The Hong Kong Jockey Club

2008 Olympic Equestrian Event

Monthly Environmental Monitoring and Audit Report - October 2006

Final

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November 2006

Ove Arup & Partners Hong Kong Ltd
Level 5, Festival Walk, 80 Tat Chee Avenue, Kowloon Tong, Kowloon, Hong Kong
Tel +852 2528 3031 Fax +852 2268 3950
www.arup.com

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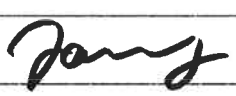
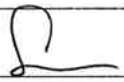
		Signature			
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Contents

Appendices

Executive Summary

This is the third 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 31 October 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 5, 13, 19 and 26 October 2006. The highest noise level of 66.8 dB(A) was recorded at the roof of Chun Cheung Court, HKJC Staff Quarters (NM1) on 26 October 2006 while the lowest noise level of 58.8 dB(A) was recorded at the podium outside Block 1 of Ravana Garden (NM3) on 13 October 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 9 and 23 October 2006. The Registered Landscape Architect (RLA) has the following observations:

- More frequent watering especially for newly transplanted trees is recommended in the coming dry season.

A total of 4 environmental site audits were conducted weekly on 3, 13, 20 and 24 October 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: Sand/silt at the Wheel Washing Bay should be cleared regularly.

Handling of waste and chemicals: General refuse on site should be cleared regularly.

A total of 0.07 tonnes of Construction and Demolition (C&D) waste and a total of 5.0 tonnes of C&D material (public fill) were disposed of at Landfill and Public Filling Area respectively in October 2006. No chemical waste was disposed of during the reporting period.

No environmental complaint was received during the reporting period.

No new 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.

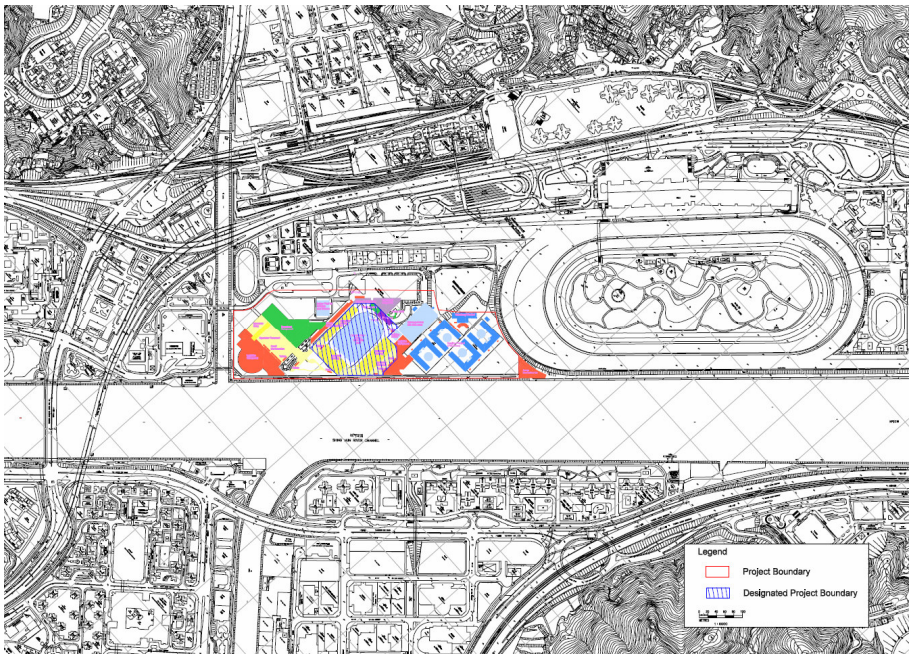
Given the very tight schedule of the project, Hong Kong Sports Institute (HKSI) in Shatin will be temporarily converted into the core competition venues for the Olympic Equestrian Event. Facilities to be provided on the core venues include:

- 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 third monthly EM&A report prepared by Arup for the submission to the HKJC summarising the implementation of the EM&A programme from 1 to 31 October 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 October 2006 include:

- Underground drain laying in Veterinary stable;

- Blinding works in progress in Retaining Wall 3 and Chiller Plant Room;
- Wall construction in Veterinary and Main stables;
- Sheet pile driving in Retaining Wall no. 3;
- Erection of hoarding; and
- Tree transplantation.

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 carried out. The monitoring schedule for the month of October 2006 and the tentative schedule for November 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	$L_{eq(30\ min)}$	Once per week	1
Between 1900-2300 hours on normal weekdays	$L_{eq(5\ min)}$*		3 (consecutive)
Between 2300-0700 hours of next day			
Between 0700-1900 hours on holidays			

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

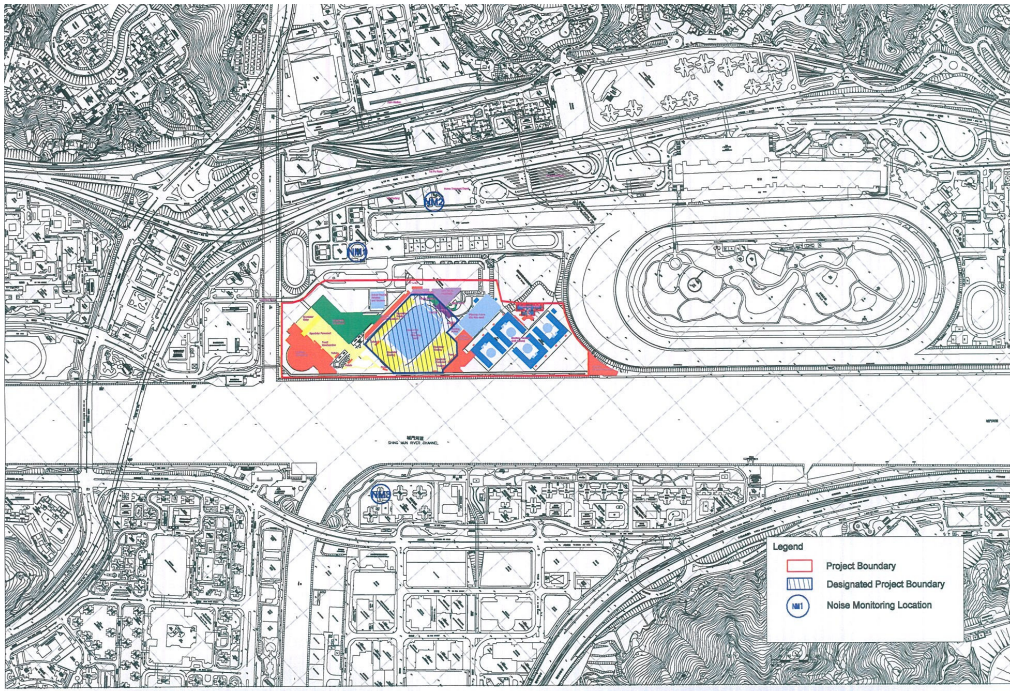
3.1.3 Monitoring Locations

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, 1meter 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	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.	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.	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.	1. Submit noise mitigation proposals to ER and IEC. 2. Implement noise mitigation proposals.
Limit Level	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.	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.	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.	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**.

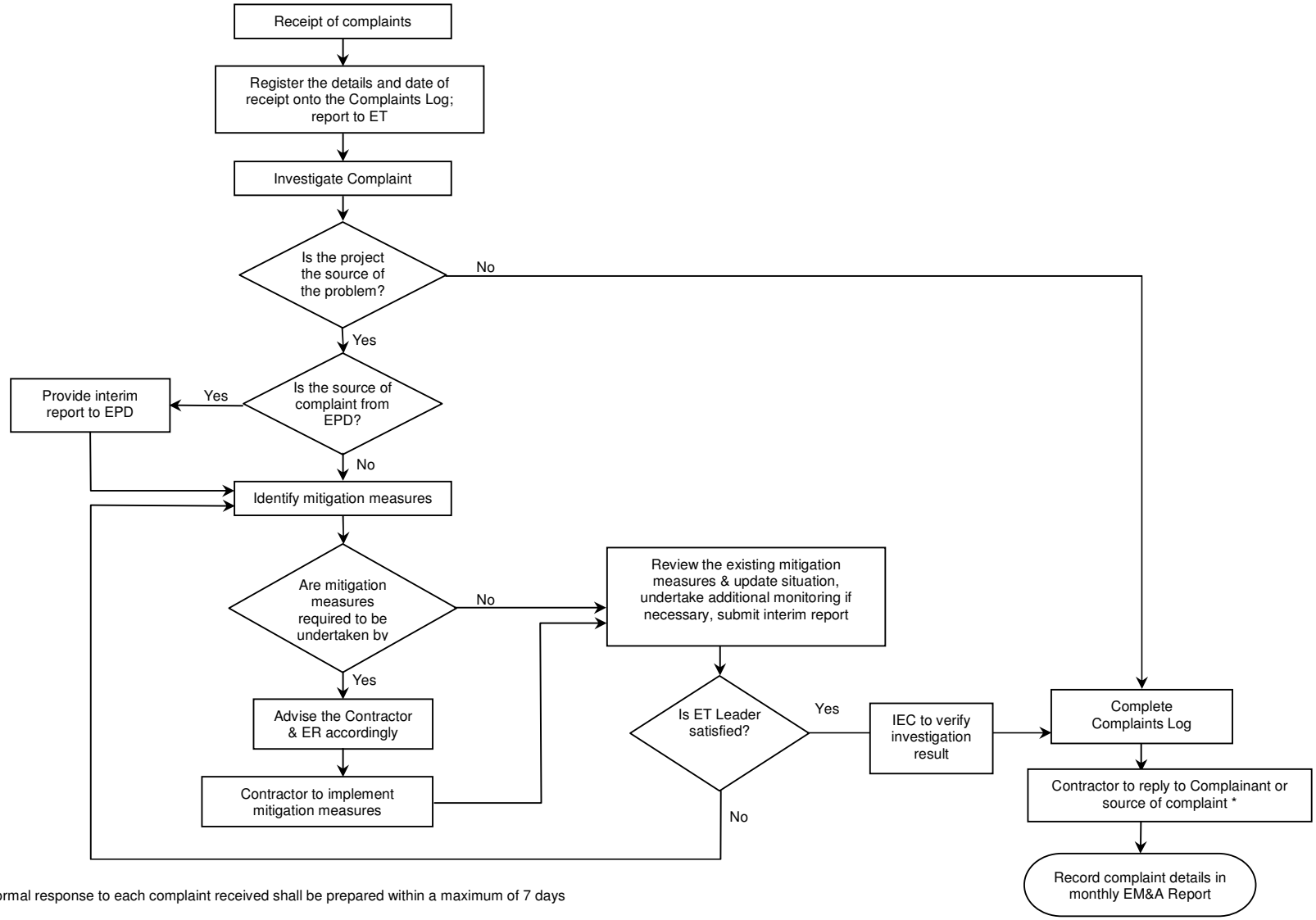


Figure 3-2: Flow chart of complaint response procedures

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
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 (Leq), L10 and L90 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 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.

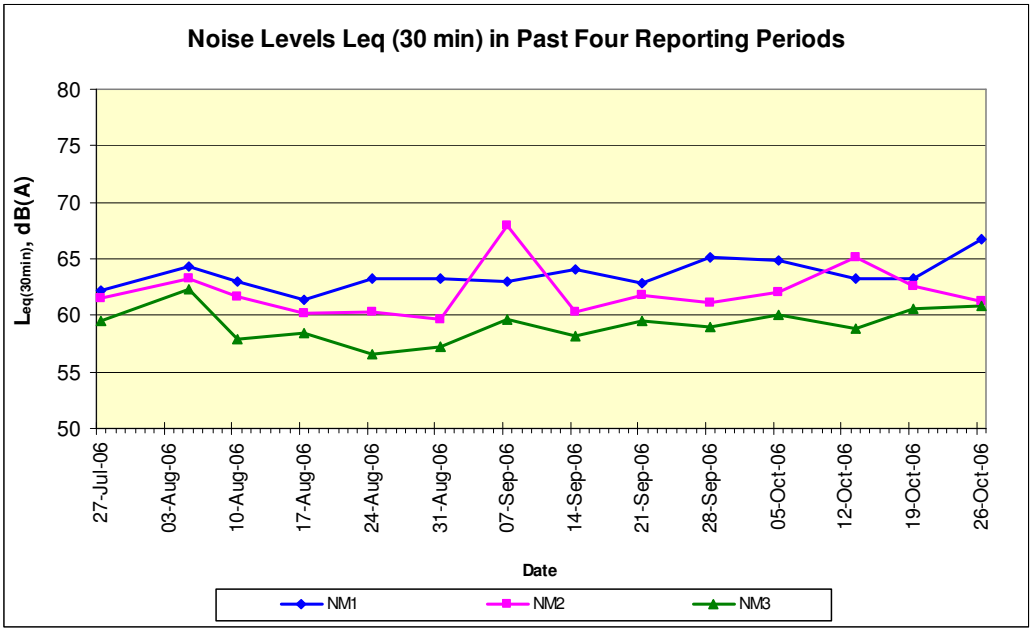
4.3.2 Summary of Results

A total of 4 sets of daytime (0700 – 1900 hours) noise monitoring was conducted on 5, 13, 19 and 26 October 2006.

The highest noise level of 66.8 dB(A) was recorded at the roof of Chun Cheung Court, HKJC Staff Quarters (NM1) on 26 October 2006 while the lowest noise level of 58.8 dB(A) was recorded at the podium outside Block 1 of Ravana Garden (NM3) on 13 October 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 out on 9th and 23rd October 2006. Site formation works are being carried out and stables are being constructed. More trees have been transplanted and are in fair condition. More frequent watering is recommended in the coming dry season. 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 October 2006. The findings of the site audits are summarised in Table 6-1.

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

Date of Issue Raised	Observation	Advice from EA	CT's Response / Environmental Outcomes	Closing Date
3 Oct 2006	1. General refuse was found at Logistic Compound.	Contractor was reminded to clear waste on site regularly.	Agreed with the ET's advice.	3 Oct 2006
13 Oct 2006	1. Dry haul road was observed.	Contractor was reminded to increase watering frequency.	Agreed with the ET's advice.	13 Oct 2006
20 Oct 2006	1. Dry haul road was observed.	Contractor was recommended to increase watering frequency.	Agreed with the ET's advice.	20 Oct 2006
	2. Sand/silt was observed at Wheel Washing Bay.	Contractor was reminded to clean the Wheel Washing Bay regularly.	Agreed with the ET's advice.	
24 Oct 2006	1. No adverse environmental impact was observed during site audit.	Contractor was reminded to clear rubbish in the bins regularly.	Agreed with the ET's advice.	24 Oct 2006

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 October 2006

Type of waste or material		Disposal at	No. of loads or quantities
C&D waste		SENT Landfill	0.07 tonnes
C&D material		Public Filling Area in TKO 137	5.0 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 October 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

No 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.
Registration of Waste Producer	WPN: 5213-753-C3317-11	1 Nov 2006	--	-
Site Effluent Discharge Licence	Licence No: 3448	1 Nov 2006	30 Nov 2011	-

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:

- Construction of wall of stable buildings;
- Tree transplantation;
- Underground drainage; and
- Excavation and fill at Training and Competition Arena (sand).

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;
- 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
  - Sand/silt at the Wheel Washing Bay should be cleared regularly.
- Air Quality
  - Watering at dry haul road should be applied frequently.
- Construction Noise
  - Nil
- Waste / Chemical Management
  - General refuse on site should be cleared regularly.
- Landscape & Visual
  - More frequent watering especially for newly transplanted trees is recommended in the coming dry season.

8.2 Conclusion

Construction phase impact monitoring and audit were conducted 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

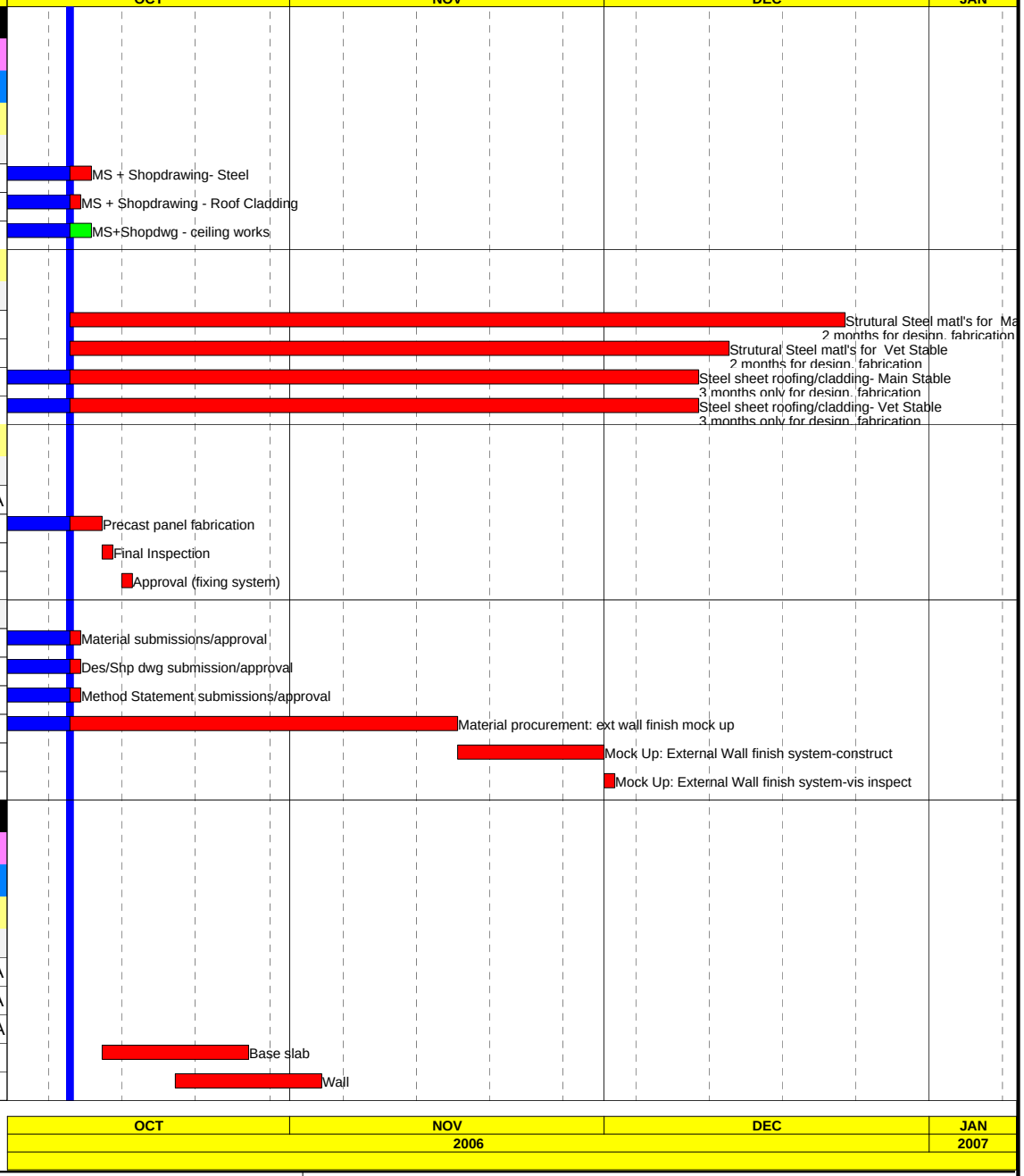
[1] Ove Arup & Partners Hong Kong Ltd. June 2006. Main Arena of the 2008 Olympic Equestrian Event – Environmental Monitoring & Audit Manual

[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
Preliminaries						
Preliminaries						
Submissions/Approvals/Procurements						
Submissions/Approvals						
Method Statement/Shopdrawing Submission						
20165	MS + Shopdrawing- Steel	18	2	2	20-SEP-06A	12-OCT-06
20170	MS + Shopdrawing - Roof Cladding	18	1	2	20-SEP-06A	11-OCT-06
20200	MS+Shopdwg - ceiling works	18	2	2	20-SEP-06A	12-OCT-06
Procurement, Fabrication and Delivery						
20245	Strutural Steel matl's for Main Stable	64	64	2	11-OCT-06	23-DEC-06
20255	Strutural Steel matl's for Vet Stable	54	54	2	11-OCT-06	12-DEC-06
20260	Steel sheet roofing/cladding- Main Stable	72	52	2	15-SEP-06A	09-DEC-06
20270	Steel sheet roofing/cladding- Vet Stable	72	52	2	15-SEP-06A	09-DEC-06
Mock Up						
Fair Face Concrete Mock Up						
M1-20515	Construct wall	4	0	2	30-AUG-06A	12-SEP-06A
M1-20520	Precast panel fabrication	5	3	2	19-SEP-06A	13-OCT-06
M1-20525	Final Inspection	1	1	2	14-OCT-06	14-OCT-06
M1-20530	Approval (fixing system)	1	1	2	16-OCT-06	16-OCT-06
External Wall Finish System Mock Up						
M2-20525	Material submissions/approval	16	1	2	20-SEP-06A	11-OCT-06
M2-20530	Des/Shp dwg submission/approval	16	1	2	20-SEP-06A	11-OCT-06
M2-20535	Method Statement submissions/approval	16	1	2	20-SEP-06A	11-OCT-06
M2-20540	Material procurement: ext wall finish mock up	48	32	2	20-SEP-06A	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
Section KD-1 (Portion HKSI-1 to HKSI-2)						
Portion HKSI-1						
Chiller Plant Room						
Retaining Wall No. 3						
50055	Sheet pile installation	12	0	2	12-SEP-06A	21-SEP-06A
50061	RW3 - Sheet pile driving	12	0	2	14-SEP-06A	21-SEP-06A
50063	RW3 - excavation	3	0	2	21-SEP-06A	03-OCT-06A
50065	Base slab	12	12	2	14-OCT-06*	27-OCT-06
50075	Wall	12	12	2	21-OCT-06	03-NOV-06



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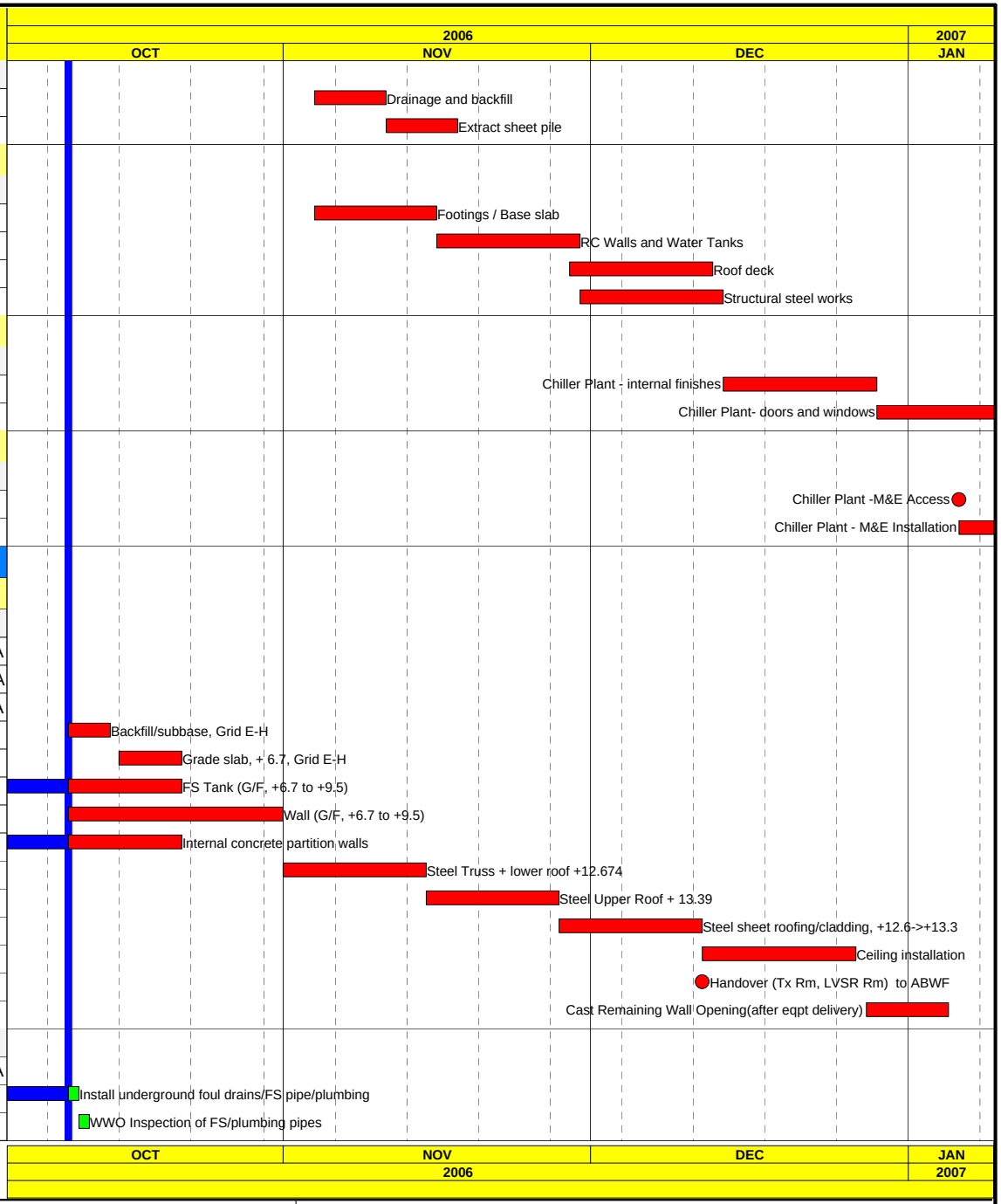
Progress Bar
Critical Activity

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
11-OCT-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
50085	Drainage and backfill	6	6	2	04-NOV-06	10-NOV-06
50095	Extract sheet pile	6	6	2	11-NOV-06	17-NOV-06
Foundation and Superstructure Works						
50115	Footings / Base slab	10	10	2	04-NOV-06	15-NOV-06
50125	RC Walls and Water Tanks	12	12	2	16-NOV-06	29-NOV-06
50135	Roof deck	12	12	2	29-NOV-06	12-DEC-06
50140	Structural steel works	12	12	2	30-NOV-06	13-DEC-06
Finishes						
50145	Chiller Plant - internal finishes	12	12	2	14-DEC-06	28-DEC-06
50155	Chiller Plant- doors and windows	12	12	2	29-DEC-06	12-JAN-07
M&E Services						
50128	Chiller Plant -M&E Access	0	0	2	06-JAN-07*	
50130	Chiller Plant - M&E Installation	48	48	2	06-JAN-07	09-MAR-07
Veterinary Stables						
Foundation and Superstructure Works						
Plant Rooms @ Grd Level, Grid A-H/1-5						
VS-190	Excavation to storm drain	2	0	2	20-SEP-06A	21-SEP-06A
VS-195	DN 100 storm drain laying + Manholes	6	0	2	22-SEP-06A	03-OCT-06A
VS-200	Tie beam /footing/+ CLP cable trench	10	0	2	25-AUG-06A	26-SEP-06A
VS-205	Backfill/subbase, Grid E-H	4	4	2	11-OCT-06	14-OCT-06
VS-210	Grade slab, + 6.7, Grid E-H	6	6	2	16-OCT-06	21-OCT-06
VS-215	FS Tank (G/F, +6.7 to +9.5)	18	10	2	27-SEP-06A	21-OCT-06
VS-215A	Wall (G/F, +6.7 to +9.5)	18	18	2	11-OCT-06	31-OCT-06
VS-217	Internal concrete partition walls	18	10	2	27-SEP-06A	21-OCT-06
VS-220	Steel Truss + lower roof +12.674	12	12	2	01-NOV-06	14-NOV-06
VS-225	Steel Upper Roof + 13.39	11	11	2	15-NOV-06	27-NOV-06
VS-230	Steel sheet roofing/cladding, +12.6->+13.3	12	12	2	28-NOV-06	11-DEC-06
VS-235	Ceiling installation	12	12	2	12-DEC-06	26-DEC-06
VS-240	Handover (Tx Rm, LVSR Rm) to ABWF	0	0	2		11-DEC-06
VS-245	Cast Remaining Wall Opening(after eqpt delivery)	6	6	2	28-DEC-06	04-JAN-07
Grd Level, H-L/1-10 & 1/F Plant Room						
VS-265	Tie beam /footing/upstand wall	0	0	2	01-SEP-06A	15-SEP-06A
VS-270	Install underground foul drains/FS pipe/plumbing	6	1	2	20-SEP-06A	11-OCT-06
VS-275	WWO Inspection of FS/plumbing pipes	1	1	2	12-OCT-06	12-OCT-06



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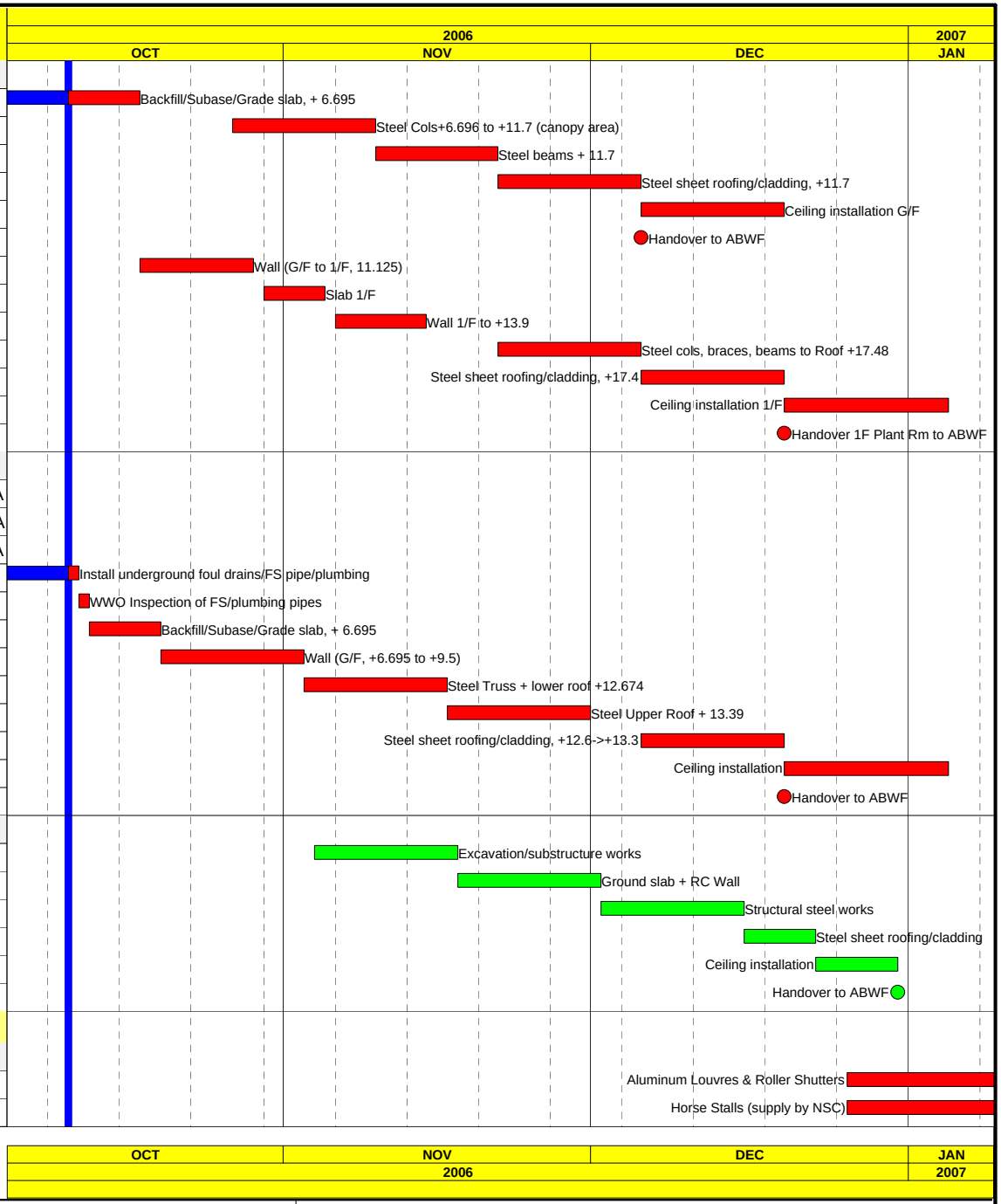
Activity ID	Activity Description	Orig Dur	Rem Dur	Cal ID	Early Start	Early Finish
Grd Level, H-L/1-10 & 1/F Plant Room						
VS-280	Backfill/Subase/Grade slab, + 6.695	12	6	2	25-SEP-06A	17-OCT-06
VS-285	Steel Cols+6.696 to +11.7 (canopy area)	12	12	2	27-OCT-06*	09-NOV-06
VS-290	Steel beams + 11.7	10	10	2	10-NOV-06	21-NOV-06
VS-295	Steel sheet roofing/cladding, +11.7	12	12	2	22-NOV-06	05-DEC-06
VS-300	Ceiling installation G/F	12	12	2	06-DEC-06	19-DEC-06
VS-305	Handover to ABWF	0	0	2		05-DEC-06
VS-310	Wall (G/F to 1/F, 11.125)	10	10	2	18-OCT-06	28-OCT-06
VS-315	Slab 1/F	6	6	2	30-OCT-06	04-NOV-06
VS-320	Wall 1/F to +13.9	8	8	2	06-NOV-06	14-NOV-06
VS-325	Steel cols, braces, beams to Roof +17.48	12	12	2	22-NOV-06	05-DEC-06
VS-330	Steel sheet roofing/cladding, +17.4	12	12	2	06-DEC-06	19-DEC-06
VS-335	Ceiling installation 1/F	12	12	2	20-DEC-06	04-JAN-07
VS-340	Handover 1F Plant Rm to ABWF	0	0	2		19-DEC-06
Other Areas, Grnd Level, Grid L-U/1-5						
VS-355	Excavation to storm drain	2	0	2	20-SEP-06A	21-SEP-06A
VS-370	DN 100 storm drain + Manholes	6	0	2	22-SEP-06A	03-OCT-06A
VS-375	Tie beam /footing/upstand wall	10	0	2	01-SEP-06A	15-SEP-06A
VS-380	Install underground foul drains/FS pipe/plumbing	6	1	2	20-SEP-06A	11-OCT-06
VS-385	WWO Inspection of FS/plumbing pipes	1	1	2	12-OCT-06	12-OCT-06
VS-390	Backfill/Subase/Grade slab, + 6.695	6	6	2	13-OCT-06	19-OCT-06
VS-395	Wall (G/F, +6.695 to +9.5)	12	12	2	20-OCT-06	02-NOV-06
VS-400	Steel Truss + lower roof +12.674	12	12	2	03-NOV-06	16-NOV-06
VS-405	Steel Upper Roof + 13.39	12	12	2	17-NOV-06	30-NOV-06
VS-410	Steel sheet roofing/cladding, +12.6->+13.3	12	12	2	06-DEC-06*	19-DEC-06
VS-415	Ceiling installation	12	12	2	20-DEC-06	04-JAN-07
VS-420	Handover to ABWF	0	0	2		19-DEC-06
Entrance Gate/Building						
VS-425	Excavation/substructure works	12	12	2	04-NOV-06*	17-NOV-06
VS-430	Ground slab + RC Wall	12	12	2	18-NOV-06	01-DEC-06
VS-435	Structural steel works	12	12	2	02-DEC-06	15-DEC-06
VS-440	Steel sheet roofing/cladding	6	6	2	16-DEC-06	22-DEC-06
VS-445	Ceiling installation	6	6	2	23-DEC-06	30-DEC-06
VS-450	Handover to ABWF	0	0	2		30-DEC-06
Finishes						
ABWF Works						
VS-020	Aluminum Louvres & Roller Shutters	21	21	2	26-DEC-06*	19-JAN-07
VS-025	Horse Stalls (supply by NSC)	21	21	2	26-DEC-06*	19-JAN-07



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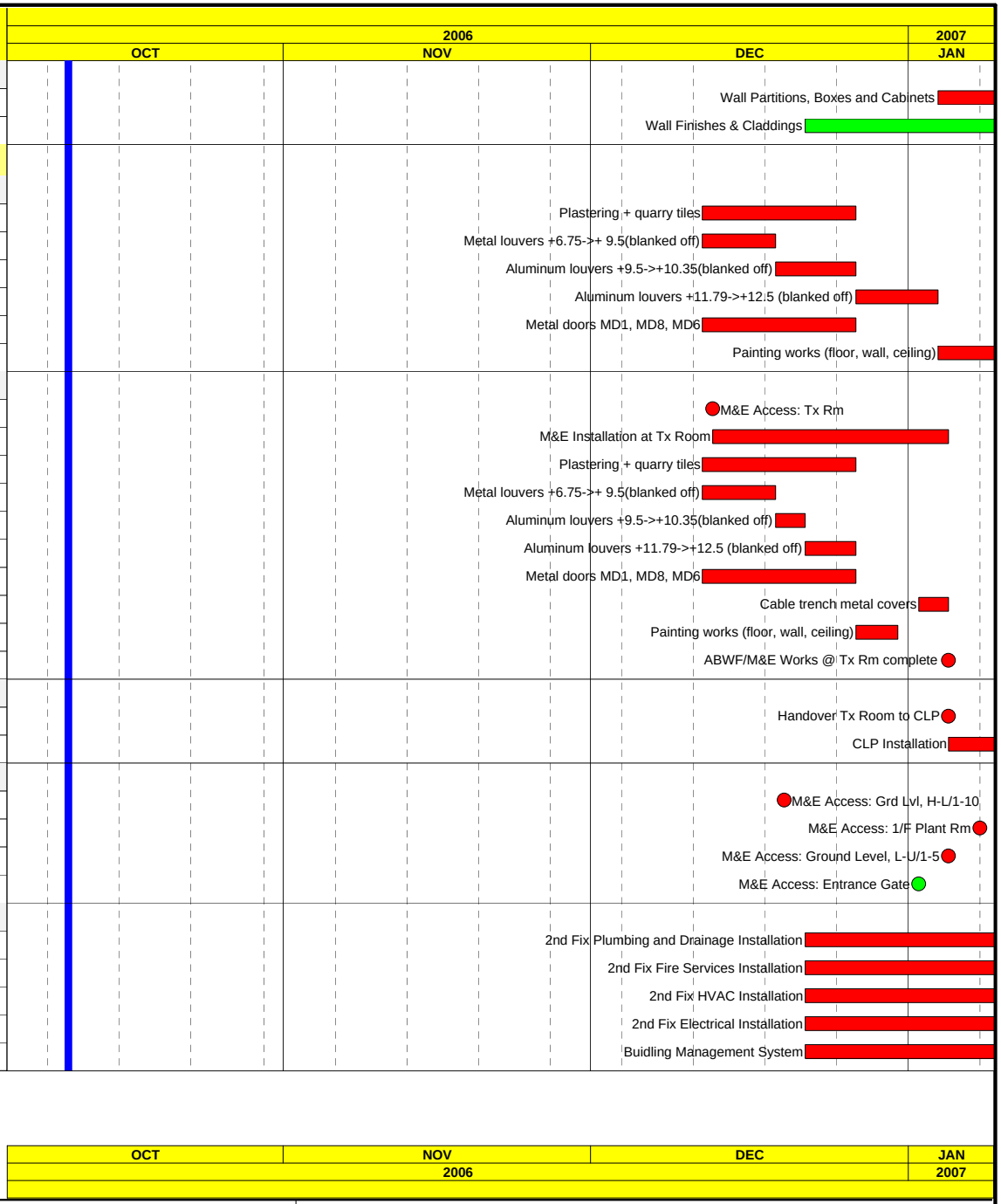
ABWF Works						
VS-030	Wall Partitions, Boxes and Cabinets	14	14	2	04-JAN-07	19-JAN-07
VS-035	Wall Finishes & Claddings	30	30	2	22-DEC-06*	27-JAN-07
M&E Services						
ABWF & M&E Works in LV Switch Room						
VS-505	Plastering + quarry tiles	12	12	2	12-DEC-06*	26-DEC-06
VS-510	Metal louvers +6.75->+ 9.5(blanked off)	6	6	2	12-DEC-06*	18-DEC-06
VS-515	Aluminum louvers +9.5->+10.35(blanked off)	6	6	2	19-DEC-06	26-DEC-06
VS-520	Aluminum louvers +11.79->+12.5 (blanked off)	6	6	2	27-DEC-06	03-JAN-07
VS-525	Metal doors MD1, MD8, MD6	12	12	2	12-DEC-06*	26-DEC-06
VS-535	Painting works (floor, wall, ceiling)	6	6	2	04-JAN-07	10-JAN-07
ABWF & M&E Works in Tx Room						
VS-075	M&E Access: Tx Rm	0	0	2	13-DEC-06*	
VS-115	M&E Installation at Tx Room	18	18	2	13-DEC-06	04-JAN-07
VS-455	Plastering + quarry tiles	12	12	2	12-DEC-06*	26-DEC-06
VS-460	Metal louvers +6.75->+ 9.5(blanked off)	6	6	2	12-DEC-06*	18-DEC-06
VS-465	Aluminum louvers +9.5->+10.35(blanked off)	3	3	2	19-DEC-06	21-DEC-06
VS-470	Aluminum louvers +11.79->+12.5 (blanked off)	3	3	2	22-DEC-06	26-DEC-06
VS-475	Metal doors MD1, MD8, MD6	12	12	2	12-DEC-06*	26-DEC-06
VS-480	Cable trench metal covers	3	3	2	02-JAN-07	04-JAN-07
VS-485	Painting works (floor, wall, ceiling)	4	4	2	27-DEC-06	30-DEC-06
VS-500	ABWF/M&E Works @ Tx Rm complete	0	0	2		04-JAN-07
CLP Transformer Rm, at Vet Stable						
VS-120	Handover Tx Room to CLP	0	0	2		04-JAN-07
VS-125	CLP Installation	48	48	2	05-JAN-07	08-MAR-07
M&E Access Dates						
VS-090	M&E Access: Grd Lvl, H-L/1-10	0	0	2	20-DEC-06*	
VS-095	M&E Access: 1/F Plant Rm	0	0	2	08-JAN-07*	
VS-100	M&E Access: Ground Level, L-U/1-5	0	0	2	05-JAN-07*	
VS-105	M&E Access: Entrance Gate	0	0	2	02-JAN-07*	
M&E Installation						
VS-110	2nd Fix Plumbing and Drainage Installation	61	61	2	22-DEC-06	12-MAR-07
VS-135	2nd Fix Fire Services Installation	61	61	2	22-DEC-06	12-MAR-07
VS-140	2nd Fix HVAC Installation	61	61	2	22-DEC-06	12-MAR-07
VS-145	2nd Fix Electrical Installation	61	61	2	22-DEC-06	12-MAR-07
VS-150	Buidling Management System	61	61	2	22-DEC-06	12-MAR-07



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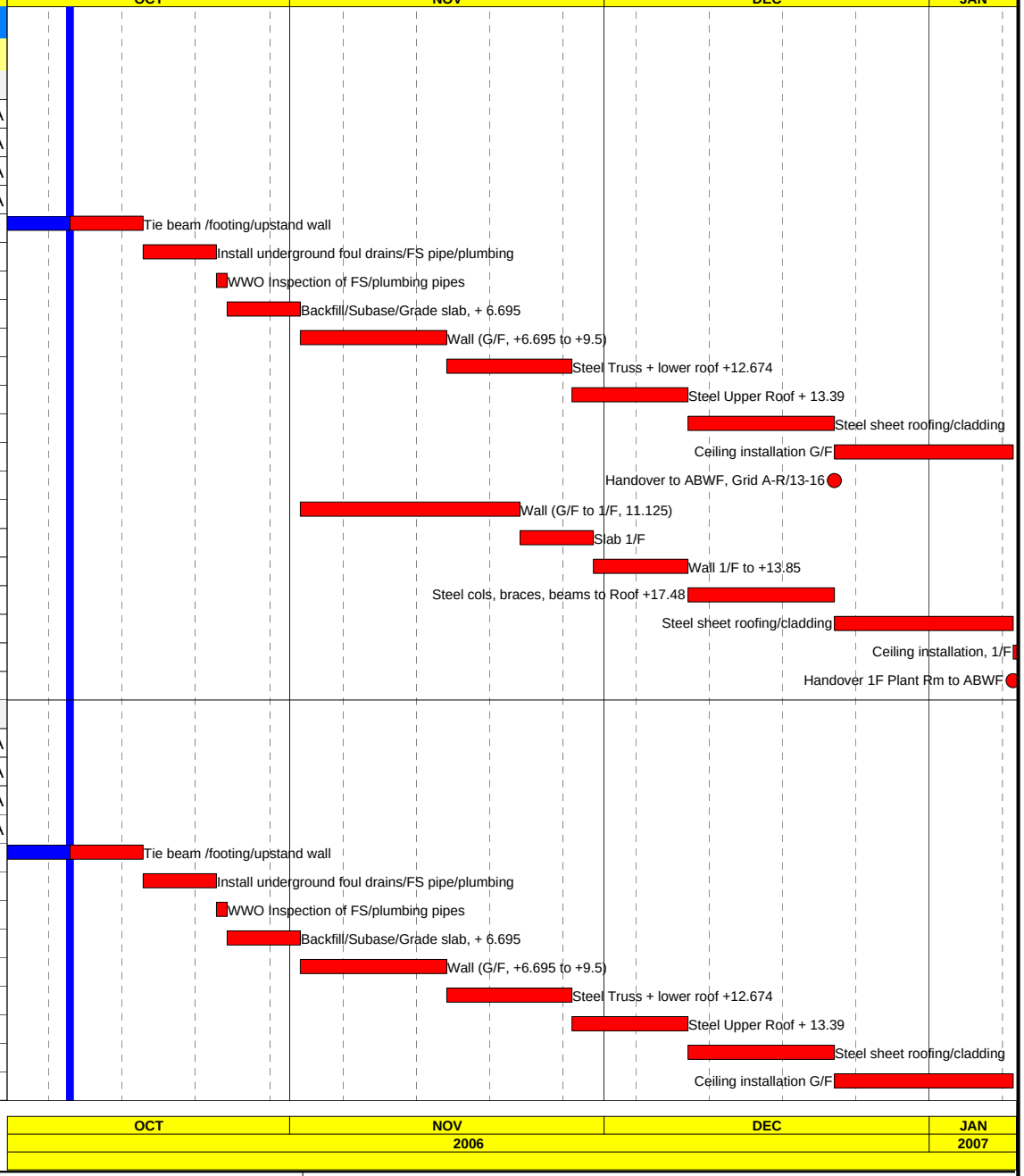
Date	Revision	Checked	Approved
11-OCT-06	Extracted from Master Programme	T Lo/T Wong	D Lau
	Version A,		
	Activities for coming 3 months		

Activity ID	Activity Description	Orig Dur	Rem Dur	Cal ID	Early Start	Early Finish
Main Stable Block No. 1						
Foundation and Superstructure Works						
Wing 1: Grid A-R/ 13-16						
MB1-130	Excavation to drains	2	0	2	31-AUG-06A	14-SEP-06A
MB1-135	Excavation to manholes	2	0	2	31-AUG-06A	14-SEP-06A
MB1-140	DN 100 foul drain laying + Manholes	6	0	2	05-SEP-06A	14-SEP-06A
MB1-145	DN 100 storm drain + Manholes	6	0	2	15-SEP-06A	20-SEP-06A
MB1-150	Tie beam /footing/upstand wall	10	6	2	18-SEP-06A	17-OCT-06
MB1-155	Install underground foul drains/FS pipe/plumbing	6	6	2	18-OCT-06	24-OCT-06
MB1-160	WWO Inspection of FS/plumbing pipes	1	1	2	25-OCT-06	25-OCT-06
MB1-165	Backfill/Subase/Grade slab, + 6.695	6	6	2	26-OCT-06	01-NOV-06
MB1-170	Wall (G/F, +6.695 to +9.5)	12	12	2	02-NOV-06	15-NOV-06
MB1-175	Steel Truss + lower roof +12.674	10	10	2	16-NOV-06	27-NOV-06
MB1-180	Steel Upper Roof + 13.39	10	10	2	28-NOV-06	08-DEC-06
MB1-185	Steel sheet roofing/cladding	12	12	2	09-DEC-06	22-DEC-06
MB1-190	Ceiling installation G/F	12	12	2	23-DEC-06	08-JAN-07
MB1-195	Handover to ABWF, Grid A-R/13-16	0	0	2		22-DEC-06
MB1-200	Wall (G/F to 1/F, 11.125)	18	18	2	02-NOV-06	22-NOV-06
MB1-205	Slab 1/F	6	6	2	23-NOV-06	29-NOV-06
MB1-210	Wall 1/F to +13.85	8	8	2	30-NOV-06	08-DEC-06
MB1-215	Steel cols, braces, beams to Roof +17.48	12	12	2	09-DEC-06	22-DEC-06
MB1-220	Steel sheet roofing/cladding	12	12	2	23-DEC-06	08-JAN-07
MB1-225	Ceiling installation, 1/F	12	12	2	09-JAN-07	22-JAN-07
MB1-230	Handover 1F Plant Rm to ABWF	0	0	2		08-JAN-07
Wing 2: Grid A-R/1-4						
MB1-245	Excavation to drains	2	0	2	31-AUG-06A	14-SEP-06A
MB1-250	Excavation manholes	2	0	2	31-AUG-06A	14-SEP-06A
MB1-255	DN 100 foul drain laying + Manholes	6	0	2	05-SEP-06A	14-SEP-06A
MB1-260	DN 100 storm drain + Manholes	6	0	2	15-SEP-06A	20-SEP-06A
MB1-265	Tie beam /footing/upstand wall	10	6	2	20-SEP-06A	17-OCT-06
MB1-270	Install underground foul drains/FS pipe/plumbing	6	6	2	18-OCT-06	24-OCT-06
MB1-275	WWO Inspection of FS/plumbing pipes	1	1	2	25-OCT-06	25-OCT-06
MB1-280	Backfill/Subase/Grade slab, + 6.695	6	6	2	26-OCT-06	01-NOV-06
MB1-285	Wall (G/F, +6.695 to +9.5)	12	12	2	02-NOV-06	15-NOV-06
MB1-290	Steel Truss + lower roof +12.674	10	10	2	16-NOV-06	27-NOV-06
MB1-295	Steel Upper Roof + 13.39	10	10	2	28-NOV-06	08-DEC-06
MB1-300	Steel sheet roofing/cladding	12	12	2	09-DEC-06	22-DEC-06
MB1-305	Ceiling installation G/F	12	12	2	23-DEC-06	08-JAN-07



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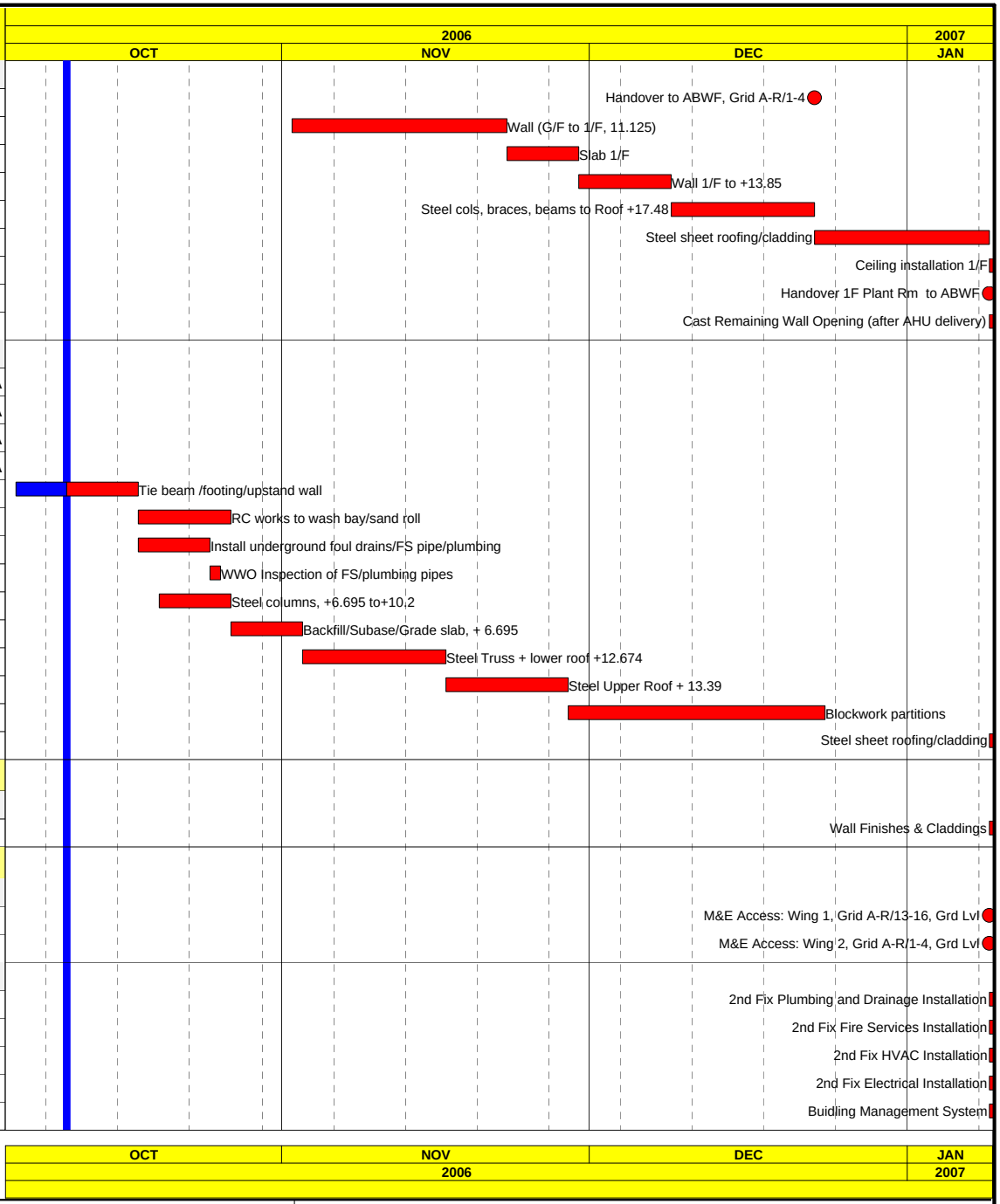
Wing 2: Grid A-R/1-4						
MB1-310	Handover to ABWF, Grid A-R/1-4	0	0	2		22-DEC-06
MB1-315	Wall (G/F to 1/F, 11.125)	18	18	2	02-NOV-06	22-NOV-06
MB1-320	Slab 1/F	6	6	2	23-NOV-06	29-NOV-06
MB1-325	Wall 1/F to +13.85	8	8	2	30-NOV-06	08-DEC-06
MB1-330	Steel cols, braces, beams to Roof +17.48	12	12	2	09-DEC-06	22-DEC-06
MB1-335	Steel sheet roofing/cladding	12	12	2	23-DEC-06	08-JAN-07
MB1-340	Ceiling installation 1/F	12	12	2	09-JAN-07	22-JAN-07
MB1-345	Handover 1F Plant Rm to ABWF	0	0	2		08-JAN-07
MB1-350	Cast Remaining Wall Opening (after AHU delivery)	6	6	2	09-JAN-07	15-JAN-07
Center: Ground Level, Grid A-E/5-12						
MB1-360	Excavation to drains	2	0	2	02-SEP-06A	18-SEP-06A
MB1-365	Excavation to manholes	2	0	2	02-SEP-06A	18-SEP-06A
MB1-370	DN 100 foul drain laying + Manholes	6	0	2	20-SEP-06A	29-SEP-06A
MB1-375	DN 100 storm drain + Manholes	6	0	2	20-SEP-06A	29-SEP-06A
MB1-380	Tie beam /footing/upstand wall	10	6	2	06-OCT-06A	17-OCT-06
MB1-385	RC works to wash bay/sand roll	8	8	2	18-OCT-06	26-OCT-06
MB1-390	Install underground foul drains/FS pipe/plumbing	6	6	2	18-OCT-06	24-OCT-06
MB1-395	WWO Inspection of FS/plumbing pipes	1	1	2	25-OCT-06	25-OCT-06
MB1-400	Steel columns, +6.695 to+10.2	6	6	2	20-OCT-06	26-OCT-06
MB1-405	Backfill/Subase/Grade slab, + 6.695	6	6	2	27-OCT-06	02-NOV-06
MB1-410	Steel Truss + lower roof +12.674	12	12	2	03-NOV-06	16-NOV-06
MB1-415	Steel Upper Roof + 13.39	10	10	2	17-NOV-06	28-NOV-06
MB1-417	Blockwork partitions	22	22	2	29-NOV-06	23-DEC-06
MB1-420	Steel sheet roofing/cladding	9	9	2	09-JAN-07	18-JAN-07
Finishes						
ABWF Works						
MB1-025	Wall Finishes & Claddings	30	30	2	09-JAN-07	19-FEB-07
M&E Services						
M&E Access Dates						
MB1-435	M&E Access: Wing 1, Grid A-R/13-16, Grd Lvl	0	0	2	09-JAN-07	
MB1-440	M&E Access: Wing 2, Grid A-R/1-4, Grd Lvl	0	0	2	09-JAN-07	
M&E Installation						
MB1-095	2nd Fix Plumbing and Drainage Installation	61	61	2	09-JAN-07	27-MAR-07
MB1-100	2nd Fix Fire Services Installation	61	61	2	09-JAN-07	27-MAR-07
MB1-105	2nd Fix HVAC Installation	61	61	2	09-JAN-07	27-MAR-07
MB1-110	2nd Fix Electrical Installation	61	61	2	09-JAN-07	27-MAR-07
MB1-115	Buidling Management System	61	61	2	09-JAN-07	27-MAR-07



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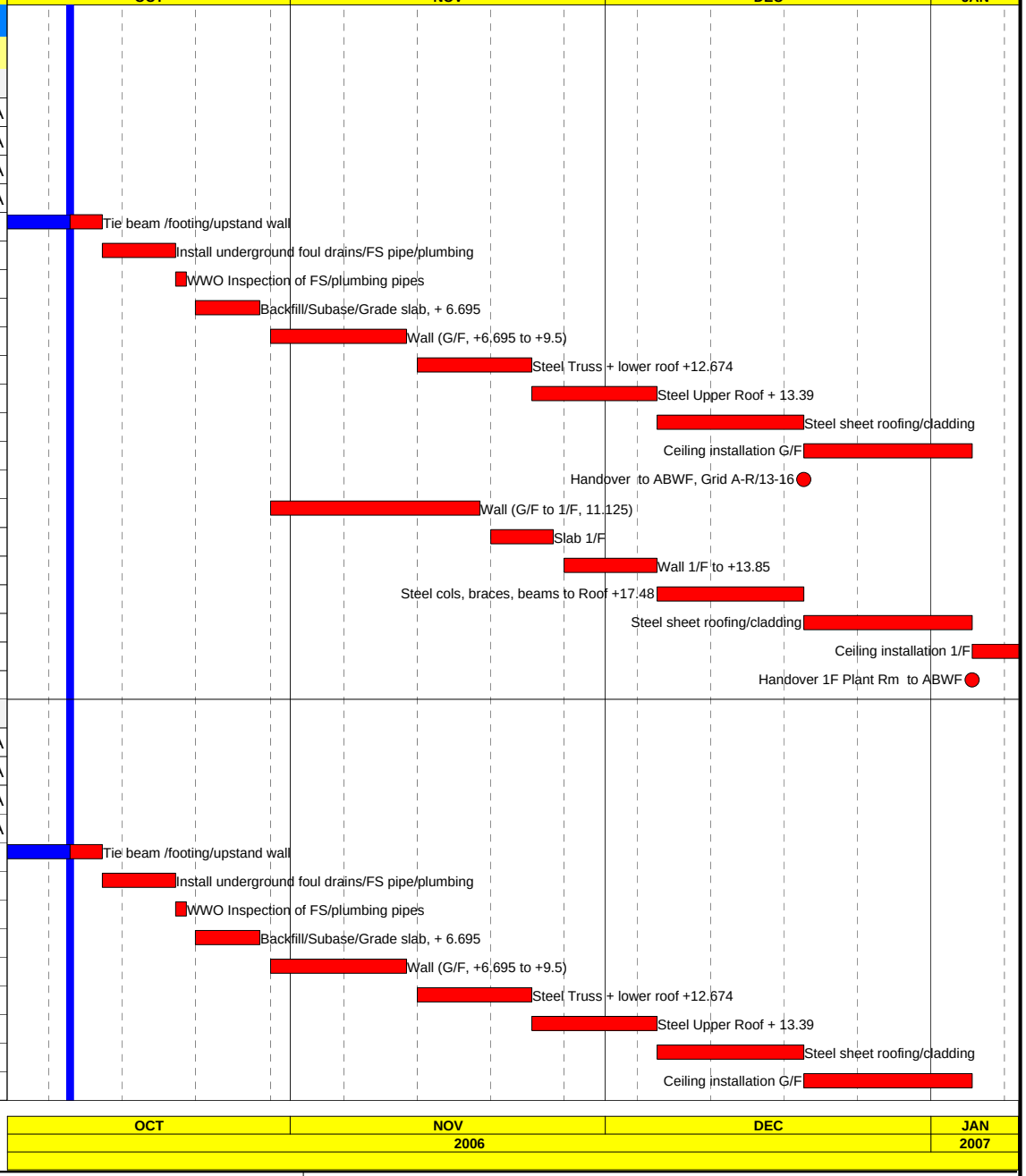
Activity ID	Activity Description	Orig Dur	Rem Dur	Cal ID	Early Start	Early Finish
Main Stable Block No. 2						
Foundation and Superstructure Works						
Wing 1: Grid A-R/ 13-16						
MB2-130	Excavation to drains	2	0	2	04-SEP-06A	17-SEP-06A
MB2-135	Excavation to manholes	2	0	2	04-SEP-06A	17-SEP-06A
MB2-140	DN 100 foul drain laying + Manholes	6	0	2	06-SEP-06A	14-SEP-06A
MB2-145	DN 100 storm drain + Manholes	6	0	2	18-SEP-06A	19-SEP-06A
MB2-150	Tie beam /footing/upstand wall	10	3	2	20-SEP-06A	13-OCT-06
MB2-155	Install underground foul drains/FS pipe/plumbing	6	6	2	14-OCT-06	20-OCT-06
MB2-160	WWO Inspection of FS/plumbing pipes	1	1	2	21-OCT-06	21-OCT-06
MB2-165	Backfill/Subase/Grade slab, + 6.695	6	6	2	23-OCT-06	28-OCT-06
MB2-170	Wall (G/F, +6.695 to +9.5)	12	12	2	30-OCT-06	11-NOV-06
MB2-175	Steel Truss + lower roof +12.674	10	10	2	13-NOV-06	23-NOV-06
MB2-180	Steel Upper Roof + 13.39	10	10	2	24-NOV-06	05-DEC-06
MB2-185	Steel sheet roofing/cladding	12	12	2	06-DEC-06	19-DEC-06
MB2-190	Ceiling installation G/F	12	12	2	20-DEC-06	04-JAN-07
MB2-195	Handover to ABWF, Grid A-R/13-16	0	0	2		19-DEC-06
MB2-200	Wall (G/F to 1/F, 11.125)	18	18	2	30-OCT-06	18-NOV-06
MB2-205	Slab 1/F	6	6	2	20-NOV-06	25-NOV-06
MB2-210	Wall 1/F to +13.85	8	8	2	27-NOV-06	05-DEC-06
MB2-215	Steel cols, braces, beams to Roof +17.48	12	12	2	06-DEC-06	19-DEC-06
MB2-220	Steel sheet roofing/cladding	12	12	2	20-DEC-06	04-JAN-07
MB2-225	Ceiling installation 1/F	12	12	2	05-JAN-07	18-JAN-07
MB2-230	Handover 1F Plant Rm to ABWF	0	0	2		04-JAN-07
Wing 2: Grid A-R/1-4						
MB2-245	Excavation to drains	2	0	2	04-SEP-06A	18-SEP-06A
MB2-250	Excavation to manholes	2	0	2	04-SEP-06A	18-SEP-06A
MB2-255	DN 100 foul drain laying + Manholes	6	0	2	20-SEP-06A	29-SEP-06A
MB2-260	DN 100 storm drain + Manholes	6	0	2	18-SEP-06A	19-SEP-06A
MB2-265	Tie beam /footing/upstand wall	10	3	2	23-SEP-06A	13-OCT-06
MB2-270	Install underground foul drains/FS pipe/plumbing	6	6	2	14-OCT-06	20-OCT-06
MB2-275	WWO Inspection of FS/plumbing pipes	1	1	2	21-OCT-06	21-OCT-06
MB2-280	Backfill/Subase/Grade slab, + 6.695	6	6	2	23-OCT-06	28-OCT-06
MB2-285	Wall (G/F, +6.695 to +9.5)	12	12	2	30-OCT-06	11-NOV-06
MB2-290	Steel Truss + lower roof +12.674	10	10	2	13-NOV-06	23-NOV-06
MB2-295	Steel Upper Roof + 13.39	10	10	2	24-NOV-06	05-DEC-06
MB2-300	Steel sheet roofing/cladding	12	12	2	06-DEC-06	19-DEC-06
MB2-305	Ceiling installation G/F	12	12	2	20-DEC-06	04-JAN-07



File Name:W13A
Start Date:11-OCT-06
Finish Date:27-JUN-07
Filter Name:FL-71 Three Months Rolling I
Layout Name:Three Months Rolling Prog

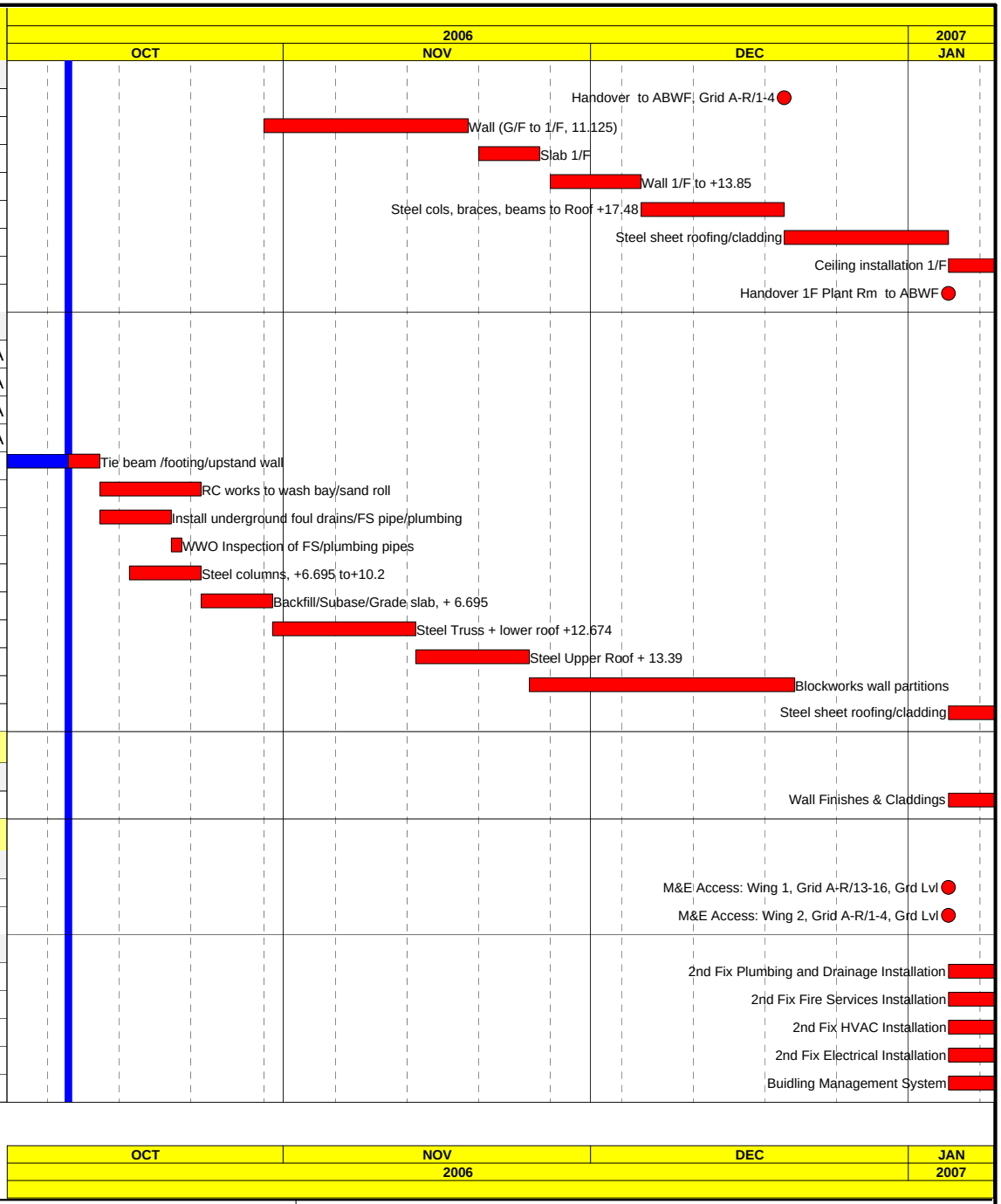
Current Bar
Progress Bar
Critical Activity

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
11-OCT-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
Wing 2: Grid A-R/1-4						
MB2-310	Handover to ABWF, Grid A-R/1-4	0	0	2		19-DEC-06
MB2-315	Wall (G/F to 1/F, 11.125)	18	18	2	30-OCT-06	18-NOV-06
MB2-320	Slab 1/F	6	6	2	20-NOV-06	25-NOV-06
MB2-325	Wall 1/F to +13.85	8	8	2	27-NOV-06	05-DEC-06
MB2-330	Steel cols, braces, beams to Roof +17.48	12	12	2	06-DEC-06	19-DEC-06
MB2-335	Steel sheet roofing/cladding	12	12	2	20-DEC-06	04-JAN-07
MB2-340	Ceiling installation 1/F	12	12	2	05-JAN-07	18-JAN-07
MB2-345	Handover 1F Plant Rm to ABWF	0	0	2		04-JAN-07
Center: Ground Level, Grid A-E/5-12						
MB2-360	Excavation to drains	2	0	2	02-SEP-06A	18-SEP-06A
MB2-365	Excavation manholes	2	0	2	02-SEP-06A	18-SEP-06A
MB2-370	DN 100 foul drain laying + Manholes	6	0	2	19-SEP-06A	28-SEP-06A
MB2-375	DN 100 storm drain + Manholes	6	0	2	19-SEP-06A	28-SEP-06A
MB2-380	Tie beam /footing/upstand wall	10	3	2	04-OCT-06A	13-OCT-06
MB2-385	RC works to wash bay/sand roll	8	8	2	14-OCT-06	23-OCT-06
MB2-390	Install underground foul drains/FS pipe/plumbing	6	6	2	14-OCT-06	20-OCT-06
MB2-395	WWO Inspection of FS/plumbing pipes	1	1	2	21-OCT-06	21-OCT-06
MB2-400	Steel columns, +6.695 to+10.2	6	6	2	17-OCT-06	23-OCT-06
MB2-405	Backfill/Subase/Grade slab, + 6.695	6	6	2	24-OCT-06	30-OCT-06
MB2-410	Steel Truss + lower roof +12.674	12	12	2	31-OCT-06	13-NOV-06
MB2-415	Steel Upper Roof + 13.39	10	10	2	14-NOV-06	24-NOV-06
MB2-417	Blockworks wall partitions	22	22	2	25-NOV-06	20-DEC-06
MB2-420	Steel sheet roofing/cladding	9	9	2	05-JAN-07	15-JAN-07
Finishes						
ABWF Works						
MB2-025	Wall Finishes & Claddings	30	30	2	05-JAN-07	08-FEB-07
M&E Services						
M&E Access Dates						
MB2-435	M&E Access: Wing 1, Grid A-R/13-16, Grd Lvl	0	0	2	05-JAN-07	
MB2-440	M&E Access: Wing 2, Grid A-R/1-4, Grd Lvl	0	0	2	05-JAN-07	
M&E Installation						
MB2-095	2nd Fix Plumbing and Drainage Installation	61	61	2	05-JAN-07	23-MAR-07
MB2-100	2nd Fix Fire Services Installation	61	61	2	05-JAN-07	23-MAR-07
MB2-105	2nd Fix HVAC Installation	61	61	2	05-JAN-07	23-MAR-07
MB2-110	2nd Fix Electrical Installation	61	61	2	05-JAN-07	23-MAR-07
MB2-115	Buidling Management System	61	61	2	05-JAN-07	23-MAR-07



File Name:W13A
Start Date:11-OCT-06
Finish Date:27-JUN-07
Filter Name:FL-71 Three Months Rolling I
Layout Name:Three Months Rolling Prog

Current Bar
Progress Bar
Critical Activity

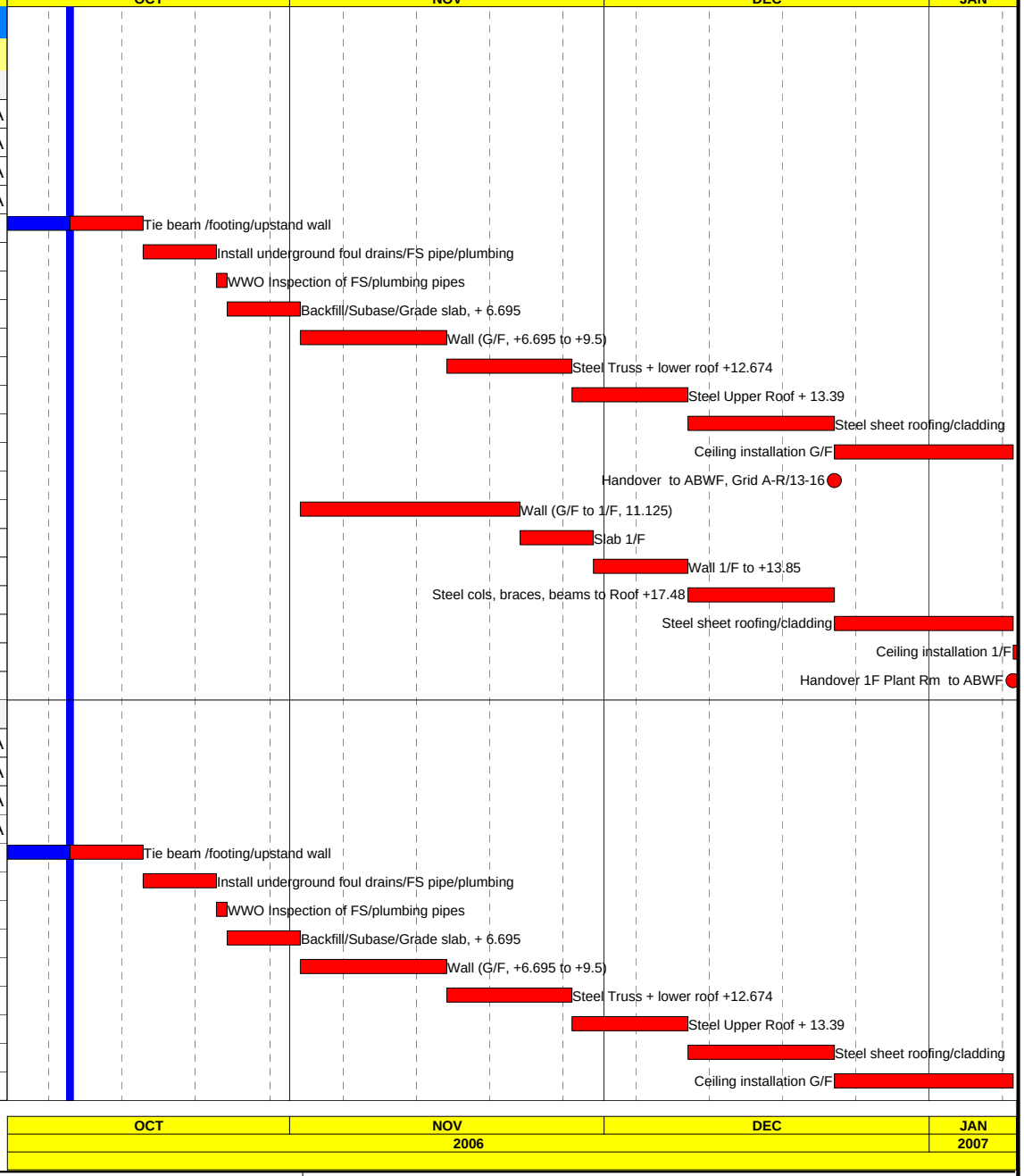
China State Const. Eng. (H.K.) Ltd.

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
11-OCT-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
Main Stable Block No. 3						
Foundation and Superstructure Works						
Wing 1: Grid A-R/ 13-16						
MB3-130	Excavation to drains	2	0	2	02-SEP-06A	19-SEP-06A
MB3-135	Excavation to manholes	2	0	2	02-SEP-06A	19-SEP-06A
MB3-140	DN 100 foul drain laying + Manholes	6	0	2	20-SEP-06A	29-SEP-06A
MB3-145	DN 100 storm drain + Manholes	6	0	2	20-SEP-06A	29-SEP-06A
MB3-150	Tie beam /footing/upstand wall	10	6	2	27-SEP-06A	17-OCT-06
MB3-155	Install underground foul drains/FS pipe/plumbing	6	6	2	18-OCT-06	24-OCT-06
MB3-160	WWO Inspection of FS/plumbing pipes	1	1	2	25-OCT-06	25-OCT-06
MB3-165	Backfill/Subase/Grade slab, + 6.695	6	6	2	26-OCT-06	01-NOV-06
MB3-170	Wall (G/F, +6.695 to +9.5)	12	12	2	02-NOV-06	15-NOV-06
MB3-175	Steel Truss + lower roof +12.674	10	10	2	16-NOV-06	27-NOV-06
MB3-180	Steel Upper Roof + 13.39	10	10	2	28-NOV-06	08-DEC-06
MB3-185	Steel sheet roofing/cladding	12	12	2	09-DEC-06	22-DEC-06
MB3-190	Ceiling installation G/F	12	12	2	23-DEC-06	08-JAN-07
MB3-195	Handover to ABWF, Grid A-R/13-16	0	0	2		22-DEC-06
MB3-200	Wall (G/F to 1/F, 11.125)	18	18	2	02-NOV-06	22-NOV-06
MB3-205	Slab 1/F	6	6	2	23-NOV-06	29-NOV-06
MB3-210	Wall 1/F to +13.85	8	8	2	30-NOV-06	08-DEC-06
MB3-215	Steel cols, braces, beams to Roof +17.48	12	12	2	09-DEC-06	22-DEC-06
MB3-220	Steel sheet roofing/cladding	12	12	2	23-DEC-06	08-JAN-07
MB3-225	Ceiling installation 1/F	12	12	2	09-JAN-07	22-JAN-07
MB3-230	Handover 1F Plant Rm to ABWF	0	0	2		08-JAN-07
Wing 2: Grid A-R/1-4						
MB3-245	Excavation to drains	2	0	2	02-SEP-06A	17-SEP-06A
MB3-250	Excavation manholes	2	0	2	02-SEP-06A	17-SEP-06A
MB3-255	DN 100 foul drain laying + Manholes	4	0	2	18-SEP-06A	27-SEP-06A
MB3-260	DN 100 storm drain + Manholes	4	0	2	18-SEP-06A	27-SEP-06A
MB3-265	Tie beam /footing/upstand wall	10	6	2	03-OCT-06A	17-OCT-06
MB3-270	Install underground foul drains/FS pipe/plumbing	6	6	2	18-OCT-06	24-OCT-06
MB3-275	WWO Inspection of FS/plumbing pipes	1	1	2	25-OCT-06	25-OCT-06
MB3-280	Backfill/Subase/Grade slab, + 6.695	6	6	2	26-OCT-06	01-NOV-06
MB3-285	Wall (G/F, +6.695 to +9.5)	12	12	2	02-NOV-06	15-NOV-06
MB3-290	Steel Truss + lower roof +12.674	10	10	2	16-NOV-06	27-NOV-06
MB3-295	Steel Upper Roof + 13.39	10	10	2	28-NOV-06	08-DEC-06
MB3-300	Steel sheet roofing/cladding	12	12	2	09-DEC-06	22-DEC-06
MB3-305	Ceiling installation G/F	12	12	2	23-DEC-06	08-JAN-07



File Name:W13A
Start Date:11-OCT-06
Finish Date:27-JUN-07
Filter Name:FL-71 Three Months Rolling I
Layout Name:Three Months Rolling Prog

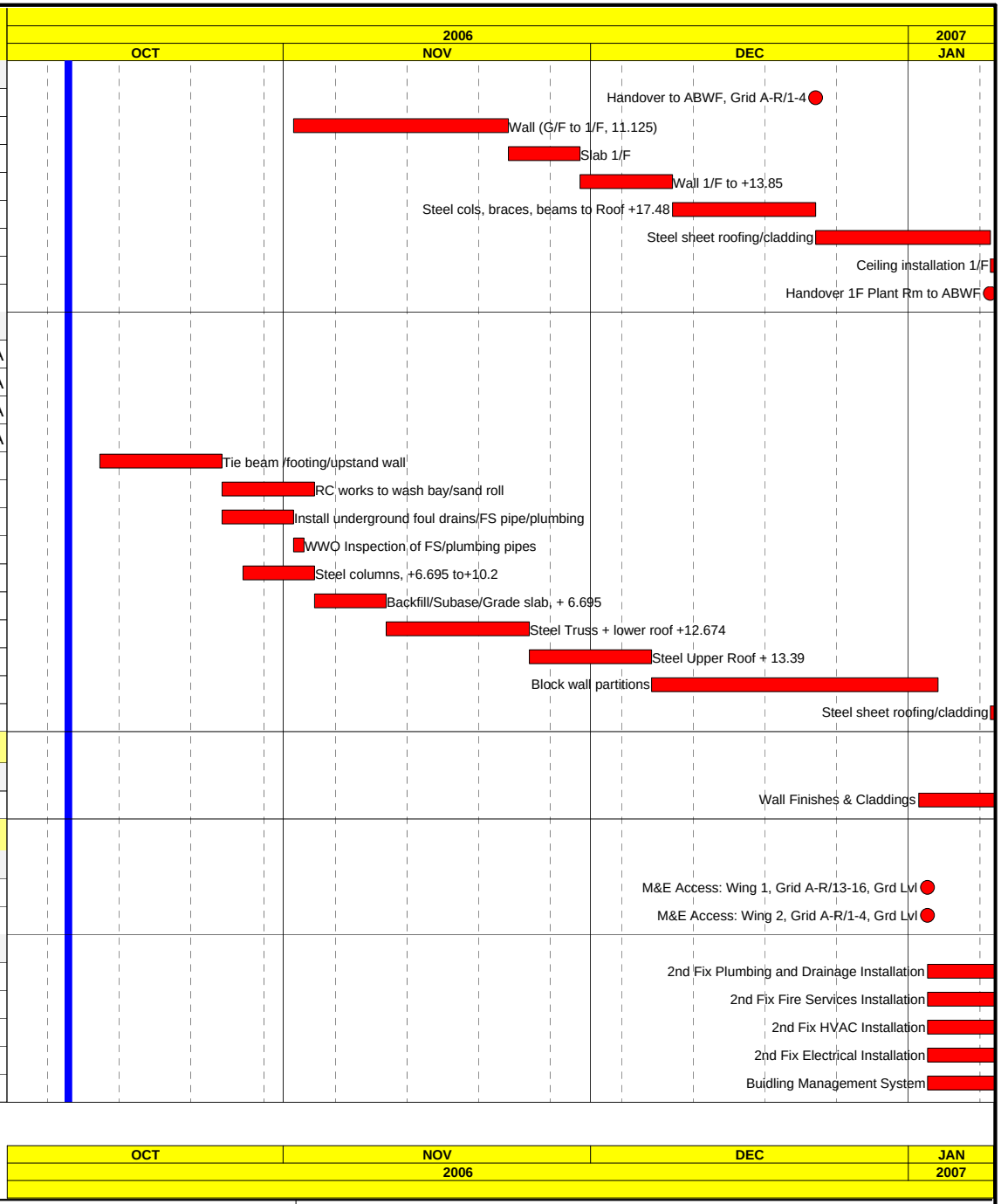
Current Bar
Progress Bar
Critical Activity

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
11-OCT-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
Wing 2: Grid A-R/1-4						
MB3-310	Handover to ABWF, Grid A-R/1-4	0	0	2		22-DEC-06
MB3-315	Wall (G/F to 1/F, 11.125)	18	18	2	02-NOV-06	22-NOV-06
MB3-320	Slab 1/F	6	6	2	23-NOV-06	29-NOV-06
MB3-325	Wall 1/F to +13.85	8	8	2	30-NOV-06	08-DEC-06
MB3-330	Steel cols, braces, beams to Roof +17.48	12	12	2	09-DEC-06	22-DEC-06
MB3-335	Steel sheet roofing/cladding	12	12	2	23-DEC-06	08-JAN-07
MB3-340	Ceiling installation 1/F	12	12	2	09-JAN-07	22-JAN-07
MB3-345	Handover 1F Plant Rm to ABWF	0	0	2		08-JAN-07
Center: Ground Level, Grid A-E/5-12						
MB3-360	Excavation drains	2	0	2	02-SEP-06A	19-SEP-06A
MB3-365	Excavation to manholes	2	0	2	02-SEP-06A	19-SEP-06A
MB3-370	DN 100 foul drain laying + Manholes	6	0	2	20-SEP-06A	29-SEP-06A
MB3-375	DN 100 storm drain + Manholes	6	0	2	20-SEP-06A	29-SEP-06A
MB3-380	Tie beam /footing/upstand wall	10	10	2	14-OCT-06*	25-OCT-06
MB3-385	RC works to wash bay/sand roll	8	8	2	26-OCT-06	03-NOV-06
MB3-390	Install underground foul drains/FS pipe/plumbing	6	6	2	26-OCT-06	01-NOV-06
MB3-395	WWO Inspection of FS/plumbing pipes	1	1	2	02-NOV-06	02-NOV-06
MB3-400	Steel columns, +6.695 to+10.2	6	6	2	28-OCT-06	03-NOV-06
MB3-405	Backfill/Subase/Grade slab, + 6.695	6	6	2	04-NOV-06	10-NOV-06
MB3-410	Steel Truss + lower roof +12.674	12	12	2	11-NOV-06	24-NOV-06
MB3-415	Steel Upper Roof + 13.39	10	10	2	25-NOV-06	06-DEC-06
MB3-417	Block wall partitions	22	22	2	07-DEC-06	03-JAN-07
MB3-420	Steel sheet roofing/cladding	9	9	2	09-JAN-07	18-JAN-07
Finishes						
ABWF Works						
MB3-025	Wall Finishes & Claddings	30	30	2	02-JAN-07	05-FEB-07
M&E Services						
M&E Access Dates						
MB3-435	M&E Access: Wing 1, Grid A-R/13-16, Grd Lvl	0	0	2	03-JAN-07	
MB3-440	M&E Access: Wing 2, Grid A-R/1-4, Grd Lvl	0	0	2	03-JAN-07	
M&E Installation						
MB3-095	2nd Fix Plumbing and Drainage Installation	54	54	2	03-JAN-07	13-MAR-07
MB3-100	2nd Fix Fire Services Installation	54	54	2	03-JAN-07	13-MAR-07
MB3-105	2nd Fix HVAC Installation	54	54	2	03-JAN-07	13-MAR-07
MB3-110	2nd Fix Electrical Installation	54	54	2	03-JAN-07	13-MAR-07
MB3-115	Buidling Management System	54	54	2	03-JAN-07	13-MAR-07



File Name:W13A
Start Date:11-OCT-06
Finish Date:27-JUN-07
Filter Name:FL-71 Three Months Rolling I
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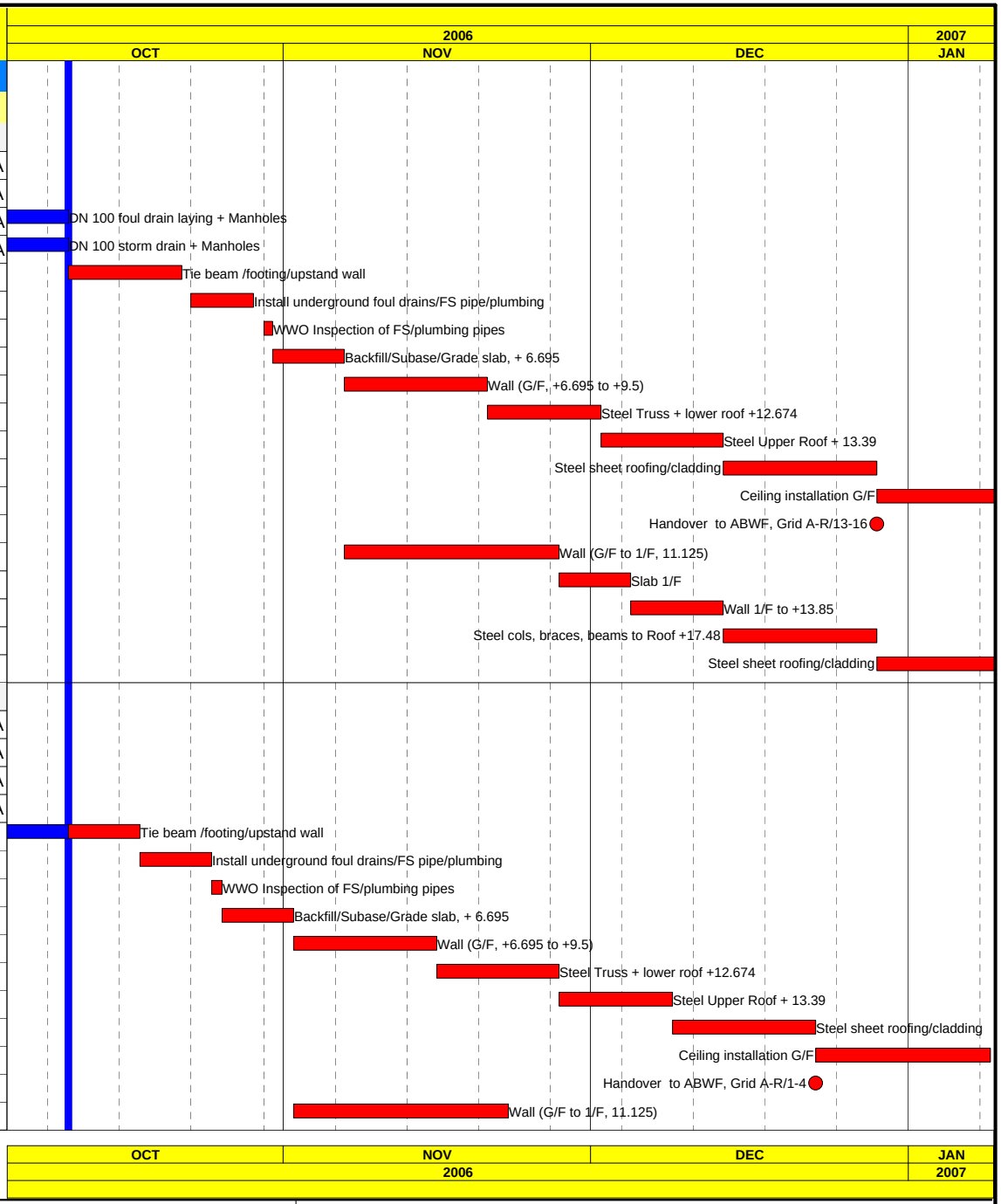
Current Bar
Progress Bar
Critical Activity

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
11-OCT-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
Main Stable Block No. 4						
Foundation and Superstructure Works						
Wing 1: Grid A-R/ 13-16						
MB4-130	Excavation to drains	2	0	2	02-SEP-06A	18-SEP-06A
MB4-135	Excavation to manholes	2	0	2	02-SEP-06A	18-SEP-06A
MB4-140	DN 100 foul drain laying + Manholes	6	0	2	19-SEP-06A	10-OCT-06A
MB4-145	DN 100 storm drain + Manholes	6	0	2	19-SEP-06A	10-OCT-06A
MB4-150	Tie beam /footing/upstand wall	10	10	2	11-OCT-06	21-OCT-06
MB4-155	Install underground foul drains/FS pipe/plumbing	6	6	2	23-OCT-06	28-OCT-06
MB4-160	WWO Inspection of FS/plumbing pipes	1	1	2	30-OCT-06	30-OCT-06
MB4-165	Backfill/Subase/Grade slab, + 6.695	6	6	2	31-OCT-06	06-NOV-06
MB4-170	Wall (G/F, +6.695 to +9.5)	12	12	2	07-NOV-06	20-NOV-06
MB4-175	Steel Truss + lower roof +12.674	10	10	2	21-NOV-06	01-DEC-06
MB4-180	Steel Upper Roof + 13.39	10	10	2	02-DEC-06	13-DEC-06
MB4-185	Steel sheet roofing/cladding	12	12	2	14-DEC-06	28-DEC-06
MB4-190	Ceiling installation G/F	12	12	2	29-DEC-06	12-JAN-07
MB4-195	Handover to ABWF, Grid A-R/13-16	0	0	2		28-DEC-06
MB4-200	Wall (G/F to 1/F, 11.125)	18	18	2	07-NOV-06	27-NOV-06
MB4-205	Slab 1/F	6	6	2	28-NOV-06	04-DEC-06
MB4-210	Wall 1/F to +13.85	8	8	2	05-DEC-06	13-DEC-06
MB4-215	Steel cols, braces, beams to Roof +17.48	12	12	2	14-DEC-06	28-DEC-06
MB4-220	Steel sheet roofing/cladding	12	12	2	29-DEC-06	12-JAN-07
Wing 2: Grid A-R/1-4						
MB4-245	Excavation to drains	2	0	2	02-SEP-06A	18-SEP-06A
MB4-250	Excavation to manholes	2	0	2	02-SEP-06A	18-SEP-06A
MB4-255	DN 100 foul drain laying + Manholes	6	0	2	20-SEP-06A	29-SEP-06A
MB4-260	DN 100 storm drain + Manholes	6	0	2	20-SEP-06A	29-SEP-06A
MB4-265	Tie beam /footing/upstand wall	10	6	2	29-SEP-06A	17-OCT-06
MB4-270	Install underground foul drains/FS pipe/plumbing	6	6	2	18-OCT-06	24-OCT-06
MB4-275	WWO Inspection of FS/plumbing pipes	1	1	2	25-OCT-06	25-OCT-06
MB4-280	Backfill/Subase/Grade slab, + 6.695	6	6	2	26-OCT-06	01-NOV-06
MB4-285	Wall (G/F, +6.695 to +9.5)	12	12	2	02-NOV-06	15-NOV-06
MB4-290	Steel Truss + lower roof +12.674	10	10	2	16-NOV-06	27-NOV-06
MB4-295	Steel Upper Roof + 13.39	10	10	2	28-NOV-06	08-DEC-06
MB4-300	Steel sheet roofing/cladding	12	12	2	09-DEC-06	22-DEC-06
MB4-305	Ceiling installation G/F	12	12	2	23-DEC-06	08-JAN-07
MB4-310	Handover to ABWF, Grid A-R/1-4	0	0	2		22-DEC-06
MB4-315	Wall (G/F to 1/F, 11.125)	18	18	2	02-NOV-06	22-NOV-06



File Name:W13A
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Filter Name:FL-71 Three Months Rolling I
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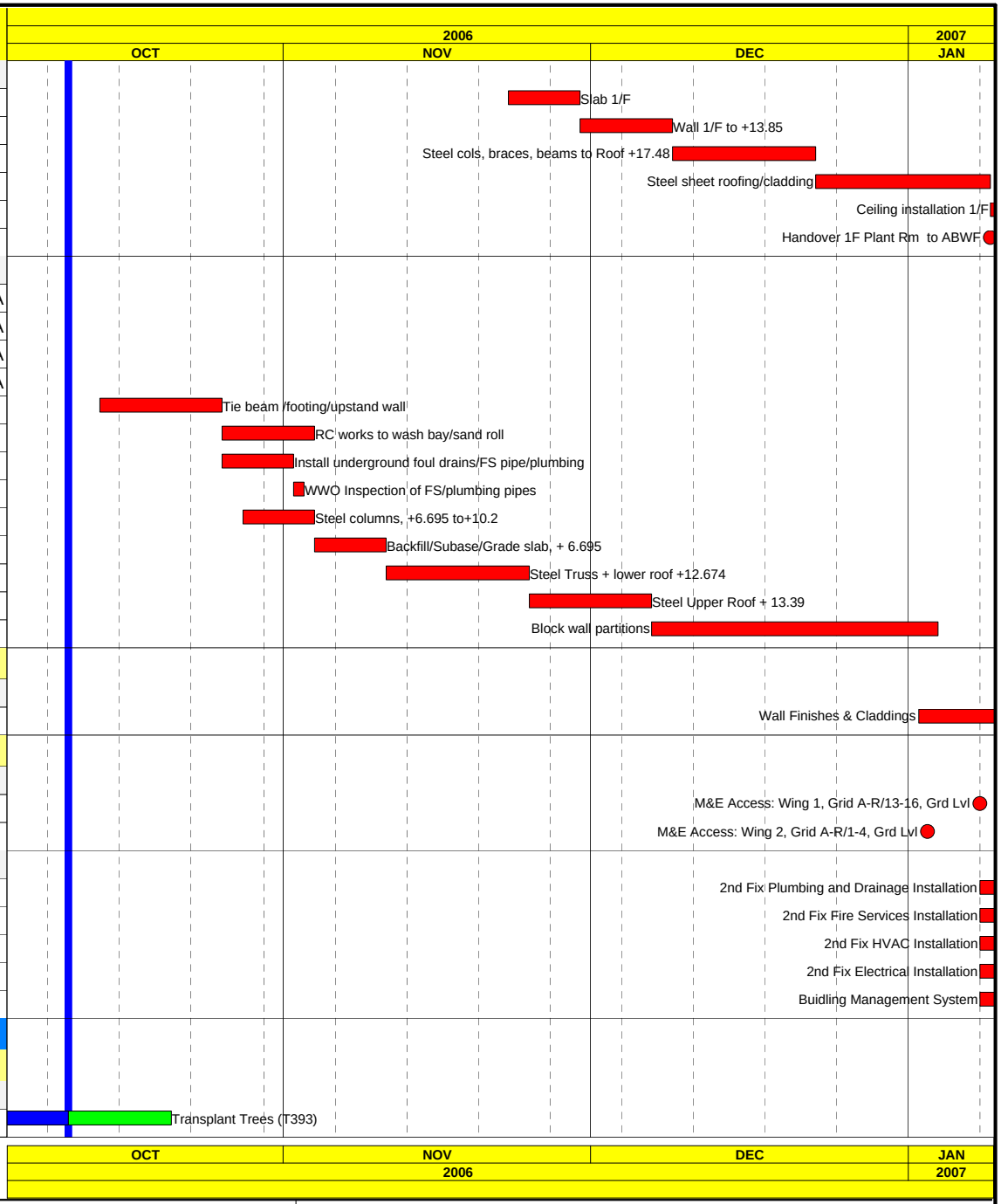
Current Bar
Progress Bar
Critical Activity

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
11-OCT-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
Wing 2: Grid A-R/1-4						
MB4-320	Slab 1/F	6	6	2	23-NOV-06	29-NOV-06
MB4-325	Wall 1/F to +13.85	8	8	2	30-NOV-06	08-DEC-06
MB4-330	Steel cols, braces, beams to Roof +17.48	12	12	2	09-DEC-06	22-DEC-06
MB4-335	Steel sheet roofing/cladding	12	12	2	23-DEC-06	08-JAN-07
MB4-340	Ceiling installation 1/F	12	12	2	09-JAN-07	22-JAN-07
MB4-345	Handover 1F Plant Rm to ABWF	0	0	2		08-JAN-07
Center: Ground Level, Grid A-E/5-12						
MB4-360	Excavation to drains	2	0	2	02-SEP-06A	19-SEP-06A
MB4-365	Excavation to manholes	2	0	2	02-SEP-06A	19-SEP-06A
MB4-370	DN 100 foul drain laying + Manholes	6	0	2	21-SEP-06A	30-SEP-06A
MB4-375	DN 100 storm drain + Manholes	6	0	2	21-SEP-06A	30-SEP-06A
MB4-380	Tie beam /footing/upstand wall	10	10	2	14-OCT-06*	25-OCT-06
MB4-385	RC works to wash bay/sand roll	8	8	2	26-OCT-06	03-NOV-06
MB4-390	Install underground foul drains/FS pipe/plumbing	6	6	2	26-OCT-06	01-NOV-06
MB4-395	WWO Inspection of FS/plumbing pipes	1	1	2	02-NOV-06	02-NOV-06
MB4-400	Steel columns, +6.695 to+10.2	6	6	2	28-OCT-06	03-NOV-06
MB4-405	Backfill/Subase/Grade slab, + 6.695	6	6	2	04-NOV-06	10-NOV-06
MB4-410	Steel Truss + lower roof +12.674	12	12	2	11-NOV-06	24-NOV-06
MB4-415	Steel Upper Roof + 13.39	10	10	2	25-NOV-06	06-DEC-06
MB4-417	Block wall partitions	22	22	2	07-DEC-06	03-JAN-07
Finishes						
ABWF Works						
MB4-025	Wall Finishes & Claddings	30	30	2	02-JAN-07	05-FEB-07
M&E Services						
M&E Access Dates						
MB4-435	M&E Access: Wing 1, Grid A-R/13-16, Grd Lvl	0	0	2	08-JAN-07	
MB4-440	M&E Access: Wing 2, Grid A-R/1-4, Grd Lvl	0	0	2	03-JAN-07	
M&E Installation						
MB4-095	2nd Fix Plumbing and Drainage Installation	54	54	2	08-JAN-07	17-MAR-07
MB4-100	2nd Fix Fire Services Installation	54	54	2	08-JAN-07	17-MAR-07
MB4-105	2nd Fix HVAC Installation	54	54	2	08-JAN-07	17-MAR-07
MB4-110	2nd Fix Electrical Installation	54	54	2	08-JAN-07	17-MAR-07
MB4-115	Buidling Management System	54	54	2	08-JAN-07	17-MAR-07
External Works						
Tree Transplanting						
51020	Transplant Trees (T393)	31	9	2	01-SEP-06A	20-OCT-06



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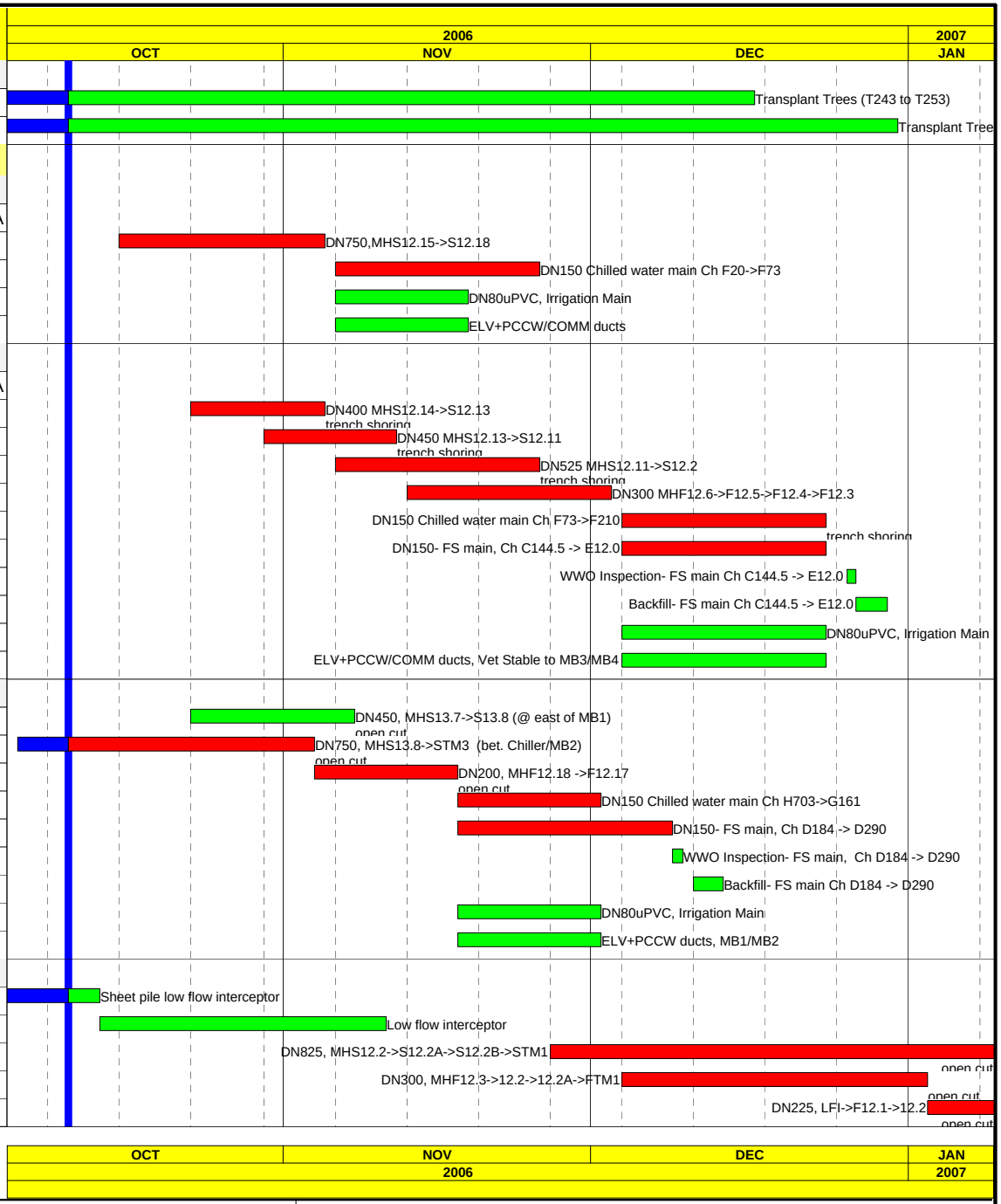
Activity ID	Activity Description	Orig Dur	Rem Dur	Cal ID	Early Start	Early Finish
51022	Transplant Trees (T243 to T253)	78	58	2	15-SEP-06A	16-DEC-06
51024	Transplant Trees (T212->T238 group)	89	69	2	15-SEP-06A	30-DEC-06
External Utilities/Drainage - Phase 1						
Utilities between Vet Stable & MB3						
EXT-035	Excavation to formation at MB3 complete	0	0	2		15-SEP-06A
EXT-090	DN750,MHS12.15->S12.18	18	18	2	16-OCT-06*	04-NOV-06
EXT-095	DN150 Chilled water main Ch F20->F73	18	18	2	06-NOV-06	25-NOV-06
EXT-245	DN80uPVC, Irrigation Main	12	12	2	06-NOV-06	18-NOV-06
EXT-247	ELV+PCCW/COMM ducts	12	12	2	06-NOV-06	18-NOV-06
Utilities@ Rd ST7 (bet. Warm Up Arena & MB3/MB4)						
EXT-100	Excav at MB3/MB4 completed	0	0	2		15-SEP-06A
EXT-165	DN400 MHS12.14->S12.13	12	12	2	23-OCT-06*	04-NOV-06
EXT-170	DN450 MHS12.13->S12.11	12	12	2	30-OCT-06	11-NOV-06
EXT-175	DN525 MHS12.11->S12.2	18	18	2	06-NOV-06	25-NOV-06
EXT-180	DN300 MHF12.6->F12.5->F12.4->F12.3	18	18	2	13-NOV-06	02-DEC-06
EXT-185	DN150 Chilled water main Ch F73->F210	18	18	2	04-DEC-06	23-DEC-06
EXT-210	DN150- FS main, Ch C144.5 -> E12.0	18	18	2	04-DEC-06	23-DEC-06
EXT-212	WWO Inspection- FS main Ch C144.5 -> E12.0	1	1	2	26-DEC-06	26-DEC-06
EXT-214	Backfill- FS main Ch C144.5 -> E12.0	3	3	2	27-DEC-06	29-DEC-06
EXT-250	DN80uPVC, Irrigation Main	18	18	2	04-DEC-06	23-DEC-06
EXT-252	ELV+PCCW/COMM ducts, Vet Stable to MB3/MB4	18	18	2	04-DEC-06	23-DEC-06
Utilities @ Road ST6 (bet MB2 and Chiller)						
EXT-120	DN450, MHS13.7->S13.8 (@ east of MB1)	14	14	2	23-OCT-06*	07-NOV-06
EXT-125	DN750, MHS13.8->STM3 (bet. Chiller/MB2)	24	21	2	06-OCT-06A	03-NOV-06
EXT-130	DN200, MHF12.18 ->F12.17	12	12	2	04-NOV-06	17-NOV-06
EXT-135	DN150 Chilled water main Ch H703->G161	12	12	2	18-NOV-06	01-DEC-06
EXT-205	DN150- FS main, Ch D184 -> D290	18	18	2	18-NOV-06	08-DEC-06
EXT-207	WWO Inspection- FS main, Ch D184 -> D290	1	1	2	09-DEC-06	09-DEC-06
EXT-209	Backfill- FS main Ch D184 -> D290	3	3	2	11-DEC-06	13-DEC-06
EXT-220	DN80uPVC, Irrigation Main	12	12	2	18-NOV-06	01-DEC-06
EXT-222	ELV+PCCW ducts, MB1/MB2	12	12	2	18-NOV-06	01-DEC-06
Utilities at South Side of MB4						
EXT-030	Sheet pile low flow interceptor	18	3	2	28-SEP-06A	13-OCT-06
EXT-060	Low flow interceptor	24	24	2	14-OCT-06	10-NOV-06
EXT-070	DN825, MHS12.2->S12.2A->S12.2B->STM1	36	36	2	27-NOV-06	09-JAN-07
EXT-075	DN300, MHF12.3->12.2->12.2A->FTM1	24	24	2	04-DEC-06	02-JAN-07
EXT-080	DN225, LFI->F12.1->12.2	18	18	2	03-JAN-07	23-JAN-07



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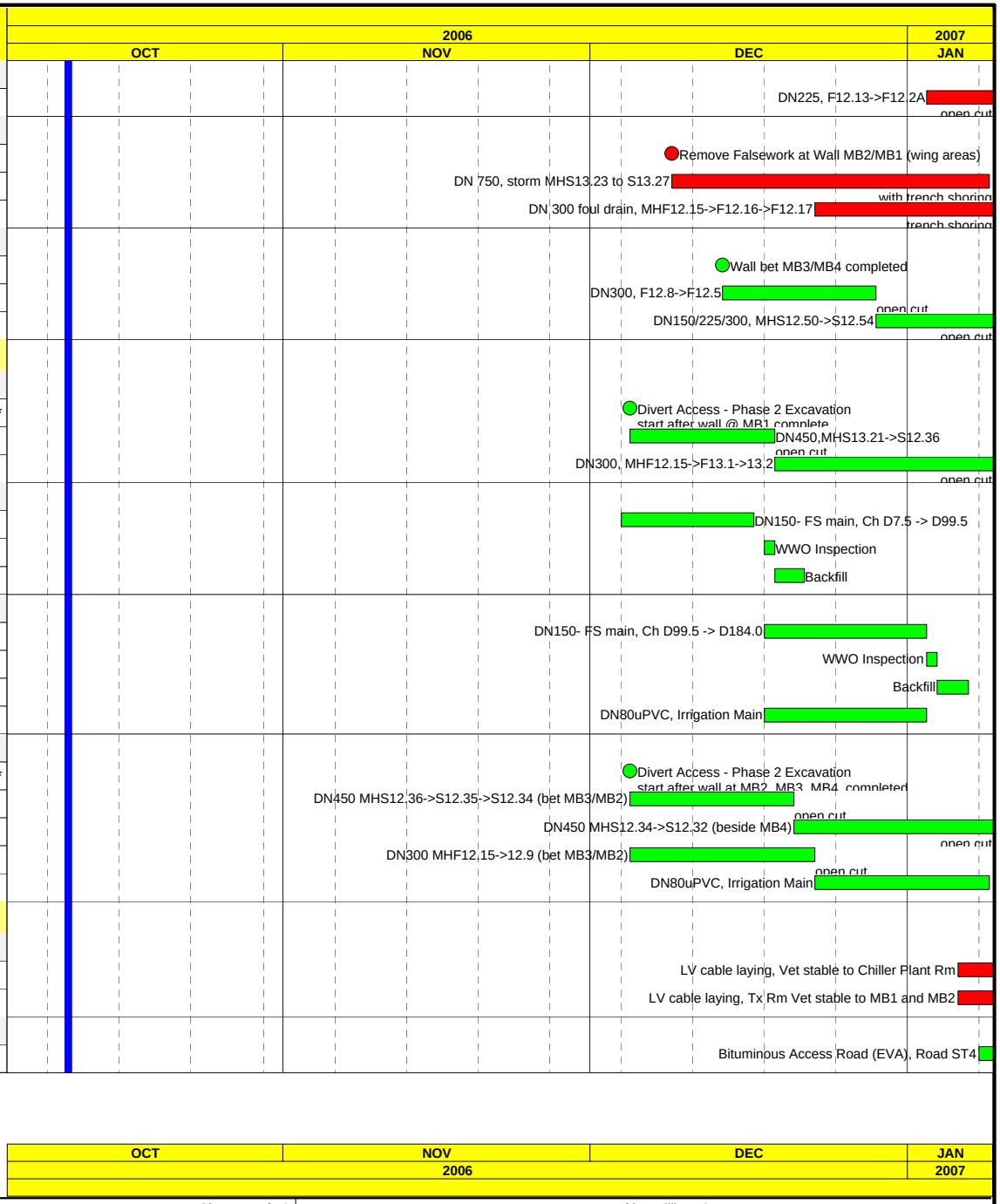
Utilities at South Side of MB4						
EXT-085	DN225, F12.13->F12.2A	12	12	2	03-JAN-07	16-JAN-07
Utilities between MB1 and MB2						
EXT-025	Remove Falsework at Wall MB2/MB1 (wing areas)	0	0	2		08-DEC-06
EXT-045	DN 750, storm MHS13.23 to S13.27	24	24	2	09-DEC-06	08-JAN-07
EXT-050	DN 300 foul drain, MHF12.15->F12.16->F12.17	18	18	2	23-DEC-06	15-JAN-07
Utilities between MB3 and MB4						
EXT-020	Wall bet MB3/MB4 completed	0	0	2		13-DEC-06
EXT-160	DN300, F12.8->F12.5	12	12	2	14-DEC-06	28-DEC-06
EXT-190	DN150/225/300, MHS12.50->S12.54	14	14	2	29-DEC-06	15-JAN-07
External Utilities/Drainage - Phase 2						
Utilities between Vet Stable and MB1						
EXT-040	Divert Access - Phase 2 Excavation	0	0	2		04-DEC-06*
EXT-105	DN450,MHS13.21->S12.36	12	12	2	05-DEC-06	18-DEC-06
EXT-110	DN300, MHF12.15->F13.1->13.2	18	18	2	19-DEC-06	10-JAN-07
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
EXT-197	WWO Inspection	1	1	2	18-DEC-06*	18-DEC-06
EXT-199	Backfill	3	3	2	19-DEC-06*	21-DEC-06
Utilities at Road ST4						
EXT-200	DN150- FS main, Ch D99.5 -> D184.0	12	12	2	18-DEC-06	02-JAN-07
EXT-202	WWO Inspection	1	1	2	03-JAN-07	03-JAN-07
EXT-204	Backfill	3	3	2	04-JAN-07	06-JAN-07
EXT-225	DN80uPVC, Irrigation Main	12	12	2	18-DEC-06	02-JAN-07
Utilities between MB3 and MB2						
EXT-015	Divert Access - Phase 2 Excavation	0	0	2		04-DEC-06*
EXT-140	DN450 MHS12.36->S12.35->S12.34 (bet MB3/MB2)	14	14	2	05-DEC-06	20-DEC-06
EXT-145	DN450 MHS12.34->S12.32 (beside MB4)	16	16	2	21-DEC-06	10-JAN-07
EXT-150	DN300 MHF12.15->12.9 (bet MB3/MB2)	16	16	2	05-DEC-06	22-DEC-06
EXT-240	DN80uPVC, Irrigation Main	12	12	2	23-DEC-06	08-JAN-07
External Utilities/Drainage - Phase 3 + Roadwork						
LV Cabling Works						
43590	LV cable laying, Vet stable to Chiller Plant Rm	12	12	2	06-JAN-07	19-JAN-07
43595	LV cable laying, Tx Rm Vet stable to MB1 and MB2	12	12	2	06-JAN-07	19-JAN-07
Access Road (EVA)						
43630	Bituminous Access Road (EVA), Road ST4	6	6	2	08-JAN-07	13-JAN-07



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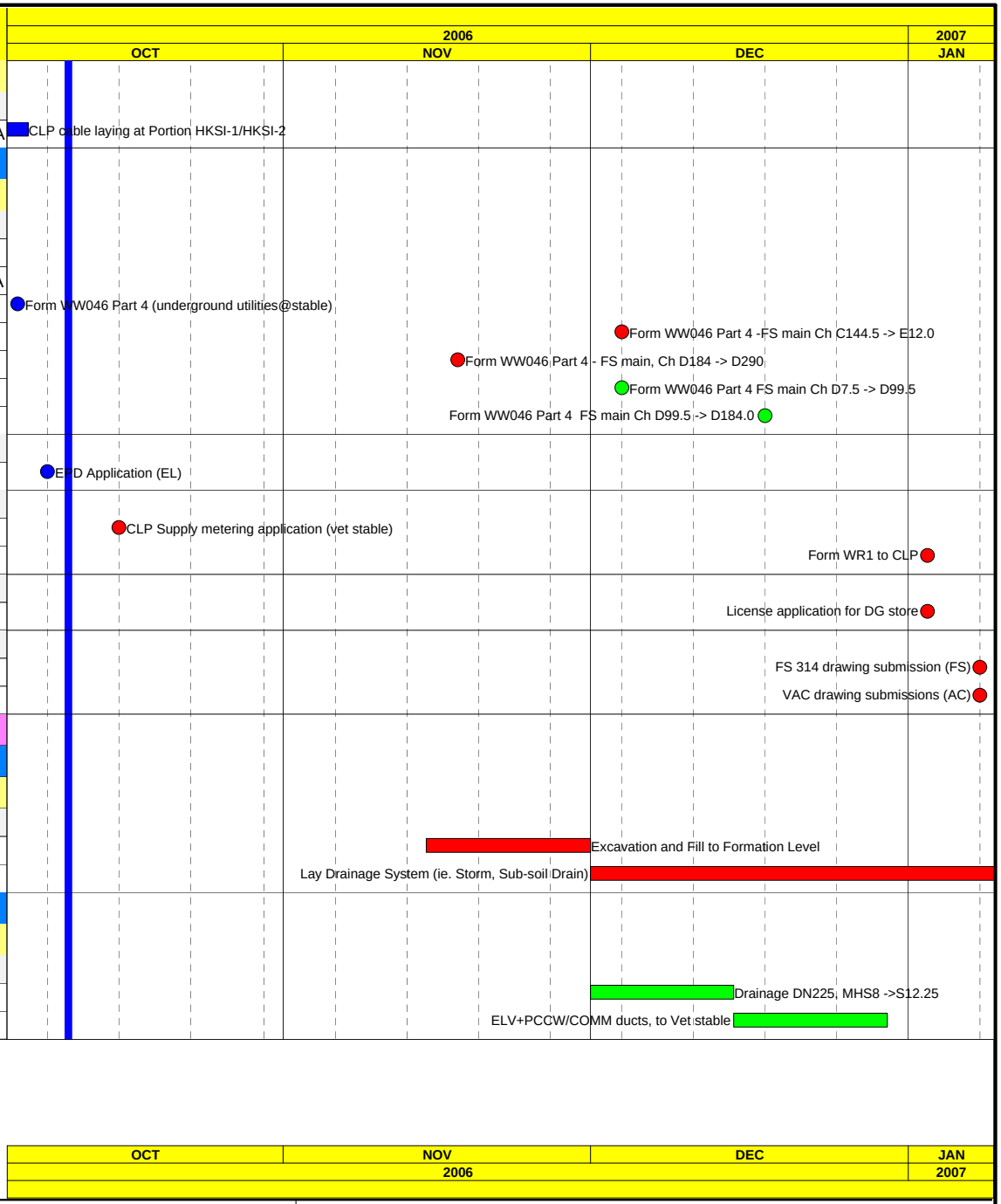
Interface Works with Employer Direct Contractors						
60080	CLP cable laying at Portion HKSI-1/HKSI-2	60	0	2	17-JUL-06A	06-OCT-06A
Statutory Submissions & Inspections						
Water Authority						
20552	RSS provide WWO approval letter	0	0	2	20-SEP-06A	
20560	Submit Form WWO46 Part 1 and 2	1	0	2	25-SEP-06A	25-SEP-06A
20570	Form WW046 Part 4 (underground utilities@stable)	0	0	2	06-OCT-06A	
20582	Form WW046 Part 4 -FS main Ch C144.5 -> E12.0	0	0	2	04-DEC-06	
20587	Form WW046 Part 4 - FS main, Ch D184 -> D290	0	0	2	18-NOV-06	
20597	Form WW046 Part 4 FS main Ch D7.5 -> D99.5	0	0	2	04-DEC-06	
20602	Form WW046 Part 4 FS main Ch D99.5 -> D184.0	0	0	2	18-DEC-06	
EPD						
20620	EPD Application (EL)	0	0	2	09-OCT-06A	
CLP						
20630	CLP Supply metering application (vet stable)	0	0	2	16-OCT-06*	
20640	Form WR1 to CLP	0	0	2	03-JAN-07*	
FSD - Dangerous Goods						
20511	License application for DG store	0	0	2	03-JAN-07*	
FSD - Fire Services						
20514	FS 314 drawing submission (FS)	0	0	2	08-JAN-07*	
20516	VAC drawing submissions (AC)	0	0	2	08-JAN-07*	
Portion HKSI-2						
Training and Competition Arena - Sand						
Site Formation						
47040	Excavation and Fill to Formation Level	14	14	2	15-NOV-06*	30-NOV-06
47050	Lay Drainage System (ie. Storm, Sub-soil Drain)	45	45	2	01-DEC-06	24-JAN-07
External Works						
External Works						
Drainage Works						
43602	Drainage DN225, MHS8 ->S12.25	12	12	2	01-DEC-06	14-DEC-06
43606	ELV+PCCW/COMM ducts, to Vet stable	12	12	2	15-DEC-06	29-DEC-06



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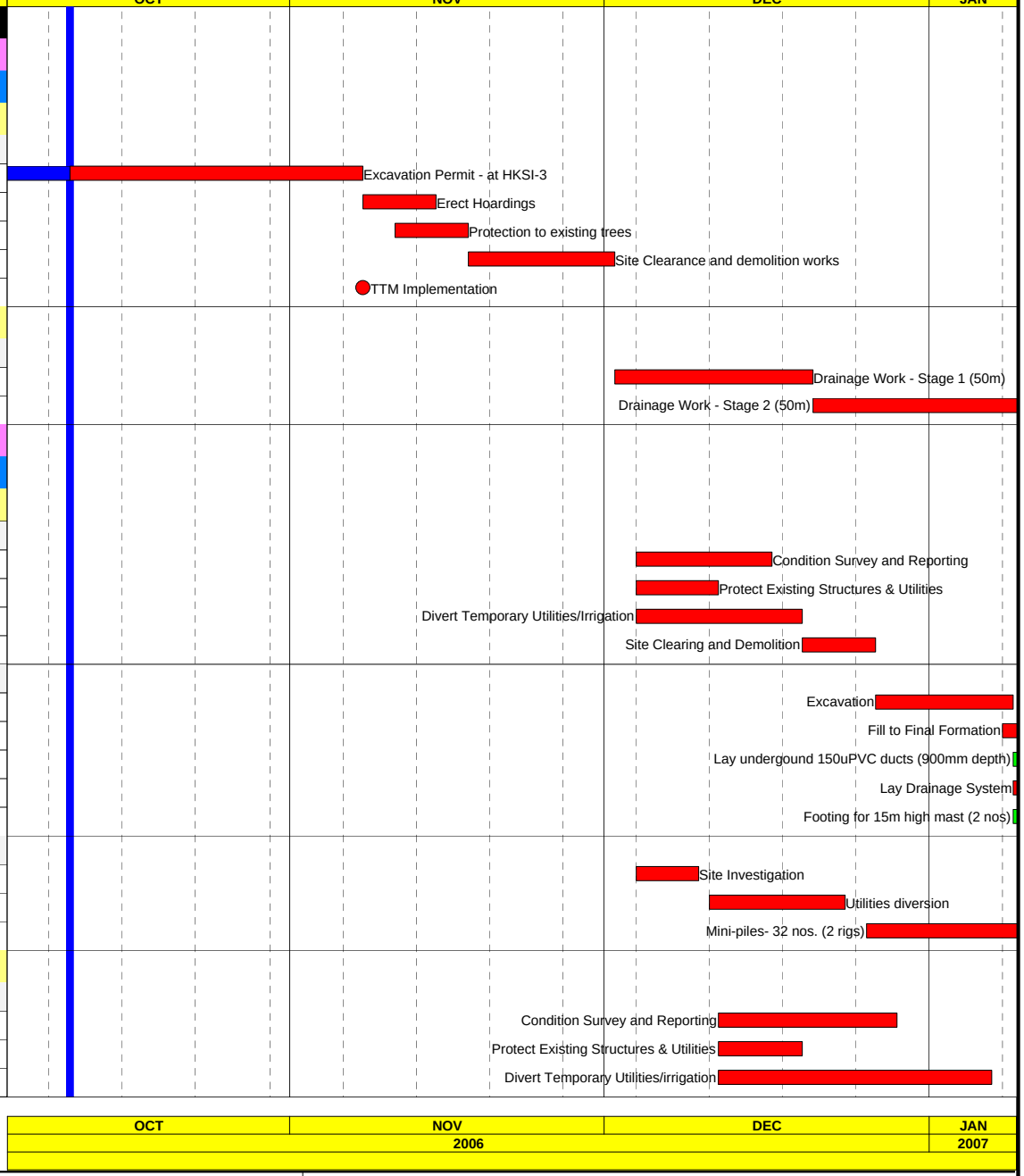
Activity ID	Activity Description	Orig Dur	Rem Dur	Cal ID	Early Start	Early Finish
Section KD-2 (Portion HKSI-3 to HKSI-6)						
Portion HKSI-3						
Shing Mun Walkway						
Initial Works						
20225	Excavation Permit - at HKSI-3	51	24	2	24-JUL-06A	07-NOV-06
66000	Erect Hoardings	6	6	2	08-NOV-06	14-NOV-06
66005	Protection to existing trees	6	6	2	11-NOV-06	17-NOV-06
66010	Site Clearance and demolition works	12	12	2	18-NOV-06	01-DEC-06
66000A	TTM Implementation	0	0	2	08-NOV-06	
External Drainage						
66020	Drainage Work - Stage 1 (50m)	16	16	2	02-DEC-06	20-DEC-06
66030	Drainage Work - Stage 2 (50m)	16	16	2	21-DEC-06	10-JAN-07
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
52020	Protect Existing Structures & Utilities	7	7	2	04-DEC-06	11-DEC-06
52030	Divert Temporary Utilities/Irrigation	14	14	2	04-DEC-06	19-DEC-06
52040	Site Clearing and Demolition	5	5	2	20-DEC-06	26-DEC-06
Site Formation, Drainage Works, Mast Footing						
52050	Excavation	10	10	2	27-DEC-06	08-JAN-07
52070	Fill to Final Formation	8	8	2	08-JAN-07	16-JAN-07
52072	Lay undergound 150uPVC ducts (900mm depth)	8	8	2	09-JAN-07	17-JAN-07
52080	Lay Drainage System	24	24	2	09-JAN-07	05-FEB-07
52095	Footing for 15m high mast (2 nos)	18	18	2	09-JAN-07	29-JAN-07
Mini Pile & Pile Cap for 40m High Mast						
65025	Site Investigation	6	6	2	04-DEC-06*	09-DEC-06
65035	Utilities diversion	12	12	2	11-DEC-06	23-DEC-06
65045	Mini-piles- 32 nos. (2 rigs)	36	36	2	26-DEC-06	06-FEB-07
Warm Up Arena and Holding Arena						
Initial Works						
53010	Condition Survey and Reporting	14	14	2	12-DEC-06	28-DEC-06
53020	Protect Existing Structures & Utilities	7	7	2	12-DEC-06	19-DEC-06
53030	Divert Temporary Utilities/irrigation	21	21	2	12-DEC-06	06-JAN-07



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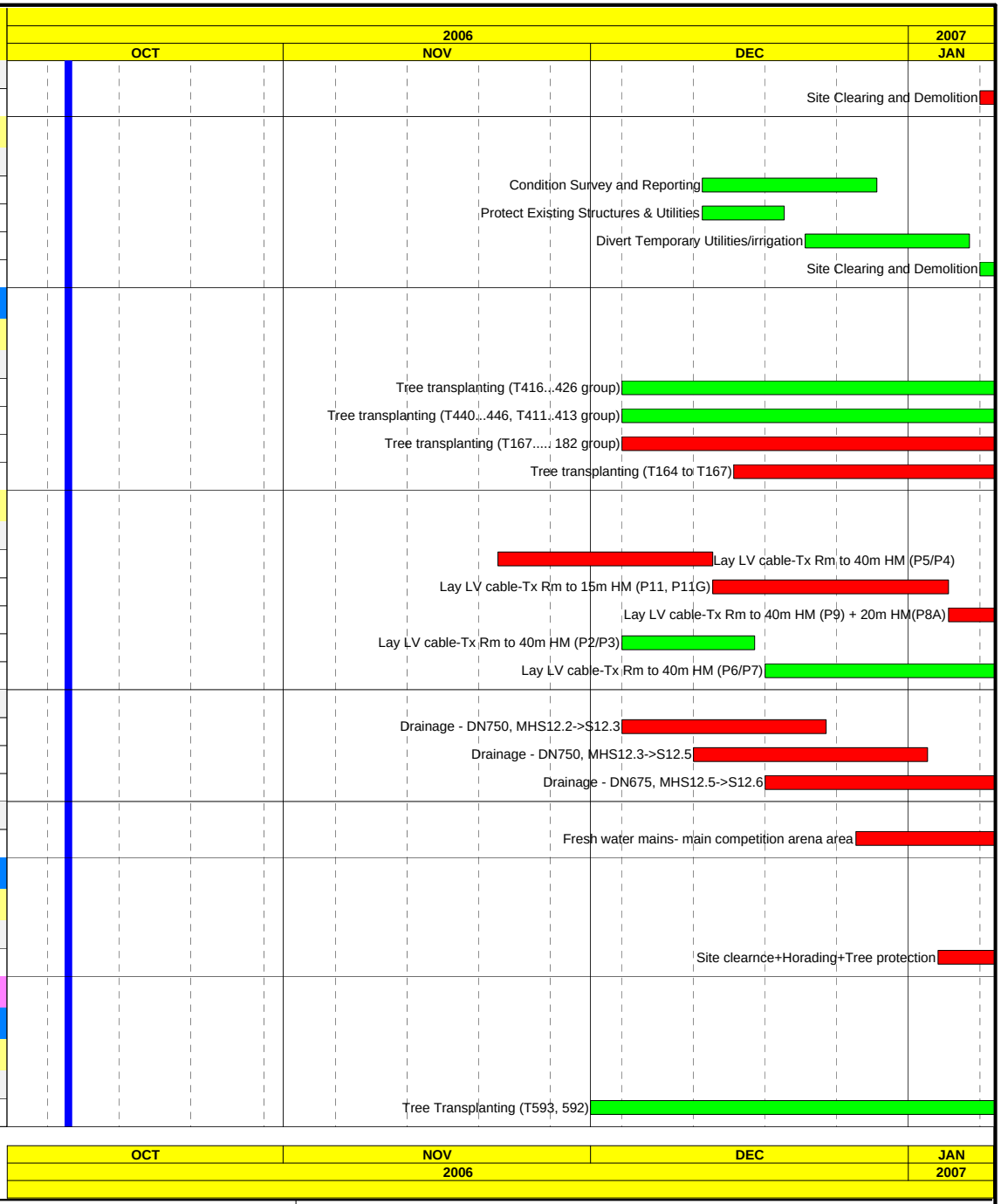
Initial Works						
53040	Site Clearing and Demolition	7	7	2	08-JAN-07	15-JAN-07
Dressage Training Arena						
Initial Works						
54010	Condition Survey and Reporting	14	14	2	12-DEC-06	28-DEC-06
54020	Protect Existing Structures & Utilities	7	7	2	12-DEC-06	19-DEC-06
54030	Divert Temporary Utilities/irrigation	12	12	2	22-DEC-06	06-JAN-07
54040	Site Clearing and Demolition	7	7	2	08-JAN-07	15-JAN-07
General External Works						
Tree Transplanting						
Initial Works						
52045	Tree transplanting (T416...426 group)	33	33	2	04-DEC-06*	12-JAN-07
52055	Tree transplanting (T440...446, T411..413 group)	35	35	2	04-DEC-06*	15-JAN-07
53045	Tree transplanting (T167..... 182 group)	35	35	2	04-DEC-06*	15-JAN-07
54045	Tree transplanting (T164 to T167)	40	40	2	15-DEC-06*	01-FEB-07
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
61095	Lay LV cable-Tx Rm to 15m HM (P11, P11G)	18	18	2	13-DEC-06	04-JAN-07
61100	Lay LV cable-Tx Rm to 40m HM (P9) + 20m HM(P8A)	12	12	2	05-JAN-07	18-JAN-07
61120	Lay LV cable-Tx Rm to 40m HM (P2/P3)	12	12	2	04-DEC-06*	16-DEC-06
61125	Lay LV cable-Tx Rm to 40m HM (P6/P7)	18	18	2	18-DEC-06	09-JAN-07
Drainage Works						
61055	Drainage - DN750, MHS12.2->S12.3	18	18	2	04-DEC-06*	23-DEC-06
61065	Drainage - DN750, MHS12.3->S12.5	18	18	2	11-DEC-06	02-JAN-07
61075	Drainage - DN675, MHS12.5->S12.6	18	18	2	18-DEC-06	09-JAN-07
Fresh Water Mains						
61140	Fresh water mains- main competition arena area	18	18	2	27-DEC-06	17-JAN-07
Area near Shatin Racecourse						
Soft Landscape						
30010	Site clearnce+Horading+Tree protection	18	18	2	04-JAN-07*	24-JAN-07
Portion HKSI-6						
General External Works						
Tree Transplanting						
Tree Transplanting						
40510	Tree Transplanting (T593, 592)	69	69	2	01-DEC-06*	28-FEB-07



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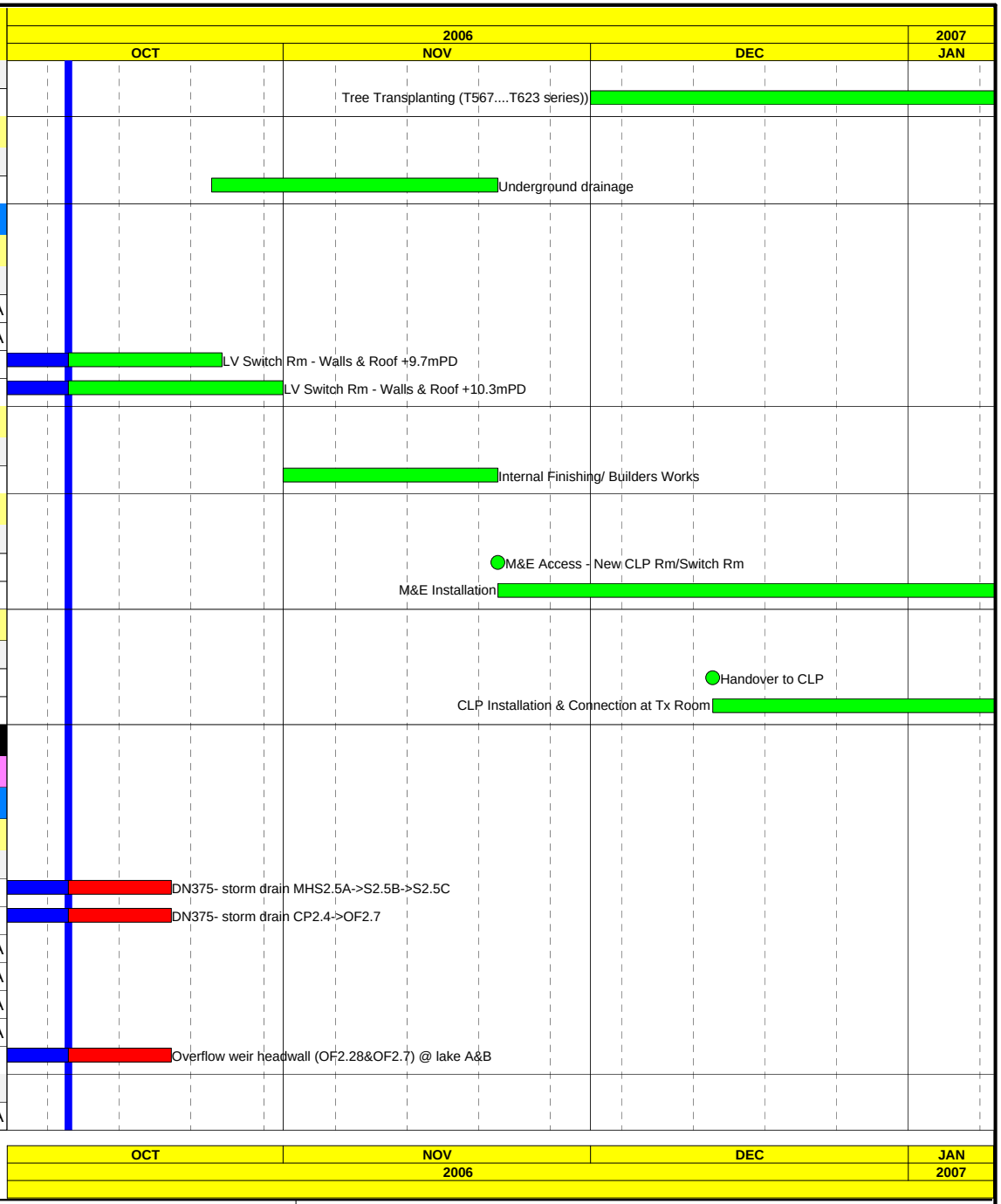
Tree Transplanting						
40513	Tree Transplanting (T567....T623 series))	69	69	2	01-DEC-06*	28-FEB-07
External Utilities/Drainage						
40555	Underground drainage	24	24	2	25-OCT-06	21-NOV-06
CLP Transformer Rm/ Switch Rm at Lawn Area						
Superstructure						
40535	Excavation and footing works	15	0	2	07-SEP-06A	15-SEP-06A
40540	Cable trench and ground slab	20	0	2	16-SEP-06A	30-SEP-06A
40545	LV Switch Rm - Walls & Roof +9.7mPD	18	13	2	03-OCT-06A	25-OCT-06
40560	LV Switch Rm - Walls & Roof +10.3mPD	18	18	2	03-OCT-06A	31-OCT-06
Finishes						
40520	Internal Finishing/ Builders Works	18	18	2	01-NOV-06	21-NOV-06
M&E Services						
40525	M&E Access - New CLP Rm/Switch Rm	0	0	2	22-NOV-06	
40530	M&E Installation	48	48	2	22-NOV-06	18-JAN-07
Power On						
40550	Handover to CLP	0	0	2	13-DEC-06	
43100	CLP Installation & Connection at Tx Room	48	48	2	13-DEC-06	08-FEB-07
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 Penflod Park						
PP-010	DN375- storm drain MHS2.5A->S2.5B->S2.5C	20	9	2	20-SEP-06A	20-OCT-06
PP-015	DN375- storm drain CP2.4->OF2.7	20	9	2	20-SEP-06A	20-OCT-06
PP-020	DN225- storm drain CP2.3->CP2.4	20	0	2	21-AUG-06A	12-SEP-06A
PP-025	DN375- storm drain CP2.5->CP2.4	20	0	2	21-AUG-06A	12-SEP-06A
PP-030	DN225- storm drain TTD	20	0	2	21-AUG-06A	12-SEP-06A
PP-035	225 U channel	20	0	2	21-AUG-06A	12-SEP-06A
PP-040	Overflow weir headwall (OF2.28&OF2.7) @ lake A&B	20	9	2	20-SEP-06A	20-OCT-06
West side of Penfold Park						
PP-065	Remove existing footpath @gen schooling area	20	0	2	21-AUG-06A	12-SEP-06A



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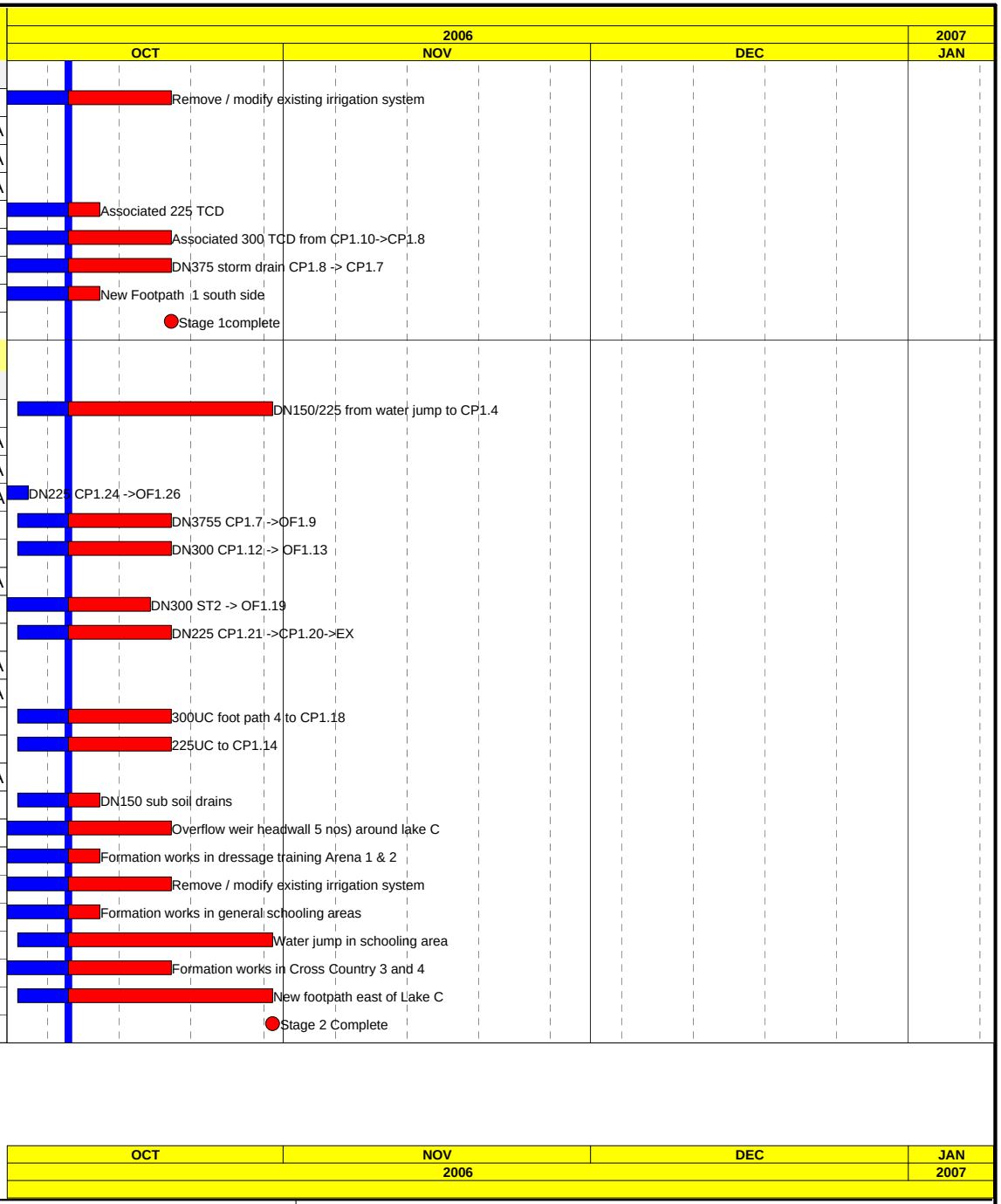
China State Const. Eng. (H.K.) Ltd.
Core Venue Main Construction Contract
(Package CV-2B & CV-2C)
FL-71 Three Months Rolling Programme
20 Sept 2006 to 20 Dec 2006

Prepared by William C

Date	Revision	Checked	Approved
11-OCT-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
West side of Penfold Park						
PP-070	Remove / modify existing irrigation system	20	9	2	21-AUG-06A	20-OCT-06
PP-075	Construct new foot path no. 5	20	0	2	21-AUG-06A	30-SEP-06A
PP-080	Construct 300 UC (CI)	20	0	2	21-AUG-06A	12-SEP-06A
PP-085	Formation at Bridle path at south and west	20	0	2	21-AUG-06A	12-SEP-06A
PP-090	Associated 225 TCD	20	3	2	20-SEP-06A	13-OCT-06
PP-095	Associated 300 TCD from CP1.10->CP1.8	20	9	2	20-SEP-06A	20-OCT-06
PP-100	DN375 storm drain CP1.8 -> CP1.7	20	9	2	20-SEP-06A	20-OCT-06
PP-105	New Footpath 1 south side	20	3	2	21-AUG-06A	13-OCT-06
PP-110	Stage 1complete	0	0	2		20-OCT-06
Stage 2						
Site Formation/Landscaping Works						
PP-120	DN150/225 from water jump to CP1.4	20	17	2	06-OCT-06A	30-OCT-06
PP-125	DN225 CP1.4A -> CP1.4B	20	0	2	04-SEP-06A	20-SEP-06A
PP-130	DN225 CP1.5 -> EX.	20	0	2	25-SEP-06A	30-SEP-06A
PP-135	DN225 CP1.24 ->OF1.26	12	0	2	20-SEP-06A	06-OCT-06A
PP-140	DN3755 CP1.7 ->OF1.9	12	9	2	06-OCT-06A	20-OCT-06
PP-145	DN300 CP1.12 -> OF1.13	12	9	2	06-OCT-06A	20-OCT-06
PP-150	DN300 ST1.16 -> OF1.16	20	0	2	11-SEP-06A	20-SEP-06A
PP-160	DN300 ST2 -> OF1.19	20	7	2	25-SEP-06A	18-OCT-06
PP-165	DN225 CP1.21 ->CP1.20->EX	12	9	2	06-OCT-06A	20-OCT-06
PP-170	Sand trap ST1 & ST2	20	0	2	05-SEP-06A	30-SEP-06A
PP-175	300UC for Arena 1 and 2	20	0	2	05-SEP-06A	30-SEP-06A
PP-180	300UC foot path 4 to CP1.18	12	9	2	06-OCT-06A	20-OCT-06
PP-185	225UC to CP1.14	12	9	2	06-OCT-06A	20-OCT-06
PP-190	300TCD to CP1.8	20	0	2	23-SEP-06A	30-SEP-06A
PP-195	DN150 sub soil drains	6	3	2	06-OCT-06A	13-OCT-06
PP-215	Overflow weir headwall 5 nos) around lake C	20	9	2	20-SEP-06A	20-OCT-06
PP-220	Formation works in dressage training Arena 1 & 2	20	3	2	13-SEP-06A	13-OCT-06
PP-225	Remove / modify existing irrigation system	20	9	2	21-AUG-06A	20-OCT-06
PP-235	Formation works in general schooling areas	20	3	2	06-SEP-06A	13-OCT-06
PP-240	Water jump in schooling area	20	17	2	06-OCT-06A	30-OCT-06
PP-245	Formation works in Cross Country 3 and 4	20	9	2	13-SEP-06A	20-OCT-06
PP-250	New footpath east of Lake C	20	17	2	06-OCT-06A	30-OCT-06
PP-255	Stage 2 Complete	0	0	2		30-OCT-06



File Name:W13A
Start Date:11-OCT-06
Finish Date:27-JUN-07
Filter Name:FL-71 Three Months Rolling I
Layout Name:Three Months Rolling Prog

Current Bar
Progress Bar
Critical Activity

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Appendix B

Monitoring Schedule for October and November 2006

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	13 Site Inspection Noise Monitoring	14
15	16	17	18	19 Noise Monitoring	20 Site Inspection	21
22	23 Landscape Audit	24 Site Inspection	25	26 Noise Monitoring	27	28
29	30	31				

Tentative Monitoring Schedule - November 2006

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

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	The contractor shall follow the procedures and requirements given in the Air Pollution Control (Construction Dust) Regulation • 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;	Good construction site practices to control the dust impact at the nearby sensitive receivers to within the relevant criteria.	Contractor	Entire construction site	Construction stage	✓ ✓ ✓ ✓ ✓ ✓ N/A ✓	• 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)

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S3.8.2	The Contract shall adopt adequate measures to mitigate the odour impact to acceptable level: • 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	• TM-EIA, Annex 4 • 5 odour units based on averaging time of 5 seconds
S4.8.1.1	1) Use of good site practices to limit noise emissions by considering the following: • 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 officer 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	✓ ✓ ✓ ✓ ✓ ✓	• Noise Control Ordinance

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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	✓	• Noise Control Ordinance • Annex 5, TM-EIA • Hoarding should have no openings and a superficial surface density of at least 14kg/m^2.
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	✓	• 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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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	• 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	✓	• 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	✓	• 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	✓	• 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	✓	• 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	✓	• HKPSG

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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	✓	• 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	✓	• Requirements laid down in ProPECC PN 1/94
S5.6.1	*Sewage Effluent* 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	✓	• ProPECC PN 1/94 • Water Pollution Control Ordinance • Waste Disposal Ordinance

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S5.6.1	*Construction Runoff and Site Drainage* • 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	✓ ✓ ✓ ✓ ✓	• ProPECC PN 1/94 • Water Pollution Control Ordinance

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	• 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.					N/A	

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	• 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 6 of the EIA 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	• 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	• 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	✓	• 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	✓	• Waste Disposal Ordinance • ETWB TC 15/2003 • Wste Disposal (Chemical Waste) (General) Regulation • ETWBTC 34/2002

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S6.5.1.2 & S6.5.1.3	*Construction and Demolition Material* • 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.	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	Contractor	Entire construction site	Construction stage	✓ ✓ ✓ ✓ ✓ ✓ ✓	• Land (Miscellaneous Provisions) Ordinance • Waste Disposal Ordinance • ETWB TC 15/2003

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	• 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.					✓ ✓ ✓	
S6.5.1.4	*Chemical Waste* • 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	N/A N/A N/A N/A	• Waste Disposal (Chemical Waste) General) Regulation • Code of Practice on the Packaging, Labelling and Storage of Chemical Waste

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S6.5.1.6	*Sewage* • 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	*General Refuse* • 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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S6.5.2.1	*Municipal Waste* • 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, bush 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	B B B N/A B	• Waste Disposal Ordinance
S6.5.2.2	*Waste from Stables* • 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	• 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?
S9.3 & S9.7	1) An Independent Environmental Checker needs to be employed as per the EM&A Manual. 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.	Control EM&A Performance	Project Proponent	All construction sites	Construction stage	✓ ✓	• EIAO Guidance Note No.4/2002 • TM-EIAO
S9.5	1) An Environmental Team needs to be employed as per the EM&A Manual. 2) Prepare a systematic Environmental Management Plan to ensure effective implementation of the mitigation measures. 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. 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	Perform environmental monitoring & auditing	Contractor	All construction sites	Construction stage	✓ ✓ ✓ ✓	• 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

ArupAcoustics

ARUP

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

Tel: +852 2268 3216

Fax: +852 2268 3950

AAc Certificate No. 2006006

CERTIFICATE OF CONFORMITY

Description of Test Instrument	Type No	Serial No
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

Signature:

Approved by: William Ng

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.

Description of Reference Calibrator	Type No	Serial No
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.

ArupAcoustics

ARUP

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

AAc Certificate No. 2006007

Fax: +852 2268 3950

Tel: +852 2268 3216

CERTIFICATE OF CONFORMITY

Description of Test Instrument	Type No	Serial No
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

Signature:

Approved by: William Ng

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.

Description of Reference Calibrator	Type No	Serial No
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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ArupAcoustics

ARUP

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

Tel: +852 2268 3216

Fax: +852 2268 3950

AAc Certificate No. 2006005

CERTIFICATE OF CONFORMITY

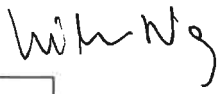
Description of Test Instrument	Type No	Serial No
Brüel & Kjær Sound Level Meter Kit	2238	2320707
Brüel & Kjær ½ " Microphone Kit	4188	2179479

Date of Test: 11 September 2006

Carried out by: Cissy Chan

Signature: 

Approved by: William Ng

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.

Description of Reference Calibrator	Type No	Serial No
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.

ArupAcoustics

ARUP

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

Tel: +852 2268 3216

Fax: +852 2268 3950

AAc Certificate No. 2006001

CERTIFICATE OF CONFORMITY

Description of Test Instrument	Type No	Serial No
Bruel & Kjaer 4230 Acoustic Calibrator	4230	1233887

Date of Test: 11 September 2006

Carried out by: Cissy Chan

Signature:

Approved by: William Ng

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.

Description of Reference Calibrator	Type No	Serial No
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	04:05	04:35	cloudy	1.8	62.2	63.0	61.0	Normal Operation
Jul-06	27-Jul-06	NM2	03:15	03:45	cloudy	1.5	61.5	63.0	60.0	Normal Operation
Jul-06	27-Jul-06	NM3	02:15	02:45	cloudy	1.3	59.5	60.5	57.0	Normal Operation
Aug-06	05-Aug-06	NM1	10:05	10:35	cloudy	2.3	64.3	65.5	61.5	Normal Operation
Aug-06	05-Aug-06	NM2	09:15	09:45	cloudy	2.1	63.3	65.0	61.5	Normal Operation
Aug-06	05-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	09:30	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	07-Sep-06	NM1	11:15	11:45	Fine	1.4	63.0	64.5	58.5	Normal Operation
Sep-06	07-Sep-06	NM2	13:00	13:30	Fine	1.6	68.0	68.2	64.0	Normal Operation
Sep-06	07-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	09:24	09:54	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

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}	
Oct-06	5/Oct/06	NM1	14:55	15:25	Fine	1.5	64.8	66.0	63.0	Normal Operation
Oct-06	5/Oct/06	NM2	14:05	14:35	Fine	1.7	62.1	64.5	60.0	Normal Operation
Oct-06	5/Oct/06	NM3	16:05	16:35	Fine	1.6	60.1	61.0	57.5	Normal Operation
Oct-06	13/Oct/06	NM1	15:00	15:30	Fine	1.6	63.2	65.5	61.5	Normal Operation
Oct-06	13/Oct/06	NM2	14:05	14:35	Fine	1.8	65.2	67.0	61.0	Normal Operation
Oct-06	13/Oct/06	NM3	16:10	16:40	Fine	1.4	58.8	60.5	56.5	Normal Operation
Oct-06	19/Oct/06	NM1	14:35	15:05	Fine	1.4	63.3	64.5	61.5	Normal Operation
Oct-06	19/Oct/06	NM2	13:50	14:20	Fine	1.6	62.6	64.0	60.5	Normal Operation
Oct-06	19/Oct/06	NM3	15:45	16:15	Fine	1.3	60.6	61.5	58.0	Normal Operation
Oct-06	26/Oct/06	NM1	14:05	14:35	Sunny	1.5	66.8	68.0	63.5	Normal Operation
Oct-06	26/Oct/06	NM2	13:20	13:50	Sunny	1.1	61.2	62.5	59.5	Normal Operation
Oct-06	26/Oct/06	NM3	15:10	15:40	Sunny	1.3	60.9	62.0	59.0	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 9th and 23rd October 2006. Site formation, vegetation clearance work and stables construction works were observed.

Tree T164, T165, T166, T167, T243, T244, T245, T246, T247, T249, T250, T251, T252, and T253 were transplanted in this month. All transplanted trees are in fair condition in general. Retained and transplanted trees are protected and fenced off with bamboo fencing. The retained trees are generally in fair condition. As the dry season approaches, more frequent watering is recommended especially for the newly transplanted trees.

1.3 Implementation Statuses of Landscape and Visual Impact Measures

The implementation statuses of environmental protection requirements are summarized in the following table.

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: • 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		x	Construction: To commence. Reinstatement: To commence	Nil.
Table 7.31	MC 2	Height of site offices: ▪ The height of site offices shall be controlled in order to avoid visual impacts.	At concealed location	HKJC's Contractor	x		x	Construction: Complied. Reinstatement: To commence.	Nil.

Table 7.31	MC 3	Hoarding and screening: ▪ 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		x	Construction: Complied. Reinstatement: To commence	Nil.
Table 7.31	MC 4	Construction plant and building material: ▪ 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		x	Construction: Complied. Reinstatement: To commence	Nil.

Table 7.31	MC 5	Construction light: ▪ 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		x	No construction lights at present.	Nil.

Table 7.31	MC 6	Vegetation: ▪ 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		x	Construction: Retain and transplant trees have been fenced off. No material or equivalent are stored under the dripline of tree. Complied. Reinstatement: To commence.	Nil.

Table 7.31	MT 1	Compensation for losses: ▪ 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		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		x	Construction: To commence. Reinstatment: 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		x	Construction: Some trees have been transplanted. Reinstatement: To commence.	ETWB TCW N0. 2/2004, WBTC No. 3/2006 BD PNAP No. 267

Table 7.31	MT 4	Planting Works: ▪ 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		x	Construction: To commence. Reinstatement: To commence.	Nil.
Table 7.31	MT 5	Tree Planting on Slopes: ▪ New slopes with a gradient larger than 30^{o} shall have shrub, groundcover or grass planting.	On affected slopes	HKJC's Contractor	x		x	Construction: To commence. Reinstatement: To commence	WBTC No. 17/2000 WBTC No. 25/93 BD PNAP No. 270

Table 7.31	MT 6	Tree Preservation: ▪ 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		x	Construction: Tree protection has been recorded. Reinstatement: To commence.	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		x	Construction: Complied. Reinstatement: To commence.	Nil

	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		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	x	Operation: To commence. Reinstatement: To commence.	Nil.
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	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

2. Recommendations and Conclusion

More frequent watering especially for newly transplanted trees is recommended in the coming dry season.

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	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: 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.