

The Jockey Club CPS Limited

Central Police Station Conservation  
and Revitalisation Project:  
*Seventh Quarterly EM&A Report*  
*(1 May 2013 to 31 July 2013)*

Issue Date: August 2013

**Environmental Resources Management**

16/F

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Reference 0095646

For and on behalf of ERM-Hong Kong, Limited
Approved by: <u>Frank Wan</u>
Signed: <u></u>
Position: <u>Partner</u>
Certified by: <u></u> (Environmental Team Leader – Winnie Ko)
Date: <u>20 August 2013</u>

This report has been prepared by ERM-Hong Kong, Limited with all reasonable skill, care and diligence within the terms of the Contract with the client, incorporating our General Terms and Conditions of Business and taking account of the resources devoted to it by agreement with the client.

We disclaim any responsibility to the client and others in respect of any matters outside the scope of the above.

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Date: 28 August 2013

## By Email and Post

ERM-Hong Kong Limited,  
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Hong Kong

Attn: Ms Winnie Ko

Dear Winnie,

### Central Police Station Conservation and Revitalization Project Verification of Seventh Quarterly EM&A Report

We refer to your letter dated 26 August 2013 regarding the seventh Quarterly EM&A Report. Atkins China Ltd. verifies, in the capacity of Independent Environmental Checker, that the report, in principle, conforms the requirements provided in Section 10.4 of the EM&A Manual.

Yours sincerely,  
For Atkins China Ltd.



Sharifah Or  
Independent Environmental Checker

c.c. HKJC – Mr. Kenneth Lee,  
Rocco Design Architect – Mr. Charles Kung,

By Email  
By Email

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## EXECUTIVE SUMMARY

The construction works of **Central Police Station Conservation and Revitalisation Project** commenced on 24 October 2011. This is the seventh quarterly Environmental Monitoring and Audit (EM&A) summary report presenting the EM&A works carried out during the period from 1 May 2013 and 31 July 2013 in accordance with the EM&A Manual.

### Environmental Monitoring and Audit Progress

A summary of the monitoring activities undertaken in this reporting period is listed below:

- Construction Noise Monitoring during normal weekdays at each monitoring station 16 times
- Joint Environmental Site Inspection 3 times
- Heritage Site Inspection 33 times
- Landscape & Visual Monitoring 3 times
- Tree Inspection 3 times
- Vibration monitoring for trial piling works 9 times
- Vibration monitoring for pipe/bored piling works 370 times
- Vibration monitoring for other construction works 200 times

### Noise

16 sets of 30-minute construction noise measurements were carried out at each of the monitoring stations (NM2 and NM6) during normal weekdays of the reporting period. No exceedance of the Action or Limit Level of construction noise was recorded during the reporting period.

### Cultural Heritage

#### *Trial Piling and Piling works*

Vibration monitoring carried out for the trial piling and piling works during the reporting period are listed below:

- 75 vibration monitoring measurements for the construction of the pipe pile walls at Parade Ground;
- 75 vibration monitoring measurements for the foundation pile works at Block 8;
- 75 vibration monitoring measurements for the construction of pipe pile walls at Old Bailey Wing (Block 50);
- 75 vibration monitoring measurements for the shaft grouted pre-bored H-piles at Block 51;

- 70 vibration monitoring measurements for the steel shear H-piles at Block 17; and
- 9 vibration monitoring measurements for the weekly vibration monitoring for the trial piling near Block 17.

#### *Other Construction Works*

Vibration monitoring carried out for other construction works during the reporting period are listed below:

- 75 vibration monitoring measurements for the structural addition and alteration works at Block 1;
- 75 vibration monitoring measurements for the structural addition and alteration works at Block 14; and
- 50 vibration monitoring measurements for the structural addition and alteration works at Block 11.

No exceedance of Alert, Alarm and Action Levels of vibration was recorded during the reporting period.

Thirty-three heritage site inspections were conducted and the Contractor has generally implemented the necessary protection measures as recommended.

#### Landscape & Visual

Landscape and visual monitoring has commenced since October 2011 on a monthly basis. Three monthly tree inspections have been conducted by the arborist during the reporting period. Most recommended actions have been performed by the Contractor as advised in the reporting period.

#### Waste Management

Wastes generated from this Project include inert construction and demolition (C&D) materials and non-inert C&D materials. 9,557.15 tonnes of inert C&D materials and 503.67 tonnes of non-inert C&D materials were generated during the reporting period. The non-inert C&D materials and general refuse generated from the Project were disposed of at the SENT Landfill. 39,279 kg of metals and 230 kg of paper/cardboard packaging were produced and sent to recyclers for recycling. No plastics waste was generated during the reporting period. No chemical waste was produced during the reporting period.

#### Environmental Site Inspection

Three joint environmental site inspections were carried out by the representatives of the Contractor, the IEC and the ET during the reporting period. The Contractor has generally implemented the mitigation measures as recommended.

Environmental Exceedance/Non-conformance/Compliant/Summons and Prosecution

No exceedance of the Action or Limit Level of construction noise was recorded at designated monitoring stations during the reporting period.

No exceedance of the Alert, Alarm and Action Levels of vibration was recorded during the reporting period.

No enquiry was received during the reporting period.

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

No complaint was received during the reporting period.

No summons/prosecution was received in this reporting period.

ERM-Hong Kong, Limited (ERM) was appointed by the Jockey Club CPS Limited (the CPS Ltd) as the Environmental Team (ET) to undertake the Environmental Monitoring and Audit (EM&A) programme for the **Central Police Station Conservation and Revitalisation Project** (the Project).

### **1.1 PURPOSE OF THE REPORT**

This is the seventh quarterly EM&A summary report, which summarises the impact monitoring results and audit findings for the EM&A programme during the reporting period from 1 May 2013 and 31 July 2013.

### **1.2 STRUCTURE OF THE REPORT**

The structure of the report is as follows:

Section 1 : **Introduction**

details the scope and structure of the report.

Section 2 : **Project Information**

summarises background and scope of the Project, site description, project organization and contract details, construction programme, the construction works undertaken and the status of Environmental Permit(s)/License(s) during the reporting period.

Section 3 : **Environmental Monitoring Requirements**

summarises the monitoring parameters, monitoring programmes, monitoring methodologies, monitoring frequency, monitoring locations, Action and Limit Levels, Event/ Action Plans, environmental mitigation measures as recommended in the EIA report, and relevant environmental requirements.

Section 4 : **Implementation Status on Environmental Mitigation Measures**

summarises the implementation of environmental protection measures during the reporting period.

Section 5 : **Monitoring Results**

summarises the monitoring and waste management results obtained in the reporting period.

Section 6 : **Environmental Site Inspection**

summarises the audit findings of the monthly site inspections undertaken within the reporting period.

Section 7 : **Environmental Non-conformance**

summarises any monitoring exceedance, environmental complaints and environmental summons received within the reporting period.

Section 8 : **Review of the EM&A Data and EIA Predictions**

compares the monitoring data and waste quantity against predictions in the approved Project EIA report.

Section 9 : **Conclusions**

## 2 PROJECT INFORMATION

### 2.1 BACKGROUND

The Chief Executive (CE)'s 2007-2008 Policy Address highlighted revitalisation as the guiding principle of heritage conservation and the Project was among one of the specific proposals put forward by the CE in the same Policy Address. At the meeting of the Executive Council (ExCo) on 15 July 2008, the ExCo advised and the CE ordered that Government should enter into a partnership with the Hong Kong Jockey Club (HKJC) in the form of an agreement (or agreements) to take forward the conservation and revitalisation of the CPS project based on various guiding parameters. The Project is now being undertaken in partnership with the Development Bureau of the HKSAR Government. The HKJC has taken on board the decision at the ExCo meeting and further investigated the design and implementation of the Project. The Project is now implemented by the CPS Limited.

### 2.2 SITE DESCRIPTION

The location of the Project Site is shown in *Annex A1*. The Site is bounded by Hollywood Road to the north, Arbuthnot Road to the east, Chancery Lane to the south and Old Bailey Street to the west.

The Site comprises three Declared Monuments designated under the *Antiquities and Monuments Ordinance* in 1995. They are:

- Central Police Station;
- Former Central Magistracy; and
- Victoria Prison Compound.

They are collectively named the Central Police Station (CPS). *Annex A2* shows the location of the Declared Monuments within CPS and the buildings within the CPS.

### 2.3 CONSTRUCTION ACTIVITIES

A summary of the major construction activities undertaken in this reporting period is shown in *Table 2.1* and illustrated in *Annex A3*.

**Table 2.1 Summary of Construction Activities undertaken in this Reporting Period**

<b>Construction Activities Undertaken</b>
<ul style="list-style-type: none"> <li>• Construction of bored pile wall and foundation piles at Old Bailey Wing;</li> <li>• Ground improvement works at lower ground floor at Block 14;</li> <li>• General strip out works at Block 2, Block 3, Block 6, Block 7, Block 10, Block 11, Block 12, Block 13, Block 14 and Block 17;</li> <li>• Structural addition and alteration works at Block 1;</li> <li>• Roof tiling preparation works at Block 1;</li> <li>• Demolition works at Block 3, Block 11 and Block 12;</li> <li>• New structure construction at Block 11;</li> <li>• Proof drill for grouting works at Block 14;</li> <li>• Timber loading test at Block 3, Block 10, Block 13 and Block 14;</li> <li>• Underpinning works at Block 14;</li> <li>• Demolition of ground slab at Block 10 and Block 13;</li> <li>• Excavation and lateral support works at Parade Ground;</li> <li>• Foundation pile at Old Bailey Wing, Arbuthnot Wing, Block 8 and Block 17;</li> <li>• Erection of loading test platform at Arbuthnot Wing;</li> <li>• Loading test to trial working pile at Arbuthnot Wing;</li> <li>• Removal of loading test platform at Arbuthnot Wing;</li> <li>• Timber doors and windows repair works at Block 1, Block 3, Block 4, Block 6 and Block 7;</li> <li>• E&amp;M installation at Block 1;</li> <li>• Full load test to masonry wall to Block 2, Block 3, Block 4, Block 9, Block 10, Block 13 and Block 15; and</li> <li>• Additional bored hole at Old Bailey Street;</li> <li>• Additional inclined drilled holes at revetment wall R55 at Old Bailey Street;</li> <li>• External scaffolding erection at Block 2, Block 3, Block 4, Block 6, Block 7, Block 9 and Block 10.</li> </ul>

## **2.4 CONSTRUCTION PROGRAMME**

The most updated construction programme for the Project is presented in *Annex I*.

## **2.5 PROJECT ORGANISATION AND MANAGEMENT STRUCTURE**

The Project organization chart, hotline number and contact details are shown in *Annex B*.

## **2.6 STATUS OF ENVIRONMENTAL APPROVAL DOCUMENTS**

A summary of the relevant permits, licences, and/or notifications on environmental protection for this Project since the granting of the EP in April 2011 is presented in *Table 2.2*.



**Table 2.2 Summary of Environmental Licensing, Notification and Permit Status**

<b>Permit/ Licences/ Notification</b>	<b>Reference</b>	<b>Validity Period</b>	<b>Remarks</b>
Environmental Permit (EP)	EP-408/2011	-	Superseded on 10 January 2012
	EP-408/2011/A	-	Superseded on 22 March 2012
	EP-408/2011/B	Throughout the Contract	Permit granted on 22 March 2012
Notification of Construction Works as required under <i>Air Pollution Control (Construction Dust) Regulation</i>	Ref. No. 332920	Throughout the Contract	-
Registration of Waste Producer under <i>Waste Disposal Ordinance</i>	Waste Producer No.: 5213-122-G2347-25	Throughout the Contract	-
Effluent Discharge License under <i>Water Pollution Control Ordinance</i>	License No. WT00010633-2011	21 Oct 2011 – 31 Oct 2016	-
Notification of Commencement of Asbestos Abatement Work under <i>Air Pollution Control Ordinance</i>	-	Throughout the Contract	EPD's letter (EPD's ref.: (5) in EPAC/A/4/000/23 3 II) dated 2 December 2011 satisfied that the content of the asbestos abatement plan (Report No.: 0210/11/ED/0078A ) is in accordance with the APCO
Approval of Asbestos Abatement Work (Phase 2)	-	Earliest commencement date on 26 January 2012	EPD's letter (EPD's ref.:() in EPAC/A/4/000/23 3) dated 18 January 2012.
Construction Noise Permit (CNP)	GW-RS0734-12	11 July 2012 at 0200 hours to 2 August 2012 at 0400 hours	Expired.
	GW-RS0839-12	13 August 2012 at 1900 hours to 31 December 2012 at 0700 hours	Expired.
	GW-RS1162-12	1 December 2012 at 0000 hours to 28 March 2013 at 0600 hours	Expired.
	GW-RS0113-13	1 February 2013 at 0200 hours to 31 May 2013 at 0400 hours	Expired.

<b>Permit/ Licences/ Notification</b>	<b>Reference</b>	<b>Validity Period</b>	<b>Remarks</b>
	GW-RS1301-12	2 January 2013 at 1900 hours to 29 June 2013 at 2300 hours	Expired.
	GW-RS0084-13	24 January 2013 at 1900 hours to 29 June 2013 at 0700 hours	Expired.
	GW-RS0638-13	16 June 2013 at 0700 hours to 15 September 2013 at 1900 hours	-
	GW-RS0714-13	29 June 2013 at 1900 hours to 28 December 2013 at 2400 hours	-
	GW-RS0745-13	5 July 2013 at 1900 hours to 30 December 2013 at 2300 hours	-

### 3.1 NOISE MONITORING

#### 3.1.1 Monitoring Location

The construction noise monitoring locations are given in *Table 3.1* and shown in *Annex C*.

**Table 3.1 Construction Phase Noise Monitoring Locations**

Monitoring Location	Proposed Construction Noise Monitoring Station			
	ID in EM&A Manual	ID	Type of Measurement	Remark
Rooftop of Ho Fook Building	N2	NM2	Façade	-
Rooftop of Chancery Mansion	---	NM6	Façade	Accesses to the original proposed monitoring location in the EM&A Manual, Chancery House (N5), were rejected; alternative location of Chancery Mansion (N6), were therefore proposed and approved by the Authorised Person (AP), the Independent Environmental Checker (IEC) and EPD.

The noise sensitive receivers are also shown in *Annex C*.

#### 3.1.2 Monitoring Parameters, Frequency and Programme

Weekly construction noise monitoring was conducted in accordance with the requirements stipulated in the EM&A Manual. The monitoring programme for this reporting period is shown in *Annex D*.

The construction noise levels were measured in terms of A-weighted equivalent continuous sound pressure level ( $L_{eq}$ ) in decibels dB(A).  $L_{eq(30min)}$  were used as the monitoring parameter for the time period in between 0700 – 1900 hours on normal weekdays. Supplementary information for data auditing, two statistical sound levels  $L_{10}$  and  $L_{90}$ ; the levels exceeded for 10 and 90 percent of the time respectively, were also recorded during the monitoring for reference. The measured noise levels were logged in every 5 minutes throughout the impact monitoring period.

#### 3.1.3 Monitoring Equipment and Methodology

Construction noise measurements were conducted in accordance with the calibration and measurement procedures as stated in *Annex – General Calibration and Measurement Procedures of Technical Memorandum on Noise from Construction Work other than Percussive Piling (GW-TM)* issued under the *Noise Control Ordinance (NCO)* (Cap 400).

The sound level meters and calibrator used for the noise measurement, as listed in *Table 3.2*, complies with IEC 651: 1979 and 804:1985 (Type 1) specification. The calibration certificates of the sound level meters are included in *Annex E*.

**Table 3.2** *Noise Monitoring Equipment*

Monitoring Stations	Monitoring Equipment (Sound Level Meter and Calibrator)
NM2, NM6	<u>Calibrator</u> Rion NC-73 (S/N 10997142; S/N 10786708) CEL 120 (S/N 3421612) <u>Sound Level Meter</u> Rion NL-31 (S/N 00603867; S/N 00410224)

Immediately prior to and following the noise measurements, the accuracy of the measurement equipment was checked using an acoustic calibrator generating a known sound pressure level at a known frequency.

Measurements were accepted as the calibration level from before and after the noise measurement agree to within 1.0 dB.

### 3.1.4 *Event / Action Plan*

**Table 3.3** *Action and Limit Levels for Construction Noise Monitoring*

Noise Monitoring Location	Action Level	Limit Level, $L_{eq(30mins), dB(A)}$	Remark
NM2, NM6	When one documented complaint is received from any one of the sensitive receivers	75 (note)	Applicable during 0700 – 1900 hours on normal weekdays.

Notes:

- Acceptable Noise Levels for Area Sensitivity Rating of A/B/C. Limit Level is reduced to 70dB(A) for schools and 65dB(A) during school examination periods.
- If works are to be carried out during restricted hours, the conditions stipulated in the CNP issued by the NCA have to be followed.

The Event / Action Plan (EAP) for noise monitoring is presented in *Annex F*.

### 3.1.5 *Mitigation Measures*

The mitigation measures in accordance with the EP, EIA and EM&A Manual and their implementation status are presented in *Annex G*.

## 3.2 CULTURAL HERITAGE

### 3.2.1 Vibration Monitoring

In accordance with the EM&A Manual, vibration monitoring is required and the vibration control limits and vibration monitoring proposal are defined by a specialist for AMO's approval.

#### *Baseline Monitoring*

A set of initial readings should be recorded prior to commencement of each stage of demolition works or trial piling works. The baseline vibration monitoring should be conducted for duration of 5 minutes on the measurement day(s) at each vibration monitoring location.

#### *Vibration Monitoring for Demolition Works*

There are five phases/stages of vibration monitoring to be carried out for demolition works, namely Initial Reading Phase, Monitoring Stage 1, Monitoring Stage 2, Monitoring Stage 3 and Monitoring Stage 4. The monitoring location is shown in *Annex L*. The vibration monitoring should be conducted for duration of 5 minutes on the days with demolition works at each vibration monitoring location.

#### *Vibration Monitoring for Trial Piling and Pipe/Bored Piling Works*

Vibration monitoring for trial piling works and pipe/bored piling works is required. The monitoring location is shown in *Annex L*. The vibration monitoring should be conducted for duration of 5 minutes on the days with trial piling works or pipe/bored piling works at each vibration monitoring location.

#### *Vibration Monitoring for Other Construction Works*

Vibration monitoring for specific construction works other than demolition works, trial piling works and pipe/bored piling works is also required in accordance with Building Department's requirement. The monitoring location is shown in *Annex M*. The number and location of monitoring location will depend on the location of the specific construction works. The vibration monitoring should be conducted for duration of 5 minutes on a daily basis (working day) at each vibration monitoring location.

#### *Alert, Alarm and Action Levels*

The Alert, Alarm and Action (AAA) Levels are to be implemented during the vibration monitoring and shown in *Table 3.4*.

**Table 3.4 Alert, Alarm and Action (AAA) Levels for Vibration Monitoring**

Instrument Type	Item Monitored	Alert Level	Alarm Level	Action Level
Vibration Monitoring	Horizontal Movement	2.0 mm/s	2.5 mm/s	3.0 mm/s

The Event / Action Plan (EAP) for vibration monitoring is shown in *Table 3.5*.

**Table 3.5 Event and Action Plan for Vibration Monitoring**

Events	Action
Exceedance of Alert Level	Notify Management Contractor
Exceedance of Alarm Level	Notify Authorised Person/ Resident Engineer
Exceedance of Action Level	Cease Works and submit mitigation

### 3.2.2 Mitigation Measures

Cultural heritage mitigation measures in accordance with the EP, EIA and EM&A Manual were implemented by the Contractor and the implementation status is given in *Annex G*.

## 3.3 LANDSCAPE AND VISUAL MONITORING

In accordance with the EM&A Manual, inspections of affected trees were conducted by an experienced and appropriately trained arborist. All irregularities that deviate from the recommended tree protection measures or could impose deleterious impacts on the protected trees were reported. Besides, implementation of mitigation measures for landscape and visual resources recommended in the EIA Report were also monitored during the site inspection.

### 3.3.1 Mitigation Measures

Landscape and visual mitigation measures in accordance with the EP, EIA and EM&A Manual were implemented by the Contractor and the implementation status is given in *Annex G*.

## 3.4 ENVIRONMENTAL REQUIREMENTS IN CONTRACT DOCUMENTS

The environmental requirements as specified in the contract documents were reviewed and were covered in the EIA's requirements.

## IMPLEMENTATION STATUS ON ENVIRONMENTAL MITIGATION MEASURES

The Contractor has generally implemented the environmental mitigation measures (including those for archaeology) and requirements as stated in the EIA Report, EM&A Manual, EP and the contract documents. The implementation status during the reporting period is summarised in *Annex G*.

Status of required submissions under the EP during the reporting period is presented in *Table 4.1*.

**Table 4.1** *Status of Required Submissions*

Submission		Submission Date
<i>EP Condition</i>		
Conditions 3.4	• Eighteenth Monthly EM&A Report	14 May 2013
	• Nineteenth Monthly EM&A Report	17 June 2013
	• Twentieth Monthly EM&A Report	15 July 2013
<i>EM&amp;A Manual</i>		
Section 10.4	Sixth Quarterly EM&A Report	10 June 2013

### 5.1 NOISE

A total of 16 sets of 30-minute construction noise measurements were carried out at each monitoring station, NM2 and NM6, during normal weekdays of the reporting period. The monitoring results together with graphical presentations are presented in *Annex H*. The local impacts observed near the monitoring stations of NM2 and NM6 were summarised below:

- NM2: construction noise from activities in the Project Site and traffic noise from Old Bailey Street.
- NM6: construction noise from activities in the Project Site and traffic noise from Chancery Lane.

No exceedance of the Action or Limit Level of construction noise was recorded during the reporting period.

### 5.2 LANDSCAPE AND VISUAL MONITORING

Three monthly tree inspections were conducted by the arborist during the reporting period on 14 May 2013, 3 June 2013 and 5 July 2013 and key findings and recommendations are summarised in *Table 5.1*.

**Table 5.1 Findings of Monthly Tree Inspections in the Reporting Period**

Tree No.	Botanical Name	Overall Health Condition	Arborist's Observation / Recommendations
<b>14 May 2013</b>			
Tree -5	<i>Mangifera indica</i>	Good	<ul style="list-style-type: none"> <li>• Part of the cordon zone has been used as a worker storage room. The Contractor was reminded to beware of potential chemical spillage.</li> </ul>
Tree -6	<i>Aleurites moluccana</i>	Fair	<ul style="list-style-type: none"> <li>• No further action required.</li> </ul>
Tree-7	<i>Aleurites moluccana</i>	Fair	<ul style="list-style-type: none"> <li>• No further action required.</li> </ul>
Tree-8	<i>Plumeria rubra</i>	Fair	<ul style="list-style-type: none"> <li>• No further action required.</li> </ul>
Tree-9	<i>Araucaria cunninghamia</i>	Fair	<ul style="list-style-type: none"> <li>• Close monitoring of sap flow is recommended.</li> </ul>
Tree-11	<i>Dracaena marginata</i>	Fair	<ul style="list-style-type: none"> <li>• No further action required.</li> </ul>
<b>3 June 2013</b>			
Tree -5	<i>Mangifera indica</i>	Good	<ul style="list-style-type: none"> <li>• Planter should be cleaned regularly;</li> <li>• To pay utmost attention to potential land pollution at the worker store room at all times.</li> </ul>
Tree -6	<i>Aleurites moluccana</i>	Fair	<ul style="list-style-type: none"> <li>• No further action required.</li> </ul>



Tree No.	Botanical Name	Overall Health Condition	Arborist's Observation / Recommendations
Tree-7	<i>Aleurites moluccana</i>	Fair	<ul style="list-style-type: none"> <li>No further action required.</li> </ul>
Tree-8	<i>Plumeria rubra</i>	Fair	<ul style="list-style-type: none"> <li>No further action required.</li> </ul>
Tree-9	<i>Araucaria cunninghamia</i>	Fair	<ul style="list-style-type: none"> <li>Close monitoring of sap flow is recommended.</li> </ul>
Tree-11	<i>Dracaena marginata</i>	Fair	<ul style="list-style-type: none"> <li>No further action required.</li> </ul>
<b>5 July 2013</b>			
Tree -5	<i>Mangifera indica</i>	Good	<ul style="list-style-type: none"> <li>Planter should be cleaned regularly;</li> <li>Wounds were observed on the lower trunk. The lower trunk should be protected with hessian cloth;</li> <li>Appropriate warning sign should be displayed in front of Tree-5.</li> </ul>
Tree -6	<i>Aleurites moluccana</i>	Fair	<ul style="list-style-type: none"> <li>No further action required.</li> </ul>
Tree-7	<i>Aleurites moluccana</i>	Fair	<ul style="list-style-type: none"> <li>No further action required.</li> </ul>
Tree-8	<i>Plumeria rubra</i>	Fair	<ul style="list-style-type: none"> <li>No further action required.</li> </ul>
Tree-9	<i>Araucaria cunninghamia</i>	Fair	<ul style="list-style-type: none"> <li>No further action required.</li> </ul>
Tree-11	<i>Dracaena marginata</i>	Fair	<ul style="list-style-type: none"> <li>Planter should be cleaned regularly;</li> <li>Sharp edge of the scaffold nearby has damaged the tree. The lower trunk should be protected with hessian cloth;</li> <li>Appropriate warning sign should be displayed in front of Tree-11.</li> </ul>

Follow-up actions needed to be implemented were recommended to the Contractor and the status of the follow-up actions was reviewed during the subsequent monthly site inspections. Recommendations have generally been implemented by the Contractor during the reporting period.

### 5.3 CULTURAL HERITAGE

#### 5.3.1 Vibration Monitoring

##### *Trial Piling and Piling works*

Vibration monitoring carried out for the trial piling and piling works during the reporting period are listed below:

##### *May 2013:*

- 25 vibration monitoring measurements for the construction of the pipe pile walls at Parade Ground;

- 25 vibration monitoring measurements for the foundation pile works at Block 8;
- 25 vibration monitoring measurements for the construction of pipe pile walls at Old Bailey Wing (Block 50);
- 25 vibration monitoring measurements for the shaft grouted pre-bored H-piles at Block 51;
- 20 vibration monitoring measurements for the steel shear H-piles at Block 17; and
- 5 vibration monitoring measurements for the weekly vibration monitoring for the trial piling near Block 17.

*June 2013:*

- 24 vibration monitoring measurements for the construction of the pipe pile walls at Parade Ground;
- 24 vibration monitoring measurements for the foundation pile works at Block 8;
- 24 vibration monitoring measurements for the construction of pipe pile walls at Old Bailey Wing (Block 50);
- 24 vibration monitoring measurements for the shaft grouted pre-bored H-piles at Block 51;
- 24 vibration monitoring measurements for the steel shear H-piles at Block 17; and
- 4 vibration monitoring measurements for the weekly vibration monitoring for the trial piling near Block 17.

*July 2013:*

- 26 vibration monitoring measurements for the construction of the pipe pile walls at Parade Ground;
- 26 vibration monitoring measurements for the foundation pile works at Block 8;
- 26 vibration monitoring measurements for the construction of pipe pile walls at Old Bailey Wing (Block 50);
- 26 vibration monitoring measurements for the shaft grouted pre-bored H-piles at Block 51; and
- 26 vibration monitoring measurements for the steel shear H-piles at Block 17.

The monitoring results are presented in *Annex L*.

#### *Other Construction Works*

Vibration monitoring carried out for other construction works during the reporting period are listed below:

##### *May 2013:*

- 25 vibration monitoring measurements for the structural addition and alteration works at Block 1; and
- 25 vibration monitoring measurements for the structural addition and alteration works at Block 14.

##### *June 2013:*

- 24 vibration monitoring measurements for the structural addition and alteration works at Block 1;
- 24 vibration monitoring measurements for the structural addition and alteration works at Block 14; and
- 24 vibration monitoring measurements for the structural addition and alteration works at Block 11.

##### *July 2013:*

- 26 vibration monitoring measurements for the structural addition and alteration works at Block 1;
- 26 vibration monitoring measurements for the structural addition and alteration works at Block 14; and
- 26 vibration monitoring measurements for the structural addition and alteration works at Block 11.

The monitoring results are presented in *Annex M*.

All monitoring results were below the Alert/ Alarm/ Action Levels.

### **5.3.2 *Heritage Site Audit***

Heritage site audits were conducted on 2, 3, 8, 9, 10, 14, 15, 16, 21 and 24 May 2013; 3, 4, 5, 11, 14, 17, 18, 19, 20, 21 and 25 June 2013; 3, 4, 9, 10, 11, 12, 17, 18, 19, 23, 25 and 26 July 2013 by the Heritage Checker during the reporting period. Follow-up actions were undertaken as reported by the Contractor and observed in the subsequent monthly site inspections conducted in the reporting period. Key site audit findings and recommendations are summarised below.

#### *16 May 2013*

- Lower ground level south side of Building 1 is vulnerable to water ingress during inclement weather. Better protection is recommended to avoid further damage to the building fabric.

*21 May 2013*

- It was noticed that a rainwater pipe to Building 1 northeast corridor had no temporary pipe, causing window frame 01/WLG2/09 wet and the floor 01/LG2/15 saturated.

*19 June 2013*

- Timber frame of 03/DG/06 in Building 3 has been damaged, potentially caused either during the process of paint removal or fanlight/door leaf removal. Improvement of the protection is required.

*20 June 2013*

- Two cigarette boxes were found on the timber floor of room 03/F/25 in Building 3.

*25 June 2013*

- It was noticed that timber floor load test in Block 10 failed due to leakage of water.

*4 July 2013*

- A worker was observed pouring a large tank of water through window 14/WS/24 of Building 14. The worker was stopped immediately and the Contractor was later informed of the incident.

*10 July 2013*

- It was observed that scaffold was laid on unprotected timber floor on the second floor of Building 4.
- It was noticed that some redundant light fittings were placed above the timber threshold and timber floor on second floor of Building 4.

*25 July 2013*

- It was noticed that Rooms 01/F/01 and 01/F/27 of Block 1 was flooded. The issue has been rectified.
- Ceiling boards of 04/S/20 at the east side of Building 4 were in risk of falling. Remedial action was taken immediately.
- It was observed that some timber frame, skirting, ceramic tiles, etc. of Building 1 were not fully protected. The Contractor was reminded to maintain proper protection.

- Guano was observed on the floor of Room 04/F/02 of Building 4. The Contractor was reminded to carry out regular clean up.

A summary of the current condition of character defining elements, historic buildings and structures is contained in *Annex N*.

#### 5.4 WASTE MANAGEMENT

Wastes generated from this Project include inert construction and demolition (C&D) materials and non-inert C&D materials. Non-inert C&D materials were made up of wastes such as general refuse. With reference to relevant handling records and trip tickets of this Project, the quantities of different types of waste generated in the reporting period are summarised in *Table 5.2*. The summary of Waste Flow Table prepared by the Contractor is shown in *Annex J*. The non-inert C&D materials and general refuse generated from the Project were disposed of at the SENT Landfill. 39,279 kg of metals and 230 kg of paper/cardboard packaging were produced and sent to recyclers for recycling. No plastics waste was generated during the reporting period. No chemical waste was produced during the reporting period.

**Table 5.2** Quantities of Waste Generated from the Project

Month / Year	Quantity						
	C&D Materials (inert) (tonnes) (a)	C&D Materials (non-inert) (tonnes) (b)	Chemical Waste		Recycled materials		
			Liquid (L)	Solid (kg)	Paper/cardboard (kg)	Plastics (kg)	Metals (kg)
May 2013	2,679.91	176.68	0	0	62	0	17,286
June 2013	3,062.38	212.63	0	0	0	0	7,150
July 2013	3,814.86	114.36	0	0	168	0	14,843
<b>Total</b>	<b>9,557.15</b>	<b>503.67</b>	<b>0</b>	<b>0</b>	<b>230</b>	<b>0</b>	<b>39,279</b>

**Notes:**

- (a) Inert C&D materials include bricks, concrete, building debris, rubble and excavated soil.  
 (b) Non-inert C&D materials include wastes such as general refuse which were disposed of at SENT Landfill and recyclable materials are paper, cardboard, plastics and metals. The figure presented under non-inert C&D materials represents quantities of non-recyclable materials. Recycled materials are reported separately.

#### 5.5 EFFECTIVENESS OF MITIGATION MEASURES AND MONITORING

The mitigation measures recommended in the EIA report and required by the EP are considered effective in minimising environmental impacts.

The EM&A for the Project was conducted as scheduled during the reporting period. No non-compliance events were observed during site inspections and no exceedances were recorded during the reporting period. The EM&A programme is considered effective.

Three monthly environmental site inspections were conducted on 16 May 2013, 20 June 2013 and 25 July 2013 during the reporting period. There was no non-compliance recorded during the site inspections. Key site audit findings and recommendations are summarised below. Monthly recommendations and observations were implemented and rectified by the Contractor in the subsequent monthly site inspections.

*16 May 2013*

- Nil.

*20 June 2013*

- Nil.

*25 July 2013*

- A small amount of muddy water was observed in the stormwater drainage channel close to the excavation area at the Parade Ground. The Contractor was reminded to provide a shoe washing area for workers leaving the excavation area. This helps to avoid mud or sand being brought out of the excavation area. The Contractor should review the temporary surface runoff management system to avoid discharge of muddy water directly from the excavation area into the stormwater drainage channel;
- Different types of materials were observed being stored in Block 1. The Contractor was reminded to store the materials properly in designated area and to maintain good housekeeping throughout the Project Site; and
- Part of the cordon zone of Tree-5 has been used as a worker storage room with temporary access. The Contractor was reminded to seek advice from the arborist regarding the potential impact of these activities on Tree-5 and to confirm these uses are acceptable.

## 7 ENVIRONMENTAL NON-CONFORMANCE

### 7.1.1 *Summary of Monitoring Exceedance*

No exceedance of the Action or Limit Level of construction noise or Alert, Alarm and Action Level of vibration was recorded during the reporting period.

### 7.1.2 *Summary of Enquiry*

No enquiry was received during the reporting period.

### 7.1.3 *Summary of Environmental Non-Compliance*

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

### 7.1.4 *Summary of Environmental Complaint*

No complaint was received during the reporting period. The cumulative number of complaints is presented in *Annex K*.

### 7.1.5 *Summary of Environmental Summons and Successful Prosecution*

No summons was received during the reporting period. The cumulative summons/prosecution log is shown in *Annex K*.

### 8.1 NOISE

A comparison was made between the monitoring results in this reporting period and the Noise Standard for general construction works during 0700 – 1900 hrs on normal weekdays (*Table 8.1*).

**Table 8.1 Comparison of Construction Noise Standard and Noise Monitoring Results**

Reporting Month	Monitoring Stations	Corresponding NSR in EIA	Noise Limit Level	Predicted Construction Noise Level (With Mitigation) in EIA	Measured Construction Noise Level
				L <sub>wq, 30 min</sub> dB(A)	L <sub>wq, 30 min</sub> dB(A)
May 2013	NM2	N2	75	67 - 72	65.1 – 70.8
	NM6	N6	75	73 - 75	65.8 – 69.9
June 2013	NM2	N2	75	67 - 72	66.4 – 68.8
	NM6	N6	75	73 - 75	68.6 – 71.0
July 2013	NM2	N2	75	67 - 72	66.2 – 70.8
	NM6	N6	75	73 - 75	68.0 – 71.8

The monitoring results recorded since the commencement of the construction works have been below the Limit Level and comparable to the predicted construction noise level in the approved EIA. Recommended mitigation measures in *Section 5.9.1* of EIA will continue to be implemented throughout the construction stage.

### 8.2 WASTE MANAGEMENT

The estimated amount of waste generated in the approved EIA and the accumulated quantities of waste generated up to this reporting period are presented in *Table 8.2*. The accumulated amount of inert and non-inert C&D materials is within the estimated amount in EIA. The major chemical waste generated on site was primarily asbestos which was not estimated in the approved EIA and hence no data is available for comparison. Recommended mitigation measures in *Section 8.5.1* of the EIA will continue to be implemented throughout the construction stage.



**Table 8.2** *Quantity of Actual Amount of C&D Materials, General Wastes and Chemical Wastes Generated and EIA Estimation*

Type of Material	Estimated Amount of Waste in EIA	Accumulated Actual Amount of Waste Recorded <sup>(a)</sup> <sup>(b)</sup>
Amount of C&D Materials (Inert) Arising	16,440 m <sup>3</sup>	10,740 m <sup>3</sup>
Amount of C&D Materials (Non-inert) Arising	890 m <sup>3</sup>	2,613 m <sup>3</sup>
General Refuse	130 kg per day	- <sup>(c)</sup>
Chemical Waste	Less than 100L per month	- 57 L (liquid) - 175 kg (solid) - 7,000 kg of asbestos generated

**Notes:**

- (a) The accumulated actual amount of C&D Materials was recorded since the commencement of construction works.
- (b) The volume of waste materials are provided by the Contractor based on the updated waste record in July 2013.
- (c) The amount of general refuse generated was not recorded.

**8.3**

**SUMMARY OF REVIEW**

The EIA predictions and the monitoring results since the commencement of construction works have been reviewed. The EIA concluded that the Project would not cause adverse impacts to the environment and the monitoring results have also indicated the same so far. Mitigation measures (including those for archaeology) recommended in the EP, EIA and EM&A Manual were implemented by the Contractor as far as practicable and were considered effective. The recommended mitigation measures will continue to be implemented throughout the construction phase of the Project.

The effectiveness of the monitoring programme has been exhibited therefore change to the programme is not considered to be necessary.

## CONCLUSIONS

This seventh Quarterly EM&A Report presents the EM&A works undertaken during the reporting period from 1 May 2013 to 31 July 2013 in accordance with EM&A Manual and the requirements under EP-408/2011/B.

No exceedance of the Action or Limit Level of construction noise was recorded at designated monitoring stations during the reporting period.

Tree inspections were conducted in this reporting period. Most of the necessary landscape and visual mitigation measures recommended in the EIA Report were implemented by the Contractor.

No exceedance of the Alert, Alarm and Action Levels of vibration was recorded during the reporting period.

No enquiry was received during the reporting period.

No non-compliance event for heritage and environmental site inspections was recorded during the reporting period.

No complaint was received during the reporting period.

No summons/prosecution was received during the reporting period.

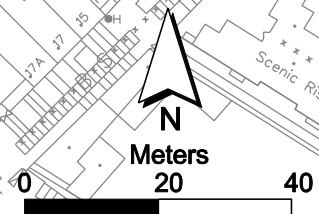
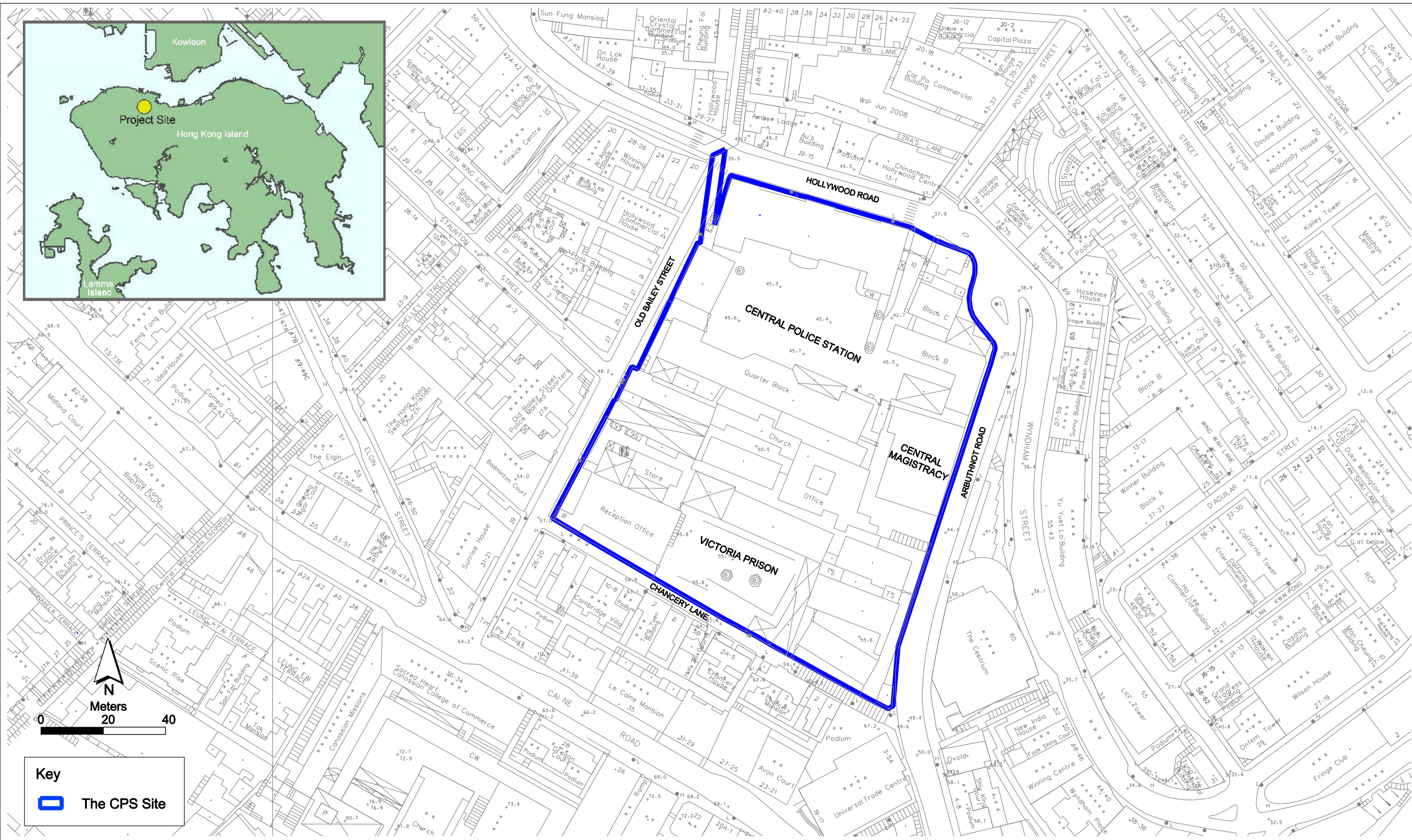
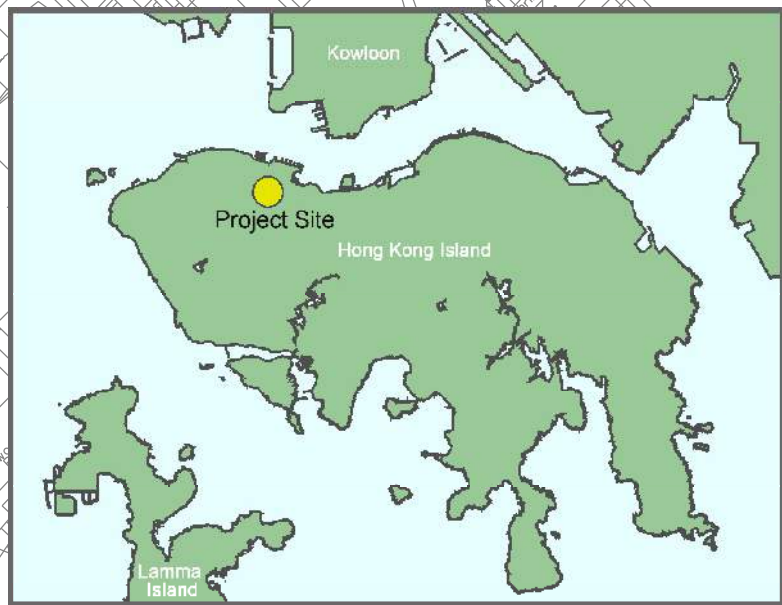
The monitoring programme was considered effective in reflecting the environmental conditions at the designated representative sensitive receivers. The monitoring results also indicate that the Project have not caused adverse impacts on the environment with implementation of appropriate mitigation measures. Change to the monitoring programme is not considered to be necessary. The ET will keep track on the EM&A programme to ensure compliance of environmental requirements and the proper implementation of all necessary mitigation measures in the coming periods.

Annex A


## Location of Works Areas and the Surroundings

Annex A1

## Project Location



**Key**

 The CPS Site

Annex A1

Project Location

**Environmental  
Resources  
Management**



賽馬會文物保育有限公司  
The Jockey Club CPS Limited

Annex A2

## Declared Monuments within the Project Site





Annex A2

Declared Monuments within the Project Site

**Environmental Resources Management**



賽馬會文物保育有限公司  
The Jockey Club CPS Limited

Annex A3

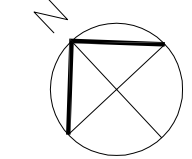
## Site Layout Plan marked with Works



**Works Summary at Block 1**

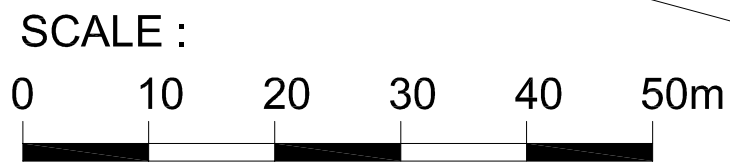
1. A&A Works
2. Repair Works to Timber Window & Door
3. Roof Tiling Preparation Works
4. Structural Strengthening Works
5. E&M Installation

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**LEGEND**

- 1. General / Furniture Strip Out Works
- 2. Full Load Test to Masonry Wall
- 3. ELS Works
- 4. Ground Improvement Works
- 5. Bored Pile Wall
- 6. Roof Tiling Preparation Works
- 7. Foundation Pile Works
- 8. Additional Broad Hole
- 9. A&A Works
- 10. Erection of Loading Test Platform
- 11. E&M Installation
- 12. Repair Works to Timber Window, Door



**CENTRAL POLICE STATION**

Client  
 賽馬會文物保育有限公司  
 The Jockey Club CPS Limited

Contractor  
**Gammon**

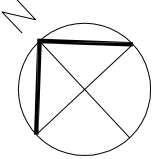
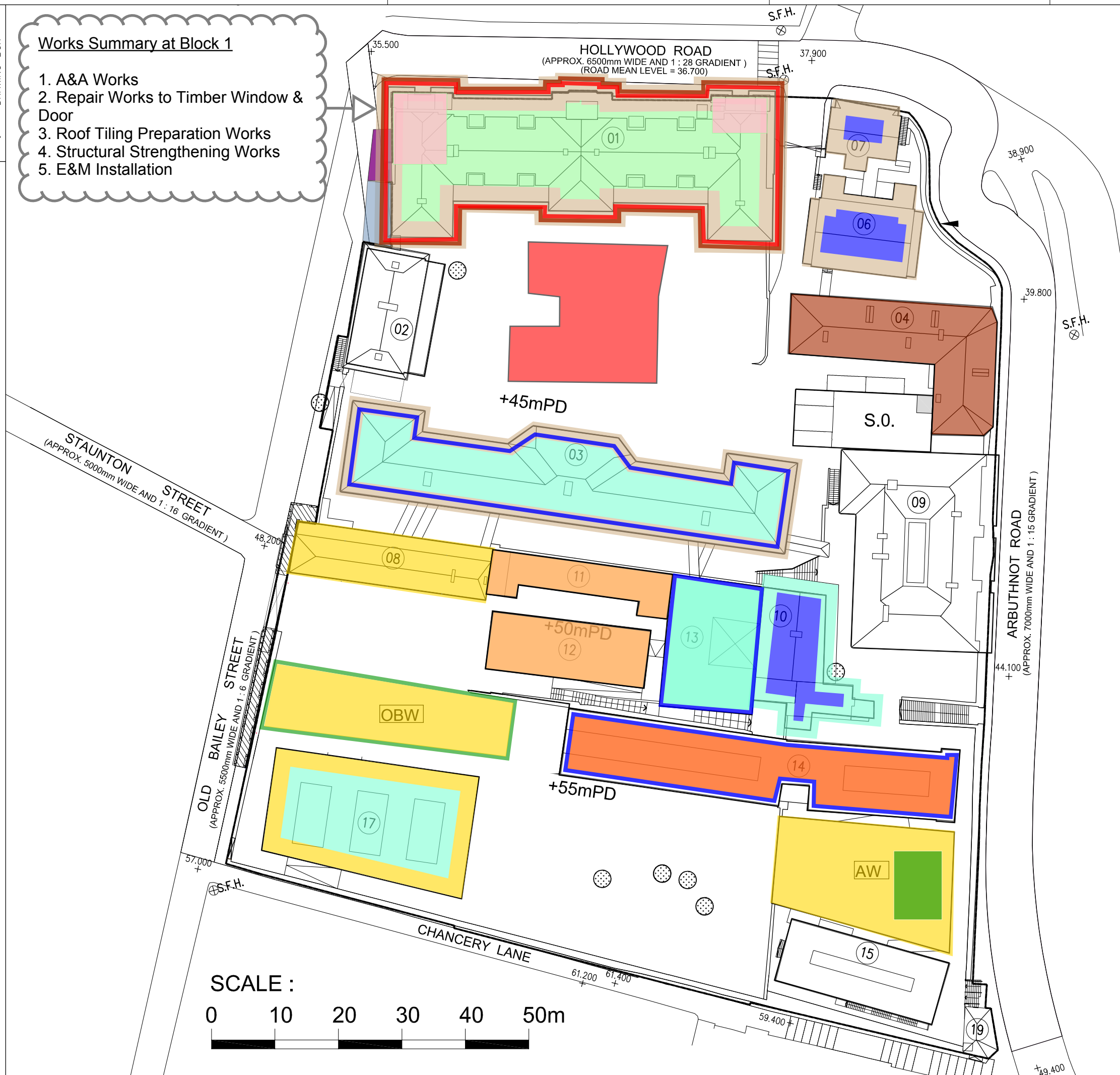
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Designed	Status	Marked for Enquiry & Complaint log (CPS/E&C/09)
Checked		
Approved	Drawing No.	-
CAD Ref		-

**Annex A3 Site Layout Plan marked with Works (May - 2013)**

**Works Summary at Block 1**

1. A&A Works
2. Repair Works to Timber Window & Door
3. Roof Tiling Preparation Works
4. Structural Strengthening Works
5. E&M Installation



**LEGEND**

- 1. General / Furniture Strip Out Works
- 2. E&M Installation
- 3. ELS Works
- 4. Underpinning Works
- 5. Bored Pile Wall
- 6 Roof Tiles Replacement Works
- 7. Foundation Pile Works
- 8. Additional Broad Hole
- 9. A&A Works
- 10. Loading Test and Removal to Trail Working Pile
- 11. E&M Installation
- 12. Repair Works to Timber Window, Door
- 13. Demolition Works
- 14. Timber Loading Test
- 15. Masonry Wall Loading Test
- 16. Additional Inclined Drilled Holes

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**CENTRAL POLICE STATION**

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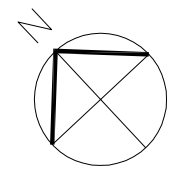
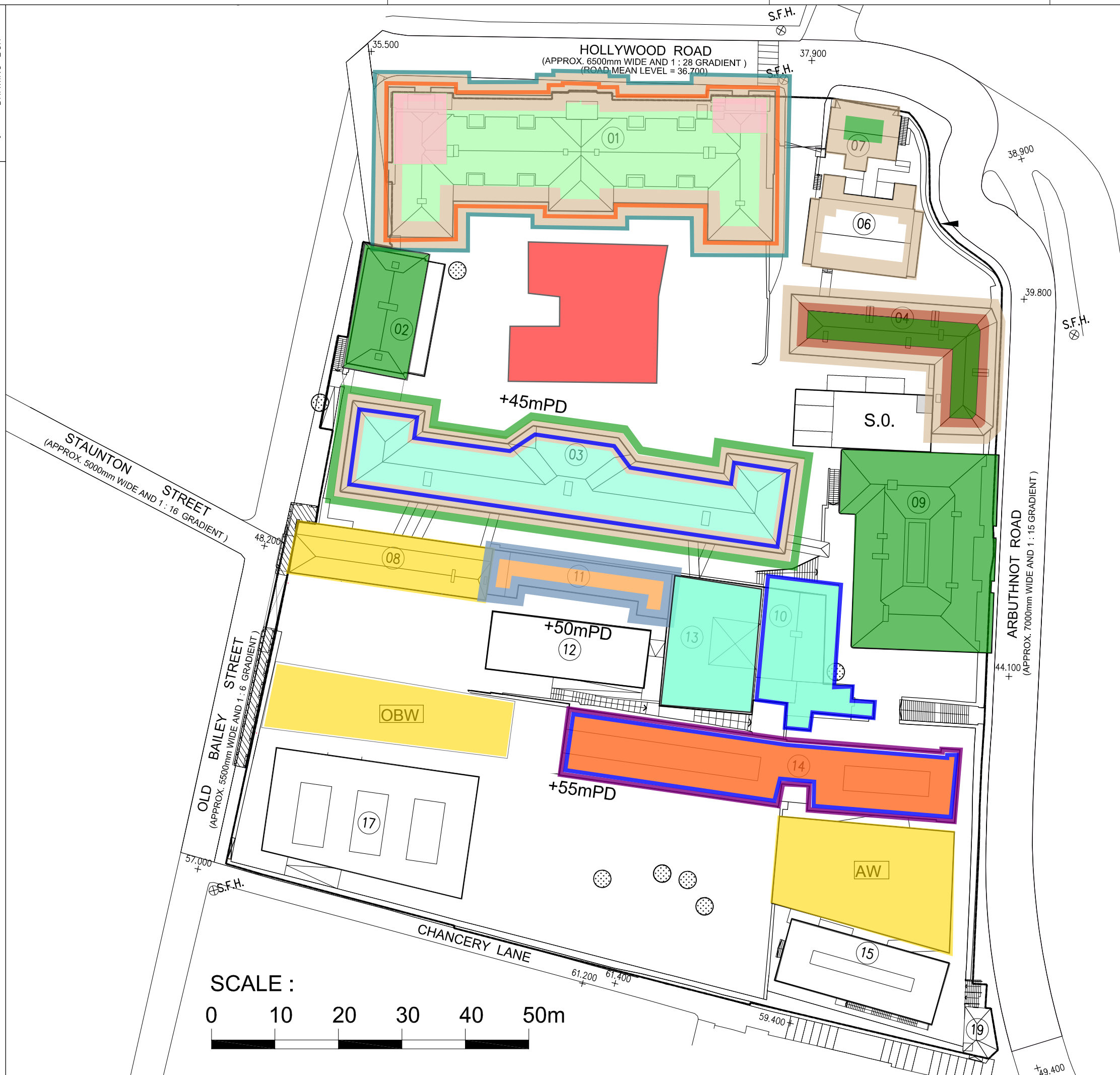
Contractor  
**Gammon**

Drawing Title  
**SITE LAYOUT PLAN**

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Checked			
Approved	Drawing No.		
CAD Ref		-	-

**Annex A3 Site Layout Plan marked with Works (June - 2013)**





**LEGEND**

- 1. General Strip Out & Slab Demolition
- 2. E&M Installation
- 3. ELS Works
- 4. Underpinning Works
- 5. E&M Installation
- 6 Roof Tiles Replacement Works
- 7. Grouting Works
- 8. New Structure Construction
- 9. Structure A&A Works
- 10. Repair Works to Timber Window, Door
- 11. Demolition Works
- 12. Timber Loading Test
- 13. Masonry Wall Loading Test
- 14. Proof Drill for Grouting Work
- 15. External Scaffolding Erection

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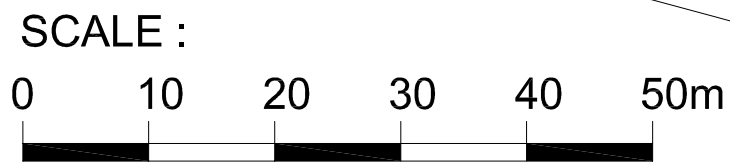
**CENTRAL POLICE STATION**

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Contractor  
**Gammon**

Drawing Title  
**SITE LAYOUT PLAN**

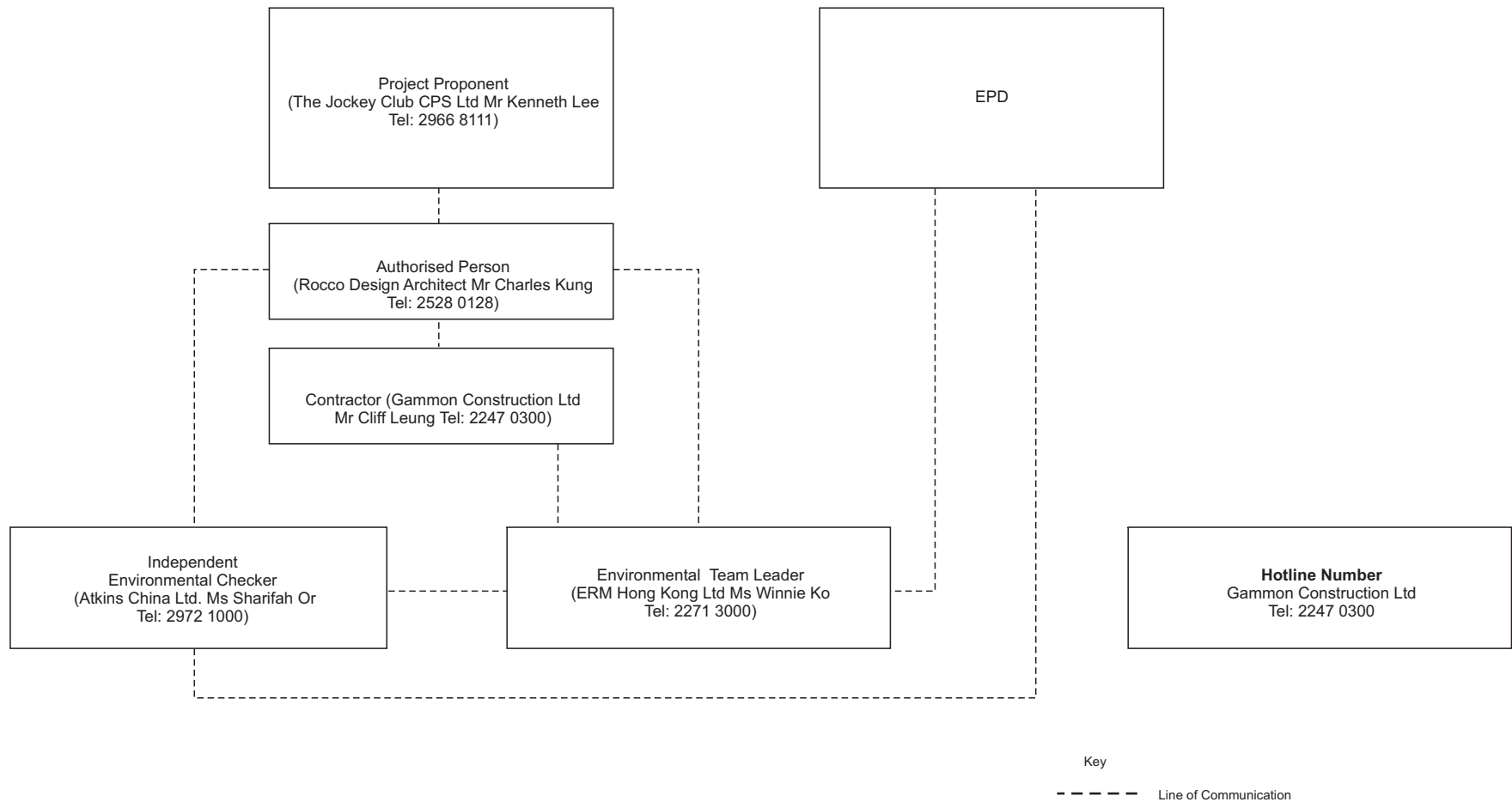
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CAD Ref		



**Annex A3 Site Layout Plan marked with Works (July - 2013)**

Annex B

## Project Organization Chart and Contact Detail



Annex C

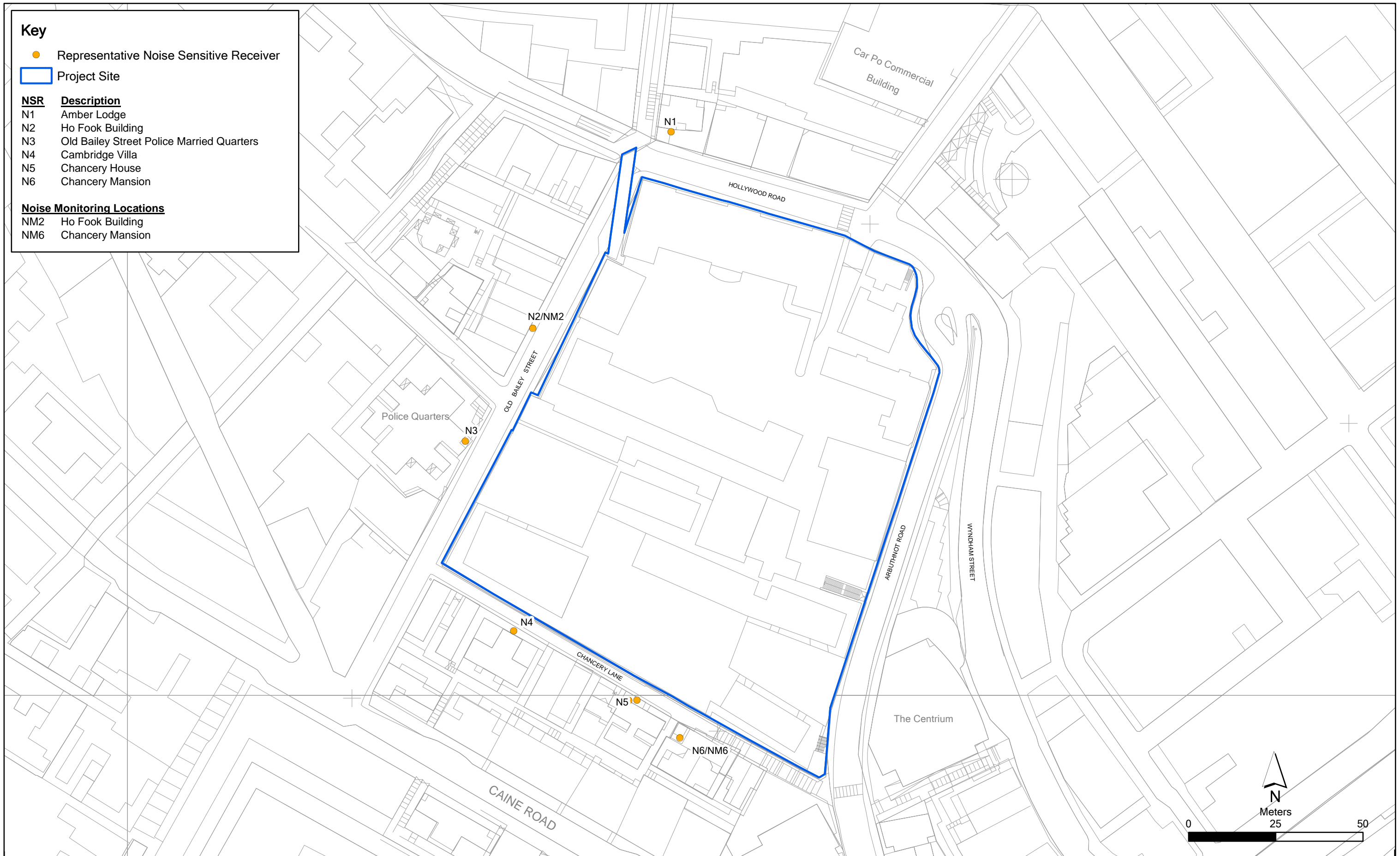
Locations of Noise  
Monitoring Stations and  
Noise Sensitive Receivers

**Key**

- Representative Noise Sensitive Receiver
- ▭ Project Site

NSR	Description
N1	Amber Lodge
N2	Ho Fook Building
N3	Old Bailey Street Police Married Quarters
N4	Cambridge Villa
N5	Chancery House
N6	Chancery Mansion

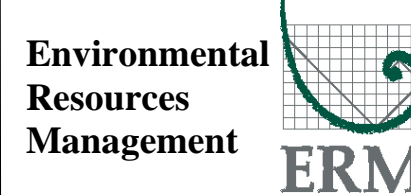
Noise Monitoring Locations	
NM2	Ho Fook Building
NM6	Chancery Mansion



Annex C

Location of Representative Noise Sensitive Receivers and Noise Monitoring Locations

File: 0095646\_NSR\_NM\_May2012.mxd  
Date: 09/05/2012



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The Jockey Club CPS Limited

Annex D

## Monitoring Schedule of the Reporting Period



**Central Police Station Compound Conservation and Revitalisation  
(Ho Fook Building - NM2 & Chancery Mansion - NM6)  
Monitoring Schedule for Reporting Month - May 2013**

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
			01-May	02-May	03-May	04-May
05-May	06-May	07-May	08-May	09-May	10-May	11-May
	Noise Monitoring at NM2 & NM6					Noise Monitoring at NM2 & NM6
12-May	13-May	14-May	15-May	16-May	17-May	18-May
				Noise Monitoring at NM2 & NM6		
19-May	20-May	21-May	22-May	23-May	24-May	25-May
			Noise Monitoring at NM2 & NM6			
26-May	27-May	28-May	29-May	30-May	31-May	
		Noise Monitoring at NM2 & NM6				

**Central Police Station Compound Conservation and Revitalisation  
(Ho Fook Building - NM2 & Chancery Mansion - NM6)  
Monitoring Schedule for Reporting Month - June 2013**

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
						01-Jun
02-Jun	03-Jun	04-Jun	05-Jun	06-Jun	07-Jun	08-Jun
	Noise Monitoring at NM2 & NM6					Noise Monitoring at NM2 & NM6
09-Jun	10-Jun	11-Jun	12-Jun	13-Jun	14-Jun	15-Jun
					Noise Monitoring at NM2 & NM6	
16-Jun	17-Jun	18-Jun	19-Jun	20-Jun	21-Jun	22-Jun
				Noise Monitoring at NM2 & NM6		
23-Jun	24-Jun	25-Jun	26-Jun	27-Jun	28-Jun	29-Jun
			Noise Monitoring at NM2 & NM6			
30-Jun						

**Central Police Station Compound Conservation and Revitalisation  
(Ho Fook Building - NM2 & Chancery Mansion - NM6)  
Monitoring Schedule for Reporting Month - July 2013**

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	01-Jul	02-Jul	03-Jul	04-Jul	05-Jul	06-Jul
		Noise Monitoring at NM2 & NM6				
07-Jul	08-Jul	09-Jul	10-Jul	11-Jul	12-Jul	13-Jul
	Noise Monitoring at NM2 & NM6					Noise Monitoring at NM2 & NM6
14-Jul	15-Jul	16-Jul	17-Jul	18-Jul	19-Jul	20-Jul
					Noise Monitoring at NM2 & NM6	
21-Jul	22-Jul	23-Jul	24-Jul	25-Jul	26-Jul	27-Jul
				Noise Monitoring at NM2 & NM6		
28-Jul	29-Jul	30-Jul	31-Jul			
			Noise Monitoring at NM2 & NM6			

Annex E

# Calibration Reports for Calibrators and Sound Level Meters



# Certificate of Calibration

## 校正證書

Certificate No. : C124184  
證書編號

**ITEM TESTED / 送檢項目 ( Job No. / 序引編號 : IC12-1770 )**

Description / 儀器名稱 : Sound Level Calibrator  
 Manufacturer / 製造商 : Rion  
 Model No. / 型號 : NC-73  
 Serial No. / 編號 : 10786708  
 Supplied By / 委託者 : Envirotech Services Co.  
 Shop 6, G/F., Casio Mansion, 209 Shaukeiwan Road,  
 Hong Kong

**TEST CONDITIONS / 測試條件**

Temperature / 溫度 : (23 ± 2)°C  
 Line Voltage / 電壓 : ---  
 Relative Humidity / 相對濕度 : (55 ± 20)%

**TEST SPECIFICATIONS / 測試規範**

Calibration check

**DATE OF TEST / 測試日期** : 17 July 2012

**TEST RESULTS / 測試結果**

The results apply to the particular unit-under-test only.  
 All results are within manufacturer's specification.  
 The results are detailed in the subsequent page(s).

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

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

Tested By :   
 測試 : L K Yeung

Certified By :   
 核證 : K C Lee

Date of Issue : 18 July 2012  
 簽發日期

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

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

# Certificate of Calibration

## 校正證書

Certificate No. : C124184  
證書編號

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

<u>Equipment ID</u>	<u>Description</u>	<u>Certificate No.</u>
CL130	Universal Counter	C123541
CL281	Multifunction Acoustic Calibrator	DC110233
TST150A	Measuring Amplifier	C120886

- Test procedure : MA100N.

- Results :

### 5.1 Sound Level Accuracy

UUT Nominal Value	Measured Value (dB)	Mfr's Spec. (dB)	Uncertainty of Measured Value (dB)
94 dB, 1 kHz	93.9	± 0.5	± 0.2

### 5.2 Frequency Accuracy

UUT Nominal Value (kHz)	Measured Value (kHz)	Mfr's Spec.	Uncertainty of Measured Value (Hz)
1	0.990	1 kHz ± 2 %	± 1

Remark : The uncertainties are for a confidence probability of not less than 95 %.

### Note :

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

# Certificate of Calibration

## 校正證書

Certificate No. : C124011  
證書編號

**ITEM TESTED / 送檢項目 (Job No. / 序引編號 : IC12-1674)**

Description / 儀器名稱 : Sound Level Calibrator  
Manufacturer / 製造商 : Rion  
Model No. / 型號 : NC-73  
Serial No. / 編號 : 10997142  
Supplied By / 委託者 : Envirotech Services Co.  
Shop 6, G/F., Casio Mansion, 209 Shaukeiwan Road,  
Hong Kong

**TEST CONDITIONS / 測試條件**

Temperature / 溫度 :  $(23 \pm 2)^{\circ}\text{C}$       Relative Humidity / 相對濕度 :  $(55 \pm 20)\%$   
Line Voltage / 電壓 : ---

**TEST SPECIFICATIONS / 測試規範**

Calibration check

**DATE OF TEST / 測試日期** : 9 July 2012

**TEST RESULTS / 測試結果**

The results apply to the particular unit-under-test only.  
All results are within manufacturer's specification.  
The results are detailed in the subsequent page(s).

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

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

Tested By :   
測試 : L K Yeung

Certified By :   
核證 : K C Lee

Date of Issue : 10 July 2012  
簽發日期

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

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# Certificate of Calibration

## 校正證書

Certificate No. : C124011  
證書編號

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

<u>Equipment ID</u>	<u>Description</u>	<u>Certificate No.</u>
CL130	Universal Counter	C123541
CL281	Multifunction Acoustic Calibrator	DC110233
TST150A	Measuring Amplifier	C120886

- Test procedure : MA100N.

- Results :

### 5.1 Sound Level Accuracy

UUT Nominal Value	Measured Value (dB)	Mfr's Spec. (dB)	Uncertainty of Measured Value (dB)
94 dB, 1 kHz	94.0	± 0.5	± 0.2

### 5.2 Frequency Accuracy

UUT Nominal Value (kHz)	Measured Value (kHz)	Mfr's Spec.	Uncertainty of Measured Value (Hz)
1	0.990	1 kHz ± 2 %	± 1

Remark : The uncertainties are for a confidence probability of not less than 95 %.

### Note :

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



# Certificate of Conformance and Calibration for

## CEL-120 Acoustic Calibrator

Applicable Standards :- IEC 60942: 2003 &amp; ANSI S1.40: 2006

CEL-120/1 Class 1 CEL-120/2 Class 2 Serial No: 3421612Firmware: 1.03Temperature: 22 °C Pressure: 1008 mb %RH 54

Frequency = 1.00kHz $\pm$ 2Hz T.H.D. = < 1%	Calibration Level
SPL @ 114.0dB Setting	<u>114.0</u> dB
SPL @ 94.0dB Setting (CEL-120/1 only)	<u>94.0</u> dB/Hz

Engineer :-

14Date : 28 AUG 2012R-9.0

Company test equipment and acoustic working standards, used for conformance testing, are subject to periodic calibration, traceable to UK national standards, in accordance with the company's ISO9001 Quality System.

### DECLARATION OF CONFORMITY

This certificate confirms that the instrument specified above has been produced and tested to comply with the manufacturer's published specifications and the relevant European Community CE directives.

Casella CEL ( U.K. ),

Regent House, Wolsley Road, Kempston, Bedford, MK42 7JY

Phone: +44 (0) 1234 844100 Fax: +44 (0) 1234 841490

E-mail: info@casellacel.com

Web: www.casellameasurement.com

# Certificate of Calibration

## 校正證書

Certificate No. : C124191  
證書編號

### ITEM TESTED / 送檢項目 ( Job No. / 序引編號 : IC12-1770 )

Description / 儀器名稱 : Sound Level Meter  
Manufacturer / 製造商 : Rion  
Model No. / 型號 : NL-31  
Serial No. / 編號 : 00603867  
Supplied By / 委託者 : Envirotech Services Co.  
Shop 6, G/F., Casio Mansion, 209 Shaukeiwan Road,  
Hong Kong

### TEST CONDITIONS / 測試條件

Temperature / 溫度 :  $(23 \pm 2)^{\circ}\text{C}$       Relative Humidity / 相對濕度 :  $(55 \pm 20)\%$   
Line Voltage / 電壓 : ---

### TEST SPECIFICATIONS / 測試規範

Calibration check

DATE OF TEST / 測試日期 : 18 July 2012

### TEST RESULTS / 測試結果

The results apply to the particular unit-under-test only.  
All results are within manufacturer's specification.  
The results are detailed in the subsequent page(s).

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

- The Government of The Hong Kong Special Administrative Region Standard & Calibration Laboratory
- Agilent Technologies, USA
- Fluke Everett Service Center, USA
- Fluke Precision Measurement Ltd., UK
- Rohde & Schwarz Laboratory, Germany

Tested By :   
測試 : L K Yeung

Certified By :   
核證 : K C Lee

Date of Issue : 18 July 2012  
簽發日期

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

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

# Certificate of Calibration

## 校正證書

Certificate No. : C124191  
證書編號

- The unit-under-test (UUT) was allowed to stabilize in the laboratory for over 12 hours, and switched on to warm up for over 10 minutes before the commencement of the test.
- Self-calibration was performed before the test.
- The results presented are the mean of 3 measurements at each calibration point.

4. Test equipment :

Equipment ID	Description	Certificate No.
CL280	40 MHz Arbitrary Waveform Generator	C120016
CL281	Multifunction Acoustic Calibrator	DC110233

5. Test procedure : MA101N.

6. Results :

6.1 Sound Pressure Level

6.1.1 Reference Sound Pressure Level

UUT Setting				Applied Value		UUT Reading (dB)	IEC 61672 Class 1 Spec. (dB)
Range (dB)	Mode	Frequency Weighting	Time Weighting	Level (dB)	Freq. (kHz)		
30 - 120	L <sub>A</sub>	A	Fast	94.00	1	93.8	± 1.1

6.1.2 Linearity

UUT Setting				Applied Value		UUT Reading (dB)
Range (dB)	Mode	Frequency Weighting	Time Weighting	Level (dB)	Freq. (kHz)	
30 - 120	L <sub>A</sub>	A	Fast	94.00	1	93.8 (Ref.)
				104.00		103.8
				114.00		113.8

IEC 61672 Class 1 Spec. : ± 0.6 dB per 10 dB step and ± 1.1 dB for overall different.

6.2 Time Weighting

UUT Setting				Applied Value		UUT Reading (dB)	IEC 61672 Class 1 Spec. (dB)
Range (dB)	Mode	Frequency Weighting	Time Weighting	Level (dB)	Freq. (kHz)		
30 - 120	L <sub>A</sub>	A	Fast	94.00	1	93.8	Ref.
			Slow			93.7	± 0.3

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# Certificate of Calibration

## 校正證書

Certificate No. : C124191  
證書編號

### 6.3 Frequency Weighting

#### 6.3.1 A-Weighting

UUT Setting				Applied Value		UUT Reading (dB)	IEC 61672 Class 1 Spec. (dB)
Range (dB)	Mode	Frequency Weighting	Time Weighting	Level (dB)	Freq.		
30 - 120	L <sub>A</sub>	A	Fast	94.00	63 Hz	67.6	-26.2 ± 1.5
					125 Hz	77.6	-16.1 ± 1.5
					250 Hz	85.1	-8.6 ± 1.4
					500 Hz	90.6	-3.2 ± 1.4
					1 kHz	93.8	Ref.
					2 kHz	95.1	+1.2 ± 1.6
					4 kHz	95.0	+1.0 ± 1.6
					8 kHz	92.8	-1.1 (+2.1 ; -3.1)
					12.5 kHz	89.9	-4.3 (+3.0 ; -6.0)

#### 6.3.2 C-Weighting

UUT Setting				Applied Value		UUT Reading (dB)	IEC 61672 Class 1 Spec. (dB)
Range (dB)	Mode	Frequency Weighting	Time Weighting	Level (dB)	Freq.		
30 - 120	L <sub>C</sub>	C	Fast	94.00	63 Hz	93.0	-0.8 ± 1.5
					125 Hz	93.6	-0.2 ± 1.5
					250 Hz	93.8	0.0 ± 1.4
					500 Hz	93.9	0.0 ± 1.4
					1 kHz	93.9	Ref.
					2 kHz	93.7	-0.2 ± 1.6
					4 kHz	93.2	-0.8 ± 1.6
					8 kHz	90.9	-3.0 (+2.1 ; -3.1)
					12.5 kHz	88.1	-6.2 (+3.0 ; -6.0)

Remarks : - Mfr's Spec. : IEC 61672 Class 1

- Uncertainties of Applied Value : 94 dB : 63 Hz - 125 Hz : ± 0.35 dB  
 250 Hz - 500 Hz : ± 0.30 dB  
 1 kHz : ± 0.20 dB  
 2 kHz - 4 kHz : ± 0.35 dB  
 8 kHz : ± 0.45 dB  
 12.5 kHz : ± 0.70 dB  
 104 dB : 1 kHz : ± 0.10 dB (Ref. 94 dB)  
 114 dB : 1 kHz : ± 0.10 dB (Ref. 94 dB)

- The uncertainties are for a confidence probability of not less than 95 %.

#### Note :

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

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# Certificate of Calibration

## 校正證書

Certificate No. : C133573  
證書編號

### ITEM TESTED / 送檢項目 (Job No. / 序引編號 : IC13-1422)

Description / 儀器名稱 : Sound Level Meter  
Manufacturer / 製造商 : Rion  
Model No. / 型號 : NL-31  
Serial No. / 編號 : 00410224  
Supplied By / 委託者 : Envirotech Services Co.  
Shop 6, G/F., Casio Mansion, 209 Shaukeiwan Road,  
Hong Kong

### TEST CONDITIONS / 測試條件

Temperature / 溫度 :  $(23 \pm 2)^{\circ}\text{C}$       Relative Humidity / 相對濕度 :  $(55 \pm 20)\%$   
Line Voltage / 電壓 : ---

### TEST SPECIFICATIONS / 測試規範

Calibration check

DATE OF TEST / 測試日期 : 14 June 2013

### TEST RESULTS / 測試結果

The results apply to the particular unit-under-test only.  
All results are within manufacturer's specification.  
The results are detailed in the subsequent page(s).


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

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

Tested By  
測試

  
K C Lee

Certified By  
核證

  
K K Wong

Date of Issue : 17 June 2013  
簽發日期

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

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# Certificate of Calibration

## 校正證書

Certificate No. : C133573

證書編號

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

Equipment ID	Description	Certificate No.
CL280	40 MHz Arbitrary Waveform Generator	C130019
CL281	Multifunction Acoustic Calibrator	DC110233

- Test procedure : MA101N.

- Results :

### 6.1 Sound Pressure Level

#### 6.1.1 Reference Sound Pressure Level

UUT Setting				Applied Value		UUT Reading (dB)	IEC 61672 Class 1 Spec. (dB)
Range (dB)	Mode	Frequency Weighting	Time Weighting	Level (dB)	Freq. (kHz)		
30 - 120	L <sub>A</sub>	A	Fast	94.00	1	93.6	± 1.1

#### 6.1.2 Linearity

UUT Setting				Applied Value		UUT Reading (dB)
Range (dB)	Mode	Frequency Weighting	Time Weighting	Level (dB)	Freq. (kHz)	
30 - 120	L <sub>A</sub>	A	Fast	94.00	1	93.6 (Ref.)
				104.00		103.6
				114.00		113.6

IEC 61672 Class 1 Spec. : ± 0.6 dB per 10 dB step and ± 1.1 dB for overall different.

### 6.2 Time Weighting

UUT Setting				Applied Value		UUT Reading (dB)	IEC 61672 Class 1 Spec. (dB)
Range (dB)	Mode	Frequency Weighting	Time Weighting	Level (dB)	Freq. (kHz)		
30 - 120	L <sub>A</sub>	A	Fast	94.00	1	93.6	Ref.
			Slow			93.5	± 0.3

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# Certificate of Calibration 校正證書

Certificate No. : C133573  
證書編號

## 6.3 Frequency Weighting

### 6.3.1 A-Weighting

UUT Setting				Applied Value		UUT Reading (dB)	IEC 61672 Class 1 Spec. (dB)
Range (dB)	Mode	Frequency Weighting	Time Weighting	Level (dB)	Freq.		
30 - 120	L <sub>A</sub>	A	Fast	94.00	63 Hz	67.3	-26.2 ± 1.5
					125 Hz	77.3	-16.1 ± 1.5
					250 Hz	84.9	-8.6 ± 1.4
					500 Hz	90.3	-3.2 ± 1.4
					1 kHz	93.6	Ref.
					2 kHz	94.9	+1.2 ± 1.6
					4 kHz	94.8	+1.0 ± 1.6
					8 kHz	92.6	-1.1 (+2.1 ; -3.1)
					12.5 kHz	89.7	-4.3 (+3.0 ; -6.0)

### 6.3.2 C-Weighting

UUT Setting				Applied Value		UUT Reading (dB)	IEC 61672 Class 1 Spec. (dB)
Range (dB)	Mode	Frequency Weighting	Time Weighting	Level (dB)	Freq.		
30 - 120	L <sub>C</sub>	C	Fast	94.00	63 Hz	92.7	-0.8 ± 1.5
					125 Hz	93.4	-0.2 ± 1.5
					250 Hz	93.6	0.0 ± 1.4
					500 Hz	93.7	0.0 ± 1.4
					1 kHz	93.7	Ref.
					2 kHz	93.5	-0.2 ± 1.6
					4 kHz	93.0	-0.8 ± 1.6
					8 kHz	90.7	-3.0 (+2.1 ; -3.1)
					12.5 kHz	87.9	-6.2 (+3.0 ; -6.0)

Remarks : - UUT Microphone Model No. : UC-53A & S/N : 307154

- Mfr's Spec. : IEC 61672 Class 1

- Uncertainties of Applied Value : 94 dB : 63 Hz - 125 Hz : ± 0.35 dB  
 250 Hz - 500 Hz : ± 0.30 dB  
 1 kHz : ± 0.20 dB  
 2 kHz - 4 kHz : ± 0.35 dB  
 8 kHz : ± 0.45 dB  
 12.5 kHz : ± 0.70 dB  
 104 dB : 1 kHz : ± 0.10 dB (Ref. 94 dB)  
 114 dB : 1 kHz : ± 0.10 dB (Ref. 94 dB)

- The uncertainties are for a confidence probability of not less than 95 %.

#### Note :

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

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Annex F

## Event/Action Plans for Noise



*Annex F Event and Action Plan for Noise*

Event	Action			
	Environmental Team (ET)	Independent Environmental Checker (IEC)	Authorised Person (AP)	Contractor
<b>Action Level</b>	<ol style="list-style-type: none"> <li>1. Notify IEC and Contractor;</li> <li>2. Carry out investigation;</li> <li>3. Report the results of investigation to the IEC, AP and Contractor;</li> <li>4. Discuss with the Contractor and formulate remedial measures;</li> <li>5. Increase monitoring frequency to check mitigation effectiveness.</li> </ol>	<ol style="list-style-type: none"> <li>1. Review the analysed results submitted by the ET;</li> <li>2. Review the proposed remedial measures by the Contractor and advise the AP accordingly;</li> <li>3. Supervise the implementation of 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. Require Contractor to proposed remedial measures for the analysed noise problem;</li> <li>4. Ensure remedial measures are properly implemented.</li> </ol>	<ol style="list-style-type: none"> <li>1. Submit noise mitigation proposals to IEC;</li> <li>2. Implement noise mitigation proposals.</li> </ol>
<b>Limit Level</b>	<ol style="list-style-type: none"> <li>1. Identify source;</li> <li>2. Inform IEC and AP;</li> <li>3. Repeat measurements to confirm findings;</li> <li>4. Increase monitoring frequency;</li> <li>5. Carry out analysis of Contractor's working procedures to determine possible mitigation to be implemented;</li> <li>6. Inform IEC, AP and EPD the causes and actions taken for the exceedances;</li> <li>7. Assess effectiveness of Contractor's remedial actions and keep IEC, EPD and AP informed of the results;</li> <li>8. If exceedance stops, cease additional monitoring.</li> </ol>	<ol style="list-style-type: none"> <li>1. Discuss amongst AP, ET, and Contractor on the potential remedial actions;</li> <li>2. Review Contractors remedial actions whenever necessary to assure their effectiveness and advise the AP accordingly;</li> <li>3. Supervise the implementation of 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. Require Contractor to propose remedial measures for the analysed noise problem;</li> <li>4. Ensure remedial measures properly implemented;</li> <li>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.</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 within 3 working days of notification;</li> <li>3. Implement the agreed proposals;</li> <li>4. Resubmit proposals if problem still not under control;</li> <li>5. Stop the relevant portion of works as determined by the AP until the exceedance is abated.</li> </ol>

Annex G

## Summary of Implementation Status

**Annex G Implementation Schedule for Environmental Protection Measures (1 May to 31 May 2013)**

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Location	When to Implement the Measure	Status
<i>Cultural Heritage</i>					
S3.9.1	S3.2.6	Subject to the outcome of the archaeological investigation, if archaeological deposits are identified to be impacted by the proposed development, appropriate mitigation measures will be recommended and agreed with AMO.	In accordance with the recommendations in the Archaeological Action Plan (AAP) issued on 21 Dec 11 and approved on 30 Dec 11 by AMO	During detailed design and construction	Recommendations under the AAP: <ul style="list-style-type: none"> <li>• Preservation by Record (PBR) at Parade Ground has been completed in this reporting period.</li> </ul>
S3.9.2	S3.3.1	<u>Vibration Monitoring</u> A baseline condition survey and baseline vibration impact will be conducted by a specialist for the approval of AMO and Buildings Department prior to commencement of the construction works to define the vibration control limits and recommend a vibration monitoring proposal for the concerned historic buildings and structures in and outside CPS for AMO's prior approval before commencement of the construction works.	Historic buildings and structures in CPS, the granite walls at Old Bailey Street and the proposed Grade 3 historic building (No. 20 Hollywood Road)	During detailed design and construction	√
S3.9.2	S3.3.3	<u>Compliance of the Approved Measures and Auditing</u> Staff training by an experience building conservation expert or relevant competent person(s) in the environmental team of the project should be provided to the on-site staffs, contractors, sub-contractors and workers of the project before commencement of works to ensure their full understanding of the approved protection schedule, restoration proposal and work methodologies related to cultural heritage, and their respective responsibilities in the implementation of the environmental protection measures.  Regular site audit for cultural heritage should be carried out in the construction phase by an experience building conservation expert in the environmental team ("the Heritage Checker") to investigate the site practice of the contractors and workers and their compliance of the approved work methodologies with respect of conservation works, mitigations for cultural heritage and any related works. A detailed	Whole site	Prior to and during construction	√

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Location	When to Implement the Measure	Status
		<p>proposal of the regular audit such as methodology (e.g. performance and monitoring indicators, control tools, frequency of the audit, etc.) and the conservation professionals to be engaged should be agreed with AMO prior to work commencement.</p> <p>The Heritage Checker shall also attend the regular site meetings with AMO and report the compliance and effectiveness of the mitigation measures for cultural heritage.</p>			
S3.9.3	S3.3.4	<p><u>Archival Recording</u></p> <p>An archival recording should be conducted to provide a detailed reference for the update of the Conservation Management Plan and inventory of historical features of the monuments, the preparation of as-built drawings showing the condition of the historic buildings and structures after the completion of the construction works. These archival records will be a reference source for future maintenance of the character defining elements, conservation of the monuments, interpretation and conservation education of the Site. The archival recording shall include but not limit to the video and photographic recording on the detailed process of the repair trials for different kinds of historical features, conservation works of character defining elements and historic fabrics of the monuments, and a written records of any new changes to the detailed design made in the construction phase illustrate with photos and drawings. A full set of the archives records (including both hard and soft copies) should be submitted to the AMO for approval after the work completion for record purpose. Any new findings related to the conservation of built heritage in the Site identified during the detailed design stage and construction phases shall be properly recorded in details for notification to the AMO and update of the Conservation Management Plan.</p>	Whole Site	During detailed design, construction and prior to operation	N/A – Archival recording will be conducted at later stage.
S3.7.3	-	<p><u>General Construction Methods</u></p> <p>Prior to the commencement of the modification/refurbishment works at an existing building or structure (e.g. masonry walls near the Old Bailey Wing) , a site survey will be carried out by the design team, and all building dimensions and levels of the building/structure shown will be</p>	Whole site	During construction	√

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Location	When to Implement the Measure	Status
		checked and confirmed by the contractor. Non-percussive piling methods will be adopted for the construction of the foundation for the new buildings. Protective and precaution measures to the existing buildings and structure adjacent to the work area (including the proposed Grade 3 historic building (No. 20 Hollywood road) and the granite boundary walls between the Ablutions Block of the police station (building no. 08) and the General Office of the prison area (building no. 18) which is adjacent to the new construction of the Old Bailey Wing and for an old granite walls at Old Bailey Street within 15m from the new construction) shall be provided to avoid damage to the existing features and to safeguard the structural integrity during the course of construction. Small scale handheld pneumatic tools with minimal vibration impact to the existing buildings/ structures are selected so as to have a better logistic and handling at the existing buildings and structures, which usually have only narrow working areas. In cases of the local demolition of structural elements, demountable platforms will be erected to temporarily support the affected area and divert the loading from above to avoid instability and create excessive cracking and settlement of the building/structure.			
S3.7.1 & 3.7.2	-	<p>Implementation and update of the Conservation Management Plan (CMP). Any new findings related to the conservation of the built heritage in the site identified during the detailed design and construction stage shall be properly recorded in details for the notification to the AMO and update in the CMP. After the construction, a cartographic and photographic recording on the restored historic buildings, historic features and the site shall be conducted and the following records shall be included into the CMP as appendices for updating and record purpose:</p> <ul style="list-style-type: none"> <li>• one set of measured drawings and photographic records showing the as-built condition of historic buildings and structures; and</li> <li>• an updated inventory list of the historic features together with the cross referenced location plans and photo records.</li> </ul> <p>One set of updated CMP shall be submitted to the AMO for approval before the operation stage of the project.</p>	Whole site	During detailed design, construction, post-construction and operation	√ - CMP was implemented during the reporting month. There were no updates for the CMP.

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Location	When to Implement the Measure	Status
<i>Landscape &amp; Visual</i>					
S4.7.27	-	<p><u><i>In-situ Tree Protection - Cordon Zone (CZ)</i></u></p> <p>Cordon off each tree along its drip line (below the crown) with a chain-link fencing of 2.5 m height with padlocked gate, allowing limited access to area only to authorized persons. The base of the perimeter fence will be sealed up to 30 cm height to ensure that no construction drainage water will enter. If grouting is to be conducted less than 5 m from the edge of the CZ, a waterproof membrane will be installed below the ground to a depth of 1.5 m on the outer edge of the CZ to prevent the subsurface lateral movement of contaminated construction wastewater from intruding the soil inside the CZ.</p>	Whole site	During construction	√ - Part of the cordon zone of Tree-5 has been altered to a worker storage room.
S4.7.2	-	<p><u><i>In-situ Tree Protection - Advanced &amp; Phased Root Pruning</i></u></p> <p>All edges of the CZ that will be affected by excavation will undergo root pruning by a trained arborist or horticulturist, in advance of the earth work. The entire affected length of the CZ, plus 3 m additional length at both ends, shall be designated as the root pruning segment (RPS). The require trench will be opened manually in the RPS, be 1.5 m deep and 1 m wide, and closed on the same day after pruning with a good soil mix. All roots with a diameter &gt;20 mm encountered in the course of trench opening shall be cut flushed with the inner wall of the trench. If the RPS exceeds one-quarter of the CZ circumference, the root pruning should be conducted in two stages. Each phase will tackle half of the RPS length. After the first phase, the tree will be allowed to recuperate for not less than four months before the second phase root pruning is conducted. The RPS shall be protected by sheet piles along the outer edge. The rig that installs the piles and the associated operations shall not intrude into the CZ or injure the protected tree.</p>	Whole site	During construction	N/A – no root pruning has been conducted yet
S4.7.2	-	<p><u><i>In-situ Tree Protection - Foliage cleansing system</i></u></p> <p>A sprinkler cleansing system will be installed either in the crown of the tree or at a suitable location on an adjacent building to provide the</p>	Whole site	During construction	√

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Location	When to Implement the Measure	Status
		means to wash the foliage of the accumulated dust when necessary, particularly in the dry season.			
S4.7.2	S4	<p><u>In-situ Tree Protection - Monthly inspection</u></p> <p>Monthly inspection of affected trees by an experienced and appropriately trained arborist or horticulturist using Form 1 – Tree Group Inspection Form and Form 2 – Tree Risk Assessment Form developed by Development Bureau (<a href="http://www.trees.gov.hk/en/doc/TRAGuideline_July2010version_combine.pdf">http://www.trees.gov.hk/en/doc/TRAGuideline_July2010version_combine.pdf</a>) or a form designed by a tree expert and approved by Tree Management Office. All irregularities that deviate from the recommended tree protection measures, or could impose deleterious impacts on the protected trees, must be reported to the authorized person or the tree expert within two days.</p>	Whole site	During construction	√
S4.7.2	-	<p><u>Light Control</u></p> <p>Control of night-time lighting shall be implemented to minimise impact to adjacent VSRs.</p>	Whole site	During construction and operation	√
S4.7.2	S4	<p><u>Compensatory Tree Planting</u></p> <p>A new planting site has been identified for compensatory tree planting in the Parade Ground. The planting is to compensate for felling of T10. The existing tree site will be enlarged to become a wide tree strip to accommodate at least six trees. The entire strip of land that accommodates T1 to T4 should be revamped to improve the soil condition for future tree growth.</p> <p>The new tree strip should be 4 m wide and covered by porous unit pavers to permit the entry of rain and irrigation water and air exchange between the soil and the atmosphere. The unit pavers should be supported by small columns to create a vault-like structure so as to avoid compaction of the underlying soil due to pedestrian trampling. The unit pavers will be movable to provide access to the soil underneath so that fertilizers and conditioners could be added on a</p>	At identified compensatory tree planting location at the Parade Ground	During detailed design and construction	N/A – Compensatory Tree Planting will be conducted at later stage.

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Location	When to Implement the Measure	Status
		<p>regular basis. The air conditioner unit currently located near the proposed planting site should also be removed. This new tree planting site should also be provided with proper irrigation.</p> <p>Pursuant to the "Environment, Transport and Works Bureau Technical Circular (Works) No. 3/2006 Tree Preservation", the compensation ratio should preferably be 1:1 according to trunk girth. T10 has a DBH of 20 cm (Table 4.3), and it is proposed that six trees of heavy standard size be planted, each with a DBH of around 10 cm and root balls of not less than 0.75 m diameter and 0.75 m depth,. Since the aggregate DBH of the new trees would be 60 cm, the rate of compensation is equivalent to three times the DBH of T10, far beyond the requirements</p> <p>The six replacement trees should be planted in the new tree strip in two staggered rows, maximising distance between each tree to avoid mutual interference in the future. It is recommended that the species selected should have a small final dimension of less than 10 m height given the proximity to built structures such as the retaining wall and buildings. Two each of the outstanding and related flowering tree species connected to local natural history are suggested::</p> <ul style="list-style-type: none"> <li>- <i>Bauhinia</i> 'Blakeana' a native evergreen species with deep mauve flowers and an exceptionally long flowering period from late autumn to early spring.</li> <li>- <i>Bauhinia purpure</i>, a native evergreen with lighter purple flowers from late autumn to early winter.</li> <li>- <i>Bauhinia variegata</i>, an exotic deciduous species, with pale pinkish flowers in spring to early summer often when the tree has little or no leaves.</li> </ul>			
S4.7.2	S4	<p><u>Vertical Greening</u></p> <p>Within the limitations of the conservation of the CPS character, greening of vertical structures should be provided where possible.</p> <p>As such it is recommended that the inner southern wall of the Site be planted as a green wall. The plantings should be inserted in between each of the large protruding piers and an offset be made from both the</p>	Inner Southern Wall	During detailed design and construction	N/A – No vertical greening was conducted during the reporting month.



EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Location	When to Implement the Measure	Status
		top and bottom edge so that old and new are equally visible. An independent frame should be strategically positioned in order to ensure minimal disturbance to the original wall, and provide the main structural support and planting surface for the green wall. The frame on to which the new green will be planted should contain its own irrigation system so that moisture for the plants will remain mainly on the planting surface and not the existing wall behind. The planting chosen should be appropriate to the Hong Kong climate, requiring relatively little maintenance to sustain the quality of both plants and wall.			
S4.7.2	-	<b><i>New Custom Paving</i></b>  New, Patterned, High Quality, Concrete Custom Pavers should replace most of the existing paving in the open spaces.	Whole site	During detailed design and construction	N/A – No custom paving was conducted during the reporting month.
S4.7.2	S4	<b><i>In-situ Tree Protection - Quarterly inspection</i></b>  Quarterly Inspection of affected and newly planted trees by an experienced and appropriately trained arborist or horticulturist using Form 1 – Tree Group Inspection Form and Form 2 – Tree Risk Assessment Form developed by Development Bureau ( <a href="http://www.trees.gov.hk/en/doc/TRAGuideline_July2010version_combine.pdf">http://www.trees.gov.hk/en/doc/TRAGuideline_July2010version_combine.pdf</a> ) or a form designed by a tree expert and approved by Tree Management Office for a period of 12 months after construction.	Whole site	During post construction and operation	N/A – The quarterly inspection will be conducted at later stage.
<i>Noise</i>					
S5.9	-	The following site practices should be followed during the construction of the Project: <ul style="list-style-type: none"> <li>• Only well-maintained plant will be operated on-site and plant will be serviced regularly during the construction phase;</li> <li>• Silencers or mufflers on construction equipment will be utilised and will be properly maintained during the construction phase;</li> <li>• Mobile plant, if any, will be sited as far away from NSRs as possible;</li> </ul>	Whole Site	During construction	√

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Location	When to Implement the Measure	Status
		<ul style="list-style-type: none"> <li>Machines and plant (such as trucks) that may be in intermittent use will be shut down between work periods or will be throttled down to a minimum;</li> <li>Plant known to emit noise strongly in one direction will, wherever possible, be orientated so that the noise is directed away from the nearby NSRs; and</li> <li>Material stockpiles and other structures will be effectively utilised, wherever practicable, in screening noise from on-site construction activities.</li> </ul>			
S5.9	-	Noise insulating sheet would be adopted for certain PME (eg drill rig, excavator for demolition of existing structures, etc). The noise insulating sheet should be deployed such that there would be no opening or gaps on the joints.	Whole Site	During construction	√
S5.9	-	Use temporary noise barriers to mitigate the noise impact arising from the construction works, particularly for low-rise NSRs. Movable noise barriers of 3 m in height with skid footing should be used and located within a few metres of stationary plant and mobile plant such that the line of sight to the NSR is blocked by the barriers. The length of the barrier should be at least five times greater than its height. The noise barrier material should have a superficial surface density of at least 7 kg m <sup>-2</sup> and have no openings or gaps.	Whole Site	During construction	√
S5.9	-	Use quiet PME as far as practicable to mitigate the construction noise impact.	Whole Site	During construction	√
S5.9	-	Scheduling of construction activities with identified grouping of PMEs.	Whole Site	During construction	√
S5.11	S5	Weekly noise monitoring will be undertaken at the representative NSRs N2 Ho Fook Building and N5 Chancery House. Monthly site audits will be conducted to ensure that the recommended mitigation measures are properly implemented during the construction stage.	Whole Site	During construction	√
<i>Air Quality</i>					
S6.8.1	-	Dust control measures stipulated in the <i>Air Pollution Control (Construction Dust) Regulation</i> will be implemented during the construction phase to control the potential fugitive dust emissions.	Whole Site	During construction	√

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Location	When to Implement the Measure	Status
S6.8.1	-	In particular: Temporary stockpiles of dusty materials will be either covered entirely by impervious sheets; placed in an area sheltered on the top and three sides; or sprayed with water to maintain the entire surface wet at all the time.	Whole Site	During construction	√
S6.8.1	-	Impervious sheet will be provided for skip hoist for material transport.	Whole Site	During construction	√
S6.8.1	-	Vehicle washing facilities will be provided at the designated vehicle exit points.	Whole Site	During construction	√
S6.8.1	-	Every vehicle will be washed to remove any dusty materials from its chassis and wheels immediately before leaving the worksite.	Whole Site	During construction	√
S6.8.1	-	Road sections between vehicle-wash areas and vehicular entrances will be paved.	Whole Site	During construction	√
S6.8.1	-	The load carried by the trucks will be covered entirely to ensure no dust emission from the vehicles.	Whole Site	During construction	√
S6.8.1	-	Hoarding of not less than 2.4m high from ground level will be provided along the Project Site boundary adjoining a road where the new buildings (Old Bailey Wing and Arbuthnot Wing) will be constructed.	Whole Site	During construction	√
S6.8.1	-	Stockpiles of more than 20 bags of cement, dry pulverised fuel ash and dusty construction materials will be covered entirely by impervious sheeting sheltered on top and 3-sides.	Whole Site	During construction	√
S6.8.1	-	An effective dust screen will be provided to enclose scaffolding, if required, from the ground floor level of building for construction of superstructure of the new buildings.	Whole Site	During construction	√
S6.8.1	-	Impervious dust screen or sheeting will be implemented for demolition of structures and renovation of outer surfaces of structures that abuts or fronts open area accessible to the public to no less than 1m higher than the highest level of the structure being demolished.	Whole Site	During construction	√
S6.8.1	-	The area at which demolition work takes place will be sprayed with water or dust suppression chemical immediately prior to, during and immediately after the demolition activity.	Area for Demolition Work	During construction	√

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Location	When to Implement the Measure	Status
S6.8.1	-	ULSD will be used for all construction plant on-site.	Whole Site	During construction	√
S6.8.1	-	The engine of the construction equipment or trucks during idling will be switched off.	Whole Site	During construction	√
S6.8.1	-	Site practices such as regular maintenance and checking of construction equipment deployed on-site will be conducted to avoid any black smoke emissions and to minimise gaseous emissions.	Whole Site	During construction	N/A – Not observed.
S6.10	S3.2	Monthly environmental site audits to ensure that appropriate dust control measures are properly implemented and good construction site practices are adopted throughout the construction period.	Whole Site	During construction	√
<i>Water Quality</i>					
S7.6	-	Channels, earth bunds or sand bag barriers will be provided on site to direct stormwater to silt removal facilities. The design of silt removal facilities will make reference to the guidelines in <i>Appendix A1 of ProPECC PN 1/94</i> . All drainage facilities and erosion and sediment control structures will be inspected on a regular basis and maintained to confirm proper and efficient operation at all times and particularly during rainstorms. Deposited silt and grit will be removed regularly.	Whole Site	During construction	√
S7.6	-	All drainage facilities and erosion and sediment control structures will be regularly inspected and maintained to ensure proper and efficient operation at all times and particularly following rainstorms. Deposited silt and grit will be removed regularly and disposed of.	Whole Site	During construction	N/A – Not observed.
S7.6	-	Measures will be taken to reduce the ingress of stormwater into excavation areas. If the excavation of the concrete foundation is to be carried out in wet season, they will be dug and backfilled in short sections wherever practicable. Water pumped out from trenches or foundation excavations will be discharged into stormwater drains via silt removal facilities.	Whole Site	During construction	N/A – Not observed.
S7.6	-	Open stockpiles of excavated and demolition materials will be covered with tarpaulin or similar fabric during rainstorms. Measures will be taken to prevent the washing away of residues, chemicals or debris into any drainage system.	Whole Site	During construction	√

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Location	When to Implement the Measure	Status
S7.6	-	Manholes (including newly constructed ones) will always be adequately covered and temporarily sealed so as to prevent silt, construction materials or debris being washed into the drainage system.	Whole Site	During construction	N/A – Not observed.
S7.6	-	Precautions will be taken when a rainstorm is imminent or forecasted, and actions to be taken during or after rainstorms are summarised in Appendix A2 of <i>ProPECC PN 1/94</i> . Particular attention will be paid to the control of silty surface runoff during storm events.	Whole Site	During construction	N/A – Not observed.
S7.6	-	All temporary and permanent drainage pipes and culverts provided to facilitate runoff discharge will be adequately designed for the controlled release of stormwater flows. All sediment traps will be regularly cleaned and maintained. The temporary diverted drainage will be reinstated to the original condition when the construction work has finished or the temporary diversion is no longer required.	Whole Site	During construction	N/A – Not observed.
S7.6	-	Vehicle and plant servicing areas, vehicle washing bays and lubrication bays will, as far as possible, be located within roofed areas. The drainage in these covered areas will be connected to foul sewers via a petrol interceptor.	Whole Site	During construction	N/A – Not observed.
S7.6	-	Oil leakage or spillage will be contained and cleaned up immediately. Waste oil will be collected and stored for recycling or disposal.	Whole Site	During construction	N/A – Not observed.
S7.6	-	Waste streams classifiable as chemical wastes will be properly stored, collected and treated.	Whole Site	During construction	√
S7.6	-	All fuel tanks and chemical storage areas will be provided with locks and be sited on paved areas.	Whole Site	During construction	√
S7.6	-	The storage areas will be surrounded by bunds with a capacity equal to 110% of the storage capacity of the largest tank to prevent spilled oil, fuel and chemicals from reaching the receiving waters.	Whole Site	During construction	√
S7.6	-	The Contractors will prepare guidelines and procedures for immediate clean-up actions following any spillages of oil, fuel or chemicals.	Whole Site	During construction	√

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Location	When to Implement the Measure	Status
S7.6	-	Surface runoff from bunded areas will pass through oil/grease traps prior to discharge to the stormwater system	Whole Site	During construction	N/A – Not observed.
S7.6	-	The stormwater discharge from the site will be monitored as part of the routine monitoring under the WPCO licence, if applicable.	Whole Site	During construction	N/A – Not observed.
S7.6	-	The existing toilet facilities of the CPS will be available to the construction workforce. The sewage will be discharged to the public sewer.	Whole Site	During construction	√
S7.8	S5.2	Monthly site audits of the works areas will be carried out during the construction phase to monitor the environmental performance of the Project and to enable prompt actions to rectify any malpractice which may give rise to water pollution problem.	Whole Site	During construction	√
<i>Waste Management</i>					
S8.5	S6.3.1 & Table 6.1	<u>General</u> The Contractor shall apply for and obtain all the necessary waste disposal permits or licences are obtained prior to the commencement of the construction works.	Whole Site	During construction	√
S8.5	-	<u>Management of Waste Disposal</u> The construction contractor will open a billing account with the EPD. Every construction waste or public fill load to be transferred to the Government waste disposal facilities such as public fill reception facilities, sorting facilities, landfills will require a valid “chit” which contains the information of the account holder to facilitate waste transaction recording and billing to the waste producer.	Whole Site	During construction	√
S8.5	S6.2	A trip-ticket system will also be established to monitor the disposal of construction waste at landfill and to control fly-tipping. The trip-ticket system will be included as one of the contractual requirements and implemented by the contractor.	Whole Site	During construction	√

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Location	When to Implement the Measure	Status
S8.5	S6 & Table 6.1	A recording system for the amount of wastes generated /recycled and disposed of will be established during the construction phase.	Whole Site	During construction	√
S8.5	S6.3	<u>Reduction of Construction Waste Generation</u>  C&D material will be segregated on-site into public fill and construction waste and stored in different containers or skips to facilitate reuse of the public fill and proper disposal of the construction waste. Specific areas of the work site will be designated for such segregation and storage if immediate use is not practicable.	Whole Site	During construction	√
S8.5	S6	<u>Chemical Waste</u>  The contractor will register as a chemical waste producer with the EPD.	Whole Site	During construction and operation	√
S8.5	S6	Containers used for storage of chemical waste shall: <ul style="list-style-type: none"> <li>• Be suitable for the substance they are holding, resistant to corrosion, maintained in a good condition, and securely closed;</li> <li>• Have a capacity of less than 450 L unless the specifications have been approved by the EPD; and</li> <li>• Display a label in English and Chinese in accordance with instructions prescribed in <i>Schedule 2 of the Regulations</i>.</li> </ul>	Whole Site	During construction and operation	√
S8.5	S6	Storage areas for chemical waste shall: <ul style="list-style-type: none"> <li>• Be clearly labelled and used solely for the storage of chemical waste;</li> <li>• Be enclosed on at least 3 sides;</li> <li>• Have an impermeable floor and bunding, of capacity to accommodate 110% of the volume of the largest container or 20% by volume of the chemical waste stored in that area, whichever is the greatest;</li> <li>• Have adequate ventilation;</li> <li>• Be covered to prevent rainfall entering (water collected within the bund must be tested and disposed of as chemical waste, if necessary); and</li> <li>• Be arranged so that incompatible materials are appropriately separated.</li> </ul>	Whole Site	During construction and operation	√

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Location	When to Implement the Measure	Status
S8.5	S6	A licensed contractor shall be employed to collect chemical waste for delivery to a licensed treatment facility.	Chemical Waste Treatment Centre at Tsing Yi	During construction and operation	√
S8.5	S6 & Table 6.1	<u>General Refuse</u> General refuse will be stored in enclosed bins separately from construction and chemical wastes. The general refuse will be delivered to the transfer station, separately from construction and chemical wastes, on a daily basis to reduce odour, pest and litter impacts.	Whole site	During construction	√
S8.5	S6	Recycling bins will be provided at strategic locations to facilitate recovery of aluminium can and waste paper from the Site. Materials recovered will be sold for recycling.	Whole site	During construction and operation	√
S8.5	S6	<u>Staff Training</u> At the commencement of the construction works, training will be provided to workers on the concepts of site cleanliness and on appropriate waste management procedures, including waste reduction, reuse and recycling.	Whole site	Commence-ment of construction	√
S8.7	S6.1 & 6.3	Monthly audits of the waste management practices will be carried out during the construction phases to determine if wastes are being managed in accordance with the recommended good site practices. The audits will examine all aspects of waste management including waste generation, storage, recycling, transport and disposal.	Whole site	During construction	√

Remark:

- √ Compliance of Mitigation Measures
- <> Compliance of Mitigation but need improvement
- x Non-compliance of Mitigation Measures
- ▲ Non-compliance of Mitigation Measures but rectified by Gammon Construction Ltd
- △ Deficiency of Mitigation Measures but rectified by Gammon Construction Ltd
- N/A Not Applicable in Reporting Period



**Annex G Implementation Schedule for Environmental Protection Measures (1 June to 30 June 2013)**

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Location	When to Implement the Measure	Status
<i>Cultural Heritage</i>					
S3.9.1	S3.2.6	Subject to the outcome of the archaeological investigation, if archaeological deposits are identified to be impacted by the proposed development, appropriate mitigation measures will be recommended and agreed with AMO.	In accordance with the recommendations in the Archaeological Action Plan (AAP) issued on 21 Dec 11 and approved on 30 Dec 11 by AMO	During detailed design and construction	No field work in the reporting month.
S3.9.2	S3.3.1	<u>Vibration Monitoring</u> A baseline condition survey and baseline vibration impact will be conducted by a specialist for the approval of AMO and Buildings Department prior to commencement of the construction works to define the vibration control limits and recommend a vibration monitoring proposal for the concerned historic buildings and structures in and outside CPS for AMO's prior approval before commencement of the construction works.	Historic buildings and structures in CPS, the granite walls at Old Bailey Street and the proposed Grade 3 historic building (No. 20 Hollywood Road)	During detailed design and construction	√
S3.9.2	S3.3.3	<u>Compliance of the Approved Measures and Auditing</u> Staff training by an experience building conservation expert or relevant competent person(s) in the environmental team of the project should be provided to the on-site staffs, contractors, sub-contractors and workers of the project before commencement of works to ensure their full understanding of the approved protection schedule, restoration proposal and work methodologies related to cultural heritage, and their respective responsibilities in the implementation of the environmental protection measures.  Regular site audit for cultural heritage should be carried out in the construction phase by an experience building conservation expert in the environmental team ("the Heritage Checker") to investigate the site practice of the contractors and workers and their compliance of the approved work methodologies with respect of conservation works, mitigations for cultural heritage and any related works. A detailed	Whole site	Prior to and during construction	√

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Location	When to Implement the Measure	Status
		<p>proposal of the regular audit such as methodology (e.g. performance and monitoring indicators, control tools, frequency of the audit, etc.) and the conservation professionals to be engaged should be agreed with AMO prior to work commencement.</p> <p>The Heritage Checker shall also attend the regular site meetings with AMO and report the compliance and effectiveness of the mitigation measures for cultural heritage.</p>			
S3.9.3	S3.3.4	<p><u>Archival Recording</u></p> <p>An archival recording should be conducted to provide a detailed reference for the update of the Conservation Management Plan and inventory of historical features of the monuments, the preparation of as-built drawings showing the condition of the historic buildings and structures after the completion of the construction works. These archival records will be a reference source for future maintenance of the character defining elements, conservation of the monuments, interpretation and conservation education of the Site. The archival recording shall include but not limit to the video and photographic recording on the detailed process of the repair trials for different kinds of historical features, conservation works of character defining elements and historic fabrics of the monuments, and a written records of any new changes to the detailed design made in the construction phase illustrate with photos and drawings. A full set of the archives records (including both hard and soft copies) should be submitted to the AMO for approval after the work completion for record purpose. Any new findings related to the conservation of built heritage in the Site identified during the detailed design stage and construction phases shall be properly recorded in details for notification to the AMO and update of the Conservation Management Plan.</p>	Whole Site	During detailed design, construction and prior to operation	N/A – Archival recording will be conducted at later stage.
S3.7.3	-	<p><u>General Construction Methods</u></p> <p>Prior to the commencement of the modification/refurbishment works at an existing building or structure (e.g. masonry walls near the Old Bailey Wing) , a site survey will be carried out by the design team, and all building dimensions and levels of the building/structure shown will be</p>	Whole site	During construction	√

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Location	When to Implement the Measure	Status
		checked and confirmed by the contractor. Non-percussive piling methods will be adopted for the construction of the foundation for the new buildings. Protective and precaution measures to the existing buildings and structure adjacent to the work area (including the proposed Grade 3 historic building (No. 20 Hollywood road) and the granite boundary walls between the Ablutions Block of the police station (building no. 08) and the General Office of the prison area (building no. 18) which is adjacent to the new construction of the Old Bailey Wing and for an old granite walls at Old Bailey Street within 15m from the new construction) shall be provided to avoid damage to the existing features and to safeguard the structural integrity during the course of construction. Small scale handheld pneumatic tools with minimal vibration impact to the existing buildings/ structures are selected so as to have a better logistic and handling at the existing buildings and structures, which usually have only narrow working areas. In cases of the local demolition of structural elements, demountable platforms will be erected to temporarily support the affected area and divert the loading from above to avoid instability and create excessive cracking and settlement of the building/structure.			
S3.7.1 & 3.7.2	-	<p>Implementation and update of the Conservation Management Plan (CMP). Any new findings related to the conservation of the built heritage in the site identified during the detailed design and construction stage shall be properly recorded in details for the notification to the AMO and update in the CMP. After the construction, a cartographic and photographic recording on the restored historic buildings, historic features and the site shall be conducted and the following records shall be included into the CMP as appendices for updating and record purpose:</p> <ul style="list-style-type: none"> <li>• one set of measured drawings and photographic records showing the as-built condition of historic buildings and structures; and</li> <li>• an updated inventory list of the historic features together with the cross referenced location plans and photo records.</li> </ul> <p>One set of updated CMP shall be submitted to the AMO for approval before the operation stage of the project.</p>	Whole site	During detailed design, construction, post-construction and operation	√ - CMP was implemented during the reporting month. There were no updates for the CMP.

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Location	When to Implement the Measure	Status
<i>Landscape &amp; Visual</i>					
S4.7.27	-	<p><u><i>In-situ Tree Protection - Cordon Zone (CZ)</i></u></p> <p>Cordon off each tree along its drip line (below the crown) with a chain-link fencing of 2.5 m height with padlocked gate, allowing limited access to area only to authorized persons. The base of the perimeter fence will be sealed up to 30 cm height to ensure that no construction drainage water will enter. If grouting is to be conducted less than 5 m from the edge of the CZ, a waterproof membrane will be installed below the ground to a depth of 1.5 m on the outer edge of the CZ to prevent the subsurface lateral movement of contaminated construction wastewater from intruding the soil inside the CZ.</p>	Whole site	During construction	<p>√ - Part of the cordon zone of Tree-5 has been used as a worker storage room. The Contractor was recommended to pay utmost attention to potential land pollution at the worker storage room at all times.</p> <p>Tree-11 has been wrapped using hessian cloth so that the tree is kept a reasonable distance from the nearby buildings (see attached at the end of <i>Annex G</i>).</p>
S4.7.2	-	<p><u><i>In-situ Tree Protection - Advanced &amp; Phased Root Pruning</i></u></p> <p>All edges of the CZ that will be affected by excavation will undergo root pruning by a trained arborist or horticulturist, in advance of the earth work. The entire affected length of the CZ, plus 3 m additional length at both ends, shall be designated as the root pruning segment (RPS). The require trench will be opened manually in the RPS, be 1.5 m deep and 1 m wide, and closed on the same day after pruning with a good soil mix. All roots with a diameter &gt;20 mm encountered in the course of trench opening shall be cut flushed with the inner wall of the trench. If the RPS exceeds one-quarter of the CZ circumference, the root pruning should be conducted in two stages. Each phase will tackle half of the RPS length. After the first phase, the tree will be allowed to recuperate for not less than four months before the second phase root pruning is conducted. The RPS shall be protected by sheet piles along the outer edge. The rig that installs the piles and the associated operations shall not intrude into the CZ or injure the protected tree.</p>	Whole site	During construction	N/A – no root pruning has been conducted yet
S4.7.2	-	<p><u><i>In-situ Tree Protection - Foliage cleansing system</i></u></p> <p>A sprinkler cleansing system will be installed either in the crown of the tree or at a suitable location on an adjacent building to provide the</p>	Whole site	During construction	√

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Location	When to Implement the Measure	Status
		means to wash the foliage of the accumulated dust when necessary, particularly in the dry season.			
S4.7.2	S4	<p><u>In-situ Tree Protection - Monthly inspection</u></p> <p>Monthly inspection of affected trees by an experienced and appropriately trained arborist or horticulturist using Form 1 – Tree Group Inspection Form and Form 2 – Tree Risk Assessment Form developed by Development Bureau (<a href="http://www.trees.gov.hk/en/doc/TRAGuideline_July2010version_combine.pdf">http://www.trees.gov.hk/en/doc/TRAGuideline_July2010version_combine.pdf</a>) or a form designed by a tree expert and approved by Tree Management Office. All irregularities that deviate from the recommended tree protection measures, or could impose deleterious impacts on the protected trees, must be reported to the authorized person or the tree expert within two days.</p>	Whole site	During construction	√
S4.7.2	-	<p><u>Light Control</u></p> <p>Control of night-time lighting shall be implemented to minimise impact to adjacent VSRs.</p>	Whole site	During construction and operation	√
S4.7.2	S4	<p><u>Compensatory Tree Planting</u></p> <p>A new planting site has been identified for compensatory tree planting in the Parade Ground. The planting is to compensate for felling of T10. The existing tree site will be enlarged to become a wide tree strip to accommodate at least six trees. The entire strip of land that accommodates T1 to T4 should be revamped to improve the soil condition for future tree growth.</p> <p>The new tree strip should be 4 m wide and covered by porous unit pavers to permit the entry of rain and irrigation water and air exchange between the soil and the atmosphere. The unit pavers should be supported by small columns to create a vault-like structure so as to avoid compaction of the underlying soil due to pedestrian trampling. The unit pavers will be movable to provide access to the soil underneath so that fertilizers and conditioners could be added on a</p>	At identified compensatory tree planting location at the Parade Ground	During detailed design and construction	N/A – Compensatory Tree Planting will be conducted at later stage.

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Location	When to Implement the Measure	Status
		<p>regular basis. The air conditioner unit currently located near the proposed planting site should also be removed. This new tree planting site should also be provided with proper irrigation.</p> <p>Pursuant to the “Environment, Transport and Works Bureau Technical Circular (Works) No. 3/2006 Tree Preservation”, the compensation ratio should preferably be 1:1 according to trunk girth. T10 has a DBH of 20 cm (Table 4.3), and it is proposed that six trees of heavy standard size be planted, each with a DBH of around 10 cm and root balls of not less than 0.75 m diameter and 0.75 m depth,. Since the aggregate DBH of the new trees would be 60 cm, the rate of compensation is equivalent to three times the DBH of T10, far beyond the requirements</p> <p>The six replacement trees should be planted in the new tree strip in two staggered rows, maximising distance between each tree to avoid mutual interference in the future. It is recommended that the species selected should have a small final dimension of less than 10 m height given the proximity to built structures such as the retaining wall and buildings. Two each of the outstanding and related flowering tree species connected to local natural history are suggested::</p> <ul style="list-style-type: none"> <li>– <i>Bauhinia</i> ‘Blakeana’ a native evergreen species with deep mauve flowers and an exceptionally long flowering period from late autumn to early spring.</li> <li>– <i>Bauhinia purpure</i>, a native evergreen with lighter purple flowers from late autumn to early winter.</li> <li>– <i>Bauhinia variegata</i>, an exotic deciduous species, with pale pinkish flowers in spring to early summer often when the tree has little or no leaves.</li> </ul>			
S4.7.2	S4	<p><u>Vertical Greening</u></p> <p>Within the limitations of the conservation of the CPS character, greening of vertical structures should be provided where possible.</p> <p>As such it is recommended that the inner southern wall of the Site be planted as a green wall. The plantings should be inserted in between each of the large protruding piers and an offset be made from both the</p>	Inner Southern Wall	During detailed design and construction	N/A – No vertical greening was conducted during the reporting month.

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Location	When to Implement the Measure	Status
		top and bottom edge so that old and new are equally visible. An independent frame should be strategically positioned in order to ensure minimal disturbance to the original wall, and provide the main structural support and planting surface for the green wall. The frame on to which the new green will be planted should contain its own irrigation system so that moisture for the plants will remain mainly on the planting surface and not the existing wall behind. The planting chosen should be appropriate to the Hong Kong climate, requiring relatively little maintenance to sustain the quality of both plants and wall.			
S4.7.2	-	<b><i>New Custom Paving</i></b>  New, Patterned, High Quality, Concrete Custom Pavers should replace most of the existing paving in the open spaces.	Whole site	During detailed design and construction	N/A – No custom paving was conducted during the reporting month.
S4.7.2	S4	<b><i>In-situ Tree Protection - Quarterly inspection</i></b>  Quarterly Inspection of affected and newly planted trees by an experienced and appropriately trained arborist or horticulturist using Form 1 – Tree Group Inspection Form and Form 2 – Tree Risk Assessment Form developed by Development Bureau ( <a href="http://www.trees.gov.hk/en/doc/TRAGuideline_July2010version_combine.pdf">http://www.trees.gov.hk/en/doc/TRAGuideline_July2010version_combine.pdf</a> ) or a form designed by a tree expert and approved by Tree Management Office for a period of 12 months after construction.	Whole site	During post construction and operation	N/A – The quarterly inspection will be conducted at later stage.
<i>Noise</i>					
S5.9	-	The following site practices should be followed during the construction of the Project: <ul style="list-style-type: none"> <li>• Only well-maintained plant will be operated on-site and plant will be serviced regularly during the construction phase;</li> <li>• Silencers or mufflers on construction equipment will be utilised and will be properly maintained during the construction phase;</li> <li>• Mobile plant, if any, will be sited as far away from NSRs as possible;</li> </ul>	Whole Site	During construction	√

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Location	When to Implement the Measure	Status
		<ul style="list-style-type: none"> <li>Machines and plant (such as trucks) that may be in intermittent use will be shut down between work periods or will be throttled down to a minimum;</li> <li>Plant known to emit noise strongly in one direction will, wherever possible, be orientated so that the noise is directed away from the nearby NSRs; and</li> <li>Material stockpiles and other structures will be effectively utilised, wherever practicable, in screening noise from on-site construction activities.</li> </ul>			
S5.9	-	Noise insulating sheet would be adopted for certain PME (eg drill rig, excavator for demolition of existing structures, etc). The noise insulating sheet should be deployed such that there would be no opening or gaps on the joints.	Whole Site	During construction	√
S5.9	-	Use temporary noise barriers to mitigate the noise impact arising from the construction works, particularly for low-rise NSRs. Movable noise barriers of 3 m in height with skid footing should be used and located within a few metres of stationary plant and mobile plant such that the line of sight to the NSR is blocked by the barriers. The length of the barrier should be at least five times greater than its height. The noise barrier material should have a superficial surface density of at least 7 kg m <sup>-2</sup> and have no openings or gaps.	Whole Site	During construction	√
S5.9	-	Use quiet PME as far as practicable to mitigate the construction noise impact.	Whole Site	During construction	√
S5.9	-	Scheduling of construction activities with identified grouping of PMEs.	Whole Site	During construction	√
S5.11	S5	Weekly noise monitoring will be undertaken at the representative NSRs N2 Ho Fook Building and N5 Chancery House. Monthly site audits will be conducted to ensure that the recommended mitigation measures are properly implemented during the construction stage.	Whole Site	During construction	√
<i>Air Quality</i>					
S6.8.1	-	Dust control measures stipulated in the <i>Air Pollution Control (Construction Dust) Regulation</i> will be implemented during the construction phase to control the potential fugitive dust emissions.	Whole Site	During construction	√



EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Location	When to Implement the Measure	Status
S6.8.1	-	In particular: Temporary stockpiles of dusty materials will be either covered entirely by impervious sheets; placed in an area sheltered on the top and three sides; or sprayed with water to maintain the entire surface wet at all the time.	Whole Site	During construction	√
S6.8.1	-	Impervious sheet will be provided for skip hoist for material transport.	Whole Site	During construction	√
S6.8.1	-	Vehicle washing facilities will be provided at the designated vehicle exit points.	Whole Site	During construction	√
S6.8.1	-	Every vehicle will be washed to remove any dusty materials from its chassis and wheels immediately before leaving the worksite.	Whole Site	During construction	√
S6.8.1	-	Road sections between vehicle-wash areas and vehicular entrances will be paved.	Whole Site	During construction	√
S6.8.1	-	The load carried by the trucks will be covered entirely to ensure no dust emission from the vehicles.	Whole Site	During construction	√
S6.8.1	-	Hoarding of not less than 2.4m high from ground level will be provided along the Project Site boundary adjoining a road where the new buildings (Old Bailey Wing and Arbuthnot Wing) will be constructed.	Whole Site	During construction	√
S6.8.1	-	Stockpiles of more than 20 bags of cement, dry pulverised fuel ash and dusty construction materials will be covered entirely by impervious sheeting sheltered on top and 3-sides.	Whole Site	During construction	√
S6.8.1	-	An effective dust screen will be provided to enclose scaffolding, if required, from the ground floor level of building for construction of superstructure of the new buildings.	Whole Site	During construction	√
S6.8.1	-	Impervious dust screen or sheeting will be implemented for demolition of structures and renovation of outer surfaces of structures that abuts or fronts open area accessible to the public to no less than 1m higher than the highest level of the structure being demolished.	Whole Site	During construction	√
S6.8.1	-	The area at which demolition work takes place will be sprayed with water or dust suppression chemical immediately prior to, during and immediately after the demolition activity.	Area for Demolition Work	During construction	√

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Location	When to Implement the Measure	Status
S6.8.1	-	ULSD will be used for all construction plant on-site.	Whole Site	During construction	√
S6.8.1	-	The engine of the construction equipment or trucks during idling will be switched off.	Whole Site	During construction	√
S6.8.1	-	Site practices such as regular maintenance and checking of construction equipment deployed on-site will be conducted to avoid any black smoke emissions and to minimise gaseous emissions.	Whole Site	During construction	N/A – Not observed.
S6.10	S3.2	Monthly environmental site audits to ensure that appropriate dust control measures are properly implemented and good construction site practices are adopted throughout the construction period.	Whole Site	During construction	√
<i>Water Quality</i>					
S7.6	-	Channels, earth bunds or sand bag barriers will be provided on site to direct stormwater to silt removal facilities. The design of silt removal facilities will make reference to the guidelines in <i>Appendix A1 of ProPECC PN 1/94</i> . All drainage facilities and erosion and sediment control structures will be inspected on a regular basis and maintained to confirm proper and efficient operation at all times and particularly during rainstorms. Deposited silt and grit will be removed regularly.	Whole Site	During construction	√
S7.6	-	All drainage facilities and erosion and sediment control structures will be regularly inspected and maintained to ensure proper and efficient operation at all times and particularly following rainstorms. Deposited silt and grit will be removed regularly and disposed of.	Whole Site	During construction	N/A – Not observed.
S7.6	-	Measures will be taken to reduce the ingress of stormwater into excavation areas. If the excavation of the concrete foundation is to be carried out in wet season, they will be dug and backfilled in short sections wherever practicable. Water pumped out from trenches or foundation excavations will be discharged into stormwater drains via silt removal facilities.	Whole Site	During construction	N/A – Not observed.
S7.6	-	Open stockpiles of excavated and demolition materials will be covered with tarpaulin or similar fabric during rainstorms. Measures will be taken to prevent the washing away of residues, chemicals or debris into any drainage system.	Whole Site	During construction	√

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Location	When to Implement the Measure	Status
S7.6	-	Manholes (including newly constructed ones) will always be adequately covered and temporarily sealed so as to prevent silt, construction materials or debris being washed into the drainage system.	Whole Site	During construction	N/A – Not observed.
S7.6	-	Precautions will be taken when a rainstorm is imminent or forecasted, and actions to be taken during or after rainstorms are summarised in Appendix A2 of <i>ProPECC PN 1/94</i> . Particular attention will be paid to the control of silty surface runoff during storm events.	Whole Site	During construction	N/A – Not observed.
S7.6	-	All temporary and permanent drainage pipes and culverts provided to facilitate runoff discharge will be adequately designed for the controlled release of stormwater flows. All sediment traps will be regularly cleaned and maintained. The temporary diverted drainage will be reinstated to the original condition when the construction work has finished or the temporary diversion is no longer required.	Whole Site	During construction	N/A – Not observed.
S7.6	-	Vehicle and plant servicing areas, vehicle washing bays and lubrication bays will, as far as possible, be located within roofed areas. The drainage in these covered areas will be connected to foul sewers via a petrol interceptor.	Whole Site	During construction	N/A – Not observed.
S7.6	-	Oil leakage or spillage will be contained and cleaned up immediately. Waste oil will be collected and stored for recycling or disposal.	Whole Site	During construction	N/A – Not observed.
S7.6	-	Waste streams classifiable as chemical wastes will be properly stored, collected and treated.	Whole Site	During construction	√
S7.6	-	All fuel tanks and chemical storage areas will be provided with locks and be sited on paved areas.	Whole Site	During construction	√
S7.6	-	The storage areas will be surrounded by bunds with a capacity equal to 110% of the storage capacity of the largest tank to prevent spilled oil, fuel and chemicals from reaching the receiving waters.	Whole Site	During construction	√
S7.6	-	The Contractors will prepare guidelines and procedures for immediate clean-up actions following any spillages of oil, fuel or chemicals.	Whole Site	During construction	√

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Location	When to Implement the Measure	Status
S7.6	-	Surface runoff from bunded areas will pass through oil/grease traps prior to discharge to the stormwater system	Whole Site	During construction	N/A – Not observed.
S7.6	-	The stormwater discharge from the site will be monitored as part of the routine monitoring under the WPCO licence, if applicable.	Whole Site	During construction	N/A – Not observed.
S7.6	-	The existing toilet facilities of the CPS will be available to the construction workforce. The sewage will be discharged to the public sewer.	Whole Site	During construction	√
S7.8	S5.2	Monthly site audits of the works areas will be carried out during the construction phase to monitor the environmental performance of the Project and to enable prompt actions to rectify any malpractice which may give rise to water pollution problem.	Whole Site	During construction	√
<i>Waste Management</i>					
S8.5	S6.3.1 & Table 6.1	<u>General</u> The Contractor shall apply for and obtain all the necessary waste disposal permits or licences are obtained prior to the commencement of the construction works.	Whole Site	During construction	√
S8.5	-	<u>Management of Waste Disposal</u> The construction contractor will open a billing account with the EPD. Every construction waste or public fill load to be transferred to the Government waste disposal facilities such as public fill reception facilities, sorting facilities, landfills will require a valid “chit” which contains the information of the account holder to facilitate waste transaction recording and billing to the waste producer.	Whole Site	During construction	√
S8.5	S6.2	A trip-ticket system will also be established to monitor the disposal of construction waste at landfill and to control fly-tipping. The trip-ticket system will be included as one of the contractual requirements and implemented by the contractor.	Whole Site	During construction	√

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Location	When to Implement the Measure	Status
S8.5	S6 & Table 6.1	A recording system for the amount of wastes generated /recycled and disposed of will be established during the construction phase.	Whole Site	During construction	√
S8.5	S6.3	<u>Reduction of Construction Waste Generation</u>  C&D material will be segregated on-site into public fill and construction waste and stored in different containers or skips to facilitate reuse of the public fill and proper disposal of the construction waste. Specific areas of the work site will be designated for such segregation and storage if immediate use is not practicable.	Whole Site	During construction	√
S8.5	S6	<u>Chemical Waste</u>  The contractor will register as a chemical waste producer with the EPD.	Whole Site	During construction and operation	√
S8.5	S6	Containers used for storage of chemical waste shall: <ul style="list-style-type: none"> <li>• Be suitable for the substance they are holding, resistant to corrosion, maintained in a good condition, and securely closed;</li> <li>• Have a capacity of less than 450 L unless the specifications have been approved by the EPD; and</li> <li>• Display a label in English and Chinese in accordance with instructions prescribed in <i>Schedule 2 of the Regulations</i>.</li> </ul>	Whole Site	During construction and operation	√
S8.5	S6	Storage areas for chemical waste shall: <ul style="list-style-type: none"> <li>• Be clearly labelled and used solely for the storage of chemical waste;</li> <li>• Be enclosed on at least 3 sides;</li> <li>• Have an impermeable floor and bunding, of capacity to accommodate 110% of the volume of the largest container or 20% by volume of the chemical waste stored in that area, whichever is the greatest;</li> <li>• Have adequate ventilation;</li> <li>• Be covered to prevent rainfall entering (water collected within the bund must be tested and disposed of as chemical waste, if necessary); and</li> <li>• Be arranged so that incompatible materials are appropriately separated.</li> </ul>	Whole Site	During construction and operation	√

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Location	When to Implement the Measure	Status
S8.5	S6	A licensed contractor shall be employed to collect chemical waste for delivery to a licensed treatment facility.	Chemical Waste Treatment Centre at Tsing Yi	During construction and operation	√
S8.5	S6 & Table 6.1	<u>General Refuse</u> General refuse will be stored in enclosed bins separately from construction and chemical wastes. The general refuse will be delivered to the transfer station, separately from construction and chemical wastes, on a daily basis to reduce odour, pest and litter impacts.	Whole site	During construction	√
S8.5	S6	Recycling bins will be provided at strategic locations to facilitate recovery of aluminium can and waste paper from the Site. Materials recovered will be sold for recycling.	Whole site	During construction and operation	√
S8.5	S6	<u>Staff Training</u> At the commencement of the construction works, training will be provided to workers on the concepts of site cleanliness and on appropriate waste management procedures, including waste reduction, reuse and recycling.	Whole site	Commencement of construction	√
S8.7	S6.1 & 6.3	Monthly audits of the waste management practices will be carried out during the construction phases to determine if wastes are being managed in accordance with the recommended good site practices. The audits will examine all aspects of waste management including waste generation, storage, recycling, transport and disposal.	Whole site	During construction	√

Remark:

- √ Compliance of Mitigation Measures
- <> Compliance of Mitigation but need improvement
- x Non-compliance of Mitigation Measures
- ▲ Non-compliance of Mitigation Measures but rectified by Gammon Construction Ltd
- Δ Deficiency of Mitigation Measures but rectified by Gammon Construction Ltd
- N/A Not Applicable in Reporting Period

**Annex G Implementation Schedule for Environmental Protection Measures (1 July to 31 July 2013)**

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Location	When to Implement the Measure	Status
<i>Cultural Heritage</i>					
S3.9.1	S3.2.6	Subject to the outcome of the archaeological investigation, if archaeological deposits are identified to be impacted by the proposed development, appropriate mitigation measures will be recommended and agreed with AMO.	In accordance with the recommendations in the Archaeological Action Plan (AAP) issued on 21 Dec 11 and approved on 30 Dec 11 by AMO	During detailed design and construction	No field work in the reporting month.
S3.9.2	S3.3.1	<u>Vibration Monitoring</u> A baseline condition survey and baseline vibration impact will be conducted by a specialist for the approval of AMO and Buildings Department prior to commencement of the construction works to define the vibration control limits and recommend a vibration monitoring proposal for the concerned historic buildings and structures in and outside CPS for AMO's prior approval before commencement of the construction works.	Historic buildings and structures in CPS, the granite walls at Old Bailey Street and the proposed Grade 3 historic building (No. 20 Hollywood Road)	During detailed design and construction	√
S3.9.2	S3.3.3	<u>Compliance of the Approved Measures and Auditing</u> Staff training by an experience building conservation expert or relevant competent person(s) in the environmental team of the project should be provided to the on-site staffs, contractors, sub-contractors and workers of the project before commencement of works to ensure their full understanding of the approved protection schedule, restoration proposal and work methodologies related to cultural heritage, and their respective responsibilities in the implementation of the environmental protection measures.  Regular site audit for cultural heritage should be carried out in the construction phase by an experience building conservation expert in the environmental team ("the Heritage Checker") to investigate the site practice of the contractors and workers and their compliance of the approved work methodologies with respect of conservation works, mitigations for cultural heritage and any related works. A detailed	Whole site	Prior to and during construction	√

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Location	When to Implement the Measure	Status
		<p>proposal of the regular audit such as methodology (e.g. performance and monitoring indicators, control tools, frequency of the audit, etc.) and the conservation professionals to be engaged should be agreed with AMO prior to work commencement.</p> <p>The Heritage Checker shall also attend the regular site meetings with AMO and report the compliance and effectiveness of the mitigation measures for cultural heritage.</p>			
S3.9.3	S3.3.4	<p><u>Archival Recording</u></p> <p>An archival recording should be conducted to provide a detailed reference for the update of the Conservation Management Plan and inventory of historical features of the monuments, the preparation of as-built drawings showing the condition of the historic buildings and structures after the completion of the construction works. These archival records will be a reference source for future maintenance of the character defining elements, conservation of the monuments, interpretation and conservation education of the Site. The archival recording shall include but not limit to the video and photographic recording on the detailed process of the repair trials for different kinds of historical features, conservation works of character defining elements and historic fabrics of the monuments, and a written records of any new changes to the detailed design made in the construction phase illustrate with photos and drawings. A full set of the archives records (including both hard and soft copies) should be submitted to the AMO for approval after the work completion for record purpose. Any new findings related to the conservation of built heritage in the Site identified during the detailed design stage and construction phases shall be properly recorded in details for notification to the AMO and update of the Conservation Management Plan.</p>	Whole Site	During detailed design, construction and prior to operation	N/A – Archival recording will be conducted at later stage.
S3.7.3	-	<p><u>General Construction Methods</u></p> <p>Prior to the commencement of the modification/refurbishment works at an existing building or structure (e.g. masonry walls near the Old Bailey Wing) , a site survey will be carried out by the design team, and all building dimensions and levels of the building/structure shown will be</p>	Whole site	During construction	√



EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Location	When to Implement the Measure	Status
		checked and confirmed by the contractor. Non-percussive piling methods will be adopted for the construction of the foundation for the new buildings. Protective and precaution measures to the existing buildings and structure adjacent to the work area (including the proposed Grade 3 historic building (No. 20 Hollywood road) and the granite boundary walls between the Ablutions Block of the police station (building no. 08) and the General Office of the prison area (building no. 18) which is adjacent to the new construction of the Old Bailey Wing and for an old granite walls at Old Bailey Street within 15m from the new construction) shall be provided to avoid damage to the existing features and to safeguard the structural integrity during the course of construction. Small scale handheld pneumatic tools with minimal vibration impact to the existing buildings/ structures are selected so as to have a better logistic and handling at the existing buildings and structures, which usually have only narrow working areas. In cases of the local demolition of structural elements, demountable platforms will be erected to temporarily support the affected area and divert the loading from above to avoid instability and create excessive cracking and settlement of the building/structure.			
S3.7.1 & 3.7.2	-	<p>Implementation and update of the Conservation Management Plan (CMP). Any new findings related to the conservation of the built heritage in the site identified during the detailed design and construction stage shall be properly recorded in details for the notification to the AMO and update in the CMP. After the construction, a cartographic and photographic recording on the restored historic buildings, historic features and the site shall be conducted and the following records shall be included into the CMP as appendices for updating and record purpose:</p> <ul style="list-style-type: none"> <li>• one set of measured drawings and photographic records showing the as-built condition of historic buildings and structures; and</li> <li>• an updated inventory list of the historic features together with the cross referenced location plans and photo records.</li> </ul> <p>One set of updated CMP shall be submitted to the AMO for approval before the operation stage of the project.</p>	Whole site	During detailed design, construction, post-construction and operation	√ - CMP was implemented during the reporting month. There were no updates for the CMP.

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Location	When to Implement the Measure	Status
<i>Landscape &amp; Visual</i>					
S4.7.27	-	<p><u><i>In-situ Tree Protection - Cordon Zone (CZ)</i></u></p> <p>Cordon off each tree along its drip line (below the crown) with a chain-link fencing of 2.5 m height with padlocked gate, allowing limited access to area only to authorized persons. The base of the perimeter fence will be sealed up to 30 cm height to ensure that no construction drainage water will enter. If grouting is to be conducted less than 5 m from the edge of the CZ, a waterproof membrane will be installed below the ground to a depth of 1.5 m on the outer edge of the CZ to prevent the subsurface lateral movement of contaminated construction wastewater from intruding the soil inside the CZ.</p>	Whole site	During construction	√ - Part of the cordon zone of Tree-5 has been used as a worker storage room. The Contractor was recommended to pay utmost attention to potential land pollution at the worker storage room at all times.
S4.7.2	-	<p><u><i>In-situ Tree Protection - Advanced &amp; Phased Root Pruning</i></u></p> <p>All edges of the CZ that will be affected by excavation will undergo root pruning by a trained arborist or horticulturist, in advance of the earth work. The entire affected length of the CZ, plus 3 m additional length at both ends, shall be designated as the root pruning segment (RPS). The require trench will be opened manually in the RPS, be 1.5 m deep and 1 m wide, and closed on the same day after pruning with a good soil mix. All roots with a diameter &gt;20 mm encountered in the course of trench opening shall be cut flushed with the inner wall of the trench. If the RPS exceeds one-quarter of the CZ circumference, the root pruning should be conducted in two stages. Each phase will tackle half of the RPS length. After the first phase, the tree will be allowed to recuperate for not less than four months before the second phase root pruning is conducted. The RPS shall be protected by sheet piles along the outer edge. The rig that installs the piles and the associated operations shall not intrude into the CZ or injure the protected tree.</p>	Whole site	During construction	N/A – no root pruning has been conducted yet
S4.7.2	-	<p><u><i>In-situ Tree Protection - Foliage cleansing system</i></u></p> <p>A sprinkler cleansing system will be installed either in the crown of the tree or at a suitable location on an adjacent building to provide the</p>	Whole site	During construction	√

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Location	When to Implement the Measure	Status
		means to wash the foliage of the accumulated dust when necessary, particularly in the dry season.			
S4.7.2	S4	<p><u>In-situ Tree Protection - Monthly inspection</u></p> <p>Monthly inspection of affected trees by an experienced and appropriately trained arborist or horticulturist using Form 1 – Tree Group Inspection Form and Form 2 – Tree Risk Assessment Form developed by Development Bureau (<a href="http://www.trees.gov.hk/en/doc/TRAGuideline_July2010version_combine.pdf">http://www.trees.gov.hk/en/doc/TRAGuideline_July2010version_combine.pdf</a>) or a form designed by a tree expert and approved by Tree Management Office. All irregularities that deviate from the recommended tree protection measures, or could impose deleterious impacts on the protected trees, must be reported to the authorized person or the tree expert within two days.</p>	Whole site	During construction	√
S4.7.2	-	<p><u>Light Control</u></p> <p>Control of night-time lighting shall be implemented to minimise impact to adjacent VSRs.</p>	Whole site	During construction and operation	√
S4.7.2	S4	<p><u>Compensatory Tree Planting</u></p> <p>A new planting site has been identified for compensatory tree planting in the Parade Ground. The planting is to compensate for felling of T10. The existing tree site will be enlarged to become a wide tree strip to accommodate at least six trees. The entire strip of land that accommodates T1 to T4 should be revamped to improve the soil condition for future tree growth.</p> <p>The new tree strip should be 4 m wide and covered by porous unit pavers to permit the entry of rain and irrigation water and air exchange between the soil and the atmosphere. The unit pavers should be supported by small columns to create a vault-like structure so as to avoid compaction of the underlying soil due to pedestrian trampling. The unit pavers will be movable to provide access to the soil underneath so that fertilizers and conditioners could be added on a</p>	At identified compensatory tree planting location at the Parade Ground	During detailed design and construction	N/A – Compensatory Tree Planting will be conducted at later stage.

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Location	When to Implement the Measure	Status
		<p>regular basis. The air conditioner unit currently located near the proposed planting site should also be removed. This new tree planting site should also be provided with proper irrigation.</p> <p>Pursuant to the “Environment, Transport and Works Bureau Technical Circular (Works) No. 3/2006 Tree Preservation”, the compensation ratio should preferably be 1:1 according to trunk girth. T10 has a DBH of 20 cm (Table 4.3), and it is proposed that six trees of heavy standard size be planted, each with a DBH of around 10 cm and root balls of not less than 0.75 m diameter and 0.75 m depth,. Since the aggregate DBH of the new trees would be 60 cm, the rate of compensation is equivalent to three times the DBH of T10, far beyond the requirements</p> <p>The six replacement trees should be planted in the new tree strip in two staggered rows, maximising distance between each tree to avoid mutual interference in the future. It is recommended that the species selected should have a small final dimension of less than 10 m height given the proximity to built structures such as the retaining wall and buildings. Two each of the outstanding and related flowering tree species connected to local natural history are suggested::</p> <ul style="list-style-type: none"> <li>– <i>Bauhinia</i> ‘Blakeana’ a native evergreen species with deep mauve flowers and an exceptionally long flowering period from late autumn to early spring.</li> <li>– <i>Bauhinia purpure</i>, a native evergreen with lighter purple flowers from late autumn to early winter.</li> <li>– <i>Bauhinia variegata</i>, an exotic deciduous species, with pale pinkish flowers in spring to early summer often when the tree has little or no leaves.</li> </ul>			
S4.7.2	S4	<p><u>Vertical Greening</u></p> <p>Within the limitations of the conservation of the CPS character, greening of vertical structures should be provided where possible.</p> <p>As such it is recommended that the inner southern wall of the Site be planted as a green wall. The plantings should be inserted in between each of the large protruding piers and an offset be made from both the</p>	Inner Southern Wall	During detailed design and construction	N/A – No vertical greening was conducted during the reporting month.

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Location	When to Implement the Measure	Status
		top and bottom edge so that old and new are equally visible. An independent frame should be strategically positioned in order to ensure minimal disturbance to the original wall, and provide the main structural support and planting surface for the green wall. The frame on to which the new green will be planted should contain its own irrigation system so that moisture for the plants will remain mainly on the planting surface and not the existing wall behind. The planting chosen should be appropriate to the Hong Kong climate, requiring relatively little maintenance to sustain the quality of both plants and wall.			
S4.7.2	-	<b><i>New Custom Paving</i></b>  New, Patterned, High Quality, Concrete Custom Pavers should replace most of the existing paving in the open spaces.	Whole site	During detailed design and construction	N/A – No custom paving was conducted during the reporting month.
S4.7.2	S4	<b><i>In-situ Tree Protection - Quarterly inspection</i></b>  Quarterly Inspection of affected and newly planted trees by an experienced and appropriately trained arborist or horticulturist using Form 1 – Tree Group Inspection Form and Form 2 – Tree Risk Assessment Form developed by Development Bureau ( <a href="http://www.trees.gov.hk/en/doc/TRAGuideline_July2010version_combine.pdf">http://www.trees.gov.hk/en/doc/TRAGuideline_July2010version_combine.pdf</a> ) or a form designed by a tree expert and approved by Tree Management Office for a period of 12 months after construction.	Whole site	During post construction and operation	N/A – The quarterly inspection will be conducted at later stage.
<i>Noise</i>					
S5.9	-	The following site practices should be followed during the construction of the Project: <ul style="list-style-type: none"> <li>• Only well-maintained plant will be operated on-site and plant will be serviced regularly during the construction phase;</li> <li>• Silencers or mufflers on construction equipment will be utilised and will be properly maintained during the construction phase;</li> <li>• Mobile plant, if any, will be sited as far away from NSRs as possible;</li> </ul>	Whole Site	During construction	√

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Location	When to Implement the Measure	Status
		<ul style="list-style-type: none"> <li>Machines and plant (such as trucks) that may be in intermittent use will be shut down between work periods or will be throttled down to a minimum;</li> <li>Plant known to emit noise strongly in one direction will, wherever possible, be orientated so that the noise is directed away from the nearby NSRs; and</li> <li>Material stockpiles and other structures will be effectively utilised, wherever practicable, in screening noise from on-site construction activities.</li> </ul>			
S5.9	-	Noise insulating sheet would be adopted for certain PME (eg drill rig, excavator for demolition of existing structures, etc). The noise insulating sheet should be deployed such that there would be no opening or gaps on the joints.	Whole Site	During construction	√
S5.9	-	Use temporary noise barriers to mitigate the noise impact arising from the construction works, particularly for low-rise NSRs. Movable noise barriers of 3 m in height with skid footing should be used and located within a few metres of stationary plant and mobile plant such that the line of sight to the NSR is blocked by the barriers. The length of the barrier should be at least five times greater than its height. The noise barrier material should have a superficial surface density of at least 7 kg m <sup>-2</sup> and have no openings or gaps.	Whole Site	During construction	√
S5.9	-	Use quiet PME as far as practicable to mitigate the construction noise impact.	Whole Site	During construction	√
S5.9	-	Scheduling of construction activities with identified grouping of PMEs.	Whole Site	During construction	√
S5.11	S5	Weekly noise monitoring will be undertaken at the representative NSRs N2 Ho Fook Building and N5 Chancery House. Monthly site audits will be conducted to ensure that the recommended mitigation measures are properly implemented during the construction stage.	Whole Site	During construction	√
<i>Air Quality</i>					
S6.8.1	-	Dust control measures stipulated in the <i>Air Pollution Control (Construction Dust) Regulation</i> will be implemented during the construction phase to control the potential fugitive dust emissions.	Whole Site	During construction	√

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Location	When to Implement the Measure	Status
S6.8.1	-	In particular: Temporary stockpiles of dusty materials will be either covered entirely by impervious sheets; placed in an area sheltered on the top and three sides; or sprayed with water to maintain the entire surface wet at all the time.	Whole Site	During construction	√
S6.8.1	-	Impervious sheet will be provided for skip hoist for material transport.	Whole Site	During construction	√
S6.8.1	-	Vehicle washing facilities will be provided at the designated vehicle exit points.	Whole Site	During construction	√
S6.8.1	-	Every vehicle will be washed to remove any dusty materials from its chassis and wheels immediately before leaving the worksite.	Whole Site	During construction	√
S6.8.1	-	Road sections between vehicle-wash areas and vehicular entrances will be paved.	Whole Site	During construction	√
S6.8.1	-	The load carried by the trucks will be covered entirely to ensure no dust emission from the vehicles.	Whole Site	During construction	√
S6.8.1	-	Hoarding of not less than 2.4m high from ground level will be provided along the Project Site boundary adjoining a road where the new buildings (Old Bailey Wing and Arbuthnot Wing) will be constructed.	Whole Site	During construction	√
S6.8.1	-	Stockpiles of more than 20 bags of cement, dry pulverised fuel ash and dusty construction materials will be covered entirely by impervious sheeting sheltered on top and 3-sides.	Whole Site	During construction	√
S6.8.1	-	An effective dust screen will be provided to enclose scaffolding, if required, from the ground floor level of building for construction of superstructure of the new buildings.	Whole Site	During construction	√
S6.8.1	-	Impervious dust screen or sheeting will be implemented for demolition of structures and renovation of outer surfaces of structures that abuts or fronts open area accessible to the public to no less than 1m higher than the highest level of the structure being demolished.	Whole Site	During construction	√
S6.8.1	-	The area at which demolition work takes place will be sprayed with water or dust suppression chemical immediately prior to, during and immediately after the demolition activity.	Area for Demolition Work	During construction	√

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Location	When to Implement the Measure	Status
S6.8.1	-	ULSD will be used for all construction plant on-site.	Whole Site	During construction	√
S6.8.1	-	The engine of the construction equipment or trucks during idling will be switched off.	Whole Site	During construction	√
S6.8.1	-	Site practices such as regular maintenance and checking of construction equipment deployed on-site will be conducted to avoid any black smoke emissions and to minimise gaseous emissions.	Whole Site	During construction	N/A – Not observed.
S6.10	S3.2	Monthly environmental site audits to ensure that appropriate dust control measures are properly implemented and good construction site practices are adopted throughout the construction period.	Whole Site	During construction	√
<i>Water Quality</i>					
S7.6	-	Channels, earth bunds or sand bag barriers will be provided on site to direct stormwater to silt removal facilities. The design of silt removal facilities will make reference to the guidelines in <i>Appendix A1 of ProPECC PN 1/94</i> . All drainage facilities and erosion and sediment control structures will be inspected on a regular basis and maintained to confirm proper and efficient operation at all times and particularly during rainstorms. Deposited silt and grit will be removed regularly.	Whole Site	During construction	√
S7.6	-	All drainage facilities and erosion and sediment control structures will be regularly inspected and maintained to ensure proper and efficient operation at all times and particularly following rainstorms. Deposited silt and grit will be removed regularly and disposed of.	Whole Site	During construction	N/A – Not observed.
S7.6	-	Measures will be taken to reduce the ingress of stormwater into excavation areas. If the excavation of the concrete foundation is to be carried out in wet season, they will be dug and backfilled in short sections wherever practicable. Water pumped out from trenches or foundation excavations will be discharged into stormwater drains via silt removal facilities.	Whole Site	During construction	N/A – Not observed.
S7.6	-	Open stockpiles of excavated and demolition materials will be covered with tarpaulin or similar fabric during rainstorms. Measures will be taken to prevent the washing away of residues, chemicals or debris into any drainage system.	Whole Site	During construction	√



EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Location	When to Implement the Measure	Status
S7.6	-	Manholes (including newly constructed ones) will always be adequately covered and temporarily sealed so as to prevent silt, construction materials or debris being washed into the drainage system.	Whole Site	During construction	N/A – Not observed.
S7.6	-	Precautions will be taken when a rainstorm is imminent or forecasted, and actions to be taken during or after rainstorms are summarised in Appendix A2 of <i>ProPECC PN 1/94</i> . Particular attention will be paid to the control of silty surface runoff during storm events.	Whole Site	During construction	N/A – Not observed.
S7.6	-	All temporary and permanent drainage pipes and culverts provided to facilitate runoff discharge will be adequately designed for the controlled release of stormwater flows. All sediment traps will be regularly cleaned and maintained. The temporary diverted drainage will be reinstated to the original condition when the construction work has finished or the temporary diversion is no longer required.	Whole Site	During construction	N/A – Not observed.
S7.6	-	Vehicle and plant servicing areas, vehicle washing bays and lubrication bays will, as far as possible, be located within roofed areas. The drainage in these covered areas will be connected to foul sewers via a petrol interceptor.	Whole Site	During construction	N/A – Not observed.
S7.6	-	Oil leakage or spillage will be contained and cleaned up immediately. Waste oil will be collected and stored for recycling or disposal.	Whole Site	During construction	N/A – Not observed.
S7.6	-	Waste streams classifiable as chemical wastes will be properly stored, collected and treated.	Whole Site	During construction	√
S7.6	-	All fuel tanks and chemical storage areas will be provided with locks and be sited on paved areas.	Whole Site	During construction	√
S7.6	-	The storage areas will be surrounded by bunds with a capacity equal to 110% of the storage capacity of the largest tank to prevent spilled oil, fuel and chemicals from reaching the receiving waters.	Whole Site	During construction	√
S7.6	-	The Contractors will prepare guidelines and procedures for immediate clean-up actions following any spillages of oil, fuel or chemicals.	Whole Site	During construction	√

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Location	When to Implement the Measure	Status
S7.6	-	Surface runoff from bunded areas will pass through oil/grease traps prior to discharge to the stormwater system	Whole Site	During construction	N/A – Not observed.
S7.6	-	The stormwater discharge from the site will be monitored as part of the routine monitoring under the WPCO licence, if applicable.	Whole Site	During construction	N/A – Not observed.
S7.6	-	The existing toilet facilities of the CPS will be available to the construction workforce. The sewage will be discharged to the public sewer.	Whole Site	During construction	√
S7.8	S5.2	Monthly site audits of the works areas will be carried out during the construction phase to monitor the environmental performance of the Project and to enable prompt actions to rectify any malpractice which may give rise to water pollution problem.	Whole Site	During construction	√
<i>Waste Management</i>					
S8.5	S6.3.1 & Table 6.1	<u>General</u> The Contractor shall apply for and obtain all the necessary waste disposal permits or licences are obtained prior to the commencement of the construction works.	Whole Site	During construction	√
S8.5	-	<u>Management of Waste Disposal</u> The construction contractor will open a billing account with the EPD. Every construction waste or public fill load to be transferred to the Government waste disposal facilities such as public fill reception facilities, sorting facilities, landfills will require a valid “chit” which contains the information of the account holder to facilitate waste transaction recording and billing to the waste producer.	Whole Site	During construction	√
S8.5	S6.2	A trip-ticket system will also be established to monitor the disposal of construction waste at landfill and to control fly-tipping. The trip-ticket system will be included as one of the contractual requirements and implemented by the contractor.	Whole Site	During construction	√

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Location	When to Implement the Measure	Status
S8.5	S6 & Table 6.1	A recording system for the amount of wastes generated /recycled and disposed of will be established during the construction phase.	Whole Site	During construction	√
S8.5	S6.3	<u>Reduction of Construction Waste Generation</u>  C&D material will be segregated on-site into public fill and construction waste and stored in different containers or skips to facilitate reuse of the public fill and proper disposal of the construction waste. Specific areas of the work site will be designated for such segregation and storage if immediate use is not practicable.	Whole Site	During construction	√
S8.5	S6	<u>Chemical Waste</u>  The contractor will register as a chemical waste producer with the EPD.	Whole Site	During construction and operation	√
S8.5	S6	Containers used for storage of chemical waste shall: <ul style="list-style-type: none"> <li>• Be suitable for the substance they are holding, resistant to corrosion, maintained in a good condition, and securely closed;</li> <li>• Have a capacity of less than 450 L unless the specifications have been approved by the EPD; and</li> <li>• Display a label in English and Chinese in accordance with instructions prescribed in <i>Schedule 2 of the Regulations</i>.</li> </ul>	Whole Site	During construction and operation	√
S8.5	S6	Storage areas for chemical waste shall: <ul style="list-style-type: none"> <li>• Be clearly labelled and used solely for the storage of chemical waste;</li> <li>• Be enclosed on at least 3 sides;</li> <li>• Have an impermeable floor and bunding, of capacity to accommodate 110% of the volume of the largest container or 20% by volume of the chemical waste stored in that area, whichever is the greatest;</li> <li>• Have adequate ventilation;</li> <li>• Be covered to prevent rainfall entering (water collected within the bund must be tested and disposed of as chemical waste, if necessary); and</li> <li>• Be arranged so that incompatible materials are appropriately separated.</li> </ul>	Whole Site	During construction and operation	√

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Location	When to Implement the Measure	Status
S8.5	S6	A licensed contractor shall be employed to collect chemical waste for delivery to a licensed treatment facility.	Chemical Waste Treatment Centre at Tsing Yi	During construction and operation	√
S8.5	S6 & Table 6.1	<u>General Refuse</u> General refuse will be stored in enclosed bins separately from construction and chemical wastes. The general refuse will be delivered to the transfer station, separately from construction and chemical wastes, on a daily basis to reduce odour, pest and litter impacts.	Whole site	During construction	√
S8.5	S6	Recycling bins will be provided at strategic locations to facilitate recovery of aluminium can and waste paper from the Site. Materials recovered will be sold for recycling.	Whole site	During construction and operation	√
S8.5	S6	<u>Staff Training</u> At the commencement of the construction works, training will be provided to workers on the concepts of site cleanliness and on appropriate waste management procedures, including waste reduction, reuse and recycling.	Whole site	Commencement of construction	√
S8.7	S6.1 & 6.3	Monthly audits of the waste management practices will be carried out during the construction phases to determine if wastes are being managed in accordance with the recommended good site practices. The audits will examine all aspects of waste management including waste generation, storage, recycling, transport and disposal.	Whole site	During construction	√

Remark:

- √ Compliance of Mitigation Measures
- <> Compliance of Mitigation but need improvement
- x Non-compliance of Mitigation Measures
- ▲ Non-compliance of Mitigation Measures but rectified by Gammon Construction Ltd
- △ Deficiency of Mitigation Measures but rectified by Gammon Construction Ltd
- N/A Not Applicable in Reporting Period

Annex H

## Noise Monitoring Results

## Annex H Noise Monitoring Results

### Daytime Noise Monitoring Results

#### NM6 Chancery Mansion

Date	Start Time	End Time	Weather	Noise level (dB(A)), 30 min			Major Construction Noise Source(s) Observed	Other Noise Source(s) Observed	Remarks	Wind Speed (m/s)	Noise Meter Model / ID	Calibrator Model / ID
				Leq	L10	L90						
06-May-13	14:18	14:48	Cloudy	67.3	68.7	64.5	Crawler crane, excavation (within the project site)	Traffic Noise	-	0.5	RION- NL31 (S/N 00603867)	RION - NC73 (S/N 10786708)
11-May-13	13:50	14:20	Sunny	68.0	69.6	64.8	Crawler crane, excavation (within the project site)	Traffic Noise	-	0.3	RION- NL31 (S/N 00603867)	RION - NC73 (S/N 10786708)
16-May-13	14:18	14:48	Cloudy	67.3	68.9	64.3	Crawler crane, excavation (within the project site)	Traffic Noise	-	0.3	RION- NL31 (S/N 00603867)	RION - NC73 (S/N 10786708)
22-May-13	13:50	14:20	Trace rain	65.8	67.2	63.3	Crawler crane (within the project site)	Traffic Noise	-	0.5	RION- NL31 (S/N 00603867)	RION - NC73 (S/N 10786708)
28-May-13	15:00	15:30	Fine	69.9	71.1	68.9	Piling, crawler crane, compressor (within the project site)	Traffic Noise	-	0.3	RION- NL31 (S/N 00603867)	RION - NC73 (S/N 10786708)
<b>Min.</b>				<b>65.8</b>								
<b>Max.</b>				<b>69.9</b>								

#### NM2 Ho Fook Building

Date	Start Time	End Time	Weather	Noise level (dB(A)), 30 min			Major Construction Noise Source(s) Observed	Other Noise Source(s) Observed	Remarks	Wind Speed (m/s)	Noise Meter Model / ID	Calibrator Model / ID
				Leq	L10	L90						
06-May-13	15:00	15:30	Cloudy	67.2	69.0	63.8	Crawler crane, excavation (within the project site)	Traffic noise	-	0.5	RION- NL31 (S/N 00603867)	RION - NC73 (S/N 10786708)
11-May-13	13:00	13:30	Sunny	67.0	68.9	64.2	Crawler crane, excavation (within the project site)	Traffic Noise	-	0.2	RION- NL31 (S/N 00603867)	RION - NC73 (S/N 10786708)
16-May-13	14:56	15:26	Cloudy	67.4	69.1	63.6	Crawler crane, excavation (within the project site)	Traffic Noise	-	0.3	RION- NL31 (S/N 00603867)	RION - NC73 (S/N 10786708)
22-May-13	11:05	11:35	Trace rain	65.1	67.0	62.3	Crawler crane (within the project site)	Traffic Noise	-	0.8	RION- NL31 (S/N 00603867)	RION - NC73 (S/N 10997142)
28-May-13	13:00	13:30	Fine	70.8	72.1	69.3	Piling, crawler crane, compressor (within the project site)	Traffic Noise	-	0.3	RION- NL31 (S/N 00603867)	RION - NC73 (S/N 10786708)
<b>Min.</b>				<b>65.1</b>								
<b>Max.</b>				<b>70.8</b>								

## Annex H Noise Monitoring Results

### Daytime Noise Monitoring Results

#### NM6 Chancery Mansion

Date	Start Time	End Time	Weather	Noise level (dB(A)), 30 min			Major Construction Noise Source(s) Observed	Other Noise Source(s) Observed	Remarks	Wind Speed (m/s)	Noise Meter Model / ID	Calibrator Model / ID
				Leq	L10	L90						
03-Jun-13	14:18	14:48	Sunny	71.0	72.2	69.6	Crawler crane (within the project site)	Traffic Noise	-	0.3	RION- NL31 (S/N 00603867)	RION - NC73 (S/N 10786708)
08-Jun-13	10:25	10:55	Sunny	69.2	70.7	67.6	Crawler crane, piling (within the project site)	Traffic Noise	-	0.2	RION- NL31 (S/N 00603867)	RION - NC73 (S/N 10786708)
14-Jun-13	9:50	10:20	Cloudy	70.0	71.3	68.2	Crawler crane, piling, compressor (within the project site)	Traffic Noise	-	0.5	RION- NL31 (S/N 00603867)	RION - NC73 (S/N 10786708)
20-Jun-13	10:20	10:50	Sunny	68.6	70.0	67.4	Crawler crane, compressor (within the project site)	Traffic Noise	-	0.5	RION- NL31 (S/N 00603867)	RION - NC73 (S/N 10786708)
26-Jun-13	15:00	15:30	Sunny	69.4	70.5	67.9	Crawler crane, welding, compressor (within the project site)	Traffic Noise	-	0.5	RION- NL31 (S/N 00603867)	RION - NC73 (S/N 10786708)
				<b>Min.</b>	<b>68.6</b>							
				<b>Max.</b>	<b>71.0</b>							

#### NM2 Ho Fook Building

Date	Start Time	End Time	Weather	Noise level (dB(A)), 30 min			Major Construction Noise Source(s) Observed	Other Noise Source(s) Observed	Remarks	Wind Speed (m/s)	Noise Meter Model / ID	Calibrator Model / ID
				Leq	L10	L90						
03-Jun-13	15:00	15:30	Sunny	68.8	70.5	66.2	Crawler crane (within the project site)	Traffic noise	-	0.3	RION- NL31 (S/N 00603867)	RION - NC73 (S/N 10786708)
08-Jun-13	9:45	10:15	Sunny	68.7	70.3	66.5	Crawler crane, piling (within the project site)	Traffic Noise	-	0.2	RION- NL31 (S/N 00603867)	RION - NC73 (S/N 10786708)
14-Jun-13	10:30	11:00	Cloudy	67.8	69.3	65.3	Crawler crane, piling (within the project site)	Traffic Noise	-	0.5	RION- NL31 (S/N 00603867)	RION - NC73 (S/N 10786708)
20-Jun-13	9:40	10:10	Sunny	66.4	67.8	63.2	-	Traffic Noise	-	0.5	RION- NL31 (S/N 00603867)	RION - NC73 (S/N 10786708)
26-Jun-13	13:00	13:30	Sunny	66.5	68.1	64.8	Crawler crane, welding (within the project site)	Traffic Noise	-	0.5	RION- NL31 (S/N 00603867)	RION - NC73 (S/N 10786708)
				<b>Min.</b>	<b>66.4</b>							
				<b>Max.</b>	<b>68.8</b>							

## Annex H Noise Monitoring Results

### Daytime Noise Monitoring Results

#### NM6 Chancery Mansion

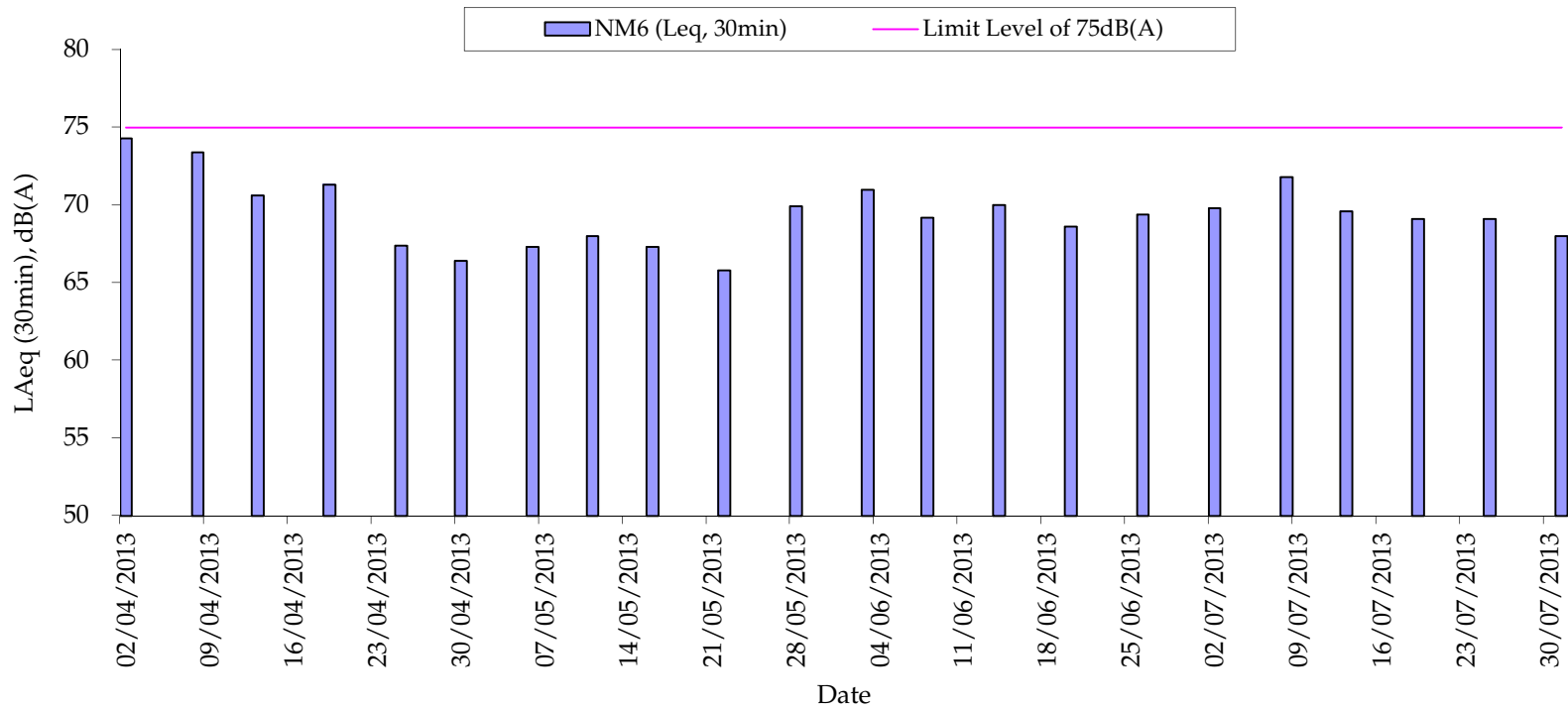
Date	Start Time	End Time	Weather	Noise level (dB(A)), 30 min			Major Construction Noise Source(s) Observed	Other Noise Source(s) Observed	Remarks	Wind Speed (m/s)	Noise Meter Model / ID	Calibrator Model / ID
				Leq	L10	L90						
02-Jul-13	11:20	11:50	Sunny	69.8	71.4	67.9	Crawler crane, compressor (within the project site)	Traffic Noise	-	0.5	RION- NL31 (S/N 00603867)	RION - NC73 (S/N 10786708)
08-Jul-13	13:38	14:08	Sunny	71.8	72.6	71.0	Crawler crane, compressor (within the project site)	Traffic Noise	-	0.2	RION- NL31 (S/N 00603867)	RION - NC73 (S/N 10786708)
13-Jul-13	10:25	10:55	Sunny	69.6	70.8	67.9	Crawler crane, compressor (within the project site)	Traffic Noise	-	0.2	RION- NL31 (S/N 00603867)	CEL-120 (S/N 3421612)
19-Jul-13	9:40	10:10	Cloudy	69.1	70.3	67.8	Crawler crane, compressor (within the project site)	Traffic Noise	-	0.3	RION- NL31 (S/N 00410224)	RION - NC73 (S/N 10786708)
25-Jul-13	9:40	10:10	Cloudy	69.1	70.8	68.1	Crawler crane, compressor (within the project site)	Traffic Noise	-	0.5	RION- NL31 (S/N 00410224)	RION - NC73 (S/N 10786708)
31-Jul-13	14:20	14:50	Sunny	68.0	69.5	65.3	Crawler crane (within the project site)	Traffic Noise	-	0.2	RION- NL31 (S/N 00410224)	RION - NC73 (S/N 10786708)
<b>Min.</b>				<b>68.0</b>								
<b>Max.</b>				<b>71.8</b>								

#### NM2 Ho Fook Building

Date	Start Time	End Time	Weather	Noise level (dB(A)), 30 min			Major Construction Noise Source(s) Observed	Other Noise Source(s) Observed	Remarks	Wind Speed (m/s)	Noise Meter Model / ID	Calibrator Model / ID
				Leq	L10	L90						
02-Jul-13	10:43	11:13	Sunny	66.9	68.4	64.8	Crawler crane (within the project site)	Traffic noise	-	0.5	RION- NL31 (S/N 00603867)	RION - NC73 (S/N 10786708)
08-Jul-13	14:15	14:45	Sunny	70.8	72.6	66.6	Crawler crane (within the project site)	Traffic Noise	-	0.2	RION- NL31 (S/N 00603867)	RION - NC73 (S/N 10786708)
13-Jul-13	9:45	10:15	Sunny	68.8	70.4	67.1	Crawler crane (within the project site)	Traffic Noise	-	0.2	RION- NL31 (S/N 00603867)	CEL-120 (S/N 3421612)
19-Jul-13	9:02	9:32	Cloudy	66.3	67.6	63.9	Crawler crane (within the project site)	Traffic Noise	-	0.3	RION- NL31 (S/N 00410224)	RION - NC73 (S/N 10786708)
25-Jul-13	10:20	10:50	Cloudy	66.3	67.7	64.5	Crawler crane (within the project site)	Traffic Noise	-	0.5	RION- NL31 (S/N 00410224)	RION - NC73 (S/N 10786708)
31-Jul-13	13:00	13:30	Sunny	66.2	67.6	64.4	Crawler crane (within the project site)	Traffic Noise	-	0.2	RION- NL31 (S/N 00410224)	RION - NC73 (S/N 10786708)
<b>Min.</b>				<b>66.2</b>								
<b>Max.</b>				<b>70.8</b>								



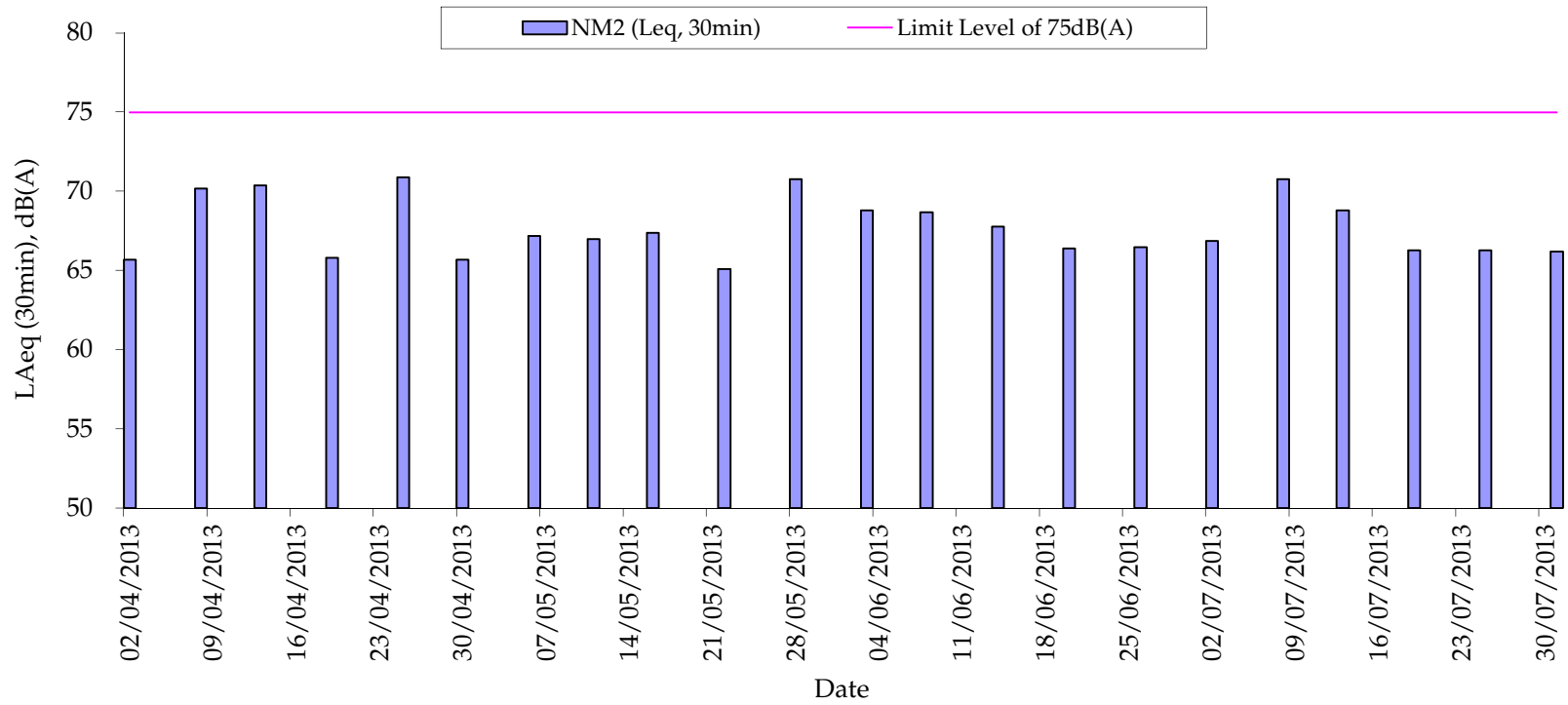
Normal Weekdays Noise Monitoring Results at NM6 - Chancery Mansion (Leq, 30min)



Remark:

- 75dB(A) was adopted as the Limit Level during normal weekdays in the reporting period

Normal Weekdays Noise Monitoring Results at NM2 - Ho Fook Building (Leq, 30min)



Remark:

- 75dB(A) was adopted as the Limit Level during normal weekdays in the reporting period

Annex I

## Construction Programme of the Project



Annex J

## Waste Flow Table

## Annex J – Waste Flow Table

Month / Year	Quantity										
	C&D Materials (inert) (tonnes) <sup>(a)</sup>	Number of Trucks for C&D Materials Disposal (inert)	Volume of C&D Materials (inert) (m <sup>3</sup> ) <sup>(c)</sup>	C&D Materials (non-inert) (tonnes) <sup>(b)</sup>	Number of Trucks for C&D Materials Disposal (non-inert)	Volume of C&D Materials (non-inert) (m <sup>3</sup> ) <sup>(c)</sup>	Chemical Waste (Solid /kg)	Chemical Waste (Liquid/L)	Recycled materials		
									Paper/cardboard (kg)	Plastics (kg)	Metals (kg)
October 2011 – November 2011	0	0	0	33.5	12	58.50	0	0	38	6	36423
December-11	0	0	0	18.25	6	29.25	0	0	112	0	24000
January-12	354.14	40	195.00	16.88	5	24.38	2400	0	0	0	3820
February-12	252.35	15	73.13	17.13	5	24.38	1400	0	223	0	8910
March-12	666.43	62	302.25	28.56	9	43.88	3200	0	0	0	48490
April-12	688.68	72	351.00	17.54	5	24.38	0	0	0	0	124030
May-12	492.33	61	297.38	36.33	13	63.38	0	0	266	0	0
June-12	383.11	45	219.38	27.41	8	39.00	40	45	0	0	1100
July-12	217.98	25	121.88	23.22	8	39.00	0	0	302	0	1750
August-12	341.87	42	204.75	48.87	16	78.00	0	0	0	0	2310
September-12	227.7	29	141.38	37.99	12	58.50	0	0	383	0	1410
October-12	290.58	44	214.50	30.34	8	39.00	0	0	86	0	3150
November-12	843.86	100	487.50	47.44	15	73.13	0	0	0	0	5650
December-12	207.5	27	131.63	88.66	28	136.50	0	0	0	0	27230
January-13	273.64	34	165.75	276.17	74	360.75	0	0	172	0	8120
February-13	945.97	131	638.63	177.54	46	224.25	0	0	0	0	1080
March-13	1236.96	151	736.13	230.55	60	292.50	0	0	164	0	11300
April-13	1406.79	187	911.63	232.27	63	307.13	135	12	225	0	21220
May-13	2679.91	317	1545.38	176.68	44	214.50	0	0	62	0	17286
June-13	3062.38	356	1735.50	212.63	56	273.00	0	0	0	0	7150
July-13	3814.86	465	2266.88	114.36	43	209.63	0	0	168	0	14843
<b>Total</b>	<b>18387.04</b>	<b>2203</b>	<b>10739.625</b>	<b>1892.32</b>	<b>536</b>	<b>2613.00</b>	<b>7175</b>	<b>57</b>	<b>2201</b>	<b>6</b>	<b>369272</b>

### Notes:

(a) Inert C&D materials (public fill) include bricks, concrete, building debris, rubble and excavated soil.

(b) Non-inert C&D materials include steel, paper / cardboard packaging waste, plastics and other wastes such as general refuse. Steel materials generated from the Project are grouped into construction wastes as the materials were not disposed of with other inert C&D materials and were recycled. The non-inert C&D materials other than steel, plastics and paper/ cardboard packaging were disposed of at SENT Landfill.

(c) If necessary, use the conversion factor: 3/4 load of dumping truck being equivalent to 6.5 m<sup>3</sup> by volume.

Annex K

Environmental Complaint,  
Environmental Summons  
and Prosecution Log

*Annex K Cumulative Complaint and Summons/Prosecutions Log*

<b>Reporting Month</b>	<b>Number of Complaints in Reporting Month</b>	<b>Number of Summons/Prosecutions in Reporting Month</b>
November 2011	0	0
December 2011	0	0
January 2012	0	0
February 2012	0	0
March 2012	4	0
April 2012	0	0
May 2012	0	0
June 2012	2	0
July 2012	1	0
August 2012	0	0
September 2012	0	0
October 2012	0	0
November 2012	2	0
December 2012	0	0
January 2013	0	0
February 2013	1	0
March 2013	1	0
April 2013	0	0
May 2013	0	0
June 2013	0	0
July 2013	0	0
<b>Overall Total</b>	<b>11</b>	<b>0</b>



Annex L

Records of Vibration  
Monitoring for Trial Piling  
and Piling Works

Pipe pile wall, grout curtain and excavation and lateral support at Parade Ground



Rev. No.	Description	Date	By	Approved
1	BD SUBMISSION	12/11	NS	
2	BD SUBMISSION	04/12	NS	

Note: This plan has been processed on a centralized check list under the centralized processing system as promulgated in PDU ADM-16. The copies of the authorized person, registered structural engineer and/or registered geotechnical engineer concerned specified under section 4(3)(b) and the provision of section 14(2) of the Buildings Ordinance are of particular reference in this regard.

Plan Approved  
 NG Kin-hing  
 Chief Structural Engineer  
 for BUILDING AUTHORITY  
 - 3 MAY 2012



**BD SUBMISSION**  
 Drawing Status: 製圖狀況

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- Check and verify all dimensions on site.
- Read this drawing in conjunction with the specifications and all other related drawings.
- Verify the relevant consultants' responsibility of any discrepancy found hereon.

**LEGEND**

	EXISTING FRESH WATER MAIN
	EXISTING SALT WATER MAIN
	EXISTING STREET LIGHTING NO. 3348B-A1
	EXISTING STREET LIGHTING CABLE
	EXISTING GAS MAIN
	EXISTING HV ELECTRICITY CABLE
	EXISTING LV ELECTRICITY CABLE
	EXISTING TELECOMMUNICATION DUCT (HONGKONG GLOBAL COMMUNICATIONS LIMITED)
	EXISTING STORMWATER DRAIN
	EXISTING FOUL SEWER
	PROPOSED FOUL SEWER
	SITE BOUNDARY
	EXISTING RETAINING WALL
	EXISTING DRILLHOLE WITH STANDPIPE/PIEZOMETER
	PROPOSED BUILDING SETTLEMENT POINTS/TILMETER
	PROPOSED RETAINING WALL SETTLEMENT POINTS/TILMETER
	PROPOSED INCLINOMETER TO BE BUILT IN BORER PILE WALL OR PIPE PILE WALL
	PROPOSED GROUND SETTLEMENT POINTS
	PROPOSED UTILITY MONITORING POINTS
	PROPOSED VIBRATION MONITORING POINTS
	PROPOSED ADDITIONAL DRILLHOLE

**NOTES:**

- UTILITIES SETTLEMENT POINTS (UT1 TO UT9) SHALL ONLY BE INSTALLED AFTER EXCAVATION PERMIT IS OBTAINED. AS ALTERNATIVE SETTLEMENT POINTS (GS18 AND GS19) MAY BE INSTALLED.
- SHOULD UT1 TO UT9 BE INSTALLED, GS18 AND GS19 SHALL NOT BE REQUIRED.
- EITHER UTILITIES SETTLEMENT MARKERS (UT1 TO UT9) OR GROUND SETTLEMENT MARKERS (GS18 AND GS19) SHALL BE INSTALLED PRIOR TO COMMENCEMENT OF OLD BAILEY WING ELS WORKS.

Client: 香港警務處  
 The Police Force

Design Consultant: **HERZOG & DEMEUREN**

Conservation Architect: **ROCCO**

Execution Architect: **ARUP**

Structural Engineer / RSE: **ARUP** E & M Engineer

Project #03: **CENTRAL POLICE STATION CONSERVATION AND REVITALISATION PROJECT**

Drawing Title: **MONITORING LAYOUT PLAN**

Scale: 1:3000  
 Drawing No.: 00-QAP209674-G-001 A





Monitoring Check Pts.	Trigger Levels		
	Alert level	Alarm level	Action level
Vibration Monitoring	2mm/s	2.5mm/s	3mm/s
# Vibration at largest span of highest Structural level	5.0mm/s	6.0mm/s	7.5mm/s

### Vibration Record

Project Title: Central Police Station Conservation & Revitalization      Project No: WP107      19-Apr-2013      to      2-May-2013  
 (WP107 Parade Ground Basement)

POINT	VM1-1	#VM1-2	VM2-1	VM3-1	#VM3-2				
DATE	mm/s	mm/s	mm/s	mm/s	mm/s				
19-Jun-2012 (Initial)									
19-Apr-13	0.166	0.761	0.145	1.650	0.281				
20-Apr-13	1.430	0.160	0.164	0.178	0.157				
21-Apr-13	Sunday								
22-Apr-13	0.241	0.255	0.093	0.128	0.114				
23-Apr-13	0.246	0.327	0.102	0.318	0.177				
24-Apr-13	0.307	0.251	0.103	0.093	0.151				
25-Apr-13	0.150	0.258	0.137	0.305	0.143				
26-Apr-13	0.184	0.317	0.129	0.962	0.159				
27-Apr-13	0.183	0.232	0.093	0.414	0.132				
28-Apr-13	Sunday								
29-Apr-13	1.310	0.420	0.160	0.211	0.172				
30-Apr-13	0.264	0.112	0.172	0.565	0.156				
01-May-13	Holiday								
02-May-13	0.160	0.206	0.600	1.460	0.145				

Remarks: # Vbration at largest span of highest structural level

Prepared by : Wong Wing Yee

Endorsed by: Yee Hop



Monitoring Check Pts.	Trigger Levels		
	Alert level	Alarm level	Action level
Vibration Monitoring	2mm/s	2.5mm/s	3mm/s
# Vibration at largest span of highest Structural level	5.0mm/s	6.0mm/s	7.5mm/s

### Vibration Record

Project Title: Central Police Station Conservation & Revitalization      Project No: WP107      3-May-2013      to      16-May-2013

(WP107 Parade Ground Basement)

POINT	VM1-1	#VM1-2	VM2-1	VM3-1	#VM3-2				
DATE	mm/s	mm/s	mm/s	mm/s	mm/s				
19-Jun-2012 (Initial)									
03-May-13	<b>0.609</b>	<b>0.103</b>	<b>0.117</b>	<b>0.227</b>	<b>0.128</b>				
04-May-13	<b>0.131</b>	<b>0.246</b>	<b>0.121</b>	<b>0.124</b>	<b>0.145</b>				
05-May-13	Sunday								
06-May-13	<b>0.268</b>	<b>0.200</b>	<b>0.181</b>	<b>0.192</b>	<b>0.221</b>				
07-May-13	<b>0.128</b>	<b>0.156</b>	<b>0.093</b>	<b>0.507</b>	<b>0.326</b>				
08-May-13	<b>0.187</b>	<b>0.212</b>	<b>0.318</b>	<b>0.196</b>	<b>0.216</b>				
09-May-13	<b>1.210</b>	<b>0.295</b>	<b>0.102</b>	<b>0.086</b>	<b>0.304</b>				
10-May-13	<b>0.236</b>	<b>0.246</b>	<b>0.117</b>	<b>1.500</b>	<b>0.393</b>				
11-May-13	<b>0.133</b>	<b>0.300</b>	<b>0.169</b>	<b>0.288</b>	<b>0.160</b>				
12-May-13	Sunday								
13-May-13	<b>0.256</b>	<b>1.450</b>	<b>0.090</b>	<b>0.507</b>	<b>0.302</b>				
14-May-13	<b>0.241</b>	<b>1.160</b>	<b>0.182</b>	<b>1.090</b>	<b>0.218</b>				
15-May-13	<b>0.189</b>	<b>0.817</b>	<b>0.102</b>	<b>0.256</b>	<b>0.333</b>				
16-May-13	<b>0.209</b>	<b>0.247</b>	<b>0.145</b>	<b>0.597</b>	<b>0.239</b>				

Remarks: # Vbration at largest span of highest structural level

Prepared by : Wong *Wing Yee*

Endorsed by: *Yee Hop*



Monitoring Check Pts.	Trigger Levels		
	Alert level	Alarm level	Action level
Vibration Monitoring	2mm/s	2.5mm/s	3mm/s
# Vibration at largest span of highest Structural level	5.0mm/s	6.0mm/s	7.5mm/s

## Vibration Record

Project Title: Central Police Station Conservation & Revitalization    Project No: WP107    17-May-2013    to    30-May-2013  
 (WP107 Parade Ground Basement)

POINT	VM1-1	#VM1-2	VM2-1	VM3-1	#VM3-2				
DATE	mm/s	mm/s	mm/s	mm/s	mm/s				
19-Jun-2012 (Initial)									
17-May-13	Holiday								
18-May-13	0.202	0.571	0.090	0.145	1.330				
19-May-13	Sunday								
20-May-13	0.133	0.454	0.083	0.117	1.070				
21-May-13	0.529	0.372	0.316	0.386	0.274				
22-May-13	0.087	0.097	0.132	0.151	1.110				
23-May-13	0.178	0.373	0.212	0.512	0.350				
24-May-13	0.165	0.293	0.086	0.556	0.329				
25-May-13	0.371	0.447	0.175	0.563	0.138				
26-May-13	Sunday								
27-May-13	0.227	0.197	0.135	1.300	0.454				
28-May-13	0.618	0.171	0.106	0.302	0.387				
29-May-13	0.113	0.211	0.137	0.188	0.170				
30-May-13	0.163	1.400	0.098	0.105	0.239				

Remarks: # Vbration at largest span of highest structural level

Prepared by : Wong Wing Yee

Endorsed by: Yee Hop



Monitoring Check Pts.	Trigger Levels		
	Alert level	Alarm level	Action level
Vibration Monitoring	2mm/s	2.5mm/s	3mm/s
# Vibration at largest span of highest Structural level	5.0mm/s	6.0mm/s	7.5mm/s

### Vibration Record

Project Title: Central Police Station Conservation & Revitalization    Project No: WP107    31-May-2013    to    13-Jun-2013  
 (WP107 Parade Ground Basement)

POINT	VM1-1	#VM1-2	VM2-1	VM3-1	#VM3-2				
DATE	mm/s	mm/s	mm/s	mm/s	mm/s				
19-Jun-2012 (Initial)									
31-May-13	0.175	0.218	0.087	0.704	0.851				
1-Jun-13	0.139	0.207	0.209	0.135	1.120				
2-Jun-13	Sunday								
3-Jun-13	0.151	0.341	0.087	0.764	0.284				
4-Jun-13	0.147	0.448	0.086	0.178	0.553				
5-Jun-13	0.102	0.093	0.091	1.190	0.111				
6-Jun-13	0.720	0.434	0.106	0.599	0.286				
7-Jun-13	0.291	0.458	0.087	0.484	0.631				
8-Jun-13	0.187	0.323	0.091	0.087	0.278				
9-Jun-13	Sunday								
10-Jun-13	0.206	0.216	0.091	0.091	0.319				
11-Jun-13	0.211	0.144	0.245	0.138	0.137				
12-Jun-13	Holiday								
13-Jun-13	0.125	0.487	0.083	1.060	0.163				

Remarks: # Vbration at largest span of highest structural level

Prepared by : Wong Wing Yee *Lee*

Endorsed by: Yee Hop *l*



Monitoring Check Pts.	Trigger Levels		
	Alert level	Alarm level	Action level
Vibration Monitoring	2mm/s	2.5mm/s	3mm/s
# Vibration at largest span of highest Structural level	5.0mm/s	6.0mm/s	7.5mm/s

## Vibration Record

Project Title: Central Police Station Conservation & Revitalization      Project No: WP107      14-Jun-2013      to      27-Jun-2013  
 (WP107 Parade Ground Basement)

POINT	VM1-1	#VM1-2	VM2-1	VM3-1	#VM3-2				
DATE	mm/s	mm/s	mm/s	mm/s	mm/s				
19-Jun-2012 (Initial)									
14-Jun-13	<b>0.842</b>	<b>0.192</b>	<b>0.242</b>	<b>0.636</b>	<b>0.163</b>				
15-Jun-13	<b>0.966</b>	<b>0.139</b>	<b>0.169</b>	<b>0.497</b>	<b>0.117</b>				
16-Jun-13	<b>Sunday</b>								
17-Jun-13	<b>1.540</b>	<b>0.451</b>	<b>0.739</b>	<b>0.266</b>	<b>0.247</b>				
18-Jun-13	<b>0.883</b>	<b>0.209</b>	<b>0.087</b>	<b>0.323</b>	<b>0.416</b>				
19-Jun-13	<b>0.223</b>	<b>0.214</b>	<b>0.624</b>	<b>0.151</b>	<b>0.163</b>				
20-Jun-13	<b>0.194</b>	<b>0.162</b>	<b>0.150</b>	<b>0.293</b>	<b>0.402</b>				
21-Jun-13	<b>0.122</b>	<b>0.384</b>	<b>0.114</b>	<b>0.113</b>	<b>0.436</b>				
22-Jun-13	<b>0.203</b>	<b>0.143</b>	<b>0.119</b>	<b>0.705</b>	<b>0.630</b>				
23-Jun-13	<b>Sunday</b>								
24-Jun-13	<b>0.363</b>	<b>0.131</b>	<b>0.087</b>	<b>0.113</b>	<b>0.182</b>				
25-Jun-13	<b>0.470</b>	<b>0.160</b>	<b>0.203</b>	<b>0.094</b>	<b>0.579</b>				
26-Jun-13	<b>0.151</b>	<b>0.146</b>	<b>0.113</b>	<b>0.173</b>	<b>0.392</b>				
27-Jun-13	<b>0.182</b>	<b>0.147</b>	<b>0.196</b>	<b>0.278</b>	<b>0.197</b>				

Remarks: # Vbration at largest span of highest structural level

Prepared by : Wong Wing Yee

Endorsed by: Yee Hop



Monitoring Check Pts.	Trigger Levels		
	Alert level	Alarm level	Action level
Vibration Monitoring	2mm/s	2.5mm/s	3mm/s
# Vibration at largest span of highest Structural level	5.0mm/s	6.0mm/s	7.5mm/s

### Vibration Record

Project Title: Central Police Station Conservation & Revitalization      Project No: WP107      28-Jun-2013      to      11-Jul-2013

(WP107 Parade Ground Basement)

POINT	VM1-1	#VM1-2	VM2-1	VM3-1	#VM3-2				
DATE	mm/s	mm/s	mm/s	mm/s	mm/s				
19-Jun-2012 (Initial)									
28-Jun-13	<b>0.156</b>	<b>0.561</b>	<b>0.087</b>	<b>0.403</b>	<b>1.650</b>				
29-Jun-13	<b>0.103</b>	<b>0.199</b>	<b>0.225</b>	<b>0.192</b>	<b>0.378</b>				
30-Jun-13	Sunday								
01-Jul-13	Holiday								
02-Jul-13	<b>0.150</b>	<b>0.175</b>	<b>0.398</b>	<b>0.502</b>	<b>0.308</b>				
03-Jul-13	<b>0.398</b>	<b>0.163</b>	<b>0.147</b>	<b>0.150</b>	<b>0.825</b>				
04-Jul-13	<b>0.228</b>	<b>0.450</b>	<b>0.209</b>	<b>0.974</b>	<b>0.178</b>				
05-Jul-13	<b>0.132</b>	<b>0.139</b>	<b>0.153</b>	<b>0.211</b>	<b>0.230</b>				
06-Jul-13	<b>0.183</b>	<b>0.185</b>	<b>0.434</b>	<b>0.310</b>	<b>0.104</b>				
07-Jul-13	Sunday								
08-Jul-13	<b>0.128</b>	<b>1.050</b>	<b>0.095</b>	<b>0.135</b>	<b>0.241</b>				
09-Jul-13	<b>0.132</b>	<b>0.497</b>	<b>0.241</b>	<b>0.163</b>	<b>0.172</b>				
10-Jul-13	<b>0.137</b>	<b>0.154</b>	<b>0.112</b>	<b>0.116</b>	<b>0.253</b>				
11-Jul-13	<b>0.199</b>	<b>0.191</b>	<b>0.242</b>	<b>0.160</b>	<b>0.415</b>				

Remarks: # Vbration at largest span of highest structural level

Prepared by : Wong Wing Yee

Endorsed by: Yee Hop





Monitoring Check Pts.	Trigger Levels		
	Alert level	Alarm level	Action level
Vibration Monitoring	2mm/s	2.5mm/s	3mm/s
# Vibration at largest span of highest Structural level	5.0mm/s	6.0mm/s	7.5mm/s

### Vibration Record

Project Title: Central Police Station Conservation & Revitalization      Project No: WP107      12-Jul-2013      to      25-Jul-2013

(WP107 Parade Ground Basement)

POINT	VM1-1	#VM1-2	VM2-1	VM3-1	#VM3-2				
DATE	mm/s	mm/s	mm/s	mm/s	mm/s				
19-Jun-2012 (Initial)									
12-Jul-13	<b>0.178</b>	<b>0.172</b>	<b>0.135</b>	<b>0.367</b>	<b>0.154</b>				
13-Jul-13	<b>0.318</b>	<b>0.225</b>	<b>0.264</b>	<b>0.493</b>	<b>0.191</b>				
14-Jul-13	Sunday								
15-Jul-13	<b>0.333</b>	<b>0.194</b>	<b>0.160</b>	<b>1.670</b>	<b>0.365</b>				
16-Jul-13	<b>0.238</b>	<b>0.145</b>	<b>0.163</b>	<b>1.430</b>	<b>0.491</b>				
17-Jul-13	<b>0.974</b>	<b>0.158</b>	<b>0.169</b>	<b>0.515</b>	<b>0.474</b>				
18-Jul-13	<b>0.268</b>	<b>0.216</b>	<b>0.687</b>	<b>0.406</b>	<b>0.383</b>				
19-Jul-13	<b>0.837</b>	<b>0.125</b>	<b>0.117</b>	<b>0.271</b>	<b>0.217</b>				
20-Jul-13	<b>0.102</b>	<b>0.272</b>	<b>1.410</b>	<b>0.285</b>	<b>0.417</b>				
21-Jul-13	Sunday								
22-Jul-13	<b>0.259</b>	<b>0.144</b>	<b>0.341</b>	<b>0.166</b>	<b>0.310</b>				
23-Jul-13	<b>0.194</b>	<b>0.345</b>	<b>0.448</b>	<b>0.197</b>	<b>0.270</b>				
24-Jul-13	<b>0.315</b>	<b>0.147</b>	<b>0.093</b>	<b>0.371</b>	<b>0.487</b>				
25-Jul-13	<b>0.370</b>	<b>0.354</b>	<b>0.116</b>	<b>0.211</b>	<b>0.325</b>				

Remarks: # Vibration at largest span of highest structural level

Prepared by : Wong Wing Yee

Endorsed by: Yee Hop



Monitoring Check Pts.	Trigger Levels		
	Alert level	Alarm level	Action level
Vibration Monitoring	2mm/s	2.5mm/s	3mm/s
# Vibration at largest span of highest Structural level	5.0mm/s	6.0mm/s	7.5mm/s

### Vibration Record

Project Title: Central Police Station Conservation & Revitalization    Project No: WP107    25-Jul-2013    to    7-Aug-2013

(WP107 Parade Ground Basement)

POINT	VM1-1	#VM1-2	VM2-1	VM3-1	#VM3-2				
DATE	mm/s	mm/s	mm/s	mm/s	mm/s				
19-Jun-2012 (Initial)									
25-Jul-13	<b>0.370</b>	<b>0.354</b>	<b>0.116</b>	<b>0.211</b>	<b>0.325</b>				
26-Jul-13	<b>0.108</b>	<b>0.287</b>	<b>0.121</b>	<b>0.144</b>	<b>0.216</b>				
27-Jul-13	<b>0.552</b>	<b>0.170</b>	<b>0.129</b>	<b>0.212</b>	<b>0.191</b>				
28-Jul-13	Sunday								
29-Jul-13	<b>0.209</b>	<b>0.146</b>	<b>0.265</b>	<b>0.474</b>	<b>0.122</b>				
30-Jul-13	<b>0.111</b>	<b>0.384</b>	<b>0.169</b>	<b>0.128</b>	<b>0.544</b>				
31-Jul-13	<b>0.402</b>	<b>0.221</b>	<b>0.131</b>	<b>0.192</b>	<b>0.334</b>				
01-Aug-13	<b>0.436</b>	<b>0.326</b>	<b>0.091</b>	<b>0.507</b>	<b>0.329</b>				
02-Aug-13	<b>0.278</b>	<b>0.216</b>	<b>0.103</b>	<b>0.476</b>	<b>0.286</b>				
03-Aug-13	<b>0.117</b>	<b>0.151</b>	<b>0.094</b>	<b>0.106</b>	<b>0.131</b>				
04-Aug-13	Sunday								
05-Aug-13	<b>0.220</b>	<b>0.310</b>	<b>0.105</b>	<b>0.278</b>	<b>0.196</b>				
06-Aug-13	<b>0.109</b>	<b>0.250</b>	<b>0.301</b>	<b>0.313</b>	<b>0.190</b>				
07-Aug-13	<b>0.290</b>	<b>0.220</b>	<b>0.169</b>	<b>0.189</b>	<b>0.275</b>				

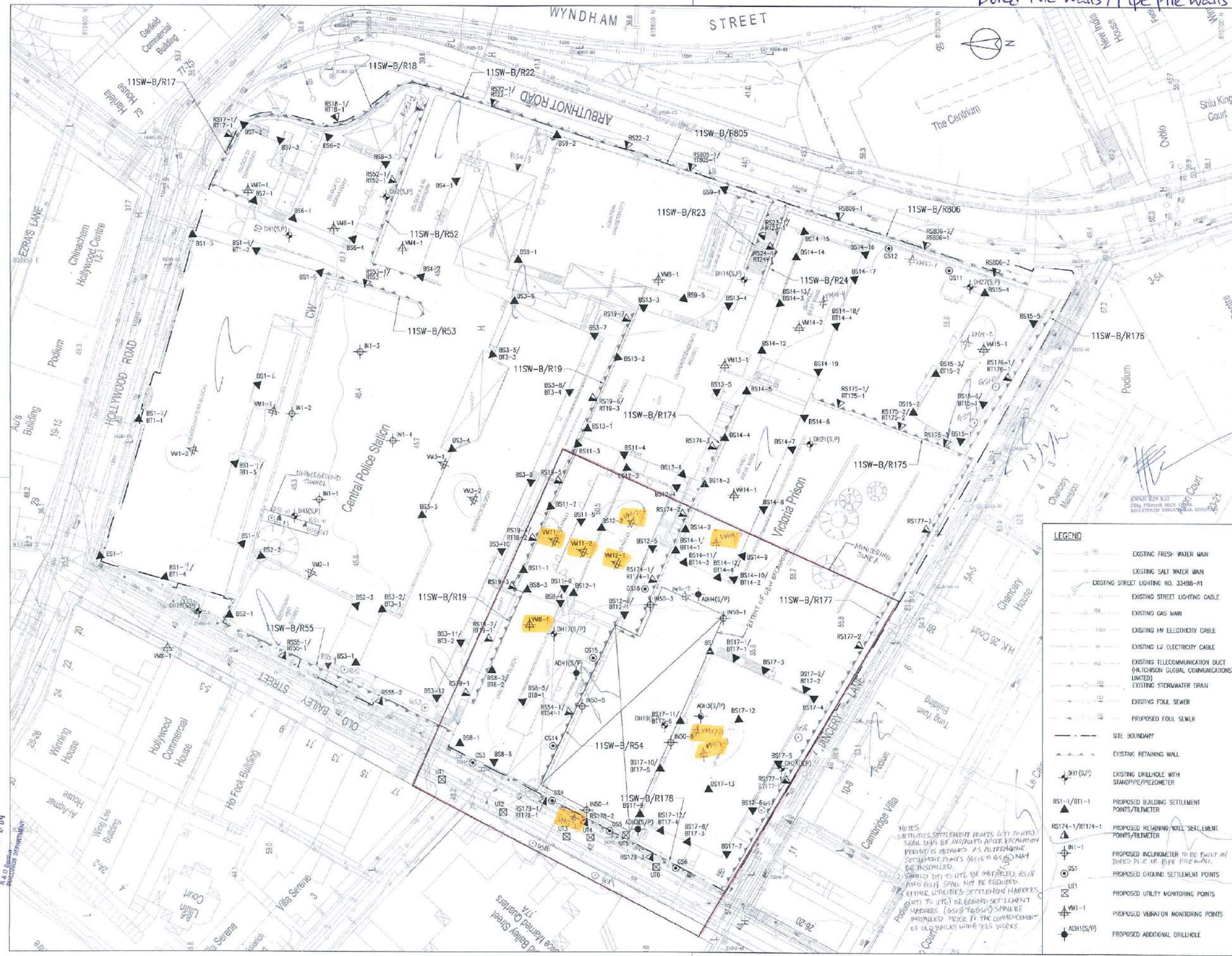
Remarks: # Vibration at largest span of highest structural level

Prepared by : Wong Wing Yee

Endorsed by: Yee Hop



# Bored Pile Walls / Pipe Pile Walls at Block 50



Revision/Submission 修改/提交

No. 編號	Description 說明	Date 日期	Approval 審核
-	BD SUBMISSION	12/11	JS

Plan Approved

NG Kin-shing  
Chief Structural Engineer  
for BUILDING AUTHORITY  
20 FEB 2012



**BD SUBMISSION**  
Drawing Status 製圖狀況

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Client 業主  
寶馬會文物保育有限公司  
The Jockey Club CPS Limited

Design Consultant  
**HERZOG & DEMEUREN**

Conservation Architect  
HOLCHISON GLOBAL COMMUNICATIONS LIMITED

Executive Architect / AP  
**ROCCO**

Structural Engineer / RSE E & M Engineer  
**ARUP** **JRP**

Project 項目  
**CENTRAL POLICE STATION  
CONSERVATION AND REVITALISATION  
PROJECT**

Drawing Title 圖名  
**MONITORING LAYOUT PLAN**

Scale 比例  
1:300/9A1

Drawn 繪圖  
K.C. Loi

Checked 校核  
AL

Revision 修改  
00-OAP209674-G-001

**LEGEND**

	EXISTING FRESH WATER MAIN
	EXISTING SALT WATER MAIN
	EXISTING STREET LIGHTING NO. 33488-A1
	EXISTING STREET LIGHTING CABLE
	EXISTING GAS MAIN
	EXISTING HV ELECTRICITY CABLE
	EXISTING LV ELECTRICITY CABLE
	EXISTING TELECOMMUNICATION DUCT (HOLCHISON GLOBAL COMMUNICATIONS LIMITED)
	EXISTING STORMWATER DRAIN
	EXISTING FOUL SEWER
	PROPOSED FOUL SEWER
	SITE BOUNDARY
	EXISTING RETAINING WALL
	EXISTING DRILLHOLE WITH STANDPIPE/PIEZOMETER
	PROPOSED BUILDING SETTLEMENT POINTS/TILTMETER
	PROPOSED RETAINING WALL SETTLEMENT POINTS/TILTMETER
	PROPOSED INCLINOMETER TO BE BUILT IN BORED PILE OR PIPE PILE WALL
	PROPOSED GROUND SETTLEMENT POINTS
	PROPOSED UTILITY MONITORING POINTS
	PROPOSED VIBRATION MONITORING POINTS
	PROPOSED ADDITIONAL DRILLHOLE

NOTES

1. UTILITIES SETTLEMENT POINTS (UTI POINTS) SHALL ONLY BE INSTALLED AFTER EXCAVATION PERMIT IS OBTAINED AS ALTERNATIVE SETTLEMENT POINTS (BS18 TO BS19) MAY BE INSTALLED.

2. SHOULD UTI TO UTI BE INSTALLED, BS18 AND BS19 SHALL NOT BE REQUIRED.

3. EITHER UTILITIES SETTLEMENT MARKERS (BS18 TO BS19) SHALL BE INSTALLED PRIOR TO THE COMMENCEMENT OF OLD BAILEY WALL PILES WORKS.

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PLANNING DEPARTMENT




Monitoring Check Pts.	Trigger Levels		
	Alert level	Alarm level	Action level
Vibration Monitoring	2mm/s	2.5mm/s	3mm/s
Vibration at largest span of highest Structural level	5.0mm/s	6.0mm/s	7.5mm/s

### Vibration Record

Project Title: Central Police Station Conservation & Revitalization      Project No: WP201      21-Apr-2013      to      4-May-2013

POINT		VM8-1	VM11-1	VM11-2	VM12-1	VM12-2	VM14-3	VM17-1	VM17-2	VM17-3
DATE	PD/(m)	mm/s	mm/s	mm/s	mm/s	mm/s	mm/s	mm/s	mm/s	mm/s
19-Jun-2012 (Initial)		<b>0.56</b>	<b>0.13</b>	<b>0.19</b>	<b>0.22</b>	<b>0.13</b>	<b>0.21</b>	<b>0.13</b>	<b>0.13</b>	<b>0.37</b>
Surveying Date										
21-Apr-2013		Sunday								
22-Apr-2013		0.26	0.35	0.13	0.51	0.11	0.42	0.21	0.32	0.15
23-Apr-2013		0.31	0.13	0.55	0.16	0.64	0.25	0.81	0.45	0.16
24-Apr-2013		0.23	0.21	0.15	0.61	0.25	0.45	0.28	0.81	0.13
25-Apr-2013		0.36	0.13	0.09	0.51	0.24	0.25	0.13	0.18	0.44
26-Apr-2013		0.61	0.13	0.25	0.24	0.88	0.45	0.65	0.13	0.47
27-Apr-2013		0.25	0.24	0.54	0.85	0.13	0.25	0.45	0.47	0.16
28-Apr-2013		Sunday								
29-Apr-2013		0.66	0.58	0.49	0.82	0.13	0.11	0.54	0.16	0.47
30-Apr-2013		0.23	0.12	0.15	0.54	0.45	0.61	0.15	0.33	0.54
1-May-2013		Public Holiday								
2-May-2013		0.55	0.13	0.13	0.24	0.64	0.25	0.74	0.15	0.66
3-May-2013		0.36	0.13	0.33	0.14	0.52	0.28	0.61	0.45	0.22
4-May-2013		0.25	0.15	0.36	0.21	0.22	0.38	0.48	0.55	0.13
Remark										

  
 Prepared by :Lo wing yue (Surveyor)

Monitoring Check Pts.	Trigger Levels		
	Alert level	Alarm level	Action level
Vibration Monitoring	2mm/s	2.5mm/s	3mm/s
Vibration at largest span of highest Structural level	5.0mm/s	6.0mm/s	7.5mm/s

### Vibration Record

Project Title: Central Police Station Conservation & Revitalization      Project No: WP201      5-May-2013      to      18-May-2013

POINT		VM8-1	VM11-1	VM11-2	VM12-1	VM12-2	VM14-3	VM17-1	VM17-2	VM17-3
DATE	PD/(m)	mm/s	mm/s	mm/s	mm/s	mm/s	mm/s	mm/s	mm/s	mm/s
19-Jun-2012 (Initial)		0.56	0.13	0.19	0.22	0.13	0.21	0.13	0.13	0.37
Surveying Date										
5-May-2013		Sunday								
6-May-2013		0.31	0.25	0.45	0.13	0.15	0.36	0.25	0.84	0.15
7-May-2013		0.13	0.26	0.51	0.66	0.34	0.29	0.15	0.88	0.54
8-May-2013		0.32	0.25	0.42	0.13	0.12	0.61	0.28	0.47	0.22
9-May-2013		0.25	0.16	0.24	0.55	0.62	0.18	0.46	0.58	0.64
10-May-2013		0.33	0.25	0.46	0.19	0.85	0.16	0.13	0.24	0.55
11-May-2013		0.56	0.52	0.25	0.56	0.47	0.26	0.15	0.13	0.11
12-May-2013		Sunday								
13-May-2013		0.23	0.16	0.25	0.44	0.58	0.31	0.59	0.81	0.13
14-May-2013		0.66	0.15	0.24	0.88	0.45	0.69	0.26	0.53	0.21
15-May-2013		0.26	0.19	0.55	0.14	0.64	0.25	0.58	0.36	0.13
16-May-2013		0.61	0.15	0.42	0.23	0.29	0.58	0.44	0.11	0.19
17-May-2013		Public Holiday								
18-May-2013		0.34	0.16	0.26	0.67	0.63	0.45	0.28	0.25	0.35
Remark										

Monitoring Check Pts.	Trigger Levels		
	Alert level	Alarm level	Action level
Vibration Monitoring	2mm/s	2.5mm/s	3mm/s
Vibration at largest span of highest Structural level	5.0mm/s	6.0mm/s	7.5mm/s

### Vibration Record

Project Title: Central Police Station Conservation & Revitalization      Project No: WP201      19-May-2013      to      1-Jun-2013


POINT		VM8-1	VM11-1	VM11-2	VM12-1	VM12-2	VM14-3	VM17-1	VM17-2	VM17-3
DATE	PD/(m)	mm/s	mm/s	mm/s	mm/s	mm/s	mm/s	mm/s	mm/s	mm/s
19-Jun-2012 (Initial)		0.56	0.13	0.19	0.22	0.13	0.21	0.13	0.13	0.37
Surveying Date										
19-May-2013		Sunday								
20-May-2013		0.23	0.13	0.55	0.19	0.56	0.34	0.55	0.11	0.27
21-May-2013		0.61	0.25	0.33	0.18	0.46	0.95	0.14	0.11	0.57
22-May-2013		0.35	0.13	0.55	0.14	0.19	0.62	0.13	0.11	0.28
23-May-2013		0.36	0.22	0.29	0.11	0.54	0.85	0.46	0.26	0.13
24-May-2013		0.23	0.28	0.45	0.41	0.11	0.86	0.28	0.13	0.27
25-May-2013		0.56	0.55	0.11	0.42	0.64	0.71	0.25	0.33	0.11
26-May-2013		Sunday								
27-May-2013		0.61	0.23	0.15	0.11	0.25	0.45	0.16	0.88	0.45
28-May-2013		0.25	0.56	0.74	0.13	0.12	0.46	0.33	0.41	0.58
29-May-2013		0.13	0.29	0.99	0.45	0.26	0.35	0.33	0.11	0.45
30-May-2013		0.62	0.15	0.18	0.31	0.22	0.51	0.42	0.11	0.25
31-May-2013		0.52	0.11	0.26	0.22	0.42	0.33	0.13	0.33	0.26
1-Jun-2013		0.23	0.15	0.42	0.17	0.53	0.16	0.62	0.25	0.63
Remark										

Monitoring Check Pts.	Trigger Levels		
	Alert level	Alarm level	Action level
Vibration Monitoring	2mm/s	2.5mm/s	3mm/s
Vibration at largest span of highest Structural level	5.0mm/s	6.0mm/s	7.5mm/s

### Vibration Record

Project Title: Central Police Station Conservation & Revitalization      Project No: WP201      2-Jun-2013      to      15-Jun-2013

POINT		VM8-1	VM11-1	VM11-2	VM12-1	VM12-2	VM14-3	VM17-1	VM17-2	VM17-3
DATE	PD/(m)	mm/s	mm/s	mm/s	mm/s	mm/s	mm/s	mm/s	mm/s	mm/s
19-Jun-2012 (Initial)		<b>0.56</b>	<b>0.13</b>	<b>0.19</b>	<b>0.22</b>	<b>0.13</b>	<b>0.21</b>	<b>0.13</b>	<b>0.13</b>	<b>0.37</b>
Surveying Date										
2-Jun-2013		Sunday								
3-Jun-2013		0.36	0.23	0.11	0.51	0.42	0.23	0.55	0.68	0.15
4-Jun-2013		0.23	0.13	0.53	0.62	0.11	0.45	0.82	0.21	0.13
5-Jun-2013		0.33	0.12	0.16	0.51	0.26	0.22	0.54	0.13	0.22
6-Jun-2013		0.36	0.23	0.15	0.14	0.55	0.82	0.46	0.25	0.11
7-Jun-2013		0.23	0.15	0.46	0.56	0.37	0.82	0.19	0.12	0.11
8-Jun-2013		0.62	0.15	0.44	0.31	0.15	0.18	0.82	0.54	0.33
9-Jun-2013		Sunday								
10-Jun-2013		0.23	0.11	0.14	0.85	0.24	0.55	0.16	0.27	0.33
11-Jun-2013		0.63	0.13	0.23	0.53	0.14	0.11	0.68	0.45	0.12
12-Jun-2013		Public Holiday								
13-Jun-2013		0.23	0.63	0.52	0.41	0.74	0.58	0.63	0.25	0.14
14-Jun-2013		0.25	0.44	0.62	0.53	0.15	0.55	0.95	0.48	0.86
15-Jun-2013		0.13	0.15	0.18	0.82	0.54	0.56	0.77	0.29	0.91
Remark										

  
 Prepared by :Lo wing yue (Surveyor)



2013.05.19

**WW** 恆誠建築工程有限公司  
Win Win Way Construction Company Ltd.


( Bored Pile Walls / Pipe Pile Walls at Block 50 )

Monitoring Check Pts.	Trigger Levels		
	Alert level	Alarm level	Action level
Vibration Monitoring	2mm/s	2.5mm/s	3mm/s
Vibration at largest span of highest Structural level	5.0mm/s	6.0mm/s	7.5mm/s

### Vibration Record

Project Title: Central Police Station Conservation & Revitalization      Project No: WP201      16-Jun-2013      to      29-Jun-2013

POINT		VM8-1	VM11-1	VM11-2	VM12-1	VM12-2	VM14-3	VM17-1	VM17-2	VM17-3
DATE	PD/(m)	mm/s	mm/s	mm/s	mm/s	mm/s	mm/s	mm/s	mm/s	mm/s
19-Jun-2012 (Initial)		<b>0.56</b>	<b>0.13</b>	<b>0.19</b>	<b>0.22</b>	<b>0.13</b>	<b>0.21</b>	<b>0.13</b>	<b>0.13</b>	<b>0.37</b>
Surveying Date										
16-Jun-2013		Sunday								
17-Jun-2013		0.32	0.12	0.15	0.14	0.56	0.66	0.32	0.25	0.88
18-Jun-2013		0.11	0.65	0.32	0.52	0.48	0.78	0.95	0.86	0.45
19-Jun-2013		0.33	0.65	0.15	0.42	0.28	0.71	0.92	0.55	0.62
20-Jun-2013		0.11	0.18	0.83	0.56	0.45	0.75	0.25	0.33	0.12
21-Jun-2013		0.11	0.18	0.23	0.56	0.45	0.85	0.77	0.56	0.25
22-Jun-2013		0.65	0.98	0.32	0.12	0.45	0.58	0.47	0.65	0.25
23-Jun-2013		Sunday								
24-Jun-2013		0.36	0.25	0.26	0.24	0.53	0.15	0.57	0.95	0.19
25-Jun-2013		0.63	0.25	0.41	0.47	0.85	0.69	0.25	0.45	0.21
26-Jun-2013		0.26	0.42	0.56	1.08	0.57	0.60	0.49	0.93	0.28
27-Jun-2013		0.49	0.65	0.37	0.27	0.48	0.95	0.24	0.50	0.50
28-Jun-2013		0.32	0.20	0.63	0.49	0.67	0.21	0.22	0.65	0.23
29-Jun-2013		0.19	0.22	0.31	0.51	0.21	0.41	0.70	0.20	0.65
Remark										

  
Prepared by :Lo wing yue (Surveyor)



Monitoring Check Pts.	Trigger Levels		
	Alert level	Alarm level	Action level
Vibration Monitoring	2mm/s	2.5mm/s	3mm/s
Vibration at largest span of highest Structural level	5.0mm/s	6.0mm/s	7.5mm/s

**Vibration Record**

Project Title: Central Police Station Conservation & Revitalization      Project No: WP201      30-Jun-2013      to      13-Jul-2013

POINT		VM8-1	VM11-1	VM11-2	VM12-1	VM12-2	VM14-3	VM17-1	VM17-2	VM17-3
DATE	PD/(m)	mm/s	mm/s	mm/s	mm/s	mm/s	mm/s	mm/s	mm/s	mm/s
19-Jun-2012 (Initial)		0.56	0.13	0.19	0.22	0.13	0.21	0.13	0.13	0.37
Surveying Date										
30-Jun-2013		Sunday								
1-Jul-2013		Public Holiday								
2-Jul-2013		0.18	0.16	0.18	0.51	0.43	0.32	0.18	0.29	0.50
3-Jul-2013		0.19	0.16	0.57	0.21	0.70	0.24	0.32	0.39	0.31
4-Jul-2013		0.64	0.21	0.51	0.35	0.31	0.47	0.36	0.38	0.32
5-Jul-2013		0.58	0.42	0.16	0.68	0.34	0.17	0.33	0.61	0.33
6-Jul-2013		0.28	0.31	0.22	0.26	0.17	0.40	0.33	0.36	0.26
7-Jul-2013		Sunday								
8-Jul-2013		0.42	0.31	0.20	0.17	0.19	0.85	0.17	0.31	0.25
9-Jul-2013		0.25	0.38	0.39	0.37	0.29	0.20	0.17	0.23	0.62
10-Jul-2013		0.32	0.29	0.21	0.20	0.26	0.19	0.25	0.24	0.19
11-Jul-2013		0.25	0.45	0.23	0.16	0.26	0.21	0.30	0.15	0.19
12-Jul-2013		0.18	0.84	0.25	0.86	0.17	0.16	0.18	0.82	0.62
13-Jul-2013		0.58	0.50	0.68	0.61	0.70	0.79	0.67	0.20	0.40
Remark										

Monitoring Check Pts.	Trigger Levels		
	Alert level	Alarm level	Action level
Vibration Monitoring	2mm/s	2.5mm/s	3mm/s
Vibration at largest span of highest Structural level	5.0mm/s	6.0mm/s	7.5mm/s

### Vibration Record

Project Title: Central Police Station Conservation & Revitalization      Project No: WP201      14-Jul-2013      to      27-Jul-2013

POINT		VM8-1	VM11-1	VM11-2	VM12-1	VM12-2	VM14-3	VM17-1	VM17-2	VM17-3
DATE	PD/(m)	mm/s	mm/s	mm/s	mm/s	mm/s	mm/s	mm/s	mm/s	mm/s
19-Jun-2012 (Initial)		<b>0.56</b>	<b>0.13</b>	<b>0.19</b>	<b>0.22</b>	<b>0.13</b>	<b>0.21</b>	<b>0.13</b>	<b>0.13</b>	<b>0.37</b>
Surveying Date										
<b>14-Jul-2013</b>		<b>Sunday</b>								
15-Jul-2013		0.42	0.16	0.65	0.64	0.72	0.18	0.74	0.18	0.82
16-Jul-2013		0.67	0.45	0.73	0.16	0.98	0.37	0.73	0.16	0.19
17-Jul-2013		0.19	0.45	0.54	0.29	0.46	0.71	0.23	0.50	0.63
18-Jul-2013		0.60	0.36	0.44	0.42	0.40	0.21	0.66	0.65	0.91
19-Jul-2013		0.16	0.86	0.54	0.23	0.21	0.54	0.59	0.20	0.15
20-Jul-2013		0.52	0.50	0.72	0.60	0.81	0.61	0.41	0.41	0.66
<b>21-Jul-2013</b>		<b>Sunday</b>								
22-Jul-2013		0.67	0.51	0.61	0.19	0.29	0.16	0.19	0.17	0.16
23-Jul-2013		0.19	0.17	0.16	0.15	0.85	0.61	0.17	0.17	0.25
24-Jul-2013		0.61	0.15	0.58	0.14	0.13	0.19	0.42	0.52	0.30
25-Jul-2013		0.99	0.80	0.20	0.31	0.23	0.30	0.69	0.20	0.58
26-Jul-2013		0.78	0.72	0.69	0.55	0.20	0.33	0.24	0.24	0.30
27-Jul-2013		0.31	0.41	0.61	0.19	0.17	0.16	0.73	0.67	0.37
Remark										

Monitoring Check Pts.	Trigger Levels		
	Alert level	Alarm level	Action level
Vibration Monitoring	2mm/s	2.5mm/s	3mm/s
Vibration at largest span of highest Structural level	5.0mm/s	6.0mm/s	7.5mm/s

### Vibration Record

Project Title: Central Police Station Conservation & Revitalization      Project No: WP201      28-Jul-2013      to      10-Aug-2013

POINT		VM8-1	VM11-1	VM11-2	VM12-1	VM12-2	VM14-3	VM17-1	VM17-2	VM17-3
DATE	PD/(m)	mm/s	mm/s	mm/s	mm/s	mm/s	mm/s	mm/s	mm/s	mm/s
19-Jun-2012 (Initial)		0.56	0.13	0.19	0.22	0.13	0.21	0.13	0.13	0.37
Surveying Date										
28-Jul-2013		Sunday								
29-Jul-2013		0.33	0.57	0.47	0.24	0.68	0.66	0.15	0.19	0.16
30-Jul-2013		0.76	0.21	0.17	0.18	0.55	0.78	0.34	0.22	0.24
31-Jul-2013		0.75	0.75	0.20	0.43	0.66	0.17	0.72	0.78	0.53
1-Aug-2013		0.22	0.58	0.23	0.27	0.77	0.28	0.28	0.26	0.47
2-Aug-2013		0.19	0.24	0.26	0.80	0.63	0.17	0.44	0.36	0.20
3-Aug-2013										
4-Aug-2013		Sunday								
5-Aug-2013										
6-Aug-2013										
7-Aug-2013										
8-Aug-2013										
9-Aug-2013										
10-Aug-2013										
Remark										



Shaft Grouted Pre-bored H-piles at Block 51 (Arbutnot Wing)



Revision/Description 修改/說明

No. 編號	Description 說明	Date 日期	Approved 核准
-	BD SUBMISSION (50)	12/11	JS
A	BD SUBMISSION (01)	02/12	JS
B	BD SUBMISSION (17)	03/12	JS
C	BD SUBMISSION BY BATCH 1	03/12	JS
D	FOR INFORMATION (50)	03/12	JS
E	BD SUBMISSION (01)	05/12	JS

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Plan Approved  
 NG Kin-ning  
 Chief Structural Engineer  
 for BUILDING AUTHORITY  
 13 JUL 2012



BD SUBMISSION  
 Drawing Status 製圖狀況

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Client 業主  
 寶馬會文物保存有限公司  
 The Jersey Club O/S Limited

Design Consultant  
**HERZOG & DEMEUREN**

Executive Architect/AR  
**ROCCO**

Structural Engineer / PSE  
**ARUP**

Project 3183  
 CENTRAL POLICE STATION  
 CONSERVATION AND REVITALISATION  
 PROJECT

Drawing Title 圖名  
**MONITORING LAYOUT PLAN**

Scale 比例 1:3000A1  
 Drawing No. 圖號 00-OAP209674-G-001  
 Checked 校核 AL  
 Revision 修訂 E

- LEGEND
- EXISTING FRESH WATER MAIN
  - EXISTING SALT WATER MAIN
  - EXISTING STREET LIGHTING NO. 33488-A1
  - EXISTING STREET LIGHTING CABLE
  - EXISTING GAS MAIN
  - EXISTING HW ELECTRICITY CABLE
  - EXISTING LV ELECTRICITY CABLE
  - EXISTING TELECOMMUNICATION DUCT (HUTCHISON GLOBAL COMMUNICATIONS LIMITED)
  - EXISTING STORMWATER DRAIN
  - EXISTING FOUL SEWER
  - PROPOSED FOUL SEWER
  - SITE BOUNDARY
  - EXISTING RETAINING WALL
  - EXISTING DRILLHOLE WITH STANCOPE/PICZOMETER
  - PROPOSED BUILDING SETTLEMENT POINTS/TILMETER
  - PROPOSED RETAINING WALL SETTLEMENT POINTS/TILMETER
  - PROPOSED INCLINOMETER TO BE BUILT IN BORED PILE WALL OR PIPE PILE WALL
  - PROPOSED GROUND SETTLEMENT POINTS
  - PROPOSED UTILITY MONITORING POINTS
  - PROPOSED VIBRATION MONITORING POINTS
  - PROPOSED ADDITIONAL DRILLHOLE



Monitoring Check Pts.	Trigger Levels		
	Alert level	Alarm level	Action level
Vibrating Monitoring	2mm/s	2.5mm/s	3mm/s

**Vibration Record**

Project Title: Central Police Station Conservation & Revitalization      Project No: WP201      28-Apr-2013      to      11-May-2013

POINT		VM14-4	VM15-2	VM51-1					
DATE	PD/(m)	mm/s	mm/s	mm/s					
03-Dec-2012	(Initial)	0.14	0.21	0.3					
28-Apr-2013		Sunday							
29-Apr-2013		0.13	0.16	0.27					
30-Apr-2013		0.25	0.45	0.55					
1-May-2013		Public Holiday							
2-May-2013		0.15	0.55	0.24					
3-May-2013		0.13	0.46	0.33					
4-May-2013		0.13	0.18	0.22					
5-May-2013		Sunday							
6-May-2013		0.52	0.25	0.11					
7-May-2013		0.13	0.51	0.44					
8-May-2013		0.11	0.41	0.26					
9-May-2013		0.56	0.51	0.66					
10-May-2013		0.66	0.42	0.13					
11-May-2013		0.16	0.11	0.19					
Remarks									


  
 Prepared by : Lo wing yue (Surveyor)

Monitoring Check Pts.	Trigger Levels		
	Alert level	Alarm level	Action level
Vibrating Monitoring	2mm/s	2.5mm/s	3mm/s

**Vibration Record**

Project Title: Central Police Station Conservation & Revitalization      Project No: WP201      12-May-2013      to      25-May-2013

POINT		VM14-4	VM15-2	VM51-1					
DATE	PD/(m)	mm/s	mm/s	mm/s					
03-Dec-2012	(Initial)	0.14	0.21	0.3					
<b>12-May-2013</b>	<b>Sunday</b>								
13-May-2013		0.19	0.24	0.27					
14-May-2013		0.28	0.52	0.49					
15-May-2013		0.29	0.55	0.41					
16-May-2013		0.29	0.46	0.71					
<b>17-May-2013</b>	<b>Public Holiday</b>								
18-May-2013		0.19	0.37	0.24					
<b>19-May-2013</b>	<b>Sunday</b>								
20-May-2013		0.29	0.61	0.18					
21-May-2013		0.54	0.28	0.13					
22-May-2013		0.13	0.28	0.64					
23-May-2013		0.11	0.55	0.28					
24-May-2013		0.26	0.61	0.77					
25-May-2013		0.15	0.54	0.19					
Remarks									

  
 Prepared by : Lo wing yue (Surveyor)

Monitoring Check Pts.	Trigger Levels		
	Alert level	Alarm level	Action level
Vibrating Monitoring	2mm/s	2.5mm/s	3mm/s

### Vibration Record

Project Title: Central Police Station Conservation & Revitalization      Project No: WP201      26-May-2013      to      8-Jun-2013

POINT		VM14-4	VM15-2	VM51-1						
DATE	PD/(m)	mm/s	mm/s	mm/s						
03-Dec-2012 (Initial)		0.14	0.21	0.3						
26-May-2013		Sunday								
27-May-2013		0.15	0.11	0.51						
28-May-2013		0.16	0.24	0.55						
29-May-2013		0.52	0.14	0.28						
30-May-2013		0.13	0.52	0.41						
31-May-2013		0.19	0.42	0.22						
1-Jun-2013		0.52	0.64	0.55						
2-Jun-2013		Sunday								
3-Jun-2013		0.55	0.11	0.26						
4-Jun-2013		0.26	0.69	0.22						
5-Jun-2013		0.11	0.48	0.42						
6-Jun-2013		0.18	0.11	0.13						
7-Jun-2013		0.13	0.55	0.61						
8-Jun-2013		0.15	0.25	0.54						
Remarks										

( Shaft Grouted Pre-bored H-piles at Block 51 )

**WW** 恆誠建築工程有限公司  
Win Win Way Construction Company Ltd.

Monitoring Check Pts.	Trigger Levels		
	Alert level	Alarm level	Action level
Vibrating Monitoring	2mm/s	2.5mm/s	3mm/s

### Vibration Record

Project Title: Central Police Station Conservation & Revitalization      Project No: WP201      9-Jun-2013      to      22-Jun-2013

POINT		VM14-4	VM15-2	VM51-1					
DATE	PD/(m)	mm/s	mm/s	mm/s					
03-Dec-2012 (Initial)		0.14	0.21	0.3					
9-Jun-2013					Sunday				
10-Jun-2013		0.16	0.52	0.42					
11-Jun-2013		0.15	0.55	0.40					
12-Jun-2013									
13-Jun-2013		0.12	0.75	0.45					
14-Jun-2013		0.13	0.14	0.62					
15-Jun-2013		0.25	0.64	0.25					
16-Jun-2013					Sunday				
17-Jun-2013		0.19	0.66	0.42					
18-Jun-2013		0.11	0.24	0.58					
19-Jun-2013		0.25	0.55	0.14					
20-Jun-2013		0.31	0.25	0.65					
21-Jun-2013		0.15	0.28	0.45					
22-Jun-2013		0.25	0.47	0.58					
Remarks									

  
Prepared by : Lo wing yue (Surveyor)



( Shaft Grouted Pre-bored H-piles at Block 51 )



Win Win Way Construction Company Ltd.

Monitoring Check Pts.	Trigger Levels		
	Alert level	Alarm level	Action level
Vibrating Monitoring	2mm/s	2.5mm/s	3mm/s

### Vibration Record

Project Title: Central Police Station Conservation & Revitalization      Project No: WP201      23-Jun-2013      to      6-Jul-2013

POINT		VM14-4	VM15-2	VM51-1						
DATE	PD/(m)	mm/s	mm/s	mm/s						
03-Dec-2012 (Initial)		0.14	0.21	0.3						
23-Jun-2013		Sunday								
24-Jun-2013		0.13	0.56	0.62						
25-Jun-2013		0.12	0.26	0.65						
26-Jun-2013		0.56	1.44	1.07						
27-Jun-2013		1.53	0.15	0.19						
28-Jun-2013		0.22	0.61	0.22						
29-Jun-2013		0.19	0.23	0.18						
30-Jun-2013		Sunday								
1-Jul-2013		Public Holiday								
2-Jul-2013		0.77	0.31	0.23						
3-Jul-2013		0.54	0.56	0.69						
4-Jul-2013		0.18	0.19	0.19						
5-Jul-2013		0.63	0.19	0.17						
6-Jul-2013		0.29	0.16	0.23						
Remarks										

Prepared by : Lo wing yue (Surveyor)

Monitoring Check Pts.	Trigger Levels		
	Alert level	Alarm level	Action level
Vibrating Monitoring	2mm/s	2.5mm/s	3mm/s

### Vibration Record

Project Title: Central Police Station Conservation & Revitalization      Project No: WP201      7-Jul-2013      to      20-Jul-2013

POINT		VM14-4	VM15-2	VM51-1						
DATE	PD/(m)	mm/s	mm/s	mm/s						
03-Dec-2012	(Initial)	0.14	0.21	0.3						
7-Jul-2013		Sunday								
8-Jul-2013		0.93	0.35	0.48						
9-Jul-2013		0.20	0.72	0.20						
10-Jul-2013		0.27	0.27	0.27						
11-Jul-2013		0.99	0.18	0.17						
12-Jul-2013		0.21	0.21	0.18						
13-Jul-2013		0.17	0.68	0.80						
14-Jul-2013		Sunday								
15-Jul-2013		0.84	0.94	0.14						
16-Jul-2013		0.14	0.15	0.58						
17-Jul-2013		0.21	0.67	0.78						
18-Jul-2013		0.69	0.70	0.74						
19-Jul-2013		0.61	0.15	0.49						
20-Jul-2013		0.77	0.67	0.66						
Remarks										

( Shaft Grouted Pre-bored H-piles at Block 51 )



**Win Win Way Construction Company Ltd.**

Monitoring Check Pts.	Trigger Levels		
	Alert level	Alarm level	Action level
Vibrating Monitoring	2mm/s	2.5mm/s	3mm/s

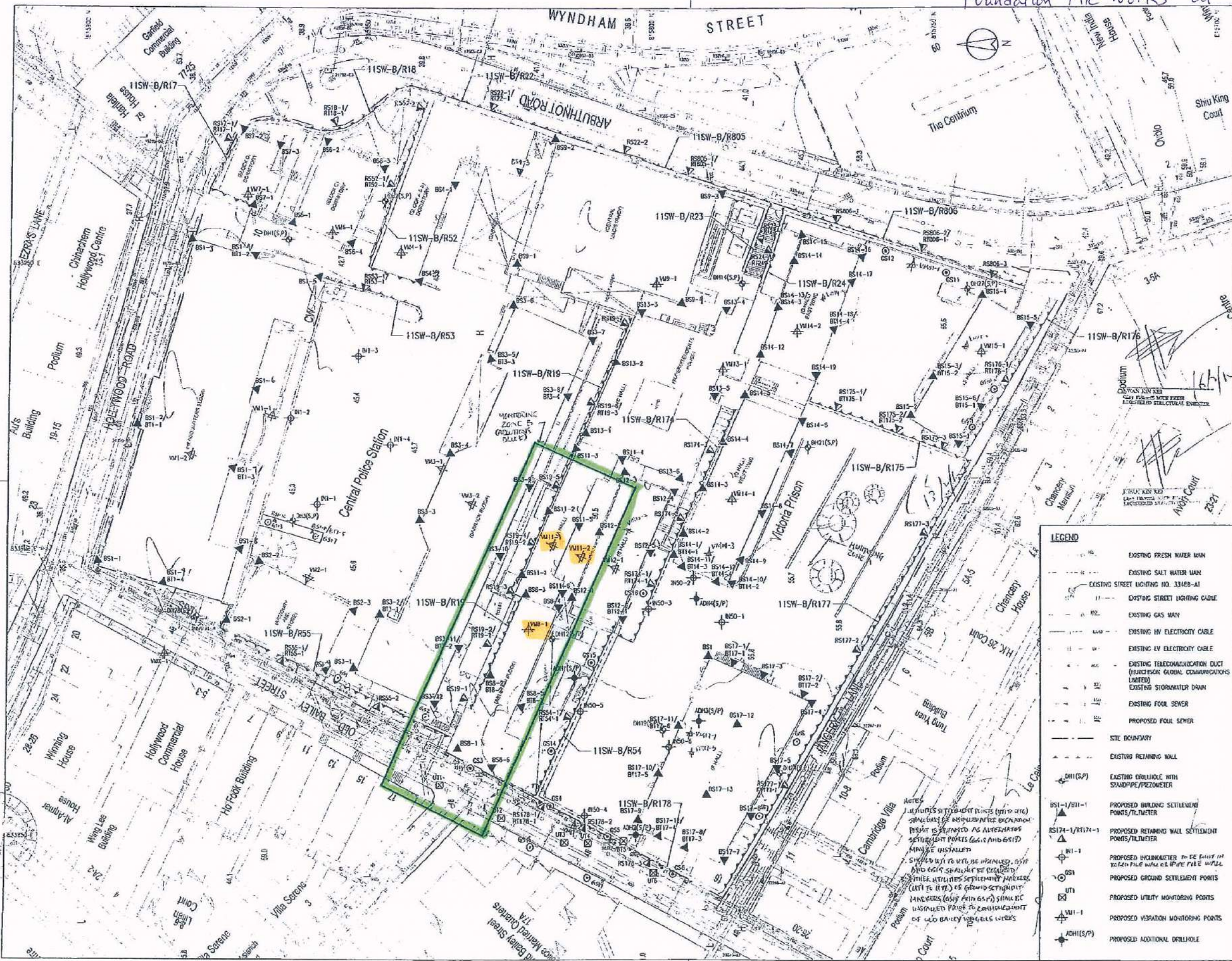
**Vibration Record**

Project Title: Central Police Station Conservation & Revitalization      Project No: WP201      21-Jul-2013      to      3-Aug-2013

POINT		VM14-4	VM15-2	VM51-1						
DATE	PD/(m)	mm/s	mm/s	mm/s						
03-Dec-2012	(Initial)	0.14	0.21	0.3						
<b>21-Jul-2013</b>		<b>Sunday</b>								
22-Jul-2013		0.53	0.25	0.27						
23-Jul-2013		0.69	0.72	0.19						
24-Jul-2013		0.51	0.61	0.59						
25-Jul-2013		0.77	0.21	0.20						
26-Jul-2013		0.42	0.63	0.28						
27-Jul-2013		0.40	0.18	0.78						
<b>28-Jul-2013</b>		<b>Sunday</b>								
29-Jul-2013		0.14	0.88	0.25						
30-Jul-2013		1.04	0.37	0.82						
31-Jul-2013		0.71	0.74	0.69						
1-Aug-2013		0.17	0.20	0.57						
2-Aug-2013		0.19	0.23	0.19						
3-Aug-2013		0.69	0.52	0.84						
Remarks										

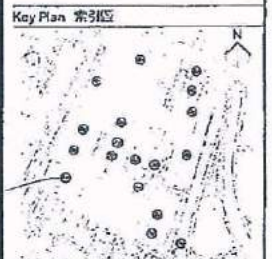


Foundation Pile Works at Block 8



Project No. 00-04/209674-G-001	
Revision/Description/Date/By	
No. 001	12/11 JS
ED SUBMISSION	

Plan Approved  
 NG King  
 Chief Structural Engineer  
 for BUILDING AUTHORITY  
 20 FEB 2012



BD SUBMISSION  
 Drawing Status: 00-04/209674-G-001

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Client: 寶馬有限公司  
 The Jackie Chek CTS Client

Design Consultant: HERZOG & DEMMEURON

Construction Architect: 00-04/209674-G-001

Executive Approved P.A.P. ROCCO

Structural Engineer: ARUP

Project: CENTRAL POLICE STATION CONSERVATION AND REVITALISATION PROJECT

Drawing Title: MONITORING LAYOUT PLAN

Scale: 1:500	Drawn: KCL	Checked: AL
1:500001	KCL	AL
Drawing No: 00-04/209674-G-001		

**LEGEND**

	EXISTING FRESH WATER MAIN
	EXISTING SALT WATER MAIN
	EXISTING STREET LIGHTING NO. 3348-A1
	EXISTING STREET LIGHTING CABLE
	EXISTING GAS MAIN
	EXISTING HV ELECTRICITY CABLE
	EXISTING LV ELECTRICITY CABLE
	EXISTING TELECOMMUNICATION DUCT (FIBRE OPTIC GLOBAL COMMUNICATIONS LIMITED)
	EXISTING STORMWATER DRAIN
	EXISTING FOUR SEWER
	PROPOSED FOUR SEWER
	SITE BOUNDARY
	EXISTING RETAINING WALL
	EXISTING DRILLHOLE WITH STANDPIPE/PREZOMETER
	PROPOSED BUILDING SETTLEMENT POINTS/TILTMETER
	PROPOSED RETAINING WALL SETTLEMENT POINTS/TILTMETER
	PROPOSED INCLINOMETER TO BE FIXED IN RETAINING WALL & PILE CAP WALL
	PROPOSED GROUND SETTLEMENT POINTS
	PROPOSED UTILITY MONITORING POINTS
	PROPOSED VIBRATION MONITORING POINTS
	PROPOSED ADDITIONAL DRILLHOLE

NOTES:  
 1. ALL SETTLEMENT POINTS (WITH THE EXCEPTED ONE) SHOULD BE INSTALLED AS PER THE DRAWING. THE POINTS SHOULD BE INSTALLED AS PER THE DRAWING. THE POINTS SHOULD BE INSTALLED AS PER THE DRAWING.  
 2. THE POINTS SHOULD BE INSTALLED AS PER THE DRAWING. THE POINTS SHOULD BE INSTALLED AS PER THE DRAWING.  
 3. THE POINTS SHOULD BE INSTALLED AS PER THE DRAWING. THE POINTS SHOULD BE INSTALLED AS PER THE DRAWING.



( Block 8 Foundation )

**WW** 恆誠建築工程有限公司  
Win Win Way Construction Company Ltd.

Monitoring Check Pts.	Trigger Levels		
	Alert level	Alarm level	Action level
Vibrating Monitoring	2mm/s	2.5mm/s	3mm/s

### Vibration Record

Project Title: Central Police Station Conservation & Revitalization      Project No: WP201      21-Apr-2013      to      4-May-2013

POINT		VM8-1	VM11-1	VM11-2					
DATE	PD/(m)	mm/s	mm/s	mm/s					
23-Apr-2012 (Initial)		0.212	0.087	0.116					
21-Apr-2013		Sunday							
22-Apr-2013		0.26	0.35	0.13					
23-Apr-2013		0.31	0.13	0.55					
24-Apr-2013		0.23	0.21	0.15					
25-Apr-2013		0.36	0.13	0.09					
26-Apr-2013		0.61	0.13	0.25					
27-Apr-2013		0.25	0.24	0.54					
28-Apr-2013		Sunday							
29-Apr-2013		0.66	0.58	0.49					
30-Apr-2013		0.23	0.12	0.15					
1-May-2013		Public Holiday							
2-May-2013		0.55	0.13	0.13					
3-May-2013		0.36	0.13	0.33					
4-May-2013		0.25	0.15	0.36					

Prepared by:  Lo wing yue (Surveyor)

( Block 8 Foundation )

**WW** 恆誠建築工程有限公司  
Win Win Way Construction Company Ltd.

Monitoring Check Pts.	Trigger Levels		
	Alert level	Alarm level	Action level
Vibrating Monitoring	2mm/s	2.5mm/s	3mm/s

### Vibration Record

Project Title: Central Police Station Conservation & Revitalization      Project No: WP201      5-May-2013      to      18-May-2013

POINT		VM8-1	VM11-1	VM11-2					
DATE	PD/(m)	mm/s	mm/s	mm/s					
23-Apr-2012 (Initial)		0.212	0.087	0.116					
05-May-2013					Sunday				
6-May-2013		0.31	0.25	0.45					
7-May-2013		0.13	0.26	0.51					
8-May-2013		0.32	0.25	0.42					
9-May-2013		0.25	0.16	0.24					
10-May-2013		0.33	0.25	0.46					
11-May-2013		0.56	0.52	0.25					
12-May-2013									
13-May-2013		0.23	0.16	0.25					
14-May-2013		0.66	0.15	0.24					
15-May-2013		0.26	0.19	0.55					
16-May-2013		0.61	0.15	0.42					
17-May-2013					Public Holiday				
18-May-2013		0.34	0.16	0.26					

Prepared by : Lo wing yue (Surveyor)

( Block 8 Foundation )

**WW** 恆誠建築工程有限公司  
Win Win Way Construction Company Ltd.

Monitoring Check Pts.	Trigger Levels		
	Alert level	Alarm level	Action level
Vibrating Monitoring	2mm/s	2.5mm/s	3mm/s

### Vibration Record

Project Title: Central Police Station Conservation & Revitalization      Project No: WP201      19-May-2013      to      1-Jun-2013

POINT		VM8-1	VM11-1	VM11-2					
DATE	PD/(m)	mm/s	mm/s	mm/s					
23-Apr-2012 (Initial)		0.212	0.087	0.116					
19-May-2013		46.72							
20-May-2013		0.23	0.13	0.55					
21-May-2013		0.61	0.25	0.33					
22-May-2013		0.35	0.13	0.55					
23-May-2013		0.36	0.22	0.29					
24-May-2013		0.23	0.28	0.45					
25-May-2013		0.56	0.55	0.11					
26-May-2013		Sunday							
27-May-2013		0.61	0.23	0.15					
28-May-2013		0.25	0.56	0.74					
29-May-2013		0.13	0.29	0.99					
30-May-2013		0.62	0.15	0.18					
31-May-2013		0.52	0.11	0.26					
1-Jun-2013		0.23	0.15	0.42					

Prepared by :  Lo wing yue (Surveyor)

( Block 8 Foundation )

**WW** 恆誠建築工程有限公司  
Win Win Way Construction Company Ltd.

Monitoring Check Pts.	Trigger Levels		
	Alert level	Alarm level	Action level
Vibrating Monitoring	2mm/s	2.5mm/s	3mm/s

### Vibration Record

Project Title: Central Police Station Conservation & Revitalization      Project No: WP201      2-Jun-2013      to      15-Jun-2013

POINT		VM8-1	VM11-1	VM11-2					
DATE	PD/(m)	mm/s	mm/s	mm/s					
23-Apr-2012 (Initial)		0.212	0.087	0.116					
02-Jun-2013		Sunday							
3-Jun-2013		0.36	0.23	0.11					
4-Jun-2013		0.23	0.13	0.53					
5-Jun-2013		0.33	0.12	0.16					
6-Jun-2013		0.36	0.23	0.15					
7-Jun-2013		0.23	0.15	0.46					
8-Jun-2013		0.62	0.15	0.44					
9-Jun-2013		Sunday							
10-Jun-2013		0.23	0.11	0.14					
11-Jun-2013		0.63	0.13	0.23					
12-Jun-2013		Public Holiday							
13-Jun-2013		0.23	0.63	0.52					
14-Jun-2013		0.25	0.44	0.62					
15-Jun-2013		0.13	0.15	0.18					

  
Prepared by : Lo wing yue (Surveyor)



( Block 8 Foundation )

**WW** 恆誠建築工程有限公司  
Win Win Way Construction Company Ltd.

Monitoring Check Pts.	Trigger Levels		
	Alert level	Alarm level	Action level
Vibrating Monitoring	2mm/s	2.5mm/s	3mm/s

### Vibration Record

Project Title: Central Police Station Conservation & Revitalization      Project No: WP201      16-Jun-2013      to      29-Jun-2013

POINT		VM8-1	VM11-1	VM11-2					
DATE	PD/(m)	mm/s	mm/s	mm/s					
23-Apr-2012 (Initial)		0.212	0.087	0.116					
16-Jun-2013					Sunday				
17-Jun-2013		0.32	0.12	0.15					
18-Jun-2013		0.11	0.65	0.32					
19-Jun-2013		0.33	0.65	0.15					
20-Jun-2013		0.11	0.18	0.83					
21-Jun-2013		0.11	0.18	0.23					
22-Jun-2013		0.65	0.98	0.32					
23-Jun-2013									
24-Jun-2013		0.36	0.25	0.26					
25-Jun-2013		0.63	0.25	0.41					
26-Jun-2013		0.26	0.42	0.56					
27-Jun-2013		0.49	0.65	0.37					
28-Jun-2013		0.32	0.20	0.63					
29-Jun-2013		0.19	0.22	0.31					

  
Prepared by : Lo wing yue (Surveyor)



仁利建築有限公司  
Yan Lee Construction Co., Ltd.

Monitoring Check Pts.	Trigger Levels		
	Alert level	Alarm level	Emergency level
Vibrating Monitoring	2mm/s	2.5mm/s	3mm/s

### Vibration Record

Project Title: Central Police Station Conservation & Revitalization      Project No: WP203      Date: 30-Jun-2013 to 13-Jul-2013

POINT	VM8-1	VM11-1	VM11-2													
DATE	PD(m)	mm/s	mm/s	mm/s	mm/s	mm/s	mm/s	mm/s	mm/s	mm/s	mm/s	mm/s	mm/s	mm/s	mm/s	mm/s
23-Apr-12 (Initial)		0.212	0.087	0.116												
30-Jun-2013																
1-Jul-2013																
2-Jul-2013		0.18	0.16	0.18												
3-Jul-2013		0.19	0.16	0.57												
4-Jul-2013		0.64	0.21	0.51												
5-Jul-2013		0.58	0.42	0.16												
6-Jul-2013		0.28	0.31	0.22												
7-Jul-2013																
8-Jul-2013		0.42	0.31	0.20												
9-Jul-2013		0.25	0.38	0.39												
10-Jul-2013		0.32	0.29	0.21												
11-Jul-2013		0.25	0.45	0.23												
12-Jul-2013		0.18	0.84	0.25												
13-Jul-2013		0.58	0.50	0.68												

Prepared by : Cheung Wal Ching

Monitoring Check Pts.	Trigger Levels		
	Alert level	Alarm level	Action level
Vibrating Monitoring	2mm/s	2.5mm/s	3mm/s
Vibration at largest span of highest Structural level	5.0mm/s	6.0mm/s	7.5mm/s

**Vibration Record**

Project Title: Central Police Station Conservation & Revitalization      Project No: WP201      14-Jul-2013      to      27-Jul-2013

POINT		VM8-1	VM11-1	VM11-2						
DATE	PD/(m)	mm/s	mm/s	mm/s						
23-Apr-2012 (Initial)		0.212	0.087	0.116						
14-Jul-2013					Sunday					
15-Jul-2013		0.42	0.16	0.65						
16-Jul-2013		0.67	0.45	0.73						
17-Jul-2013		0.19	0.45	0.54						
18-Jul-2013		0.60	0.36	0.44						
19-Jul-2013		0.16	0.86	0.54						
20-Jul-2013		0.52	0.50	0.72						
21-Jul-2013										
22-Jul-2013		0.67	0.51	0.61						
23-Jul-2013		0.19	0.17	0.16						
24-Jul-2013		0.61	0.15	0.58						
25-Jul-2013		0.99	0.80	0.20						
26-Jul-2013		0.78	0.72	0.69						
27-Jul-2013		0.31	0.41	0.61						

Monitoring Check Pts.	Trigger Levels		
	Alert level	Alarm level	Action level
Vibrating Monitoring	2mm/s	2.5mm/s	3mm/s
Vibration at largest span of highest Structural level	5.0mm/s	6.0mm/s	7.5mm/s

### Vibration Record

Project Title: Central Police Station Conservation & Revitalization      Project No: WP201      28-Jul-2013      to      10-Aug-2013

POINT		VM8-1	VM11-1	VM11-2						
DATE	PD/(m)	mm/s	mm/s	mm/s						
23-Apr-2012 (Initial)		0.212	0.087	0.116						
28-Jul-2013					Sunday					
29-Jul-2013		0.33	0.57	0.47						
30-Jul-2013		0.76	0.21	0.17						
31-Jul-2013		0.75	0.75	0.20						
1-Aug-2013										
2-Aug-2013										
3-Aug-2013										
4-Aug-2013					Sunday					
5-Aug-2013										
6-Aug-2013										
7-Aug-2013										
8-Aug-2013										
9-Aug-2013										
10-Aug-2013										



Mini-piles with post-pressurized grout in CDG and steel shear H-piles at Block 1



**NOTES:**  
 1. UTILITIES SETTLEMENT POINTS (UT1 TO UT6) SHALL ONLY BE INSTALLED AFTER EXCAVATION PERMIT IS OBTAINED AS ALTERNATIVE SETTLEMENT POINTS (GS18 AND GS19) MAY BE INSTALLED.  
 2. SHOULD UT1 TO UT6 BE INSTALLED, GS18 AND GS19 SHALL NOT BE REQUIRED.  
 3. EITHER UTILITIES SETTLEMENT MARKERS (UT1 TO UT6) OR GROUND SETTLEMENT MARKERS (GS18 AND GS19) SHALL BE INSTALLED PRIOR TO COMMENCEMENT OF OLD BAILEY WORKS.

**LEGEND**

	EXISTING FRESH WATER MAIN
	EXISTING SALT WATER MAIN
	EXISTING STREET LIGHTING NO. 33485-A1
	EXISTING STREET LIGHTING CABLE
	EXISTING GAS MAIN
	EXISTING HV ELECTRICITY CABLE
	EXISTING LV ELECTRICITY CABLE
	EXISTING TELECOMMUNICATION DUCT (HONGKONG GLOBAL COMMUNICATIONS LIMITED)
	EXISTING STORMWATER DRAIN
	EXISTING FOUL SEWER
	PROPOSED FOUL SEWER
	SITE BOUNDARY
	EXISTING RETAINING WALL
	EXISTING DRILLHOLE WITH STANDPIPE/PREZOMETER
	PROPOSED BUILDING SETTLEMENT POINTS/TILTMETER
	PROPOSED RETAINING WALL SETTLEMENT POINTS/TILTMETER
	PROPOSED INCLINOMETER TO BE BUILT IN BORED PILE WALL OR PIPE PILE WALL
	PROPOSED GROUND SETTLEMENT POINTS
	PROPOSED UTILITY MONITORING POINTS
	PROPOSED VIBRATION MONITORING POINTS
	PROPOSED ADDITIONAL DRILLHOLE

Rev. No.	Description	Date	By	Appr'd
1	ISSUANCE	12/11	JS	
2	REVISION	03/12	JS	
3	REVISION	03/12	JS	

Plan Approved  
 NG Kam-ching  
 Chief Structural Engineer  
 for BUILDING AUTHORITY  
 14 MAR 2012



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 Client 業主  
 香港會文物業有限公司  
 Tel: 2524-1128 Fax: 2524-1129

**HERZOG & DEMEUREN**  
 Design Consultant  
 Conservation Architect  
**ROCCO**  
 Structural Engineer / R/C & S/C Engineer  
**ARUP**  
 Project 0818  
 CENTRAL POLICE STATION  
 CONSERVATION AND REVITALISATION  
 PROJECT  
 Drawing Title 圖名  
**MONITORING LAYOUT PLAN**

Scale 1:200  
 Drawing No. 1:300-01  
 Drawing Title 圖名  
**00-OAP209674-G-001 B**

Drawn 繪圖  
 Checked 校核  
 K.C. Lai  
 AL






Monitoring Check Pts.	Trigger Levels		
	Alert level	Alarm level	Action level
Vibration Monitoring	2mm/s	2.5mm/s	3mm/s
Vibration at largest span of highest Structural level	5.0mm/s	6.0mm/s	7.5mm/s

**Vibration Record**

Project Title: Central Police Station Conservation & Revitalization      Project No: WP201      28-Apr-2013      to      11-May-2013

POINT		VM17-1	VM17-3						
DATE	PD/(m)	mm/s	mm/s						
19-Jun-2012 (Initial)		0.13	0.37						
Surveying Date									
28-Apr-2013				Sunday					
29-Apr-2013		0.54	0.47						
30-Apr-2013		0.15	0.54						
1-May-2013				Public Holiday					
2-May-2013		0.74	0.66						
3-May-2013		0.61	0.22						
4-May-2013		0.48	0.13						
5-May-2013				Sunday					
6-May-2013		0.25	0.15						
7-May-2013		0.15	0.54						
8-May-2013		0.28	0.22						
9-May-2013		0.46	0.64						
10-May-2013		0.13	0.55						
11-May-2013		0.15	0.11						
Remark									

Prepared by :  Lo wing yue (Surveyor)

Monitoring Check Pts.	Trigger Levels		
	Alert level	Alarm level	Action level
Vibration Monitoring	2mm/s	2.5mm/s	3mm/s
Vibration at largest span of highest Structural level	5.0mm/s	6.0mm/s	7.5mm/s

**Vibration Record**

Project Title: Central Police Station Conservation & Revitalization      Project No: WP201      12-May-2013      to      25-May-2013

POINT		VM17-1	VM17-3						
DATE	PD/(m)	mm/s	mm/s						
19-Jun-2012 (Initial)		0.13	0.37						
Surveying Date									
12-May-2013		Sunday							
13-May-2013		0.59	0.13						
14-May-2013		0.26	0.21						
15-May-2013		0.58	0.13						
16-May-2013		0.44	0.19						
17-May-2013		Public Holiday							
18-May-2013		0.28	0.35						
19-May-2013		Sunday							
20-May-2013		0.55	0.27						
21-May-2013		0.14	0.57						
22-May-2013		0.13	0.28						
23-May-2013		0.46	0.13						
24-May-2013		0.28	0.27						
25-May-2013		0.25	0.11						
Remark									

  
 Prepared by : Lo wing yue (Surveyor)



Monitoring Check Pts.	Trigger Levels		
	Alert level	Alarm level	Action level
Vibration Monitoring	2mm/s	2.5mm/s	3mm/s
Vibration at largest span of highest Structural level	5.0mm/s	6.0mm/s	7.5mm/s

### Vibration Record

Project Title: Central Police Station Conservation & Revitalization      Project No: WP201      26-May-2013      to      8-Jun-2013

POINT		VM17-1	VM17-3						
DATE	PD/(m)	mm/s	mm/s						
19-Jun-2012 (Initial)		0.13	0.37						
Surveying Date									
26-May-2013				Sunday					
27-May-2013		0.16	0.45						
28-May-2013		0.33	0.58						
29-May-2013		0.33	0.45						
30-May-2013		0.42	0.25						
31-May-2013		0.13	0.26						
1-Jun-2013		0.62	0.63						
2-Jun-2013				Sunday					
3-Jun-2013		0.55	0.15						
4-Jun-2013		0.82	0.13						
5-Jun-2013		0.54	0.22						
6-Jun-2013		0.46	0.11						
7-Jun-2013		0.19	0.11						
8-Jun-2013		0.82	0.33						
Remark									

  
Prepared by :Lo wing yue (Surveyor)

Monitoring Check Pts.	Trigger Levels		
	Alert level	Alarm level	Action level
Vibration Monitoring	2mm/s	2.5mm/s	3mm/s
Vibration at largest span of highest Structural level	5.0mm/s	6.0mm/s	7.5mm/s

**Vibration Record**

Project Title: Central Police Station Conservation & Revitalization      Project No: WP201      9-Jun-2013      to      22-Jun-2013

POINT		VM17-1	VM17-3						
DATE	PD/(m)	mm/s	mm/s						
19-Jun-2012 (Initial)		<b>0.13</b>	<b>0.37</b>						
Surveying Date									
9-Jun-2013		Sunday							
10-Jun-2013		0.16	0.33						
11-Jun-2013		0.68	0.12						
12-Jun-2013		Public Holiday							
13-Jun-2013		0.63	0.14						
14-Jun-2013		0.95	0.86						
15-Jun-2013		0.77	0.91						
16-Jun-2013		Sunday							
17-Jun-2013		0.32	0.88						
18-Jun-2013		0.95	0.45						
19-Jun-2013		0.92	0.62						
20-Jun-2013		0.25	0.12						
21-Jun-2013		0.77	0.25						
22-Jun-2013		0.47	0.25						
Remark									

  
 Prepared by :Lo wing yue (Surveyor)

( Block 17 Foundation Works )



Monitoring Check Pts.	Trigger Levels		
	Alert level	Alarm level	Action level
Vibration Monitoring	2mm/s	2.5mm/s	3mm/s
Vibration at largest span of highest Structural level	5.0mm/s	6.0mm/s	7.5mm/s

### Vibration Record

Project Title: Central Police Station Conservation & Revitalization      Project No: WP201      23-Jun-2013      to      6-Jul-2013

POINT		VM17-1	VM17-3						
DATE	PD/(m)	mm/s	mm/s						
19-Jun-2012 (Initial)		<b>0.13</b>	<b>0.37</b>						
Surveying Date									
<b>23-Jun-2013</b>				<b>Sunday</b>					
24-Jun-2013		0.57	0.19						
25-Jun-2013		0.25	0.21						
26-Jun-2013		0.49	0.28						
27-Jun-2013		0.24	0.50						
28-Jun-2013		0.22	0.23						
29-Jun-2013		0.70	0.65						
<b>30-Jun-2013</b>				<b>Sunday</b>					
<b>1-Jul-2013</b>				<b>Public Holiday</b>					
2-Jul-2013		0.18	0.50						
3-Jul-2013		0.32	0.31						
4-Jul-2013		0.36	0.32						
5-Jul-2013		0.33	0.33						
6-Jul-2013		0.33	0.26						
Remark									

Monitoring Check Pts.	Trigger Levels		
	Alert level	Alarm level	Action level
Vibration Monitoring	2mm/s	2.5mm/s	3mm/s
Vibration at largest span of highest Structural level	5.0mm/s	6.0mm/s	7.5mm/s

### Vibration Record

Project Title: Central Police Station Conservation & Revitalization      Project No: WP201      7-Jul-2013      to      20-Jul-2013

POINT		VM17-1	VM17-3						
DATE	PD/(m)	mm/s	mm/s						
19-Jun-2012 (Initial)		<b>0.13</b>	<b>0.37</b>						
Surveying Date									
<b>7-Jul-2013</b>									
8-Jul-2013		0.17	0.25						
9-Jul-2013		0.17	0.62						
10-Jul-2013		0.25	0.19						
11-Jul-2013		0.30	0.19						
12-Jul-2013		0.18	0.62						
13-Jul-2013		0.67	0.40						
<b>14-Jul-2013</b>									
15-Jul-2013		0.74	0.82						
16-Jul-2013		0.73	0.19						
17-Jul-2013		0.23	0.63						
18-Jul-2013		0.66	0.91						
19-Jul-2013		0.59	0.15						
20-Jul-2013		0.41	0.66						
Remark									

Monitoring Check Pts.	Trigger Levels		
	Alert level	Alarm level	Action level
Vibration Monitoring	2mm/s	2.5mm/s	3mm/s
Vibration at largest span of highest Structural level	5.0mm/s	6.0mm/s	7.5mm/s

### Vibration Record

Project Title: Central Police Station Conservation & Revitalization      Project No: WP201      21-Jul-2013      to      3-Aug-2013

POINT		VM17-1	VM17-3						
DATE	PD/(m)	mm/s	mm/s						
19-Jun-2012 (Initial)		<b>0.13</b>	<b>0.37</b>						
Surveying Date									
<b>21-Jul-2013</b>				<b>Sunday</b>					
22-Jul-2013		0.19	0.16						
23-Jul-2013		0.17	0.25						
24-Jul-2013		0.42	0.30						
25-Jul-2013		0.69	0.58						
26-Jul-2013		0.24	0.30						
27-Jul-2013		0.73	0.37						
<b>28-Jul-2013</b>				<b>Sunday</b>					
29-Jul-2013		0.17	0.25						
30-Jul-2013		0.42	0.30						
31-Jul-2013		0.69	0.58						
1-Aug-2013		0.66	0.91						
2-Aug-2013		0.59	0.15						
3-Aug-2013		0.41	0.66						
Remark									







Monitoring Check Pts.	Trigger Levels		
	Alert level	Alarm level	Action level
Vibrating Monitoring	5mm/s	6mm/s	7.5mm/s

### Vibration Record

Project Title: Central Police Station Conservation & Revitalization      Project No: WP201      19-May-2013      to      1-Jun-2013

POINT		VM1	VM2	VM3	VM4	VM5	VM6	VM7	VM8	VM9	VM10	VM11	VM12	VM13	VM14	VM15
DATE	PD/(m)	mm/s	mm/s	mm/s	mm/s	mm/s	mm/s	mm/s	mm/s	mm/s	mm/s	mm/s	mm/s	mm/s	mm/s	mm/s
2-Apr-2012 (Initial)		0.58	0.18	0.18	0.66	1.4	0.25	1.14	0.65	0.28	0.22	0.18	0.22	0.18	0.22	0.22
28-Feb-2013		0.17	0.24	0.28	0.33	0.36	0.40	0.20	0.19	0.26	0.24	0.19	0.39	0.40	0.15	0.30
7-Mar-2013		0.30	0.25	0.10	0.20	0.29	0.16	0.11	0.26	0.37	0.34	0.11	0.20	0.18	0.16	0.21
14-Mar-2013		0.11	0.17	0.22	0.23	0.15	0.30	0.15	0.28	0.29	0.34	0.16	0.27	0.31	0.23	0.29
21-Mar-2013		0.18	0.22	0.23	0.29	0.40	0.37	0.34	0.18	0.26	0.50	0.26	0.39	0.41	0.28	0.30
27-Mar-2013		0.13	0.14	0.14	0.14	0.17	0.36	0.40	0.11	0.19	0.15	0.24	0.72	0.15	0.17	0.25
3-Apr-2013		0.29	0.30	0.14	0.15	0.40	0.20	0.19	0.26	0.24	0.22	0.13	0.09	0.13	0.23	0.29
10-Apr-2013		0.16	0.26	0.25	0.25	0.19	0.39	0.15	0.25	0.78	0.46	0.51	0.25	0.61	0.13	0.19
17-Apr-2013		0.25	0.39	0.20	0.56	0.35	0.43	0.50	0.56	0.35	0.26	0.30	0.30	0.26	0.36	0.25
24-Apr-2013		0.23	0.13	0.25	0.16	0.45	0.25	0.44	0.81	0.19	0.23	0.36	0.45	0.75	0.61	0.25
2-May-2013		0.14	0.28	0.23	0.29	0.30	0.14	0.36	0.19	0.17	0.28	0.15	0.14	0.28	0.13	0.22
9-May-2013		0.11	0.19	0.29	0.39	0.20	0.56	0.35	0.22	0.25	0.60	0.19	0.19	0.39	0.30	0.21
16-May-2013		0.56	0.35	0.13	0.09	0.17	0.14	0.40	0.37	0.17	0.40	0.30	0.25	0.37	0.28	0.34
23-May-2013		0.34	0.31	0.26	0.40	0.29	0.22	0.19	0.41	0.26	0.28	0.17	0.32	0.36	0.27	0.19
30-May-2013		0.30	0.28	0.16	0.18	0.26	0.33	0.31	0.27	0.28	0.42	0.25	0.33	0.18	0.26	0.24

Prepared by : Lo wing yue (Surveyor)



Monitoring Check Pts.	Trigger Levels		
	Alert level	Alarm level	Action level
Vibrating Monitoring	5mm/s	6mm/s	7.5mm/s

## Vibration Record

Project Title: Central Police Station Conservation & Revitalization      Project No: WP201      16-Jun-2013      to      29-Jun-2013

POINT	VM1	VM2	VM3	VM4	VM5	VM6	VM7	VM8	VM9	VM10	VM11	VM12	VM13	VM14	VM15
DATE	PD/(m)	mm/s	mm/s	mm/s	mm/s	mm/s	mm/s	mm/s	mm/s	mm/s	mm/s	mm/s	mm/s	mm/s	mm/s
2-Apr-2012 (Initial)		0.58	0.18	0.18	0.66	1.4	0.25	1.14	0.65	0.28	0.22	0.18	0.22	0.18	0.22
27-Mar-2013		0.13	0.14	0.14	0.14	0.17	0.36	0.40	0.11	0.19	0.15	0.24	0.72	0.15	0.17
3-Apr-2013		0.29	0.30	0.14	0.15	0.40	0.20	0.19	0.26	0.24	0.22	0.13	0.09	0.13	0.23
10-Apr-2013		0.16	0.26	0.25	0.25	0.19	0.39	0.15	0.25	0.78	0.46	0.51	0.25	0.61	0.13
17-Apr-2013		0.25	0.39	0.20	0.56	0.35	0.43	0.50	0.56	0.35	0.26	0.30	0.30	0.26	0.36
24-Apr-2013		0.23	0.13	0.25	0.16	0.45	0.25	0.44	0.81	0.19	0.23	0.36	0.45	0.75	0.61
2-May-2013		0.14	0.28	0.23	0.29	0.30	0.14	0.36	0.19	0.17	0.28	0.15	0.14	0.28	0.13
9-May-2013		0.11	0.19	0.29	0.39	0.20	0.56	0.35	0.22	0.25	0.60	0.19	0.19	0.39	0.30
16-May-2013		0.56	0.35	0.13	0.09	0.17	0.14	0.40	0.37	0.17	0.40	0.30	0.25	0.37	0.28
23-May-2013		0.34	0.31	0.26	0.40	0.29	0.22	0.19	0.41	0.26	0.28	0.17	0.32	0.36	0.27
30-May-2013		0.30	0.28	0.16	0.18	0.26	0.33	0.31	0.27	0.28	0.42	0.25	0.33	0.18	0.26
6-Jun-2013		0.25	0.19	0.39	0.15	0.19	0.17	0.28	0.15	0.14	0.40	0.37	0.17	0.40	0.30
13-Jun-2013		0.14	0.40	0.37	0.17	0.40	0.30	0.29	0.40	0.37	0.34	0.18	0.26	0.50	0.12
20-Jun-2013		0.29	0.34	0.57	0.41	0.16	0.33	0.28	0.24	0.35	0.40	0.19	0.13	0.44	0.32
27-Jun-2013		0.21	0.28	0.40	0.42	0.27	0.26	0.21	0.94	0.40	0.67	0.54	0.23	0.21	0.21



Prepared by : Lo wing yue (Surveyor)

Annex M

# Records of Vibration Monitoring for Other Construction Works



Structural Alteration and Additions at Block 14



W.D. Ref. No. 2009/11 (BL/RS) (4) (S)  
 P.S.D. Ref. No. 2009/11 (BL/RS) (4) (S)

No.	Description	Date	Approved by
-	BD SUBMISSION (50)	12/11	J.S.
A	BD SUBMISSION (01)	03/12	J.S.
B	BD SUBMISSION (17)	03/12	J.S.
C	BD SUBMISSION (04) BATCH 1	03/12	J.S.
D	FOR INFORMATION (50)	03/12	J.S.
E	BD SUBMISSION (51)	05/12	J.S.
F	BD SUBMISSION (04)	05/12	J.S.
G	BD SUBMISSION (03)	05/12	J.S.
H	BD SUBMISSION (14)	05/12	J.S.

Note: This plan has been processed on a computerized system as programmed in SHAP. All the data of the submitted drawings, registered structural engineer and registered geotechnical engineer concerned to specified section 4(2)(b) and the provision of section 7(2)(b) of the Building Ordinance are not provided in this page.

Plan Approved  
 NG-Kin-Wing  
 Chief Structural Engineer  
 for BUILDING AUTHORITY  
 - 9 AUG 2012



**BD SUBMISSION**  
 Drawing Status 製圖狀況

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 Notify the relevant authorities immediately of any discrepancy found herein.  
 如發現圖紙內有任何錯誤之處，請立即通知有關當局。

**LEGEND**

	EXISTING FRESH WATER MAIN
	EXISTING SALT WATER MAIN
	EXISTING STREET LIGHTING NO. 33488-A1
	EXISTING STREET LIGHTING CABLE
	EXISTING GAS MAIN
	EXISTING HV ELECTRICITY CABLE
	EXISTING LV ELECTRICITY CABLE
	EXISTING TELECOMMUNICATION DUCT (HUTCHISON GLOBAL COMMUNICATIONS LIMITED)
	EXISTING STORMWATER DRAIN
	EXISTING FOUL SEWER
	PROPOSED FOUL SEWER
	SITE BOUNDARY
	EXISTING RETAINING WALL
	EXISTING DRILLHOLE WITH STANDPIPE/PREZOMETER
	PROPOSED BUILDING SETTLEMENT POINTS/TILT-METER
	PROPOSED RETAINING WALL SETTLEMENT POINTS/TILT-METER
	PROPOSED INCLINOMETER TO BE BUILT IN BORED PILE WALL OR PIPE PILE WALL
	PROPOSED GROUND SETTLEMENT POINTS
	PROPOSED UTILITY MONITORING POINTS
	PROPOSED VIBRATION MONITORING POINTS
	PROPOSED ADDITIONAL DRILLHOLE

Client 業主  
 香港警務處保安處  
 The Security Clerk (SC) Limited

Design Consultant  
**HERZOG & DEMEUREN**

Conservation Architect  
**ROCCO**

Structural Engineer / P.E.  
**ARUP**

Project 項目  
**CENTRAL POLICE STATION  
 CONSERVATION AND REVITALISATION  
 PROJECT**

Drawing Title 圖名  
**MONITORING LAYOUT PLAN**

Scale 比例尺  
 1:300B01

Drawing No. 圖號  
**00-OAP209674-G-001**

Checked 校核  
 K.C.L.O.  
 H

EWAN KIN EZE  
 Chief Project Manager  
 Registered Structural Engineer

Doc No. 00-OAP209674-G-001



( Block 14 )

**WW** 恆誠建築工程有限公司  
Win Win Way Construction Company Ltd.

Monitoring Check Pts.	Trigger Levels		
	Alert level	Alarm level	Action level
Vibrating Monitoring	2mm/s	2.5mm/s	3mm/s

### Vibration Record

Project Title: Central Police Station Conservation & Revitalization      Project No: WP201      21-Apr-2013      to      4-May-2013

POINT		VM14-1	VM14-2	VM14-3	VM14-4					
DATE	PD/(m)	mm/s	mm/s	mm/s	mm/s					
19-Nov-12 (Initial)		0.103	0.112	0.147	0.136					
21-Apr-2013		Sunday								
22-Apr-2013		0.22	0.61	0.42	0.13					
23-Apr-2013		0.33	0.31	0.25	0.25					
24-Apr-2013		0.26	0.55	0.45	0.13					
25-Apr-2013		0.61	0.22	0.25	0.13					
26-Apr-2013		1.61	0.31	0.45	0.13					
27-Apr-2013		0.35	0.25	0.25	0.23					
28-Apr-2013		Sunday								
29-Apr-2013		0.26	0.35	0.11	0.13					
30-Apr-2013		0.32	0.62	0.61	0.25					
1-May-2013		Public Holiday								
2-May-2013		0.15	0.23	0.25	0.15					
3-May-2013		0.52	0.52	0.28	0.13					
4-May-2013		0.13	0.26	0.38	0.13					
Remarks										

Prepared by : Lo wing yue (Surveyor)

( Block 14 )

**WW** 恆誠建築工程有限公司  
Win Win Way Construction Company Ltd.

Monitoring Check Pts.	Trigger Levels		
	Alert level	Alarm level	Action level
Vibrating Monitoring	2mm/s	2.5mm/s	3mm/s

### Vibration Record

Project Title: Central Police Station Conservation & Revitalization      Project No: WP201      5-May-2013      to      18-May-2013

POINT		VM14-1	VM14-2	VM14-3	VM14-4				
DATE	PD(m)	mm/s	mm/s	mm/s	mm/s				
19-Nov-12 (Initial)		0.103	0.112	0.147	0.136				
5-May-2013		Sunday							
6-May-2013		0.66	0.15	0.36	0.52				
7-May-2013		0.15	0.34	0.29	0.13				
8-May-2013		0.62	0.12	0.61	0.11				
9-May-2013		0.19	0.62	0.18	0.56				
10-May-2013		0.33	0.85	0.16	0.66				
11-May-2013		0.16	0.47	0.26	0.16				
12-May-2013		Sunday							
13-May-2013		0.22	0.28	0.31	0.19				
14-May-2013		0.31	0.33	0.69	0.28				
15-May-2013		1.31	0.23	0.25	0.29				
16-May-2013		0.36	0.33	0.58	0.29				
17-May-2013		Public Holiday							
18-May-2013		1.81	0.24	0.45	0.19				
Remarks									

Prepared by : Lo wing yue (Surveyor)

( Block 14 )

**WW** 恆誠建築工程有限公司  
 Win Win Way Construction Company Ltd.

Monitoring Check Pts.	Trigger Levels		
	Alert level	Alarm level	Action level
Vibrating Monitoring	2mm/s	2.5mm/s	3mm/s

### Vibration Record

Project Title: Central Police Station Conservation & Revitalization      Project No: WP201      19-May-2013      to      1-Jun-2013

POINT		VM14-1	VM14-2	VM14-3	VM14-4				
DATE	PD/(m)	mm/s	mm/s	mm/s	mm/s				
19-Nov-12 (Initial)		0.103	0.112	0.147	0.136				
19-May-2013		Sunday							
20-May-2013		0.60	0.13	0.34	0.29				
21-May-2013		0.36	0.95	0.95	0.54				
22-May-2013		0.62	0.26	0.62	0.13				
23-May-2013		0.13	0.22	0.85	0.11				
24-May-2013		0.65	0.19	0.86	0.26				
25-May-2013		0.33	0.23	0.71	0.15				
26-May-2013		Sunday							
27-May-2013		0.21	0.26	0.45	0.15				
28-May-2013		0.32	0.22	0.46	0.16				
29-May-2013		0.52	0.33	0.35	0.52				
30-May-2013		0.36	0.21	0.51	0.13				
31-May-2013		0.22	0.33	0.33	0.19				
1-Jun-2013		0.62	0.12	0.16	0.52				
Remarks									

  
 Prepared by : Lo wing yue (Surveyor)



( Block 14 Structural A&A )


**WW** 恆誠建築工程有限公司  
Win Win Way Construction Company Ltd.

Monitoring Check Pts.	Trigger Levels		
	Alert level	Alarm level	Action level
Vibrating Monitoring	2mm/s	2.5mm/s	3mm/s

### Vibration Record

Project Title: Central Police Station Conservation & Revitalization      Project No: WP201      2-Jun-2013      to      15-Jun-2013

POINT		VM14-1	VM14-2	VM14-3	VM14-4				
DATE	PD/(m)	mm/s	mm/s	mm/s	mm/s				
19-Nov-12 (Initial)		0.103	0.112	0.147	0.136				
2-Jun-2013		Sunday							
3-Jun-2013		0.56	0.81	0.23	0.55				
4-Jun-2013		0.21	0.33	0.45	0.26				
5-Jun-2013		0.31	0.62	0.22	0.11				
6-Jun-2013		0.30	0.36	0.82	0.18				
7-Jun-2013		0.68	0.23	0.82	0.13				
8-Jun-2013		0.33	0.23	0.18	0.15				
9-Jun-2013		Sunday							
10-Jun-2013		0.39	0.23	0.55	0.16				
11-Jun-2013		0.65	0.22	0.11	0.15				
12-Jun-2013		Public Holiday							
13-Jun-2013		0.33	0.33	0.58	0.12				
14-Jun-2013		0.61	0.22	0.55	0.13				
15-Jun-2013		0.32	0.31	0.56	0.25				
Remarks									

  
Prepared by : Lo wing yue (Surveyor)

( Block 14 Structural A&A )

**WW** 恆誠建築工程有限公司  
Win Win Way Construction Company Ltd.

Monitoring Check Pts.	Trigger Levels		
	Alert level	Alarm level	Action level
Vibrating Monitoring	2mm/s	2.5mm/s	3mm/s

### Vibration Record

Project Title: Central Police Station Conservation & Revitalization      Project No: WP201      16-Jun-2013      to      29-Jun-2013

POINT		VM14-1	VM14-2	VM14-3	VM14-4				
DATE	PD(m)	mm/s	mm/s	mm/s	mm/s				
19-Nov-12 (Initial)		0.103	0.112	0.147	0.136				
<b>16-Jun-2013</b>		<b>Sunday</b>							
17-Jun-2013		0.33	0.22	0.66	0.19				
18-Jun-2013		0.22	0.56	0.78	0.11				
19-Jun-2013		0.53	0.33	0.71	0.25				
20-Jun-2013		0.36	0.22	0.75	0.31				
21-Jun-2013		0.62	0.33	0.85	0.15				
22-Jun-2013		0.75	0.36	0.58	0.25				
<b>23-Jun-2013</b>		<b>Sunday</b>							
24-Jun-2013		0.32	0.21	0.15	0.13				
25-Jun-2013		0.11	0.21	0.69	0.12				
26-Jun-2013		0.33	0.59	0.60	0.56				
27-Jun-2013		0.34	0.28	0.95	1.53				
28-Jun-2013		0.40	0.22	0.21	0.22				
29-Jun-2013		0.41	0.23	0.41	0.19				
Remarks									

Prepared by :  Lo wing yue (Surveyor)

( Block 14 Structural A&A )

**WW** 恆誠建築工程有限公司

Win Win Way Construction Company Ltd.

Monitoring Check Pts.	Trigger Levels		
	Alert level	Alarm level	Stop level
Vibrating Monitoring	2mm/s	2.5mm/s	3mm/s

### Vibration Record

Project Title: Central Police Station Conservation & Revitalization      Project No: WP201      30-Jun-2013      to      13-Jul-2013

POINT		VM14-1	VM14-2	VM14-3	VM14-4					
DATE	PD/(m)	mm/s	mm/s	mm/s	mm/s					
19-Nov-12 (Initial)		0.103	0.112	0.147	0.136					
30-Jun-2013		Sunday								
1-Jul-2013		Public Holiday								
2-Jul-2013		0.35	0.29	0.32	0.77					
3-Jul-2013		0.55	0.23	0.24	0.54					
4-Jul-2013		0.48	0.49	0.47	0.18					
5-Jul-2013		0.78	0.72	0.17	0.63					
6-Jul-2013		0.39	0.51	0.40	0.29					
7-Jul-2013		Sunday								
8-Jul-2013		0.47	0.43	0.85	0.93					
9-Jul-2013		0.80	0.28	0.20	0.20					
10-Jul-2013		0.13	0.33	0.19	0.27					
11-Jul-2013		0.52	0.15	0.21	0.99					
12-Jul-2013		0.15	0.20	0.16	0.21					
13-Jul-2013		0.41	0.19	0.79	0.17					
Remarks										

Prepared by : Lo wing yue (Surveyor)

( Block 14 Structural A&A )



恆誠建築工程有限公司

Win Win Way Construction Company Ltd.

Monitoring Check Pts.	Trigger Levels		
	Alert level	Alarm level	Action level
Vibrating Monitoring	2mm/s	2.5mm/s	3mm/s

### Vibration Record

Project Title: Central Police Station Conservation & Revitalization      Project No: WP201      14-Jul-2013      to      27-Jul-2013

POINT		VM14-1	VM14-2	VM14-3	VM14-4					
DATE	PD/(m)	mm/s	mm/s	mm/s	mm/s					
19-Nov-12 (Initial)		0.103	0.112	0.147	0.136					
14-Jul-2013		Sunday								
15-Jul-2013		0.13	0.20	0.18	0.84					
16-Jul-2013		0.20	0.15	0.37	0.14					
17-Jul-2013		0.21	0.30	0.71	0.21					
18-Jul-2013		0.51	0.17	0.21	0.69					
19-Jul-2013		0.26	0.61	0.54	0.61					
20-Jul-2013		0.40	0.57	0.61	0.77					
21-Jul-2013		Sunday								
22-Jul-2013		0.74	0.19	0.16	0.53					
23-Jul-2013		0.74	0.55	0.61	0.69					
24-Jul-2013		0.23	0.16	0.19	0.51					
25-Jul-2013		0.18	0.24	0.30	0.77					
26-Jul-2013		0.35	0.32	0.33	0.42					
27-Jul-2013		0.77	0.23	0.16	0.40					
Remarks										

Prepared by : Lo wing yue (Surveyor)

( Block 14 Structural A&A )



恆誠建築工程有限公司

Win Win Way Construction Company Ltd.

Monitoring Check Pts.	Trigger Levels		
	Alert level	Alarm level	Action level
Vibrating Monitoring	2mm/s	2.5mm/s	3mm/s

### Vibration Record

Project Title: Central Police Station Conservation & Revitalization      Project No: WP201      28-Jul-2013      to      10-Aug-2013

POINT		VM14-1	VM14-2	VM14-3	VM14-4					
DATE	PD/(m)	mm/s	mm/s	mm/s	mm/s					
19-Nov-12 (Initial)		0.103	0.112	0.147	0.136					
28-Jul-2013		Sunday								
29-Jul-2013		0.64	0.66	0.66	0.14					
30-Jul-2013		0.29	0.78	0.78	1.04					
31-Jul-2013		0.16	0.17	0.17	0.71					
1-Aug-2013		0.49	0.28	0.28	0.17					
2-Aug-2013		0.39	0.17	0.17	0.14					
3-Aug-2013		0.37	0.51	0.69	0.16					
4-Aug-2013		Sunday								
5-Aug-2013		0.30	0.16	0.40	0.53					
6-Aug-2013		0.51	0.27	0.19	0.18					
7-Aug-2013		0.15	0.19	0.64	0.26					
8-Aug-2013		0.30	0.46	0.16	0.21					
9-Aug-2013		0.23	0.18	0.23	0.44					
10-Aug-2013										
Remarks										

Prepared by : Lo wing yue (Surveyor)









Monitoring Check Pts.	Trigger Levels		
	Alert level	Alarm level	Action level
Vibration Monitoring	2mm/s	2.5mm/s	3mm/s
# Vibration at largest span of highest Structural level	5.0mm/s	6.0mm/s	7.5mm/s

### Vibration Record

Project Title: Central Police Station Conservation & Revitalization      Project No: WP202 (Block 1 A&A 18-Apr-2013      to      1-May-2013)

POINT	#VM1-1*	#VM1-2*							
DATE	mm/s	mm/s							
11-12-12 (Initial)	0.132	0.698							
18-Apr-13	0.098	0.111							
19-Apr-13	0.166	0.761							
20-Apr-13	1.430	0.160							
21-Apr-13	Sunday								
22-Apr-13	0.241	0.255							
23-Apr-13	0.246	0.327							
24-Apr-13	0.307	0.251							
25-Apr-13	0.150	0.258							
26-Apr-13	0.184	0.317							
27-Apr-13	0.183	0.232							
28-Apr-13	Sunday								
29-Apr-13	1.310	0.420							
30-Apr-13	0.264	0.112							
01-May-13	Holiday								

Remarks: \* same as WP107

# Vibration at largest span of highest structural level

Prepared by : Wong Wing Yee



Monitoring Check Pts.	Trigger Levels		
	Alert level	Alarm level	Action level
Vibration Monitoring	2mm/s	2.5mm/s	3mm/s
# Vibration at largest span of highest Structural level	5.0mm/s	6.0mm/s	7.5mm/s

### Vibration Record

Project Title: Central Police Station Conservation & Revitalization      Project No: WP202 (Block 1 A&A 2-May-2013 to 15-May-2013)

POINT	#VM1-1*	#VM1-2*							
DATE	mm/s	mm/s							
11-12-12 (Initial)	0.132	0.698							
02-May-13	0.160	0.206							
03-May-13	0.609	0.103							
04-May-13	0.131	0.246							
05-May-13	Sunday								
06-May-13	0.268	0.200							
07-May-13	0.128	0.156							
08-May-13	0.187	0.212							
09-May-13	1.210	0.295							
10-May-13	0.236	0.246							
11-May-13	0.133	0.300							
12-May-13	Sunday								
13-May-13	0.256	1.450							
14-May-13	0.241	1.160							
15-May-13	0.189	0.817							

Remarks: \* same as WP107

# Vibration at largest span of highest structural level

Prepared by : Wong Wing Yee



Monitoring Check Pts.	Trigger Levels		
	Alert level	Alarm level	Action level
Vibration Monitoring	2mm/s	2.5mm/s	3mm/s
# Vibration at largest span of highest Structural level	5.0mm/s	6.0mm/s	7.5mm/s

## Vibration Record

Project Title: Central Police Station Conservation & Revitalization      Project No: WP202 (Block 1 A&A 16-May-2013      to      #####

POINT	#VM1-1*	#VM1-2*							
DATE	mm/s	mm/s							
11-12-12 (Initial)	<b>0.132</b>	<b>0.698</b>							
16-May-13	<b>0.209</b>	<b>0.247</b>							
17-May-13	Holiday								
18-May-13	<b>0.202</b>	<b>0.571</b>							
19-May-13	Sunday								
20-May-13	<b>0.133</b>	<b>0.454</b>							
21-May-13	<b>0.529</b>	<b>0.372</b>							
22-May-13	<b>0.087</b>	<b>0.097</b>							
23-May-13	<b>0.178</b>	<b>0.373</b>							
24-May-13	<b>0.165</b>	<b>0.293</b>							
25-May-13	<b>0.371</b>	<b>0.447</b>							
26-May-13	Sunday								
27-May-13	<b>0.227</b>	<b>0.197</b>							
28-May-13	<b>0.618</b>	<b>0.171</b>							
29-May-13	<b>0.113</b>	<b>0.211</b>							

Remarks: \* same as WP107  
# Vibration at largest span of highest structural level

Prepared by : Wong Wing Yee



Monitoring Check Pts.	Trigger Levels		
	Alert level	Alarm level	Action level
Vibration Monitoring	2mm/s	2.5mm/s	3mm/s
# Vibration at largest span of highest Structural level	5.0mm/s	6.0mm/s	7.5mm/s

## Vibration Record

Project Title: Central Police Station Conservation & Revitalization      Project No: WP202 (Block 1 A&A 30-May-2013 to 12-Jun-2013)

POINT	#VM1-1*	#VM1-2*							
DATE	mm/s	mm/s							
11-12-12 (Initial)	0.132	0.698							
30-May-13	0.163	1.400							
31-May-13	0.175	0.218							
1-Jun-13	0.139	0.207							
2-Jun-13	Sunday								
3-Jun-13	0.151	0.341							
4-Jun-13	0.147	0.448							
5-Jun-13	0.102	0.093							
6-Jun-13	0.720	0.434							
7-Jun-13	0.291	0.458							
8-Jun-13	0.187	0.323							
9-Jun-13	Sunday								
10-Jun-13	0.206	0.216							
11-Jun-13	0.211	0.144							
12-Jun-13	Holiday								

Remarks: \* same as WP107  
# Vibration at largest span of highest structural level

Prepared by : Wong Wing Yee *WY*



Monitoring Check Pts.	Trigger Levels		
	Alert level	Alarm level	Action level
Vibration Monitoring	2mm/s	2.5mm/s	3mm/s
# Vibration at largest span of highest Structural level	5.0mm/s	6.0mm/s	7.5mm/s

## Vibration Record

Project Title: Central Police Station Conservation & Revitalization      Project No: WP202 (Block 1 A&A 13-Jun-2013 to 26-Jun-2013)

POINT	#VM1-1*	#VM1-2*							
DATE	mm/s	mm/s							
11-12-12 (Initial)	<b>0.132</b>	<b>0.698</b>							
13-Jun-13	<b>0.125</b>	<b>0.487</b>							
14-Jun-13	<b>0.842</b>	<b>0.192</b>							
15-Jun-13	<b>0.966</b>	<b>0.139</b>							
16-Jun-13	Sunday								
17-Jun-13	<b>1.540</b>	<b>0.451</b>							
18-Jun-13	<b>0.883</b>	<b>0.209</b>							
19-Jun-13	<b>0.223</b>	<b>0.214</b>							
20-Jun-13	<b>0.194</b>	<b>0.162</b>							
21-Jun-13	<b>0.122</b>	<b>0.384</b>							
22-Jun-13	<b>0.203</b>	<b>0.143</b>							
23-Jun-13	Sunday								
24-Jun-13	<b>0.363</b>	<b>0.131</b>							
25-Jun-13	<b>0.470</b>	<b>0.160</b>							
26-Jun-13	<b>0.151</b>	<b>0.146</b>							

Remarks: \* same as WP107

# Vibration at largest span of highest structural level

Prepared by : Wong Wing Yee



Monitoring Check Pts.	Trigger Levels		
	Alert level	Alarm level	Action level
Vibration Monitoring	2mm/s	2.5mm/s	3mm/s
# Vibration at largest span of highest Structural level	5.0mm/s	6.0mm/s	7.5mm/s

### Vibration Record

Project Title: Central Police Station Conservation & Revitalization      Project No: WP202 (Block 1 A&F) 27-Jun-2013      to      10-Jul-2013

POINT	#VM1-1*	#VM1-2*							
DATE	mm/s	mm/s							
11-12-12 (Initial)	<b>0.132</b>	<b>0.698</b>							
27-Jun-13	<b>0.182</b>	<b>0.147</b>							
28-Jun-13	<b>0.156</b>	<b>0.561</b>							
29-Jun-13	<b>0.103</b>	<b>0.199</b>							
30-Jun-13	Sunday								
01-Jul-13	Holiday								
02-Jul-13	<b>0.150</b>	<b>0.175</b>							
03-Jul-13	<b>0.398</b>	<b>0.163</b>							
04-Jul-13	<b>0.228</b>	<b>0.450</b>							
05-Jul-13	<b>0.132</b>	<b>0.139</b>							
06-Jul-13	<b>0.183</b>	<b>0.185</b>							
07-Jul-13	Sunday								
08-Jul-13	<b>0.128</b>	<b>1.050</b>							
09-Jul-13	<b>0.132</b>	<b>0.497</b>							
10-Jul-13	<b>0.137</b>	<b>0.154</b>							

Remarks: \* same as WP107

# Vibration at largest span of highest structural level

Prepared by : Wong Wing Yee

Endorsed by : Shui Wing





Monitoring Check Pts.	Trigger Levels		
	Alert level	Alarm level	Action level
Vibration Monitoring	2mm/s	2.5mm/s	3mm/s
# Vibration at largest span of highest Structural level	5.0mm/s	6.0mm/s	7.5mm/s

### Vibration Record

Project Title: Central Police Station Conservation & Revitalization      Project No: WP202 (Block 1 A&F)      11-Jul-2013      to      24-Jul-2013

POINT	#VM1-1*	#VM1-2*							
DATE	mm/s	mm/s							
11-12-12 (Initial)	<b>0.132</b>	<b>0.698</b>							
11-Jul-13	<b>0.199</b>	<b>0.191</b>							
12-Jul-13	<b>0.178</b>	<b>0.172</b>							
13-Jul-13	<b>0.318</b>	<b>0.225</b>							
14-Jul-13	Sunday								
15-Jul-13	<b>0.333</b>	<b>0.194</b>							
16-Jul-13	<b>0.238</b>	<b>0.145</b>							
17-Jul-13	<b>0.974</b>	<b>0.158</b>							
18-Jul-13	<b>0.268</b>	<b>0.216</b>							
19-Jul-13	<b>0.837</b>	<b>0.125</b>							
20-Jul-13	<b>0.102</b>	<b>0.272</b>							
21-Jul-13	Sunday								
22-Jul-13	<b>0.259</b>	<b>0.144</b>							
23-Jul-13	<b>0.194</b>	<b>0.345</b>							
24-Jul-13	<b>0.315</b>	<b>0.147</b>							

Remarks: \* same as WP107

# Vibration at largest span of highest structural level

Prepared by : Wong Wing Yee

Endorsed by : Shui Wing



Monitoring Check Pts.	Trigger Levels		
	Alert level	Alarm level	Action level
Vibration Monitoring	2mm/s	2.5mm/s	3mm/s
# Vibration at largest span of highest Structural level	5.0mm/s	6.0mm/s	7.5mm/s

### Vibration Record

Project Title: Central Police Station Conservation & Revitalization      Project No: WP202 (Block 1 A&F) 25-Jul-2013      to      31-Jul-2013

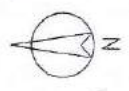
POINT	#VM1-1*	#VM1-2*							
DATE	mm/s	mm/s							
11-12-12 (Initial)	<b>0.132</b>	<b>0.698</b>							
25-Jul-13	<b>0.370</b>	<b>0.354</b>							
26-Jul-13	<b>0.108</b>	<b>0.287</b>							
27-Jul-13	<b>0.552</b>	<b>0.170</b>							
28-Jul-13	Sunday								
29-Jul-13	<b>0.209</b>	<b>0.146</b>							
30-Jul-13	<b>0.111</b>	<b>0.384</b>							
31-Jul-13	<b>0.402</b>	<b>0.221</b>							

Remarks: \* same as WP107  
# Vibration at largest span of highest structural level

Prepared by : Wong Wing Yee      Endorsed by : Shui Wing



# Structural Additions and Alterations at Block 11



This plan has been prepared on a computer using AutoCAD software. It is intended for use as a reference only and should not be used for any other purpose without the written consent of the Engineer. The Engineer is not responsible for any errors or omissions in this plan.

No.	Description	Date	Approved
-	BD SUBMISSION (50)	12/11	JS
A	BD SUBMISSION (01)	03/12	JS
B	BD SUBMISSION (17)	03/12	JS
C	BD SUBMISSION RW BATCH 1	03/12	JS
D	FOR INFORMATION (50)	03/12	JS
E	BD SUBMISSION (51)	05/12	JS
F	BD SUBMISSION (04)	05/12	JS
G	BD SUBMISSION (03)	05/12	JS
H	BD SUBMISSION (14)	25/12	JS
I	BD SUBMISSION RW BATCH 2	28/12	JS
J	BD SUBMISSION (06&07)	07/12	JS
L	BD SUBMISSION (01/10/07/12)	JS	
M	BD SUBMISSION (11)	07/12	JS

Plan Approved  
**CHONG Kam-yung Jacky**  
 Chief Structural Engineer  
 for BUILDING AUTHORITY  
 - 3 OCT 2012



## BD SUBMISSION

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Client 業主  

 The Urban Club (HK) Limited

Design Consultant  
**HERZOG & DEMEUREN**

Conservation Architect

Executive Architect / AP  
**ROCCO YIP**

Structural Engineer / RSE  
**ARUP** E & M Engineer

Project 項目  
**CENTRAL POLICE STATION  
 CONSERVATION AND REVITALISATION  
 PROJECT**

Drawing Title 圖名  
**MONITORING LAYOUT PLAN**

Scale 比例  
 1:3000(A1)  
 Drawing No. 圖號  
 00-OAP209674-G-001  
 Checked 校核  
 AL  
 Revised 修訂  
 M

LEGEND	
	EXISTING FRESH WATER MAIN
	EXISTING SALT WATER MAIN
	EXISTING STREET LIGHTING NO. 33488-A1
	EXISTING STREET LIGHTING CABLE
	EXISTING GAS MAIN
	EXISTING HV ELECTRICITY CABLE
	EXISTING LV ELECTRICITY CABLE
	EXISTING TELECOMMUNICATION DUCT (HUTCHINSON GLOBAL COMMUNICATIONS LIMITED)
	EXISTING STORMWATER DRAIN
	EXISTING FOUL SEWER
	PROPOSED FOUL SEWER
	SITE BOUNDARY
	EXISTING RETAINING WALL
	EXISTING DRILLHOLE WITH STANDPIPE/PIEZOMETER
	PROPOSED BUILDING SETTLEMENT POINTS/TILTMETER
	PROPOSED RETAINING WALL SETTLEMENT POINTS/TILTMETER
	PROPOSED INCLINOMETER TO BE BUILT IN BORED PILE WALL OR PIPE PILE WALL
	PROPOSED GROUND SETTLEMENT POINTS
	PROPOSED UTILITY MONITORING POINTS
	PROPOSED VIBRATION MONITORING POINTS
	PROPOSED ADDITIONAL DRILLHOLE





Monitoring Check Pts.	Trigger Levels		
	Alert level	Alarm level	Action level
Vibration Monitoring	2mm/s	2.5mm/s	3mm/s
Vibration at largest span of highest Structural level	5.0mm/s	6.0mm/s	7.5mm/s

### Vibration Record

Project Title: Central Police Station Conservation & Revit Project No: WP202 (Blk 11 A&A) 19-May-2013 to 1-Jun-2013

POINT		VM11-1*	VM11-2*						
DATE	PD/(m)	mm/s	mm/s	mm/s	mm/s	mm/s			
23-Apr-2012	(Initial)	0.130	0.190						
19-May-13							Sunday		
20-May-13		0.13	0.55						
21-May-13		0.25	0.33						
22-May-13		0.13	0.55						
23-May-13		0.22	0.29						
24-May-13		0.28	0.45						
25-May-13		0.55	0.11						
26-May-13							Sunday		
27-May-13		0.23	0.15						
28-May-13		0.56	0.74						
29-May-13		0.29	0.99						
30-May-13		0.15	0.18						
31-May-13		0.11	0.26						
1-Jun-13		0.15	0.42						

Remarks: \* These points intercept with WP201 Block 50

Prepared by : Wong Wing Yee *WYY*



Monitoring Check Pts.	Trigger Levels		
	Alert level	Alarm level	Action level
Vibration Monitoring	2mm/s	2.5mm/s	3mm/s
Vibration at largest span of highest Structural level	5.0mm/s	6.0mm/s	7.5mm/s

### Vibration Record

Project Title: Central Police Station Conservation & Revit    Project No: WP202 (Blk 11 A&A)    2-Jun-2013    to    15-Jun-2013

POINT		VM11-1*	VM11-2*						
DATE	PD/(m)	mm/s	mm/s	mm/s	mm/s	mm/s			
23-Apr-2012	(Initial)	0.130	0.190						
2-Jun-13		Sunday							
3-Jun-13		0.23	0.11						
4-Jun-13		0.13	0.53						
5-Jun-13		0.12	0.16						
6-Jun-13		0.23	0.15						
7-Jun-13		0.15	0.46						
8-Jun-13		0.15	0.44						
9-Jun-13		Sunday							
10-Jun-13		0.11	0.14						
11-Jun-13		0.13	0.23						
12-Jun-13		Public Holiday							
13-Jun-13		0.63	0.52						
14-Jun-13		0.44	0.62						
15-Jun-13		0.15	0.18						

Remarks: \* These points intercept with WP201 Block 50

Prepared by : Wong Wing Yee *WYY*



Monitoring Check Pts.	Trigger Levels		
	Alert level	Alarm level	Action level
Vibration Monitoring	2mm/s	2.5mm/s	3mm/s
Vibration at largest span of highest Structural level	5.0mm/s	6.0mm/s	7.5mm/s

### Vibration Record

Project Title: Central Police Station Conservation & Revit    Project No: WP202 (Blk 11 A&A)    16-Jun-2013    to    29-Jun-2013

POINT		VM11-1*	VM11-2*						
DATE	PD/(m)	mm/s	mm/s	mm/s	mm/s	mm/s			
23-Apr-2012	(Initial)	<b>0.130</b>	<b>0.190</b>						
16-Jun-13		Sunday							
17-Jun-13		<b>0.12</b>	<b>0.15</b>						
18-Jun-13		<b>0.65</b>	<b>0.32</b>						
19-Jun-13		<b>0.65</b>	<b>0.15</b>						
20-Jun-13		<b>0.18</b>	<b>0.83</b>						
21-Jun-13		<b>0.18</b>	<b>0.23</b>						
22-Jun-13		<b>0.98</b>	<b>0.32</b>						
23-Jun-13		Sunday							
24-Jun-13		<b>0.25</b>	<b>0.26</b>						
25-Jun-13		<b>0.25</b>	<b>0.41</b>						
26-Jun-13		<b>0.42</b>	<b>0.56</b>						
27-Jun-13		<b>0.65</b>	<b>0.37</b>						
28-Jun-13		<b>0.20</b>	<b>0.63</b>						
29-Jun-13		<b>0.22</b>	<b>0.31</b>						

Remarks: \* These points intercept with WP201 Block 50

Prepared by : Wong Wing Yee





Monitoring Check Pts.	Trigger Levels		
	Alert level	Alarm level	Action level
Vibration Monitoring	2mm/s	2.5mm/s	3mm/s
Vibration at largest span of highest Structural level	5.0mm/s	6.0mm/s	7.5mm/s

### Vibration Record

Project Title: Central Police Station Conservation & Revit    Project No: WP202 (Blk 11 A&A)    30-Jun-2013    to    13-Jul-2013

POINT	VM11-1*	VM11-2*							
DATE	PD/(m)	mm/s	mm/s	mm/s	mm/s	mm/s			
23-Apr-2012 (Initial)		0.130	0.190						
30-Jun-13							Sunday		
01-Jul-13							Holiday		
02-Jul-13		0.16	0.18						
03-Jul-13		0.16	0.57						
04-Jul-13		0.21	0.51						
05-Jul-13		0.42	0.16						
06-Jul-13		0.31	0.22						
07-Jul-13							Sunday		
08-Jul-13		0.31	0.20						
09-Jul-13		0.38	0.39						
10-Jul-13		0.29	0.21						
11-Jul-13		0.45	0.23						
12-Jul-13		0.84	0.25						
13-Jul-13		0.50	0.68						

Remarks: \* These points intercept with WP201 Block 50

Prepared by : Wong Wing Yee *WY*

Acknowledged by : Shiu Wing *SW*



Monitoring Check Pts.	Trigger Levels		
	Alert level	Alarm level	Action level
Vibration Monitoring	2mm/s	2.5mm/s	3mm/s
Vibration at largest span of highest Structural level	5.0mm/s	6.0mm/s	7.5mm/s

### Vibration Record

Project Title: Central Police Station Conservation & Revi    Project No: WP202 (Blk 11 A&A)    14-Jul-2013    to    27-Jul-2013

POINT		VM11-1*	VM11-2*						
DATE	PD/(m)	mm/s	mm/s	mm/s	mm/s	mm/s			
23-Apr-2012 (Initial)		<b>0.13</b>	<b>0.19</b>						
14-Jul-13				Sunday					
15-Jul-13		<b>0.16</b>	<b>0.65</b>						
16-Jul-13		<b>0.45</b>	<b>0.73</b>						
17-Jul-13		<b>0.45</b>	<b>0.54</b>						
18-Jul-13		<b>0.36</b>	<b>0.44</b>						
19-Jul-13		<b>0.86</b>	<b>0.54</b>						
20-Jul-13		<b>0.50</b>	<b>0.72</b>						
21-Jul-13				Sunday					
22-Jul-13		<b>0.51</b>	<b>0.61</b>						
23-Jul-13		<b>0.17</b>	<b>0.16</b>						
24-Jul-13		<b>0.15</b>	<b>0.58</b>						
25-Jul-13		<b>0.80</b>	<b>0.20</b>						
26-Jul-13		<b>0.72</b>	<b>0.69</b>						
27-Jul-13		<b>0.41</b>	<b>0.61</b>						

Remarks: \* These points intercept with WP201 Block 50

Prepared by : Wong Wing Yee

Endorsed by : Shui Wing



Annex N

## A Summary of Current Condition of Character Defining Elements

## **Schedule of Character Defining Elements**

Central Police Station

CENTRAL POLICE STATION, HONG KONG

### **SCHEDULE OF CHARACTER DEFINING ELEMENTS**

This Schedule of Character Defining Elements has been prepared at the request of the Antiquities and Monuments Office (AMO) to support applications for S.6 approval under the Antiquities and Monuments Ordinance and the Environmental Impact assessment Ordinance. The levels of significance and their meanings are derived from the work of James Semple Kerr.

For each element, the level of significance is stated, together with the planned outcome and associated mitigation measure, where applicable, and the resultant impact upon the significance. Generally, only those items subject to change are noted, and the impacts should be read as negative . Where elements are deemed currently to be adverse, the impact of the changes should be read as positive.

The levels of significance and definitions as defined by Kerr are stated below. The criteria used to assess the significance of each element are, as directed by AMO : (i) the association with the operation of the Central Police Station Compound; and (ii) its architectural quality. Where these criteria conflict, the resultant assessment score is aggregated.

Each entry in the schedule is accompanied by a photograph of a sample of the item described. The location of each photograph is noted on the floor plans attached in the appendix to the schedule. Similar examples of each item can be seen by observation.

## Schedule of Character Defining Elements

## Central Police Station

	Level of significance	Meaning
<b>Positive</b>	<b>Exceptional</b>	Where an individual space or element is assessed as displaying a strong contribution to the overall significance of the place. Spaces, elements or fabric exhibit a high degree of intactness and quality, though minor alterations or degradation may be evident.
	<b>High</b>	Where an individual space or element is assessed as making a substantial contribution to the overall significance of the place. Spaces, elements or fabric originally of substantial quality, yet may have undergone considerable alteration or adaption resulting in presentation which is either incomplete or ambiguous. The category also includes spaces, elements or fabric of average quality in terms of design and materials, but which exhibit a high degree of intactness.
	<b>Moderate</b>	Where an individual space or element is assessed as making a moderate contribution to the overall significance of the place. Spaces, elements or fabric originally of some intrinsic quality, and may have undergone alteration or degradation. In addition, elements of relatively new construction, where the assessment of significance is difficult, may be included. This category also includes original spaces, elements or fabric of any quality which have undergone extensive alteration or adaption.
	<b>Low</b>	Where an individual space or element is assessed as making a minor contribution to the overall significance of the place, especially when compared to other features. Spaces, elements or fabric originally of little intrinsic quality, any may have undergone alteration or degradation. This category also includes original spaces, elements or fabric of any quality which have undergone extensive alteration or adaption to the extent that only isolated remnants survive (resulting in a low degree of intactness and quality of presentation).
	<b>Neutral</b>	Where an individual space or element is assessed as having an unimportant relationship with the overall significance of the place. Spaces, elements or fabric are assessed as having little or no significance.
	<b>Adverse</b>	Where an individual space or element detracts from the appreciation of cultural significance, by adversely affecting or obscuring other significant areas, elements or items.



**Schedule of Character Defining Elements**

Central Police Station

**Addendum**

**Date**

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Item no. 10.029 edited entry  
Item no. 10.030 added

18 June 2013  
18 June 2013

**Schedule of Character Defining Elements**



Central Police Station

**01 Police Headquarters**

Element no.	Description	Photo ref	Significance	Proposal	Mitigation	Impact
01.001	Flat plywood ceiling lining with plain rectangular cover battens		Adverse	Replace with T&G boarding to match existing	Not applicable	High
01.002	Plaster coving at abutments of walls and ceilings		Low	Remove in exceptional cases eg, where adjacent new lift shaft	Cut back neatly to a square edge and ensure remaining section is secure.	Low



**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref	Significance	Proposal	Mitigation	Impact
01.003	Lay-in grid suspended ceiling		Adverse	Remove	Not applicable	High
01.004	Timber thresholds at external doors and internal doors between main corridor and individual rooms		Low	Remove to enable level access	Splice extensions to door jambs, extend width of bottom rail of doors to match existing	Low



**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref	Significance	Proposal	Mitigation	Impact
01.005	Plaster box cornice		Moderate	Remove in exceptional cases eg. where adjacent new lift shafts	Cut back neatly to a square edge and ensure remaining section is secure.	Moderate
01.006	Panelled doors		Moderate	Replace where necessary to achieve fire resistance to comply with Code	Re-use where possible. Record design on survey drawings where element cannot be re-used.	Moderate



**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref	Significance	Proposal	Mitigation	Impact
01.007	External shutters		High	Reinstate to match existing pattern	Not applicable	High
01.008	External terraces at 1/F		High	Overlay existing concrete paving with timber deck to provide level access	New deck to be reversible	Low

**Schedule of Character Defining Elements**


Central Police Station

Element no.	Description	Photo ref	Significance	Proposal	Mitigation	Impact
01.009	Plaster ceilings on GF and LG1		Moderate	Install cloud ceilings to accommodate new services	Install fixed grid to minimise damage to ceiling	High
01.010	Timber door frames and architraves		Moderate	Conceal in exceptional cases eg. where adjacent new lift shaft	Retain architrave and door frame in situ. Avoid damage to joinery.	High




**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref	Significance	Proposal	Mitigation	Impact
01.011	Concrete floor		Low	Replace where new kitchens and plant rooms to be installed	Carefully remove and retain existing floorboards for re-use. Ensure controlled demolition of concrete structure and removal of debris from building to avoid damage to adjacent surfaces. Protect or carefully remove and set aside adjacent elements such as skirting boards	Low


**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref	Significance	Proposal	Mitigation	Impact
01.012	Rainwater goods		Adverse	Replace with cast iron in pattern to match original and in correct locations	Not applicable	High



**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref	Significance	Proposal	Mitigation	Impact
01.013	Exterior decorations		Adverse	Strip off and redecorate	Sample and analyse existing paint media; select new media to suit substrate and significance	High



**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref	Significance	Proposal	Mitigation	Impact
01.014	Existing door openings		Moderate	Block opening as part of re-planning of interior	Retain existing door frame and architraves. Use framing and non-combustible sheet linings to block opening.	Moderate
01.015	Existing walls		Moderate	Form new opening as part of re-planning of interiors	New doors and frames to be of their time to avoid confusion about provenance	Moderate



**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref	Significance	Proposal	Mitigation	Impact
01.016	Altered doors and windows		Adverse	Repair or renew as necessary existing frames to match original patterns	Not applicable	High
01.017	Mezzanine floor in room 01/LG1/13		Adverse	Remove floor and supporting columns to re-create original double-height space	Not applicable	High

**Schedule of Character Defining Elements**



Central Police Station

Element no.	Description	Photo ref	Significance	Proposal	Mitigation	Impact
01.018	Cast iron grilles above Service Corridor 01/LG1/35		High	Remove existing steel sheet covering [alterations to grilles awaiting confirmation from HdM]		
01.019	Perforated concrete deck above lightwell		Adverse	Remove deck and make good brickwork at abutments	Not applicable	High





**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref	Significance	Proposal	Mitigation	Impact
01.020	External airconditioning units and other external services		Adverse	Remove and make good brickwork	Not applicable	High
01.021	Stair balustrades		High	Balustrades to be supplemented with additional handrails and supports to mitigate non-compliance with code	New fittings to be of their time and made reversible. Physical intervention to existing stairs and balustrades to be kept to the minimum.	Moderate


**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref	Significance	Proposal	Mitigation	Impact
01.022	Main corridors		High	Install new lighting, fire sprinklers, fire doors to comply with Fire Services Code	New fittings to be mounted in a manner that is of its time and reversible. Avoid physical intervention with existing plaster box cornices, architraves, dado rails	High
01.023	Painted signs		High	Protect in situ	Not applicable	N/A


**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref	Significance	Proposal	Mitigation	Impact
01.024	Fixed signs		Low-High	Remove and refix/display in visitors' centre/discard	Record each sign and assess significance individually and treat accordingly	N/A

**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref	Significance	Proposal	Mitigation	Impact
01.025	Pitched roofs		High	New penetrations through roofs for ventilation ducts and other services	<p>Arrange new penetrations so that they conform with the geometry of the existing roof.</p> <p>Model the size and shape of the new ducts so that the impact on the roofscape is minimised.</p> <p>Finish the new ducts in a non-reflective material in a neutral mid-tone.</p>	High



**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref	Significance	Proposal	Mitigation	Impact
01.026	Enclosure at First Floor landing of main stair		Adverse	Remove	Not applicable	Moderate

**Schedule of Character Defining Elements**



Central Police Station

Element no.	Description	Photo ref	Significance	Proposal	Mitigation	Impact
01.027	Steel railing enclosure at FF level		Low	Remove	Record on measured drawings and photographs	Low
01.028	Tongued and grooved flat and sloped timber boarded ceilings		Moderate	Repair where necessary and reinstate where missing	Not applicable	Moderate




**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref	Significance	Proposal	Mitigation	Impact
01.029	Modern partitions		Adverse	Remove	Not applicable	High
01.030	Tiled dado		High	Cut away for enlargement of existing windows to form new doorways	Cut back to joint line and adjust tiling pattern to suit new opening. New tiles to match existing sizes and colours.	Moderate


**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref	Significance	Proposal	Mitigation	Impact
01.031	Reinforced concrete canopy and sash windows		Moderate	Remove canopy and replace sash windows with new windows to match original	Make good brickwork where canopy removed, Reinstate rendered architraves around new window to match similar window facing on West wing	Moderate


**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref	Significance	Proposal	Mitigation	Impact
01.032	Arched opening in brick wall above ceiling line		Low	Retain insitu and use to pass through future services. Infill only where opening is within a fire compartment	Use non-combustible material to block opening.	Low


## Schedule of Character Defining Elements

## Central Police Station

Element no.	Description	Photo ref	Significance	Proposal	Mitigation	Impact
01.033	Ceiling void service installation (Cast Iron Water Tank and pipework)		Low	Remove and make good adjacent surfaces	N/A	Low



**Schedule of Character Defining Elements**

**02 Armoury**

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
02.001	Lay-in grid suspended ceiling		Adverse	Remove	Not applicable	High
02.002	Modern internal doors		Adverse	Remove	Not applicable	High

**Schedule of Character Defining Elements**



Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
02.003	Modern partitions		Adverse	Remove	Not applicable	High
02.004	External airconditioning units and other external services		Adverse	Remove and make good brickwork	Not applicable	High




**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
02.005	Brickwork walls enclosing rooms at GF and FF East side		Low	Remove and reinstate verandah	Not applicable	High
02.006	Concrete floors		Low	Selected removal to accommodate new stairs and lift shaft	Carefully form openings to ensure structural stability	Low


**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
02.007	Rainwater goods		Adverse	Replace with cast iron in pattern to match original and in correct locations	No applicable	High


**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
02.008	Altered doors and windows		Adverse	Repair or renew as necessary existing frames to match original patterns	Not applicable	High



**Schedule of Character Defining Elements**

Central Police Station


Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
02.009	Concrete stairs		Adverse	Remove stairs	Not applicable	Moderate

**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
02.010	Pitched roofs		High	New penetrations through roofs for ventilation ducts and other services	Arrange new penetrations so that they conform with the geometry of the existing roof. Model the size and shape of the new ducts to reduce impact. Finish ducts in a non-reflective material that is neutral in colour and mid-tone.	High
02.011	Roof structure and tiled soffit		High	Repair and retain.	N/A	Neutral


**03 Barracks Block**

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
03.001	Lay-in grid suspended ceiling		Adverse	Remove	Not applicable	High





**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
3.002	Panelled doors		Moderate	Replace where necessary to achieve fire resistance to comply with Code	Re-use where possible. Record design on survey drawings where item cannot be re-used.	Moderate



**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
03.003	External shutters		High	Reinstate to match existing pattern	Not applicable	High
03.004	Timber thresholds at external doors and internal doors between main corridor and individual rooms		Low	Remove to enable level access	Splice extensions to door jambs, extend width of bottom rail of doors to match existing	Low


**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
03.005	Timber spandrel panels below windows		Low	Conceal in exceptional cases eg. where adjacent new lift shaft	Retain frame and spandrel panel where possible. Remove only where necessary in connection with re-planning of interiors. Record on measured survey drawings.	Low
03.006	Timber floors		High	Replace where new kitchens and plant rooms to be installed	Limit extent of removal as much as possible. Carefully remove and retain existing floorboards for re-use. Ensure controlled dismantling of timber structure and set aside for possible re-use. Protect or carefully remove and set aside adjacent elements such as skirting boards	Medium



**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
03.007	Rainwater goods		Adverse	Replace with cast iron in pattern to match original and in correct locations	No applicable	High


**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
03.008	Exterior decorations		Adverse	Strip off and redecorate	Sample and analyse existing paint media; select new media to suit substrate and significance	High
03.009	Block existing door openings		Low	Block opening as part of re-planning of interior	Retain existing door frame and architraves. Use framing and non-combustible sheet linings to block opening.	Low

**Schedule of Character Defining Elements**


Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
03.010	Form new door openings		Low	Form new opening as part of re-planning of interiors	New doors and frames to be of their time to avoid confusion about provenance. Re-open original openings where possible. Retain original reveals and arches.	Low





**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
03.011	Altered doors and windows		Adverse	Repair or renew as necessary existing frames to match original patterns	Not applicable	High

**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
03.012	External airconditioning units and other external services		Adverse	Remove and make good brickwork	Not applicable	High
03.013	Stair balustrades		High	Balustrades to be supplemented with additional handrails and supports to mitigate non-compliance with code	New fittings to be of their time and made reversible. Physical intervention to existing stairs and balustrades to be kept to the minimum.	Moderate



**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
03.014	Painted signs		High	Protect in situ	Not applicable	N/A
03.015	Fixed signs		Low-High	Remove and refix/display in visitors' centre/discard	Record each sign and assess significance individually and treat accordingly	N/A



## Schedule of Character Defining Elements

## Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
03.016	Pitched roofs		High	New penetrations through roofs for ventilation ducts and other services	Arrange new penetrations so that they conform with the geometry of the existing roof. Model the size and shape of the new ducts so that the impact on the roofscape is minimised. Finish the new ducts in a non-reflective material that is neutral in colour and mid-tone.	High
03.017	Lean-to structure adjacent North wall		Moderate	Remove	Record on measured survey drawings. Make good walls where roof structure abuts	Moderate



**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
03.018	Metal-frames windows at GF North elevation		Adverse	Remove window frames, masonry spandrel panels below and reinstate verandah	Not applicable	High
03.019	Internal walls at Ground Floor level		Moderate	Remove selected internal walls where strictly necessary as part of re-planning of interiors	Walls of early or original date to be retained in part eg. by leaving a "nib" where the wall is bonded to another wall. At the point where the wall is cut away, form the cut-line on the line of a vertical joint in alternate courses. Bricks in the remaining courses to be left "as cut", and not re-bonded. Record walls on measured survey dwgs.	Moderate



## Schedule of Character Defining Elements

## Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
03.020	Assembly rooms at centre of building (all floors)		Moderate	Sub-divide two rooms on each floor to provide service core, comprising: lifts, toilets, plant rooms, stores	Form new sub-visions using lightweight partitions to achieve reversibility. Form straight joints at abutments with existing retained walls. Notch new partitions around existing brick corbels at high level as a reminder of current condition.	Moderate
03.021	Exposed soffits of timber floors		Moderate	Underline existing floors to achieve specified fire resistance stated in Code	Avoid unnecessary damage to existing structure. New lining will reduce extent of intervention into existing structure. Keep level of new linings well clear of window heads.	Moderate

**Schedule of Character Defining Elements**


Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
03.022	Existing window frames/openings		High	Open up selected openings to form new fire escape doors	Retain any salvageable material for possible re-use elsewhere. Retain existing window jambs intact. Cut away masonry to form door openings along same line as window jamb; do not re-bind cut brickwork. Record existing condition on measured survey drawings.	Low
03.023	Single storey outbuildings on south side		Adverse	Demolish	Check for evidence of early route from Magistracy to Prison.	Low




**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
03.024	Bridge at east end		Moderate	Retain	Not applicable	Neutral


**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
03.025	Chimneypiece on Ground Floor		Low	Repair and retain in current location	Not applicable	Neutral
03.026	Window in south wall; original dormitory space		Moderate	Remove window and take down brickwork spandrel; subdivide space to form new fire-protected escape route.	Record existing condition on measured survey drawings. New partition wall to be reversible.	Low



**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
03.027	Clay-tiled floor in store room adjacent stairs		Low	Remove as part of re-planning of interiors	Record on measured survey drawings	Low


**Schedule of Character Defining Elements**

**04 Dormitory Block A & B**

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
04.001	Lay-in grid suspended ceiling		Adverse	Remove	Not applicable	High
04.002	Timber thresholds at external doors and internal doors between main corridor and individual rooms		Low	Remove to enable level access	Splice extensions to door jambs, extend width of bottom rail of doors to match existing	Low


**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
04.003	Plaster box cornice		Moderate	Remove in exceptional cases where eg. where adjacent new lift shafts	Cut back neatly to a square edge and ensure remaining section is secure.	Moderate


**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
04.004	Rainwater goods		Adverse	Replace with cast iron in pattern to match original and in correct locations	No applicable	High

**Schedule of Character Defining Elements**


Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
04.005	Exterior decorations		Adverse	Strip off and redecorate	Sample and analyse existing paint media; select new media to suit substrate and significance	High




**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
04.006	Block existing door openings		Moderate	Block opening as part of re-planning of interior	Retain existing door frame and architraves. Use framing and non-combustible sheet linings to block opening.	Moderate


**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
04.007	Form new door openings		Moderate	Form new opening as part of re-planning of interiors	New doors and frames to be of their time to avoid confusion about provenance	Moderate

**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
04.008	Altered doors and windows		Adverse	Repair or renew as necessary existing frames to match original patterns	Not applicable	High


**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
04.009	Window frames in arcades of North and East elevations		Adverse	Remove window frames and make good masonry reveals and reinstate verandah	Not applicable	High

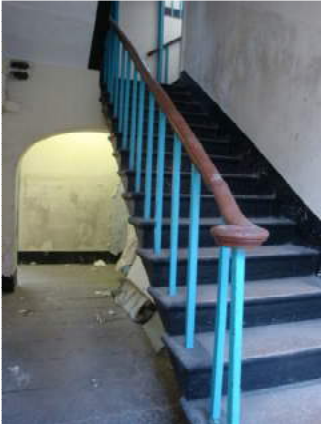
**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
04.010	External airconditioning units and other external services		Adverse	Remove and make good brickwork	Not applicable	High


**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
04.011	Stair balustrades		High	Balustrades to be supplemented with additional handrails and supports to mitigate non-compliance with code	New fittings to be of their time and made reversible. Physical intervention to existing stairs and balustrades to be kept to the minimum.	Moderate

**Schedule of Character Defining Elements**


Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
04.012	Stair from First to Second Floor		High	Replace stair to improve safety	New stair to be built of steel to comply with Code and to distinguish it as being "of its time".	Moderate





**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
04.013	External verandahs		High	Install new lighting, fire sprinklers, fire doors to comply with Fire Services Code, extract ducting to external walls	New fittings to be mounted in a manner that is of its time and reversible. Avoid physical intervention with existing plaster box cornices in rooms, architraves, dado rails. Position outlet grilles in external walls on centre-line of arcade arches and above structural arch	High


**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
04.014	Painted signs		High	Protect in situ	Not applicable	N/A
04.015	Fixed signs		Low-High	Remove and refix/display in visitors' centre/discard	Record each sign and assess significance individually and treat accordingly	N/A


**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
04.016	Pitched roofs		High	New penetrations through roofs for ventilation ducts and other services	<p>Arrange new penetrations so that they conform with the geometry of the existing roof.</p> <p>Model the size and shape of the new ducts so that the impact on the roofscape is minimised.</p> <p>Finish the new ducts in a non-reflective material that is neutral in colour.</p>	High


**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
04.017	Toilets at ends of verandahs		Adverse	Remove and make good finishes	Not applicable	High


**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
04.018	Partitions at GF Dormitory A		High	Remove to make way for Interpretation	Prepare measured drawings and photographs before removal.	Moderate


**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
04.019	Switchgear in old porch 04/G/13		Adverse	Open up porch, remove electrical switchgear and make good	Not applicable	High

**Schedule of Character Defining Elements**


Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
04.020	Flat plywood ceiling lining with plain rectangular cover battens		Adverse	Replace with T&G boarding to match existing	Not applicable	High



**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
04.021	Steps up to doorway on FF verandah		Moderate	Remove steps and doorway to form new fore escape route	Record steps and doorway on measured drawings	Moderate


**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
04.022	Timber boarded floors with moulded skirtings		High	Retain all boarded floors and skirtings	Reinstate floor boards and skirtings after fire proofing works	Low


**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
04.023	Cantilever balconies		High	<p>Retain and repair as necessary.</p> <p>Reinstate balcony on west elevation.</p>	<p>Avoid highly visible intervention to enhance structural integrity and/or compliance with building codes.</p> <p>Restrict access if necessary to achieve this objective.</p>	Low


**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
04.024	Clay tile floor		Low	Retain and repair as necessary	Not applicable	Neutral
04.025	Matched-boarded ceiling with perforated border		Moderate	Repair and retain insitu	Not applicable	Neutral

**Schedule of Character Defining Elements**



Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
04.026	Ceiling rose		Low	Repair and retain insitu	Not applicable	Neutral

**Schedule of Character Defining Elements**



Central Police Station

**06 Dormitory C**

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
06.001	Granite thresholds at external doors		Low	Retain; install timber deck flush with level of step where necessary	Avoid alteration to step.	Low
06.002	Pitched roof		High	New penetrations through roofs for ventilation ducts and other services	Arrange new penetrations so that they conform with the geometry of the existing roof. Model the size and shape of the new ducts so that the impact on the roofscape is minimised. Finish the new ducts in a non-reflective material that is neutral in colour and mid-tone.	High

**Schedule of Character Defining Elements**



Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
06.003	Rainwater goods		Adverse	Replace with cast iron in pattern to match original and in correct locations	Not applicable	High
06.004	Exterior decorations		Adverse	Strip off and redecorate	Sample and analyse existing paint media; select new media to suit substrate and significance	Moderate





**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
06.005	Altered doors and windows		Adverse	Adverse	Repair or renew as necessary existing frames to match original patterns	Not applicable
06.006	External airconditioning units and other external services		Adverse	Adverse	Remove and make good brickwork	Not applicable



**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
06.007	Painted signs		High	Protect in situ	Not applicable	N/A
06.008	Fixed signs		Low-High	Remove and refix/display in visitors' centre/discard	Record each sign and assess significance individually and treat accordingly	N/A



**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
06.009	Cantilever balconies		High	Retain and repair as necessary.	Avoid highly visible intervention to enhance structural integrity and/or compliance with building codes. Restrict access if necessary to achieve this objective.	Low
06.010	Iron balustrades		High	Retain and repair as necessary.	Avoid highly visible intervention to enhance structural integrity and/or compliance with building codes. Restrict access if necessary to achieve this objective.	Low


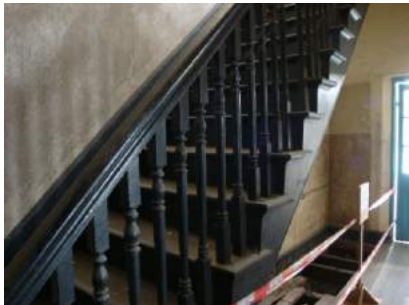
**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
06.011	Perforated margin at perimeter of ceiling		Low	Repair and retain.	Where fire-proofing of floor is required, use a product that can be installed within the floor void, leaving the ceiling lining intact.	Low
06.012	Block existing door openings		Moderate	Block opening as part of re-planning of interior	Retain existing door frame and architraves. Use framing and non-combustible sheet linings to block opening.	Moderate



**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
06.013	Form new door openings		Moderate	Form new opening as part of re-planning of interiors	New doors and frames to be of their time to avoid confusion about provenance	Moderate
06.014	Stair balustrades		High	Balustrades to be supplemented with additional handrails and supports to mitigate non-compliance with code	New fittings to be of their time and made reversible. Physical intervention to existing stairs and balustrades to be kept to the minimum.	Moderate



**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
06.015	Timber floors		High	Retain all boarded floors and skirtings	Reinstate floor boards and skirtings after fire proofing works	Low
06.016	Vinyl tile floor		Adverse	Remove tiles; renew boarded floor boards if necessary	Not applicable	Moderate

**Schedule of Character Defining Elements**

Central Police Station



Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
06.017	Batten and panel ceiling lining		Low	Replace with lath and plaster ceiling	Not applicable	Low
06.018	Exposed roof covering		Moderate	Retain as existing	Consider insulating between upper and lower layers of roof tiles to provide thermal insulation and vapour barrier	Low



**Schedule of Character Defining Elements**



Central Police Station

**07 Dormitory D**

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
07.001	Pitched roofs		High	New penetrations through roofs for ventilation ducts and other services	<p>Arrange new penetrations so that they conform with the geometry of the existing roof.</p> <p>Model the size and shape of the new ducts so that the impact on the roofscape is minimised.</p> <p>Finish the new ducts in a non-reflective material that is neutral in colour and mid-tone.</p>	High
07.002	Rainwater goods		Adverse	Replace with cast iron in pattern to match original and in correct locations	No applicable	High



**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
07.003	Exterior decorations		Adverse	Strip off and redecorate	Sample and analyse existing paint media; select new media to suit substrate and significance	High
07.004	Altered doors and windows		Adverse	Repair or renew as necessary existing frames to match original patterns	Not applicable	High



**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
07.005	External airconditioning units and other external services		Adverse	Remove and make good brickwork	Not applicable	High
07.006	Clothes drying racks		Adverse	Remove	Not applicable	Low



**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
07.008	Lay-in grid suspended ceiling		Adverse	Remove	Not applicable	High
07.009	Corbelled brickwork at perimeter of room		Low	Remove in exceptional cases where eg. where adjacent new lift shafts	Cut back neatly to a square edge and ensure remaining section is secure.	Low



**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
07.010	Plywood floor		Adverse	Replace with hardwood floor boards	Not applicable	High
07.011	Timber thresholds at external doors and internal doors between main corridor and individual rooms		Low	Remove to enable level access	Splice extensions to door jambs, extend width of bottom rail of doors to match existing	Low


**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
07.012	Form new door openings		Moderate	Form new opening as part of re-planning of interiors	New doors and frames to be of their time to avoid confusion about provenance	Moderate
07.013	Stair balustrades		High	Balustrades to be supplemented with additional handrails and supports to mitigate non-compliance with code	New fittings to be of their time and made reversible. Physical intervention to existing stairs and balustrades to be kept to the minimum.	Moderate

**Schedule of Character Defining Elements**



Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
07.014	Fixed signs		Low-High	Remove and refix/display in visitors' centre/discard	Record each sign and assess significance individually and treat accordingly	N/A



**Schedule of Character Defining Elements**



Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
07.015	Exposed roof tiling		Moderate	Retain as existing	Consider insulating between upper and lower layers of roof tiles to provide thermal insulation and vapour barrier	Low
07.016	Concrete floor		Adverse	Overlay with hardwood floor boards	Not applicable	Moderate

**Schedule of Character Defining Elements**



Central Police Station

**08 Ablutions Block**

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
08.001	Panelled doors		Low	Replace where necessary to achieve compliance with Building Code	Re-use where possible. Record design on survey drawings where element cannot be re-used.	Moderate
08.002	Rainwater goods		Adverse	Replace with cast iron in pattern to match original and in correct locations	No applicable	High



## Schedule of Character Defining Elements

## Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
08.003	Exterior decorations		Adverse	Strip off and redecorate	Sample and analyse existing paint media; select new media to suit substrate and significance	High
08.004	Block existing door openings		Moderate	Block opening as part of re-planning of interior	Retain existing door frame and architraves. Use framing and non-combustible sheet linings to block opening.	Moderate



**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
08.005	Timber roof structure		High	Retain	Not applicable	Neutral
08.006	External stair at west end		Moderate	Retain	Repair as necessary.  Alter balustrade to achieve reasonable level of operational safety.  Restrict access to repairs and maintenance and means of escape.	Low



**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
08.007	External airconditioning units and other external services		Adverse	Remove and make good brickwork	Not applicable	High
08.008	Painted signs		High	Protect in situ	Not applicable	N/A


**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
08.009	Wire mesh screens		Adverse	Remove	Not applicable	Low
08.010	Internal walls and concrete floors		Low	Remove and rebuild in new configuration to suit new use	Ensure retained facades are fully supported during construction operations. Protect retained walls against damage during demolition works. Install new walls and floors to respect fenestration; avoid	Low

**Schedule of Character Defining Elements**



Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
					clashes.	
08.011	Cantilever balconies on north side		Moderate	Repair and retain insitu	Not applicable	





**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
08.012	Bridge access to Barrack Block		Moderate	Retain	Repair as necessary.  Alter balustrade to achieve reasonable level of operational safety.  Restrict access to repairs and maintenance and means of escape.	Low
08.013	Balcony balustrades		Low	Repair as necessary and retain.  Remove selected sections to enable installation of new bridge connections to Barrack Block.	Avoid removal of associated iron columns.  Form interventions at selected positions so as to maintain the rhythm of the balustrades and ensure proper support at ends.	Low

**Schedule of Character Defining Elements**

Central Police Station



Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
08.014	Single-storey outbuilding with pitched roof over		Low	Demolish to make way for new loading bay.	<p>Record on measured survey drawings.</p> <p>Infill existing internal opening leaving reveals exposed.</p> <p>Tooth-in new brickwork at abutments after existing walls removed.</p> <p>Salvage cast iron columns for possible re-use.</p>	Low
08.015	Corrugated steel sheet on balcony balustrades		Adverse	Remove	Not applicable	Low

**Schedule of Character Defining Elements**

Central Police Station



**Schedule of Character Defining Elements**

**09 Magistracy**

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
09.001	Lay-in grid suspended ceiling		Adverse	Remove	Not applicable	High
09.002	Modern partitions		Adverse	Remove	Not applicable	N/A

**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
09.003	Internal walls		Moderate	Remove selected internal walls where strictly necessary as part of re-planning of interiors	Walls or early or original date to be retained in part eg. By leaving a “nib” where the wall is bonded to another wall. At the point where the wall is cut away, form the cut-line on the line of a vertical joint in alternate courses. Bricks in the remaining courses to be left “as cut”, and not re-bonded, as evidence of the current condition.	Moderate
09.004	Plaster box cornice		Moderate	Remove in exceptional cases eg. Where adjacent new lift shafts	Cut back neatly to a square edge and ensure remaining section is secure.	Moderate


**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
09.005	Panelled doors		Moderate	Replace where necessary to achieve fire resistance to comply with Code	Re-use where possible. Record design on survey drawings where element cannot be re-used.	Moderate

**Schedule of Character Defining Elements**


Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
09.006	Block existing door openings		Moderate	Block opening as part of re-planning of interior	Retain existing door frame and architraves. Use framing and non-combustible sheet linings to block opening.	Moderate
09.007	Form new door openings		Moderate	Form new opening as part of re-planning of interiors	New doors and frames to be of their time to avoid confusion about provenance	Moderate





**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
09.008	Stair balustrades		High	Balustrades to be supplemented with additional handrails and supports to mitigate non-compliance with code	New fittings to be of their time and made reversible. Physical intervention to existing stairs and balustrades to be kept to the minimum.	Moderate
09.009	Fixed signs		Low-High	Remove and refix/display in visitors' centre/discard	Record each sign and assess significance individually and treat accordingly	N/A



## Schedule of Character Defining Elements

## Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
09.010	External airconditioning units and other external services		Adverse	Remove and make good brickwork	Not applicable	High
09.011	Pitched roofs		High	New penetrations through roofs for ventilation ducts and other services	Arrange new penetrations so that they conform with the geometry of the existing roof. Model the size and shape of the new ducts so that the impact on the roofscape is minimised. Finish the new ducts in a non-reflective material that is neutral in colour and mid-tone.	High



**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
09.012	Rainwater goods		Moderate	Replace with larger sizes/closer spacing to improve performance	Use cast iron to match original pattern Make good all redundant fixing holes	High
09.013	Metal walkways across lightwell		Adverse	Remove walkways and make good brickwork at abutments	Not applicable	High



**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
09.014	Altered doors and windows		Adverse	Repair or renew as necessary existing frames to match original patterns	Not applicable	High
09.015	Sloping canopy over external stair on west side		Adverse	Remove canopy and supporting structure	Not applicable	Moderate



**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
09.016	Single storey secure shelter at North West corner		Low	Demolish	Make good brickwork at abutments.	Low
09.017	Iron railing adjacent south side of item 09.016 above		Moderate	Retain; including remains of bars (now removed) between existing railings and east side of Barracks Block.	Not applicable	Neutral


**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
09.018	Public toilets in 09/LG1/17, 24		Adverse	Strip out sanitaryware, and fit-out for pottery display/service access. Form new door openings in east walls.	Retain existing door openings and metal-barred gates. Retain external granite steps and existing ground level.	Low
09.019	Cell doors		High	Re-open to provide access to Retail space	Retain existing iron gate	Low

**Schedule of Character Defining Elements**



Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
09.020	Meeting room at G/02-05		Moderate	Remove timber panelling from walls and sub divide to form new toilets and lift shaft	Record existing wall linings, and any earlier lining behind, on measured survey drawings.	Moderate
09.021	Lobbies within entrance hall G/12		Adverse	Remove	Not applicable	N/A





**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
09.022	Public galleries on FF		Adverse	Strip out plant, remove partition walls and restore galleries	Not applicable	High
09.023	Chimney piece		Moderate	Retain	Not applicable	Neutral

**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
09.024	Lanterns above entrance hall		Adverse	Remove existing lanterns and install single lantern	Not applicable	Moderate
09.025	Boarded ceilings on Second Floor		High	Repair and retain where possible	Limit extent of penetrations as far as practicable. Record on measured survey drawings where ceilings have exceptionally to be removed.	Low



**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
09.026	Iron gates at top of external stair		Moderate	Retain	No applicable	Neutral
09.027	Iron balustrade adjacent terrace at First Floor east side		High	Retain; install structural glass balustrade inboard of ironwork to provide compliance with Building Codes	Avoid penetration of existing tiled pavement when fixing glass balustrade.	Low


**Schedule of Character Defining Elements**

**10 Assistant Superintendent's Office**

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
10.001	Lay-in grid suspended ceiling		Adverse	Remove	Not applicable	High
10.002	Plaster box cornice		Moderate	Remove in exceptional cases eg. Where adjacent new lift shafts	Cut back neatly to a square edge and ensure remaining section is secure.	Moderate



**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
10.003	Panelled doors and linings		Moderate	Replace where necessary to achieve fire resistance to comply with Code	Re-use where possible. Record design on survey drawings where element cannot be re-used.	Moderate



**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
10.004	Timber boarded floor with moulded skirtings		High	Repair as necessary and retain	Lift carefully and refix upon completion of fire-proofing and services installation	Low
10.005	Exterior decorations		Adverse	Strip off and redecorate	Sample and analyse existing paint media; select new media to suit substrate and significance	High

**Schedule of Character Defining Elements**



Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
10.006	Block existing door openings		Moderate	Block opening as part of re-planning of interior	Retain existing door frame and architraves. Use framing and non-combustible sheet linings to block opening.	Moderate
10.007	Form new door openings		Moderate	Form new opening as part of re-planning of interiors	New doors and frames to be of their time to avoid confusion about provenance	Moderate




**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
10.008	Altered doors and windows		Adverse	Repair or renew as necessary existing frames to match original patterns	Not applicable	High
10.009	External airconditioning units and other external services		Adverse	Remove and make good brickwork	Not applicable	High



**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
10.010	Stair balustrades		High	Balustrades to be supplemented with additional handrails and supports to mitigate non-compliance with code	New fittings to be of their time and made reversible. Physical intervention to existing stairs and balustrades to be kept to the minimum.	Moderate


## Schedule of Character Defining Elements

## Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
10.011	Fixed signs		Low-High	Remove and refix/display in visitors' centre/discard	Record each sign and assess significance individually and treat accordingly	N/A
10.012	Pitched roofs		High	New penetrations through roofs for ventilation ducts and other services	Arrange new penetrations so that they conform with the geometry of the existing roof. Model the size and shape of the new ducts so that the impact on the roofscape is minimised. Finish the new ducts in a non-reflective material that is neutral in colour and mid-tone.	High



**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
10.013	Internal walls		Moderate	Remove selected internal walls where strictly necessary as part of re-planning of interiors	Walls or early or original date to be retained in part eg. By leaving a “nib” where the wall is bonded to another wall. At the point where the wall is cut away, form the cut-line on the line of a vertical joint in alternate courses. Bricks in the remaining courses to be left “as cut”, and not re-bonded, as evidence of the current condition.	Moderate



**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
10.014	Partitions on SF		Moderate	Remove partitions	Record partitions on measured drawings	Moderate
10.015	Blocked windows on south elevation of south-east wing		Adverse	Re-open window openings and reinstate window frames and glazing	Not applicable	Moderate



**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
10.016	Open-joisted ceiling on Ground Floor of south-east wing		Moderate	Underline floor to provide fire protection.	Avoid intrusive alteration. Use fire-proofing products and methods that enable existing structure and boarding to be retained.	Low
10.017	Moulded timber picture rail		Low	Repair and retain	Not applicable	Neutral

**Schedule of Character Defining Elements**



Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
10.018	Timber roof structure above south-east wing		Moderate	Repair as necessary and retain	Avoid intrusive alteration. Retain open appearance/	Low
10.019	Timber stair		Moderate	Underline with fire-resisting lining	Repair as necessary and retain.	Low





**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
10.020	Clay/terrazzo tile floor on Ground Floor and steps		Adverse	Adjust levels to enable level access and replace floor finish	Not applicable	Low
10.024	Granite wall on North elevation		High	Construct new external steps adjacent wall	Keep new stair clear of wall; avoid any physical connection between steps and wall.	Low



**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
10.025	Single storey outbuilding at South East corner		Moderate	Demolish outbuilding and make good at abutments	Record outbuilding on measured drawings	Low
10.026	Blocked archway on East elevation		Adverse	Demolish infilling and re-open archway	Protect original arch and jambs against damage during demolition	Moderate



**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
10.027	Chimney on east elevation		Low	Retain	Not applicable	Neutral
10.028	Cantilever balconies		High	Repair as necessary and retain	Avoid intrusive interventions. Restrict access if necessary to retain existing appearance.	Neutral

**Schedule of Character Defining Elements**


Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
10.029	Steps on east elevation		Moderate	Repair as necessary and retain	Not applicable	Neutral
10.030	Decorative metal screen (See also item 10.026)		Low	Repair and retain	Not applicable	Positive

## Schedule of Character Defining Elements



Central Police Station

### 11 A Hall

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
11.001	Form new door openings		Low	Form new opening as part of re-planning of interiors	New doors and frames to be of their time to avoid confusion about provenance	Low



**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
11.002	External airconditioning units and other external services		Adverse	Remove and make good brickwork	Not applicable	High
11.003	Painted signs		High	Protect in situ	Not applicable	N/A

**Schedule of Character Defining Elements**



Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
11.004	Fixed signs		Low-High	Remove and refix/display in visitors' centre/discard	Record each sign and assess significance individually and treat accordingly	N/A
11.005	Concrete stairs		Low	Remove and rebuild as part of re-planning of interiors	None	Low




**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
11.006	Flat roof		Low	Form new rooftop extension at West end to accommodate fire escape stair	Form straight joint at abutment with building 08 Ablutions Block	Low
11.007	Security screen at roof level		Low	Remove	Record on measured survey drawings	Low


**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
11.008	Rainwater goods		Adverse	Replace with cast iron in pattern to match original and in correct locations	Not applicable	High


**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
11.009	Rainwater goods		Low	Remove embedded cast iron pipework set into wall to reduce long term maintenance burden	Record on measured survey drawings. Make good cavity.	Low



**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
11.010	Timber doors		Low	Repair and retain	Not applicable	Neutral


**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
11.011	Security screen and door at First Floor		Low	Remove	Record on measured survey drawings	Low
11.012	Door thresholds and plinth		Low	Retain; remove paint media from plinth and brickwork	Not applicable	Neutral

**Schedule of Character Defining Elements**



Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
11.013	Metal louvres on window openings		Adverse	Remove	Not applicable	Low

**Schedule of Character Defining Elements**

Central Police Station



**12 B Hall**

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
12.001	Flat roof		Moderate	Repair and retain	Avoid roof penetrations as far as possible	Low
12.002	Cells at GF level		High	Remove cells in selected locations to accommodate new North-South route across site	Record existing layout on measured survey drawings. Limit number of cells affected to the minimum necessary. Retain floor structure above. Retain remainder of cells at this level for interpretation	Moderate





**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
12.003	External airconditioning units and other external services		Adverse	Remove and make good brickwork	Not applicable	High
12.004	Painted signs		High	Protect in situ	Not applicable	N/A

**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
12.005	Fixed signs		Low-High	Remove and refix/display in visitors' centre/discard	Record each sign and assess significance individually and treat accordingly	N/A
12.006	Rainwater goods		Adverse	Replace with cast iron in pattern to match original and in correct locations	Not applicable	High


**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
12.007	Corbelled brickwork at high level in cells		Low	Retain	Not applicable	Neutral
12.008	Barbed wire		Moderate	Remove	Record wire on measured drawings	Low


**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
12.009	External walls		Moderate	Form openings in North and South walls in conjunction with new North-South route across site	Cut brickwork to form openings in North and South walls; do not re-bond brickwork.	Moderate



**Schedule of Character Defining Elements**

**13 C Hall**

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
13.001	External airconditioning units and other external services		Adverse	Remove	Not applicable	Moderate



**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
13.002	Door to Ladder Store		Low	Retain	Not applicable	Neutral
13.003	Security bars at window openings		Low	Retain	Not applicable	Neutral

**Schedule of Character Defining Elements**


Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
13.004	Flat roof		Low	Retain	Avoid roof penetrations as far as possible.	Low
13.005	Eaves detail		Low	Retain	Not applicable	Neutral





**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
13.006	Cantilever reinforced concrete canopy		Low	Retain	Not applicable	Neutral



**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
13.007	Internal partition walls		Low	Remove as part of re-planning of interiors	Record on measured survey drawings	Low
13.008	Fixed signs		Low-High	Remove and refix/display in visitors' centre/discard	Record each sign and assess significance individually and treat accordingly	N/A



**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
13.009	Metal window frames		Moderate	Repair and retain	Not applicable	Neutral
13.010	Internal security screens		Moderate	Retain where possible	Where necessary record on measured survey drawings prior to removal	Low



**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
13.011	Coving at abutments between RC beams and walls		Low	Avoid penetrations for services installations as far as possible.	Cut away neatly for services penetrations and make good at abutments.	Low
13.012	Communal cells at Ground Floor		Moderate	Remove as part of re-planning of interiors	Record on measured survey drawings	Low



**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
13.013	Rooflight and security bars over communal cells		Moderate	Remove as part of re-planning of interiors	Record on measured survey drawings	Low
13.014	Granite threshold at external door openings		Low	Retain	Not applicable	Neutral

**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
13.015	Timber boarded doors with fanlight over		Low	Repair as necessary and retain	Not applicable	Neutral
13.015	Vinyl tile floor		Adverse	Replace	Not applicable	Low

**Schedule of Character Defining Elements**

Central Police Station


Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact



**Schedule of Character Defining Elements**

Central Police Station

**14 D Hall East Wing**

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
14.001	West entrance at Lower Ground Floor		Moderate	Retain as public entrance at this level.	<p>Retain security gate and granite threshold.</p> <p>Adjust adjacent ground level as necessary to achieve barrier-free access.</p> <p>Pin gate back against adjacent wall in the open position if necessary.</p>	Low

**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
14.002	Half-round headed doorway and side lights		Moderate	Retain	Remove air duct and make good masonry above arch.	Low


**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
14.003	Granite surround to cells (generally north side, alternating with brick surrounds – see next item)		Moderate	Retain door surround and gate wherever possible.	Pin back gate against wall.  Remove paint media to expose granite material.	Low



**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
14.004	Brick reveals with bull-nosed arrisses and segmental arch over (generally north side, alternating with granite surrounds – see previous item)		High	Retain door surround and gate wherever possible	Pin back gate against wall	Low



**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
14.005	Arched opening at East end First Floor		Low	Retain as existing	Not applicable	Low
14.006	Concrete floor generally at Lower Ground Floor		Low	Excavate entire floor to install piled underpinning	Record levels on measured survey drawings.  Install new floor at the same level.	Low


**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
14.007	Part-blocked windows at Lower Ground Floor - extent of blocking varies.		Moderate	Open up window opening to full extent.	Record existing condition on measured survey drawings. Add further detail during demolition works.	Low
14.008	External granite stair from Lower Ground to Ground Floor level		Moderate	Remove stair to make way for new stair in similar position	Review design proposals to see whether existing stair can be retained.	Low

**Schedule of Character Defining Elements**


Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
14.009	Ashlar pattern on external walls		Moderate	Form new openings for entrance/exit to building	<p>Set out new openings to cause minimum disruption to ashlar pattern.</p> <p>Record existing pattern on measured survey drawings.</p>	Low




**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
14.010	Blocked doorway at south-east corner		Low	Preserve blocked opening intact.	Not applicable	Neutral



**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
14.011	Metal security gate and screen		Low	Retain insitu	Pin gate in open position if necessary	Neutral



**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
14.012	Half-round headed doorway and side lights at Ground Floor west end		Moderate	Retain insitu	Not applicable	Neutral
14.013	Structural steelwork bracing and temporary access stair		Adverse	Remove upon completion of underpinning	Not applicable	Moderate


**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
14.014	RC staircase at north-east corner		Low	Remove	Record on measured drawings	Low
14.015	Vinyl tile floor on suspended timber floor		Adverse	Remove vinyl tiles and restore boards if possible; alternatively, replace boards with new timber to match other boarded floors elsewhere on the site.	Not applicable	Low



**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
14.016	Cell walls at Ground Floor		Moderate	Retain insitu	<p>Use existing door openings wherever possible.</p> <p>Avoid further alteration to existing altered openings where feasible.</p>	Low



**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
14.017	Mortuary		High	Preserve insitu	Avoid any service penetrations from adjacent spaces	Neutral
14.018	Brickwork surrounds to doorways with segmental arches over		Moderate	Increase width in selected locations to allow wheelchairs to pass	Record on measured survey drawings.  Limit interventions as far as possible.	Low

**Schedule of Character Defining Elements**


Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
14.019	Granite surrounds to doorways with lintels over		Moderate	Increase width in selected locations to allow wheelchairs to pass	Record on measured survey drawings.  Limit interventions as far as possible.	Low
14.020	Flat ceilings at Ground Floor		Low	Form penetrations for services installations where necessary	Avoid disruption of beams.	Low




**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
14.021	Arched opening at east end		Low	Retain insitu	Not applicable	Neutral


**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
14.022	Top-lit central hall		High	Retain insitu	Not applicable	Neutral


**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
14.023	Arches across central hall at First Floor		Moderate	Retain insitu	Not applicable	Neutral


**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
14.024	Inset security gate and screen in First Floor cells		Low	Remove to suit new use	Remove where necessary.  Record on measured drawings.	Low



**Schedule of Character Defining Elements**

**14 D Hall West Wing**

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
14.030	Main stair		High	Remove wire mesh and framing	Record on measured drawings	Low



**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
14.031	Brick vault over central hall at Ground Floor		High	Retain insitu	Not applicable	Neutral
14.032	Terrazzo floor in central hall at Ground floor		Moderate	Remove to enable piled underpinning	Record on measured survey drawings	Moderate

**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
14.033	Brick vaults above cells		High	Retain insitu	Avoid penetrations for services	Neutral
14.034	Cell walls (later additions)		Moderate	Remove where necessary to accommodate new cafe	Record on measured drawings	Low

**Schedule of Character Defining Elements**

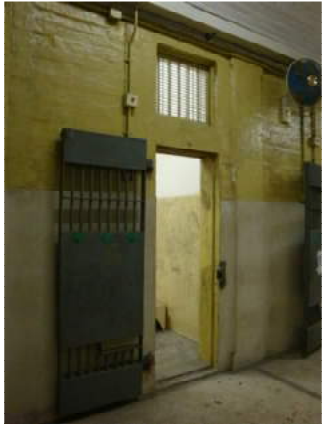
Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
14.035	Brickwork spandrels below cell windows on south side at Ground Floor		Moderate	Remove to accommodate new cafe	Record on measured survey drawings	Low




**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
14.036	Cell walls flanking central hall		High	Remove to accommodate new cafe	Record on measured survey drawings.  Retain selected cells for interpretation purposes.	Moderate

**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
14.037	Cell floors		Low	Remove to enable piled underpinning	Record on measured survey drawings	Low



**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
14.038	Partition wall across central hall at Ground Floor		Low	Remove to accommodate new cafe	Record on measured survey drawings	Low


**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
14.039	Granite pavement in cross-passage between East and West Wings		Moderate	Repair as necessary and retain insitu	Not applicable	Neutral
14.040	Granite threshold at doorway between cross-passage and East Wing		Moderate	Retain insitu	Not applicable	Neutral



**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
14.041	Brick vault over cross-passage		High	Retain insitu	Avoid any services penetrations	Neutral
14.042	Granite floor in central hall at First Floor		Moderate	Retain insitu	Repair where necessary	Neutral

**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
14.043	Cell walls flanking central hall at First Floor		High	Retain insitu	Not applicable	Neutral
14.044	Brickwork spandrels below cell windows at Second Floor		Moderate	Remove to enable new use	Record on measured drawings.  Confine changes to one elevation, north or south.	Low


**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
14.045	Metal security screen adjacent main stair		Moderate	Retain insitu	Not applicable	Neutral

**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
14.046	Double-height central hall at Second Floor		High	Retain insitu	Not applicable	Neutral





**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
14.047	View ports adjacent entrance doors		Moderate	Retain insitu	Not applicable	Neutral
14.048	Services installations		Adverse	Remove	Not applicable	Moderate



**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
14.049	Metalwork and structural steel framing on exterior (typical)		Adverse	Remove	Not applicable	High
14.050	Blind arcade, south elevation		Low	Remove infill brickwork within arched openings at ground level to enable new cafe	Record on measured survey drawings.  Observe and record any evidence that brickwork infills were built at the same time as the arched openings or added later	Low

**Schedule of Character Defining Elements**



Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
14.051	Blind arcade, north elevation		Low	Retain insitu	Not applicable	Neutral
14.052	Fence wall, east end of D Hall Yard		Low	Remove to reinstate access to granite stair to Lower Ground Floor level	Record on measured drawings	Low

**Schedule of Character Defining Elements**


Central Police Station

**15 E Hall**

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
15.001	Dividing walls at Lower Ground Floor		Moderate	Remove to enable multi-purpose use	Record on measured survey drawings	Low
15.002	Dividing walls at Lower Ground Floor		Moderate	Remove to enable multi-purpose use	Record on measured survey drawings	Low



**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
15.003	Staircase within Laundry Yard		Moderate	Remove to enable construction of Arbuthnot Wing	Record on measured survey drawings	Low



**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
15.004	Services installations		Adverse	Remove	Not applicable	Moderate
15.005	Metal louvres over cell window openings		Low	Remove	Record on measured survey drawings	Low


**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
15.006	Raised ground level adjacent entrance		Low	Remove to enable level access	Record on measured survey drawings	Low
15.007	Access balconies and apertures		Moderate	Retain apertures	Provide temporary closure as required for operational reasons	Low

**Schedule of Character Defining Elements**


Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
15.008	Central staircase		High	Retain	Provide secondary staircase within cell blocks to achieve code compliance	Low





**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
15.009	Cell walls flanking central hall		High	Retain	Pin back cell doors against walls.	Neutral


**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
15.010	Services installations		Adverse	Remove	Not applicable	Moderate
15.011	Balcony balustrades		Moderate	Retain	Install wire net across aperture to avoid need to upgrade balustrade to meet Building Code requirements	Low

**Schedule of Character Defining Elements**


Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
15.012	Second Floor central hall		High	Retain	Not applicable	Neutral

**Schedule of Character Defining Elements**



Central Police Station

**17 F Hall**

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
17.001	Lay-in grid suspended ceiling		Adverse	Remove	Not applicable	High



**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
17.002	Rainwater goods		Low	Remove existing RWPs and install new RWPs externally on North and South Elevations	Improve roof drainage to avoid ponding	Low
17.003	Exterior decorations		Adverse	Strip off and redecorate	Sample and analyse existing paint media; select new media to suit substrate and significance	High



**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
17.004	External airconditioning units and other external services		Adverse	Remove and make good brickwork	Not applicable	High
17.005	Fixed signs		Moderate	Remove and refix/display in visitors' centre/discard	Record each sign and assess significance individually and treat accordingly	Moderate



**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
17.006	Security screen at First Floor entrance		Low	Remove	Record on measured drawings	Low
17.007	Metal windows		Moderate	Remove at First Floor to accommodate gallery space and block structural openings with blockwork	Record on measured drawings.	Moderate

**Schedule of Character Defining Elements**



Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
17.008	Fixed furniture		Moderate	Remove to accommodate gallery space	None	Low
17.009	Security screens		Moderate	Remove to accommodate gallery space	Record on measured drawings	Moderate





**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
17.010	Timber windows		Moderate	Remove at First Floor to accommodate gallery space and block structural openings with blockwork	Record on measured drawings	Moderate
17.011	Communal washing/lavatory facilities		Moderate	Remove to accommodate gallery space	Record on measured drawings	Low



**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
17.012	Blocked up lantern light		Low	Unblock lantern and fit glazing	Record on measured drawings	Low
17.013	Security gates at Ground openings		Moderate	Remove to enable access to Ground Floor gallery space	Record on measured drawings	Low


**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
17.014	Interview booths		High	Remove to accommodate new gallery	Rebuild in new location	Moderate
17.015	External stair to First Floor		Moderate	Upgrade balustrade to comply with Building Code	Record on measured drawings. Supplement existing balustrade elements with minimal elements if necessary.	Low

**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
17.016	Ground Floor main entrance		Low	Retain as existing.	Keep fixed shut if not required for operational use.	Low



**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
17.017	Security screen at Ground Floor main entrance		Low	Remove to accommodate gallery space	Record on measured drawings	Low


**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
17.018	Blue Entrance Gate (facing Old Bailey Street)		High	Retain in situ	Maintain in working order	Neutral
17.019	Blue Entrance Gate (inner) and enclosed yard		Moderate	Retain gate and enclosing walls and roof in situ; remove cupboards.	Repair and maintain gate in working order	Low


**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
17.020	Blue Entrance Gate (inner) facing Prison Yard		Moderate	Retain gate and enclosing frame	Repair and maintain in working order	Low

**Schedule of Character Defining Elements**



Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
17.021	Barbed wire		Moderate	Remove	Record on measured drawings. Make good fixing points where attached to brickwork.	Low




**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
17.022	Metal security bars at windows		Moderate	Remove as part of blocking up window openings to accommodate gallery space at First Floor	Record on measured drawings	Low
17.023	External toilets at Ground Floor adjacent East elevation		Low	Remove	Record on measured drawings	Low



**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
17.024	Open Visit Room		Low	Space reallocated to other uses	Record on measured drawings. Salvage entrance sign and re-use in new layout of interview booths.	Low


**Schedule of Character Defining Elements**

**19 Bauhinia House**

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
19.001	Pitched roofs		High	New penetrations through roofs for ventilation ducts and other services	Arrange new penetrations so that they conform with the geometry of the existing roof. Model the size and shape of the new ducts so that the impact on the roofscape is minimised. Finish the new ducts in a non-reflective material that is neutral in colour and mid-tone.	High
19.002	Chimney		High	Repair and retain	Not applicable	Neutral


**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
19.003	Rainwater goods and other external services		Adverse	Remove and make good wall surface. Replace defective and non-matching rainwater goods with cast iron fittings to match original.	Not applicable	Moderate


**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
19.004	External stone wall facing		High	Carry out close inspection of painted areas to determine extent of original granite facing and remove paint media where applicable.	Not applicable	Moderate


**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
19.005	Gun loops		High	Remove concrete infilling and make good stonework where necessary.	Not applicable	Moderate


**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
19.006	Look-out turret		High	Repair and retain insitu	Not applicable	Neutral

**Schedule of Character Defining Elements**


Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
19.007	Windows		Moderate	Remove and make good stonework as necessary	Record existing windows on measured survey drawings	Moderate





**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
19.008	Modern partitions		Adverse	Remove	Not applicable	Moderate



**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
19.009	Electrical services		Adverse	Remove	Not applicable	Moderate
19.010	Lay-in grid suspended ceiling		Adverse	Remove	Not applicable	High

**Schedule of Character Defining Elements**

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
19.011	Exposed timber roof structure		High	Repair and retain insitu	Not applicable	Neutral
19.012	Timber stair		Moderate	Remove	Record on measured surveys drawings	Low