216-R01 | <p><b>Part A - Water Quality</b></p> <ul style="list-style-type: none"><li>No environmental deficiency was identified during the site inspection.</li></ul>   | C 3              |
| 161216-R02 | <p><b>Part B - Landscape and Visual</b></p> <ul style="list-style-type: none"><li>No environmental deficiency was identified during the site inspection.</li></ul> <p><b>Part C - Air Quality</b></p> <ul style="list-style-type: none"><li>The silt/sand should be cleared properly near the site entrance of Central-PTW.</li><li>The exposed area should be sprayed with water to prevent the dust emission in the site area of North Point-PTW and Central-PTW.</li></ul> | C 5              |
|            | <p><b>Part D - Noise</b></p> <ul style="list-style-type: none"><li>No environmental deficiency was identified during the site inspection.</li></ul>   |                  |
|            | <p><b>Part E - Waste / Chemical Management</b></p> <ul style="list-style-type: none"><li>No environmental deficiency was identified during the site inspection.</li></ul>   |                  |
|            | <p><b>Part F - Permit / Licenses</b></p> <ul style="list-style-type: none"><li>No environmental deficiency was identified during the site inspection.</li></ul>   |                  |
|            | <p><b>Follow up:</b></p> <ul style="list-style-type: none"><li>For previous audit session (Ref. No. 161207), outstanding item 161207-R03 is required to be followed up and remarked as 161216-R01 which will be reviewed in the next weekly site inspection (Ref. No. 161221).</li></ul>  |                  |
|            | <p><b>Remark:</b></p> <ul style="list-style-type: none"><li>--</li></ul>  |                  |

|             | Name               | Signature   | Date             |
|-------------|--------------------|---|------------------|
| Recorded by | Janet Wai          |  | 16 December 2016 |
| Checked by  | Dr. Priscilla Choy |  | 16 December 2016 |



Contract No: DC/2009/23

HATS 2A - Upgrading of PTWs at North Point, Wan Chai East and Central

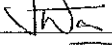

Record Summary of Environmental Site Inspection

Inspection Information

|                            |                              |
|----------------------------|------------------------------|
| Checklist Reference Number | 161221                       |
| Date                       | 21 December 2016 (Wednesday) |
| Time                       | 9:30 – 11:40                 |

| Ref. No. | Non-Compliance  | Related Item No. |
|----------|-----------------|------------------|
| -        | None identified | -                |

| Ref. No.   | Remarks/Observations   | Related Item No. |
|------------|--|------------------|
| 161221-R01 | <p><b>Part A - Water Quality</b></p> <ul style="list-style-type: none"><li>No environmental deficiency was identified during the site inspection.</li></ul> <p><b>Part B – Landscape and Visual</b></p> <ul style="list-style-type: none"><li>No environmental deficiency was identified during the site inspection.</li></ul> <p><b>Part C - Air Quality</b></p> <ul style="list-style-type: none"><li>The silt/sand should be cleared properly near the site entrance of Central-PTW.</li></ul> <p><b>Part D – Noise</b></p> <ul style="list-style-type: none"><li>No environmental deficiency was identified during the site inspection.</li></ul>                            | C 3              |
| 161221-R02 | <p><b>Part E –Waste / Chemical Management</b></p> <ul style="list-style-type: none"><li>Properly clear the oil stain at Central-PTW.</li></ul> <p><b>Part F - Permit / Licenses</b></p> <ul style="list-style-type: none"><li>No environmental deficiency was identified during the site inspection.</li></ul> <p><b>Follow up:</b></p> <ul style="list-style-type: none"><li>For previous audit session (Ref. No. 161216), outstanding item 161216-R01 is required to be followed up and remarked as 161221-R01 which will be reviewed in the next weekly site inspection (Ref. No. 161228).</li></ul> <p><b>Remark:</b></p> <ul style="list-style-type: none"><li>--</li></ul> | E 2ii & 7i       |

|             | Name               | Signature  | Date             |
|-------------|--------------------|--|------------------|
| Recorded by | Janet Wai          |   | 21 December 2016 |
| Checked by  | Dr. Priscilla Choy |  | 21 December 2016 |

Contract No: DC/2009/23

**HATS 2A - Upgrading of PTWs at North Point, Wan Chai East and Central**

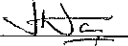

**Record Summary of Environmental Site Inspection**

**Inspection Information**

|                            |                              |
|----------------------------|------------------------------|
| Checklist Reference Number | 161228                       |
| Date                       | 28 December 2016 (Wednesday) |
| Time                       | 9:30 – 11:00                 |

| Ref. No. | Non-Compliance  | Related Item No. |
|----------|-----------------|------------------|
| -        | None identified | -                |

| Ref. No.   | Remarks/Observations   | Related Item No. |
|------------|--|------------------|
|            | <p><b>Part A - Water Quality</b></p> <ul style="list-style-type: none"> <li>No environmental deficiency was identified during the site inspection.</li> </ul>  |                  |
| 161228-R02 | <p><b>Part B - Landscape and Visual</b></p> <ul style="list-style-type: none"> <li>The construction material should be placed far away from the tree protection area of North Point-PTW and Wan Chai-PTW.</li> </ul>   | B 1              |
| 161228-R04 | <ul style="list-style-type: none"> <li>The fence should be provided and enhanced for the existing tree at Wan Chai-PTW.</li> </ul>   | B 2              |
| 161228-R03 | <p><b>Part C - Air Quality</b></p> <ul style="list-style-type: none"> <li>The dusty materials should be covered by impervious material to prevent the dust emission at Wan Chai-PTW and Central-PTW.</li> </ul>  | C 6              |
| 161228-R05 | <ul style="list-style-type: none"> <li>The silt/sand should be cleared properly near the site entrance of Central-PTW.</li> </ul>  | C 3              |
|            | <p><b>Part D - Noise</b></p> <ul style="list-style-type: none"> <li>No environmental deficiency was identified during the site inspection.</li> </ul>  |                  |
| 161228-R01 | <p><b>Part E - Waste / Chemical Management</b></p> <ul style="list-style-type: none"> <li>The general refuse should be cleared regularly to prevent the accumulation at North Point-PTW, Wan Chai-PTW and Central-PTW.</li> </ul>  | E 1i             |
|            | <p><b>Part F - Permit / Licenses</b></p> <ul style="list-style-type: none"> <li>No environmental deficiency was identified during the site inspection.</li> </ul>  |                  |
|            | <p><b>Follow up:</b></p> <ul style="list-style-type: none"> <li>For previous audit session (Ref. No. 161221), outstanding item 161221-R01 is required to be followed up and remarked as 161228-R05 which will be reviewed in the next weekly site inspection (Ref. No. 170104).</li> </ul> |                  |
|            | <p><b>Remark:</b></p> <ul style="list-style-type: none"> <li>--</li> </ul>   |                  |

|             | Name               | Signature   | Date             |
|-------------|--------------------|---|------------------|
| Recorded by | Janet Wai          |  | 28 December 2016 |
| Checked by  | Dr. Priscilla Choy |  | 28 December 2016 |

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**APPENDIX J  
SUMMARY OF AMOUNT OF WASTE  
GENERATED**

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APPENDIX J MONTHLY SUMMARY WASTE FLOW TABLE FOR December (2016)

| Month     | Actual Quantities of Inert C&D Materials Generated Monthly |                          |                          |                          |                          |                          | Actual Quantities of C&D Wastes Generated Monthly |                             |              |                |                            | Special Waste            |                          |                          |              |
|-----------|--|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|---|-----------------------------|--------------|----------------|----------------------------|--------------------------|--------------------------|--------------------------|--------------|
|           | Total Quantity Generated                                   | Broken Concrete (4)      | Reused in the Contract   | Reused in other Projects | Disposal as Public Fill  | Import Fill              | Metals  | Paper / Cardboard Packaging | Plastics (3) | Chemical Waste | Other, e.g. general refuse | Screening (CPTW)         | Grit (CPTW)              | Screening (NPPTW)        | Grit (NPPTW) |
|           | [in '000m <sup>3</sup> ]                                   | [in '000m <sup>3</sup> ] | [in '000m <sup>3</sup> ] | [in '000m <sup>3</sup> ] | [in '000m <sup>3</sup> ] | [in '000m <sup>3</sup> ] | [in '000kg]                                       | [in '000kg]                 | [in '000kg]  | [in '000kg]    | [in '000m <sup>3</sup> ]   | [in '000m <sup>3</sup> ] | [in '000m <sup>3</sup> ] | [in '000m <sup>3</sup> ] |              |
| Year2015  | 24.063   | 0.000                    | 0.000                    | 0.000                    | 24.063                   | 0.000                    | 72.810  | 5.557                       | 0.708        | 1.030          | 1.485                      | 2.615                    | 1.697                    | 1.022                    | 0.604        |
| JAN       | 0.205  | 0.000                    | 0.000                    | 0.000                    | 0.205                    | 0.000                    | 0.000   | 0.150                       | 0.010        | 0.000          | 0.030                      | 0.071                    | 0.030                    | 0.045                    | 0.028        |
| FEB       | 0.054  | 0.000                    | 0.000                    | 0.000                    | 0.054                    | 0.000                    | 0.000   | 0.150                       | 0.010        | 0.000          | 0.010                      | 0.075                    | 0.035                    | 0.040                    | 0.026        |
| MAR       | 0.234  | 0.000                    | 0.000                    | 0.000                    | 0.234                    | 0.000                    | 0.000   | 0.150                       | 0.020        | 0.000          | 0.071                      | 0.086                    | 0.037                    | 0.046                    | 0.028        |
| APR       | 0.281  | 0.000                    | 0.000                    | 0.000                    | 0.281                    | 0.000                    | 0.000   | 0.160                       | 0.020        | 0.000          | 0.043                      | 0.081                    | 0.053                    | 0.047                    | 0.033        |
| MAY       | 0.158  | 0.000                    | 0.000                    | 0.000                    | 0.158                    | 0.000                    | 0.000   | 0.160                       | 0.020        | 0.000          | 0.034                      | 0.057                    | 0.121                    | 0.046                    | 0.085        |
| JUN       | 0.032  | 0.000                    | 0.000                    | 0.000                    | 0.032                    | 0.000                    | 0.000   | 0.160                       | 0.020        | 0.000          | 0.048                      | 0.056                    | 0.101                    | 0.041                    | 0.080        |
| SUB-TOTAL | 25.027   | 0.000                    | 0.000                    | 0.000                    | 25.027                   | 0.000                    | 72.810  | 6.487                       | 0.808        | 1.030          | 1.721                      | 3.041                    | 2.074                    | 1.287                    | 0.884        |
| JUL       | 0.144  | 0.000                    | 0.000                    | 0.000                    | 0.144                    | 0.000                    | 0.000   | 0.165                       | 0.020        | 0.000          | 0.042                      | 0.055                    | 0.026                    | 0.052                    | 0.034        |
| AUG       | 0.068  | 0.000                    | 0.000                    | 0.000                    | 0.068                    | 0.000                    | 0.000   | 0.160                       | 0.020        | 0.000          | 0.034                      | 0.059                    | 0.034                    | 0.045                    | 0.027        |
| SEP       | 0.214  | 0.000                    | 0.000                    | 0.000                    | 0.214                    | 0.000                    | 0.000   | 0.165                       | 0.020        | 0.000          | 0.041                      | 0.060                    | 0.031                    | 0.043                    | 0.029        |
| OCT       | 0.197  | 0.000                    | 0.000                    | 0.000                    | 0.197                    | 0.000                    | 0.000   | 0.165                       | 0.020        | 0.000          | 0.074                      | 0.064                    | 0.030                    | 0.046                    | 0.032        |
| NOV       | 0.195  | 0.000                    | 0.000                    | 0.000                    | 0.195                    | 0.000                    | 0.000   | 0.165                       | 0.020        | 0.000          | 0.074                      | 0.065                    | 0.026                    | 0.043                    | 0.024        |
| DEC       | 0.604  | 0.000                    | 0.000                    | 0.000                    | 0.604                    | 0.000                    | 0.000   | 0.167                       | 0.020        | 0.000          | 0.043                      | 0.064                    | 0.021                    | 0.050                    | 0.023        |
| TOTAL     | 26.449   | 0.000                    | 0.000                    | 0.000                    | 26.449                   | 0.000                    | 72.810  | 7.474                       | 0.928        | 1.030          | 2.029                      | 3.408                    | 2.242                    | 1.566                    | 1.053        |

| Forecast of Total Quantities of C&D materials to be Generated from the Contracts * |                          |                          |                          |                          |                          |             |                             |              |                |                            | Special Waste            |                          | Special Waste            |              |
|--|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|-------------|-----------------------------|--------------|----------------|----------------------------|--------------------------|--------------------------|--------------------------|--------------|
| Total Quantity Generated   | Broken Concrete (4)      | Reused in the Contract   | Reused in other Projects | Disposal as Public Fill  | Import Fill              | Metals      | Paper / Cardboard Packaging | Plastics (3) | Chemical Waste | Other, e.g. general refuse | Screening (CPTW)         | Grit (CPTW)              | Screening (NPPTW)        | Grit (NPPTW) |
| [in '000m <sup>3</sup> ]   | [in '000m <sup>3</sup> ] | [in '000m <sup>3</sup> ] | [in '000m <sup>3</sup> ] | [in '000m <sup>3</sup> ] | [in '000m <sup>3</sup> ] | [in '000kg] | [in '000kg]                 | [in '000kg]  | [in '000kg]    | [in '000m <sup>3</sup> ]   | [in '000m <sup>3</sup> ] | [in '000m <sup>3</sup> ] | [in '000m <sup>3</sup> ] |              |
| 26.5   | 0.01                     | 0.01                     | 0                        | 26.48                    | 0                        | 100         | 8                           | 1            | 3              | 3.5                        | 4.5                      | 3                        | 2                        | 1.5          |

- Notes :
- The performance targets are given in PS Clause 6(14).
  - The waste flow table shall also include C&D materials that are specified in the Contract to be imported for use at the site.
  - Plastics refer to plastic bottles / containers, plastic sheets / foam from packaging material.
  - The contractor shall also submit the latest forecast of the total amount of C&D materials expected to be generated from the Works, together with a breakdown of the nature where to total amount of C&D materials expected to be generated from the Works is equal to or exceeding 50,000m<sup>3</sup>. (PS Clause 25.25S (6)(b) refers).  
[Delete Note (4) and the table above on the forecast, where inapplicable].
  - The assumed density (kg/m<sup>3</sup>) for both C&D material and general refuse.  
C&D material 2000kg/m<sup>3</sup>  
General refuse 500kg/m<sup>3</sup>
  - Conversion factors for reporting purpose:
 

|  |  |  |                                |
|--|--|--|--------------------------------|
| in-situ: rock = 2.5 tonnes/m <sup>3</sup> ; soil = 2.0 tonnes/m <sup>3</sup> | excavated: rock = 2.0 tonnes/m <sup>3</sup> ; soil = 1.8 tonnes/m <sup>3</sup> | Special Waste (Grit) = 1.2 tonnes/m <sup>3</sup> |                                |
| broken concrete and bitumen = 2.4 tonnes/m <sup>3</sup>                      | C&D Waste = 0.9 tonnes/m <sup>3</sup>  | bentonite slurry = 2.8 tonnes/m <sup>3</sup>     | Chemical waste 1 Litres = 1 kg |

 Special Waste (Screening) = 0.31 tonnes/m<sup>3</sup>

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**APPENDIX K  
EVENT ACTION PLANS**

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**APPENDIX K – Event / Action Plans**

**Table K-1 Event / Action Plan For Air Quality**

| <b>EVENT</b>                                      | <b>ACTION</b>   |   |  |   |
|---|---|---|--|---|
|   | <b>ET</b>   | <b>IEC</b>  | <b>ER</b>  | <b>CONTRACTOR</b>   |
| <b>ACTION LEVEL</b>                               |   |   |  |   |
| 1. Exceedance for one sample                      | 1. Identify source, investigate the causes of exceedance and propose remedial measures;<br>2. Inform IEC and ER;<br>3. Repeat measurement to confirm finding;<br>4. Increase monitoring frequency to daily.   | 1. Check monitoring data submitted by ET;<br>2. Check Contractor’s working method.  | 1. Notify Contractor.  | 1. Rectify any unacceptable practice;<br>2. Amend working methods if appropriate.   |
| 2. Exceedance for two or more consecutive samples | 1. Identify source;<br>2. Inform IEC and ER;<br>3. Advise the ER on the effectiveness of the proposed remedial measures;<br>4. Repeat measurements to confirm findings;<br>5. Increase monitoring frequency to daily;<br>6. Discuss with IEC and Contractor on remedial | 1. Check monitoring data submitted by ET;<br>2. Check Contractor’s working method;<br>3. Discuss with ET and Contractor on possible remedial measures;<br>4. Advise the ET on the effectiveness of the proposed remedial measures;<br>5. Supervise Implementation of remedial measures. | 1. Confirm receipt of notification of failure in writing;<br>2. Notify Contractor;<br>3. Ensure remedial measures properly implemented | 1. Submit proposals for remedial to ER within 3 working days of notification;<br>2. Implement the agreed proposals;<br>3. Amend proposal if appropriate |

| EVENT                        | ACTION  |  |  |   |
|------------------------------|---|--|--|---|
|                              | ET  | IEC  | ER   | CONTRACTOR  |
|                              | actions required;<br>7. If exceedance continues, arrange meeting with IEC and ER;<br>8. If exceedance stops, cease additional monitoring  |  |  |   |
| <b>LIMIT LEVEL</b>           |   |  |  |   |
| 1. Exceedance for one sample | 1. Identify source, investigate the causes of exceedance and propose remedial measures;<br>2. Inform ER, Contractor and EPD;<br>3. Repeat measurement to confirm finding;<br>4. Increase monitoring frequency to daily;<br>5. Assess effectiveness of Contractor's remedial actions and keep IEC, EPD and ER informed of the results. | 1. Check monitoring data submitted by ET;<br>2. Check Contractor's working method;<br>3. Discuss with ET and Contractor on possible remedial measures;<br>4. Advise the ER on the effectiveness of the proposed remedial measures;<br>5. Supervise implementation of remedial measures | 1. Confirm receipt of notification of failure in writing;<br>2. Notify Contractor;<br>3. Ensure remedial measures properly implemented | 1. Take immediate action to avoid further exceedance;<br>2. Submit proposals for remedial actions to IEC within 3 working days of notification;<br>3. Implement the agreed proposals;<br>4. Amend proposal if appropriate |

| EVENT   | ACTION  |  |   |  |
|---|---|--|---|--|
|   | ET  | IEC  | ER  | CONTRACTOR   |
| 2. Exceedance for two or more consecutive samples | 1. Notify IEC, ER, Contractor and EPD;<br>2. Identify source;<br>3. Repeat measurement to confirm findings;<br>4. Increase monitoring frequency to daily;<br>5. Carry out analysis of Contractor's working procedures to determine possible mitigation to be implemented;<br>6. Arrange meeting with IEC and ER to discuss the remedial actions to be taken;<br>7. Assess effectiveness of Contractor's remedial actions and keep IEC, EPD and ER informed of the results;<br>8. If exceedance stops, cease additional monitoring | 1. Check monitoring data submitted by ET;<br>2. Check Contractor's working method;<br>3. Discuss amongst ER, ET, and Contractor on the potential remedial actions;<br>4. Review Contractor's remedial actions whenever necessary to assure their effectiveness and advise the ER accordingly;<br>5. Supervise the implementation of remedial measures. | 1. Confirm receipt of notification of failure in writing;<br>2. Notify Contractor;<br>3. In consolidation with the IEC, agree with the Contractor on the remedial measures to be implemented;<br>4. Ensure remedial measures properly implemented;<br>5. If exceedance continues, consider what portion of the work is responsible and instruct the Contractor to stop that portion of work until the exceedance is abated. | 1. Take immediate action to avoid further exceedance;<br>2. Submit proposals for remedial actions to IEC within 3 working days of notification;<br>3. Implement the agreed proposals;<br>4. Resubmit proposals if problem still not under control;<br>5. Stop the relevant portion of works as determined by the ER until the exceedance is abated |



**Table J-2 Event / Action Plan For Construction Noise**

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

| <b>EVENT</b> | <b>ACTION</b>  |            |                                |                                       |
|--------------|--|------------|--------------------------------|---------------------------------------|
|              | <b>ET</b>  | <b>IEC</b> | <b>ER</b>                      | <b>CONTRACTOR</b>                     |
|              | Contractor's remedial actions and keep IEC, EPD and ER informed of the results;<br>8. If exceedance stops, cease additional monitoring |            | until the exceedance is abated | the ER until the exceedance is abated |

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**APPENDIX L  
ENVIRONMENTAL MITIGATION  
IMPLEMENTATION SCHEDULE (EMIS)**

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**APPENDIX L IMPLEMENTATION SCHEDULE OF ENVIRONMENTAL MITIGATION MEASURES (EMIS)**

| <b>EIA Ref.</b> | <b>Recommended Mitigation Measures</b>   | <b>Location of the measure</b> | <b>Implementation Status</b> |
|-----------------|--|--------------------------------|------------------------------|
| <b>A</b>        | <b>Air Quality</b>   |                                |                              |
| 3.74            | Skip hoist for material transport should be totally enclosed by impervious sheeting.   | All construction sites         | ^                            |
|                 | Vehicle washing facilities should be provided at every vehicle exit point.   |                                | ^                            |
|                 | The area where vehicle washing takes place and the section of the road between the washing facilities and the exit point should be paved with concrete, bituminous materials or hardcore.                                    |                                | ^                            |
|                 | Where a site boundary adjoins a road, streets or other areas accessible to the public, hoarding of not less than 2.4 m high from ground level should be provided along the entire length except for a site entrance or exit. |                                | ^                            |
|                 | Use of regular watering, with complete coverage, to reduce dust emissions from exposed site surfaces and unpaved roads, particularly during dry weather.   |                                | *                            |
|                 | Side enclosure and covering of any aggregate or dusty material storage piles to reduce emissions. Where this is not practicable owing to frequent usage, watering shall be applied to aggregate fines.                       |                                | *                            |
|                 | Open stockpiles shall be avoided or covered. Where possible, prevent placing dusty material storage piles near ASRs.   |                                | ^                            |
|                 | Tarpaulin covering of all dusty vehicle loads transported to, from and between site locations.   |                                | ^                            |
|                 | Imposition of speed controls for vehicles on unpaved site roads. Ten kilometers per hour is the recommended limit.   |                                | ^                            |
|                 | Every stock of more than 20 bags of cement should be covered entirely by impervious sheeting placed in an area sheltered on the top and the 3 sides.   |                                | ^                            |
|                 | Every vehicle should be washed to remove any dusty materials from its body and wheels before leaving the construction sites.   | ^                              |                              |
| 3.74            | Instigation of an environmental monitoring and auditing program to monitor the construction process in order to enforce controls and modify method of work if dusty conditions arise.  | All construction sites         | ^                            |

| EIA Ref.          | Recommended Mitigation Measures  | Location of the measure | Implementation Status |
|-------------------|--|-------------------------|-----------------------|
|                   |  |                         |                       |
| <b>B</b>          | <b>Airborne Noise</b>  |                         |                       |
| 4.56–<br>4.61     | Use of quiet PME, movable barriers and acoustic mats.  | All construction sites  | ^                     |
| 4.67              | Only well-maintained plant shall be operated on-site and plant shall be serviced regularly during the construction program.  |                         | ^                     |
|                   | Silencers or mufflers on construction equipment shall be utilized and shall be properly maintained during the construction program.  |                         | ^                     |
|                   | Mobile plant, if any, shall be sited as far away from NSRs as possible.  |                         | ^                     |
|                   | Machines and plant (such as trucks) that may be in intermittent use shall be shut down between works periods or shall be throttled down to a minimum.  |                         | ^                     |
| 4.67              | Plant known to emit noise strongly in one direction shall, wherever possible, be orientated so that the noise is directed away from the nearby NSRs.   |                         | ^                     |
|                   | Material stockpiles and other structures shall be effectively utilized, wherever practicable, in screening noise from on-site construction activities.   |                         | ^                     |
| <b>C</b>          | <b>Water Quality</b>   |                         |                       |
| 6.349 to<br>6.375 | Construction Site Runoff and General Construction Activities<br>The mitigation measures as outlined in the ProPECC PN 1/94 Construction Site Drainage should be adopted where applicable.  | All construction sites  | ^                     |
| 6.376             | Effluent Discharge<br>There is a need to apply to EPD for a discharge licence for discharge of effluent from the construction site under the WPCO. The discharge quality must meet the requirements specified in the discharge licence. If monitoring of the treated effluent quality from the works areas is required during the construction phase of the Project, the monitoring should be carried out in accordance with the WPCO license which is under the ambit of regional office (RO) of EPD.<br>Minimum distances of 100 m should be maintained between the discharge points of construction site effluent and the existing saltwater intakes. |                         | ^                     |
| 6.377             | Accidental Spillage of Chemicals<br><br>Contractor must register as a chemical waste producer if chemical wastes would be produced from the construction activities. The Waste Disposal Ordinance (Cap 354) and its subsidiary regulations in particular the Waste Disposal (Chemical Waste) (General)   |                         | ^                     |

| EIA Ref. | Recommended Mitigation Measures   | Location of the measure | Implementation Status |
|----------|---|-------------------------|-----------------------|
|          | Regulation should be observed and complied with for control of chemical wastes.   |                         |                       |
| 6.378    | Any service shop and maintenance facilities should be located on hard standings within a bunded area, and sumps and oil interceptors should be provided. Maintenance of vehicles and equipment involving activities with potential for leakage and spillage should only be undertaken within the areas appropriately equipped to control these discharges.  |                         | ^                     |
| 6.379    | <p>Disposal of chemical wastes should be carried out in compliance with the Waste Disposal Ordinance. The Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes published under the Waste Disposal Ordinance details the requirements to deal with chemical wastes. General requirements are given as follows:</p> <ul style="list-style-type: none"> <li>• Suitable containers should be used to hold the chemical wastes to avoid leakage or spillage during storage, handling and transport.</li> <li>• Chemical waste containers should be suitably labelled, to notify and warn the personnel who are handling the wastes, to avoid accidents.</li> <li>• Storage area should be selected at a safe location on site and adequate space should be allocated to the storage area.</li> </ul>  |                         | ^                     |
| 6.380    | <p>Construction Works in Close Proximity of Storm Drains or Seafront</p> <p>To minimize the potential water quality impacts from the construction works located at or near any watercourse, the practices outlined below should be adopted where applicable.</p> <ul style="list-style-type: none"> <li>• The use of less or smaller construction plants may be specified to reduce the disturbance to the storm water courses or marine environment.</li> <li>• Temporary storage of materials (e.g. equipment, filling materials, chemicals and fuel) and temporary stockpile of construction materials should be located well away from any water courses during carrying out of the construction works.</li> <li>• Stockpiling of construction materials and dusty materials should be covered and located away from any water courses.</li> <li>• Construction debris and spoil should be covered up and/or disposed of as soon as possible to avoid being washed into the nearby water receivers.</li> <li>• Construction activities, which generate large amount of wastewater, should be carried out in a distance away from the waterfront, where practicable.</li> <li>• Proper shoring may need to be erected in order to prevent soil/mud from slipping into</li> </ul> | All construction sites  | ^                     |

| EIA Ref. | Recommended Mitigation Measures  | Location of the measure | Implementation Status |
|----------|--|-------------------------|-----------------------|
|          | the storm culvert or sea.  |                         |                       |
| <b>D</b> | <b>Waste Management</b>  |                         |                       |
| 9.107    | Reusable steel or concrete panel shutters, fencing and hoarding and signboard should be used as a preferred alternative to items made of wood, to minimise wastage of wood. Attention should be paid to WBTC No. 19/2001 - Metallic Site Hoardings and Signboards to reduce the amount of timber used on construction sites. Metallic alternatives to timber are readily available and should be used rather than new timber. Precast concrete units should be adopted wherever feasible to minimize the use of timber formwork. | All construction sites  | ^                     |
| 9.109    | All waste materials should be segregated into categories covering: <ul style="list-style-type: none"> <li>• excavated materials suitable for reuse on-site;</li> <li>• excavated materials suitable for public filling facilities;</li> <li>• remaining C&amp;D waste for landfill;</li> <li>• chemical waste; and</li> <li>• general refuse for landfill.</li> </ul>  | All construction sites  | ^                     |
| 9.113    | Sort C&D waste from demolition of existing facilities to recover recyclable portions such as metals;   |                         | ^                     |
|          | Segregation and storage of different types of waste in different containers, skips or stockpiles to enhance reuse or recycling of materials and their proper disposal.   |                         | ^                     |
|          | Encourage collection of aluminium cans, PET bottles and paper by providing separate labelled bins to enable these wastes to be segregated from other general refuse generated by the work force.   |                         | ^                     |
|          | Any unused chemicals or those with remaining functional capacity shall be recycled.  |                         | ^                     |
|          | Proper storage and site practices to minimise the potential for damage or contamination of construction materials.   |                         | *                     |
| 9.115    | Nomination of an approved person, such as a site manager, to be responsible for good site practices, arrangements for collection and effective disposal to an appropriate facility, of all wastes generated at the site.   |                         | ^                     |
|          | Training of site personnel in proper waste management and chemical waste handling procedures.  |                         | ^                     |
| 9.115    | Develop and provide toolbox talk for on-site sorting of C&D materials to enhance worker's awareness in handling, sorting, reuse and recycling of C&D materials.  |                         | ^                     |

| EIA Ref. | Recommended Mitigation Measures  | Location of the measure | Implementation Status |
|----------|--|-------------------------|-----------------------|
|          |  |                         |                       |
|          | Provision of sufficient waste disposal points and regular collection of waste.   |                         | ^                     |
|          | Regular cleaning and maintenance programme for drainage systems, sumps and oil interceptors.   |                         | ^                     |
| 9.125    | Bentonite slurries used in diaphragm wall construction should be reconditioned and reused wherever practicable. The disposal of residual used bentonite slurry should follow the good practice guidelines stated in ProPECC PN 1/94 "Construction Site Drainage"   | All construction sites  | N/A                   |
| 9.131    | Adequate number of portable toilets at temporary works areas or the PTWs to ensure that sewage from site staff would be properly collected.  |                         | ^                     |
| 9.133    | General refuse should be stored in enclosed bins, skips or compaction units separating from C&D material and disposed of at designated landfill.   |                         | *                     |
| 9.135    | The recyclable component of the municipal waste generated by the workforce, such as aluminium cans, paper and cleansed plastic containers should be separated from other waste. Provision and collection of recycling bins for different types of recyclable waste should be set up by the Contractor. The Contractor should also be responsible for arranging recycling companies to collect these materials.   |                         | ^                     |
| 9.137    | If chemical wastes are produced at the construction site, the Contractor would 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 shall use a licensed collector to transport and dispose of the chemical wastes, to either the approved Chemical Waste Treatment Centre, or another licensed facility, in accordance with the Waste Disposal (Chemical Waste) (General) Regulation. |                         | ^                     |
| 9.142    | Prior to excavation of the marine deposit layer, the deposit should be tested in accordance with the ETWB TC(W) No. 34/2002 and the results should be presented in a Preliminary Sediment Quality Report. The marine deposit should be disposed of at the disposal site designated by the Marine Fill Committee (MFC) or Director of Environmental Protection (DEP) depending on the test results.   |                         | N/A                   |



| <b>EIA Ref.</b> | <b>Recommended Mitigation Measures</b>   | <b>Location of the measure</b>   | <b>Implementation Status</b> |
|-----------------|--|--|------------------------------|
| <b>E</b>        | <b>Terrestrial Ecology</b>   |  |                              |
| 10.94           | To implement effective noise mitigation measures as recommended in Section 4 of EIA.   | All construction sites   | N/A                          |
| 10.95           | Dust control practices such as regular watering, complete coverage of any aggregate or dusty material storage piles, and re-schedule of dusty activities during high-wind conditions as well as other measures recommended in Section 3 of EIA, should be implemented. |  | ^                            |
| 10.96           | Fences/hoardings should be erected and installed along the boundary of the works areas.  |  | ^                            |
| 10.97           | Standard good site practices as suggested in Section 10 of EIA should be implemented.  |  | N/A                          |
| 10.98           | Provision of proper drainage system and runoff control measures such as use of sand/silt traps, oil/grease separators, sedimentation tanks, etc.   |  | ^                            |
| <b>F</b>        | <b>Landscape and Visual</b>  |  |                              |
| Table 13.7      | Topsoil, where identified, should be stripped and stored for re-use in the construction of the soft landscape works, where practical.  | All construction sites   | ^                            |
|                 | Existing trees to be retained on site should be carefully protected during construction.   |  | *                            |
|                 | Trees unavoidably affected by the works should be transplanted where practical.  |  | ^                            |
|                 | Compensatory tree planting should be provided to compensate for felled trees.  |  | ^                            |
|                 | Control of night-time lighting.  |  | ^                            |
| Table 13.7      | Erection of decorative screen hoarding compatible with the surrounding setting.  | All construction sites   | N/A                          |
| <b>G</b>        | <b>Marine Ecology</b>  |  |                              |
| 11.137          | To minimize the potential indirect impacts on water quality from construction site runoff and various construction activities, the practices outlined in ProPECC PN 1/94 Construction Site Drainage should be adopted.   | All construction sites   | ^                            |
| <b>H</b>        | <b>Hazard to Life</b>  |  |                              |
| 14A.201         | Limiting use of cranes in terms of locations, lifting height, swing angle and setting up safety zone.  | Exact location will be determined on construction site by the engineer | ^                            |

|          |   |
|----------|---|
| Remarks: | ^ Compliance of mitigation measure;   |
|          | N/A Not Applicable;   |
|          | * Recommendation was made during site audit but improved/rectified by the contractor.         |
|          | # Recommendation was made during site audit and to be improved / rectified by the contractor. |
|          | X Non-compliance of mitigation measure;   |
|          | • Non-compliance but rectified by the contractor;   |

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**APPENDIX M  
COMPLAINT LOG**

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**APPENDIX M – COMPLAINT LOG**

**Reporting Month:** December 2016

| Log Ref. | Location | Received Date | Details of Complaint | Investigation/Mitigation Action | Status |
|----------|----------|---------------|----------------------|---------------------------------|--------|
| N.A.     | N.A.     | N.A.          | N.A.                 | N.A.                            | N.A.   |

**Remarks:** No environmental complaint was received in the reporting month.

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**APPENDIX N**  
**CONSTRUCTION PROGRAMME**

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OUTSTANDING WORKS PROGRAMME FOR DC/2009/23  
NORTH POINT PTW, WAN CHAI EAST PTW AND CENTRAL PTW

| ID | Task Name  | Action By | Duration | Start      | Finish     | Predeces | Remarks     | Gantt Chart               |     |      |      |        |           |         |          |          |     |  |  | 201 |
|----|--|-----------|----------|------------|------------|----------|-------------|---------------------------|-----|------|------|--------|-----------|---------|----------|----------|-----|--|--|-----|
|    |  |           |          |            |            |          |             | April                     | May | June | July | August | September | October | November | December | Jan |  |  |     |
| 1  | <b>NORTH POINT PTW</b>   |           | 227 days | 01 Apr '16 | 31 Dec '16 |          |             | [Gantt Chart Summary Bar] |     |      |      |        |           |         |          |          |     |  |  | 201 |
| 2  | <b>Area A1 (in between FSGT and Drop Shaft)</b>                  |           | 65 days  | 26 Sep '16 | 12 Dec '16 |          |             | [Gantt Chart Summary Bar] |     |      |      |        |           |         |          |          |     |  |  |     |
| 3  | <b>Manhole and Pipe laying (Stormdrain)</b>                      |           | 23 days  | 26 Sep '16 | 24 Oct '16 |          |             | [Gantt Chart Summary Bar] |     |      |      |        |           |         |          |          |     |  |  |     |
| 4  | Sheetpiling works for Stormdrain                                 | Leader    | 12 days  | 26 Sep '16 | 11 Oct '16 |          |             | [Gantt Chart Task Bar]    |     |      |      |        |           |         |          |          |     |  |  |     |
| 5  | Manhole and Pipe Installation (Stormdrain)                       | Leader    | 9 days   | 12 Oct '16 | 21 Oct '16 | 4        |             | [Gantt Chart Task Bar]    |     |      |      |        |           |         |          |          |     |  |  |     |
| 6  | Backfilling for Stormdrain                                       | Leader    | 2 days   | 22 Oct '16 | 24 Oct '16 | 5        |             | [Gantt Chart Task Bar]    |     |      |      |        |           |         |          |          |     |  |  |     |
| 7  | <b>Manhole and Pipe laying (Sewage)</b>                          |           | 17 days  | 25 Oct '16 | 12 Nov '16 |          |             | [Gantt Chart Summary Bar] |     |      |      |        |           |         |          |          |     |  |  |     |
| 8  | Manhole and Pipe Installation (Sewage)                           | Leader    | 14 days  | 25 Oct '16 | 09 Nov '16 | 6        |             | [Gantt Chart Task Bar]    |     |      |      |        |           |         |          |          |     |  |  |     |
| 9  | Removal of formworks for manhole                                 | Leader    | 1 day    | 10 Nov '16 | 10 Nov '16 | 8        |             | [Gantt Chart Task Bar]    |     |      |      |        |           |         |          |          |     |  |  |     |
| 10 | Backfilling for Sewage System                                    | Leader    | 2 days   | 11 Nov '16 | 12 Nov '16 | 9        |             | [Gantt Chart Task Bar]    |     |      |      |        |           |         |          |          |     |  |  |     |
| 11 | <b>Remaining Air Duct from FSGT to Drop Shaft</b>                |           | 4 days   | 14 Nov '16 | 17 Nov '16 |          |             | [Gantt Chart Summary Bar] |     |      |      |        |           |         |          |          |     |  |  |     |
| 12 | Excavation incl. blinding layer                                  | Leader    | 1 day    | 14 Nov '16 | 14 Nov '16 | 35       |             | [Gantt Chart Task Bar]    |     |      |      |        |           |         |          |          |     |  |  |     |
| 13 | Air duct installation  | Leader    | 2 days   | 15 Nov '16 | 16 Nov '16 | 12       |             | [Gantt Chart Task Bar]    |     |      |      |        |           |         |          |          |     |  |  |     |
| 14 | Backfilling  | Leader    | 1 day    | 17 Nov '16 | 17 Nov '16 | 13       |             | [Gantt Chart Task Bar]    |     |      |      |        |           |         |          |          |     |  |  |     |
| 15 | <b>Road Works for Area A1</b>                                    |           | 21 days  | 18 Nov '16 | 12 Dec '16 |          |             | [Gantt Chart Summary Bar] |     |      |      |        |           |         |          |          |     |  |  |     |
| 16 | Sub-base   | Leader    | 7 days   | 18 Nov '16 | 25 Nov '16 | 10,14    |             | [Gantt Chart Task Bar]    |     |      |      |        |           |         |          |          |     |  |  |     |
| 17 | Road Kerb incl. U-channel and catchpit                           | Leader    | 6 days   | 26 Nov '16 | 02 Dec '16 | 16       |             | [Gantt Chart Task Bar]    |     |      |      |        |           |         |          |          |     |  |  |     |
| 18 | Road Base  | Leader    | 1 day    | 03 Dec '16 | 03 Dec '16 | 17       |             | [Gantt Chart Task Bar]    |     |      |      |        |           |         |          |          |     |  |  |     |
| 19 | Paving blocks for Area A1  | Leader    | 7 days   | 05 Dec '16 | 12 Dec '16 | 18       |             | [Gantt Chart Task Bar]    |     |      |      |        |           |         |          |          |     |  |  |     |
| 20 | <b>Area A2 (in between FSGT, Drop Shaft and Pumping Station)</b> |           | 77 days  | 10 Sep '16 | 12 Dec '16 |          |             | [Gantt Chart Summary Bar] |     |      |      |        |           |         |          |          |     |  |  |     |
| 21 | <b>Manhole for Sewage and Pipe Reinstatement</b>                 |           | 12 days  | 19 Sep '16 | 03 Oct '16 |          |             | [Gantt Chart Summary Bar] |     |      |      |        |           |         |          |          |     |  |  |     |
| 22 | Manhole for Sewage and Pipe Reinstatement                        | Leader    | 12 days  | 19 Sep '16 | 03 Oct '16 |          |             | [Gantt Chart Task Bar]    |     |      |      |        |           |         |          |          |     |  |  |     |
| 23 | <b>Remaining DN400 Rising Main (SP2)</b>                         |           | 17 days  | 10 Sep '16 | 30 Sep '16 |          |             | [Gantt Chart Summary Bar] |     |      |      |        |           |         |          |          |     |  |  |     |
| 24 | Material on site (decking should be ready)                       | Leader    | 1 day    | 10 Sep '16 | 10 Sep '16 |          |             | [Gantt Chart Task Bar]    |     |      |      |        |           |         |          |          |     |  |  |     |
| 25 | Excavation for installation of remaining DN400                   | Leader    | 6 days   | 14 Sep '16 | 21 Sep '16 |          |             | [Gantt Chart Task Bar]    |     |      |      |        |           |         |          |          |     |  |  |     |
| 26 | Installation of remaining DN400 pipe                             | Leader    | 3 days   | 22 Sep '16 | 24 Sep '16 | 24,25    |             | [Gantt Chart Task Bar]    |     |      |      |        |           |         |          |          |     |  |  |     |
| 27 | Thrust block construction  | Leader    | 2 days   | 26 Sep '16 | 27 Sep '16 | 26       |             | [Gantt Chart Task Bar]    |     |      |      |        |           |         |          |          |     |  |  |     |
| 28 | Testing of DN400 pipe  | Leader    | 1 day    | 28 Sep '16 | 28 Sep '16 | 27       |             | [Gantt Chart Task Bar]    |     |      |      |        |           |         |          |          |     |  |  |     |
| 29 | Backfilling  | Leader    | 2 days   | 29 Sep '16 | 30 Sep '16 | 28       |             | [Gantt Chart Task Bar]    |     |      |      |        |           |         |          |          |     |  |  |     |
| 30 | <b>Storm Drain, Sewage and Cable Draw Pit</b>                    |           | 28 days  | 03 Oct '16 | 04 Nov '16 |          |             | [Gantt Chart Summary Bar] |     |      |      |        |           |         |          |          |     |  |  |     |
| 31 | Manhole and Pipe Installation (Sewage)                           | Leader    | 10 days  | 03 Oct '16 | 14 Oct '16 | 29       |             | [Gantt Chart Task Bar]    |     |      |      |        |           |         |          |          |     |  |  |     |
| 32 | Cable Draw Pit   | Leader    | 4 days   | 15 Oct '16 | 19 Oct '16 | 31       |             | [Gantt Chart Task Bar]    |     |      |      |        |           |         |          |          |     |  |  |     |
| 33 | Storm Drain & Pit  | Leader    | 14 days  | 20 Oct '16 | 04 Nov '16 | 32       |             | [Gantt Chart Task Bar]    |     |      |      |        |           |         |          |          |     |  |  |     |
| 34 | <b>Road Works for Area A2</b>                                    |           | 32 days  | 05 Nov '16 | 12 Dec '16 |          |             | [Gantt Chart Summary Bar] |     |      |      |        |           |         |          |          |     |  |  |     |
| 35 | Sub-base   | Leader    | 7 days   | 05 Nov '16 | 12 Nov '16 | 33       |             | [Gantt Chart Task Bar]    |     |      |      |        |           |         |          |          |     |  |  |     |
| 36 | Road Base, Kerb incl. U-channel and catchpit                     | Leader    | 7 days   | 14 Nov '16 | 21 Nov '16 | 35       |             | [Gantt Chart Task Bar]    |     |      |      |        |           |         |          |          |     |  |  |     |
| 37 | Paving blocks for Area A2  | Leader    | 7 days   | 05 Dec '16 | 12 Dec '16 | 36,18    |             | [Gantt Chart Task Bar]    |     |      |      |        |           |         |          |          |     |  |  |     |
| 38 | <b>Remaining Works around DO Building</b>                        |           | 142 days | 24 May '16 | 10 Nov '16 |          |             | [Gantt Chart Summary Bar] |     |      |      |        |           |         |          |          |     |  |  |     |
| 39 | <b>Construction of Staircase No. 5</b>                           |           | 39 days  | 15 Sep '16 | 02 Nov '16 |          |             | [Gantt Chart Summary Bar] |     |      |      |        |           |         |          |          |     |  |  |     |
| 40 | Bay 1  | Leader    | 10 days  | 15 Sep '16 | 27 Sep '16 |          |             | [Gantt Chart Task Bar]    |     |      |      |        |           |         |          |          |     |  |  |     |
| 41 | Bay 2  | Leader    | 10 days  | 28 Sep '16 | 11 Oct '16 | 40       |             | [Gantt Chart Task Bar]    |     |      |      |        |           |         |          |          |     |  |  |     |
| 42 | Bay 3  | Leader    | 7 days   | 12 Oct '16 | 19 Oct '16 | 41       |             | [Gantt Chart Task Bar]    |     |      |      |        |           |         |          |          |     |  |  |     |
| 43 | Finishing & Backfilling  | Leader    | 12 days  | 20 Oct '16 | 02 Nov '16 | 42       |             | [Gantt Chart Task Bar]    |     |      |      |        |           |         |          |          |     |  |  |     |
| 44 | <b>Construction of Toilet</b>                                    |           | 38 days  | 14 Sep '16 | 31 Oct '16 |          |             | [Gantt Chart Summary Bar] |     |      |      |        |           |         |          |          |     |  |  |     |
| 45 | Finishing Works  | Leader    | 14 days  | 14 Sep '16 | 30 Sep '16 |          |             | [Gantt Chart Task Bar]    |     |      |      |        |           |         |          |          |     |  |  |     |
| 46 | <b>E&amp;M Installation for toilet and shower room</b>           | JEC       | 24 days  | 03 Oct '16 | 31 Oct '16 | 45       |             | [Gantt Chart Task Bar]    |     |      |      |        |           |         |          |          |     |  |  |     |
| 47 | <b>Manhole and Pipe Laying</b>                                   |           | 33 days  | 03 Oct '16 | 10 Nov '16 |          |             | [Gantt Chart Summary Bar] |     |      |      |        |           |         |          |          |     |  |  |     |
| 48 | Bamboo Scaffolding for External Finishing of DO Building         | Leader    | 1 day    | 03 Oct '16 | 03 Oct '16 |          |             | [Gantt Chart Task Bar]    |     |      |      |        |           |         |          |          |     |  |  |     |
| 49 | External Finishing at DO Building                                | Leader    | 7 days   | 04 Oct '16 | 12 Oct '16 | 48       |             | [Gantt Chart Task Bar]    |     |      |      |        |           |         |          |          |     |  |  |     |
| 50 | Removal of Bamboo Scaffolding                                    | Leader    | 1 day    | 13 Oct '16 | 13 Oct '16 | 49       |             | [Gantt Chart Task Bar]    |     |      |      |        |           |         |          |          |     |  |  |     |
| 51 | Manhole and Pipe Laying  | Leader    | 24 days  | 14 Oct '16 | 10 Nov '16 | 50       |             | [Gantt Chart Task Bar]    |     |      |      |        |           |         |          |          |     |  |  |     |
| 52 | <b>E&amp;M Outstanding Works at DO Building</b>                  |           | 126 days | 24 May '16 | 22 Oct '16 |          |             | [Gantt Chart Summary Bar] |     |      |      |        |           |         |          |          |     |  |  |     |
| 53 | Provision of ACF   | JEC       | 50 days  | 23 Aug '16 | 22 Oct '16 |          | In progress | [Gantt Chart Task Bar]    |     |      |      |        |           |         |          |          |     |  |  |     |
| 54 | Defects Rectification  | JEC       | 109 days | 24 May '16 | 30 Sep '16 |          | In progress | [Gantt Chart Task Bar]    |     |      |      |        |           |         |          |          |     |  |  |     |
| 55 | <b>Other Works for FSGT Building</b>                             |           | 141 days | 23 May '16 | 08 Nov '16 |          |             | [Gantt Chart Summary Bar] |     |      |      |        |           |         |          |          |     |  |  |     |
| 56 | <b>Defects and Outstanding Works at FSGT Building</b>            | Leader    | 110 days | 23 May '16 | 30 Sep '16 |          |             | [Gantt Chart Summary Bar] |     |      |      |        |           |         |          |          |     |  |  |     |
| 57 | Defects and Outstanding Finishes at FSGT Building                | Leader    | 110 days | 23 May '16 | 30 Sep '16 |          |             | [Gantt Chart Task Bar]    |     |      |      |        |           |         |          |          |     |  |  |     |
| 58 | Defects Rectification on E&M Works                               | JEC       | 110 days | 23 May '16 | 30 Sep '16 |          | In progress | [Gantt Chart Task Bar]    |     |      |      |        |           |         |          |          |     |  |  |     |
| 59 | <b>Ramp Construction No. 4</b>                                   | Leader    | 29 days  | 12 Sep '16 | 18 Oct '16 |          |             | [Gantt Chart Summary Bar] |     |      |      |        |           |         |          |          |     |  |  |     |
| 60 | Removal of shelter   | Leader    | 4 days   | 12 Sep '16 | 15 Sep '16 |          |             | [Gantt Chart Task Bar]    |     |      |      |        |           |         |          |          |     |  |  |     |
| 61 | Footing Construction   | Leader    | 6 days   | 17 Sep '16 | 23 Sep '16 | 60       |             | [Gantt Chart Task Bar]    |     |      |      |        |           |         |          |          |     |  |  |     |
| 62 | Column Construction  | Leader    | 5 days   | 24 Sep '16 | 29 Sep '16 | 61       |             | [Gantt Chart Task Bar]    |     |      |      |        |           |         |          |          |     |  |  |     |
| 63 | Slab Construction  | Leader    | 14 days  | 30 Sep '16 | 18 Oct '16 | 62       |             | [Gantt Chart Task Bar]    |     |      |      |        |           |         |          |          |     |  |  |     |
| 64 | <b>Remaining U-Channel and Catchpit</b>                          |           | 18 days  | 19 Oct '16 | 08 Nov '16 |          |             | [Gantt Chart Summary Bar] |     |      |      |        |           |         |          |          |     |  |  |     |
| 65 | U-Channel and Catchpit (West Side of FSGT and DO Building)       | Leader    | 12 days  | 19 Oct '16 | 01 Nov '16 | 63       |             | [Gantt Chart Task Bar]    |     |      |      |        |           |         |          |          |     |  |  |     |
| 66 | U-Channel and Catchpit (North Side of FSGT Building)             | Leader    | 6 days   | 02 Nov '16 | 08 Nov '16 | 65       |             | [Gantt Chart Task Bar]    |     |      |      |        |           |         |          |          |     |  |  |     |

OUTSTANDING WORKS PROGRAMME FOR DC/2009/23  
NORTH POINT PTW, WAN CHAI EAST PTW AND CENTRAL PTW

| ID  | Task Name  | Action By | Duration | Start      | Finish     | Predeces  | Remarks  | 201                              |    |    |     |    |    |    |      |    |    |    |      |    |    |    |        |    |    |    |           |    |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |
|-----|--|-----------|----------|------------|------------|-----------|--|----------------------------------|----|----|-----|----|----|----|------|----|----|----|------|----|----|----|--------|----|----|----|-----------|----|----|----|---------|----|----|----------|----|----|----------|----|----|-----|----|----|----|----|----|----|----|----|----|----|
|     |  |           |          |            |            |           |  | April                            |    |    | May |    |    |    | June |    |    |    | July |    |    |    | August |    |    |    | September |    |    |    | October |    |    | November |    |    | December |    |    | Jan |    |    |    |    |    |    |    |    |    |    |
|     |  |           |          |            |            |           |  | 13                               | 20 | 27 | 03  | 10 | 17 | 24 | 01   | 08 | 15 | 22 | 29   | 05 | 12 | 19 | 26     | 03 | 10 | 17 | 24        | 31 | 07 | 14 | 21      | 28 | 04 | 11       | 18 | 25 | 02       | 09 | 16 | 23  | 30 | 06 | 13 | 20 | 27 | 04 | 11 | 18 | 25 | 01 |
| 67  | <b>Other External Works</b>  |           | 227 days | 01 Apr '16 | 31 Dec '16 |           |  | [Summary bar from Apr to Dec]    |    |    |     |    |    |    |      |    |    |    |      |    |    |    |        |    |    |    |           |    |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |
| 68  | <b>Backfilling Works (Drop Shaft Area)</b>                                   | Leader    | 101 days | 02 Jul '16 | 31 Oct '16 |           |  | [Summary bar from Jul to Oct]    |    |    |     |    |    |    |      |    |    |    |      |    |    |    |        |    |    |    |           |    |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |
| 69  | Backfilling Works between Seawater Intake Chamber & Seawater Pumping Station | Leader    | 54 days  | 11 Jul '16 | 10 Sep '16 |           |  | [Blue bar from Jul to Sep]       |    |    |     |    |    |    |      |    |    |    |      |    |    |    |        |    |    |    |           |    |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |
| 70  | Remaining Works for Seawater Pumping Station (incl. multi part cover)        | Leader    | 101 days | 02 Jul '16 | 31 Oct '16 |           |  | [Blue bar from Jul to Oct]       |    |    |     |    |    |    |      |    |    |    |      |    |    |    |        |    |    |    |           |    |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |
| 71  | Remaining Works for Seawater Intake Chamber A & B (incl. multi part cover)   | Leader    | 101 days | 02 Jul '16 | 31 Oct '16 |           |  | [Blue bar from Jul to Oct]       |    |    |     |    |    |    |      |    |    |    |      |    |    |    |        |    |    |    |           |    |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |
| 72  | Backfilling Works at Seawater Intake Chamber A and B                         | Leader    | 27 days  | 12 Sep '16 | 15 Oct '16 |           |  | [Blue bar from Sep to Oct]       |    |    |     |    |    |    |      |    |    |    |      |    |    |    |        |    |    |    |           |    |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |
| 73  | <b>Remaining Cable Ducts and Drawpits</b>                                    | Leader    | 61 days  | 19 Sep '16 | 30 Nov '16 |           |  | [Summary bar from Sep to Nov]    |    |    |     |    |    |    |      |    |    |    |      |    |    |    |        |    |    |    |           |    |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |
| 74  | Remaining Cable Ducts and Drawpits   | Leader    | 25 days  | 19 Sep '16 | 19 Oct '16 |           |  | [Blue bar from Sep to Oct]       |    |    |     |    |    |    |      |    |    |    |      |    |    |    |        |    |    |    |           |    |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |
| 75  | H2S and Weather Monitoring Station   | JEC       | 36 days  | 20 Oct '16 | 30 Nov '16 | 74        | Waiting for H/O of cable duct from Civil Works                               | [Red bar from Oct to Nov]        |    |    |     |    |    |    |      |    |    |    |      |    |    |    |        |    |    |    |           |    |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |
| 76  | <b>Remaining E&amp;M Works</b>   | Leader    | 190 days | 01 Apr '16 | 16 Nov '16 |           |  | [Summary bar from Apr to Nov]    |    |    |     |    |    |    |      |    |    |    |      |    |    |    |        |    |    |    |           |    |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |
| 77  | E+H Flume Channel re-calibration   | Leader    | 27 days  | 23 Aug '16 | 23 Sep '16 |           | In progress  | [Red bar from Aug to Sep]        |    |    |     |    |    |    |      |    |    |    |      |    |    |    |        |    |    |    |           |    |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |
| 78  | Mechanical Installation of Penstock inside Seawater Intake Chamber B         | Leader    | 39 days  | 23 Aug '16 | 08 Oct '16 |           | Rework on penstock   | [Red bar from Aug to Oct]        |    |    |     |    |    |    |      |    |    |    |      |    |    |    |        |    |    |    |           |    |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |
| 79  | Electrical Installation of Penstock inside Seawater Intake Chamber B         | Leader    | 17 days  | 20 Oct '16 | 08 Nov '16 | 74        | Waiting for H/O of cable duct from Civil Works                               | [Red bar from Oct to Nov]        |    |    |     |    |    |    |      |    |    |    |      |    |    |    |        |    |    |    |           |    |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |
| 80  | M&E Installation at Seawater Pumping Station                                 | Leader    | 152 days | 01 Apr '16 | 30 Sep '16 |           |  | [Red bar from Apr to Sep]        |    |    |     |    |    |    |      |    |    |    |      |    |    |    |        |    |    |    |           |    |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |
| 81  | Electrical Installation at Valve Chamber                                     | JEC       | 176 days | 01 Apr '16 | 31 Oct '16 |           | Cable duct and plinth for local control station not yet finish (Civil Works) | [Red bar from Apr to Oct]        |    |    |     |    |    |    |      |    |    |    |      |    |    |    |        |    |    |    |           |    |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |
| 82  | Outdoor lamp poles   | JEC       | 24 days  | 20 Oct '16 | 16 Nov '16 | 74        | Waiting for H/O of cable duct from Civil Works                               | [Red bar from Oct to Nov]        |    |    |     |    |    |    |      |    |    |    |      |    |    |    |        |    |    |    |           |    |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |
| 83  | Final System Commissioning   | JEC       | 23 days  | 30 Sep '16 | 28 Oct '16 |           | Inspection not yet confirmed by ARUP/ST2                                     | [Red bar from Sep to Oct]        |    |    |     |    |    |    |      |    |    |    |      |    |    |    |        |    |    |    |           |    |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |
| 84  | Fire Services Inspection (Including EVA)                                     | JEC       | 1 day    | 20 Oct '16 | 20 Oct '16 |           |  | [Milestone diamond on Oct 20]    |    |    |     |    |    |    |      |    |    |    |      |    |    |    |        |    |    |    |           |    |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |
| 85  | <b>Grasscrete and Landscaping Works</b>                                      | Leader    | 51 days  | 01 Nov '16 | 31 Dec '16 |           |  | [Summary bar from Nov to Dec]    |    |    |     |    |    |    |      |    |    |    |      |    |    |    |        |    |    |    |           |    |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |
| 86  | Near Staircase at DO Bldg. (Area G1) - except Grass                          | Leader    | 7 days   | 03 Nov '16 | 10 Nov '16 | 43,65     | After Staircase No. 5 and U-Channel & Catchpit                               | [Blue bar from Nov 3 to Nov 10]  |    |    |     |    |    |    |      |    |    |    |      |    |    |    |        |    |    |    |           |    |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |
| 87  | Along DO Bldg & FSGT Bldg. (Area G2 - 4 bays) - except Grass                 | Leader    | 39 days  | 11 Nov '16 | 28 Dec '16 | 86        |  | [Blue bar from Nov 11 to Dec 28] |    |    |     |    |    |    |      |    |    |    |      |    |    |    |        |    |    |    |           |    |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |
| 88  | Near Toilet at DO Bldg. (Area G3) - except Grass                             | Leader    | 7 days   | 11 Nov '16 | 18 Nov '16 | 45,51     | After toilet and manhole   | [Blue bar from Nov 11 to Nov 18] |    |    |     |    |    |    |      |    |    |    |      |    |    |    |        |    |    |    |           |    |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |
| 89  | East Side of DO Bldg. (Area G4) - except Grass                               | Leader    | 7 days   | 19 Nov '16 | 26 Nov '16 | 88        |  | [Blue bar from Nov 19 to Nov 26] |    |    |     |    |    |    |      |    |    |    |      |    |    |    |        |    |    |    |           |    |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |
| 90  | Grass Installation (Area G1 to G4) near FSGT and DO Bldg.                    | Leader    | 3 days   | 29 Dec '16 | 31 Dec '16 | 87,88,89  |  | [Blue bar from Dec 29 to Dec 31] |    |    |     |    |    |    |      |    |    |    |      |    |    |    |        |    |    |    |           |    |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |
| 91  | Near Seawater Pumping Station and Valve Chamber (Area G5) - except Grass     | Leader    | 7 days   | 01 Nov '16 | 08 Nov '16 | 29,70     | After remaining works at Seawater Pumping Station                            | [Blue bar from Nov 1 to Nov 8]   |    |    |     |    |    |    |      |    |    |    |      |    |    |    |        |    |    |    |           |    |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |
| 92  | Grass Installation (Area G5) near Seawater Pumping Station & Valve Chamber   | Leader    | 3 days   | 09 Nov '16 | 11 Nov '16 | 91        |  | [Blue bar from Nov 9 to Nov 11]  |    |    |     |    |    |    |      |    |    |    |      |    |    |    |        |    |    |    |           |    |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |
| 93  | Landscaping Works (FSGT Building Area)                                       | Leader    | 12 days  | 02 Nov '16 | 15 Nov '16 | 65        | After U-channel & catchpit on west side of FSGT & DO Bldg.                   | [Blue bar from Nov 2 to Nov 15]  |    |    |     |    |    |    |      |    |    |    |      |    |    |    |        |    |    |    |           |    |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |
| 94  | Landscaping Works (Drop Shaft Area)  | Leader    | 24 days  | 01 Nov '16 | 28 Nov '16 | 70        | After remaining works at Seawater Pumping Station                            | [Blue bar from Nov 1 to Nov 28]  |    |    |     |    |    |    |      |    |    |    |      |    |    |    |        |    |    |    |           |    |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |
| 95  | <b>Boundary Wall</b>   |           | 124 days | 13 Jul '16 | 07 Dec '16 |           |  | [Summary bar from Jul to Dec]    |    |    |     |    |    |    |      |    |    |    |      |    |    |    |        |    |    |    |           |    |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |
| 96  | Investigation Works  | Leader    | 30 days  | 13 Jul '16 | 16 Aug '16 |           |  | [Blue bar from Jul 13 to Aug 16] |    |    |     |    |    |    |      |    |    |    |      |    |    |    |        |    |    |    |           |    |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |
| 97  | Design Checking and ICE  | Leader    | 27 days  | 17 Aug '16 | 17 Sep '16 | 96        |  | [Blue bar from Aug 17 to Sep 17] |    |    |     |    |    |    |      |    |    |    |      |    |    |    |        |    |    |    |           |    |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |
| 98  | Fabrication of Fence Wall  | Leader    | 15 days  | 19 Sep '16 | 06 Oct '16 | 97        |  | [Blue bar from Sep 19 to Oct 6]  |    |    |     |    |    |    |      |    |    |    |      |    |    |    |        |    |    |    |           |    |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |
| 99  | Concrete Trimming  | Leader    | 15 days  | 29 Sep '16 | 18 Oct '16 | 97        |  | [Blue bar from Sep 29 to Oct 18] |    |    |     |    |    |    |      |    |    |    |      |    |    |    |        |    |    |    |           |    |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |
| 100 | Concrete Portion of Boundary Wall  | Leader    | 58 days  | 29 Sep '16 | 07 Dec '16 | 97        |  | [Blue bar from Sep 29 to Dec 7]  |    |    |     |    |    |    |      |    |    |    |      |    |    |    |        |    |    |    |           |    |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |
| 101 | Timber Portion of Boundary Wall  | Leader    | 50 days  | 11 Oct '16 | 07 Dec '16 | 99SS+8 da |  | [Blue bar from Oct 11 to Dec 7]  |    |    |     |    |    |    |      |    |    |    |      |    |    |    |        |    |    |    |           |    |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |

OUTSTANDING WORKS PROGRAMME FOR DC/2009/23  
NORTH POINT PTW, WAN CHAI EAST PTW AND CENTRAL PTW

| ID  | Task Name   | Action By | Duration | Start      | Finish     | Precedes  | Remarks  | Timeline      |    |    |     |    |    |      |    |    |      |    |    |        |    |    |           |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|-----|---|-----------|----------|------------|------------|-----------|--|---------------|----|----|-----|----|----|------|----|----|------|----|----|--------|----|----|-----------|----|----|---------|----|----|----------|----|----|----------|----|----|-----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
|     |   |           |          |            |            |           |  | April         |    |    | May |    |    | June |    |    | July |    |    | August |    |    | September |    |    | October |    |    | November |    |    | December |    |    | 201 |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|     |   |           |          |            |            |           |  | 13            | 20 | 27 | 03  | 10 | 17 | 24   | 01 | 08 | 15   | 22 | 29 | 05     | 12 | 19 | 26        | 03 | 10 | 17      | 24 | 31 | 07       | 14 | 21 | 28       | 04 | 11 | 18  | 25 | 02 | 09 | 16 | 23 | 30 | 06 | 13 | 20 | 27 | 04 | 11 | 18 | 25 | 01 |
| 102 | <b>WAN CHAI EAST PTW</b>  |           | 185 days | 23 May '16 | 31 Dec '16 |           |  | [Summary bar] |    |    |     |    |    |      |    |    |      |    |    |        |    |    |           |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 103 | <b>Admin Building and Inlet Pumping Station Building</b>  |           | 147 days | 23 May '16 | 15 Nov '16 |           |  | [Summary bar] |    |    |     |    |    |      |    |    |      |    |    |        |    |    |           |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 104 | <b>Defects and Outstanding Works</b>  |           | 85 days  | 22 Jun '16 | 30 Sep '16 |           |  | [Summary bar] |    |    |     |    |    |      |    |    |      |    |    |        |    |    |           |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 105 | Defects and Outstanding Finishes at Admin Building  | Leader    | 85 days  | 22 Jun '16 | 30 Sep '16 |           |  | [Blue bar]    |    |    |     |    |    |      |    |    |      |    |    |        |    |    |           |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 106 | Outdoor Lighting  | JEC       | 27 days  | 23 Aug '16 | 23 Sep '16 |           |  | [Red bar]     |    |    |     |    |    |      |    |    |      |    |    |        |    |    |           |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 107 | PV System   | JEC       | 27 days  | 23 Aug '16 | 23 Sep '16 |           |  | [Red bar]     |    |    |     |    |    |      |    |    |      |    |    |        |    |    |           |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 108 | <b>Remaining Works at Inlet Pumping Station</b>   |           | 147 days | 23 May '16 | 15 Nov '16 |           |  | [Summary bar] |    |    |     |    |    |      |    |    |      |    |    |        |    |    |           |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 109 | Pavement for Pedestrian (between Boundary Wall and Inlet Pumping Station)                       | Leader    | 37 days  | 03 Oct '16 | 15 Nov '16 |           |  | [Blue bar]    |    |    |     |    |    |      |    |    |      |    |    |        |    |    |           |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 110 | Curtain Wall  | Leader    | 121 days | 23 May '16 | 15 Oct '16 |           |  | [Blue bar]    |    |    |     |    |    |      |    |    |      |    |    |        |    |    |           |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 111 | Painting works & architectural finishes at existing Inlet Pumping Station                       | Leader    | 37 days  | 03 Oct '16 | 15 Nov '16 |           |  | [Blue bar]    |    |    |     |    |    |      |    |    |      |    |    |        |    |    |           |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 112 | <b>Remaining E&amp;M Works</b>  |           | 161 days | 24 May '16 | 02 Dec '16 |           |  | [Summary bar] |    |    |     |    |    |      |    |    |      |    |    |        |    |    |           |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 113 | E+H Flume Channel re-calibration  | JEC       | 27 days  | 23 Aug '16 | 23 Sep '16 |           | In progress                                    | [Red bar]     |    |    |     |    |    |      |    |    |      |    |    |        |    |    |           |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 114 | Resolve Pump Liner  | JEC       | 150 days | 24 May '16 | 19 Nov '16 |           |  | [Red bar]     |    |    |     |    |    |      |    |    |      |    |    |        |    |    |           |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 115 | Permanent support to valves   | JEC       | 66 days  | 23 Aug '16 | 10 Nov '16 |           | On hold by BCM                                 | [Red bar]     |    |    |     |    |    |      |    |    |      |    |    |        |    |    |           |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 116 | Permanent platform  | JEC       | 66 days  | 23 Aug '16 | 10 Nov '16 |           | On hold by BCM                                 | [Red bar]     |    |    |     |    |    |      |    |    |      |    |    |        |    |    |           |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 117 | Cable Ducts and Drawpits (for H2S and Weather Monitoring Station)                               | Leader    | 30 days  | 12 Sep '16 | 19 Oct '16 |           |  | [Blue bar]    |    |    |     |    |    |      |    |    |      |    |    |        |    |    |           |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 118 | H2S and Weather Monitoring Station  | JEC       | 38 days  | 20 Oct '16 | 02 Dec '16 | 117       | Waiting for H/O of cable duct from Civil Works | [Red bar]     |    |    |     |    |    |      |    |    |      |    |    |        |    |    |           |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 119 | Outstanding DOU and ventilation works   | JEC       | 124 days | 24 May '16 | 20 Oct '16 |           | ACF air duct to skip enclosure and hood        | [Red bar]     |    |    |     |    |    |      |    |    |      |    |    |        |    |    |           |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 120 | Final System Commissioning of DOU and Ventilation Works   | JEC       | 27 days  | 21 Oct '16 | 21 Nov '16 | 119       |  | [Red bar]     |    |    |     |    |    |      |    |    |      |    |    |        |    |    |           |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 121 | Installation of skip enclosure (site installation)  | JEC       | 24 days  | 26 Sep '16 | 25 Oct '16 |           |  | [Red bar]     |    |    |     |    |    |      |    |    |      |    |    |        |    |    |           |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 122 | <b>Boundary Wall (Near Admin Bldg. Footing Construction Completed) - 30m</b>                    |           | 66 days  | 12 Aug '16 | 31 Oct '16 |           |  | [Summary bar] |    |    |     |    |    |      |    |    |      |    |    |        |    |    |           |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 123 | Design Submission and Approval  | Leader    | 14 days  | 12 Aug '16 | 27 Aug '16 |           |  | [Blue bar]    |    |    |     |    |    |      |    |    |      |    |    |        |    |    |           |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 124 | Fabrication (off-site)  | Leader    | 35 days  | 29 Aug '16 | 11 Oct '16 | 123       |  | [Blue bar]    |    |    |     |    |    |      |    |    |      |    |    |        |    |    |           |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 125 | Fence Wall Installation   | Leader    | 5 days   | 12 Oct '16 | 17 Oct '16 | 124       |  | [Blue bar]    |    |    |     |    |    |      |    |    |      |    |    |        |    |    |           |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 126 | Painting  | Leader    | 6 days   | 18 Oct '16 | 24 Oct '16 | 125       |  | [Blue bar]    |    |    |     |    |    |      |    |    |      |    |    |        |    |    |           |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 127 | Timber Installation   | Leader    | 6 days   | 25 Oct '16 | 31 Oct '16 | 126       |  | [Blue bar]    |    |    |     |    |    |      |    |    |      |    |    |        |    |    |           |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 128 | <b>Boundary Wall and Landscaping Works (Drop Shaft Area) - 60m</b>                              |           | 100 days | 13 Aug '16 | 10 Dec '16 |           |  | [Summary bar] |    |    |     |    |    |      |    |    |      |    |    |        |    |    |           |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 129 | Design Submission and Approval  | Leader    | 30 days  | 13 Aug '16 | 17 Sep '16 |           |  | [Blue bar]    |    |    |     |    |    |      |    |    |      |    |    |        |    |    |           |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 130 | Fabrication (off-site)  | Leader    | 18 days  | 19 Sep '16 | 11 Oct '16 | 129,124SS |  | [Blue bar]    |    |    |     |    |    |      |    |    |      |    |    |        |    |    |           |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 131 | Footing Construction (Excavation to Concreting)   | Leader    | 12 days  | 19 Sep '16 | 03 Oct '16 | 129       |  | [Blue bar]    |    |    |     |    |    |      |    |    |      |    |    |        |    |    |           |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 132 | Fence Wall Installation   | Leader    | 6 days   | 12 Oct '16 | 18 Oct '16 | 130,131   |  | [Blue bar]    |    |    |     |    |    |      |    |    |      |    |    |        |    |    |           |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 133 | Painting  | Leader    | 6 days   | 19 Oct '16 | 25 Oct '16 | 132       |  | [Blue bar]    |    |    |     |    |    |      |    |    |      |    |    |        |    |    |           |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 134 | Timber Installation   | Leader    | 12 days  | 26 Oct '16 | 08 Nov '16 | 133       |  | [Blue bar]    |    |    |     |    |    |      |    |    |      |    |    |        |    |    |           |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 135 | Trimming of existing Fence  | Leader    | 10 days  | 09 Nov '16 | 19 Nov '16 | 134       |  | [Blue bar]    |    |    |     |    |    |      |    |    |      |    |    |        |    |    |           |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 136 | Landscaping Works   | Leader    | 18 days  | 21 Nov '16 | 10 Dec '16 | 135       |  | [Blue bar]    |    |    |     |    |    |      |    |    |      |    |    |        |    |    |           |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 137 | <b>Boundary Wall (along Entrance Gate) - 55m</b>  |           | 96 days  | 13 Aug '16 | 06 Dec '16 |           |  | [Summary bar] |    |    |     |    |    |      |    |    |      |    |    |        |    |    |           |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 138 | Design Submission and Approval  | Leader    | 30 days  | 13 Aug '16 | 17 Sep '16 |           |  | [Blue bar]    |    |    |     |    |    |      |    |    |      |    |    |        |    |    |           |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 139 | Fabrication (off-site)  | Leader    | 18 days  | 19 Sep '16 | 11 Oct '16 | 138       |  | [Blue bar]    |    |    |     |    |    |      |    |    |      |    |    |        |    |    |           |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 140 | Footing Construction (Excavation to Concreting)   | Leader    | 12 days  | 04 Oct '16 | 18 Oct '16 | 131       |  | [Blue bar]    |    |    |     |    |    |      |    |    |      |    |    |        |    |    |           |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 141 | Fence Wall Installation   | Leader    | 6 days   | 19 Oct '16 | 25 Oct '16 | 140,139   |  | [Blue bar]    |    |    |     |    |    |      |    |    |      |    |    |        |    |    |           |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 142 | Painting  | Leader    | 6 days   | 26 Oct '16 | 01 Nov '16 | 141       |  | [Blue bar]    |    |    |     |    |    |      |    |    |      |    |    |        |    |    |           |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 143 | Timber Installation   | Leader    | 12 days  | 02 Nov '16 | 15 Nov '16 | 142       |  | [Blue bar]    |    |    |     |    |    |      |    |    |      |    |    |        |    |    |           |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 144 | Trimming of existing Fence  | Leader    | 18 days  | 16 Nov '16 | 06 Dec '16 | 143       |  | [Blue bar]    |    |    |     |    |    |      |    |    |      |    |    |        |    |    |           |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 145 | Sliding Gate Installation   | Leader    | 18 days  | 16 Nov '16 | 06 Dec '16 | 143       |  | [Blue bar]    |    |    |     |    |    |      |    |    |      |    |    |        |    |    |           |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 146 | <b>Roadworks and Drainage Works incl. Grasscrete (between Fence Wall &amp; Admin Bldg.)</b>     |           | 85 days  | 20 Sep '16 | 31 Dec '16 |           |  | [Summary bar] |    |    |     |    |    |      |    |    |      |    |    |        |    |    |           |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 147 | Grasscrete (in between Drop Shaft and Admin Bldg. GL1)  | Leader    | 7 days   | 20 Sep '16 | 27 Sep '16 |           |  | [Blue bar]    |    |    |     |    |    |      |    |    |      |    |    |        |    |    |           |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 148 | Drainage Works (SM5 incl. pipe laying) and Roadworks - Admin Bldg GL 1-3                        | Leader    | 16 days  | 28 Sep '16 | 18 Oct '16 | 147       |  | [Blue bar]    |    |    |     |    |    |      |    |    |      |    |    |        |    |    |           |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 149 | Drainage Works at Admin Bldg GL A-B   | Leader    | 5 days   | 19 Oct '16 | 24 Oct '16 | 148       |  | [Blue bar]    |    |    |     |    |    |      |    |    |      |    |    |        |    |    |           |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 150 | Remaining Grasscrete (along GL 7)   | Leader    | 5 days   | 25 Oct '16 | 29 Oct '16 | 149       |  | [Blue bar]    |    |    |     |    |    |      |    |    |      |    |    |        |    |    |           |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 151 | Roadworks (in between Drop Shaft and Admin Bldg. GL1)   | Leader    | 8 days   | 31 Oct '16 | 08 Nov '16 | 150       |  | [Blue bar]    |    |    |     |    |    |      |    |    |      |    |    |        |    |    |           |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 152 | Roadworks (in between Admin Bldg & Fence Wall Gate Area) Admin Bldg GL A-B                      | Leader    | 8 days   | 31 Oct '16 | 08 Nov '16 | 150       |  | [Blue bar]    |    |    |     |    |    |      |    |    |      |    |    |        |    |    |           |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 153 | Roadworks (in between Admin Bldg & Fence Wall Gate Area) Admin Bldg GL B-C                      | Leader    | 10 days  | 09 Nov '16 | 19 Nov '16 | 152       |  | [Blue bar]    |    |    |     |    |    |      |    |    |      |    |    |        |    |    |           |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 154 | Roadworks (in between Admin Bldg & Pumping Station) Admin Bldg GL 3-4                           | Leader    | 10 days  | 09 Nov '16 | 19 Nov '16 | 151       |  | [Blue bar]    |    |    |     |    |    |      |    |    |      |    |    |        |    |    |           |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 155 | Roadworks (in between Admin Bldg & Pumping Station) Admin Bldg GL 4-between 6&7                 | Leader    | 8 days   | 21 Nov '16 | 29 Nov '16 | 154       |  | [Blue bar]    |    |    |     |    |    |      |    |    |      |    |    |        |    |    |           |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 156 | Drainage & Roadworks (in between Admin Bldg & Pumping Station) Admin Bldg GL between 6&7 - 7    | Leader    | 9 days   | 30 Nov '16 | 09 Dec '16 | 155,153   |  | [Blue bar]    |    |    |     |    |    |      |    |    |      |    |    |        |    |    |           |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 157 | Roadworks (In Between Admin Bldg. GL 7 & Fence Wall Gate Area) Half of Road                     | Leader    | 8 days   | 10 Dec '16 | 19 Dec '16 | 156       |  | [Blue bar]    |    |    |     |    |    |      |    |    |      |    |    |        |    |    |           |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 158 | Remaining Roadworks (In Between Admin Bldg. GL 7 & Fence Wall Gate Area) Remaining Half of Road | Leader    | 9 days   | 20 Dec '16 | 31 Dec '16 | 157       |  | [Blue bar]    |    |    |     |    |    |      |    |    |      |    |    |        |    |    |           |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |



OUTSTANDING WORKS PROGRAMME FOR DC/2009/23  
NORTH POINT PTW, WAN CHAI EAST PTW AND CENTRAL PTW

| ID  | Task Name   | Action By | Duration | Start      | Finish     | Precedes | Remarks   | Timeline      |    |    |     |    |    |      |    |    |      |    |    |        |    |    |           |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|-----|---|-----------|----------|------------|------------|----------|---|---------------|----|----|-----|----|----|------|----|----|------|----|----|--------|----|----|-----------|----|----|---------|----|----|----------|----|----|----------|----|----|-----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
|     |   |           |          |            |            |          |   | April         |    |    | May |    |    | June |    |    | July |    |    | August |    |    | September |    |    | October |    |    | November |    |    | December |    |    | 201 |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|     |   |           |          |            |            |          |   | 13            | 20 | 27 | 03  | 10 | 17 | 24   | 01 | 08 | 15   | 22 | 29 | 05     | 12 | 19 | 26        | 03 | 10 | 17      | 24 | 31 | 07       | 14 | 21 | 28       | 04 | 11 | 18  | 25 | 02 | 09 | 16 | 23 | 30 | 06 | 13 | 20 | 27 | 04 | 11 | 18 | 25 | 01 |
| 159 | <b>CENTRAL PTW</b>  |           | 185 days | 23 May '16 | 31 Dec '16 |          |   | [Summary bar] |    |    |     |    |    |      |    |    |      |    |    |        |    |    |           |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 160 | <b>Outstanding Works at FSGT, DO Room, DG Store &amp; General Store</b>   |           | 185 days | 23 May '16 | 31 Dec '16 |          |   | [Summary bar] |    |    |     |    |    |      |    |    |      |    |    |        |    |    |           |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 161 | <b>FSGT Building</b>  |           | 115 days | 23 May '16 | 07 Oct '16 |          |   | [Summary bar] |    |    |     |    |    |      |    |    |      |    |    |        |    |    |           |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 162 | Outstanding and Defective Works   | Leader    | 110 days | 23 May '16 | 30 Sep '16 |          |   | [Blue bar]    |    |    |     |    |    |      |    |    |      |    |    |        |    |    |           |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 163 | Installation of Access Link Bridge between FSGT and DO Room               | Leader    | 15 days  | 20 Sep '16 | 07 Oct '16 |          |   | [Blue bar]    |    |    |     |    |    |      |    |    |      |    |    |        |    |    |           |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 164 | <b>DO Room, DG Store and General Store</b>                                |           | 185 days | 23 May '16 | 31 Dec '16 |          |   | [Summary bar] |    |    |     |    |    |      |    |    |      |    |    |        |    |    |           |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 165 | Outstanding and Defective Works   | Leader    | 110 days | 23 May '16 | 30 Sep '16 |          |   | [Blue bar]    |    |    |     |    |    |      |    |    |      |    |    |        |    |    |           |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 166 | RC Staircase (up to +7.7mPD)  | Leader    | 87 days  | 23 May '16 | 02 Sep '16 |          |   | [Blue bar]    |    |    |     |    |    |      |    |    |      |    |    |        |    |    |           |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 167 | RC Staircase (up to +11.4mPD)   | Leader    | 19 days  | 03 Sep '16 | 26 Sep '16 | 166      |   | [Blue bar]    |    |    |     |    |    |      |    |    |      |    |    |        |    |    |           |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 168 | RC Staircase (up to roof at +14.51mPD)                                    | Leader    | 18 days  | 27 Sep '16 | 19 Oct '16 | 167      |   | [Blue bar]    |    |    |     |    |    |      |    |    |      |    |    |        |    |    |           |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 169 | Finishing at Staircase  | Leader    | 60 days  | 20 Oct '16 | 30 Dec '16 | 168      |   | [Blue bar]    |    |    |     |    |    |      |    |    |      |    |    |        |    |    |           |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 170 | Plate load test for Toilet Construction                                   | Leader    | 6 days   | 20 Oct '16 | 26 Oct '16 | 168      |   | [Blue bar]    |    |    |     |    |    |      |    |    |      |    |    |        |    |    |           |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 171 | Toilet (slab construction and drain installation)                         | Leader    | 9 days   | 27 Oct '16 | 05 Nov '16 | 170      |   | [Blue bar]    |    |    |     |    |    |      |    |    |      |    |    |        |    |    |           |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 172 | Toilet (wall and top slab construction)                                   | Leader    | 15 days  | 07 Nov '16 | 23 Nov '16 | 171      |   | [Blue bar]    |    |    |     |    |    |      |    |    |      |    |    |        |    |    |           |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 173 | Internal Finishing at Toilet  | Leader    | 5 days   | 24 Nov '16 | 29 Nov '16 | 172      |   | [Blue bar]    |    |    |     |    |    |      |    |    |      |    |    |        |    |    |           |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 174 | E&M Installation at Toilet  | Leader    | 26 days  | 30 Nov '16 | 31 Dec '16 | 173      |   | [Blue bar]    |    |    |     |    |    |      |    |    |      |    |    |        |    |    |           |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 175 | <b>Outstanding Works at Inlet Pumping Station</b>                         |           | 145 days | 23 May '16 | 12 Nov '16 |          |   | [Summary bar] |    |    |     |    |    |      |    |    |      |    |    |        |    |    |           |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 176 | Curtain Wall  | Leader    | 121 days | 23 May '16 | 15 Oct '16 |          |   | [Blue bar]    |    |    |     |    |    |      |    |    |      |    |    |        |    |    |           |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 177 | Painting works & architectural finishes at existing Inlet Pumping Station | Leader    | 24 days  | 17 Oct '16 | 12 Nov '16 | 176      |   | [Blue bar]    |    |    |     |    |    |      |    |    |      |    |    |        |    |    |           |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 178 | <b>Remaining E&amp;M Works</b>  | Leader    | 150 days | 24 May '16 | 19 Nov '16 |          |   | [Summary bar] |    |    |     |    |    |      |    |    |      |    |    |        |    |    |           |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 179 | Outstanding and Defective Works for E&M Works at Central PTW              | JEC       | 109 days | 24 May '16 | 30 Sep '16 |          |   | [Red bar]     |    |    |     |    |    |      |    |    |      |    |    |        |    |    |           |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 180 | ACF installation  | JEC       | 33 days  | 23 Aug '16 | 30 Sep '16 |          | In progress                                     | [Red bar]     |    |    |     |    |    |      |    |    |      |    |    |        |    |    |           |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 181 | Permanent Air Duct  | JEC       | 120 days | 24 May '16 | 15 Oct '16 |          | In progress air duct to and inside IPS          | [Red bar]     |    |    |     |    |    |      |    |    |      |    |    |        |    |    |           |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 182 | Permanent Cables  | JEC       | 146 days | 24 May '16 | 15 Nov '16 |          | Subject to availability of cable ducts          | [Red bar]     |    |    |     |    |    |      |    |    |      |    |    |        |    |    |           |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 183 | Remaining Cable Ducts and Drawpits (Civil Works)                          | Leader    | 25 days  | 19 Sep '16 | 19 Oct '16 |          |   | [Blue bar]    |    |    |     |    |    |      |    |    |      |    |    |        |    |    |           |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 184 | H2S and Weather Monitoring Station  | JEC       | 27 days  | 20 Oct '16 | 19 Nov '16 | 183      | Subject to availability of cable ducts          | [Red bar]     |    |    |     |    |    |      |    |    |      |    |    |        |    |    |           |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 185 | Final System Commissioning (FSGT Building)                                | JEC       | 24 days  | 14 Sep '16 | 14 Oct '16 |          |   | [Red bar]     |    |    |     |    |    |      |    |    |      |    |    |        |    |    |           |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 186 | Final System Commissioning DOU and Ventilation                            | JEC       | 27 days  | 15 Oct '16 | 15 Nov '16 |          |   | [Red bar]     |    |    |     |    |    |      |    |    |      |    |    |        |    |    |           |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 187 | Conversion of existing flushing system at Inlet Pumping Station           | JEC       | 9 days   | 23 Sep '16 | 04 Oct '16 |          | Waiting for backfill (civil) up to 1m below FFL | [Red bar]     |    |    |     |    |    |      |    |    |      |    |    |        |    |    |           |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 188 | Flume channel re-calibration  | JEC       | 27 days  | 23 Aug '16 | 23 Sep '16 |          | In progress                                     | [Red bar]     |    |    |     |    |    |      |    |    |      |    |    |        |    |    |           |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 189 | Pump liner issues   | JEC       | 104 days | 18 Jul '16 | 18 Nov '16 |          |   | [Red bar]     |    |    |     |    |    |      |    |    |      |    |    |        |    |    |           |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 190 | Pump softstarter bypass contractor  | JEC       | 37 days  | 23 Aug '16 | 06 Oct '16 |          |   | [Red bar]     |    |    |     |    |    |      |    |    |      |    |    |        |    |    |           |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 191 | Fire Services Inspection (Including EVA)                                  | JEC       | 1 day    | 27 Oct '16 | 27 Oct '16 |          |   | [Red bar]     |    |    |     |    |    |      |    |    |      |    |    |        |    |    |           |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 192 | Handing over the system to ST2  | JEC       | 30 days  | 08 Sep '16 | 15 Oct '16 |          |   | [Red bar]     |    |    |     |    |    |      |    |    |      |    |    |        |    |    |           |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 193 | <b>Remaining Boundary Wall Construction</b>                               |           | 123 days | 11 Jul '16 | 03 Dec '16 |          |   | [Summary bar] |    |    |     |    |    |      |    |    |      |    |    |        |    |    |           |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 194 | <b>Fabrication for Steel Frame</b>  |           | 18 days  | 29 Sep '16 | 21 Oct '16 |          |   | [Summary bar] |    |    |     |    |    |      |    |    |      |    |    |        |    |    |           |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 195 | Fabrication of Steel Frame (Planters 3-5 and 13-17)                       | Leader    | 18 days  | 29 Sep '16 | 21 Oct '16 |          |   | [Blue bar]    |    |    |     |    |    |      |    |    |      |    |    |        |    |    |           |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 196 | <b>Planters 1 to 2</b>  |           | 70 days  | 11 Jul '16 | 30 Sep '16 |          |   | [Summary bar] |    |    |     |    |    |      |    |    |      |    |    |        |    |    |           |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 197 | Painting Works for Frame  | Leader    | 55 days  | 11 Jul '16 | 12 Sep '16 |          |   | [Blue bar]    |    |    |     |    |    |      |    |    |      |    |    |        |    |    |           |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 198 | Timber Installation   | Leader    | 15 days  | 13 Sep '16 | 30 Sep '16 | 197      |   | [Blue bar]    |    |    |     |    |    |      |    |    |      |    |    |        |    |    |           |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 199 | <b>Planter 3</b>  |           | 17 days  | 15 Nov '16 | 03 Dec '16 |          | Upon completion of road and drainage works      | [Summary bar] |    |    |     |    |    |      |    |    |      |    |    |        |    |    |           |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 200 | Excavation  | Leader    | 2 days   | 15 Nov '16 | 16 Nov '16 | 248      |   | [Blue bar]    |    |    |     |    |    |      |    |    |      |    |    |        |    |    |           |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 201 | Footing Construction  | Leader    | 12 days  | 17 Nov '16 | 30 Nov '16 | 200      |   | [Blue bar]    |    |    |     |    |    |      |    |    |      |    |    |        |    |    |           |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 202 | Frame Installation  | Leader    | 2 days   | 01 Dec '16 | 02 Dec '16 | 201      |   | [Blue bar]    |    |    |     |    |    |      |    |    |      |    |    |        |    |    |           |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 203 | Timber Installation   | Leader    | 1 day    | 03 Dec '16 | 03 Dec '16 | 202      |   | [Blue bar]    |    |    |     |    |    |      |    |    |      |    |    |        |    |    |           |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 204 | <b>Planter 4</b>  |           | 46 days  | 13 Sep '16 | 08 Nov '16 |          |   | [Summary bar] |    |    |     |    |    |      |    |    |      |    |    |        |    |    |           |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 205 | Excavation  | Leader    | 6 days   | 13 Sep '16 | 20 Sep '16 |          |   | [Blue bar]    |    |    |     |    |    |      |    |    |      |    |    |        |    |    |           |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 206 | Formworks   | Leader    | 3 days   | 21 Sep '16 | 23 Sep '16 | 205      |   | [Blue bar]    |    |    |     |    |    |      |    |    |      |    |    |        |    |    |           |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 207 | Steel works   | Leader    | 1 day    | 24 Sep '16 | 24 Sep '16 | 206      |   | [Blue bar]    |    |    |     |    |    |      |    |    |      |    |    |        |    |    |           |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 208 | Concrete  | Leader    | 1 day    | 26 Sep '16 | 26 Sep '16 | 207      |   | [Blue bar]    |    |    |     |    |    |      |    |    |      |    |    |        |    |    |           |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 209 | Removal of formworks  | Leader    | 1 day    | 27 Sep '16 | 27 Sep '16 | 208      |   | [Blue bar]    |    |    |     |    |    |      |    |    |      |    |    |        |    |    |           |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 210 | Capping formworks   | Leader    | 1 day    | 28 Sep '16 | 28 Sep '16 | 209      |   | [Blue bar]    |    |    |     |    |    |      |    |    |      |    |    |        |    |    |           |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 211 | Steel works   | Leader    | 1 day    | 29 Sep '16 | 29 Sep '16 | 210      |   | [Blue bar]    |    |    |     |    |    |      |    |    |      |    |    |        |    |    |           |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 212 | Formworks   | Leader    | 1 day    | 30 Sep '16 | 30 Sep '16 | 211      |   | [Blue bar]    |    |    |     |    |    |      |    |    |      |    |    |        |    |    |           |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 213 | Concrete  | Leader    | 1 day    | 03 Oct '16 | 03 Oct '16 | 212      |   | [Blue bar]    |    |    |     |    |    |      |    |    |      |    |    |        |    |    |           |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 214 | Frame Installation  | Leader    | 2 days   | 05 Nov '16 | 07 Nov '16 | 222      |   | [Blue bar]    |    |    |     |    |    |      |    |    |      |    |    |        |    |    |           |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 215 | Timber Installation   | Leader    | 1 day    | 08 Nov '16 | 08 Nov '16 | 214,223  |   | [Blue bar]    |    |    |     |    |    |      |    |    |      |    |    |        |    |    |           |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 216 | <b>Planter 5 (Capping)</b>  |           | 66 days  | 19 Aug '16 | 07 Nov '16 |          |   | [Summary bar] |    |    |     |    |    |      |    |    |      |    |    |        |    |    |           |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 217 | Drilling  | Leader    | 1 day    | 19 Aug '16 | 19 Aug '16 |          |   | [Blue bar]    |    |    |     |    |    |      |    |    |      |    |    |        |    |    |           |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 218 | Steel Works   | Leader    | 3 days   | 26 Aug '16 | 29 Aug '16 | 217      |   | [Blue bar]    |    |    |     |    |    |      |    |    |      |    |    |        |    |    |           |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 219 | Formworks   | Leader    | 1 day    | 30 Aug '16 | 30 Aug '16 | 218      |   | [Blue bar]    |    |    |     |    |    |      |    |    |      |    |    |        |    |    |           |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 220 | Concrete  | Leader    | 1 day    | 31 Aug '16 | 31 Aug '16 | 219      |   | [Blue bar]    |    |    |     |    |    |      |    |    |      |    |    |        |    |    |           |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 221 | Removal of formworks  | Leader    | 1 day    | 01 Sep '16 | 01 Sep '16 | 220      |   | [Blue bar]    |    |    |     |    |    |      |    |    |      |    |    |        |    |    |           |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 222 | Frame Installation  | Leader    | 2 days   | 03 Nov '16 | 04 Nov '16 | 235      |   | [Blue bar]    |    |    |     |    |    |      |    |    |      |    |    |        |    |    |           |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 223 | Timber Installation   | Leader    | 1 day    | 07 Nov '16 | 07 Nov '16 | 222,236  |   | [Blue bar]    |    |    |     |    |    |      |    |    |      |    |    |        |    |    |           |    |    |         |    |    |          |    |    |          |    |    |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |

Project: Outstanding Works Programme (15Sep16)  
Date: 27 Sep '16

Leader [Blue bar] JEC [Red bar] Milestone [Diamond] Summary [Arrow]

OUTSTANDING WORKS PROGRAMME FOR DC/2009/23  
NORTH POINT PTW, WAN CHAI EAST PTW AND CENTRAL PTW

| ID  | Task Name  | Action By | Duration       | Start             | Finish            | Predeces    | Remarks | Gantt Chart |     |      |      |        |           |         |          |          |     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|-----|--|-----------|----------------|-------------------|-------------------|-------------|---------|-------------|-----|------|------|--------|-----------|---------|----------|----------|-----|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
|     |  |           |                |                   |                   |             |         | April       | May | June | July | August | September | October | November | December | Jan |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 224 | <b>Planters 13 to 15</b>   |           | <b>72 days</b> | <b>11 Aug '16</b> | <b>05 Nov '16</b> |             |         |             |     |      |      |        |           |         |          |          |     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 225 | Slab breaking & demolition   | Leader    | 7 days         | 11 Aug '16        | 18 Aug '16        |             |         |             |     |      |      |        |           |         |          |          |     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 226 | Blinding   | Leader    | 1 day          | 19 Aug '16        | 19 Aug '16        | 225         |         |             |     |      |      |        |           |         |          |          |     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 227 | Formworks  | Leader    | 12 days        | 20 Aug '16        | 02 Sep '16        | 226         |         |             |     |      |      |        |           |         |          |          |     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 228 | Steel Works  | Leader    | 4 days         | 03 Sep '16        | 07 Sep '16        | 227         |         |             |     |      |      |        |           |         |          |          |     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 229 | Concrete   | Leader    | 1 day          | 08 Sep '16        | 08 Sep '16        | 228         |         |             |     |      |      |        |           |         |          |          |     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 230 | Removal of formworks   | Leader    | 1 day          | 09 Sep '16        | 09 Sep '16        | 229         |         |             |     |      |      |        |           |         |          |          |     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 231 | Formworks  | Leader    | 6 days         | 10 Sep '16        | 17 Sep '16        | 230         |         |             |     |      |      |        |           |         |          |          |     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 232 | Steel Works  | Leader    | 2 days         | 19 Sep '16        | 20 Sep '16        | 231         |         |             |     |      |      |        |           |         |          |          |     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 233 | Concrete   | Leader    | 1 day          | 21 Sep '16        | 21 Sep '16        | 232         |         |             |     |      |      |        |           |         |          |          |     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 234 | Removal of formworks   | Leader    | 1 day          | 22 Sep '16        | 22 Sep '16        | 233         |         |             |     |      |      |        |           |         |          |          |     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 235 | Frame Installation   | Leader    | 6 days         | 27 Oct '16        | 02 Nov '16        | 234,238     |         |             |     |      |      |        |           |         |          |          |     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 236 | Timber Installation  | Leader    | 2 days         | 04 Nov '16        | 05 Nov '16        | 235,239     |         |             |     |      |      |        |           |         |          |          |     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 237 | <b>Planter 16 to 17</b>  |           | <b>36 days</b> | <b>22 Oct '16</b> | <b>02 Dec '16</b> |             |         |             |     |      |      |        |           |         |          |          |     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 238 | Frame Installation   | Leader    | 4 days         | 22 Oct '16        | 26 Oct '16        | 195         |         |             |     |      |      |        |           |         |          |          |     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 239 | Timber Installation  | Leader    | 1 day          | 03 Nov '16        | 03 Nov '16        | 238,235     |         |             |     |      |      |        |           |         |          |          |     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 240 | Installation of Sliding Gate   | Leader    | 25 days        | 04 Nov '16        | 02 Dec '16        | 239         |         |             |     |      |      |        |           |         |          |          |     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 241 | <b>Roadworks and Drainage Works</b>  |           | <b>36 days</b> | <b>03 Oct '16</b> | <b>14 Nov '16</b> |             |         |             |     |      |      |        |           |         |          |          |     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 242 | <b>Southern Portion</b>  |           | <b>36 days</b> | <b>03 Oct '16</b> | <b>14 Nov '16</b> |             |         |             |     |      |      |        |           |         |          |          |     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 243 | Site Clearance   | Leader    | 6 days         | 03 Oct '16        | 08 Oct '16        |             |         |             |     |      |      |        |           |         |          |          |     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 244 | Excavation Works   | Leader    | 6 days         | 11 Oct '16        | 17 Oct '16        | 243         |         |             |     |      |      |        |           |         |          |          |     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 245 | Catchpit and Drainage Pipe Installation  | Leader    | 6 days         | 18 Oct '16        | 24 Oct '16        | 244         |         |             |     |      |      |        |           |         |          |          |     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 246 | Sub Base   | Leader    | 2 days         | 25 Oct '16        | 26 Oct '16        | 245         |         |             |     |      |      |        |           |         |          |          |     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 247 | Road base and Kerb   | Leader    | 6 days         | 27 Oct '16        | 02 Nov '16        | 246         |         |             |     |      |      |        |           |         |          |          |     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 248 | Paving Block Installation  | Leader    | 10 days        | 03 Nov '16        | 14 Nov '16        | 247         |         |             |     |      |      |        |           |         |          |          |     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 249 | <b>Grasscrete and Landscaping Works</b>  |           | <b>60 days</b> | <b>03 Oct '16</b> | <b>12 Dec '16</b> |             |         |             |     |      |      |        |           |         |          |          |     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 250 | <b>Grasscrete Installation</b>   |           | <b>40 days</b> | <b>03 Oct '16</b> | <b>18 Nov '16</b> |             |         |             |     |      |      |        |           |         |          |          |     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 251 | Removal of Container and Site Clearance (in between FSGT & DO, DG and General Store Bldg.) | Leader    | 6 days         | 03 Oct '16        | 08 Oct '16        |             |         |             |     |      |      |        |           |         |          |          |     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 252 | Excavation Works (in between FSGT & DO, DG and General Store Bldg.)                        | Leader    | 9 days         | 11 Oct '16        | 20 Oct '16        | 251         |         |             |     |      |      |        |           |         |          |          |     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 253 | Catchpit and Drainage Pipe Installation (in between FSGT & DO, DG and General Store Bldg.) | Leader    | 14 days        | 21 Oct '16        | 05 Nov '16        | 252         |         |             |     |      |      |        |           |         |          |          |     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 254 | Site clearance after Planters 13 to 15   | Leader    | 3 days         | 07 Nov '16        | 09 Nov '16        | 253,234     |         |             |     |      |      |        |           |         |          |          |     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 255 | Sub base with backfilling  | Leader    | 2 days         | 10 Nov '16        | 11 Nov '16        | 254         |         |             |     |      |      |        |           |         |          |          |     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 256 | Laying of steel mesh   | Leader    | 2 days         | 12 Nov '16        | 14 Nov '16        | 255         |         |             |     |      |      |        |           |         |          |          |     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 257 | Concrete   | Leader    | 1 day          | 15 Nov '16        | 15 Nov '16        | 256         |         |             |     |      |      |        |           |         |          |          |     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 258 | Soil laying  | Leader    | 2 days         | 16 Nov '16        | 17 Nov '16        | 257         |         |             |     |      |      |        |           |         |          |          |     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 259 | Grass Installation   | Leader    | 1 day          | 18 Nov '16        | 18 Nov '16        | 258         |         |             |     |      |      |        |           |         |          |          |     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 260 | <b>Landscaping Works</b>   |           | <b>31 days</b> | <b>07 Nov '16</b> | <b>12 Dec '16</b> |             |         |             |     |      |      |        |           |         |          |          |     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 261 | Site clearance after Planters 13 to 15   | Leader    | 3 days         | 07 Nov '16        | 09 Nov '16        | 234,254,255 |         |             |     |      |      |        |           |         |          |          |     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 262 | Backfilling  | Leader    | 10 days        | 10 Nov '16        | 21 Nov '16        | 261         |         |             |     |      |      |        |           |         |          |          |     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 263 | Landscaping for Central PTW  | Leader    | 18 days        | 22 Nov '16        | 12 Dec '16        | 262         |         |             |     |      |      |        |           |         |          |          |     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |