

The Hong Kong Jockey
Club

**2008 Olympic
Equestrian Event**

Monthly Environmental
Monitoring and Audit
Report - September 2006

Final

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October 2006

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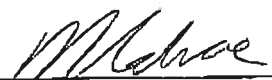
Job number 24469



**INDEPENDENT ENVIRONMENTAL CHECKER
CHECK CERTIFICATE**

**Independent Environmental Checker for
Main Arena of the 2008 Olympic Equestrian Event
Monthly EM&A Report for September 2006 (Final)**




We confirm having used reasonable skill and care in the preparation of the Monthly EM&A Report and we certify that we can verify the report.

Signed: 
Independent Environmental Checker
H. J. Cochrane
Director and IEC

Date: 16/10/06

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Executive Summary

This is the second monthly environmental monitoring and audit (EM&A) report presenting the progress of environmental monitoring and audit work for Main Arena of the 2008 Olympic Equestrian Event for the period from 1 to 30 September 2006, including noise monitoring and landscape and visual audit. Noise was measured in terms of $L_{eq(30min)}$ with L_{10} and L_{90} measurements for reference.

A total of 4 sets of daytime (0700 – 1900 hours) noise monitoring was conducted on 7, 14, 21 and 28 September 2006. The highest noise level of 68.0 dB(A) was recorded at the roof of Racecourse Villa (NM2) on 7 September 2006 while the lowest noise level of 58.2 dB(A) was recorded at the podium outside Block 1 of Ravana Garden (NM3) on 14 September 2006. There was no exceedance of noise A/L Levels recorded during the reporting period.

A total of 2 landscape and visual audit was carried out bi-weekly on 11 and 25 September 2006. The Registered Landscape Architect (RLA) has the following observations:

- Vegetation clearance and site formation works were being carried out.
- Temporary tree protection measures were recorded.
- The Contractor was required to implement measures for better tree protection.

A total of 4 environmental site audits was conducted weekly on 4, 11, 18 and 25 September 2006. The major environmental concerns included the following issues:

Air quality: Regular watering during dry and windy season and dusty works should be provided.

Noise: No environmental noise issue was raised during the reporting period.

Water quality: Mosquito control measures, preferably drying off or levelling of ponding water should be provided.

Handling of waste and chemicals: Proper classification and disposal of the waste as well as regular clearing of waste was required.

A total of 0.03 tonnes of Construction and Demolition (C&D) waste and a total of 3.6 tonnes of C&D material (public fill) were disposed of at Landfill and Public Filling Area respectively in September 2006. No chemical waste was disposed of during the reporting period.

No environmental complaint was received during the reporting period.

No construction noise permit was granted during the reporting period.

No exceedance of noise monitoring action/limit levels was recorded during the reporting period.

There was neither notification of summons nor prosecution received during the reporting period.

1 Introduction

1.1 Project Background

Having considered the advantage of established international equine import and export protocols as well as the supporting facilities already in place, the International Olympic Committee (IOC) has accepted the Beijing Organising Committee for the Games of the 29th Olympiad (BOCOG)'s proposal of staging the 2008 Olympic and Paralympic Equestrian Events in Hong Kong.

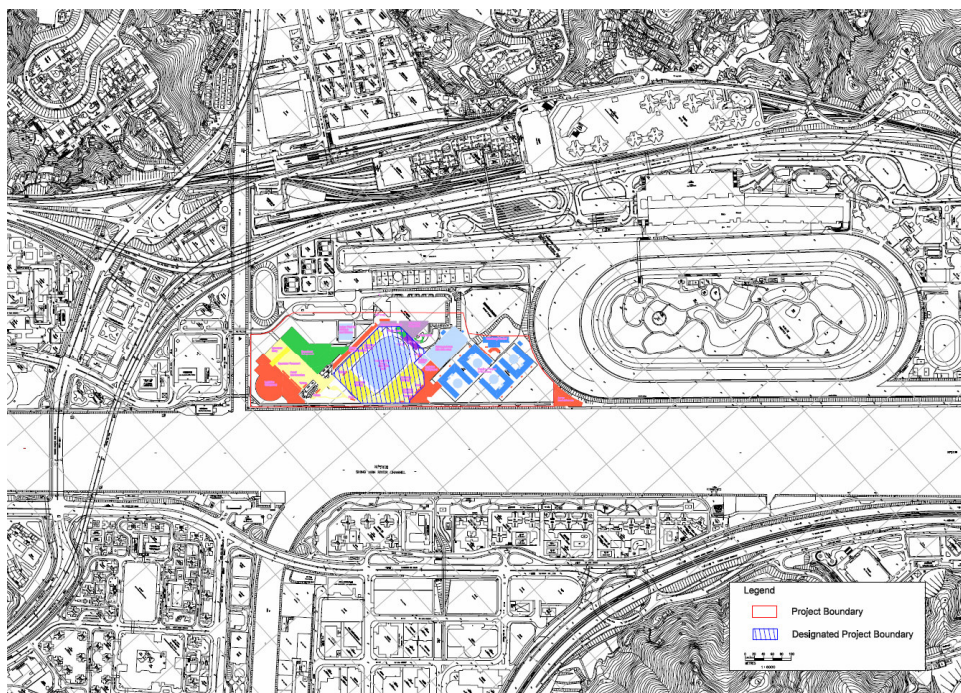
Given the very tight schedule of the project, Hong Kong Sports Institute (HKSI) in Shatin will be temporarily converted into the core competition venues for the Olympic Equestrian Event. Facilities to be provided on the core venues include:

- Main Competition Arena for 20,000 spectators
- Stable Complex
- Training Arenas
- Logistic Compound
- Spectator Entry & Broadcast Compound
- Food & Merchandise

The venues will be in operation for approximately one month during the Olympic event, with the competition expected to last from between 10 to 14 days. 14 days after the Olympic Events, the Paralympic competition will be staged, which will last for a few days.

One year before the 2008 Olympic Event, the site will be occupied for the Test Event, which is used by all divisions of the Olympic Organising Committee to test their organisational capabilities for the Games and Event Management to trail the equine facilities and the footing (riding surface) of the Main Arena, Stables and Training Facilities. These mock up events are known as the 'Test Event Mode', and limited public access will be given.

Figure 1-1: Location plan of the project



The implementation of the Project is scheduled from July 2006 to December 2008. Table 1-1 gives the tentative project timetable and phasing.

Table 1-1: Timetable and phasing for the Project

Task	Start	Finish
Pre- Test Event Construction	July 2006	June 2007
Test Event	August 2007 (2 weeks)	
Post Test Event Construction	September 2007	June 2008
Olympic Event	August 2008 (2 weeks)	
Paralympic Event	September 2008 (1 week)	
Reinstatement of HKSI	October 2008	December 2008

The Main Arena of the 2008 Olympic Equestrian Event is classified as a Designated Project (DP) under item O7, Part 1, Schedule 2 of the Environmental Impact Assessment Ordinance (EIAO) – an outdoor sporting facility with a capacity to accommodate more than 10,000 persons.

In accordance with the requirements of Section 5(1) of the EIAO, a project profile (No. PP-266/2005) was submitted to Environmental Protection Department (EPD) for the application of an EIA Study Brief on 17 October 2005. Pursuant to Section 5(7)(a) of the EIAO, EPD issued to The Hong Kong Jockey Club (HKJC) a study brief (ref: EIA Study Brief No: ESB-136/2005 dated 7 November 2005) to carry out an EIA study.

The EIA Report for the Project (EIA-118/2005) was approved and an Environmental Permit (EP) (EP-236/2006) granted by EPD on 24th and 25th March 2006 respectively.

1.2 Project Organisation

The Project Proponent is the Hong Kong Jockey Club (HKJC); the Engineer's Representative (ER) is Ove Arup & Partners Hong Kong Ltd (Arup); the Contractor is China State Construction Engrg (HK) Ltd; the Independent Environmental Checker (IEC) is Meinhardt Infrastructure and Environment Ltd; the Environmental Team (ET) is Arup.

1.3 Scope of Impact EM&A

The impact environmental monitoring and audit for the Project included noise monitoring, landscape and visual audit, and environmental site audit.

1.4 Purpose of the Report

The purpose of this monthly EM&A report is to provide information on monitoring methodology, monitoring results, environmental permit status, site audit findings, recommendations and conclusions of the EM&A of the project.

This is the second monthly EM&A report prepared by Arup for the submission to the HKJC summarising the implementation of the EM&A programme from 1 to 30 September 2006.

2 Scope of Construction Works

2.1 Construction Programme

The construction works commenced on 15 August 2006. An up-to-date construction programme is attached in **Appendix A**.

2.2 Construction Activities of the Month

Major construction activities carried out by the Contractor in September 2006 include:

- Erection of hoarding;

- Tree transplantation;
- Excavation works to formation at all stables, low flow interceptor, transformer room and veterinary stable;
- Footing, tie beams and drain laying in progress in Main Stables 1, 2, 3 and 4;
- Sheet pile driving in Retaining Wall no. 3;
- Erection of formwork and steel bar fixing in Veterinary stables and transformer room; and
- Geotechnical investigation in Portion HKSI-4.

3 Summary of EM&A Requirements

Noise monitoring shall be conducted by the ET at specified monitoring locations during the construction stage. Landscape and visual audits and environmental site audits shall also be carried out. The monitoring schedule for the month of September 2006 and the tentative schedule for October 2006 are attached in **Appendix B**.

3.1 Construction Noise

3.1.1 Monitoring Parameters

Construction noise is measured in terms of A-weighted equivalent continuous sound pressure level (L_{eq}). L_{10} and L_{90} were also recorded as supplementary reference information for data auditing.

3.1.2 Monitoring Frequency

Noise monitoring was performed on a weekly basis in accordance with the EM&A Manual. The monitoring time periods, parameters and frequency are summarised in Table 3-1.

Table 3-1: Construction noise monitoring parameters and frequency

Time Period (when construction activity is found)	Parameters	Monitoring Frequency	No. of Measurements for Each Monitoring
Between 0700-1900 hours on normal weekdays	$L_{eq(30\text{ min})}$	Once per week	1
Between 1900-2300 hours on normal weekdays	$L_{eq(5\text{ min})}^*$		3 (consecutive)
Between 2300-0700 hours of next day			
Between 0700-1900 hours on holidays			

*The $L_{eq(5\text{ min})}$ will only be measured if construction activities are conducted during holidays and between the period of 1900 and 0700 hours during normal weekdays.

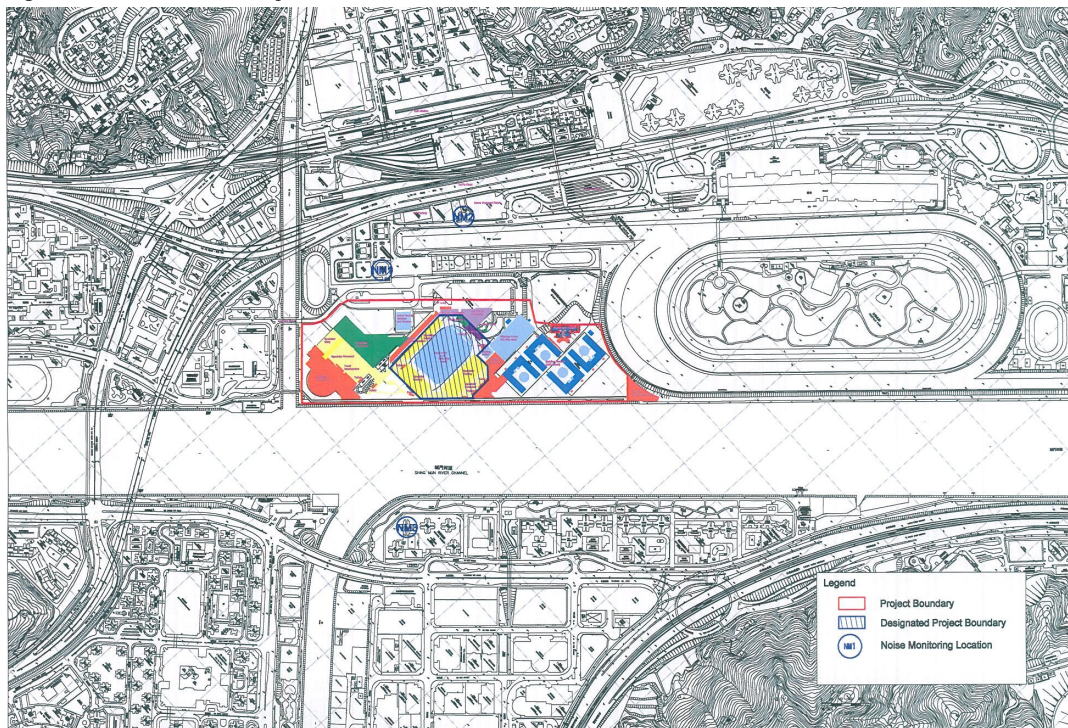
3.1.3 Monitoring Locations

A total of three locations were specified for the noise monitoring as shown in Table 3-2 and Figure 3-1. Measurements were conducted at a position 1.2m above ground and kept away from reflective surface.

Table 3-2: Construction noise monitoring locations

Monitoring Station ID	Location	Monitoring Point
NM1	Chung Cheung Court, HKJC Staff Quarters	On the roof, 1 meter from façade, facing the main works area
NM2	Racecourse Villa	On the roof, 1 meter from façade, facing the main works area
NM3	Ravana Garden	On the podium outside Block 1, 1 meter from façade, facing the main works area.

Figure 3-1: Noise Monitoring Location



3.2 Landscape and Visual

3.2.1 Audit Parameters

All landscape and visual mitigation measures implemented by both the Contractor Team (CT) and the Landscape Contractor during the construction phase and the first year of the operational phase shall be audited by a landscape auditor, to ensure compliance with the aims of the mitigation measures.

3.2.2 Audit Frequency

The landscape and visual monitoring and audit shall be undertaken once every two weeks throughout the construction, operation and reinstatement phases.

3.2.3 Audit Location

The landscape and visual monitoring and audit shall be conducted throughout the entire site area.

3.3 Performance Limits and Event-Action Plans

The monitoring results will be checked against appropriate standards and requirements. A two-tier system performance limits have been established in the Project specific EM&A Manual. The “Action Level” and the “Limit Level” (A/L) are established according to the EPD requirements. The ET, ER, IEC, and CT will take corresponding action in accordance with the Event-Action Plans if the monitoring results exceed the performance limits.

3.3.1 Construction Noise

The A/L Levels for construction noise have been established in accordance with TM-EIAO as summarised in Table 3-3.

Table 3-3: Action and Limit Levels for construction noise

Time Period	Action Level	Limit Level
0700 – 1900 hours on any day not being a Sunday or public holiday	When one documented complaint is received	75 dB(A)

The action required to be taken by different parties in the case of occurrence of exceedance of A/L Levels are summarised in the Event and Action Plan in Table 3-4.

Table 3-4: Event and Action Plan for construction noise exceedance

Event	Action			
	ET Leader	IEC	ER	Contractor
Action Level	<ol style="list-style-type: none"> 1. Notify IEC, ER and the Contractor within 24 hours of identification of the exceedance. 2. Carry out investigation. 3. Report the results of investigation to IEC, ER and the Contractor. 4. Discuss with the Contractor and formulate remedial measures. 5. Increase monitoring frequency to check mitigation measures. 	<ol style="list-style-type: none"> 1. Review with analysed results submitted by ET. 2. Review the proposed remedial measures by the Contractor and advise ER accordingly. 3. Supervise the implementation of remedial measures. 	<ol style="list-style-type: none"> 1. Confirm receipt of notification of exceedance in writing. 2. Notify the Contractor. 3. Require the Contractor to propose remedial measures for the analysed noise problem. 4. Ensure remedial measures are properly implemented. 	<ol style="list-style-type: none"> 1. Submit noise mitigation proposals to ER and IEC. 2. Implement noise mitigation proposals.
Limit Level	<ol style="list-style-type: none"> 1. Identify the source. 2. Notify IEC, ER, EPD and the Contractor within 24 hours of identification of the exceedance. 3. Repeat measurement to confirm findings. 4. Increase monitoring frequency. 5. Carry out analysis of Contractor's working procedures to determine possible mitigation to be implemented. 6. Inform IEC, ER, and EPD the causes & actions taken for the exceedances. 7. Assess effectiveness of the Contractor's remedial actions and keep IEC, EPD and ER informed of the results. 8. If exceedance stops, cease additional monitoring 9. Report the results of investigation to the IEC, EPD and ER. 	<ol style="list-style-type: none"> 1. Discuss amongst ER, ET Leader and the Contractor on the potential remedial actions. 2. Review the Contractor's remedial actions whenever necessary to assure their effectiveness and advise ER accordingly. 3. Supervise the implementation of remedial measures. 	<ol style="list-style-type: none"> 1. Confirm receipt of notification of exceedance in writing. 2. Notify the Contractor. 3. Require the Contractor to propose remedial measures for the analysed noise problem. 4. Ensure remedial measures are properly implemented. 5. If exceedance continues, consider what activity of the work is responsible and instruct the Contractor to stop that activity of work until the exceedance is abated. 	<ol style="list-style-type: none"> 1. Take immediate action to avoid further exceedance. 2. Submit proposals for remedial actions to IEC and ER within 3 working days of notification. 3. Implement the agreed proposals. 4. Resubmit proposals if problem still not under control. 5. Stop the relevant activity of works as determined by the ER until the exceedance is abated.

3.4 Site Inspection and Environmental Complaint Handling

3.4.1 Site Inspection Frequency and Areas Covered

Regular site inspections will be carried out on a weekly basis. The areas of inspection cover the different environmental impacts, such as air quality, noise, water quality and waste, and their pollution controls and mitigation measures for both within and outside the site area. Site inspection for landscape and visual impact shall be carried out on a bi-weekly basis.

Ad hoc site inspection will be carried out if significant environmental non-compliance is identified. Inspections may also be carried out subsequent to receipt of any environmental complaints, or as part of the investigation work, as specified in the Event and Action Plans.

3.4.2 Site Inspection Procedures

- (a) The CT and/or ER will advise the Environmental Auditor (EA) of ET for all information on any environmental related aspects.
- (b) The EA will discuss with the CT and/or ER to forecast any potential environmental impact.
- (c) The EA will conduct a site walk with the CT and/or ER, particularly the areas with extensive construction works.
- (d) The EA will conduct inspection for the main environmental facilities and measures such as wheel washing facilities located at site exits, water spraying truck, temporary noise barrier, and internal noise-reducing measures of heavy equipment etc, to ensure that these environmental facilities operate normally and effectively.
- (e) The EA will fill up a site inspection checklist during the site inspection for recording any special observations.
- (f) The EA will conduct post-discussion with the CT and/or ER for the establishment of additional/special measures if any non-conformance is found. The completion date for such additional measures will be confirmed during the post-discussion.
- (g) The EA will propose a reasonable timeframe together with the CT and/or ER, for preparation of the proposal for remediation of environmental non-compliance.
- (h) The completed site inspection checklist will be signed by the EA, the CT and/or ER, for reference and for taking action in accordance with the agreed procedures, reporting systems and time frame.

3.4.3 Environmental Complaints

In accordance with the EM&A Manual, environmental complaints will be referred to the ET for initiation of the complaint investigation procedures. The ET will undertake the following procedures upon receipt of complaints:

- a) The ET will record the details of the complaint and the date of receipt into the complaint database, and inform ER immediately.
- b) The ET will perform complaint investigation to determine its validity and to assess whether the source of the problem is due to work activities.
- c) The ER will instruct the CT to identify mitigation measures in consultation with the ET, if the complaint is valid and due to works.
- d) The ET will liaise with the CT on their mitigation measure proposals and implementation, if required.
- e) The ET will conduct review of the CT's response on the identified mitigation measures, and of the updated situation.
- f) The ET will submit interim report to EPD if the complaint is received via EPD. The interim report will clearly state the status of the complaint investigation and the follow-up action within the time frame assigned by EPD.
- g) The ET will undertake additional monitoring and audit to verify the situation if necessary, and ensure that any valid reason for complaint does not recur.
- h) The ET will report on the investigation results and the subsequent actions to the source of complaint for responding to the complainant. If the source of complaint is via EPD, the results will be reported within the time frame assigned by EPD.
- i) The ET will record the details of the complaint, investigation, subsequent actions and results in the monthly EM&A report.

During the complaint investigation work undertaken by the ET, CT and ER should cooperate with the ET on providing all the necessary information and assistance for completion of the investigation. If mitigation measures are identified as necessary after the investigation, the CT should promptly carry out the required mitigation to the satisfaction of ET. The ER should ensure that the CT has carried out such identified measures.

A flow chart of the complaint response procedures is shown in Figure 3-2 for reference.

3.5 Environmental Mitigation Measures

Environmental mitigation measures as recommended in the EIA report were stipulated in the EM&A Manual for the Contractor to adopt. A list of mitigation measures and their implementation status are given in **Appendix C**.

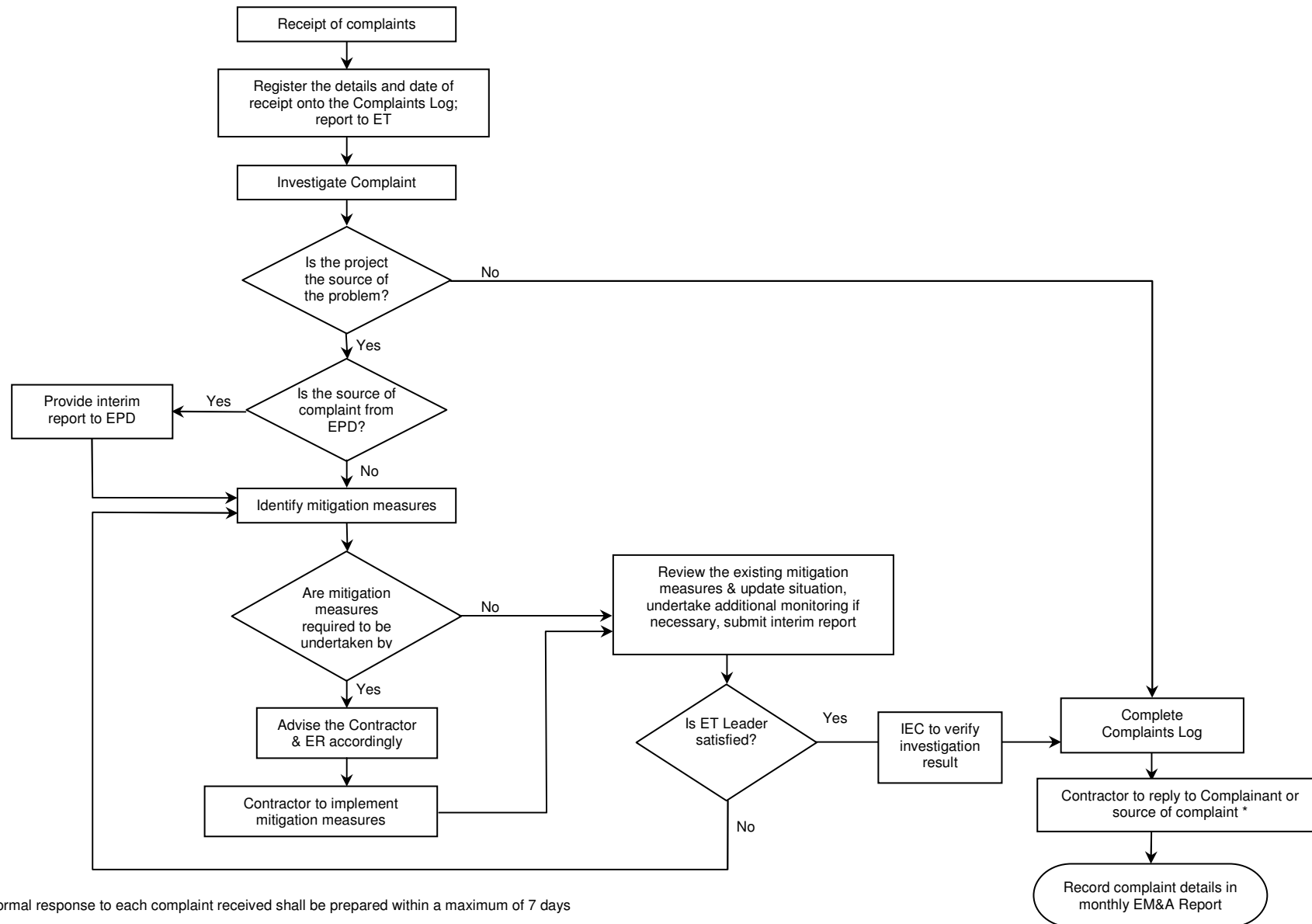


Figure 3-2: Flow chart of complaint response procedures

4 Noise Monitoring

4.1 Monitoring Equipment

Details of the integrating sound level meters used in the noise monitoring are shown in Table 5-1.

Table 5-1: Equipment list for construction noise monitoring

Equipment	Manufacturer & Model No.	Precision Grade	Qty.
Integrating sound level meter	Brüel & Kjær 2238	IEC 651 Type 1	3
Windshield	Brüel & Kjær UA0237	IEC 804 Type 1	3
Acoustical calibrator	Brüel & Kjær 4230	IEC 942 Type 1	1
Acoustical calibrator	Brüel & Kjær 4226		1
LCD wind speed indicator	Kestrel Vane Anemometer	--	1

4.2 Methodology

4.2.1 Field Measurement

- The sound level meter and battery were checked to ensure that they were in proper condition.
- The sound level meter was set on a tripod at 1.2m above ground and at 1m from the exterior of the building façade.
- Before conducting the measurement, the sound level meter was calibrated by an acoustical calibrator.
- The measurement parameter was set to A-weighted sound pressure level. The time weighting was set in fast response and the time period of measurement at 30 minutes.
- The wind speed was checked during noise monitoring to ensure the steady wind speed did not exceed 5m/s, or wind with gusts did not exceed 10m/s.
- Any abnormal conditions that generated intrusive noise during the measurement were recorded on the field record sheet.
- After each measurement, the equivalent continuous sound pressure level (L_{eq}), L_{10} and L_{90} were recorded on the field record sheet.
- The sound level meter was re-calibrated by the acoustical calibrator to confirm that there was no significant drift of reading.

4.2.2 Equipment Maintenance and Calibration

All sound level meters comply with the standards of IEC 651 (Fast, Slow, Impulse RMS detector tests) and IEC 804 (L_{eq} functions). The acoustical calibrator model no. 4226 complies with IEC 942. The calibration certificates of the noise monitoring equipment are attached in **Appendix D**.

4.3 Results and Observations

4.3.1 Weather Conditions and Other Factors

No adverse weather conditions, in particular adverse wind speed & wind direction and fog & rain that may significantly affect or invalidate the collected noise monitoring data, were recorded during the reporting period.

Neither unusual operation of the construction site nor abnormal noise source was observed during the reporting period.

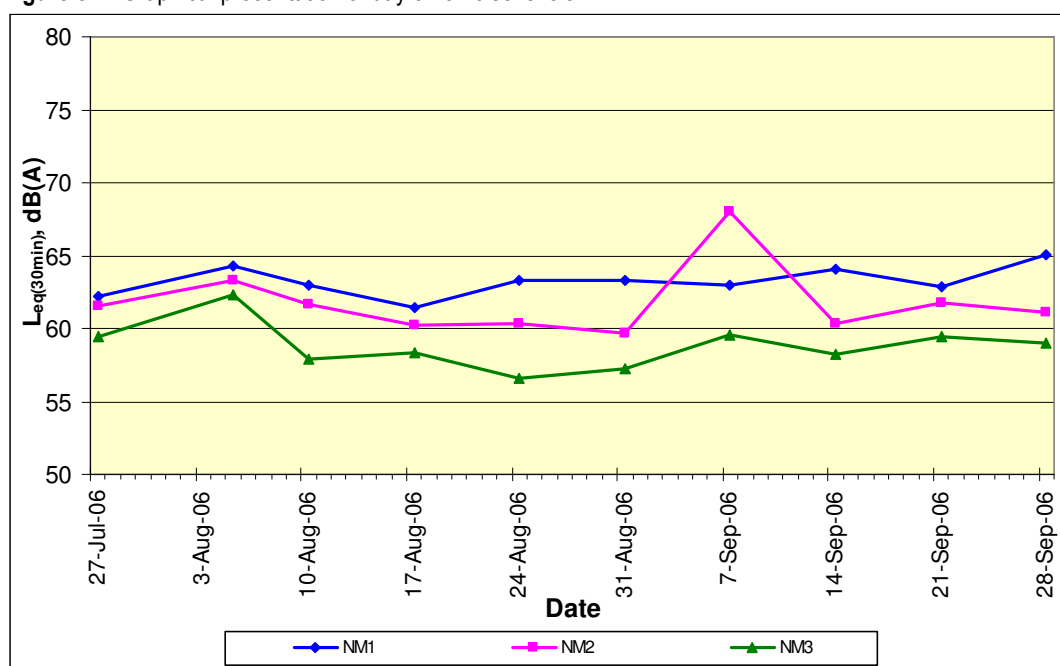
4.3.2 Summary of Results

A total of 4 sets of daytime (0700 – 1900 hours) noise monitoring was conducted on 7, 14, 21 and 28 September 2006.

The highest noise level of 68.0 dB(A) was recorded at the roof of Racecourse Villa (NM2) on 7 September 2006 while the lowest noise level of 58.2 dB(A) was recorded at the podium outside Block 1 of Ravana Garden (NM3) on 14 September 2006. There was no exceedance of noise A/L Levels recorded during the reporting period.

Detailed construction noise monitoring results are attached in **Appendix E** and graphical presentation of the noise levels at each monitoring location is illustrated in Figure 5-1.

Figure 5-1: Graphical presentation of day-time noise levels



5 Landscape and Visual Monitoring and Audit

5.1 Summary of Inspection

Landscape and visual monitoring and site audits were carried on 11th and 25th September 2006. Site office has been constructed and located at the East corner of the Site. The rear side of the office was painted in olive green color to reduce visual impacts. Vegetation clearance and site formation works were being carried out. Tree protection measures were recorded. The audit findings and recommendations are recorded in a detailed report in **Appendix F**.

6 Site Inspection, Waste Disposal, Environmental Complaints, Environmental Licenses and Non-compliance Records

6.1 Site Audit Findings

Four weekly environmental site audits were carried out in September 2006. The findings of the site audits are summarised in Table 6-1.

Table 6-1: Findings of weekly environmental site audit in September 2006

Date of Issue Raised	Observation	Advice from EA	CT's Response / Environmental Outcomes	Closing Date
4 Sept 2006	1. Excavated / unpaved area was observed within the HKSI site.	Air and water quality mitigation measures were reminded.	Agreed with the ET's advice.	4 Sept 2006
	2. General refuse, including packing materials and cut tree branches, was observed accumulated within the site.	Proper classification and disposal of the waste as well as regular clearance of waste was required.	Agreed with the ET's advice.	
	3. An oil drum without driptray was observed near the entrance of the site. The CT reported that the oil drum belonged to other contractor of another project.	Removal of oil drum from the site was requested.	Agreed with the ET's advice.	
11 Sept 2006	1. Ponding of water was observed within the site.	Mosquito control measures were reminded, preferably drying / levelling of the ponding areas.	Agreed with the ET's advice.	11 Sept 2006
18 Sept 2006	1. General refuse was observed accumulated within the site.	Proper classification and disposal of the waste as well as regular clearance of waste was required.	Agreed with the ET's advice.	18 Sept 2006
	2. Ponding of water was observed within the site.	Mosquito control measures were reminded, preferably drying / levelling of the ponding areas.	Agreed with the ET's advice.	
	3. Haul road was dry without watering.	Air and water quality mitigation measures were reminded.	Agreed with the ET's advice.	
	4. Noise label was not provided on the air compressor.	Provision of noise label before use.	Agreed with the ET's advice.	25 Sept 2006
25 Sept 2006	1. General refuse was observed accumulated within the site	Proper classification and disposal of the waste as well as regular clearance of waste was required.	Agreed with the ET's advice.	25 Sept 2006

Date of Issue Raised	Observation	Advice from EA	CT's Response / Environmental Outcomes	Closing Date
	2. Shutter was not provided for the driptray to avoid leakage of oil.	Provision of shutter was reminded.	Agreed with the ET's advice.	
	3. An oil drum without driptray was observed near a transformer room.	Provision of driptray was reminded.	Agreed with the ET's advice.	
	4. Haul road was dry without watering.	Air and water quality mitigation measures were reminded.	Agreed with the ET's advice.	

6.2 Waste Disposal

Disposal of waste material during the reporting period generally complied with the corresponding waste disposal requirements. The waste disposal quantity during the reporting period is summarised in Table 6-2.

Table 6-2: Waste disposal quantity in September 2006

Type of waste or material	Disposal at	No. of loads or quantities
C&D waste	SENT Landfill	0.03 tonnes
C&D material	Public Filling Area in TKO 137	3.6 tonnes
Chemical waste	Spent lube oil	Collected by licensed collector
		0 L

6.3 Complaint Record

One environmental complaint on discharge of muddy water was referred by EPD on 28 August 2006. The Contractor replied to EPD on 30 August 2006. EPD was satisfied with the current site drainage system after conducting a site inspection on 1 September 2006. No rectification was required and the case was closed. However, contractor had carried out the following measures to prevent any further discharge of muddy water from the subject site areas:

1. Keep closely checking on the performance of the wastewater treatment system;
2. Closely monitoring of the discharge outlet at Shing Mun River and tracing of the source origin immediately if muddy water was observed;
3. Made use of the shallow ground areas on site to temporary trap stormwater inside the site to prevent any direct discharge;
4. Construction of temporary drainage channel and use of water pump to properly divert the trapped stormwater to the temporary sump pit;
5. Control pumping of all muddy water collected from the sump pit to the wastewater treatment plant within its treatment capacity before discharging.

There was no environmental complaint received in September 2006. A log record on the environmental complaints is given in **Appendix G** and a cumulative statistics on environmental complaints is given in Table 6-3.

Table 6-3 : Cumulative statistics on environmental complaints

No. of complaints received in the reporting month	No. of outstanding complaints	Cumulative no. of complaints received since the commencement of project
0	0	1

6.4 Exceedance

There was no exceedance of environmental monitoring data for A/L Levels during the reporting period.

6.5 Notification of Summons and Successful Prosecution

No notification of summon and prosecution was received during the reporting month.

6.6 Environmental Licenses

One new CNP was granted in the reporting period. A summary of the valid environmental licenses is given in Table 6-4.

Table 6-4: Summary of valid environmental licenses

Type of Licence	Reference No.	Valid from	Valid to	Remarks
Environmental Permit	EP-236/2006	25 March 2006	--	-
Construction Noise Permit	GW-RN0433-06	4 September 2006	3 March 2007	General Earth Works in HKSI Area.

7 Future Key Issue

7.1 Forecast of Works Programme

Based on the 3-month rolling programme as shown in Appendix A, key construction activities to be carried out in the coming three months will include:

- Site foundation work;
- Underground drainage work;
- Construction of transformer room; and
- Construction of base slab of stable.

7.2 Key Issues for Coming Month

Based on the construction programme as shown in Appendix A, the following key issues are anticipated in the coming month:

- Site drainage management;
- Wastewater/runoff and effluent discharge management;
- Dust generation from land-based activities, such as breaking, excavation and stockpiling of dusty material;
- Noise from construction activities and mobilisation of plant and equipment;
- Installation of temporary noise barrier along the site boundary;
- Submission of Waste Management Plan (WMP) and Environmental Management Plan (EMP);
- Tree transplant and protection; and

- General housekeeping and waste management.

8 Comments, Recommendations and Conclusion

8.1 Comments and Recommendations

According to the environmental site inspections performed during the reporting period, the following recommendations were provided:

- Water Quality
 - Mosquito control measures were reminded, preferably drying / levelling of the ponding area.
 - The Contractor was reminded to avoid surface runoff flowing out of the site during rainy day. The mitigation measures had been implemented including construction of temporary drainage channel, use of water pump to properly divert the trapped stormwater to the temporary sump pit and control pumping of all muddy water collected from the sump pit to the wastewater treatment plant within its treatment capacity before discharging. With implemented above mitigation measures, it is effective control muddy water discharge.
- Air Quality
 - Prompt action was required to urge commissioning and operation of the wheel-washing facility.
 - Regular and increase watering frequency for unpaved area was reminded.
- Construction Noise
 - Nil
- Waste / Chemical Management
 - Proper classification and disposal of the waste as well as regular clearing of waste was required.
 - Regular clearing of waste and better housekeeping was reminded.
- Landscape & Visual
 - The Contractor was required to implement tree protection measures for better tree protection.

8.2 Conclusion

Construction phase impact monitoring and audit has commenced in the reporting month. Monitoring and audit programme included construction noise monitoring, landscape and visual monitoring and audit, and weekly site inspection.

Daytime noise levels were monitored at 3 monitoring locations during the reporting month. No exceedance of Limit Level was recorded.

Weekly site inspections were conducted in the reporting month. Some mitigation measures were still being set up. Remedial measures were advised for those deficiencies observed for the Contractor to follow up.

No Construction Noise Permit was obtained in the reporting month.

No environmental complaint was received during the reporting period.

There was neither notification of summons nor prosecution received during the reporting period.

9 References

- [1] Ove Arup & Partners Hong Kong Ltd. June 2006. Main Arena of the 2008 Olympic Equestrian Event – Environmental Monitoring & Audit Manual
- [2] Ove Arup & Partners Hong Kong Ltd. July 2006. Main Arena of the 2008 Olympic Equestrian Event – Environmental Baseline Monitoring Report




Appendix A

**Construction
Programme**

Activity ID	Activity Description	Orig Dur	Rem Dur	Cal ID	Early Start	Early Finish	2006			
							SEP	OCT	NOV	DEC
Commencement of Works & Site Possessions										
Commencement of Works										
Commencement of Works										
Possession Dates										
10900	Portion HKSI-3	0	0	1	05-OCT-06		● Portion HKSI-3 Tentative, to be confirmed. Subject to excavation permit approval.			
11000	Portion HKSI-4	0	0	1	03-DEC-06*			● Portion HKSI-4 3 December 2006		
Preliminaries										
Preliminaries										
Preliminary Requirements										
Preliminary Site Preparation										
20050	Erect Hoardings - Area 1 (HKSI-1)	14	12	2	27-JUL-06A	04-OCT-06	Erect Hoardings - Area 1 (HKSI-1)			
20054	Erect Hoarding - Area 3 (HKSI-4)	7	7	2	04-DEC-06	11-DEC-06		Erect Hoarding - Area 3 (HKSI-4)		
Submissions/Approvals/Procurements										
Submissions/Approvals										
Method Statement/Shopdrawing Submission										
20165	MS + Shopdrawing for Main Stable- Superstructure	18	18	2	20-SEP-06	12-OCT-06	MS + Shopdrawing for Main Stable- Superstructure			
20170	MS + Shopdrawing for Vet Stable- Roof Cladding	18	18	2	20-SEP-06	12-OCT-06	MS + Shopdrawing for Vet Stable- Roof Cladding			
20180	MS + Shopdrawing for Maint Stable- Roof Cladding	18	18	2	20-SEP-06	12-OCT-06	MS + Shopdrawing for Maint Stable- Roof Cladding			
20185	MS + Shopdrawing for Veterinary - Superstructure	18	18	2	20-SEP-06	12-OCT-06	MS + Shopdrawing for Veterinary - Superstructure			
20190	MS+Shopdrg for Vet Stable- ceiling works	18	18	2	20-SEP-06	12-OCT-06	MS+Shopdrg for Vet Stable- ceiling works			
20200	MS+Shopdrg for Main Stable- ceiling works	18	18	2	20-SEP-06	12-OCT-06	MS+Shopdrg for Main Stable- ceiling works			
Design Submissions to ASD										
20556	Design submission to ASD- Stone Cladding	18	18	2	20-SEP-06	12-OCT-06	Design submission to ASD- Stone Cladding			
20557	Design submission Stone Cladding - ASD revw/appv	24	24	2	13-OCT-06	09-NOV-06		Design submission Stone Cladding - ASD revw/appv		
20558	Design submission to ASD- Roof Cladding System	18	18	2	20-SEP-06	12-OCT-06	Design submission to ASD- Roof Cladding System			
20559	Design submission Roof Cladding - ASD revw/appvl	24	24	2	13-OCT-06	09-NOV-06		Design submission Roof Cladding - ASD revw/appvl		

SEP	OCT	NOV	DEC
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China State Const. Eng. (H.K.) Ltd. Sheet 1 of 22
Core Venue Main Construction Contract
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FL-71 Three Months Rolling Programme
20 Sept 2006 to 20 Dec 2006

Prepared by William C				
Date	Revision	Checked	Approved	
20-SEP-06	Extracted from Master Programme Version A, Activities for coming 3 months	T Lo/T Wong	D Lau	

Activity ID	Activity Description	Orig Dur	Rem Dur	Cal ID	Early Start	Early Finish	2006			
							SEP	OCT	NOV	DEC
							Procurement, Fabrication and Delivery			
20245	Strutural Steel matl's for Main Stable	43	43	2	20-SEP-06	10-NOV-06				Strutural Steel matl's for Main Stable 2 months for design, fabrication and delivery to site
20255	Strutural Steel matl's for Vet Stable	34	34	2	20-SEP-06	31-OCT-06				Strutural Steel matl's for Vet Stable 2 months for design, fabrication priority on Tx Room area
20260	Steel sheet roofing/cladding- Main Stable	52	52	2	20-SEP-06	21-NOV-06				Steel sheet roofing/cladding- Main Stable 3 months only for design, fabrication and delivery to site
20265	High Mast Lights	90	90	1	03-DEC-06	02-MAR-07				High Mast Lights
20270	Steel sheet roofing/cladding- Vet Stable	52	52	2	28-AUG-06A	21-NOV-06				Steel sheet roofing/cladding- Vet Stable 3 months only for design, fabrication and delivery to site
20275	Underground E/M Materials - Main Stable	36	19	1	03-SEP-06A	08-OCT-06				Underground E/M Materials - Main Stable
20280	Ceiling materials- Main Stable	58	58	2	20-SEP-06	28-NOV-06				Ceiling materials- Main Stable 3 months only for design, fabrication and delivery to site
20285	Above Ground E/M Materials - Main Stable	36	19	1	03-SEP-06A	08-OCT-06				Above Ground E/M Materials - Main Stable
20290	Ceiling materials- Vet Stable	58	58	2	20-SEP-06	28-NOV-06				Ceiling materials- Vet Stable 3 months only for design, fabrication and delivery to site
20335	Drainage Materials (2nd) - Shing Mun Walkway	45	43	1	18-SEP-06A	01-NOV-06				Drainage Materials (2nd) - Shing Mun Walkway
20345	Drainage Materials (3rd) - Shing Mun Walkway	45	45	1	02-NOV-06	16-DEC-06				Drainage Materials (3rd) - Shing Mun Walkway
20355	Drainage & Irrigation System - Penfold	60	8	1	30-JUL-06A	27-SEP-06				Drainage & Irrigation System - Penfold
20395	New Trees & Shrubs - Penfold Park	48	48	1	29-SEP-06*	15-NOV-06				New Trees & Shrubs - Penfold Park
20565	Architectural: Internal/External Finishes	96	96	1	20-SEP-06	24-DEC-06				
M&E: Shopdrawing Submissions										
Combined Builders Work Drawings (CBWD)										
20780	CBWD(above ground)- Chiller Plant	24	24	1	20-SEP-06	13-OCT-06				CBWD(above ground)- Chiller Plant
20790	CBWD(above ground)- Veterinary Stables	24	14	1	10-SEP-06A	03-OCT-06				CBWD(above ground)- Veterinary Stables
20795	CBWD(above ground)- Main Stable Block	24	24	1	20-SEP-06	13-OCT-06				CBWD(above ground)- Main Stable Block

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Core Venue Main Construction Contract
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FL-71 Three Months Rolling Programme
20 Sept 2006 to 20 Dec 2006

Prepared by William C				
Date	Revision	Checked	Approved	
20-SEP-06	Extracted from Master Programme Version A, Activities for coming 3 months	T Lo/T Wong	D Lau	

Activity ID	Activity Description	Orig Dur	Rem Dur	Cal ID	Early Start	Early Finish	2006			
							SEP	OCT	NOV	DEC
M&E Equipments: Procurement / Delivery										
20805	LV Switchboard- submission/approval/procurement	142	100	1	09-AUG-06A	28-DEC-06				
20815	Generator Set- submission/approval/procurement	127	100	1	24-AUG-06A	28-DEC-06				
20820	Armoured Cable- submission/approval/procurement	112	64	1	03-AUG-06A	22-NOV-06				
20825	Light Mast- submission/approval/procurement	142	142	1	27-SEP-06*	15-FEB-07				
20835	MVAC Chiller- submission/approval/procurement	142	94	1	03-AUG-06A	22-DEC-06				
20845	MVAC AHU- submission/approval/procurement	127	87	1	11-AUG-06A	15-DEC-06				
20855	MVAC MCC- submission/approval/procurement	112	100	1	08-SEP-06A	28-DEC-06				
20865	MVAC Pumps- submission/approval/procurement	142	94	1	03-AUG-06A	22-DEC-06				
20875	FS Pumps- submission/approval/procurement	142	94	1	03-AUG-06A	22-DEC-06				
20885	FS MCC- submission/approval/procurement	112	100	1	08-SEP-06A	28-DEC-06				
20895	FS AFA Panel- submission/approval/procurement	127	87	1	11-AUG-06A	15-DEC-06				
20905	P&D Pumps- submission/approval/procurement	142	94	1	03-AUG-06A	22-DEC-06				
20915	P&D MCC- submission/approval/procurement	112	100	1	08-SEP-06A	28-DEC-06				
20925	Sanitary Fit. - submission/approval/procurement	127	118	1	11-SEP-06A	15-JAN-07				
Mock Up										
Fair Face Concrete Mock Up										
M1-20520	Precast panel fabrication	5	4	2	19-SEP-06A	23-SEP-06				
M1-20525	Final fixing	1	1	2	25-SEP-06	25-SEP-06				
M1-20530	Visual inspection (fixing system)	1	1	2	26-SEP-06	26-SEP-06				
External Wall Finish System Mock Up										
M2-20525	Material submissions/approval	16	16	2	20-SEP-06	10-OCT-06				
M2-20530	Des/Shp dwg submission/approval	16	16	2	20-SEP-06	10-OCT-06				
M2-20535	Method Statement submissions/approval	16	16	2	20-SEP-06	10-OCT-06				
M2-20540	Material procurement: ext wall finish mock up	48	48	2	20-SEP-06	16-NOV-06				
M2-20545	Mock Up: External Wall finish system-construct	12	12	2	17-NOV-06	30-NOV-06				
M2-20550	Mock Up: External Wall finish system-vis inspect	1	1	2	01-DEC-06	01-DEC-06				

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 Finish Date:23-MAY-07
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China State Const. Eng. (H.K.) Ltd. Sheet 3 of 22
Core Venue Main Construction Contract
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FL-71 Three Months Rolling Programme
20 Sept 2006 to 20 Dec 2006

Prepared by William C				
Date	Revision	Checked	Approved	
20-SEP-06	Extracted from Master Programme	T Lo/T Wong	D Lau	
	Version A,			
	Activities for coming 3 months			

Activity ID	Activity Description	Orig Dur	Rem Dur	Cal ID	Early Start	Early Finish	2006			
							SEP	OCT	NOV	DEC
Named Suppliers/Subcontractors										
CSECL Internal Subletting										
Subcontract Agreements- assumed 4 weeks										
20435	Supply/construction-sand footing @ indoor arena	24	24	2	20-SEP-06	19-OCT-06				
20440	Supply/construction-sand footing @ all arenas	24	24	2	20-SEP-06	19-OCT-06				
20450	Supply/install- rubber coat to flr/wall stables	24	24	2	20-SEP-06	19-OCT-06				
20465	Supply- horse stalls in all stable areas	24	24	2	20-SEP-06	19-OCT-06				
Material Procurement										
Assumed 3 months:Submissions/Appvls, Fabrication										
20470	Supply/construction-sand footing @ indoor arena	72	40	2	20-SEP-06	07-NOV-06				
20475	Supply/construction-sand footing @ arenas HKSI	72	40	2	20-SEP-06	07-NOV-06				
20480	Supply/construction-sand footing at arena P Park	72	40	2	20-SEP-06	07-NOV-06				
20485	Supply/install- rubber coat to flr/wall stables	72	40	2	20-SEP-06	07-NOV-06				
20490	Supply- bridle path/arena/lunge ring: gate/fence	72	40	2	20-SEP-06	07-NOV-06				
20495	Supply- synthetic sand to bridle trail	72	53	2	23-OCT-06	22-DEC-06				
20500	Supply- horse stalls in all stable areas	72	40	2	20-SEP-06	07-NOV-06				

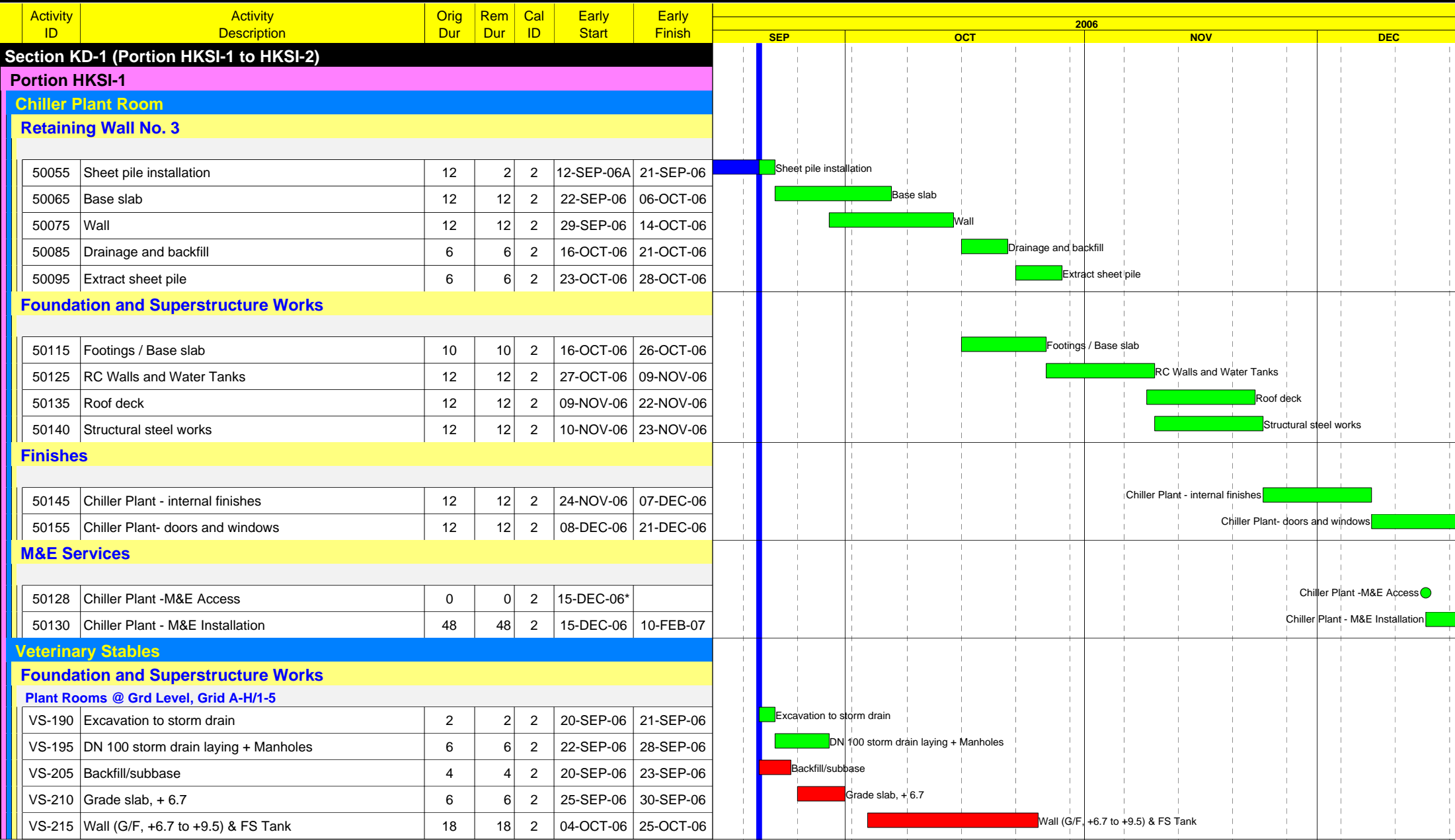
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FL-71 Three Months Rolling Programme
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Prepared by William C				
Date	Revision	Checked	Approved	
20-SEP-06	Extracted from Master Programme	T Lo/T Wong	D Lau	
	Version A,			
	Activities for coming 3 months			



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Core Venue Main Construction Contract
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FL-71 Three Months Rolling Programme
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Prepared by William C				
Date	Revision	Checked	Approved	
20-SEP-06	Extracted from Master Programme	T Lo/T Wong	D Lau	
	Version A,			
	Activities for coming 3 months			

Activity ID	Activity Description	Orig Dur	Rem Dur	Cal ID	Early Start	Early Finish	2006			
							SEP	OCT	NOV	DEC
Plant Rooms @ Grd Level, Grid A-H/1-5										
VS-217	Internal concrete partition walls	18	18	2	04-OCT-06	25-OCT-06		Internal concrete partition walls		
VS-220	Steel Truss + lower roof +12.674	12	12	2	26-OCT-06	08-NOV-06		Steel Truss + lower roof +12.674		
VS-225	Steel Upper Roof + 13.39	11	11	2	09-NOV-06	21-NOV-06		Steel Upper Roof + 13.39		
VS-230	Steel sheet roofing/cladding, +12.6->+13.3	12	12	2	22-NOV-06	05-DEC-06		Steel sheet roofing/cladding, +12.6->+13.3		
VS-235	Ceiling installation	12	12	2	06-DEC-06	19-DEC-06		Ceiling installation		
VS-240	Handover (Tx Rm, LVSR Rm) to ABWF	0	0	2		05-DEC-06		Handover (Tx Rm, LVSR Rm) to ABWF		
Grd Level, H-L/1-10 & 1/F Plant Room										
VS-270	Install underground foul drains/FS pipe/plumbing	6	6	2	20-SEP-06	26-SEP-06		Install underground foul drains/FS pipe/plumbing		
VS-275	WVO Inspection of FS/plumbing pipes	1	1	2	27-SEP-06	27-SEP-06		WVO Inspection of FS/plumbing pipes		
VS-280	Backfill/Subase/Grade slab, + 6.695	12	12	2	28-SEP-06	13-OCT-06		Backfill/Subase/Grade slab, + 6.695		
VS-285	Steel Cols+6.696 to +11.7 (canopy area)	12	12	2	14-OCT-06	27-OCT-06		Steel Cols+6.696 to +11.7 (canopy area)		
VS-290	Steel beams + 11.7	10	10	2	28-OCT-06	08-NOV-06		Steel beams + 11.7		
VS-295	Steel sheet roofing/cladding, +11.7	12	12	2	09-NOV-06	22-NOV-06		Steel sheet roofing/cladding, +11.7		
VS-300	Ceiling installation G/F	12	12	2	29-NOV-06	12-DEC-06		Ceiling installation G/F		
VS-305	Handover to ABWF	0	0	2		22-NOV-06		Handover to ABWF		
VS-310	Wall (G/F to 1/F, 11.125)	10	10	2	14-OCT-06	25-OCT-06		Wall (G/F to 1/F, 11.125)		
VS-315	Slab 1/F	6	6	2	26-OCT-06	01-NOV-06		Slab 1/F		
VS-320	Wall 1/F to +13.9	8	8	2	02-NOV-06	10-NOV-06		Wall 1/F to +13.9		
VS-325	Steel cols, braces, beams to Roof +17.48	12	12	2	11-NOV-06	24-NOV-06		Steel cols, braces, beams to Roof +17.48		
VS-330	Steel sheet roofing/cladding, +17.4	12	12	2	25-NOV-06	08-DEC-06		Steel sheet roofing/cladding, +17.4		
VS-335	Ceiling installation 1/F	12	12	2	09-DEC-06	22-DEC-06		Ceiling installation 1/F		
VS-340	Handover 1F Plant Rm to ABWF	0	0	2		08-DEC-06		Handover 1F Plant Rm to ABWF		
Other Areas, Grnd Level, Grid L-U/1-5										
VS-355	Excavation to storm drain	2	2	2	20-SEP-06	21-SEP-06		Excavation to storm drain		
VS-370	DN 100 strom drain + Manholes	6	6	2	20-SEP-06	26-SEP-06		DN 100 strom drain + Manholes		
VS-380	Install underground foul drains/FS pipe/plumbing	6	6	2	20-SEP-06	26-SEP-06		Install underground foul drains/FS pipe/plumbing		
VS-385	WVO Inspection of FS/plumbing pipes	1	1	2	27-SEP-06	27-SEP-06		WVO Inspection of FS/plumbing pipes		
VS-390	Backfill/Subase/Grade slab, + 6.695	6	6	2	28-SEP-06	05-OCT-06		Backfill/Subase/Grade slab, + 6.695		
VS-395	Wall (G/F, +6.695 to +9.5)	12	12	2	06-OCT-06	20-OCT-06		Wall (G/F, +6.695 to +9.5)		
VS-400	Steel Truss + lower roof +12.674	12	12	2	21-OCT-06	03-NOV-06		Steel Truss + lower roof +12.674		

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Core Venue Main Construction Contract
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FL-71 Three Months Rolling Programme
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Prepared by William C				
Date	Revision	Checked	Approved	
20-SEP-06	Extracted from Master Programme	T Lo/T Wong	D Lau	
	Version A,			
	Activities for coming 3 months			

Activity ID	Activity Description	Orig Dur	Rem Dur	Cal ID	Early Start	Early Finish	2006				
							SEP	OCT	NOV	DEC	
Other Areas, Grnd Level, Grid L-U/1-5											
VS-405	Steel Upper Roof + 13.39	12	12	2	04-NOV-06	17-NOV-06			Steel Upper Roof + 13.39		
VS-410	Steel sheet roofing/cladding, +12.6->+13.3	12	12	2	04-DEC-06*	16-DEC-06			Steel sheet roofing/cladding, +12.6->+13.3		
VS-415	Ceiling installation	12	12	2	18-DEC-06	02-JAN-07			Ceiling installation		
VS-420	Handover to ABWF	0	0	2		16-DEC-06			Handover to ABWF		
Entrance Gate/Building											
VS-425	Excavation/substructure works	12	12	2	04-NOV-06*	17-NOV-06			Excavation/substructure works		
VS-430	Ground slab + RC Wall	12	12	2	18-NOV-06	01-DEC-06			Ground slab + RC Wall		
VS-435	Structural steel works	12	12	2	02-DEC-06	15-DEC-06			Structural steel works		
VS-440	Steel sheet roofing/cladding	6	6	2	16-DEC-06	22-DEC-06			Steel sheet roofing/cladding		
M&E Services											
ABWF & M&E Works in LV Switch Room											
VS-505	Plastering + quarry tiles	12	12	2	06-DEC-06	19-DEC-06			Plastering + quarry tiles		
VS-510	Metal louvers +6.75->+ 9.5(blanked off)	6	6	2	06-DEC-06	12-DEC-06			Metal louvers +6.75->+ 9.5(blanked off)		
VS-515	Aluminum louvers +9.5->+10.35(blanked off)	6	6	2	13-DEC-06	19-DEC-06			Aluminum louvers +9.5->+10.35(blanked off)		
VS-525	Metal doors MD1, MD8, MD6	12	12	2	06-DEC-06	19-DEC-06			Metal doors MD1, MD8, MD6		
ABWF & M&E Works in Tx Room											
VS-075	M&E Access: Tx Rm	0	0	2	13-DEC-06*				M&E Access: Tx Rm		
VS-115	M&E Installation at Tx Room	18	18	2	13-DEC-06	04-JAN-07			M&E Installation at Tx Room		
VS-455	Plastering + quarry tiles	12	12	2	06-DEC-06	19-DEC-06			Plastering + quarry tiles		
VS-460	Metal louvers +6.75->+ 9.5(blanked off)	6	6	2	06-DEC-06	12-DEC-06			Metal louvers +6.75->+ 9.5(blanked off)		
VS-465	Aluminum louvers +9.5->+10.35(blanked off)	3	3	2	13-DEC-06	15-DEC-06			Aluminum louvers +9.5->+10.35(blanked off)		
VS-470	Aluminum louvers +11.79->+12.5 (blanked off)	3	3	2	16-DEC-06	19-DEC-06			Aluminum louvers +11.79->+12.5 (blanked off)		
VS-475	Metal doors MD1, MD8, MD6	12	12	2	06-DEC-06	19-DEC-06			Metal doors MD1, MD8, MD6		
M&E Access Dates											
VS-090	M&E Access: Grd Lvl, H-L/1-10	0	0	2	13-DEC-06				M&E Access: Grd Lvl, H-L/1-10		
M&E Cast In Items											
VS-080	M&E Cast in items	72	72	2	28-SEP-06	22-DEC-06	M&E Cast in items				
M&E Installation											
VS-135	2nd Fix Fire Services Installation	61	61	2	18-DEC-06	07-MAR-07			2nd Fix Fire Services Installation		
VS-140	2nd Fix HVAC Installation	61	61	2	18-DEC-06	07-MAR-07			2nd Fix HVAC Installation		
VS-145	2nd Fix Electrical Installation	61	61	2	18-DEC-06	07-MAR-07			2nd Fix Electrical Installation		

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FL-71 Three Months Rolling Programme
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Prepared by William C				
Date	Revision	Checked	Approved	
20-SEP-06	Extracted from Master Programme Version A, Activities for coming 3 months	T Lo/T Wong	D Lau	

Activity ID	Activity Description	Orig Dur	Rem Dur	Cal ID	Early Start	Early Finish	2006				
							SEP	OCT	NOV	DEC	
M&E Installation											
VS-150	Building Management System	61	61	2	18-DEC-06	07-MAR-07					Building Management System
Main Stable Block No. 1											
Foundation and Superstructure Works											
Wing 1: Grid A-R/ 13-16											
MB1-150	Tie beam /footing/upstand wall	10	8	2	18-SEP-06A	28-SEP-06	■				
MB1-155	Install underground foul drains/FS pipe/plumbing	6	6	2	29-SEP-06	06-OCT-06		■			
MB1-160	WVO Inspection of FS/plumbing pipes	1	1	2	09-OCT-06	09-OCT-06			■		
MB1-165	Backfill/Subbase/Grade slab, + 6.695	6	6	2	10-OCT-06	16-OCT-06			■		
MB1-170	Wall (G/F, +6.695 to +9.5)	12	12	2	17-OCT-06	30-OCT-06			■		
MB1-175	Steel Truss + lower roof +12.674	10	10	2	31-OCT-06	10-NOV-06			■		
MB1-180	Steel Upper Roof + 13.39	10	10	2	11-NOV-06	22-NOV-06				■	
MB1-185	Steel sheet roofing/cladding	12	12	2	23-NOV-06	06-DEC-06				■	
MB1-190	Ceiling installation G/F	12	12	2	07-DEC-06	20-DEC-06					■
MB1-195	Handover to ABWF, Grid A-R/13-16	0	0	2		06-DEC-06					●
MB1-200	Wall (G/F to 1/F, 11.125)	18	18	2	17-OCT-06	06-NOV-06			■		
MB1-205	Slab 1/F	6	6	2	07-NOV-06	13-NOV-06				■	
MB1-210	Wall 1/F to +13.85	8	8	2	14-NOV-06	22-NOV-06					■
MB1-215	Steel cols, braces, beams to Roof +17.48	12	12	2	23-NOV-06	06-DEC-06				■	
MB1-220	Steel sheet roofing/cladding	12	12	2	07-DEC-06	20-DEC-06					■
Wing 2: Grid A-R/1-4											
MB1-265	Tie beam /footing/upstand wall	10	10	2	20-SEP-06A	30-SEP-06	■				
MB1-270	Install underground foul drains/FS pipe/plumbing	6	6	2	03-OCT-06	10-OCT-06		■			
MB1-275	WVO Inspection of FS/plumbing pipes	1	1	2	11-OCT-06	11-OCT-06			■		
MB1-280	Backfill/Subbase/Grade slab, + 6.695	6	6	2	12-OCT-06	18-OCT-06			■		
MB1-285	Wall (G/F, +6.695 to +9.5)	12	12	2	19-OCT-06	01-NOV-06			■		
MB1-290	Steel Truss + lower roof +12.674	10	10	2	02-NOV-06	13-NOV-06			■		
MB1-295	Steel Upper Roof + 13.39	10	10	2	14-NOV-06	24-NOV-06				■	
MB1-300	Steel sheet roofing/cladding	12	12	2	25-NOV-06	08-DEC-06				■	
MB1-305	Ceiling installation G/F	12	12	2	09-DEC-06	22-DEC-06					■
MB1-310	Handover to ABWF, Grid A-R/1-4	0	0	2		08-DEC-06					●

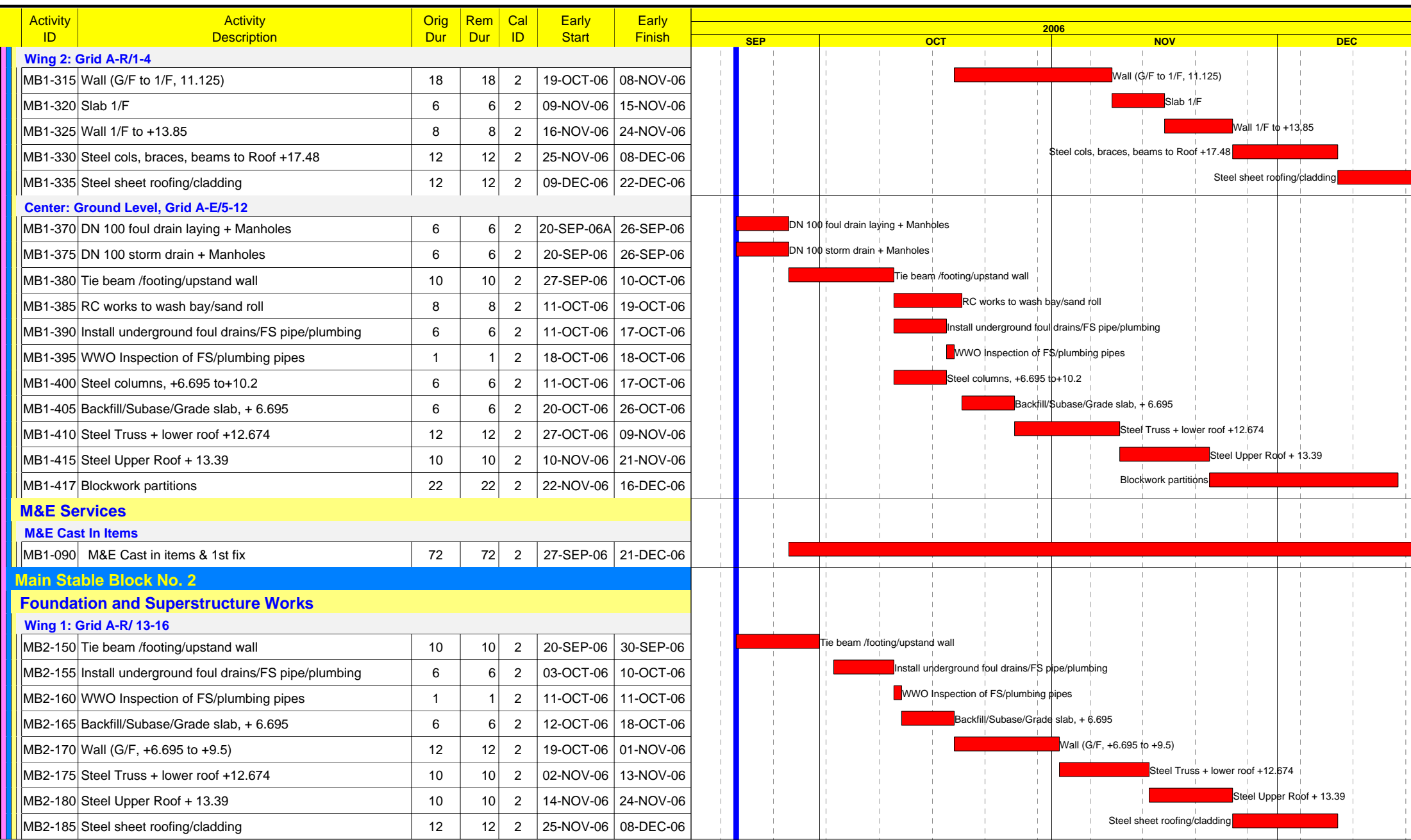
SEP	OCT	NOV	DEC
2006			

File Name:WP09
 Start Date:20-SEP-06
 Finish Date:23-MAY-07
 Filter Name:FL-71 Three Months Rolling I
 Layout Name:Three Months Rolling Progi
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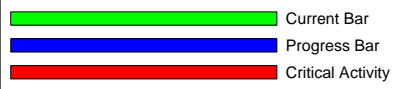
■ Current Bar
 ■ Progress Bar
 ■ Critical Activity

China State Const. Eng. (H.K.) Ltd. Sheet 8 of 22
Core Venue Main Construction Contract
(Package CV-2B & CV-2C)
FL-71 Three Months Rolling Programme
20 Sept 2006 to 20 Dec 2006

Prepared by William C				
Date	Revision	Checked	Approved	
20-SEP-06	Extracted from Master Programme Version A, Activities for coming 3 months	T Lo/T Wong	D Lau	



File Name:WP09
 Start Date:20-SEP-06
 Finish Date:23-MAY-07
 Filter Name:FL-71 Three Months Rolling I
 Layout Name:Three Months Rolling Progi
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China State Const. Eng. (H.K.) Ltd. Sheet 9 of 22
Core Venue Main Construction Contract
(Package CV-2B & CV-2C)
FL-71 Three Months Rolling Programme
20 Sept 2006 to 20 Dec 2006

Prepared by William C				
Date	Revision	Checked	Approved	
20-SEP-06	Extracted from Master Programme	T Lo/T Wong	D Lau	
	Version A,			
	Activities for coming 3 months			

Activity ID	Activity Description	Orig Dur	Rem Dur	Cal ID	Early Start	Early Finish	2006				
							SEP	OCT	NOV	DEC	
Wing 1: Grid A-R/ 13-16											
MB2-190	Ceiling installation G/F	12	12	2	09-DEC-06	22-DEC-06					Ceiling installation G/F
MB2-195	Handover to ABWF, Grid A-R/13-16	0	0	2		08-DEC-06					Handover to ABWF, Grid A-R/13-16
MB2-200	Wall (G/F to 1/F, 11.125)	18	18	2	19-OCT-06	08-NOV-06					Wall (G/F to 1/F, 11.125)
MB2-205	Slab 1/F	6	6	2	09-NOV-06	15-NOV-06					Slab 1/F
MB2-210	Wall 1/F to +13.85	8	8	2	16-NOV-06	24-NOV-06					Wall 1/F to +13.85
MB2-215	Steel cols, braces, beams to Roof +17.48	12	12	2	25-NOV-06	08-DEC-06					Steel cols, braces, beams to Roof +17.48
MB2-220	Steel sheet roofing/cladding	12	12	2	09-DEC-06	22-DEC-06					Steel sheet roofing/cladding
Wing 2: Grid A-R/1-4											
MB2-255	DN 100 foul drain laying + Manholes	6	6	2	20-SEP-06A	26-SEP-06					DN 100 foul drain laying + Manholes
MB2-265	Tie beam /footing/upstand wall	10	10	2	27-SEP-06	10-OCT-06					Tie beam /footing/upstand wall
MB2-270	Install underground foul drains/FS pipe/plumbing	6	6	2	11-OCT-06	17-OCT-06					Install underground foul drains/FS pipe/plumbing
MB2-275	WVO Inspection of FS/plumbing pipes	1	1	2	18-OCT-06	18-OCT-06					WVO Inspection of FS/plumbing pipes
MB2-280	Backfill/Subbase/Grade slab, + 6.695	6	6	2	19-OCT-06	25-OCT-06					Backfill/Subbase/Grade slab, + 6.695
MB2-285	Wall (G/F, +6.695 to +9.5)	12	12	2	26-OCT-06	08-NOV-06					Wall (G/F, +6.695 to +9.5)
MB2-290	Steel Truss + lower roof +12.674	10	10	2	09-NOV-06	20-NOV-06					Steel Truss + lower roof +12.674
MB2-295	Steel Upper Roof + 13.39	10	10	2	21-NOV-06	01-DEC-06					Steel Upper Roof + 13.39
MB2-300	Steel sheet roofing/cladding	12	12	2	02-DEC-06	15-DEC-06					Steel sheet roofing/cladding
MB2-305	Ceiling installation G/F	12	12	2	16-DEC-06	30-DEC-06					Ceiling installation G/F
MB2-310	Handover to ABWF, Grid A-R/1-4	0	0	2		15-DEC-06					Handover to ABWF, Grid A-R/1-4
MB2-315	Wall (G/F to 1/F, 11.125)	18	18	2	26-OCT-06	15-NOV-06					Wall (G/F to 1/F, 11.125)
MB2-320	Slab 1/F	6	6	2	16-NOV-06	22-NOV-06					Slab 1/F
MB2-325	Wall 1/F to +13.85	8	8	2	23-NOV-06	01-DEC-06					Wall 1/F to +13.85
MB2-330	Steel cols, braces, beams to Roof +17.48	12	12	2	02-DEC-06	15-DEC-06					Steel cols, braces, beams to Roof +17.48
MB2-335	Steel sheet roofing/cladding	12	12	2	16-DEC-06	30-DEC-06					Steel sheet roofing/cladding
Center: Ground Level, Grid A-E/5-12											
MB2-370	DN 100 foul drain laying + Manholes	6	5	2	19-SEP-06A	25-SEP-06					DN 100 foul drain laying + Manholes
MB2-375	DN 100 storm drain + Manholes	6	5	2	19-SEP-06A	25-SEP-06					DN 100 storm drain + Manholes
MB2-380	Tie beam /footing/upstand wall	10	10	2	26-SEP-06	09-OCT-06					Tie beam /footing/upstand wall
MB2-385	RC works to wash bay/sand roll	8	8	2	10-OCT-06	18-OCT-06					RC works to wash bay/sand roll
MB2-390	Install underground foul drains/FS pipe/plumbing	6	6	2	10-OCT-06	16-OCT-06					Install underground foul drains/FS pipe/plumbing

SEP	OCT	NOV	DEC
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File Name:WP09
Start Date:20-SEP-06
Finish Date:23-MAY-07
Filter Name:FL-71 Three Months Rolling
Layout Name:Three Months Rolling Program
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█ Current Bar
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China State Const. Eng. (H.K.) Ltd.
Core Venue Main Construction Contract
(Package CV-2B & CV-2C)
FL-71 Three Months Rolling Programme
20 Sept 2006 to 20 Dec 2006

Prepared by William C				
Date	Revision	Checked	Approved	
20-SEP-06	Extracted from Master Programme	T Lo/T Wong	D Lau	
	Version A,			
	Activities for coming 3 months			

Activity ID	Activity Description	Orig Dur	Rem Dur	Cal ID	Early Start	Early Finish	2006			
							SEP	OCT	NOV	DEC
Center: Ground Level, Grid A-E/5-12										
MB2-395	WVO Inspection of FS/plumbing pipes	1	1	2	17-OCT-06	17-OCT-06				
MB2-400	Steel columns, +6.695 to+10.2	6	6	2	10-OCT-06	16-OCT-06				
MB2-405	Backfill/Subbase/Grade slab, + 6.695	6	6	2	19-OCT-06	25-OCT-06				
MB2-410	Steel Truss + lower roof +12.674	12	12	2	26-OCT-06	08-NOV-06				
MB2-415	Steel Upper Roof + 13.39	10	10	2	09-NOV-06	20-NOV-06				
MB2-417	Blockworks wall partitions	22	22	2	21-NOV-06	15-DEC-06				
M&E Services										
M&E Cast In Items										
MB2-090	M&E Cast in items & 1st fix	72	72	2	26-SEP-06	20-DEC-06				
Main Stable Block No. 3										
Foundation and Superstructure Works										
Wing 1: Grid A-R/ 13-16										
MB3-140	DN 100 foul drain laying + Manholes	6	6	2	20-SEP-06A	26-SEP-06				
MB3-145	DN 100 storm drain + Manholes	6	6	2	20-SEP-06A	26-SEP-06				
MB3-150	Tie beam /footing/upstand wall	10	10	2	27-SEP-06	10-OCT-06				
MB3-155	Install underground foul drains/FS pipe/plumbing	6	6	2	11-OCT-06	17-OCT-06				
MB3-160	WVO Inspection of FS/plumbing pipes	1	1	2	18-OCT-06	18-OCT-06				
MB3-165	Backfill/Subbase/Grade slab, + 6.695	6	6	2	19-OCT-06	25-OCT-06				
MB3-170	Wall (G/F, +6.695 to +9.5)	12	12	2	26-OCT-06	08-NOV-06				
MB3-175	Steel Truss + lower roof +12.674	10	10	2	09-NOV-06	20-NOV-06				
MB3-180	Steel Upper Roof + 13.39	10	10	2	21-NOV-06	01-DEC-06				
MB3-185	Steel sheet roofing/cladding	12	12	2	09-DEC-06	22-DEC-06				
MB3-200	Wall (G/F to 1/F, 11.125)	18	18	2	26-OCT-06	15-NOV-06				
MB3-205	Slab 1/F	6	6	2	16-NOV-06	22-NOV-06				
MB3-210	Wall 1/F to +13.85	8	8	2	23-NOV-06	01-DEC-06				
MB3-215	Steel cols, braces, beams to Roof +17.48	12	12	2	02-DEC-06	15-DEC-06				
Wing 2: Grid A-R/1-4										
MB3-255	DN 100 foul drain laying + Manholes	4	4	2	18-SEP-06A	23-SEP-06				
MB3-260	DN 100 storm drain + Manholes	4	4	2	18-SEP-06A	23-SEP-06				
MB3-265	Tie beam /footing/upstand wall	10	10	2	25-SEP-06	06-OCT-06				
MB3-270	Install underground foul drains/FS pipe/plumbing	6	6	2	09-OCT-06	14-OCT-06				

File Name:WP09
 Start Date:20-SEP-06
 Finish Date:23-MAY-07
 Filter Name:FL-71 Three Months Rolling I
 Layout Name:Three Months Rolling Progi
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 Current Bar
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China State Const. Eng. (H.K.) Ltd. Sheet 11 of 22
Core Venue Main Construction Contract
(Package CV-2B & CV-2C)
FL-71 Three Months Rolling Programme
20 Sept 2006 to 20 Dec 2006

2006				
SEP	OCT	NOV	DEC	
Prepared by William C				
Date	Revision	Checked	Approved	
20-SEP-06	Extracted from Master Programme	T Lo/T Wong	D Lau	
Version A,				
Activities for coming 3 months				

Activity ID	Activity Description	Orig Dur	Rem Dur	Cal ID	Early Start	Early Finish	2006				
							SEP	OCT	NOV	DEC	
Wing 2: Grid A-R/1-4											
MB3-275	WWO Inspection of FS/plumbing pipes	1	1	2	16-OCT-06	16-OCT-06					
MB3-280	Backfill/Subbase/Grade slab, + 6.695	6	6	2	17-OCT-06	23-OCT-06					
MB3-285	Wall (G/F, +6.695 to +9.5)	12	12	2	24-OCT-06	06-NOV-06					
MB3-290	Steel Truss + lower roof +12.674	10	10	2	07-NOV-06	17-NOV-06					
MB3-295	Steel Upper Roof + 13.39	10	10	2	18-NOV-06	29-NOV-06					
MB3-300	Steel sheet roofing/cladding	12	12	2	16-DEC-06	30-DEC-06					
MB3-315	Wall (G/F to 1/F, 11.125)	18	18	2	24-OCT-06	13-NOV-06					
MB3-320	Slab 1/F	6	6	2	14-NOV-06	20-NOV-06					
MB3-325	Wall 1/F to +13.85	8	8	2	21-NOV-06	29-NOV-06					
MB3-330	Steel cols, braces, beams to Roof +17.48	12	12	2	30-NOV-06	13-DEC-06					
Center: Ground Level, Grid A-E/5-12											
MB3-370	DN 100 foul drain laying + Manholes	6	6	2	20-SEP-06	26-SEP-06					
MB3-375	DN 100 storm drain + Manholes	6	6	2	20-SEP-06	26-SEP-06					
MB3-380	Tie beam /footing/upstand wall	10	10	2	27-SEP-06	10-OCT-06					
MB3-385	RC works to wash bay/sand roll	8	8	2	11-OCT-06	19-OCT-06					
MB3-390	Install underground foul drains/FS pipe/plumbing	6	6	2	11-OCT-06	17-OCT-06					
MB3-395	WWO Inspection of FS/plumbing pipes	1	1	2	18-OCT-06	18-OCT-06					
MB3-400	Steel columns, +6.695 to+10.2	6	6	2	11-OCT-06	17-OCT-06					
MB3-405	Backfill/Subbase/Grade slab, + 6.695	6	6	2	20-OCT-06	26-OCT-06					
MB3-410	Steel Truss + lower roof +12.674	12	12	2	27-OCT-06	09-NOV-06					
MB3-415	Steel Upper Roof + 13.39	10	10	2	10-NOV-06	21-NOV-06					
MB3-417	Block wall partitions	22	22	2	22-NOV-06	16-DEC-06					
M&E Services											
M&E Cast In Items											
MB3-090	M&E Cast in items & 1st fix	72	72	2	16-OCT-06	09-JAN-07					
Main Stable Block No. 4											
Foundation and Superstructure Works											
Wing 1: Grid A-R/ 13-16											
MB4-140	DN 100 foul drain laying + Manholes	6	5	2	19-SEP-06A	25-SEP-06					
MB4-145	DN 100 storm drain + Manholes	6	5	2	19-SEP-06A	25-SEP-06					
MB4-150	Tie beam /footing/upstand wall	10	10	2	26-SEP-06	09-OCT-06					

SEP	OCT	NOV	DEC
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File Name:WP09
 Start Date:20-SEP-06
 Finish Date:23-MAY-07
 Filter Name:FL-71 Three Months Rolling I
 Layout Name:Three Months Rolling Progi
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 Current Bar
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China State Const. Eng. (H.K.) Ltd. Sheet 12 of 22
Core Venue Main Construction Contract
(Package CV-2B & CV-2C)
FL-71 Three Months Rolling Programme
20 Sept 2006 to 20 Dec 2006

Prepared by William C				
Date	Revision	Checked	Approved	
20-SEP-06	Extracted from Master Programme	T Lo/T Wong	D Lau	
	Version A,			
	Activities for coming 3 months			

Activity ID	Activity Description	Orig Dur	Rem Dur	Cal ID	Early Start	Early Finish	2006				
							SEP	OCT	NOV	DEC	
Wing 1: Grid A-R/ 13-16											
MB4-155	Install underground foul drains/FS pipe/plumbing	6	6	2	10-OCT-06	16-OCT-06		█			
MB4-160	WVO Inspection of FS/plumbing pipes	1	1	2	17-OCT-06	17-OCT-06		█			
MB4-165	Backfill/Subbase/Grade slab, + 6.695	6	6	2	18-OCT-06	24-OCT-06		█			
MB4-170	Wall (G/F, +6.695 to +9.5)	12	12	2	25-OCT-06	07-NOV-06		█			
MB4-175	Steel Truss + lower roof +12.674	10	10	2	08-NOV-06	18-NOV-06			█		
MB4-180	Steel Upper Roof + 13.39	10	10	2	20-NOV-06	30-NOV-06			█		
MB4-185	Steel sheet roofing/cladding	12	12	2	09-DEC-06	22-DEC-06				█	
MB4-200	Wall (G/F to 1/F, 11.125)	18	18	2	25-OCT-06	14-NOV-06		█			
MB4-205	Slab 1/F	6	6	2	15-NOV-06	21-NOV-06			█		
MB4-210	Wall 1/F to +13.85	8	8	2	22-NOV-06	30-NOV-06			█		
MB4-215	Steel cols, braces, beams to Roof +17.48	12	12	2	01-DEC-06	14-DEC-06				█	
Wing 2: Grid A-R/1-4											
MB4-255	DN 100 foul drain laying + Manholes	6	6	2	20-SEP-06A	26-SEP-06	█				
MB4-260	DN 100 storm drain + Manholes	6	6	2	20-SEP-06A	26-SEP-06	█				
MB4-265	Tie beam /footing/upstand wall	10	10	2	27-SEP-06	10-OCT-06		█			
MB4-270	Install underground foul drains/FS pipe/plumbing	6	6	2	11-OCT-06	17-OCT-06		█			
MB4-275	WVO Inspection of FS/plumbing pipes	1	1	2	18-OCT-06	18-OCT-06		█			
MB4-280	Backfill/Subbase/Grade slab, + 6.695	6	6	2	19-OCT-06	25-OCT-06		█			
MB4-285	Wall (G/F, +6.695 to +9.5)	12	12	2	26-OCT-06	08-NOV-06		█			
MB4-290	Steel Truss + lower roof +12.674	10	10	2	09-NOV-06	20-NOV-06			█		
MB4-295	Steel Upper Roof + 13.39	10	10	2	21-NOV-06	01-DEC-06			█		
MB4-300	Steel sheet roofing/cladding	12	12	2	16-DEC-06	30-DEC-06				█	
MB4-315	Wall (G/F to 1/F, 11.125)	18	18	2	26-OCT-06	15-NOV-06		█			
MB4-320	Slab 1/F	6	6	2	16-NOV-06	22-NOV-06			█		
MB4-325	Wall 1/F to +13.85	8	8	2	23-NOV-06	01-DEC-06			█		
MB4-330	Steel cols, braces, beams to Roof +17.48	12	12	2	02-DEC-06	15-DEC-06				█	
Center: Ground Level, Grid A-E/5-12											
MB4-370	DN 100 foul drain laying + Manholes	6	6	2	21-SEP-06*	27-SEP-06	█				
MB4-375	DN 100 storm drain + Manholes	6	6	2	21-SEP-06*	27-SEP-06	█				
MB4-380	Tie beam /footing/upstand wall	10	10	2	28-SEP-06	11-OCT-06		█			

SEP	OCT	NOV	DEC
2006			

File Name:WP09
 Start Date:20-SEP-06
 Finish Date:23-MAY-07
 Filter Name:FL-71 Three Months Rolling
 Layout Name:Three Months Rolling Program
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█ Current Bar
█ Progress Bar
█ Critical Activity




China State Const. Eng. (H.K.) Ltd. Sheet 13 of 22
Core Venue Main Construction Contract
(Package CV-2B & CV-2C)
FL-71 Three Months Rolling Programme
20 Sept 2006 to 20 Dec 2006

Prepared by William C				
Date	Revision	Checked	Approved	
20-SEP-06	Extracted from Master Programme	T Lo/T Wong	D Lau	
	Version A,			
	Activities for coming 3 months			

Activity ID	Activity Description	Orig Dur	Rem Dur	Cal ID	Early Start	Early Finish	2006			
							SEP	OCT	NOV	DEC
Center: Ground Level, Grid A-E/5-12										
MB4-385	RC works to wash bay/sand roll	8	8	2	12-OCT-06	20-OCT-06		RC works to wash bay/sand roll		
MB4-390	Install underground foul drains/FS pipe/plumbing	6	6	2	12-OCT-06	18-OCT-06		Install underground foul drains/FS pipe/plumbing		
MB4-395	WVO Inspection of FS/plumbing pipes	1	1	2	19-OCT-06	19-OCT-06		WVO Inspection of FS/plumbing pipes		
MB4-400	Steel columns, +6.695 to+10.2	6	6	2	12-OCT-06	18-OCT-06		Steel columns, +6.695 to+10.2		
MB4-405	Backfill/Subase/Grade slab, + 6.695	6	6	2	21-OCT-06	27-OCT-06		Backfill/Subase/Grade slab, + 6.695		
MB4-410	Steel Truss + lower roof +12.674	12	12	2	28-OCT-06	10-NOV-06		Steel Truss + lower roof +12.674		
MB4-415	Steel Upper Roof + 13.39	10	10	2	11-NOV-06	22-NOV-06		Steel Upper Roof + 13.39		
MB4-417	Block wall partitions	22	22	2	23-NOV-06	18-DEC-06		Block wall partitions		
M&E Services										
M&E Cast In Items										
MB4-090	M&E Cast in items & 1st fix	72	72	2	16-OCT-06	09-JAN-07		M&E Cast in items & 1st fix		
External Works										
Tree Transplanting										
51020	Transplant Trees (T393)	31	15	2	01-SEP-06A	09-OCT-06		Transplant Trees (T393)		
51022	Transplant Trees (T243 to T253)	78	78	2	20-SEP-06	21-DEC-06				
51024	Transplant Trees (T212->T238 group)	89	88	2	19-SEP-06A	04-JAN-07				
External Utilities/Drainage - Phase 1										
Utilities between Vet Stable & MB3										
EXT-090	DN750,MHS12.15->S12.18	18	18	2	03-OCT-06*	24-OCT-06		DN750,MHS12.15->S12.18		
EXT-095	DN150 Chilled water main Ch F20->F73	18	18	2	25-OCT-06	14-NOV-06		DN150 Chilled water main Ch F20->F73		
EXT-245	DN80uPVC, Irrigation Main	12	12	2	25-OCT-06	07-NOV-06		DN80uPVC, Irrigation Main		
EXT-247	ELV+PCCW/COMM ducts	12	12	2	25-OCT-06	07-NOV-06		ELV+PCCW/COMM ducts		
Utilities@ Rd ST7 (bet. Warm Up Arena & MB3/MB4)										
EXT-165	DN400 MHS12.14->S12.13	12	12	2	03-OCT-06*	17-OCT-06		DN400 MHS12.14->S12.13 trench shoring		
EXT-170	DN450 MHS12.13->S12.11	12	12	2	11-OCT-06	24-OCT-06		DN450 MHS12.13->S12.11 trench shoring		
EXT-175	DN525 MHS12.11->S12.2	18	18	2	18-OCT-06	07-NOV-06		DN525 MHS12.11->S12.2 trench shoring		
EXT-180	DN300 MHF12.6->F12.5->F12.4->F12.3	18	18	2	25-OCT-06	14-NOV-06		DN300 MHF12.6->F12.5->F12.4->F12.3		
EXT-185	DN150 Chilled water main Ch F73->F210	18	18	2	15-NOV-06	05-DEC-06		DN150 Chilled water main Ch F73->F210 trench shoring		
EXT-210	DN150- FS main, Ch C144.5 -> E12.0	18	18	2	15-NOV-06	05-DEC-06		DN150- FS main, Ch C144.5 -> E12.0 trench shoring		
EXT-212	WVO Inspection- FS main Ch C144.5 -> E12.0	1	1	2	06-DEC-06	06-DEC-06		WVO Inspection- FS main Ch C144.5 -> E12.0		

SEP	OCT	NOV	DEC
2006			

File Name:WP09
Start Date:20-SEP-06
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Filter Name:FL-71 Three Months Rolling
LAYOUT Name:Three Months Rolling Program
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 Current Bar
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China State Const. Eng. (H.K.) Ltd. Sheet 14 of 22
Core Venue Main Construction Contract
(Package CV-2B & CV-2C)
FL-71 Three Months Rolling Programme
20 Sept 2006 to 20 Dec 2006

Prepared by William C				
Date	Revision	Checked	Approved	
20-SEP-06	Extracted from Master Programme	T Lo/T Wong	D Lau	
	Version A,			
	Activities for coming 3 months			

Activity ID	Activity Description	Orig Dur	Rem Dur	Cal ID	Early Start	Early Finish	2006					
							SEP	OCT	NOV	DEC		
Utilities @ Rd ST7 (bet. Warm Up Arena & MB3/MB4)												
EXT-214	Backfill- FS main Ch C144.5 -> E12.0	3	3	2	07-DEC-06	09-DEC-06					Backfill- FS main Ch C144.5 -> E12.0	
EXT-250	DN80uPVC, Irrigation Main	18	18	2	15-NOV-06	05-DEC-06					DN80uPVC, Irrigation Main	
EXT-252	ELV+PCCW/COMM ducts, Vet Stable to MB3/MB4	18	18	2	15-NOV-06	05-DEC-06					ELV+PCCW/COMM ducts, Vet Stable to MB3/MB4	
Utilities @ Road ST6 (bet MB2 and Chiller)												
EXT-120	DN450, MHS13.7->S13.8 (@ east of MB1)	14	14	2	03-OCT-06*	19-OCT-06					DN450, MHS13.7->S13.8 (@ east of MB1) open cut	
EXT-125	DN750, MHS13.8->STM3 (bet. Chiller/MB2)	24	24	2	03-OCT-06	31-OCT-06					DN750, MHS13.8->STM3 (bet. Chiller/MB2) open cut	
EXT-130	DN200, MHF12.18 ->F12.17	12	12	2	01-NOV-06	14-NOV-06					DN200, MHF12.18 ->F12.17 open cut	
EXT-135	DN150 Chilled water main Ch H703->G161	12	12	2	15-NOV-06	28-NOV-06					DN150 Chilled water main Ch H703->G161	
EXT-205	DN150- FS main, Ch D184 -> D290	18	18	2	15-NOV-06	05-DEC-06					DN150- FS main, Ch D184 -> D290	
EXT-207	WVO Inspection- FS main, Ch D184 -> D290	1	1	2	06-DEC-06	06-DEC-06					WVO Inspection- FS main, Ch D184 -> D290	
EXT-209	Backfill- FS main Ch D184 -> D290	3	3	2	07-DEC-06	09-DEC-06					Backfill- FS main Ch D184 -> D290	
EXT-220	DN80uPVC, Irrigation Main	12	12	2	15-NOV-06	28-NOV-06					DN80uPVC, Irrigation Main	
EXT-222	ELV+PCCW ducts, MB1/MB2	12	12	2	15-NOV-06	28-NOV-06					ELV+PCCW ducts, MB1/MB2	
Utilities at South Side of MB4												
EXT-030	Sheet pile low flow interceptor	18	18	2	03-OCT-06*	24-OCT-06					Sheet pile low flow interceptor	
EXT-060	Low flow interceptor	24	24	2	25-OCT-06	21-NOV-06					Low flow interceptor	
EXT-070	DN825, MHS12.2->S12.2A->S12.2B->STM1	36	36	2	08-NOV-06	19-DEC-06					DN825, MHS12.2->S12.2A->S12.2B->STM1 open cut	
EXT-075	DN300, MHF12.3->12.2->12.2A->FTM1	24	24	2	15-NOV-06	12-DEC-06					DN300, MHF12.3->12.2->12.2A->FTM1 open cut	
EXT-080	DN225, LFI->F12.1->12.2	18	18	2	13-DEC-06	04-JAN-07					DN225, LFI->F12.1->12.2 open cut	
EXT-085	DN225, F12.13->F12.2A	12	12	2	13-DEC-06	27-DEC-06					DN225, F12.13->F12.2A open cut	
Utilities between MB1 and MB2												
EXT-025	Remove Falsework at Wall MB2/MB1 (wing areas)	0	0	2		24-NOV-06					Remove Falsework at Wall MB2/MB1 (wing areas)	
EXT-045	DN 750, storm MHS13.23 to S13.27	24	24	2	25-NOV-06	22-DEC-06					DN 750, storm MHS13.23 to S13.27 with trench shoring	
EXT-050	DN 300 foul drain, MHF12.15->F12.16->F12.17	18	18	2	09-DEC-06	30-DEC-06					DN 300 foul drain, MHF12.15->F12.16->F12.17 trench shoring	
Utilities between MB3 and MB4												
EXT-020	Wall bet MB3/MB4 completed	0	0	2		01-DEC-06					Wall bet MB3/MB4 completed	
EXT-160	DN300, F12.8->F12.5	12	12	2	02-DEC-06	15-DEC-06					DN300, F12.8->F12.5 open cut	
EXT-190	DN150/225/300, MHS12.50->S12.54	14	14	2	16-DEC-06	03-JAN-07					DN150/225/300, MHS12.50->S12.54 open cut	
External Utilities/Drainage - Phase 2												
Utilities between Vet Stable and MB1												
EXT-040	Divert Access - Phase 2 Excavation	0	0	2		04-DEC-06*					Divert Access - Phase 2 Excavation start after wall @ MB1 complete	

SEP	OCT	NOV	DEC
2006			

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Core Venue Main Construction Contract
(Package CV-2B & CV-2C)
FL-71 Three Months Rolling Programme
20 Sept 2006 to 20 Dec 2006

Prepared by William C				
Date	Revision	Checked	Approved	
20-SEP-06	Extracted from Master Programme Version A, Activities for coming 3 months	T Lo/T Wong	D Lau	

Activity ID	Activity Description	Orig Dur	Rem Dur	Cal ID	Early Start	Early Finish	2006			
							SEP	OCT	NOV	DEC
Utilities between Vet Stable and MB1										
EXT-105	DN450,MHS13.21->S12.36	12	12	2	05-DEC-06	18-DEC-06				DN450,MHS13.21->S12.36
EXT-110	DN300, MHF12.15->F13.1->13.2	18	18	2	19-DEC-06	10-JAN-07				DN300, MHF12.15->F13.1->13.2
Utilities bet. Vet Stable and Sand Arena, Rd ST5										
EXT-195	DN150- FS main, Ch D7.5 -> D99.5	12	12	2	04-DEC-06*	16-DEC-06				DN150- FS main, Ch D7.5 -> D99.5
EXT-197	WWO Inspection	1	1	2	18-DEC-06*	18-DEC-06				WWO Inspection
EXT-199	Backfill	3	3	2	19-DEC-06*	21-DEC-06				Backfill
Utilities at Road ST4										
EXT-200	DN150- FS main, Ch D99.5 -> D184.0	12	12	2	18-DEC-06	02-JAN-07				DN150- FS main, Ch D99.5 -> D184.0
EXT-225	DN80uPVC, Irrigation Main	12	12	2	18-DEC-06	02-JAN-07				DN80uPVC, Irrigation Main
Utilities between MB3 and MB2										
EXT-015	Divert Access - Phase 2 Excavation	0	0	2		04-DEC-06*				Divert Access - Phase 2 Excavation
EXT-140	DN450 MHS12.36->S12.35->S12.34 (bet MB3/MB2)	14	14	2	05-DEC-06	20-DEC-06				DN450 MHS12.36->S12.35->S12.34 (bet MB3/MB2)
EXT-150	DN300 MHF12.15->12.9 (bet MB3/MB2)	16	16	2	05-DEC-06	22-DEC-06				DN300 MHF12.15->12.9 (bet MB3/MB2)
Interface Works with Employer Direct Contractors										
60080	CLP cable laying at Portion HKSI-1/HKSI-2	60	4	2	17-JUL-06A	23-SEP-06				CLP cable laying at Portion HKSI-1/HKSI-2
Statutory Submissions & Inspections										
Water Authority										
20552	RSS provide WWO approval letter	0	0	2	20-SEP-06					RSS provide WWO approval letter
20560	Submit Form WWO46 Part 1 and 2	1	1	2	23-SEP-06	23-SEP-06				Submit Form WWO46 Part 1 and 2
20570	Form WW046 Part 4 (underground utilities@stable)	0	0	2	25-SEP-06					Form WW046 Part 4 (underground utilities@stable)
20582	Form WW046 Part 4 -FS main Ch C144.5 -> E12.0	0	0	2	15-NOV-06					Form WW046 Part 4 -FS main Ch C144.5 -> E12.0
20587	Form WW046 Part 4 - FS main, Ch D184 -> D290	0	0	2	15-NOV-06					Form WW046 Part 4 - FS main, Ch D184 -> D290
20597	Form WW046 Part 4 FS main Ch D7.5 -> D99.5	0	0	2	04-DEC-06					Form WW046 Part 4 FS main Ch D7.5 -> D99.5
20602	Form WW046 Part 4 FS main Ch D99.5 -> D184.0	0	0	2	18-DEC-06					Form WW046 Part 4 FS main Ch D99.5-> D184.0
EPD										
20620	EPD Application (EL)	0	0	2	09-OCT-06*					EPD Application (EL)
CLP										
20630	CLP Supply metering application (vet stable)	0	0	2	16-OCT-06*					CLP Supply metering application (vet stable)

SEP	OCT	NOV	DEC
2006			

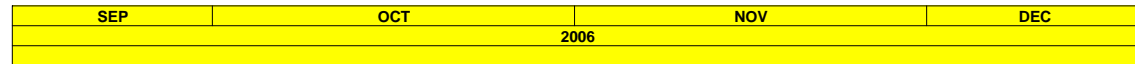
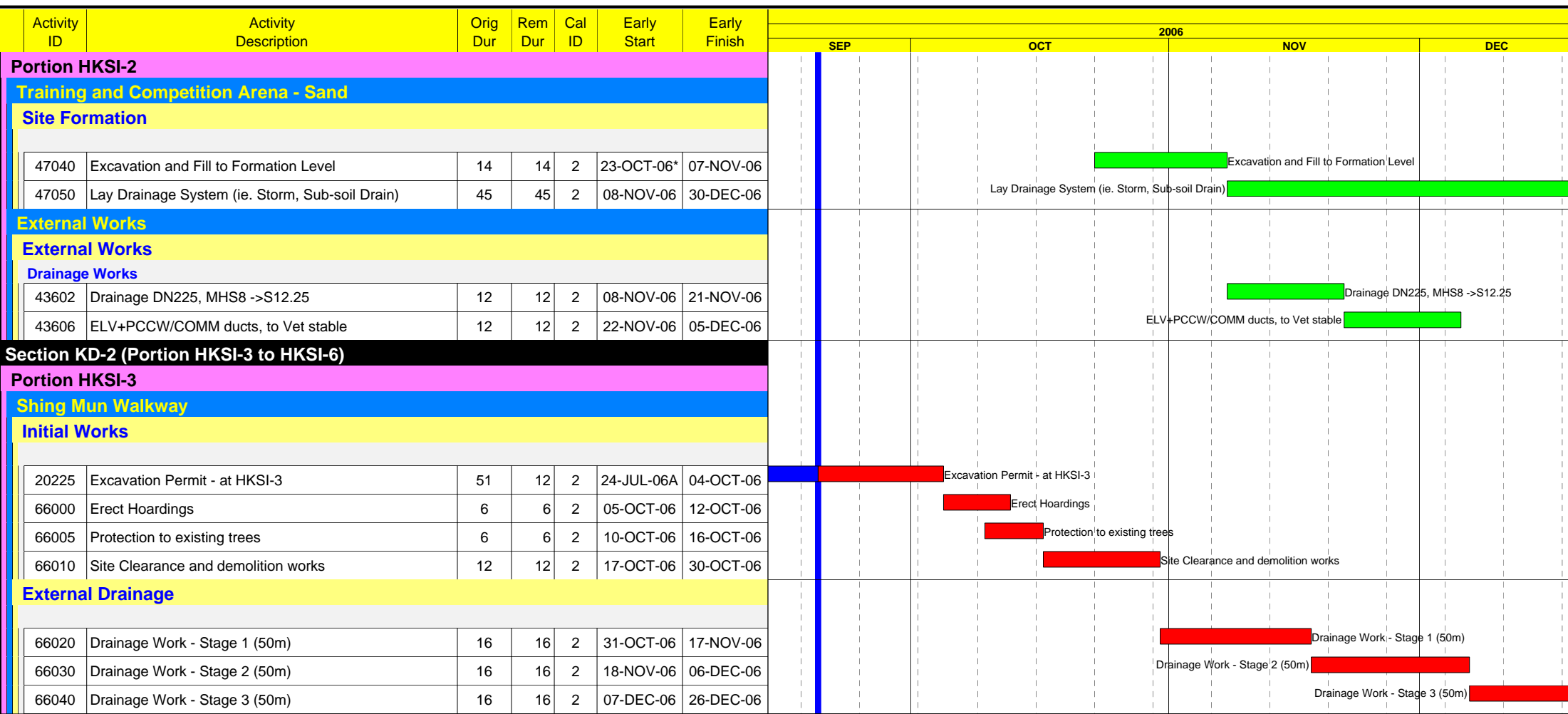
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Start Date:20-SEP-06
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Filter Name:FL-71 Three Months Rolling
Layout Name:Three Months Rolling Program
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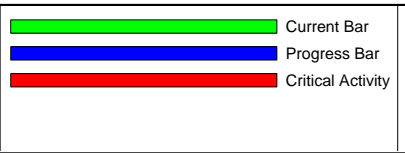
China State Const. Eng. (H.K.) Ltd.
Core Venue Main Construction Contract
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20 Sept 2006 to 20 Dec 2006

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Prepared by William C

Date	Revision	Checked	Approved
20-SEP-06	Extracted from Master Programme	T Lo/T Wong	D Lau
	Version A,		
	Activities for coming 3 months		



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 Layout Name:Three Months Rolling Proq
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China State Const. Eng. (H.K.) Ltd. Sheet 17 of 22
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(Package CV-2B & CV-2C)
FL-71 Three Months Rolling Programme
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Prepared by William C				
Date	Revision	Checked	Approved	
20-SEP-06	Extracted from Master Programme	T Lo/T Wong	D Lau	
	Version A,			
	Activities for coming 3 months			

Activity ID	Activity Description	Orig Dur	Rem Dur	Cal ID	Early Start	Early Finish	2006			
							SEP	OCT	NOV	DEC
Portion HKSI-4										
Training and Competition Arenas										
Main Competition Arena										
Initial Works										
52010	Condition Survey and Reporting	12	12	2	04-DEC-06	16-DEC-06			Condition Survey and Reporting	
52020	Protect Existing Structures & Utilities	7	7	2	04-DEC-06	11-DEC-06			Protect Existing Structures & Utilities	
52030	Divert Temporary Utilities/Irrigation	14	14	2	04-DEC-06	19-DEC-06			Divert Temporary Utilities/Irrigation	
Mini Pile & Pile Cap for 40m High Mast										
65025	Site Investigation	6	6	2	04-DEC-06*	09-DEC-06			Site Investigation	
65035	Utilities diversion	12	12	2	11-DEC-06	23-DEC-06			Utilities diversion	
Warm Up Arena and Holding Arena										
Initial Works										
53010	Condition Survey and Reporting	14	14	2	12-DEC-06	28-DEC-06			Condition Survey and Reporting	
53020	Protect Existing Structures & Utilities	7	7	2	12-DEC-06	19-DEC-06			Protect Existing Structures & Utilities	
53030	Divert Temporary Utilities/Irrigation	21	21	2	12-DEC-06	06-JAN-07			Divert Temporary Utilities/Irrigation	
Dressage Training Arena										
Initial Works										
54010	Condition Survey and Reporting	14	14	2	12-DEC-06	28-DEC-06			Condition Survey and Reporting	
54020	Protect Existing Structures & Utilities	7	7	2	12-DEC-06	19-DEC-06			Protect Existing Structures & Utilities	
General External Works										
Tree Transplanting										
Initial Works										
52045	Tree transplanting (T416...426 group)	33	33	2	04-DEC-06*	12-JAN-07			Tree transplanting (T416...426 group)	
52055	Tree transplanting (T440...446, T411...413 group)	35	35	2	04-DEC-06*	15-JAN-07			Tree transplanting (T440...446, T411...413 group)	
53045	Tree transplanting (T167..... 182 group)	35	35	2	04-DEC-06*	15-JAN-07			Tree transplanting (T167..... 182 group)	
54045	Tree transplanting (T164 to T167)	40	40	2	15-DEC-06*	01-FEB-07			Tree transplanting (T164 to T167)	
External Utilities/Drainage										
LV Cabling Works										
61085	Lay LV cable-Tx Rm to 40m HM (P5/P4)	18	18	2	22-NOV-06	12-DEC-06			Lay LV cable-Tx Rm to 40m HM (P5/P4)	
61095	Lay LV cable-Tx Rm to 15m HM (P11, P11G)	18	18	2	13-DEC-06	04-JAN-07			Lay LV cable-Tx Rm to 15m HM (P11, P11G)	
61120	Lay LV cable-Tx Rm to 40m HM (P2/P3)	12	12	2	04-DEC-06*	16-DEC-06			Lay LV cable-Tx Rm to 40m HM (P2/P3)	
61125	Lay LV cable-Tx Rm to 40m HM (P6/P7)	18	18	2	18-DEC-06	09-JAN-07			Lay LV cable-Tx Rm to 40m HM (P6/P7)	

SEP	OCT	NOV	DEC
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Core Venue Main Construction Contract
(Package CV-2B & CV-2C)
FL-71 Three Months Rolling Programme
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Date	Revision	Checked	Approved	
20-SEP-06	Extracted from Master Programme	T Lo/T Wong	D Lau	
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Activity ID	Activity Description	Orig Dur	Rem Dur	Cal ID	Early Start	Early Finish	2006				
							SEP	OCT	NOV	DEC	
Drainage Works											
61055	Drainage - DN750, MHS12.2->S12.3	18	18	2	04-DEC-06*	23-DEC-06				Drainage - DN750, MHS12.2->S12.3	
61065	Drainage - DN750, MHS12.3->S12.5	18	18	2	11-DEC-06	02-JAN-07				Drainage - DN750, MHS12.3->S12.5	
61075	Drainage - DN675, MHS12.5->S12.6	18	18	2	18-DEC-06	09-JAN-07				Drainage - DN675, MHS12.5->S12.6	
Portion HKSI-6											
General External Works											
Tree Transplanting											
Tree Transplanting											
40510	Tree Transplanting (T593, 592)	69	69	2	01-DEC-06*	28-FEB-07				Tree Transplanting (T593, 592)	
40513	Tree Transplanting (T567....T623 series))	69	69	2	01-DEC-06*	28-FEB-07				Tree Transplanting (T567....T623 series))	
External Utilities/Drainage											
40555	Underground drainage	24	24	2	05-OCT-06	02-NOV-06				Underground drainage	
CLP Transformer Rm/ Switch Rm at Lawn Area											
Superstructure											
40540	Cable trench and ground slab	20	11	2	16-SEP-06A	03-OCT-06				Cable trench and ground slab	
40545	LV Switch Rm - Walls & Roof +9.7mPD	18	18	2	04-OCT-06	25-OCT-06				LV Switch Rm - Walls & Roof +9.7mPD	
40560	LV Switch Rm - Walls & Roof +10.3mPD	18	18	2	13-OCT-06	02-NOV-06				LV Switch Rm - Walls & Roof +10.3mPD	
Finishes											
40520	Internal Finishing/ Builders Works	18	18	2	03-NOV-06	23-NOV-06				Internal Finishing/ Builders Works	
M&E Services											
40525	M&E Access - New CLP Rm/Switch Rm	0	0	2	24-NOV-06					M&E Access - New CLP Rm/Switch Rm	
40530	M&E Installation	48	48	2	14-DEC-06	09-FEB-07				M&E Installation	

SEP	OCT	NOV	DEC
2006			

File Name:WP09
Start Date:20-SEP-06
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Layout Name:Three Months Rolling Progi
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China State Const. Eng. (H.K.) Ltd. Sheet 19 of 22
Core Venue Main Construction Contract
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FL-71 Three Months Rolling Programme
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Prepared by William C				
Date	Revision	Checked	Approved	
20-SEP-06	Extracted from Master Programme	T Lo/T Wong	D Lau	
	Version A,			
	Activities for coming 3 months			

Activity ID	Activity Description	Orig Dur	Rem Dur	Cal ID	Early Start	Early Finish	2006			
							SEP	OCT	NOV	DEC
Section KD-3 & KD-4 (Portion PP-1 to PP-3)										
Portion PP-1, PP-2, PP-3										
Penfold Park Arenas										
Stage 1										
East Side of Penfold Park										
PP-010	DN375- storm drain MHS2.5A->S2.5B->S2.5C	20	20	2	20-SEP-06	14-OCT-06				
PP-015	DN375- storm drain CP2.4->OF2.7	20	20	2	20-SEP-06	14-OCT-06				
PP-040	Overflow weir headwall (OF2.28&OF2.7) @ lake A&B	20	20	2	20-SEP-06	14-OCT-06				
West side of Penfold Park										
PP-070	Remove / modify existing irrigation system	20	14	2	21-AUG-06A	06-OCT-06				
PP-075	Construct new foot path no. 5	20	10	2	21-AUG-06A	30-SEP-06				
PP-090	Associated 225 TCD	20	10	2	20-SEP-06	30-SEP-06				
PP-095	Associated 300 TCD from CP1.10->CP1.8	20	20	2	20-SEP-06	14-OCT-06				
PP-100	DN375 storm drain CP1.8 -> CP1.7	20	20	2	20-SEP-06	14-OCT-06				
PP-105	New Footpath 1 south side	20	10	2	21-AUG-06A	30-SEP-06				
PP-110	Stage 1 complete	0	0	2		14-OCT-06				
Stage 2										
Site Formation/Landscaping Works										
PP-115	Stage 2 commence	0	0	2	16-OCT-06					
PP-120	DN150/225 from water jump to CP1.4B	20	20	2	16-OCT-06	07-NOV-06				
PP-125	DN225 CP1.4A -> CP1.4B	20	20	2	16-OCT-06	07-NOV-06				
PP-130	DN225 CP1.5 -> EX.	20	20	2	16-OCT-06	07-NOV-06				
PP-135	DN225 CP1.24 ->OF1.26	20	20	2	16-OCT-06	07-NOV-06				
PP-140	DN3755 CP1.7 ->OF1.9	20	20	2	16-OCT-06	07-NOV-06				
PP-145	DN300 CP1.12 -> OF1.13	20	20	2	16-OCT-06	07-NOV-06				
PP-150	DN300 ST1.16 -> OF1.16	20	20	2	16-OCT-06	07-NOV-06				
PP-155	DN300 ST1.16 -> OF1.16	20	20	2	16-OCT-06	07-NOV-06				
PP-160	DN300 ST2 -> OF1.9	20	20	2	16-OCT-06	07-NOV-06				
PP-165	DN225 CP1.21 ->CP1.2 ->EX	20	20	2	16-OCT-06	07-NOV-06				
PP-170	Sand trap ST1 & ST2	20	6	2	05-SEP-06A	26-SEP-06				
PP-175	300UC for Arena 1 and 2	20	10	2	05-SEP-06A	30-SEP-06				
PP-180	300UC foot path 4 to CP1.18	20	20	2	16-OCT-06	07-NOV-06				

File Name:WP09
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 Finish Date:23-MAY-07
 Filter Name:FL-71 Three Months Rolling I
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China State Const. Eng. (H.K.) Ltd. Sheet 20 of 22
Core Venue Main Construction Contract
(Package CV-2B & CV-2C)
FL-71 Three Months Rolling Programme
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20-SEP-06	Extracted from Master Programme Version A, Activities for coming 3 months	T Lo/T Wong	D Lau	

Activity ID	Activity Description	Orig Dur	Rem Dur	Cal ID	Early Start	Early Finish	2006			
							SEP	OCT	NOV	DEC
Site Formation/Landscaping Works										
PP-185	225UC to CP1.14	20	20	2	16-OCT-06	07-NOV-06				225UC to CP1.14
PP-190	300UC to CP1.8	20	20	2	16-OCT-06	07-NOV-06				300UC to CP1.8
PP-195	DN150 sub soil drains	20	20	2	16-OCT-06	07-NOV-06				DN150 sub soil drains
PP-215	Overflow weir headwall 5 nos) around lake C	20	20	2	20-SEP-06	14-OCT-06				
PP-220	Formation works in dressage training Arena 1 & 2	20	14	2	13-SEP-06A	06-OCT-06				
PP-225	Remove / modify existing irrigation system	20	10	2	21-AUG-06A	30-SEP-06				
PP-240	Water jump in schooling area	20	20	2	20-SEP-06	14-OCT-06				
PP-245	Formation works in Cross Country 3 and 4	20	14	2	13-SEP-06A	06-OCT-06				
PP-250	New footpath east of Lake C	20	14	2	13-SEP-06A	06-OCT-06				
PP-255	Stage 2 Complete	0	0	2		07-NOV-06				● Stage 2 Complete
Stage 3										
Site Formation/Landscaping Works										
PP-260	Stage 3 commence	0	0	2	08-NOV-06					● Stage 3 commence
PP-265	Remove modify existgng irrigation system	20	10	2	21-AUG-06A	30-SEP-06				
PP-285	Formation works in Cross Country no. 2	20	20	2	08-NOV-06	30-NOV-06				
PP-290	New footpath No. 2 and 3	20	20	2	08-NOV-06	30-NOV-06				
PP-295	225 UC	20	20	2	08-NOV-06	30-NOV-06				
PP-300	300 UC	20	20	2	08-NOV-06	30-NOV-06				
PP-305	Formation works in Bridle Path 1 at east side	20	20	2	08-NOV-06	30-NOV-06				
PP-310	Associated 150 sub soil drains	20	20	2	08-NOV-06	30-NOV-06				
PP-315	Associated 225 TCD	20	20	2	08-NOV-06	30-NOV-06				
PP-320	Concrete toe wall beside lake A water feature	20	10	2	05-SEP-06A	30-SEP-06				
PP-330	Stage 3 complete	0	0	2	01-DEC-06					● Stage 3 complete
Stage 4										
Site Formation/Landscaping Works										
PP-335	Stage 4 commence	0	0	2	30-NOV-06					● Stage 4 commence
PP-345	Formation works in Bridle path at North entrance	20	20	2	30-NOV-06	22-DEC-06				
PP-350	DN225 storm drain CP2.11->2.12	20	20	2	30-NOV-06	22-DEC-06				
PP-355	Assoiated 150 subsoil drains	20	20	2	30-NOV-06	22-DEC-06				
PP-360	Associated 225 TCD	20	20	2	30-NOV-06	22-DEC-06				

SEP	OCT	NOV	DEC
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File Name:WP09
 Start Date:20-SEP-06
 Finish Date:23-MAY-07
 Filter Name:FL-71 Three Months Rolling
 Layout Name:Three Months Rolling Program
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 Current Bar
 Progress Bar
 Critical Activity




Sheet 21 of 22
China State Const. Eng. (H.K.) Ltd.
Core Venue Main Construction Contract
(Package CV-2B & CV-2C)
FL-71 Three Months Rolling Programme
20 Sept 2006 to 20 Dec 2006

Prepared by William C				
Date	Revision	Checked	Approved	
20-SEP-06	Extracted from Master Programme	T Lo/T Wong	D Lau	
	Version A,			
	Activities for coming 3 months			

Activity ID	Activity Description	Orig Dur	Rem Dur	Cal ID	Early Start	Early Finish	2006														
							SEP			OCT			NOV			DEC					
Site Formation/Landscaping Works																					
PP-365	Reinstatement for existing footpath (west /south	20	20	2	30-NOV-06	22-DEC-06															
PP-370	Complete/ fine trim formation: all bridle path	20	20	2	30-NOV-06	22-DEC-06															
PP-380	Complete/ fine trim formation: all Cross country	20	20	2	30-NOV-06	22-DEC-06															
PP-385	Complete/ fine trim formation: General Schooling	20	20	2	30-NOV-06	22-DEC-06															
Tree Planting																					
PP-500	New Trees and Shrubs	24	24	2	16-DEC-06	15-JAN-07															

SEP	OCT	NOV	DEC
2006			

File Name:WP09
 Start Date:20-SEP-06
 Finish Date:23-MAY-07
 Filter Name:FL-71 Three Months Rolling
 Layout Name:Three Months Rolling Program
 © Primavera Systems, Inc.

 Current Bar
 Progress Bar
 Critical Activity

China State Const. Eng. (H.K.) Ltd.
Core Venue Main Construction Contract
(Package CV-2B & CV-2C)
FL-71 Three Months Rolling Programme
20 Sept 2006 to 20 Dec 2006

Prepared by William C				
Date	Revision	Checked	Approved	
20-SEP-06	Extracted from Master Programme	T Lo/T Wong	D Lau	
	Version A,			
	Activities for coming 3 months			

Appendix B

**Monitoring Schedule
for September and
October 2006**

Monitoring Schedule - September 2006

September 2006						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
					1	2
3	4 Site Inspection	5	6	7 Noise Monitoring	8	9
10	11 Site Inspection Landscape Audit	12	13	14 Noise Monitoring	15	16
17	18 Site Inspection	19	20	21 Noise Monitoring	22	23
24	25 Site Inspection Landscape Audit	26	27	28 Noise Monitoring	29	30

Tentative Monitoring Schedule - October 2006

October 2006						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1	2	3 Site Inspection	4	5 Noise Monitoring	6	7
8	9 Landscape Audit	10	11	12 Noise Monitoring	13 Site Inspection	14
15	16	17	18	19 Noise Monitoring	20 Site Inspection	21
22	23 Landscape Audit	24	25	26 Noise Monitoring	27 Site Inspection	28
29	30	31				

Appendix C

**Environmental
Mitigation
Implementation
Schedule**

**Environmental Mitigation Implementation Schedule
Main Arena of 2008 Olympic Equestrian Events**

EIA Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concerns to address	Who to implement the measures?	Location of the measures	When to implement the measures?	Implementation	What requirements or standards for the measures to achieve?
S3.8	<p>The contractor shall follow the procedures and requirements given in the Air Pollution Control (Construction Dust) Regulation</p> <ul style="list-style-type: none"> • Any excavated of dusty material should be covered entirely by impervious sheeting or sprayed with water to maintain the entire surface wet and then removed or backfilled or reinstated where practicable within 24 hours of the excavation or unloading; • Any dusty materials remaining after a stockpile is removed should be wetted with water and cleared from the surface of roads or streets; • The load of dusty materials on a vehicle leaving a construction site should be covered entirely by impervious sheeting to ensure that the dusty materials do not leak from the vehicle; • Where practicable, vehicle washing facilities with high pressure water jet should be provided at every discernible or designated vehicle exit point. The area where vehicle washing takes place and the road section between the washing facilities and the exit point should be paved with concrete, bituminous materials or hardcores; • When there are open excavation and reinstatement works, hoarding of not less than 2.4m high should be provided as far as practicable along the site boundary with provision for public crossing. Good site practice shall also be adopted by the Contractor to ensure the conditions of the hoardings are properly maintained throughout the construction period; • The portion of any road leading only to construction site that is within 30m of a vehicle entrance or exit should be kept clear of dusty materials; • Any area that involves demolition activities should be sprayed with water or a dust suppression chemical immediately prior to, during and immediately after the activities so as to maintain the entire surface wet; • Where a scaffolding is erected around the perimeter of a building under construction, effective dust screens, sheeting or netting should be provided to enclose the scaffolding from the ground floor level of the building, or a canopy should be provided from the first floor level up to the highest level of the scaffolding; • Any skip hoist for material transport should be totally enclosed by impervious sheeting; 	<p>Good construction site practices to control the dust impact at the nearby sensitive receivers to within the relevant criteria.</p>	Contractor	Entire construction site	Construction stage	<p align="center">✓</p> <p align="center">✓</p> <p align="center">✓</p> <p align="center">✓</p> <p align="center">✓</p> <p align="center">✓</p> <p align="center">N/A</p> <p align="center">✓</p>	<ul style="list-style-type: none"> • To control the dust impact to within the HKAQO and TM-EIA criteria (Ref. 1-hr and 24hr TSP levels are 500 μgm^{-3} and 260 μgm^{-3}, respectively)

**Environmental Mitigation Implementation Schedule
Main Arena of 2008 Olympic Equestrian Events**

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S3.8.2	<p>The Contract shall adopt adequate measures to mitigate the odour impact to acceptable level:</p> <ul style="list-style-type: none"> • A sanitary environment will always be maintained in the stable area. The current waste management practices will be extended to cover the new stable area at HKSI. Detailed design of stable will cater for the health, safety and environmental protection considerations in accordance with the HKJC policy and practice; • Regular maintenance of the odour removal system, such as carbon filter system will be carried out to maintain the odour removal efficiency; and • Enclosed containers, similar to those at the existing stables near HKSI, will be provided for the stockpiling of waste. 	minimize the potential odour impact to nearby sensitive receivers	Contractor	Stables	Operational Phase	N/A	<ul style="list-style-type: none"> • TM-EIA, Annex 4 • 5 odour units based on averaging time of 5 seconds
S4.8.1.1	<p>1) Use of good site practices to limit noise emissions by considering the following:</p> <ul style="list-style-type: none"> • only well-maintained plant should be operated on-site and plant should be serviced regularly during the construction programme; • machines and plant (such as trucks, cranes) that may be in intermittent use should be shut down between work periods or should be throttled down to a minimum; • plant known to emit noise strongly in one direction, where possible, be orientated so that the noise is directed away from nearby NSRs; • silencers or mufflers on construction equipment should be properly fitted and maintained during the construction works; • mobile plant should be sited as far away from NSRs as possible and practicable; • material stockpiles, mobile container site office and other structures should be effectively utilised, where practicable, to screen noise from on-site construction activities. 	Control construction airborne noise by means of good site practices	Contractor	Entire construction site	Construction stage	<p align="center">✓</p> <p align="center">✓</p> <p align="center">✓</p> <p align="center">✓</p> <p align="center">✓</p> <p align="center">✓</p>	<ul style="list-style-type: none"> • Noise Control Ordinance

**Environmental Mitigation Implementation Schedule
Main Arena of 2008 Olympic Equestrian Events**

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S4.8.1.2	2) Install temporary hoarding of 2.4m high located on the site boundaries between noisy construction activities and NSRs. The conditions of the hoardings shall be properly maintained throughout the construction period.	Reduce the construction noise levels at low-level zone of NSRs through partial screening.	Contractor	Entire construction site	Construction stage	✓	<ul style="list-style-type: none"> • Noise Control Ordinance • Annex 5, TM-EIA • Hoarding should have no openings and a superficial surface density of at least 14kg/m².
S4.8.1.3	3) Install movable noise barriers (typically density @14kg/m ²), acoustic mat close to noisy plants including air compressor, water pump, hand-held breaker and pipe pile rigs.	Screen the noisy plant items to be used at all construction sites	Contractor	Entire construction site	Construction stage	✓	<ul style="list-style-type: none"> • Noise Control Ordinance • Annex 5, TM-EIA • 75dB(A) for residential premises and 70dB(A) for schools during daytime • The movable barrier should achieve at least 5dB(A) and the full enclosure should be designed to achieve 10dB(A)

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Main Arena of 2008 Olympic Equestrian Events**

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S4.8.1.4	4) Liaise with the school representative(s) including, but not limited to Hong Kong Institute of Vocational Education (Shatin), Jockey Club Ti-1 College, International Christian School – Elementary and Leung Kui Kau Primary School to obtain the examination schedule and avoid noisy construction activities during school examination period.	Schedule the construction works outside school examination periods to less intrusive periods	Contractor	Construction sites near the schools such as Hong Kong Institute of Vocational Education (Shatin), Jockey Club Ti-1 College, International Christian School – Elementary and Leung Kui Kau Primary School	Construction stage	N/A	<ul style="list-style-type: none"> • Noise Control Ordinance • Annex 5, TM-EIA • To comply with the daytime construction noise criterion of 65dB(A) at school during the examination periods,
S4.8.1.5	5) Select “Quiet plants” which comply with the BS 5228 Part 1 or TM standards.	Reduce the noise levels of plant items	Contractor	Entire construction site	Construction stage	✓	<ul style="list-style-type: none"> • Noise Control Ordinance & its TM • Annex 5, TM-EIA
S4.8.1.6	6) Sequencing operation of construction plant equipment.	Operate sequentially within the same work site to reduce the construction airborne noise	Contractor	Entire construction site where practicable	Construction stage	✓	<ul style="list-style-type: none"> • Noise Control Ordinance • Annex 5, TM-EIA
S4.8.4.1	1) The Louvres should be orientated away from adjacent NSRs where possible, preferably onto Sha Tin Racecourse which are less sensitive.	Control operational noise from fixed sources	Designers	E&M plant items	Design stage	✓	<ul style="list-style-type: none"> • HKPSG
S4.8.4.1	2) Adequate direct noise mitigation measures including silencers, acoustic louvers, acoustic enclosures should be allowed for in the design.	Control operational noise from fixed sources	Designers	E&M plant items	Design stage	✓	<ul style="list-style-type: none"> • HKPSG
S4.8.4.2	3) A cluster of small power rated loudspeakers should be used instead of a few large power rated loudspeakers	Control operational noise from fixed sources	Designers	PA system	Design stage	✓	<ul style="list-style-type: none"> • HKPSG

**Environmental Mitigation Implementation Schedule
Main Arena of 2008 Olympic Equestrian Events**

EIA Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concerns to address	Who to implement the measures?	Location of the measures	When to implement the measures?	Implementation	What requirements or standards for the measures to achieve?
S4.8.4.2	4) Directional loudspeakers should be used and orientated them to point towards the audience and away from the nearby noise sensitive receivers	Control operational noise from fixed sources	Designers	PA system	Design stage	✓	<ul style="list-style-type: none"> • HKPSG
S5.6.1	1) Follow the site practices outlined in ProPECC PN 1/94 as far as practicable in order to minimise surface runoff and the chance of erosion, and to reduce any suspended solids prior to discharge.	Good site practice to control construction water quality	Contractor	Entire construction site	Construction stage	✓	<ul style="list-style-type: none"> • Requirements laid down in ProPECC PN 1/94
S5.6.1	<u>Sewage Effluent</u> 1) Portable chemical toilets and sewage holding tanks are recommended for handling the construction sewage generated by the workforce. A licensed contractor should be employed to provide appropriate and adequate portable toilets and be responsible for appropriate disposal and maintenance.	Control sewage effluent arising from the sanitary facilities provided for the on-site construction workforce	Contractor	On-site sanitary facilities	Construction stage	✓	<ul style="list-style-type: none"> • ProPECC PN 1/94 • Water Pollution Control Ordinance • Waste Disposal Ordinance

**Environmental Mitigation Implementation Schedule
Main Arena of 2008 Olympic Equestrian Events**

EIA Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concerns to address	Who to implement the measures?	Location of the measures	When to implement the measures?	Implementation	What requirements or standards for the measures to achieve?
S5.6.1	<p><u>Construction Runoff and Site Drainage</u></p> <ul style="list-style-type: none"> At the start of site establishment (including the barging facility), perimeter cut-off drains to direct off-site water around the site should be constructed with internal drainage works and erosion and sedimentation control facilities implemented. Channels (both temporary and permanent drainage pipes and culverts), earth bunds or sand bag barriers should be provided on site to direct stormwater to silt removal facilities. The dikes or embankments for flood protection should be implemented around the boundaries of earthwork areas. Temporary ditches should be provided to facilitate the runoff discharge into an appropriate watercourse, through a site/sediment trap. The sediment/silt traps should be incorporated in the permanent drainage channels to enhance deposition rates. The design of efficient silt removal facilities should be based on the guidelines in Appendix A1 of ProPECC PN 1/94, which states that the retention time for silt/sand traps should be 5 minutes under maximum flow conditions. Construction works should be programmed to minimize surface excavation works during the rainy seasons (April to September). All exposed earth areas should be completed and vegetated as soon as possible after earthworks have been completed, or alternatively, within 14 days of the cessation of earthworks where practicable. If excavation of soil cannot be avoided during the rainy season, or at any time of year when rainstorms are likely, exposed slope surfaces should be covered by tarpaulin or other means. The overall slope of the site should be kept to a minimum to reduce the erosive potential of surface water flows, and all trafficked areas and access roads protected by coarse stone ballast. An additional advantage accruing from the use of crushed stone is the positive traction gained during prolonged periods of inclement weather and the reduction of surface sheet flows. All drainage facilities and erosion and sediment control structures should be regularly inspected and maintained to ensure proper and efficient operation at all times and particularly following rainstorms. Deposited silt and grit should be removed regularly and disposed of by spreading evenly over stable, vegetated areas. 	Control construction runoff and erosion from site surface, drainage channel, stockpiles, barging facility, wheel washing facilities, etc to minimize water quality during construction stage	Contractor	Entire construction site	Construction stage	<p align="center">✓</p> <p align="center">✓</p> <p align="center">✓</p> <p align="center">✓</p> <p align="center">✓</p> <p align="center">✓</p>	<ul style="list-style-type: none"> ProPECC PN 1/94 Water Pollution Control Ordinance

**Environmental Mitigation Implementation Schedule
Main Arena of 2008 Olympic Equestrian Events**

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	<ul style="list-style-type: none"> • Measures should be taken to minimise the ingress of site drainage into excavations. If the excavation of trenches in wet periods is necessary, they should be dug and backfilled in short sections wherever practicable. Water pumped out from trenches or foundation excavations should be discharged into storm drains via silt removal facilities. • Open stockpiles of construction materials (for example, aggregates, sand and fill material) of more than 50 m3 should be covered with tarpaulin or similar fabric during rainstorms. Measures should be taken to prevent the washing away of construction materials, soil, silt or debris into any drainage system. • Manholes (including newly constructed ones) should always be adequately covered and temporarily sealed so as to prevent silt, construction materials or debris being washed into the drainage system and storm runoff being directed into foul sewers. • Precautions to be taken at any time of year when rainstorms are likely, actions to be taken when a rainstorm is imminent or forecasted, and actions to be taken during or after rainstorms are summarised in Appendix A2 of ProPECC PN 1/94. Particular attention should be paid to the control of silty surface runoff during storm events, especially for areas located near steep slopes. • All vehicles and plant should be cleaned before leaving a construction site to ensure no earth, mud, debris and the like is deposited by them on roads. An adequately designed and sited wheel washing bay should be provided at every construction site exit. Wash-water should have sand and silt settled out and removed at least on a weekly basis to ensure the continued efficiency of the process. The section of access road leading to, and exiting from, the wheel-wash bay to the public road should be paved with sufficient backfall toward the wheel-wash bay to prevent vehicle tracking of soil and silty water to public roads and drains. • Oil interceptors should be provided in the site drainage system downstream of any oil/fuel pollution sources. The oil interceptors should be emptied and cleaned regularly to prevent the release of oil and grease into the storm water drainage system after accidental spillage. A bypass should be provided for the oil interceptors to prevent flushing during heavy rain. 					<p align="center">✓</p> <p align="center">✓</p> <p align="center">✓</p> <p align="center">✓</p> <p align="center">✓</p> <p align="center">N/A</p>	

**Environmental Mitigation Implementation Schedule
Main Arena of 2008 Olympic Equestrian Events**

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	<ul style="list-style-type: none"> Construction solid waste, debris and rubbish on site should be collected, handled and disposed of properly to avoid water quality impacts. Requirements for solid waste management are detailed in Section 9 of this Report. All fuel tanks and storage areas should be provided with locks and sited on sealed areas, within bunds of a capacity equal to 110% of the storage capacity of the largest tank to prevent spilled fuel oils from reaching water sensitive receivers nearby. 					✓ ✓	
S5.6.2.1	A low flow interceptor drainage system should be constructed to intercept the first foul flush and convey it to a storage tank from where it is pumped to the foul drainage system. The catchment area of the low flow interceptor drainage covers the area of Main Stable Complex. Sand traps will also be provided at the stable to prevent sand from being conveyed into the pipe system.	Control surface runoff	Scheme designers and/or Operator	Drainage system	Design and/or operational stage	B	<ul style="list-style-type: none"> TM-water Water Pollution Control Ordinance
S5.6.2.2	A new 450mm public gravity sewer should be constructed along the pathway of the Shing Mun River and be connected to the existing 450mm public sewer at the southeastern corner of HKSI to collect the sewage from the new Stable Complex and the low flow interceptor system.	Control sewage collection	Scheme designers	Sewage System	Design stage	B	<ul style="list-style-type: none"> Water Pollution Control Ordinance TM-water
S6.5.1.1	1) The requirements as recommended in ETWB TC 15/2003 Waste Management on Construction Sites and its latest version, and other relevant guidelines, should be included in the Particular Specification as appropriate.	Develop waste management strategies and minimize construction waste disposal	Scheme Designer	Entire construction site	Design stage	✓	<ul style="list-style-type: none"> Waste Disposal Ordinance ETWB TC 15/2003
S6.5.1.1	2) Prior to the commencement of construction work, the Contractor should prepare a WMP to provide an overall framework for waste management and reduction.	Develop waste management and reduction strategies	Contractor	Entire construction site	Construction stage	✓	<ul style="list-style-type: none"> Waste Disposal Ordinance ETWB TC 15/2003 Waste Disposal (Chemical Waste) (General) Regulation ETWBTC 34/2002

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S6.5.1.2 & S6.5.1.3	<p><u>Construction and Demolition Material</u></p> <ul style="list-style-type: none"> • Opportunity for re-using of fill material for back filling should be optimized. • Excavated materials that cannot be recycled should be transported to public filling areas. • Careful design, planning and good site management can minimise over-ordering and waste materials such as concrete, mortars and cement grouts. The design of formwork should maximise the use of standard wooden panels so that high reuse levels can be achieved. Alternatives such as steel formwork or plastic fencing should be considered to increase the potential for reuse. • The contractor should recycle as much as possible of the construction waste on-site. Proper segregation of wastes on site will increase the feasibility of recycling certain components of the waste stream by recycling contractors. Concrete and masonry can be used as general fill and steel reinforcement bars can be used by scrap steel mills. Different areas should be designated for such segregation and storage wherever site conditions permit. • Maintain temporary stockpiles and reuse excavated fill material for backfilling and reinstatement. • Surplus artificial hard materials should be delivered to Tuen Mun Area 38 recycling plant or its successor for recycling into subsequent useful products. • On-site sorting and segregation facility of all type of wastes is considered as one of the best practice in waste management and hence, should be implemented in all projects generating construction waste. The sorted public fill and construction & demolition (C&D) waste should be disposed to public filling areas and landfills, respectively. 	<p>Good site practice to minimize the waste generation and recycle the C&D materials as far as practicable so as to reduce the amount for final disposal</p>	<p>Contractor</p>	<p>Entire construction site</p>	<p>Construction stage</p>	<p>✓ ✓ ✓ ✓ ✓ ✓</p>	<ul style="list-style-type: none"> • Land (Miscellaneous Provisions) Ordinance • Waste Disposal Ordinance • ETWB TC 15/2003

**Environmental Mitigation Implementation Schedule
Main Arena of 2008 Olympic Equestrian Events**

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	<ul style="list-style-type: none"> • Make provisions in the Contract documents to allow and promote the use of recycled aggregates where appropriate. • Implement a trip-ticket system for each works contract to ensure that the disposal of C&D materials are properly documented and verified. • Implement an enhanced Waste Management Plan similar to ETWB TC(W) No. 15/2003 – “Waste Management on Construction Sites” to encourage on-sitting sorting of C&D materials and to minimize their generation during the course of construction. 					<p align="center">✓</p> <p align="center">✓</p> <p align="center">✓</p>	
S6.5.1.4	<p><u>Chemical Waste</u></p> <ul style="list-style-type: none"> • Chemical waste that is produced, as defined by Schedule 1 of the Waste Disposal (Chemical Waste) (General) Regulation, should be handled in accordance with the Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes. • Containers used for the storage of chemical wastes should be suitable for the substance they are holding, resistant to corrosion, maintained in a good condition, and securely closed; have a capacity of less than 450 liters unless the specification has been approved by the EPD; and display a label in English and Chinese in accordance with instructions prescribed in Schedule 2 of the regulation. • The storage area for chemical wastes should be clearly labelled and used solely for the storage of chemical waste; enclosed on at least 3 sides; have an impermeable floor and bunding of sufficient capacity to accommodate 110% of the volume of the largest container or 20 % of the total volume of waste stored in that area, whichever is the greatest; have adequate ventilation; covered to prevent rainfall entering; and arranged so that incompatible materials are adequately separated. • Disposal of chemical waste should be via a licensed waste collector; be to a facility licensed to receive chemical waste, such as the Chemical Waste Treatment Centre which also offers a chemical waste collection service and can supply the necessary storage containers; or be to a reuser of the waste, under approval from the EPD. 	Control the chemical waste and ensure proper storage, handling and disposal.	Contractor	Entire construction site	Construction stage	<p align="center">N/A</p> <p align="center">N/A</p> <p align="center">N/A</p> <p align="center">N/A</p>	<ul style="list-style-type: none"> • Waste Disposal (Chemical Waste) General Regulation • Code of Practice on the Packaging, Labelling and Storage of Chemical Waste

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Main Arena of 2008 Olympic Equestrian Events**

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S6.5.1.6	<u>Sewage</u> <ul style="list-style-type: none"> • Adequate numbers of portable toilets should be provided for the workers. The portable toilets should be maintained in a state, which will not deter the workers from utilizing these portable toilets. Night soil should be collected by licensed collectors regularly. 	Proper handling of sewage from worker to avoid odour, pest and litter impacts	Contractor	Entire construction site	Construction stage	✓	• Waste Disposal Ordinance
S6.5.1.5	<u>General Refuse</u> <ul style="list-style-type: none"> • General refuse generated on-site should be stored in enclosed bins or compaction units separately from construction and chemical wastes. • A reputable waste collector should be employed by the Contractor to remove general refuse from the site, separately from construction and chemical wastes, on a daily basis to minimize odour, pest and litter impacts. Burning of refuse on construction sites is prohibited by law. • Aluminium cans are often recovered from the waste stream by individual collectors if they are segregated and made easily accessible. Separate labelled bins for their deposit should be provided if feasible. • Office wastes can be reduced through the recycling of paper if volumes are large enough to warrant collection. Participation in a local collection scheme should be considered by the Contractor. In addition, waste separation facilities for paper, aluminium cans, plastic bottles etc., should be provided. 	Minimize production of the general refuse and avoid odour, pest and litter impacts	Contractor	Entire construction site	Construction stage	✓ ✓ ✓ ✓	• Waste Disposal Ordinance

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EIA Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concerns to address	Who to implement the measures?	Location of the measures	When to implement the measures?	Implementation	What requirements or standards for the measures to achieve?
S6.5.2.1	<p><u>Municipal Waste</u></p> <ul style="list-style-type: none"> Recycling bins will be provided at shops and food service locations to collect cardboard containers. Personnel in office will be provided with bins to recycle office paper. Aluminium can recycling bins will be placed at prominent locations for collection Recycling bins for plastic bottle recovery should be set up at prominent places to facilitate visitors' participation in material recovery activities. The landscaping works will generate a certain amount of grass clippings, leaves, brush and tree trimmings. However, the handling capacity of the existing Sha Ling composting facility is limited and is currently composting livestock wastes. The facility is unlikely to be able to handle the green waste generated from the Project site. Should there be a market or facility which could process the green waste arising from the Project site, the establishment of a recycling programme for green waste should be considered. The venue operator should make arrangements with the laser printer toner cartridge suppliers to collect and recycle used toner cartridges for laser printers to avoid disposal of the cartridge at landfills as far as practicable. 	Storage and handing of waste	Operator	Entire project site	Operational stage	<p align="center">✓</p> <p align="center">✓</p> <p align="center">✓</p> <p align="center">N/A</p> <p align="center">✓</p>	<ul style="list-style-type: none"> Waste Disposal Ordinance
S6.5.2.2	<p><u>Waste from Stables</u></p> <ul style="list-style-type: none"> Waste from horse stables (mainly the horse manure) would be collected on a regular basis following HKJC's sanitary practices. 	Storage and handing of waste	Operator	Entire project site	Operational stage	B	<ul style="list-style-type: none"> Waste Disposal Ordinance

**Environmental Mitigation Implementation Schedule
Main Arena of 2008 Olympic Equestrian Events**

EIA Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concerns to address	Who to implement the measures?	Location of the measures	When to implement the measures?	Implementation	What requirements or standards for the measures to achieve?
S9.3 & S9.7	<p>1) An Independent Environmental Checker needs to be employed as per the EM&A Manual.</p> <p>2) Establish a telephone hotline which enables the public to raise any matters of concern regarding the project such as complaints, comments, suggestions or requests for information.</p>	Control EM&A Performance	Project Proponent	All construction sites	Construction stage	<p>✓</p> <p>B</p>	<ul style="list-style-type: none"> • EIAO Guidance Note No.4/2002 • TM-EIAO
S9.5	<p>1) An Environmental Team needs to be employed as per the EM&A Manual.</p> <p>2) Prepare a systematic Environmental Management Plan to ensure effective implementation of the mitigation measures.</p> <p>3) An environmental impact monitoring needs to be implementing by the Environmental Team to ensure all the requirements given in the EM&A Manual are fully complied with.</p> <p>4) Real-time reporting of monitoring data for the Project through a dedicated internet website need to be provided and maintained by the Environmental Team</p>	Perform environmental monitoring & auditing	Contractor	All construction sites	Construction stage	<p>✓</p> <p>✓</p> <p>✓</p> <p>✓</p>	<ul style="list-style-type: none"> • EIAO Guidance Note No.4/2002 • TM-EIAO

Note: ✓ - Implemented
 B - To be implemented
 N/A - Not applicable

Appendix D

**Calibration certificates
of noise monitoring
equipment**

Summary of Equipment Calibration Details

Equipment Type	Model	Serial No.	Last Calibration Date	Next Calibration Date
Integrating sound level meter with microphone	Brüel & Kjær 2238 Brüel & Kjær 4188	2320694 2274284	11 Sep 2006	10 Sep 2007
		2320696 2274286	11 Sep 2006	10 Sep 2007
		2320707 2179479	11 Sep 2006	10 Sep 2007
Acoustical calibrator	Brüel & Kjær 4230	1233887	11 Sep 2006	10 Sep 2007
Acoustical multi frequency calibrator	Brüel & Kjær 4226	1531372	21 Sep 2005	20 Sep 2006

CERTIFICATE OF CALIBRATION

Issued by: Brüel & Kjær UK Ltd.

Date of Issue: 21 SEP 2005 Certificate Number: 14260



0174

Brüel & Kjær 

Bedford House, Rutherford Close, Stevenage.
Hertfordshire. SG1 2ND
Telephone: 01438 739100 Fax.: 01438 739199
E-Mail : ukservice@bksv.com

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Approved signatory

Name: A. M. HAMM

Signature: 

CALIBRATION OF MULTI FREQUENCY CALIBRATOR TYPE 4226 ("Free Field and Random" version)

Client: ARUP ACOUSTICS
PARKIN HOUSE
8 ST. THOMAS STREET
WINCHESTER. SO23 9HE

Calibrator Type 4226, S/No: 1531372

With Coupler UA0915, S/No: 1531372

Client Inventory Number: -

Manufacturer: Brüel & Kjær

Equipment Received on: 16 SEP 2005

Calibration Date: 21 SEP 2005

Brüel & Kjær Reference No: 1-65783810

Measurement Method

The Calibration was performed to Laboratory Procedure TWI-103.

Sound pressure level in the 1/2 inch coupler of the calibrator was measured with a laboratory grade condenser microphone Type 4180, used as a working standard, calibrated by the National Physical Laboratory.

This certificate is issued in accordance with the laboratory accreditation requirements of the United Kingdom Accreditation Service. It provides traceability of measurement to recognised national standards, and to units of measurement realised at the National Physical Laboratory or other recognised national standards laboratories. This certificate may not be reproduced other than in full, except with the prior written approval of the issuing laboratory.

CERTIFICATE OF CALIBRATION

UKAS Accredited Calibration Laboratory No. 0174

Certificate Number

14260

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The measured sound pressure was compared with that generated in the coupler of a working standard pistonphone calibrated by the National Physical Laboratory whose output was cross checked against a reference standard pistonphone, also calibrated by the National Physical Laboratory, using the same microphone and at the same ambient conditions. Appropriate corrections for atmospheric pressure conditions during calibration and for the measurement frequency and level response were taken into account.

Sound pressure level results are the mean of 5 measurements.

Results apply directly to the following settings on the calibrator, pressure, linear, calibration, 94dB, microphone group a, b, c.

Results for frequency and distortion are the result of a single measurement.

Results for 104 and 114dB are only at 125Hz, 1kHz and 8kHz, compared with the output at 94dB.

Calibration results apply at ambient conditions during the process of calibration.

Calibrations marked (Not UKAS Accredited) in this certificate have been included for completeness.

CALIBRATION RESULTS

4226 Settings: Linear, Pressure, 94dB, Microphone Group c.

Frequency Setting Hz	Sound Pressure Level in dB re 20µPa	Frequency Hz (Not UKAS Accredited)	Distortion % (Not UKAS Accredited)
31.5	94.12	31.63	0.5
63	94.02	63.13	0.2
125	94.01	125.9	0.1
250	94.01	251.3	0.1
500	94.00	502.5	0.2
1k	94.05	1.005 k	0.2
2k	94.04	1.979 k	0.3
4k	94.04	3.957 k	0.5
8k	94.11	7.915 k	0.3
12.5k	94.08	12.66 k	0.2

CERTIFICATE OF CALIBRATION

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Certificate Number

14260

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Expanded uncertainty of calibration:

Sound Pressure Level: ± 0.15 dB from 31.5 Hz to 2 kHz,
 ± 0.20 dB at 4 kHz and 8 kHz,
 ± 0.25 dB at 12.5 kHz
Frequency: ± 1 last significant digit reported.
Distortion: $\pm 0.3\%$ distortion.

The reported expanded uncertainty is based on a standard uncertainty multiplied by a coverage factor $k=2$, providing a level of confidence of approximately 95%. The uncertainty evaluation has been carried out in accordance with UKAS requirements.

ADDITIONAL TESTS

Sound Pressure Levels at Settings of 94, 104 and 114 dB

Frequency	Difference 104-94dB	Difference 114-94dB
125 Hz	9.99	19.97
1kHz	10.00	19.98
8kHz	9.96	19.93

Result of a single measurement, expanded uncertainty ± 0.15 dB

Inverted "A" Weighting, Readings Relative to 1kHz in dB

Frequency Hz	31.5	63	125	250	500	1 k	2 k	4 k	8 k	12.5 k
Target Value	+39.4	+26.2	+16.1	+8.6	+3.2	0	-1.2	-1.0	+1.1	+4.3
Reading	39.5	26.2	16.1	8.6	3.2	0.0	-1.2	-0.9	1.2	4.3

Target values according to BS EN 60651 - 1994 - results of a single measurement, values rounded to 0.1 dB, expanded uncertainty ± 0.3 dB.

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Certificate Number

14260

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Free Field and Random settings

Freq. Hz	Free Field Setting						Random	
	Microphone Group a		Microphone Group b		Microphone Group c		Microphone Group b	
	Target Value dB	Reading dB	Target Value dB	Reading dB	Target Value dB	Reading dB	Target Value dB	Reading dB
250	0	0.00	0	0.00	0	0.00	0	0.00
500	0	0.00	0	0.00	0	0.00	0	0.00
1k	+0.15	0.14	+0.20	0.19	+0.10	0.09	+0.05	0.03
2k	+0.50	0.49	+0.45	0.44	+0.35	0.34	+0.10	0.08
4k	+1.35	1.34	+1.05	1.04	+0.95	0.92	+0.15	0.14
8k	+4.50	4.46	+2.80	2.77	+2.60	2.58	+0.40	0.38
12.5k	+7.35	7.28	+5.60	5.54	+5.05	5.00	+1.50	1.48

Target values as specified in the manufacturer's manual, result of a single measurement, expanded uncertainty ± 0.2 dB.

Ambient conditions during calibration were:

Atmospheric Pressure 101.3 kPa
Temperature 23 °C
Relative Humidity 46 %

Checked by: MA Fitch

Level 5 Festival Walk
 80 Tat Chee Avenue
 Kowloon Tong, Kowloon
 HONG KONG

AAc Certificate No. 2006006

Fax: +852 2268 3950

Tel: +852 2268 3216

CERTIFICATE OF CONFORMITY

<u>Description of Test Instrument</u>	<u>Type No</u>	<u>Serial No</u>
Brüel & Kjær Sound Level Meter Kit	2238	2320694
Brüel & Kjær ½ " Microphone Kit	4188	2274284

Date of Test: 11 September 2006

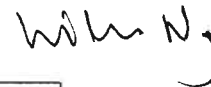
Carried out by: Cissy Chan

Approved by: William Ng

Signature:



Signature:



Ambient Conditions During Test	
Atmospheric Pressure:	1KPa
Air Temperature:	21°C
Relative Humidity:	58%

This document is to certify that the above Test Instrumentation did conform to the manufacturer's original specification on the date of the test. Any adjustments that were required to bring the instrumentation back into specification are duly noted in this document. The tests were carried out using the reference calibrator described below.

<u>Description of Reference Calibrator</u>	<u>Type No</u>	<u>Serial No</u>
Brüel & Kjær Multi Frequency Calibrator	4226	1531372
Brüel & Kjær Coupler	UA0915	1531372
Certificate of Calibration Serial No.	14260	
By Brüel & Kjær (UK) Ltd Calibration Date:	21 September 2005	
NAMAS Accredited Calibration Laboratory No.	0174	

The reference calibrator, Type 4226, has traceable calibration back to National Measurement Standards. As such it is used as Arup Acoustics own 'Primary Standard' and is used only for controlled laboratory calibration tests on all sound measuring equipment owned by Arup Acoustics.

Footnote:

Arup Acoustics is not a registered NAMAS accredited calibration laboratory. This certificate is for internal use only (unless otherwise authorised) and is part of Arup Acoustics development and commitment to QC and QA procedures.

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AAc Certificate No. 2006007

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Tel: +852 2268 3216

CERTIFICATE OF CONFORMITY

<u>Description of Test Instrument</u>	<u>Type No</u>	<u>Serial No</u>
Brüel & Kjær Sound Level Meter Kit	2238	2320696
Brüel & Kjær ½ " Microphone Kit	4188	2274286

Date of Test: 11 September 2006

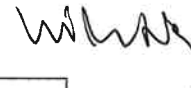
Carried out by: Cissy Chan

Approved by: William Ng

Signature:



Signature:



Ambient Conditions During Test	
Atmospheric Pressure:	1KPa
Air Temperature:	21°C
Relative Humidity:	58%

This document is to certify that the above Test Instrumentation did conform to the manufacturer's original specification on the date of the test. Any adjustments that were required to bring the instrumentation back into specification are duly noted in this document. The tests were carried out using the reference calibrator described below.

<u>Description of Reference Calibrator</u>	<u>Type No</u>	<u>Serial No</u>
Brüel & Kjær Multi Frequency Calibrator	4226	1531372
Brüel & Kjær Coupler	UA0915	1531372

Certificate of Calibration Serial No. 14260
By Brüel & Kjær (UK) Ltd Calibration Date: 21 September 2005
NAMAS Accredited Calibration Laboratory No. 0174

The reference calibrator, Type 4226, has traceable calibration back to National Measurement Standards. As such it is used as Arup Acoustics own 'Primary Standard' and is used only for controlled laboratory calibration tests on all sound measuring equipment owned by Arup Acoustics.

Footnote:

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AAc Certificate No. 2006005

Fax: +852 2268 3950

Tel: +852 2268 3216

CERTIFICATE OF CONFORMITY

<u>Description of Test Instrument</u>	<u>Type No</u>	<u>Serial No</u>
Brüel & Kjær Sound Level Meter Kit	2238	2320707
Brüel & Kjær ½ " Microphone Kit	4188	2179479

Date of Test: 11 September 2006

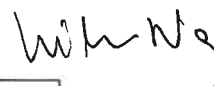
Carried out by: Cissy Chan

Approved by: William Ng

Signature:



Signature:



Ambient Conditions During Test	
Atmospheric Pressure:	1KPa
Air Temperature:	21°C
Relative Humidity:	58%

This document is to certify that the above Test Instrumentation did conform to the manufacturer's original specification on the date of the test. Any adjustments that were required to bring the instrumentation back into specification are duly noted in this document. The tests were carried out using the reference calibrator described below.

<u>Description of Reference Calibrator</u>	<u>Type No</u>	<u>Serial No</u>
Brüel & Kjær Multi Frequency Calibrator	4226	1531372
Brüel & Kjær Coupler	UA0915	1531372
Certificate of Calibration Serial No.	14260	
By Brüel & Kjær (UK) Ltd Calibration Date:	21 September 2005	
NAMAS Accredited Calibration Laboratory No.	0174	

The reference calibrator, Type 4226, has traceable calibration back to National Measurement Standards. As such it is used as Arup Acoustics own 'Primary Standard' and is used only for controlled laboratory calibration tests on all sound measuring equipment owned by Arup Acoustics.

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CERTIFICATE OF CONFORMITY

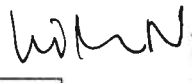
<u>Description of Test Instrument</u>	<u>Type No</u>	<u>Serial No</u>
Bruel & Kjaer 4230 Acoustic Calibrator	4230	1233887

Date of Test: 11 September 2006

Carried out by: Cissy Chan

Approved by: William Ng

Signature: 

Signature: 

Ambient Conditions During Test	
Atmospheric Pressure:	1KPa
Air Temperature:	21°C
Relative Humidity:	58%

This document is to certify that the above Test Instrumentation did conform to the manufacturer's original specification on the date of the test. Any adjustments that were required to bring the instrumentation back into specification are duly noted in this document. The tests were carried out using the reference calibrator described below.

<u>Description of Reference Calibrator</u>	<u>Type No</u>	<u>Serial No</u>
Brüel & Kjær Multi Frequency Calibrator	4226	1531372
Brüel & Kjær Coupler	UA0915	1531372

Certificate of Calibration Serial No. 14260
By Brüel & Kjær (UK) Ltd Calibration Date: 21 September 2005
NAMAS Accredited Calibration Laboratory No. 0174

The reference calibrator, Type 4226, has traceable calibration back to National Measurement Standards. As such it is used as Arup Acoustics own 'Primary Standard' and is used only for controlled laboratory calibration tests on all sound measuring equipment owned by Arup Acoustics.

Footnote:

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Appendix E

**Detailed noise
monitoring results**

Details of Noise Impact Monitoring

Month	Date	NSR No.	Time periods		Weather condition	Avg. wind speed (m/s)	Noise Level dB(A)			Influencing factors/ Site condition
			Start	Finish			L _{eq}	L ₁₀	L ₉₀	
Jul-06	27-Jul-06	NM1	4:05	4:35	cloudy	1.8	62.2	63.0	61.0	Normal Operation
Jul-06	27-Jul-06	NM2	3:15	3:45	cloudy	1.5	61.5	63.0	60.0	Normal Operation
Jul-06	27-Jul-06	NM3	2:15	2:45	cloudy	1.3	59.5	60.5	57.0	Normal Operation
Aug-06	5-Aug-06	NM1	10:05	10:35	cloudy	2.3	64.3	65.5	61.5	Normal Operation
Aug-06	5-Aug-06	NM2	9:15	9:45	cloudy	2.1	63.3	65.0	61.5	Normal Operation
Aug-06	5-Aug-06	NM3	11:20	11:50	cloudy	2.6	62.3	64.5	59.0	Normal Operation
Aug-06	10-Aug-06	NM1	15:00	15:30	cloudy	1.6	63.0	64.5	60.5	Normal Operation
Aug-06	10-Aug-06	NM2	14:10	14:40	cloudy	1.8	61.6	63.5	59.5	Normal Operation
Aug-06	10-Aug-06	NM3	16:05	16:35	cloudy	1.5	57.9	59.0	56.0	Normal Operation
Aug-06	17-Aug-06	NM1	14:53	15:23	Sunny	2.3	61.4	63.0	59.0	Normal Operation
Aug-06	17-Aug-06	NM2	14:13	14:43	Sunny	3.2	60.2	61.5	58.5	Normal Operation
Aug-06	17-Aug-06	NM3	15:46	16:16	Sunny	2.9	58.4	59.5	56.5	Normal Operation
Aug-06	24-Aug-06	NM1	10:15	10:45	Fine	1.7	63.3	64.5	61.0	Normal Operation
Aug-06	24-Aug-06	NM2	9:30	10:00	Fine	1.8	60.3	61.5	58.5	Normal Operation
Aug-06	24-Aug-06	NM3	11:15	11:45	Fine	1.6	56.6	58.5	54.5	Normal Operation
Aug-06	31-Aug-06	NM1	15:00	15:30	Sunny	1.7	63.3	64.5	61.5	Normal Operation
Aug-06	31-Aug-06	NM2	14:05	14:35	Sunny	1.5	59.7	60.5	57.5	Normal Operation
Aug-06	31-Aug-06	NM3	15:55	16:25	Sunny	1.4	57.2	58.0	53.5	Normal Operation
Sep-06	7-Sep-06	NM1	11:15	11:45	Fine	1.4	63.0	64.5	58.5	Normal Operation
Sep-06	7-Sep-06	NM2	13:00	13:30	Fine	1.6	68.0	68.2	64.0	Normal Operation
Sep-06	7-Sep-06	NM3	14:10	14:40	Fine	1.4	59.6	61.0	57.0	Normal Operation
Sep-06	14-Sep-06	NM1	13:45	14:15	Cloudy	1.9	64.1	66.0	61.5	Normal Operation
Sep-06	14-Sep-06	NM2	13:00	13:30	Cloudy	1.8	60.3	61.5	57.5	Normal Operation
Sep-06	14-Sep-06	NM3	14:40	15:10	cloudy	1.6	58.2	59.5	54.5	Normal Operation
Sep-06	21-Sep-06	NM1	14:15	14:45	Sunny	2.1	62.9	64.0	61.0	Normal Operation
Sep-06	21-Sep-06	NM2	13:29	13:59	Sunny	1.2	61.8	63.5	59.5	Normal Operation
Sep-06	21-Sep-06	NM3	15:15	15:45	Sunny	1.6	59.5	61.0	57.5	Normal Operation
Sep-06	28-Sep-06	NM1	9:24	9:54	Sunny	1.8	65.1	66.5	62.5	Normal Operation
Sep-06	28-Sep-06	NM2	10:08	10:38	Sunny	1.6	61.1	62.0	59.5	Normal Operation
Sep-06	28-Sep-06	NM3	11:06	11:36	Sunny	1.9	59.0	60.5	56.5	Normal Operation

Appendix F

**Landscape and visual
monitoring and audit
report**

1. Monitoring results

1.1 Landscape and Visual

Landscape resource changes related to the site clearance work comprise of the loss of turf and trees. This impact was described in the EIA report and is considered acceptable.

1.2 Environmental Site Auditing

Landscape and visual monitoring and site audits were carried out on 11th and 25th September 2006. Site formation, vegetation clearance work and stables construction works were observed.

A site office has been constructed and located at the East corner of the Site. The rear side of the office is painted in olive green color to reduce visual impacts to VSRs.

Tree T557 and T558 have been transplanted and are in fair condition. Retain and transplant trees are protected and fenced off with bamboo fencing. The retained trees are generally in fair condition.

1.3 Implementation Statuses of Landscape and Visual Impact Measures

The implementation statuses of environmental protection requirements are summarized in the Table 1.1.

2. Recommendations and Conclusion

The Contractor shall implement tree protection measure as soon as possible.

Table 1.1 Implementation Statuses of Landscape and Visual Impact Measures

EIA Ref	EM&A Ref	Environmental Protection Measures*	Location / Timing	Implementation Agent	Implementation Stages **			Implementation Status	Relevant Legislation & Guidelines
					C	O	R		
Landscape and Visual Impact - Construction Phase									
Table 7.31	MC1	Site offices, construction yard and holding nursery: <ul style="list-style-type: none"> Site offices and the construction yard shall be decommissioned after construction. Construction roads shall be decommissioned and landscape areas be restored to its original or newly proposed state. The holding nursery for decorative plants at show jumps shall be decommissioned after the Olympic events. 	At concealed location	HKJC's Contractor	x	<input type="checkbox"/>	x	Construction: To commence. Reinstatement: To commence	Nil.
Table 7.31	MC 2	Height of site offices: <ul style="list-style-type: none"> The height of site offices shall be controlled in order to avoid visual impacts. 	At concealed location	HKJC's Contractor	x	<input type="checkbox"/>	x	Construction: Complied. Reinstatement: To commence.	Nil.

EIA Ref	EM&A Ref	Environmental Protection Measures*	Location / Timing	Implementation Agent	Implementation Stages **			Implementation Status	Relevant Legislation & Guidelines
					C	O	R		
Table 7.31	MC 3	Hoarding and screening: <ul style="list-style-type: none"> Where practical the site offices areas, construction yards and storage areas shall be screened with decorative hoarding or vegetation around the peripheries until the completion of relevant construction phases. 	Site offices, construction yards and storage areas.	HKJC's Contractor	x	<input type="checkbox"/>	x	Construction: Complied. Reinstatement: To commence	Nil.
Table 7.31	MC 4	Construction plant and building material: <ul style="list-style-type: none"> Shall be orderly and carefully stored in order to appear neat and avoid visibility from outside where practical; Excess materials shall be removed from site as soon as practical; and All construction plant shall be removed from site upon completion of construction works. 	All areas with construction plant and building material	HKJC's Contractor	x	<input type="checkbox"/>	x	Construction: Complied. Reinstatement: To commence	Nil.

EIA Ref	EM&A Ref	Environmental Protection Measures*	Location / Timing	Implementation Agent	Implementation Stages **			Implementation Status	Relevant Legislation & Guidelines
					C	O	R		
Table 7.31	MC 5	Construction light: <ul style="list-style-type: none"> To be oriented away from the viewing location of VSRs; and All construction lights shall have frosted diffusers and reflective covers. 	All construction lights	HKJC's Contractor	x	<input type="checkbox"/>	x	No construction lights at present.	Nil.

EIA Ref	EM&A Ref	Environmental Protection Measures*	Location / Timing	Implementation Agent	Implementation Stages **			Implementation Status	Relevant Legislation & Guidelines
					C	O	R		
Table 7.31	MC 6	<p>Vegetation:</p> <ul style="list-style-type: none"> • Temporary construction sites shall be restored to standards as good as, or better than, the original condition; • The potential for soil erosion shall be reduced at the construction stage by minimizing the extent of vegetation disturbance on site and by providing a protective cover over exposed ground; and • No construction equipment or building materials shall be stored under the dripline of retained trees and no vehicle movement or other construction activities like washing, concrete mixing etc shall be carried out under the dripline of trees. 	Affected vegetation areas	HKJC's Contractor	x	<input type="checkbox"/>	x	<p>Construction: Retain and transplant trees have been fenced off. No material or equivalent are stored under the dripline of tree. Complied.</p> <p>Reinstatement: To commence.</p>	Nil.

EIA Ref	EM&A Ref	Environmental Protection Measures*	Location / Timing	Implementation Agent	Implementation Stages **			Implementation Status	Relevant Legislation & Guidelines
					C	O	R		
Table 7.31	MT 1	Compensation for losses: <ul style="list-style-type: none"> The tree compensation to tree loss ratio shall be 1:2; and At least 82 new trees of light standard or larger size shall be planted. 	At available areas suitable for healthy tree growth	HKJC's Contractor	x	<input type="checkbox"/>	x	Construction: To commence. Reinstatement: To commence.	Nil.
Table 7.31	MT 2	The majority of compensation species shall comprise of species that already occurs within the LIA boundaries.	General	HKJC's Contractor	x	<input type="checkbox"/>	x	Construction: To commence. Reinstatement: To commence.	Nil.
Table 7.31	MT 3	Where practical, trees that require removal shall be transplanted on Site.	At available areas suitable for healthy tree growth	HKJC's Contractor	x <input type="checkbox"/>	<input type="checkbox"/>	x	Construction: To commence. Reinstatement: To commence.	ETWB TCW NO. 2/2004, WBTC No. 3/2006 BD PNAP No. 267

EIA Ref	EM&A Ref	Environmental Protection Measures*	Location / Timing	Implementation Agent	Implementation Stages **			Implementation Status	Relevant Legislation & Guidelines
					C	O	R		
Table 7.31	MT 4	Planting Works: <ul style="list-style-type: none"> New trees, bamboos and shrubs shall be planted in groups in order to screen visual impacts and to provide additional shade. 	At available areas suitable for healthy tree growth and along approach footpath	HKJC's Contractor	x	<input type="checkbox"/>	x	Construction: To commence. Reinstatement: To commence.	Nil.
Table 7.31	MT 5	Tree Planting on Slopes: <ul style="list-style-type: none"> New slopes with a gradient larger than 30o shall have shrub, groundcover or grass planting. 	On affected slopes	HKJC's Contractor	x	<input type="checkbox"/>	x	Construction: To commence. Reinstatement: To commence	WBTC No. 17/2000 WBTC No. 25/93 BD PNAP No. 270

EIA Ref	EM&A Ref	Environmental Protection Measures*	Location / Timing	Implementation Agent	Implementation Stages **			Implementation Status	Relevant Legislation & Guidelines
					C	O	R		
Table 7.31	MT 6	<p>Tree Preservation:</p> <ul style="list-style-type: none"> No tree shall be transplanted or felled without prior approval by relevant Government departments; All trees that are marked for retention shall be fenced off with a 1.2m high fence; and Transplant preparation works shall be carried as soon as possible after commencement of construction. Rootball and crown pruning shall be carried out over a period of at least 1 month. 	At existing locations of retained trees and transplantation areas, which should be suitable for healthy tree growth.	HKJC's Contractor	x	<input type="checkbox"/>	x	<p>Construction: Tree protection has been recorded.</p> <p>Reinstatement: To commence.</p>	Nil
Table 7.31	MT 7	Existing shrub and ground cover planting areas that will not be removed shall be maintained in good condition and enhanced where practical.	All retained planting areas	HKJC's Contractor HKJC's Contractor HKJC's Contractor	x	<input type="checkbox"/>	x	<p>Construction: Complied.</p> <p>Reinstatement: To commence.</p>	Nil

EIA Ref	EM&A Ref	Environmental Protection Measures*	Location / Timing	Implementation Agent	Implementation Stages **			Implementation Status	Relevant Legislation & Guidelines
					C	O	R		
	MS 8	Site formation works at slopes shall be followed with hydroseeding as soon as practical or be covered with shrubs and groundcovers.	Slope areas	Event Operator HKJC's Contractor	x	<input type="checkbox"/>	x	Construction: To commence. Reinstatement: To commence	Nil
Table 7.31	MS 9	Grassing shall be carried out as soon as practical after construction of footing stratum at one of the General Training Arenas.	General Training Arena	Event Operator	x			Construction: To commence. Reinstatement: To commence	Nil.
Table 7.31	MF 1	All floodlight units on the floodlight poles shall be properly aimed at the competition and practice areas of the Main and Warm-up arenas. In this regards, the central light focus of each floodlight unit shall always be aimed on the arena areas and not on any other adjacent area.	Main Arena and Warm-up Arena	HKJC's Contractor		x <input type="checkbox"/>	x	Operation: To commence. Reinstatement: To commence.	Nil.

EIA Ref	EM&A Ref	Environmental Protection Measures*	Location / Timing	Implementation Agent	Implementation Stages **			Implementation Status	Relevant Legislation & Guidelines
					C	O	R		
Table 7.31	MF 2	Each floodlight unit shall have a built-in anti-glare baffle and visor shield to limit the glare.	Main Arena and Warm-up Arena	HKJC's Contractor	x			Construction: To commence.	Nil.
Table 7.31	MF 3	Operational hours of the floodlights shall be restricted to competition hours only. Floodlights shall be turned off when spectators have left the seating area.	Main Arena and Warm-up Arena	Event Operator		x <input type="checkbox"/>	x	Operation: To commence. Reinstatement: To commence.	Nil.

* All recommendations and requirements resulted during the course of EIA Process, including ACE and/or accepted public comment to the proposed project.

** C=Construction, O=Operation R=Reinstatement

N/A Not applicable

Appendix G

**Log records and details
of environmental
complaints**

Log Record on Environmental Complaints

No.	Date of Complaint Received	Description	Investigation Result and Proposed Actions	Completion Date	Remarks
001	28 Aug 2006	Discharge of muddy water into Shing Mun River	<p>No evidence had shown the source of the muddy water discharge from subjected site. In fact, there were three main contractors working inside the HKSI area and all share the same discharge outlet. However, contractor had carried out the following measures to prevent any further discharge of muddy water from the subject site areas:</p> <ol style="list-style-type: none"> 1. Keep closely checking on the performance of the wastewater treatment system; 2. Closely monitoring of the discharge outlet at Shing Mun River and tracing of the source origin immediately if muddy water was observed; 3. Made use of the shallow ground areas on site to temporary trap stormwater inside the site to prevent any direct discharge; 4. Construction of temporary drainage channel and use of water pump to properly divert the trapped stormwater to the temporary sump pit; 5. Control pumping of all muddy water collected from the sump pit to the wastewater treatment plant within its treatment capacity before discharging. 	1 Sept 2006	EPD inspected the site drainage system on 1 Sept 2006 and was satisfied.