

Highways Department


Route 8 (previously known as Route 9) between Cheung Sha Wan & Sha Tin

Contract No. HY/2003/10 - Environmental Team for
Lai Chi Kok Viaduct and Eagle's Nest Tunnel

Monthly EM&A Report Part I – Lai Chi Kok Viaduct (Version 1)

August 2006

Approved By


(Environmental Team Leader)

REMARKS:

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

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CINOTECH CONSULTANTS LTD

Room 1602-1610, Delta House,
3 On Yiu Street,
Shatin, NT, Hong Kong
Tel: (852) 2151 2083 Fax: (852) 3107 1388
Email: info@cinotech.com.hk

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ABBREVIATION AND ACRONYM

AL Levels	Action and Limit Levels
CEDD	Civil Engineering and Development Department
E / ER	Engineer/Engineer's Representative
EIA	Environmental Impact Assessment
EM&A	Environmental Monitoring and Audit
EMIS	Environmental Mitigation Implementation Schedule
EP	Environmental Permit
EPD	Environmental Protection Department
ET	Environmental Team
HVS	High Volume Sampler
HyD	Highways Department
IEC	Independent Environmental Checker
NOE	Notification of Exceedance
QA/QC	Quality Assurance / Quality Control
RE	Resident Engineer
RH	Relative Humidity
SLM	Sound Level Meter
TSP	Total Suspended Particulates

EXECUTIVE SUMMARY

Introduction

- This is the thirty-third monthly Environmental Monitoring and Audit (EM&A) Report prepared by Cinotech Consultants Limited for the “Route 8 (previously known as Route 9) between Cheung Sha Wan & Sha Tin, Lai Chi Kok Viaduct & Eagle’s Nest Tunnel”. This report documents the findings of EM&A Works conducted in August 2006 for Contract No. HY/2003/01, Lai Chi Kok Viaduct (the Project).
- The major site activities undertaken in the reporting month included bulk excavation works, retaining wall construction, drainage works at Hoi Lai Estate, segment erection by launching gantry at Abutment M, Construction of Wai Man Tsuen Pump House and Irrigation Pump House near Pier C14.

Environmental Monitoring and Audit Works

- Environmental monitoring and audit works for the Project was performed regularly as stipulated in the updated EM&A Manual and the results were checked and reviewed. Site audits were conducted once per week. The implementation of the environmental mitigation measures, Event Action Plans and environmental complaint handling procedures were also checked.
- Summary of the events and action taken in the reporting month is tabulated in **Table I**.

Table I Summary Table for Events Recorded in the Reporting Month

Parameter	No. of Events		No. of Events Due to the Project	Action Taken
	Action Level	Limit Level		
1-hr TSP	0	0	0	N/A
24-hr TSP	0	0	0	N/A
Noise	1	0	0 (Invalid complaint)	Complaint Investigation

Environmental Licenses and Permits

- Licenses/Permits granted to the Project include the Environmental Permit (EP) for the Project, the Water Discharge Licenses (WDLs) and the Construction Noise Permits (CNPs). Four new CNPs were issued to the Project by EPD in the reporting month.

Key Information in the Reporting Month

- Summary of key information in this reporting month is tabulated in **Table II**.

Table II Summary Table for Key Information in the Reporting Month

Event	Event Details		Action Taken	Status	Remark
	Number	Nature			
Complaint received	2	Noise, dust, water quality	Complaint Investigation	In progress	---
Changes to the assumptions and key construction / operation activities recorded	0	---	N/A	N/A	---
Status of submissions under EP	0	---	N/A	N/A	---
Notifications of any summons & prosecutions received	0	---	N/A	N/A	---

Future Key Issues:

Major site activities for the coming month include:

- Rock dowel installation at slope CCR-S1 & CCR-S4.
- Bulk excavation works at slope CCR-S4, CCR-R3 and CCR-R6.
- Retaining wall construction at CCR-R1 to CCR-R6 and LCK-R1 to LCK-R2.
- Drainage works at Rest Garden area, Hoi Lai Estate and Castle Peak Road.
- Offsite fabrication of parapet and noise barrier.
- Cast in-situ of slip roads C and D.
- Parapet installation for Main Viaduct and slip roads A to D.
- Erection of noise barrier at slip roads A, C and D.
- Construction of Wai Man Tsuen pump house and Irrigation Pump House near Pier C14.

The anticipated environmental impacts will be mainly on air impact from bulk excavation works, noise impact from construction of Wai Man Tsuen pump house, and water quality impact during rainy season.

1. INTRODUCTION

Background

- 1.1 Route 9 (Kowloon Section) (R9K) (hereinafter call the R9K-Project) forms part of the Route 9 between Cheung Sha Wan and Sha Tin (R9-CSWST) project, which will be a new expressway connecting West Kowloon and Sha Tin. It will be the fourth external link between Sha Tin and Kowloon and will form an important link between the northeast New Territories and the west Kowloon, Lantau Island and the western New Territories. R9K is being managed and implemented by the Highways Department (HyD).
- 1.2 The engineering design of R9K is covered under Agreement No. CE 50/98 “Route 9 between Cheung Sha Wan and Sha Tin – Design Construction Assignment”. The main consultant engaged under Agreement No. CE 50/98 is Maunsell Hyder Joint Venture (MHJV), who will act as the Engineer for the construction contracts. The works of R9K mainly comprise a 1.4km dual 3-lane Lai Chi Kok Viaduct from Lai Wan Interchange to Butterfly Valley; 0.5 km of dual 3-lane at-grade carriageway linking to the 2.1 km dual 3-lane twin-bore Eagle's Nest Tunnel with associated portal buildings; a toll plaza with an administration building located with the Sha Tin valley woodland; a ventilation building and an adit; associated noise barriers, noise enclosures, drainage, slope and landscape works; and electrical and mechanical works for the whole R9-CSWST. The remainder of the R9-CSWST forms the Sha Tin Section (R9S) of the project and is being managed and implemented separately by the Civil Engineering and Development Department (CEDD).
- 1.3 The R9-CSWST project is a Designated Project under the Environmental Impact Assessment Ordinance (Cap. 499) (EIAO). An environmental impact assessment (EIA) report has been prepared in 1998 for the R9-CSWST project (1998 R9 EIA) to consider the key issues of noise, air quality, water quality, ecological, construction waste, landscape and visual, land use and cultural impacts, and identify possible mitigation measures.
- 1.4 An Updated Final EIA report was subsequently completed in August 1999 for the R9-CSWST project (1999 R9 EIA), to cater for some changes in R9K portion as mentioned in paragraph 1 in the report. The 1999 R9 EIA was endorsed by Environmental Protection Department (EPD) in November 1999. The 1998 R9 EIA and the 1999 R9 EIA (R9 EIA Reports) were included in the EIA register under the EIAO as report no. EIA-135/BC and AEIAR-022/1999 respectively. Environmental Monitoring and Audit (EM&A) Manuals for each of the R9 EIA Reports (EM&A Manuals) were also included as part of the EIA reports in the register.
- 1.5 Subsequent to the endorsement of the R9 EIA Reports by EPD in November 1999, the project programme was deferred to start in 2002/2003 for completion by 2006/07. The implementation of the project was then separated into the R9S and R9K portion. An Environmental Permit (EP) No. EP-103/2001 was issued on 17 September 2001 for R9K to the HyD as Permit Holder and a varied EP No. EP-103/2001/A was subsequently issued on 20 May 2003 for R9K (R9K EP) to HyD as Permit Holder. A varied EP-103/2001/C was recently issued on 22 July 2005.

- 1.6 The major construction activities of two civil contracts of the R9K project, Contract No. HY/2003/01 entitled “Route 9 – Lai Chi Kok Viaduct” and Contract No. HY/2003/02 entitled “Route 9 – Eagle’s Nest Tunnel and Associated Works”, were commenced in 15th December 2003 for completion in April 2007.
- 1.7 “Route 9” was recently re-titled as “Route 8 (previously known as Route 9)”. Cinotech Consultants Limited (Cinotech) was commissioned by HyD to undertake the Environmental Monitoring and Audit works for “Route 8 between Cheung Sha Wan and Sha Tin - Environmental Team (ET) for Lai Chi Kok Viaduct and Eagle’s Nest Tunnel (Contract No. HY/2003/10)”. Dr. Priscilla CHOY of Cinotech Consultants Ltd. was appointed as the ET Leader under Condition 2.2 of the EP. Mr. David YEUNG of CH2M HILL Hong Kong Ltd. was appointed as the IEC under Condition 2.1 of the EP. This is the thirty-third monthly EM&A report summarizing the EM&A works for the Project in August 2006.

Project Organizations

- 1.8 Different parties with different levels of involvement in the project organization include:
- Project Proponent – Major Works Project Management Office (MWPMO) of Highways Department (HyD)
 - Engineer (E) / Engineer’s Representative (ER) – Maunsell-Hyder Joint Venture
 - Environmental Team (ET) – Cinotech Consultants Limited
 - Independent Environmental Checker (IEC) – CH2M HILL Hong Kong Limited
 - Contractor – Acciona Infraestructuras S.A.
- 1.9 The responsibilities of respective parties are detailed in Section 1.8.3 of the EM&A Manual (1999) of the Project.
- 1.10 The key contacts of the Project are shown in **Table 1.1**.

Construction Programme

- 1.11 The site activities undertaken in the reporting month were:
- Bulk excavation works at slope CCR-R3, CCR-R4 and CCR-R6.
 - Retaining wall construction at CCR-R1 to CCR-R6 and LCK-R2.
 - Drainage works at Hoi Lai Estate.
 - Offsite fabrication of parapet and noise barrier.
 - Segment erection by launching gantry at Abutment M.
 - Erection of noise barrier at slip roads A.
 - Construction of Wai Man Tsuen Pump House and Irrigation Pump House near Pier C14.
 - Cast in-situ of slip roads C and D.
 - Parapet installation for slip roads A-D and main viaduct.

Table 1.1 Key Project Contacts

Party	Role	Name	Position	Phone No.	Fax No.
HyD	Permit Holder	Mr. Kroc Leung	SE2/R8K	2762 3662	2714 5198
		Mr. Esther Yung	E1/R8K	2762 3677	
		Mr. LC Chung	E2/R8K	2762 3613	
MHJV	Engineer	Mr. Conrad Ng	Project Manager	2605 6262	2691 2649
	Engineer's Representative	Mr. D.F. Lilliman	CRE	2959 0010	2959 0290
		Mr. Henry Liu	SRE	2991 1068	
		Mr. Joseph Chi	RE	2991 1034	
Cinotech	Environmental Team	Dr. Priscilla Choy	The ET Leader	2151 2089	3107 1388
		Ms. Attle Hui	Audit Team Leader	2151 2093	
		Mr. Henry Leung	Monitoring Team Leader	2151 2087	
CH2M	Independent Environmental Checker	Mr. David Yeung	Independent Environmental Checker	2872 2934	2507 2293
		Mr. Billy Yu	Assistant Independent Environmental Checker	2872 2949	
Acciona	Contractor	Mr. Rafael Rubio	Project Director	2956 3300	2956 3331
		Mr. Lawrence Kwok	QA/E Manager		
24-hour Emergency Hotline				2370 9200	-

Summary of EM&A Requirements

- 1.12 The EM&A programme requires construction phase monitoring for air quality and construction noise, and environmental site audit. The EM&A requirements for each parameter are described in the following sections, including:
- All monitoring parameters;
 - Action and Limit levels for all environmental parameters;
 - Event Action Plans;
 - Environmental mitigation measures, as recommended in the project EIA study final report; and
 - Environmental requirements in contract documents.
- 1.13 The advice on the implementation status of environmental protection and pollution control/mitigation measures is summarized in Section 4 of this report.
- 1.14 This report presents the environmental monitoring results, observations, locations, equipment, period, methodology and QA/QC procedures of the required monitoring parameters, namely dust and noise levels and audit works for the Project in the reporting month.

2. AIR QUALITY

Monitoring Requirements

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

Monitoring Locations

- 2.2 One designated monitoring station, AM2 was selected for impact dust monitoring for the Project. **Table 2.1** describes the air quality monitoring location, which is also depicted in **Figures 1**.

Table 2.1 Locations for Air Quality Monitoring

Monitoring Station	Description	Location
AM2	Lai Chi Kok Park Sports Centre	Rooftop

Monitoring Equipment

- 2.3 **Table 2.2** summarizes the equipment used for the air quality monitoring. Copies of calibration certificates are attached in **Appendix B**.

Table 2.2 Air Quality Monitoring Equipment

Equipment	Model and Make	Quantity
Calibrator	GMW25; S/N: 1536	1
HVS Sampler	Graseby GMW Model GS2310 High Volume TSP Sampler and associated equipment and shelter	1

Monitoring Parameters, Frequency and Duration

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

Table 2.3 Impact Dust Monitoring Parameters, Frequency and Duration

Parameters	Frequency
1-hr TSP	Three times / 6 days
24-hr TSP	Once / 6 days

Monitoring Methodology and QA/QC Procedure

Instrumentation

- 2.5 Graseby GMW Model GS2310 TSP High Volume Sampler (HVS) was employed for 1-hour & 24-hour TSP monitoring. The sampler was composed of a motor, a filter holder, a flow controller and a sampling inlet and its performance specification complied with that required by USEPA Standard Title 40, Code of Federation Regulations Chapter 1 (Part 50). Moreover, the HVS also met all the requirements in Sections 2.2 to 2.4 of the EM&A Manual (1999).

Operating/Analytical Procedures

- 2.6 Operating/analytical procedures for the operation of HVS were as follows:
- A horizontal platform was provided with appropriate support to secure the samplers against gusty wind.
 - No two samplers were placed less than 2 meters apart.
 - The distance between the sampler and an obstacle, such as buildings, was at least twice the height that the obstacle protrudes above the sampler.
 - A minimum of 2 meters of separation from walls, parapets and penthouses was required for rooftop samples.
 - A minimum of 2 meters separation from any supporting structure, measured horizontally was required.
 - No furnaces or incineration flues were nearby.
 - Airflow around the sampler was unrestricted.
 - The sampler was more than 20 meters from the drip line.
 - Any wire fence and gate, to protect the sampler, should not cause any obstruction during monitoring.
- 2.7 Prior to the commencement of the dust sampling, the flow rate of the high volume sampler was properly set (between 1.1 m³/min. and 1.4 m³/min.) in accordance with the manufacturer's instruction to within the range recommended in USEPA Standard Title 40, CFR Part 50.
- 2.8 For TSP sampling, fiberglass filters (G810) were used.
- 2.9 The power supply was checked to ensure the sampler worked properly.
- 2.10 On sampling, the sampler was operated for 5 minutes to establish thermal equilibrium before placing any filter media at the designated air monitoring station.
- 2.11 The filter holding frame was then removed by loosening the four nuts and a weighted and conditioned filter was carefully centered with the stamped number upwards, on a supporting screen.
- 2.12 The filter was aligned on the screen so that the gasket formed an airtight seal on the outer edges of the filter. Then the filter holding frame was tightened to the filter holder with swing bolts. The applied pressure should be sufficient to avoid air leakage at the edges.

- 2.13 The shelter lid was closed and secured with the aluminum strip.
- 2.14 The timer was then programmed. Information was recorded on the record sheet, which included the starting time, the weather condition and the filter number (the initial weight of the filter paper can be found out by using the filter number).
- 2.15 After sampling, the filter was removed and sent to the laboratory for weighing. The elapsed time was also recorded.
- 2.16 Before weighing, all filters were equilibrated in a conditioning environment for 24 hours. The conditioning environment temperature should be between 25°C and 30°C and not vary by more than $\pm 3^\circ\text{C}$; the relative humidity (RH) should be $< 50\%$ and not vary by more than $\pm 5\%$. A convenient working RH is 40%.

Maintenance/Calibration

- 2.17 The following maintenance/calibration was required for the HVS:
- The high volume motors and their accessories were properly maintained. Appropriate maintenance such as routine motor brushes replacement and electrical wiring checking were made to ensure that the equipment and necessary power supply are in good working condition.
 - High volume samplers were calibrated at bi-monthly intervals using GMW-25 Calibration Kit throughout all stages of the air quality monitoring.

Results and Observations

- 2.18 All TSP monitoring was conducted as scheduled in this reporting month. No Action/Limit Level exceedance was recorded for both 1-hr and 24-hr TSP monitoring in the reporting month.
- 2.19 Wind data monitoring equipment has been installed in Shatin Heights for logging wind speed and wind direction. These wind data for the reporting month is summarized in **Appendix D**.
- 2.20 The monitoring data and graphical presentations of 1-hour and 24-hour TSP monitoring results are shown in **Appendices E** and **F**, respectively.

3. NOISE

Monitoring Requirements

- 3.1 Monitoring and audit of construction noise levels is required to be conducted, in accordance with the EM&A Manual, to ensure that any unacceptable noise impacts could be readily detected and timely and appropriate action be undertaken to rectify the situation.
- 3.2 The construction noise levels shall be measured in terms of the A-weighted equivalent continuous sound pressure level (Leq). Leq (30min) shall be used as the monitoring parameter for the time period between 0700-1900 hours on normal weekdays. For all other time periods, Leq (5min) shall be employed for comparison with the Noise Control Ordinance (NCO) criteria. As supplementary information for data auditing, statistical results such as L_{10} and L_{90} shall also be obtained for reference.
- 3.3 Four designated noise monitoring stations, namely NM4, NM8a, NM8b and NM9 were selected for impact monitoring. **Appendix A** shows the established Action and Limit Levels for the environmental monitoring works.

Monitoring Locations

- 3.4 Noise monitoring was conducted at five designated monitoring stations as summarized in **Table 3.1**. **Figures 1** show the locations of these stations.

Table 3.1 Noise Monitoring Stations

Stations*	Description	Location
NM4	Mei Foo Sun Chuen, Phase 5	Rooftop of Block 9
NM8a	Nob Hill	M/F of Car Park
NM8b	Nob Hill	3/F of Car Park
NM9	Hoi Lai Estate	G/F of Hoi Fai House

- (1) Renovation work was undertaken at the Lai Chi Kok Reception Centre (NM2) and the centre was found vacated. The noise monitoring was suspended since December 2004. Approval for the change of EM&A Programme was granted by EPD on 30th December 2004.
- (2) The Lai Chi Kok Hospital (NM3) was also found vacated and noise monitoring has been suspended since January 2005, as approved by EPD on 15th March 2005.

- 3.5 Stations NM8a and NM8b were installed at Nob Hill in May 2004. Station NM8b is located at 3/F of the car park of Nob Hill, which is strongly influenced by traffic noise from Ching Cheung Road. The measurement at this station is for reference purpose, but not for compliance check of construction noise. The measured noise level at Station NM8a, which is located at M/F of car park and closer to the construction site, acts as an indicator of the construction noise. Since the domestic premises are located above 5/F, noise assessment would be performed to assess the level of nuisance resulting from the construction noise at the domestic premises whenever the measured noise level at NM8a exceeds the noise limit level.

- 3.6 A new housing estate, Hoi Lai Estate, became one of the noise sensitive receivers close to the Project site. As recommended by the Regional (West) Office of EPD, noise monitoring at this location (Station NM9) was newly included in the EM&A programme. Approval for the change of EM&A programme was granted by EPD on 30th December 2004.

Monitoring Equipment

- 3.7 **Table 3.2** summarizes the noise monitoring equipment model being used. Copies of calibration certificates are attached in **Appendix B**.

Table 3.2 Noise Monitoring Equipment

Equipment	Model and Make	Qty.
Integrating Sound Level Meter	B&K Model 2238	5
Calibrator	B&K 4231	2
Wind Speed Anemometer	RS232 Integral Vane Digital Anemometer	1

Monitoring Parameters, Frequency and Duration

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

Table 3.3 Noise Monitoring Parameters, Frequency and Duration

Stations	Parameter	Period	Frequency	Measurement
NM4	L ₁₀ (30 min.)dB(A) L ₉₀ (30 min.)dB(A) L _{eq} (30 min.)dB(A)	0700-1900 hrs. on weekdays	Once per week	Façade
NM8a				Façade
NM8b				Façade
NM9				Façade

Monitoring Methodology and QA/QC Procedures

- The Sound Level Meter was generally set on a tripod at a height of 1.2 m above the ground, depending to the actual monitoring condition.
- The battery condition was checked to ensure the correct functioning of the meter.
- Parameters such as frequency weighting, the time weighting and the measurement time were set as follows:
 - frequency weighting : A
 - time weighting : Fast
 - time measurement : 30 minutes / 5 minutes
- Prior to and after each noise measurement, the meter was calibrated using a Calibrator for 94.0 dB at 1000 Hz. If the difference in the calibration level before and after measurement was more than 1.0 dB, the measurement would be considered invalid and repeat of noise measurement would be required after re-calibration or repair of the equipment.
- The wind speed was frequently checked with the portable wind meter.

- At the end of the monitoring period, the L_{eq} , L_{90} and L_{10} were recorded. In addition, site conditions and noise sources were recorded on a standard record sheet.
- Noise measurement was paused during periods of high intrusive noise if possible and observation was recorded when intrusive noise was not avoided.
- Noise monitoring was cancelled in the presence of fog, rain, and wind with a steady speed exceeding 5 m/s, or wind with gusts exceeding 10 m/s.

Maintenance and Calibration

- 3.9 The microphone head of the sound level meter and calibrator was cleaned with soft cloth regularly.
- 3.10 The meters were sent to the supplier to check and calibrate on a yearly interval.

Results and Observations

- 3.11 Noise monitoring was performed at the four designated locations as scheduled except on 2 August 2006. The monitoring at all Stations (NM4, NM8a, NM8b and NM9) on that date was cancelled as Typhoon Signal No. 1 was hoisted.
- 3.12 All the Construction Noise Levels (CNLs) reported in this report, except those collected at Stations NM8a, NM8b and NM9, were adjusted with the corresponding baseline level (i.e. Measured L_{eq} – Baseline L_{eq} = Measured CNL), in order to facilitate the interpretation of the noise exceedance.
- 3.13 Noise monitoring results and graphical presentations are shown in **Appendix G**.
- 3.14 1 Action and no Limit Level exceedance was recorded in the reporting month due to receiving a complaint.
- 3.15 One complaint was referred by the Environmental Protection Department (EPD) to the Environmental Team (ET) Leader of the Project on 31st August 2006 regarding construction noise, dust and wastewater discharge between Lai Wan Road and Lai King Hill Road.
- 3.16 According to RSS's record, rock dowel installation for slope stabilization at CCR-S1 was commenced on 22nd August 2006 and would likely last for at least 6 months. With reference to RSS's site diary, all site activities including drilling works at the concerned area were conducted between 8:00 and 18:00 daily. Ad hoc site observation carried out by the RSS confirmed that no construction activity was carried out after 18:00.
- 3.17 During the monthly site inspection on 4th September 2006, rock drilling at the slope CCR-S1 was carrying out. The ET observed that the work area was enclosed by tarpaulin sheets at three sides. Water was sprayed continuously at the drilling hole and head of the drilling rig was enclosed with a wet thick towel. All the mitigation measures mentioned by the RSS were implemented.
- 3.18 Based on the information collected, the complaints were considered not justifiable. The detail of the complaint is shown in **Appendix M**.

- 3.19 At Stations NM8a and NM8b, the major noise source identified during the monitoring exercises was mainly the road traffic noise.
- 3.20 At Station NM4 and NM9, construction noise from the Project and occasionally the traffic noise were identified as the major noise source during monitoring.

4. ENVIRONMENTAL AUDIT

Site Audits

- 4.1 Site audits were carried out by ET on weekly basis to monitor the timely implementation of proper environmental management practices and mitigation measures in the Project site. The summaries of site audits are attached in **Appendix I**.
- 4.2 Site audits were conducted on 2nd, 7th, 16th, 23rd and 30th August 2006 by ET. The audit session on 7th August 2006 was conducted with the representatives of HyD, IEC, ER, the Contractor and ET.

Review of Environmental Monitoring Procedures

- 4.3 The monitoring works conducted by the monitoring team were inspected regularly. The following observations have been recorded for the monitoring works:

Air Quality Monitoring

- The monitoring team recorded all observations around the monitoring stations within and outside the construction site.
- The monitoring team recorded the temperature and weather conditions on the monitoring days.

Noise Monitoring

- The monitoring team recorded all observations around the monitoring stations, which might affect the monitoring result.
- Major noise sources were identified and recorded. Other intrusive noise attributing to the result was trimmed off by pausing the monitoring temporarily.

Status of Environmental Licensing and Permitting

- 4.4 All permits/licenses obtained for the Project are summarized in **Table 4.1**. Four new CNPs were issued to the Project in the reporting month.

Implementation Status of Environmental Mitigation Measures

- 4.5 According to the Environmental Permit and the EM&A Manuals, the mitigation measures detailed in the documents are required to be implemented. An updated summary of the EMIS is provided in **Appendix K**.

Table 4.1 Summary of Environmental Licensing and Permit Status

Permit No.	Valid Period		Details	Status
	From	To		
Environmental Permit (EP)				
EP-103/2001/C	22/7/05	N/A	<p><u>Construction and operation of</u></p> <p>(a) All civil works (including highways, traffic, geotechnical, drainage, structural, architectural and landscaping works) for the Lai Chi Kok Viaduct, the interchange with Ching Cheung Road, the main road within Butterfly Valley and the Eagle's Nest Tunnel;</p> <p>(b) All E&M works (including ventilation, Traffic Control & Surveillance System (TCSS), toll collection system and lighting) for the whole Route 9 between Cheung Sha Wan and Sha Tin;</p> <p>(c) The permanent slope works above the northern portal of the Eagle's Nest Tunnel;</p> <p>(d) The architectural works (including fitting out and furnishings) of the portal buildings of the Sha Tin Heights Tunnel.</p>	Valid
Registration of Chemical Waste Producer				
WPN 5213-261-N2413-04	17/11/03	N/A	N/A	Valid
Water Discharge Licence				
EP482/260/251/1	05/12/03	31/12/08	Discharge of industrial trade effluent arising from the construction site at Route 9 – Lai Po Road Section of Lai Chi Kok Viaduct (Contract HY/2003/01).	Valid
EP482/260/251/2	15/12/03	31/12/08	Discharge of industrial trade effluent arising from the construction site at Route 9 – Lai Chi Kok Viaduct excluding Lai Po Road Section.	Valid
Construction Noise Permit (CNP)				
GW-RW0083-06 (replaced by GW-RW0121-06)	18/2/06	17/8/06	<p><i>Location:</i> Ching Cheung Road near Mei Foo Sun Chuen</p> <p><i>Time Period:</i> General holidays (including Sundays) between 0700-2300 hrs and any other days between 1900-2300 hrs</p>	Expired
GW-RW0091-06	19/2/06	13/8/06	<p><i>Location:</i> Ching Cheung Road near CLP Substation</p> <p><i>Time Period:</i> General holidays (including Sundays) between 0900-2100 hrs</p>	Expired
GW-RW0121-06	11/3/06	6/9/06	<p><i>Location:</i> Ching Cheung Road near Castle Peak Road</p> <p><i>Time Period:</i> Whole day of general holidays (including Sundays) and any other days between 1900-0700 hrs on next day</p>	Valid
GW-RW0135-06	16/3/06	15/9/06	<p><i>Location:</i> Butterfly Valley</p> <p><u>20/03/06 to 31/03/06</u> <i>Time Period:</i> Whole day of general holidays (including Sundays) and any other days between 1900-0700 hrs on next day</p> <p><u>1/4/06 to 15/9/06</u> <i>Time Period:</i> General holidays (including Sundays) between 0900-2300 hrs and any other days between 1900-0700 hrs on next day</p>	Valid
GW-RW0142-06	22/3/06	15/9/06	<p><i>Location:</i> Lai Wan Road</p> <p><i>Time Period:</i> Any day not being a general holiday between 2100-0700 hrs on next day</p>	Valid

Permit No.	Valid Period		Details	Status
	From	To		
GW-RW0145-06	31/3/06	30/9/06	<i>Location: Lai Po Road and Yuet Lun Street</i> <i>Time Period: Any day not being a general holiday between 2100-0700 hrs on next day</i>	Valid
GW-RW0146-06	22/3/06	19/9/06	<i>Location: Lai Wan Road</i> <i>Time Period: Whole day of general holidays (including Sundays) and any other days between 1900-0700 hrs on next day</i>	Valid
GW-RW0173-06	31/3/06	30/9/06	<i>Location: Butterfly Valley Road, Lai Chi Kok</i> <i>Time period: General holiday including Sundays between 0000-2300 hrs and any day not being a general holiday between 1900-2300</i>	Valid
GW-RW0192-06	7/4/06	6/10/06	<i>Location: Junction of Ching Cheung Road and Castle Peak Road</i> <i>Time Period: General holidays (including Sundays) between 0700-2300 hours and any other days between 1900-2300 hours</i>	Valid
GW-RW0244-06	27/4/06	26/9/06	<i>Location: Ching Cheung Road near Mei Foo Sun Chuen</i> <i>Time Period: General holiday (included Sundays) between 0700-2300 hours and any day not being a general holiday between 1900-2300 hours.</i>	Valid
GW-RW0257-06	4/5/06	3/10/06	<i>Location: Castle Peak Road near Ching Cheung Road</i> <i>Time Period: General holiday (includes Sundays) between 0700-2300 hours and any day not being a general holiday between 1900-2300 hours.</i>	Valid
GW-RW0258-06	5/5/06	4/10/06	<i>Location: Butterfly Valley</i> <i>Time Period: General holiday (includes Sundays) between 0000-2400 hours and any day not being a general holiday between 1900-0700 hours.</i>	Valid
GW-RW0269-06	15/5/06	14/11/06	<i>Location: Lai Po Road near Yuet Lun Street</i> <i>Time Period: General holiday (includes Sundays) between 0000-2400 hours and any day not being a general holiday between 1900-0700 hours.</i>	Valid
GW-RW0270-06	15/5/06	14/11/06	<i>Location: Lai Po Road near Hoi Lai Estate</i> <i>Time Period: General holiday (includes Sundays) between 0000-2400 hours and any day not being a general holiday between 1900-0700 hours.</i>	Valid
GW-RW0271-06	15/5/06	10/11/06	<i>Location: Ching Cheung Road near Butterfly Valley Road</i> <i>Time Period: Any day not being a general holiday between 2100-2400 hours (immediately following a general holiday) and between 2100-0700 hours (not immediately following a general holiday).</i>	Valid
GW-RW0276-06	15/5/06	11/11/06	<i>Location: Butterfly Valley Road near Lai Chi Kok Interchange</i> <i>Time Period: Any day not being a general holiday between 2100-2400 hours (immediately following a general holiday) and between 2100-0700 hours (not immediately following a general holiday).</i>	Valid
GW-RW0319-06	30/5/06	26/11/06	<i>Location: Ching Cheung Road near Butterfly Valley Road</i> <i>Time Period: General holiday (includes Sundays) between 0000-2400 hours and any day not being a general holiday between 1900-0700 hours.</i>	Valid
GW-RW0311-06	6/6/06	5/12/06	<i>Location: Butterfly Valley near O Pui Shan Boys' Home</i> <i>Time Period: General holiday (including Sundays) between 0700-2300 hours and any day not being a general holiday between 1900-2300 hours.</i>	Valid

Permit No.	Valid Period		Details	Status
	From	To		
GW-RW0381-06	17/7/06	16/12/06	<i>Location:</i> Kwai Chung Road near Lai Chi Kok Interchange <i>Time Period:</i> Any day not being a general holiday between 2100-2400 (immediately following a general holiday) and 2100-0700 (not immediately following a general holiday)	Valid
GW-RW0383-06	20/7/06	2/8/06	<i>Location:</i> Butterfly Valley Road near Lai Chi Kok Reception Centre <i>Time Period:</i> Any not being a general holiday between 2100-2400 (Immediately following a general holiday) and 2100-0700 (not immediately following a general holiday)	Valid
GW-RW0384-06	20/7/06	2/8/06	<i>Location:</i> Lai Po Road near Yuet Lun Street <i>Time Period:</i> Any day not being a general holiday between 2100-2400 (immediately following a general holiday) and 2100-0700 (not immediately following a general holiday)	Valid
GW-RW0393-06	27/7/06	25/1/07	<i>Location:</i> Lai Wan Road <i>Time Period:</i> Any day not being a general holiday between 2100-2400 (immediately following a general holiday) and 2100-0700 (not immediately following a general holiday)	Valid
GW-RW0408-06	02/8/06	30/12/06	<i>Location:</i> Lai Po Road near Hoi Lai Estate <i>Time Period:</i> Any day not being a general holiday between 2100-2400 (immediately following a general holiday) and 2100-0700 (not immediately following a general holiday)	Valid (new)
GW-RW0421-06	3/8/06	2/1/07	<i>Location:</i> Lai Po Road near Sham Mong Road <i>Time Period:</i> Any day not being a general holiday between 19:00 - 07:00 and 00:00 - 24:00 (general holiday including Sundays)	Valid (new)
GW-RW0414-06	16/8/06	30/8/06	<i>Location:</i> Lai Po Road near Yuet Lun Street <i>Time Period:</i> Any day not being a general holiday between 2100-2400 (immediately following a general holiday) and 2100-0700 (not immediately following a general holiday)	New and Expired
GW-RW0415-06	16/8/06	30/8/06	<i>Location:</i> Butterfly Valley Road near Lai Chi Kok Reception Centre <i>Time Period:</i> Any day not being a general holiday between 2100-2400 (immediately following a general holiday) and 2100-0700 (not immediately following a general holiday)	New and Expired

4.6 During site inspections in the reporting month, no non-conformance was identified. The observations and recommendations are summarized in **Table 4.2**.

Table 4.2 Observations and Recommendations of Site Audits

Parameters	Date	Observations and Recommendations	Follow-up
<i>Water Quality</i>	7-Aug-06	Accumulation of stagnant water was observed after rain at the deck of Bridge Area, D13 and S1. The Contractor was reminded to remove/spray larvicide onto stagnant water preventing mosquitoes from breeding.	The situation was found improved / rectified during the audit on 16-Aug-06.

Parameters	Date	Observations and Recommendations	Follow-up
	7-Aug-06	Sand and silt were observed inside the trench at the discharge outlet of the Aquased, at R3. The Contractor was reminded to remove sand and silt. Besides, the Contractor was reminded to review the Sedimentation System to maintain its efficiency.	The situation was found improved / rectified during the audit on 16-Aug -06.
	30-Aug-06	Accumulation of stagnant water was observed at LCK-R2. The Contractor was reminded to remove/spray larvicide onto stagnant water preventing mosquitoes from breeding.	The situation was found improved / rectified during the audit on 4-Sep -06.
Waste Chemical Management	7-Aug-06	General refuses were scattered on the ground at Abutment B. The Contractor was reminded to clear refuses regularly.	The situation was found improved / rectified during the audit on 16-Aug -06.

Summary of Exceedances

1-hr and 24-hr TSP Monitoring

4.7 No Action/Limit Level exceedance was recorded in the reporting month.

Construction Noise Monitoring

4.8 1 Action Level (noise complaint) exceedances was recorded on 31st August 2006. No Limit Level exceedance was recorded in the reporting month.

4.9 One complaint was referred by the Environmental Protection Department (EPD) to the Environmental Team (ET) Leader of the Project on 31st August 2006 regarding construction noise, dust and wastewater discharge between Lai Wan Road and Lai King Hill Road. According to RSS's record, rock dowel installation for slope stabilization at CCR-S1 was commenced on 22nd August 2006 and would likely last for at least 6 months. With reference to RSS's site diary, all site activities including drilling works at the concerned area were conducted between 8:00 and 18:00 daily. Ad hoc site observation carried out by the RSS confirmed that no construction activity was carried out after 18:00. Based on the information collected, the complaints were considered not justifiable. The investigation report was issued on 11th September 2006 and the detail of the complaint is shown in **Appendix M**.

Implementation Status of Event Action Plans

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

Summary of Complaint and Prosecution

4.11 Two public complaints were received in the reporting month.

4.12 One complaint was referred by the Integrated Complaint Centre (ICC) on 30th August 2006 about dust generated by the rock drilling work at the area between Mei Foo and Lai King Hill Road. According to RSS's record, rock dowel installation for slope stabilization at CCR-S1 was commenced on 22nd August 2006 and would likely last for at least 6 months. As

advised by the RSS, tarpaulin sheet covering and water spraying were provided by the Contractor to mitigate the dust nuisance generated from the rock drilling works. During the monthly site inspection on 4th September 2006, the ET observed that the work area was enclosed by tarpaulin sheets at three sides. Water was sprayed continuously at the drilling hole and head of the drilling rig was enclosed with a wet thick towel. Base on the information collected and the monitoring results, the complaints are considered not justifiable. The detail of the complaint is shown in **Appendix M**.

- 4.13 Another complaint was referred by the Environmental Protection Department (EPD) to the Environmental Team (ET) Leader of the Project on 31st August 2006 regarding construction noise, dust and wastewater discharge between Lai Wan Road and Lai King Hill Road. According to RSS's record, rock dowel installation for slope stabilization at CCR-S1 was commenced on 22nd August 2006 and would likely last for at least 6 months. With reference to RSS's site diary, all site activities including drilling works at the concerned area were conducted between 8:00 and 18:00 daily. Ad hoc site observation carried out by the RSS confirmed that no construction activity was carried out after 18:00. Based on the information collected, the complaints were considered not justifiable. The detail of the complaint is shown in **Appendix M**.
- 4.14 No prosecution was received in the reporting month.
- 4.15 There were 29 environmental complaints referred to the ET and 1 prosecution received since the commencement of the Project. The Complaint Log is attached in **Appendix M**.

5. FUTURE KEY ISSUES

Key Issues for the Coming Month

5.1 Key issues to be considered in the coming month include:

- Construction noise from excavation, construction of pump station, slope works and retaining wall at CCR-R1 to CCR-R6 and LCK-R1 to LCK-R2;
- Surface runoff generated at the areas CCR-S4, CCR-R3 and CCR-R6;
- Dust generation from stockpiles of dusty materials, exposed retain wall and Bulk excavation works; and
- Stagnant water accumulated on site after heavy rainfall.

Monitoring Schedule for the Next Month

5.2 The tentative monitoring schedule for the next month is shown in **Appendix C**.

Construction Program for the Next Month

5.3 The major construction activities in the coming month include:

- Rock dowel installation at slope CCR-S1 & CCR-S4.
- Bulk excavation works at slope CCR-S4, CCR-R3 and CCR-R6.
- Retaining wall construction at CCR-R1 to CCR-R6 and LCK-R1 to LCK-R2.
- Drainage works at Rest Garden area, Hoi Lai Estate and Castle Peak Road.
- Offsite fabrication of parapet and noise barrier.
- Cast in-situ of slip roads C and D.
- Parapet installation for Main Viaduct and slip roads A to D.
- Erection of noise barrier at slip roads A, C and D.
- Construction of Wai Man Tsuen pump house and Irrigation Pump House near Pier C14.

5.4 The tentative construction program for the Project is provided in **Appendix L**.

6. CONCLUSIONS AND RECOMMENDATIONS

Conclusions

- 6.1 Environmental monitoring works were performed in the reporting month and all monitoring results were checked and reviewed.
- 6.2 No Action/Limit Level exceedance for both 1-hour TSP and 24-hours TSP was recorded in the reporting month.
- 6.3 One Action Level (noise complaint) exceedance was recorded on 31st August 2006. No Limit Level exceedance was recorded in the reporting month
- 6.4 2 complaints were received in the reporting month. No prosecution was received in the reporting month.

Recommendations

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

Water Impact

- To ensure properly maintenance for de-silting facilities
- To review and implement temporary drainage system for the upcoming wet season.
- To review the capacity of de-silting facilities for discharge.
- To avoid stagnant water accumulation on site.

Noise Impact

- To provide temporary noise barriers for noisy activities, such as rock dowel installation.
- To review the works sequence of site activities so as to reduce the number of noisy equipment in concurrent operation.
- To employ quiet powered mechanical equipment if possible.
- To ensure compliance of CNP conditions during restricted-hour works.

Dust Impact

- To ensure water spray is applied for the dust emissive works, such as soil nail installation, loading and unloading of soil materials, excavation works and rock dowel installation.
- To cover soil stockpiles and exposed slope surface by impervious sheets or other means.
- To ensure that all vehicles carrying dusty material are properly covered before leaving the site.

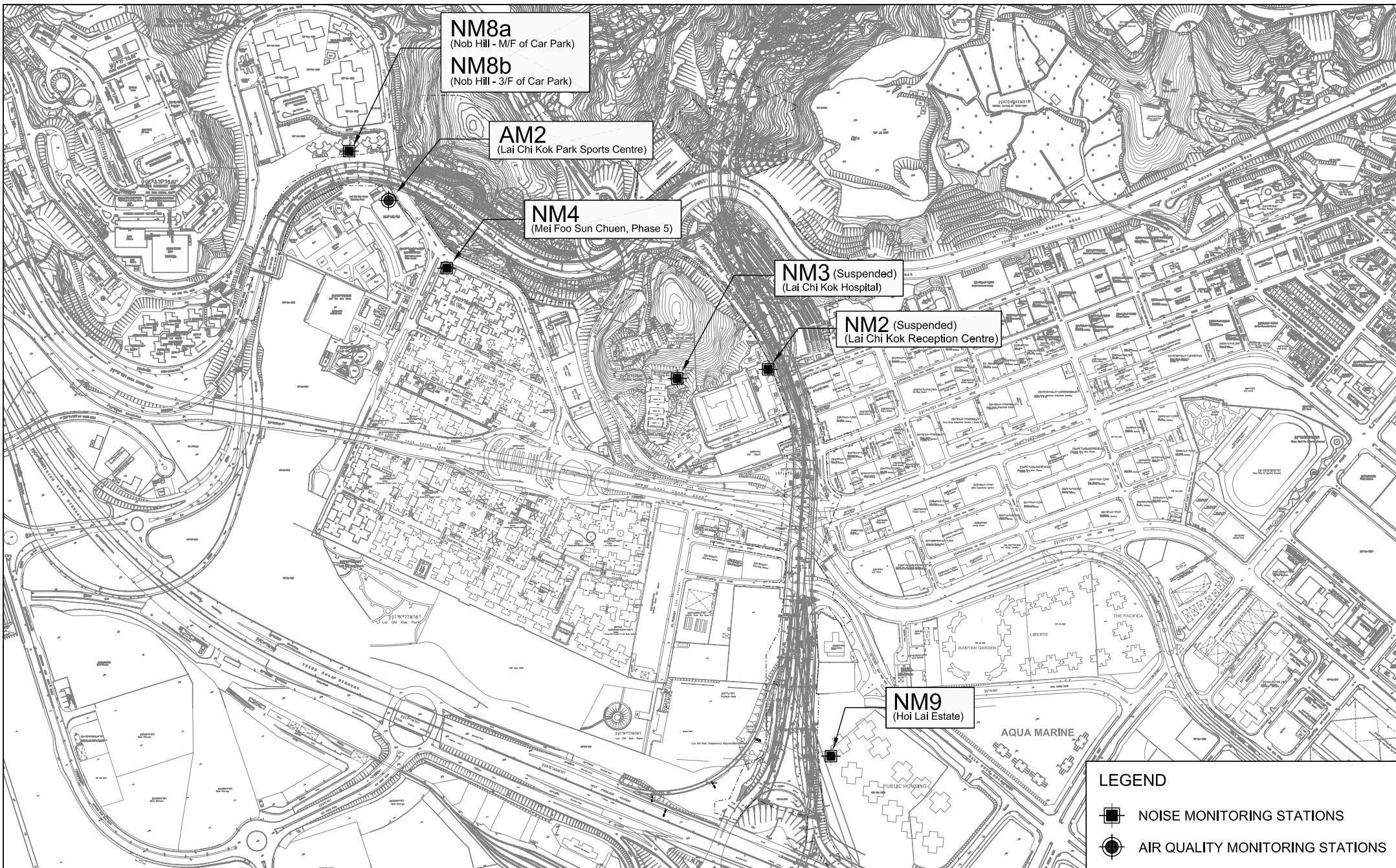
Waste / Chemical Management

- To ensure the performance of sorting of C&D materials at source (during generation);
- To carry out inspection of dump truck at site exit to ensure inert and non-inert C&D

materials are properly segregated before removing off site.

- To ensure proper collection and disposal of rubbish generated on site.
- To avoid any discharge or accidental spillage of chemical waste directly from the site.

FIGURES



Title

ROUTE 8 (PREVIOUSLY KNOWN AS ROUTE 9) BETWEEN CHEUNG SHA WAN AND SHA TIN
CONTRACT HY/2003/01 - LAI CHI KOK VIADUCT

LOCATIONS OF MONITORING STATIONS

Scale

1 : 8000 (A4)

Date

2006

LEGEND

■ NOISE MONITORING STATIONS

● AIR QUALITY MONITORING STATIONS

Project No.

MA3024

Figure No.

1

CINOTECH
consultants limited

**APPENDIX A
ACTION AND LIMIT LEVELS**

Appendix A - Action and Limit Levels (LCKV)

1-Hour TSP

Location	Action Level, $\mu\text{g}/\text{m}^3$	Limit Level, $\mu\text{g}/\text{m}^3$
AM2	301	500

24-Hour TSP

Location	Action Level, $\mu\text{g}/\text{m}^3$	Limit Level, $\mu\text{g}/\text{m}^3$
AM2	177	260

Construction Noise

Period	Action Level	Limit Level
0700-1900 hrs on normal weekdays	When one documented complaint is received	75 dB(A)
0700-2300 hrs on holidays & 1900-2300 hrs on all other days		70* dB(A)
2300-0700 hrs of next day		55* dB(A)

(*) The Area Sensitivity Rating for the noise monitoring stations (NM4, NM8a, NM8b and NM9) is taken as C, according to Table 1 of EPD's Technical Memorandum on Noise from Construction Work other than Percussive Piling.

**APPENDIX B
COPIES OF CALIBRATION
CERTIFICATES**

High-Volume TSP Sampler

5-POINT CALIBRATION DATA SHEET

CINOTECH

File No. MA3024/20/0018

Station Lai Chi Kok Sport Centre (AM2)
 Date: 20-Jul-06
 Equipment No.: A-01-20

Operator: WK
 Next Due Date: 19-Sep-06
 Serial No. 0818

Ambient Condition			
Temperature, Ta (K)	302.9	Pressure, Pa (mmHg)	757

Orifice Transfer Standard Information					
Equipment No.:	A-04-04	Slope, mc	0.0575	Intercept, bc	0.0395
Last Calibration Date:	13-Mar-06	$mc \times Qstd + bc = [\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$			
Next Calibration Date:	12-Mar-07	$Qstd = \{[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2} - bc\} / mc$			

Calibration of TSP Sampler					
Calibration Point	Orifice			HVS	
	ΔH (orifice), in. of water	[ΔH x (Pa/760) x (298/Ta)] ^{1/2}	Qstd (CFM) X - axis	ΔW (HVS), in. of oil	[ΔW x (Pa/760) x (298/Ta)] ^{1/2} Y-axis
1	11.7	3.39	58.20	8.3	2.85
2	10.6	3.22	55.36	6.9	2.60
3	8.0	2.80	48.01	5.1	2.24
4	6.4	2.50	42.87	3.5	1.85
5	3.2	1.77	30.11	1.7	1.29

By Linear Regression of Y on X

Slope, mw = 0.0551

Intercept, bw : -0.4174

Correlation coefficient* = 0.9948

*If Correlation Coefficient < 0.990, check and recalibrate.

Set Point Calculation

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

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

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

Therefore, Set Point; W = (mw x Qstd + bw)² x (760 / Pa) x (Ta / 298) = 3.88

Remarks: _____

Conducted by: Wk Tang
 Checked by: HK

Signature: [Signature]
 Signature: [Signature]

Date: 20 Jul 06
 Date: 20 July 06

WELLAB LTD.

Unit C, 1/F, Goldlion Holdings Center
13-15 Yuen Shun Circuit,
Shatin, Hong Kong.
Tel: (852) 2898 7388
Fax: (852) 2898 7076

TEST REPORT

APPLICANT: Cinotech Consultants Limited
1602-1610 Delta House,
3 On Yiu Street,
Shatin, N.T.

Test Report No.:	C/06/60502
Date of Issue:	2006-05-02
Date Received:	2006-05-01
Date Tested:	2006-05-01
Date Completed:	2006-05-02

ATTN: Mr. Henry Leung

Page: 1 of 1

Certificate of Calibration

Item for calibration:

Description : RS232 Integral Vane Digital Anemometer
Manufacturer : AZ Instrument
Model No. : 451104
Serial No. : 9020746
Equipment No. : A-03-01

Test conditions:

Room Temperature : 21 degree Celsius
Relative Humidity : 66%
Pressure : 1018.4 kPa

Methodology:

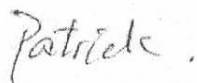
The anemometer has been calibrated in accordance with the documented procedures and using standard(s) and instrument(s) which are recommended by the manufacturer, or equivalent.

Results:

	Reference Set Point	Instrument Readings
Measuring Air Velocity, m/s	2.00	2.00
Temperature, °C	21.0	21.0

PREPARED AND CHECKED BY:

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



PATRICK TSE

Laboratory Manager



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

AIR POLLUTION MONITORING EQUIPMENT

ORIFICE TRANSFER STANDARD CERTIFICATION WORKSHEET TE-5025A

Date - Mar 13, 2006 Rootsmeter S/N 9833620 Ta (K) - 294
 Operator Tisch Orifice I.D. - 0993 Pa (mm) - 746.76

PLATE OR Run #	VOLUME START (m3)	VOLUME STOP (m3)	DIFF VOLUME (m3)	DIFF TIME (min)	METER DIFF Hg (mm)	ORFICE DIFF H2O (in.)
1	NA	NA	1.00	1.3890	3.2	2.00
2	NA	NA	1.00	0.9850	6.3	4.00
3	NA	NA	1.00	0.8810	7.8	5.00
4	NA	NA	1.00	0.8410	8.6	5.50
5	NA	NA	1.00	0.6950	12.5	8.00

DATA TABULATION

Vstd	(x axis) Qstd	(y axis)	Va	(x axis) Qa	(y axis)
0.9917	0.7139	1.4113	0.9957	0.7168	0.8874
0.9876	1.0026	1.9959	0.9916	1.0067	1.2549
0.9854	1.1185	2.2315	0.9894	1.1231	1.4030
0.9844	1.1706	2.3405	0.9884	1.1753	1.4715
0.9792	1.4090	2.8227	0.9832	1.4147	1.7747
Qstd slope (m) = 2.03154			Qa slope (m) = 1.27212		
intercept (b) = -0.03970			intercept (b) = -0.02496		
coefficient (r) = 0.99999			coefficient (r) = 0.99999		
y axis = SQRT[H2O(Pa/760) (298/Ta)]			y axis = SQRT[H2O(Ta/Pa)]		

CALCULATIONS

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

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

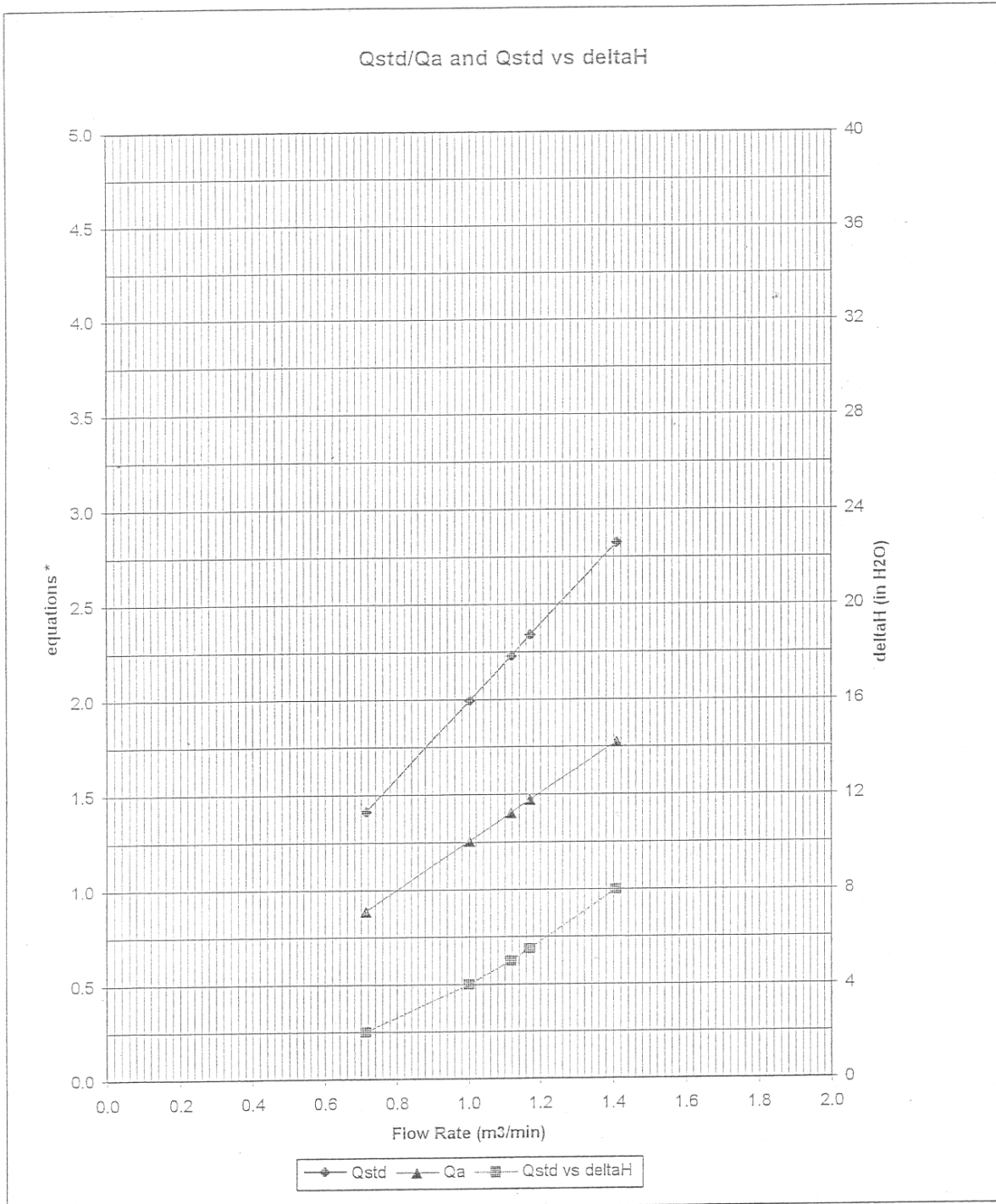
For subsequent flow rate calculations:

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



TISCH ENVIROMENTAL, INC.
 145 SOUTH MIAMI AVE.
 VILLAGE OF CLEVES, OH 45002
 513.467.9000
 877.263.7610 TOLL FREE
 513.467.9009 FAX
 WWW.TISCH-ENV.COM

AIR POLLUTION MONITORING EQUIPMENT



* y-axis equations:

Qstd series:
$$\sqrt{\Delta H \left(\frac{P_a}{P_{std}} \right) \left(\frac{T_{std}}{T_a} \right)}$$

Qa series:
$$\sqrt{(\Delta H (T_a / P_a))}$$

#0993

WELLAB LTD.

Unit C, 1/F, Goldlion Holdings Center
13-15 Yuen Shun Circuit,
Shatin, Hong Kong.
Tel: (852) 2898 7388
Fax: (852) 2898 7076

TEST REPORT

APPLICANT: Cinotech Consultants Limited
1602-1610 Delta House,
3 On Yiu Street,
Shatin, N.T.

Test Report No.:	C/N/51216/1
Date of Issue:	2005-12-16
Date Received:	2005-12-15
Date Tested:	2005-12-15
Date Completed:	2005-12-16
Next Due Date:	2006-12-15

ATTN: Mr. Henry Leung

Page: 1 of 1

Certificate of Calibration

Item for calibration:

Description	: Integrating Sound Level Meter
Manufacturer	: Brüel & Kjær
Model No.	: B&K 2238
Serial No.	: 2337665
Microphone No.	: 2289749
Equipment No.	: N-01-01

Test conditions:

Room Temperature	: 20 degree Celsius
Relative Humidity	: 63%

Test Specifications:

Performance checking at 94 and 114 dB

Methodology:

In-house method, according to manufacturer instruction manual

Results:

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

PREPARED AND CHECKED BY:

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



PATRICK TSE
Operation Manager

WELLAB LTD.

Unit C, 1/F, Goldlion Holdings Center
13-15 Yuen Shun Circuit,
Shatin, Hong Kong.
Tel: (852) 2898 7388
Fax: (852) 2898 7076

TEST REPORT

APPLICANT: Cinotech Consultants Limited
1602-1610 Delta House,
3 On Yiu Street,
Shatin, N.T.

Test Report No.:	C/N/51116/1
Date of Issue:	2005-11-16
Date Received:	2005-11-15
Date Tested:	2005-11-15
Date Completed:	2005-11-16
Next Due Date:	2006-11-15

ATTN: Mr. Henry Leung

Page: 1 of 1

Certificate of Calibration

Item for calibration:

Description	: Integrating Sound Level Meter
Manufacturer	: Brüel & Kjær
Model No.	: B&K 2238
Serial No.	: 2337666
Microphone No.	: 2289750
Equipment No.	: N-01-02

Test conditions:

Room Temperature	: 20 degree Celsius
Relative Humidity	: 60%

Test Specifications:

Performance checking at 94 and 114 dB

Methodology:

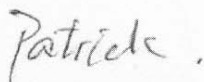
In-house method, according to manufacturer instruction manual

Results:

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

PREPARED AND CHECKED BY:

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



PATRICK TSE
Operation Manager

WELLAB LTD.

Unit C, 1/F, Goldlion Holdings Center
13-15 Yuen Shun Circuit,
Shatin, Hong Kong.
Tel: (852) 2898 7388
Fax: (852) 2898 7076

TEST REPORT

APPLICANT: Cinotech Consultants Limited
1602-1610 Delta House,
3 On Yiu Street,
Shatin, N.T.

Test Report No.:	C/N/50905-1
Date of Issue:	2005-09-06
Date Received:	2005-09-05
Date Tested:	2005-09-06
Date Completed:	2005-09-06
Next Due Date:	2006-09-05

ATTN: Mr. Henry Leung

Page: 1 of 1

Certificate of Calibration

Item for calibration:

Description	: Integrating Sound Level Meter
Manufacturer	: Brüel & Kjær
Model No.	: B&K 2238
Serial No.	: 2359311
Microphone No.	: 2346382
Equipment No.	: N-01-03

Test conditions:

Room Temperature	: 22 degree Celsius
Relative Humidity	: 65%

Test Specifications:

Performance checking at 94 and 114 dB

Methodology:

In-house method, according to manufacturer instruction manual

Results:

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

PREPARED AND CHECKED BY:

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

Patrick

PATRICK TSE
Laboratory Manager

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WELLAB LTD.

Unit C, 1/F, Goldlion Holdings Center
13-15 Yuen Shun Circuit,
Shatin, Hong Kong.
Tel: (852) 2898 7388
Fax: (852) 2898 7076

TEST REPORT

APPLICANT: Cinotech Consultants Limited
1602-1610 Delta House,
3 On Yiu Street,
Shatin, N.T.

Test Report No.:	C/N/50905-2
Date of Issue:	2005-09-06
Date Received:	2005-09-05
Date Tested:	2005-09-05
Date Completed:	2005-09-06
Next Due Date:	2006-09-05

ATTN: Mr. Henry Leung

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Certificate of Calibration

Item for calibration:

Description	: Integrating Sound Level Meter
Manufacturer	: Brüel & Kjær
Model No.	: B&K 2238
Serial No.	: 2359303
Equipment No.	: N-01-04

Test conditions:

Room Temperature	: 21 degree Celsius
Relative Humidity	: 62%
Pressure	: 1006.5hPa

Test Specifications:

Performance checking at 94 and 114 dB

Methodology:

In-house method, according to manufacturer instruction manual

Results:

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

PREPARED AND CHECKED BY:

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



PATRICK TSE
Operation Manager

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TEST REPORT

APPLICANT: Cinotech Consultants Limited
1602-1610 Delta House,
3 On Yiu Street,
Shatin, N.T.

Test Report No.:	C/N/51015/1
Date of Issue:	2005-10-15
Date Received:	2005-10-13
Date Tested:	2005-10-14
Date Completed:	2005-10-15
Next Due Date:	2006-10-14

ATTN: Mr. Henry Leung

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Certificate of Calibration

Item for calibration:

Description	: Integrating Sound Level Meter
Manufacturer	: Brüel & Kjær
Model No.	: B&K 2238
Serial No.	: 2394976
Microphone No.	: 2407349
Equipment No.	: N-01-05

Test conditions:

Room Temperature	: 22 degree Celsius
Relative Humidity	: 65%

Test Specifications:

Performance checking at 94 and 114 dB

Methodology:

In-house method, according to manufacturer instruction manual

Results:

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

PREPARED AND CHECKED BY:

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Patrick

PATRICK TSE
Operation Manager

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TEST REPORT

APPLICANT: Cinotech Consultants Limited
1602-1610 Delta House,
3 On Yiu Street,
Shatin, N.T.

Test Report No.:	C/05/1115-1
Date of Issue:	2005-11-15
Date Received:	2005-11-14
Date Tested:	2005-11-15
Date Completed:	2005-11-15
Next Due Date:	2006-11-14

ATTN: Mr. Henry Leung

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Item for calibration:

Description	: Acoustical Calibrator
Manufacturer	: Brüel & Kjær
Model No.	: 4231
Serial No.	: 2326353
Project No.	: C13
Equipment No.	: N-02-01

Test conditions:

Room Temperature	: 20 degree Celsius
Relative Humidity	: 65%
Pressure	: 1015.2 hPa

Methodology:

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

Results:

Sound Pressure Level	Measured SPL	Tolerance
At 94 dB SPL	94.0	94.0 ± 0.1 dB

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Patrick

PATRICK TSE
Operation Manager

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13-15 Yuen Shun Circuit,
Shatin, Hong Kong.
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Fax: (852) 2898 7076

TEST REPORT

APPLICANT: Cinotech Consultants Limited
1602-1610 Delta House,
3 On Yiu Street,
Shatin, N.T.

Test Report No.:	C/06/60304
Date of Issue:	2006-03-04
Date Received:	2006-03-03
Date Tested:	2006-03-03
Date Completed:	2006-03-04
Next Due Date:	2007-03-04

ATTN: Mr. Henry Leung

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Item for calibration:

Description	: Acoustical Calibrator
Manufacturer	: Brüel & Kjær
Model No.	: 4231
Serial No.	: 2343007
Project No.	: C13
Equipment No.	: N-02-02

Test conditions:

Room Temperature	: 20 degree Celsius
Relative Humidity	: 71%
Pressure	: 1020.1hPa

Methodology:

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

Results:

Sound Pressure Level	Measured SPL	Tolerance
At 94 dB SPL	94.0	94.0 ± 0.2 dB

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Operation Manager

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Shatin, Hong Kong.
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TEST REPORT

APPLICANT: **Cinotech Consultants Limited**
1602-1610 Delta House,
3 On Yiu Street,
Shatin, N.T.

Test Report No.:	C/N/50905-1A
Date of Issue:	2005-09-06
Date Received:	2005-09-05
Date Tested:	2005-09-05
Date Completed:	2005-09-06
Next Due Date:	2006-09-05

ATTN: **Mr. Henry Leung**

Page: 1 of 1

Item for calibration:

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

Test conditions:

Room Temperature	: 21 degree Celsius
Relative Humidity	: 62%
Pressure	: 1006.5hPa

Methodology:

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

Results:

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

PREPARED AND CHECKED BY:

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

Patrick .

PATRICK TSE
Operation Manager

**APPENDIX C
ENVIRONMENTAL MONITORING AND
AUDIT SCHEDULE**

**Environmental Monitoring for Lai Chi Kok Viaduct
Tentative Air Quality and Noise Monitoring Schedule for August 2006**

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
30-Jul	31-Jul	1-Aug	2-Aug	3-Aug	4-Aug	5-Aug
		1 hr TSP	1 hr TSP Noise 24 hrs TSP	1 hr TSP		
6-Aug	7-Aug	8-Aug	9-Aug	10-Aug	11-Aug	12-Aug
		1 hr TSP 24 hrs TSP	1 hr TSP Noise	1 hr TSP		
13-Aug	14-Aug	15-Aug	16-Aug	17-Aug	18-Aug	19-Aug
	24 hrs TSP	1 hr TSP		1 hr TSP Noise	1 hr TSP	24 hrs TSP
20-Aug	21-Aug	22-Aug	23-Aug	24-Aug	25-Aug	26-Aug
	1 hr TSP	1 hr TSP Noise		1 hr TSP	24 hrs TSP	
27-Aug	28-Aug	29-Aug	30-Aug	31-Aug	1-Sep	2-Sep
	1 hr TSP	1 hr TSP Noise		24 hrs TSP	1 hr TSP	

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

AM2 Lai Chi Kok Sports Centre
 NM4 Mei Foo Sun Chuen, Phase 5
 NM8a M/F of Nob Hill
 NM8b 3/F of Nob Hill
 NM9 G/F, Hoi Fai House, Hoi Lai Estate

**Environmental Monitoring for Lai Chi Kok Viaduct
Tentative Air Quality and Noise Monitoring Schedule for September 2006**

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
27-Aug	28-Aug	29-Aug	30-Aug	31-Aug	1-Sep	2-Sep
	1 hr TSP	1 hr TSP Noise		24 hrs TSP	1 hr TSP	
3-Sep	4-Sep	5-Sep	6-Sep	7-Sep	8-Sep	9-Sep
		1 hr TSP	24 hrs TSP	1 hr TSP Noise	1 hr TSP	
10-Sep	11-Sep	12-Sep	13-Sep	14-Sep	15-Sep	16-Sep
		1 hr TSP 24 hrs TSP	1 hr TSP Noise	1 hr TSP		
17-Sep	18-Sep	19-Sep	20-Sep	21-Sep	22-Sep	23-Sep
	24 hrs TSP	1 hr TSP	1 hr TSP Noise	1 hr TSP		24 hrs TSP
24-Sep	25-Sep	26-Sep	27-Sep	28-Sep	29-Sep	30-Sep
	1 hr TSP	1 hr TSP Noise		1 hr TSP	24 hrs TSP	

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

- AM2 Lai Chi Kok Sports Centre
- NM4 Mei Foo Sun Chuen, Phase 5
- NM8a M/F of Nob Hill
- NM8b 3/F of Nob Hill
- NM9 G/F, Hoi Fai House, Hoi Lai Estate

APPENDIX D
WIND DATA

Appendix D - Wind Data

Date	Time	Wind Speed m/s	Direction
1-Aug-2006	00:00	1.3	ENE
1-Aug-2006	01:00	1.3	ENE
1-Aug-2006	02:00	0.4	ENE
1-Aug-2006	03:00	0.4	NE
1-Aug-2006	04:00	0.4	NE
1-Aug-2006	05:00	1.3	ENE
1-Aug-2006	06:00	1.8	ENE
1-Aug-2006	07:00	3.1	ENE
1-Aug-2006	08:00	2.7	ENE
1-Aug-2006	09:00	3.1	NE
1-Aug-2006	10:00	2.7	ENE
1-Aug-2006	11:00	3.1	ENE
1-Aug-2006	12:00	3.1	NE
1-Aug-2006	13:00	2.2	ENE
1-Aug-2006	14:00	1.3	NE
1-Aug-2006	15:00	2.2	ENE
1-Aug-2006	16:00	1.8	ENE
1-Aug-2006	17:00	1.8	ENE
1-Aug-2006	18:00	1.8	ENE
1-Aug-2006	19:00	0.4	ENE
1-Aug-2006	20:00	0.4	ENE
1-Aug-2006	21:00	0.4	ENE
1-Aug-2006	22:00	0.4	ENE
1-Aug-2006	23:00	0.4	ENE
2-Aug-2006	00:00	0.4	SW
2-Aug-2006	01:00	0.4	E
2-Aug-2006	02:00	0.4	SSW
2-Aug-2006	03:00	0	WSW
2-Aug-2006	04:00	0	---
2-Aug-2006	05:00	0	WNW
2-Aug-2006	06:00	0	WNW
2-Aug-2006	07:00	0	WNW
2-Aug-2006	08:00	0	WNW
2-Aug-2006	09:00	0	NE
2-Aug-2006	10:00	3.1	SW
2-Aug-2006	11:00	3.1	WSW
2-Aug-2006	12:00	3.1	WSW
2-Aug-2006	13:00	1.8	WSW
2-Aug-2006	14:00	1.8	SW
2-Aug-2006	15:00	2.2	E
2-Aug-2006	16:00	4.3	N
2-Aug-2006	17:00	4.5	N
2-Aug-2006	18:00	3.9	ENE
2-Aug-2006	19:00	2.7	W
2-Aug-2006	20:00	2.9	SW
2-Aug-2006	21:00	3.8	S
2-Aug-2006	22:00	3.9	ESE
2-Aug-2006	23:00	2.6	---
3-Aug-2006	00:00	2.3	N
3-Aug-2006	01:00	1.3	N
3-Aug-2006	02:00	1.8	E
3-Aug-2006	03:00	2.2	E
3-Aug-2006	04:00	2.2	---
3-Aug-2006	05:00	1.3	E

Appendix D - Wind Data

Date	Time	Wind Speed m/s	Direction
3-Aug-2006	06:00	1.3	---
3-Aug-2006	07:00	0	E
3-Aug-2006	08:00	0	E
3-Aug-2006	09:00	0.4	N
3-Aug-2006	10:00	0.9	N
3-Aug-2006	11:00	0.4	NNE
3-Aug-2006	12:00	0.9	ENE
3-Aug-2006	13:00	2.2	ENE
3-Aug-2006	14:00	2.7	ENE
3-Aug-2006	15:00	3.1	ENE
3-Aug-2006	16:00	3.6	ENE
3-Aug-2006	17:00	3.1	ENE
3-Aug-2006	18:00	3.6	ENE
3-Aug-2006	19:00	2.7	ENE
3-Aug-2006	20:00	2.2	ENE
3-Aug-2006	21:00	1.8	ENE
3-Aug-2006	22:00	1.8	NE
3-Aug-2006	23:00	2.2	ENE
4-Aug-2006	00:00	1.3	ENE
4-Aug-2006	01:00	2.2	ENE
4-Aug-2006	02:00	2.2	ENE
4-Aug-2006	03:00	2.7	ENE
4-Aug-2006	04:00	2.2	NE
4-Aug-2006	05:00	3.1	NE
4-Aug-2006	06:00	2.2	NE
4-Aug-2006	07:00	1.8	NE
4-Aug-2006	08:00	3.1	ENE
4-Aug-2006	09:00	3.6	NE
4-Aug-2006	10:00	4.5	ENE
4-Aug-2006	11:00	4	NE
4-Aug-2006	12:00	3.1	NE
4-Aug-2006	13:00	4	NE
4-Aug-2006	14:00	3.6	NE
4-Aug-2006	15:00	3.1	NE
4-Aug-2006	16:00	3.1	NE
4-Aug-2006	17:00	3.1	ENE
4-Aug-2006	18:00	3.1	NE
4-Aug-2006	19:00	1.8	NE
4-Aug-2006	20:00	0.9	ENE
4-Aug-2006	21:00	0.4	NE
4-Aug-2006	22:00	0.9	NE
4-Aug-2006	23:00	1.3	ENE
5-Aug-2006	00:00	1.8	NE
5-Aug-2006	01:00	2.2	ENE
5-Aug-2006	02:00	1.8	ENE
5-Aug-2006	03:00	2.2	ENE
5-Aug-2006	04:00	1.8	ENE
5-Aug-2006	05:00	1.8	ENE
5-Aug-2006	06:00	0.9	NE
5-Aug-2006	07:00	0.4	N
5-Aug-2006	08:00	0.9	NE
5-Aug-2006	09:00	2.7	NE
5-Aug-2006	10:00	3.1	NE
5-Aug-2006	11:00	2.2	ENE

Appendix D - Wind Data

Date	Time	Wind Speed m/s	Direction
5-Aug-2006	12:00	2.7	ENE
5-Aug-2006	13:00	3.6	ENE
5-Aug-2006	14:00	2.7	NE
5-Aug-2006	15:00	2.2	NE
5-Aug-2006	16:00	2.2	NE
5-Aug-2006	17:00	1.8	ENE
5-Aug-2006	18:00	1.3	NE
5-Aug-2006	19:00	1.3	ENE
5-Aug-2006	20:00	1.8	ENE
5-Aug-2006	21:00	2.2	ENE
5-Aug-2006	22:00	2.2	ENE
5-Aug-2006	23:00	1.3	ENE
6-Aug-2006	00:00	1.3	NE
6-Aug-2006	01:00	1.3	ENE
6-Aug-2006	02:00	0.9	ENE
6-Aug-2006	03:00	0.4	ENE
6-Aug-2006	04:00	0	ENE
6-Aug-2006	05:00	0	ENE
6-Aug-2006	06:00	0	ENE
6-Aug-2006	07:00	0	---
6-Aug-2006	08:00	0.4	ENE
6-Aug-2006	09:00	0.4	ENE
6-Aug-2006	10:00	0.4	NNE
6-Aug-2006	11:00	0.4	NNE
6-Aug-2006	12:00	0.4	NNE
6-Aug-2006	13:00	0.9	N
6-Aug-2006	14:00	0.4	N
6-Aug-2006	15:00	0.4	NE
6-Aug-2006	16:00	0	SSW
6-Aug-2006	17:00	0.4	SW
6-Aug-2006	18:00	0.4	SW
6-Aug-2006	19:00	0	SSW
6-Aug-2006	20:00	0	SW
6-Aug-2006	21:00	0	SW
6-Aug-2006	22:00	0	SW
6-Aug-2006	23:00	0	SSW
7-Aug-2006	00:00	0	S
7-Aug-2006	01:00	0	S
7-Aug-2006	02:00	0	---
7-Aug-2006	03:00	0	S
7-Aug-2006	04:00	0	---
7-Aug-2006	05:00	0	---
7-Aug-2006	06:00	0	S
7-Aug-2006	07:00	0	S
7-Aug-2006	08:00	0	SSW
7-Aug-2006	09:00	0.4	SSW
7-Aug-2006	10:00	0.4	SW
7-Aug-2006	11:00	0.4	WSW
7-Aug-2006	12:00	0.9	SW
7-Aug-2006	13:00	0.9	SW
7-Aug-2006	14:00	0.9	SW
7-Aug-2006	15:00	0.9	W
7-Aug-2006	16:00	0.9	W
7-Aug-2006	17:00	0.4	N

Appendix D - Wind Data

Date	Time	Wind Speed m/s	Direction
7-Aug-2006	18:00	0.4	WSW
7-Aug-2006	19:00	0	W
7-Aug-2006	20:00	0	W
7-Aug-2006	21:00	0	W
7-Aug-2006	22:00	0	SE
7-Aug-2006	23:00	0	NNW
8-Aug-2006	00:00	0	SSW
8-Aug-2006	01:00	0	WSW
8-Aug-2006	02:00	0	WSW
8-Aug-2006	03:00	0	WSW
8-Aug-2006	04:00	0	WSW
8-Aug-2006	05:00	0	SW
8-Aug-2006	06:00	0	SSW
8-Aug-2006	07:00	0	SSW
8-Aug-2006	08:00	0	SSW
8-Aug-2006	09:00	0	SSW
8-Aug-2006	10:00	0.9	S
8-Aug-2006	11:00	2.2	SW
8-Aug-2006	12:00	2.2	WSW
8-Aug-2006	13:00	0.4	W
8-Aug-2006	14:00	0.9	SW
8-Aug-2006	15:00	1.8	SW
8-Aug-2006	16:00	1.8	SSW
8-Aug-2006	17:00	1.3	SSW
8-Aug-2006	18:00	0.4	S
8-Aug-2006	19:00	0	SE
8-Aug-2006	20:00	0	---
8-Aug-2006	21:00	0	SE
8-Aug-2006	22:00	0	SE
8-Aug-2006	23:00	0	---
9-Aug-2006	00:00	0	---
9-Aug-2006	01:00	0	---
9-Aug-2006	02:00	0	SE
9-Aug-2006	03:00	0	SE
9-Aug-2006	04:00	0	SE
9-Aug-2006	05:00	0	---
9-Aug-2006	06:00	0	---
9-Aug-2006	07:00	0	---
9-Aug-2006	08:00	0	SE
9-Aug-2006	09:00	0	SE
9-Aug-2006	10:00	1.3	SW
9-Aug-2006	11:00	0.9	WSW
9-Aug-2006	12:00	1.3	SW
9-Aug-2006	13:00	1.8	SW
9-Aug-2006	14:00	0.9	SW
9-Aug-2006	15:00	0.9	WSW
9-Aug-2006	16:00	0.9	NNE
9-Aug-2006	17:00	0.9	WNW
9-Aug-2006	18:00	0.9	WNW
9-Aug-2006	19:00	0.4	E
9-Aug-2006	20:00	0.4	E
9-Aug-2006	21:00	0.9	N
9-Aug-2006	22:00	0.4	WSW
9-Aug-2006	23:00	0	WSW

Appendix D - Wind Data

Date	Time	Wind Speed m/s	Direction
10-Aug-2006	00:00	0	WSW
10-Aug-2006	01:00	0	---
10-Aug-2006	02:00	0	---
10-Aug-2006	03:00	0	WSW
10-Aug-2006	04:00	0	---
10-Aug-2006	05:00	0	---
10-Aug-2006	06:00	0	---
10-Aug-2006	07:00	0	---
10-Aug-2006	08:00	0	WSW
10-Aug-2006	09:00	0.4	SW
10-Aug-2006	10:00	0.4	N
10-Aug-2006	11:00	0.9	N
10-Aug-2006	12:00	1.3	ENE
10-Aug-2006	13:00	0.9	ENE
10-Aug-2006	14:00	0.4	ENE
10-Aug-2006	15:00	0	ENE
10-Aug-2006	16:00	0	ENE
10-Aug-2006	17:00	0	ENE
10-Aug-2006	18:00	0	SW
10-Aug-2006	19:00	0	SW
10-Aug-2006	20:00	0	SW
10-Aug-2006	21:00	0	SW
10-Aug-2006	22:00	0	SW
10-Aug-2006	23:00	0.4	ENE
11-Aug-2006	00:00	2.2	ENE
11-Aug-2006	01:00	2.7	ENE
11-Aug-2006	02:00	2.7	ENE
11-Aug-2006	03:00	0.9	ENE
11-Aug-2006	04:00	0.9	ENE
11-Aug-2006	05:00	0	NE
11-Aug-2006	06:00	0.4	E
11-Aug-2006	07:00	0.4	ENE
11-Aug-2006	08:00	0.4	ENE
11-Aug-2006	09:00	0.4	ENE
11-Aug-2006	10:00	0.4	ESE
11-Aug-2006	11:00	1.3	ENE
11-Aug-2006	12:00	1.8	NE
11-Aug-2006	13:00	1.3	NE
11-Aug-2006	14:00	1.8	ENE
11-Aug-2006	15:00	1.8	ENE
11-Aug-2006	16:00	0.9	SW
11-Aug-2006	17:00	0.4	SW
11-Aug-2006	18:00	0	SW
11-Aug-2006	19:00	0	SW
11-Aug-2006	20:00	0.4	SSW
11-Aug-2006	21:00	0	ESE
11-Aug-2006	22:00	0.4	SSW
11-Aug-2006	23:00	0	SW
12-Aug-2006	00:00	0.9	ENE
12-Aug-2006	01:00	0.4	S
12-Aug-2006	02:00	0	S
12-Aug-2006	03:00	1.3	N
12-Aug-2006	04:00	2.2	NE
12-Aug-2006	05:00	1.3	NE

Appendix D - Wind Data

Date	Time	Wind Speed m/s	Direction
12-Aug-2006	06:00	0.9	N
12-Aug-2006	07:00	1.8	NE
12-Aug-2006	08:00	2.7	ENE
12-Aug-2006	09:00	2.2	ENE
12-Aug-2006	10:00	2.7	NE
12-Aug-2006	11:00	2.7	NE
12-Aug-2006	12:00	3.1	NE
12-Aug-2006	13:00	3.1	NE
12-Aug-2006	14:00	2.7	ENE
12-Aug-2006	15:00	2.2	ENE
12-Aug-2006	16:00	2.2	ENE
12-Aug-2006	17:00	1.8	NE
12-Aug-2006	18:00	2.2	ENE
12-Aug-2006	19:00	1.8	ENE
12-Aug-2006	20:00	1.8	NE
12-Aug-2006	21:00	1.8	ENE
12-Aug-2006	22:00	2.2	NE
12-Aug-2006	23:00	2.2	NE
13-Aug-2006	00:00	2.2	ENE
13-Aug-2006	01:00	1.8	NE
13-Aug-2006	02:00	1.8	ENE
13-Aug-2006	03:00	2.2	ENE
13-Aug-2006	04:00	2.7	ENE
13-Aug-2006	05:00	1.8	NE
13-Aug-2006	06:00	0.9	NE
13-Aug-2006	07:00	1.8	NE
13-Aug-2006	08:00	2.2	ENE
13-Aug-2006	09:00	3.1	ENE
13-Aug-2006	10:00	3.1	NE
13-Aug-2006	11:00	2.7	NE
13-Aug-2006	12:00	2.7	NE
13-Aug-2006	13:00	2.7	NE
13-Aug-2006	14:00	2.7	NE
13-Aug-2006	15:00	2.7	NE
13-Aug-2006	16:00	2.7	NE
13-Aug-2006	17:00	2.2	NE
13-Aug-2006	18:00	1.3	ENE
13-Aug-2006	19:00	1.3	NE
13-Aug-2006	20:00	1.3	NE
13-Aug-2006	21:00	0.9	ENE
13-Aug-2006	22:00	0.9	NE
13-Aug-2006	23:00	1.8	ENE
14-Aug-2006	00:00	1.3	NE
14-Aug-2006	01:00	0.9	NE
14-Aug-2006	02:00	0.4	ENE
14-Aug-2006	03:00	1.3	ENE
14-Aug-2006	04:00	1.3	NE
14-Aug-2006	05:00	1.3	ENE
14-Aug-2006	06:00	1.3	NE
14-Aug-2006	07:00	2.2	NE
14-Aug-2006	08:00	2.2	NE
14-Aug-2006	09:00	2.7	NE
14-Aug-2006	10:00	1.8	NE
14-Aug-2006	11:00	1.8	NE

Appendix D - Wind Data

Date	Time	Wind Speed m/s	Direction
14-Aug-2006	12:00	2.7	NE
14-Aug-2006	13:00	2.7	ENE
14-Aug-2006	14:00	2.7	NE
14-Aug-2006	15:00	2.7	NE
14-Aug-2006	16:00	2.2	NE
14-Aug-2006	17:00	2.2	NE
14-Aug-2006	18:00	2.2	NE
14-Aug-2006	19:00	0.9	NE
14-Aug-2006	20:00	1.3	NE
14-Aug-2006	21:00	0.4	NNE
14-Aug-2006	22:00	1.3	ENE
14-Aug-2006	23:00	0.9	ENE
15-Aug-2006	00:00	1.3	ENE
15-Aug-2006	01:00	0.9	NE
15-Aug-2006	02:00	1.3	NE
15-Aug-2006	03:00	1.8	ENE
15-Aug-2006	04:00	0.9	ENE
15-Aug-2006	05:00	0.4	NNE
15-Aug-2006	06:00	0	NNE
15-Aug-2006	07:00	0.4	NE
15-Aug-2006	08:00	1.8	NE
15-Aug-2006	09:00	2.7	NE
15-Aug-2006	10:00	2.2	ENE
15-Aug-2006	11:00	1.3	NE
15-Aug-2006	12:00	1.8	NE
15-Aug-2006	13:00	2.7	NE
15-Aug-2006	14:00	2.7	NE
15-Aug-2006	15:00	0.9	ENE
15-Aug-2006	16:00	0.4	ENE
15-Aug-2006	17:00	0.4	ENE
15-Aug-2006	18:00	0.9	NE
15-Aug-2006	19:00	0.4	E
15-Aug-2006	20:00	0.9	NE
15-Aug-2006	21:00	0.4	ENE
15-Aug-2006	22:00	0.9	ENE
15-Aug-2006	23:00	1.3	ENE
16-Aug-2006	00:00	0.9	ENE
16-Aug-2006	01:00	1.3	ENE
16-Aug-2006	02:00	0.4	ENE
16-Aug-2006	03:00	0	NE
16-Aug-2006	04:00	0	NE
16-Aug-2006	05:00	0	NNE
16-Aug-2006	06:00	0	N
16-Aug-2006	07:00	0	N
16-Aug-2006	08:00	0.4	W
16-Aug-2006	09:00	0	N
16-Aug-2006	10:00	0.4	N
16-Aug-2006	11:00	0.4	N
16-Aug-2006	12:00	0.9	N
16-Aug-2006	13:00	0.9	N
16-Aug-2006	14:00	1.3	W
16-Aug-2006	15:00	1.8	WSW
16-Aug-2006	16:00	0.9	W
16-Aug-2006	17:00	0.4	WSW

Appendix D - Wind Data

Date	Time	Wind Speed m/s	Direction
16-Aug-2006	18:00	0.4	SW
16-Aug-2006	19:00	0.4	SSW
16-Aug-2006	20:00	0.4	SW
16-Aug-2006	21:00	0	SW
16-Aug-2006	22:00	0	SW
16-Aug-2006	23:00	0	SW
17-Aug-2006	00:00	0	SW
17-Aug-2006	01:00	0	SW
17-Aug-2006	02:00	0	SW
17-Aug-2006	03:00	0	SW
17-Aug-2006	04:00	0	SW
17-Aug-2006	05:00	0	SW
17-Aug-2006	06:00	0	---
17-Aug-2006	07:00	0	SW
17-Aug-2006	08:00	0.4	SW
17-Aug-2006	09:00	0	SW
17-Aug-2006	10:00	0.4	SW
17-Aug-2006	11:00	0.9	W
17-Aug-2006	12:00	1.3	WNW
17-Aug-2006	13:00	2.2	W
17-Aug-2006	14:00	1.3	W
17-Aug-2006	15:00	1.3	WSW
17-Aug-2006	16:00	1.3	WSW
17-Aug-2006	17:00	1.3	SW
17-Aug-2006	18:00	1.3	SW
17-Aug-2006	19:00	1.3	SSW
17-Aug-2006	20:00	0.4	SSW
17-Aug-2006	21:00	0	ENE
17-Aug-2006	22:00	0	N
17-Aug-2006	23:00	0	---
18-Aug-2006	00:00	0	ENE
18-Aug-2006	01:00	0	ENE
18-Aug-2006	02:00	0	SSW
18-Aug-2006	03:00	0	SSW
18-Aug-2006	04:00	0.4	SSW
18-Aug-2006	05:00	0	SSW
18-Aug-2006	06:00	0	SSW
18-Aug-2006	07:00	0.4	SW
18-Aug-2006	08:00	0	S
18-Aug-2006	09:00	0.4	SW
18-Aug-2006	10:00	1.3	WSW
18-Aug-2006	11:00	2.2	SW
18-Aug-2006	12:00	1.3	SW
18-Aug-2006	13:00	0.9	SW
18-Aug-2006	14:00	1.3	SSW
18-Aug-2006	15:00	1.3	WSW
18-Aug-2006	16:00	1.3	SSW
18-Aug-2006	17:00	1.8	SW
18-Aug-2006	18:00	1.3	SW
18-Aug-2006	19:00	2.7	WNW
18-Aug-2006	20:00	0.4	NE
18-Aug-2006	21:00	0.4	ENE
18-Aug-2006	22:00	0	ENE
18-Aug-2006	23:00	0	ENE

Appendix D - Wind Data

Date	Time	Wind Speed m/s	Direction
19-Aug-2006	00:00	0	ENE
19-Aug-2006	01:00	0	---
19-Aug-2006	02:00	0	---
19-Aug-2006	03:00	0	---
19-Aug-2006	04:00	0	ENE
19-Aug-2006	05:00	0	ENE
19-Aug-2006	06:00	0	---
19-Aug-2006	07:00	0	ENE
19-Aug-2006	08:00	0	ENE
19-Aug-2006	09:00	0	ENE
19-Aug-2006	10:00	0	ENE
19-Aug-2006	11:00	0.4	SSW
19-Aug-2006	12:00	0.4	SW
19-Aug-2006	13:00	0.9	SW
19-Aug-2006	14:00	0.9	SW
19-Aug-2006	15:00	1.3	SW
19-Aug-2006	16:00	0.4	W
19-Aug-2006	17:00	0.9	SSW
19-Aug-2006	18:00	1.3	WSW
19-Aug-2006	19:00	0.4	SW
19-Aug-2006	20:00	0.4	SW
19-Aug-2006	21:00	0	SW
19-Aug-2006	22:00	0	---
19-Aug-2006	23:00	0	SW
20-Aug-2006	00:00	0	SW
20-Aug-2006	01:00	0	SW
20-Aug-2006	02:00	0.4	SSW
20-Aug-2006	03:00	0.4	SSW
20-Aug-2006	04:00	0	SSW
20-Aug-2006	05:00	0	SSW
20-Aug-2006	06:00	0	SSW
20-Aug-2006	07:00	0	SSW
20-Aug-2006	08:00	0	SSW
20-Aug-2006	09:00	0.9	SW
20-Aug-2006	10:00	0.9	SW
20-Aug-2006	11:00	0.4	SW
20-Aug-2006	12:00	1.3	W
20-Aug-2006	13:00	1.8	W
20-Aug-2006	14:00	1.3	W
20-Aug-2006	15:00	0.9	ENE
20-Aug-2006	16:00	1.8	NE
20-Aug-2006	17:00	0.9	ENE
20-Aug-2006	18:00	0	E
20-Aug-2006	19:00	0	ENE
20-Aug-2006	20:00	0	SSW
20-Aug-2006	21:00	1.3	W
20-Aug-2006	22:00	0	W
20-Aug-2006	23:00	0	W
21-Aug-2006	00:00	0	WNW
21-Aug-2006	01:00	0	WNW
21-Aug-2006	02:00	0	WNW
21-Aug-2006	03:00	0	WNW
21-Aug-2006	04:00	0	WNW
21-Aug-2006	05:00	0	WNW

Appendix D - Wind Data

Date	Time	Wind Speed m/s	Direction
21-Aug-2006	06:00	0	WNW
21-Aug-2006	07:00	0	WNW
21-Aug-2006	08:00	0	WNW
21-Aug-2006	09:00	0.4	WNW
21-Aug-2006	10:00	0	WNW
21-Aug-2006	11:00	0.4	SW
21-Aug-2006	12:00	0.4	ENE
21-Aug-2006	13:00	0.9	ENE
21-Aug-2006	14:00	0.4	NNE
21-Aug-2006	15:00	0.4	SW
21-Aug-2006	16:00	0.9	SSW
21-Aug-2006	17:00	0.4	WNW
21-Aug-2006	18:00	0.9	WSW
21-Aug-2006	19:00	0.4	W
21-Aug-2006	20:00	0	WSW
21-Aug-2006	21:00	0	WSW
21-Aug-2006	22:00	0	WSW
21-Aug-2006	23:00	0	WSW
22-Aug-2006	00:00	0	WSW
22-Aug-2006	01:00	0	---
22-Aug-2006	02:00	0	---
22-Aug-2006	03:00	0	---
22-Aug-2006	04:00	0	WSW
22-Aug-2006	05:00	0	WSW
22-Aug-2006	06:00	0	WSW
22-Aug-2006	07:00	0	---
22-Aug-2006	08:00	0.4	WSW
22-Aug-2006	09:00	0.4	WSW
22-Aug-2006	10:00	0	WSW
22-Aug-2006	11:00	0	WSW
22-Aug-2006	12:00	0	WSW
22-Aug-2006	13:00	0.4	SW
22-Aug-2006	14:00	0	S
22-Aug-2006	15:00	0	S
22-Aug-2006	16:00	0.4	S
22-Aug-2006	17:00	0.9	S
22-Aug-2006	18:00	0	SSW
22-Aug-2006	19:00	0	S
22-Aug-2006	20:00	0	S
22-Aug-2006	21:00	0	S
22-Aug-2006	22:00	0	---
22-Aug-2006	23:00	0	---
23-Aug-2006	00:00	0	S
23-Aug-2006	01:00	0	S
23-Aug-2006	02:00	0.4	S
23-Aug-2006	03:00	0	ENE
23-Aug-2006	04:00	0	ENE
23-Aug-2006	05:00	0	---
23-Aug-2006	06:00	0	---
23-Aug-2006	07:00	0	---
23-Aug-2006	08:00	0	---
23-Aug-2006	09:00	0	ENE
23-Aug-2006	10:00	0	ENE
23-Aug-2006	11:00	0.4	WSW

Appendix D - Wind Data

Date	Time	Wind Speed m/s	Direction
23-Aug-2006	12:00	0.4	SW
23-Aug-2006	13:00	0.4	SW
23-Aug-2006	14:00	0.4	SW
23-Aug-2006	15:00	0.4	NE
23-Aug-2006	16:00	0.4	W
23-Aug-2006	17:00	0.4	S
23-Aug-2006	18:00	0	SSW
23-Aug-2006	19:00	0	WSW
23-Aug-2006	20:00	0	SW
23-Aug-2006	21:00	0	SW
23-Aug-2006	22:00	0	SW
23-Aug-2006	23:00	0	SW
24-Aug-2006	00:00	0.4	NE
24-Aug-2006	01:00	0.4	WSW
24-Aug-2006	02:00	0.4	SW
24-Aug-2006	03:00	0.9	SSW
24-Aug-2006	04:00	0.4	NE
24-Aug-2006	05:00	0.4	SW
24-Aug-2006	06:00	0.4	SW
24-Aug-2006	07:00	0	SW
24-Aug-2006	08:00	0	SW
24-Aug-2006	09:00	0	SW
24-Aug-2006	10:00	0	SW
24-Aug-2006	11:00	0	SSE
24-Aug-2006	12:00	0	SSE
24-Aug-2006	13:00	0	SSE
24-Aug-2006	14:00	0.4	SW
24-Aug-2006	15:00	0.9	SW
24-Aug-2006	16:00	0.9	SW
24-Aug-2006	17:00	0.9	WSW
24-Aug-2006	18:00	0.4	SW
24-Aug-2006	19:00	0	ENE
24-Aug-2006	20:00	0.4	NE
24-Aug-2006	21:00	0.4	NE
24-Aug-2006	22:00	0	WSW
24-Aug-2006	23:00	0	WSW
25-Aug-2006	00:00	0	WSW
25-Aug-2006	01:00	0	WSW
25-Aug-2006	02:00	0	WSW
25-Aug-2006	03:00	0	W
25-Aug-2006	04:00	0	W
25-Aug-2006	05:00	0	SE
25-Aug-2006	06:00	0	NE
25-Aug-2006	07:00	0	SW
25-Aug-2006	08:00	0	S
25-Aug-2006	09:00	0.4	SW
25-Aug-2006	10:00	1.3	SW
25-Aug-2006	11:00	1.8	SW
25-Aug-2006	12:00	1.8	SW
25-Aug-2006	13:00	2.2	SSW
25-Aug-2006	14:00	2.2	SW
25-Aug-2006	15:00	2.2	SW
25-Aug-2006	16:00	1.8	SSW
25-Aug-2006	17:00	1.3	SW

Appendix D - Wind Data

Date	Time	Wind Speed m/s	Direction
25-Aug-2006	18:00	0.9	SW
25-Aug-2006	19:00	0	SSE
25-Aug-2006	20:00	0	SE
25-Aug-2006	21:00	0	SE
25-Aug-2006	22:00	0	SSE
25-Aug-2006	23:00	0	SSE
26-Aug-2006	00:00	0	---
26-Aug-2006	01:00	0	SSE
26-Aug-2006	02:00	0	---
26-Aug-2006	03:00	0	SSE
26-Aug-2006	04:00	0	SSE
26-Aug-2006	05:00	0	SSE
26-Aug-2006	06:00	0	SSE
26-Aug-2006	07:00	0	SSE
26-Aug-2006	08:00	0	SSE
26-Aug-2006	09:00	0	NNE
26-Aug-2006	10:00	0.4	SW
26-Aug-2006	11:00	1.8	SW
26-Aug-2006	12:00	2.2	SW
26-Aug-2006	13:00	2.2	SW
26-Aug-2006	14:00	2.7	SW
26-Aug-2006	15:00	2.2	SSW
26-Aug-2006	16:00	1.3	SW
26-Aug-2006	17:00	1.3	SSW
26-Aug-2006	18:00	0.4	SW
26-Aug-2006	19:00	0	W
26-Aug-2006	20:00	0.4	SSW
26-Aug-2006	21:00	0	SW
26-Aug-2006	22:00	0	SSW
26-Aug-2006	23:00	0	SSW
27-Aug-2006	00:00	0	SW
27-Aug-2006	01:00	0	SW
27-Aug-2006	02:00	0	SW
27-Aug-2006	03:00	0	SW
27-Aug-2006	04:00	0	S
27-Aug-2006	05:00	0	SE
27-Aug-2006	06:00	0	SSE
27-Aug-2006	07:00	0	SSE
27-Aug-2006	08:00	0.4	S
27-Aug-2006	09:00	0.4	ENE
27-Aug-2006	10:00	0	ENE
27-Aug-2006	11:00	0	ENE
27-Aug-2006	12:00	1.3	WSW
27-Aug-2006	13:00	0.4	E
27-Aug-2006	14:00	0	E
27-Aug-2006	15:00	0	E
27-Aug-2006	16:00	0	E
27-Aug-2006	17:00	0	E
27-Aug-2006	18:00	0	E
27-Aug-2006	19:00	0	E
27-Aug-2006	20:00	0	E
27-Aug-2006	21:00	0	SSW
27-Aug-2006	22:00	0.9	SSW
27-Aug-2006	23:00	1.3	NW

Appendix D - Wind Data

Date	Time	Wind Speed m/s	Direction
28-Aug-2006	00:00	0	NE
28-Aug-2006	01:00	0	NE
28-Aug-2006	02:00	0	NE
28-Aug-2006	03:00	0	NE
28-Aug-2006	04:00	0	NE
28-Aug-2006	05:00	0	NE
28-Aug-2006	06:00	0	SW
28-Aug-2006	07:00	0	SSE
28-Aug-2006	08:00	0.4	WNW
28-Aug-2006	09:00	0.9	SSW
28-Aug-2006	10:00	2.2	W
28-Aug-2006	11:00	1.3	SW
28-Aug-2006	12:00	0	SSW
28-Aug-2006	13:00	0.4	S
28-Aug-2006	14:00	0	E
28-Aug-2006	15:00	0	E
28-Aug-2006	16:00	0	SSW
28-Aug-2006	17:00	0	SW
28-Aug-2006	18:00	0	SW
28-Aug-2006	19:00	0	SW
28-Aug-2006	20:00	0	---
28-Aug-2006	21:00	0	---
28-Aug-2006	22:00	0	SW
28-Aug-2006	23:00	0	---
29-Aug-2006	00:00	0	SW
29-Aug-2006	01:00	0	SW
29-Aug-2006	02:00	0	SW
29-Aug-2006	03:00	0.4	SW
29-Aug-2006	04:00	0.4	NNE
29-Aug-2006	05:00	0	E
29-Aug-2006	06:00	0	E
29-Aug-2006	07:00	0.4	WSW
29-Aug-2006	08:00	0	SSE
29-Aug-2006	09:00	0.4	SSE
29-Aug-2006	10:00	0.4	E
29-Aug-2006	11:00	0	E
29-Aug-2006	12:00	0	E
29-Aug-2006	13:00	0	E
29-Aug-2006	14:00	0	E
29-Aug-2006	15:00	0.4	E
29-Aug-2006	16:00	0.4	N
29-Aug-2006	17:00	0.9	W
29-Aug-2006	18:00	0.9	W
29-Aug-2006	19:00	0	W
29-Aug-2006	20:00	0	W
29-Aug-2006	21:00	0	W
29-Aug-2006	22:00	0	W
29-Aug-2006	23:00	0	W
30-Aug-2006	00:00	0	W
30-Aug-2006	01:00	0	---
30-Aug-2006	02:00	0	W
30-Aug-2006	03:00	0	W
30-Aug-2006	04:00	0	W
30-Aug-2006	05:00	0.4	W

Appendix D - Wind Data

Date	Time	Wind Speed m/s	Direction
30-Aug-2006	06:00	0.9	N
30-Aug-2006	07:00	1.3	N
30-Aug-2006	08:00	0.9	NE
30-Aug-2006	09:00	0	E
30-Aug-2006	10:00	0	E
30-Aug-2006	11:00	0.4	NE
30-Aug-2006	12:00	0	E
30-Aug-2006	13:00	0	ESE
30-Aug-2006	14:00	0	SSW
30-Aug-2006	15:00	0.4	SSW
30-Aug-2006	16:00	0	SSW
30-Aug-2006	17:00	0	SW
30-Aug-2006	18:00	0.4	W
30-Aug-2006	19:00	0	WSW
30-Aug-2006	20:00	0.4	WSW
30-Aug-2006	21:00	0.4	N
30-Aug-2006	22:00	0	SSW
30-Aug-2006	23:00	0.4	SSW
30-Aug-2006	00:00	0.4	SSW
31-Aug-2006	01:00	0.4	NNW
31-Aug-2006	02:00	0.4	WNW
31-Aug-2006	03:00	0.4	N
31-Aug-2006	04:00	0.4	W
31-Aug-2006	05:00	0	W
31-Aug-2006	06:00	0	---
31-Aug-2006	07:00	0	---
31-Aug-2006	08:00	0	W
31-Aug-2006	09:00	0.4	W
31-Aug-2006	10:00	0.4	SSW
31-Aug-2006	11:00	0.4	SW
31-Aug-2006	12:00	0	SW
31-Aug-2006	13:00	0.4	SW
31-Aug-2006	14:00	0.4	SW
31-Aug-2006	15:00	0.4	SW
31-Aug-2006	16:00	0.4	W
31-Aug-2006	17:00	0.4	N
31-Aug-2006	18:00	0.4	NE
31-Aug-2006	19:00	0.4	W
31-Aug-2006	20:00	0	S
31-Aug-2006	21:00	0	NE
31-Aug-2006	22:00	0.4	WNW
31-Aug-2006	23:00	0.4	NE

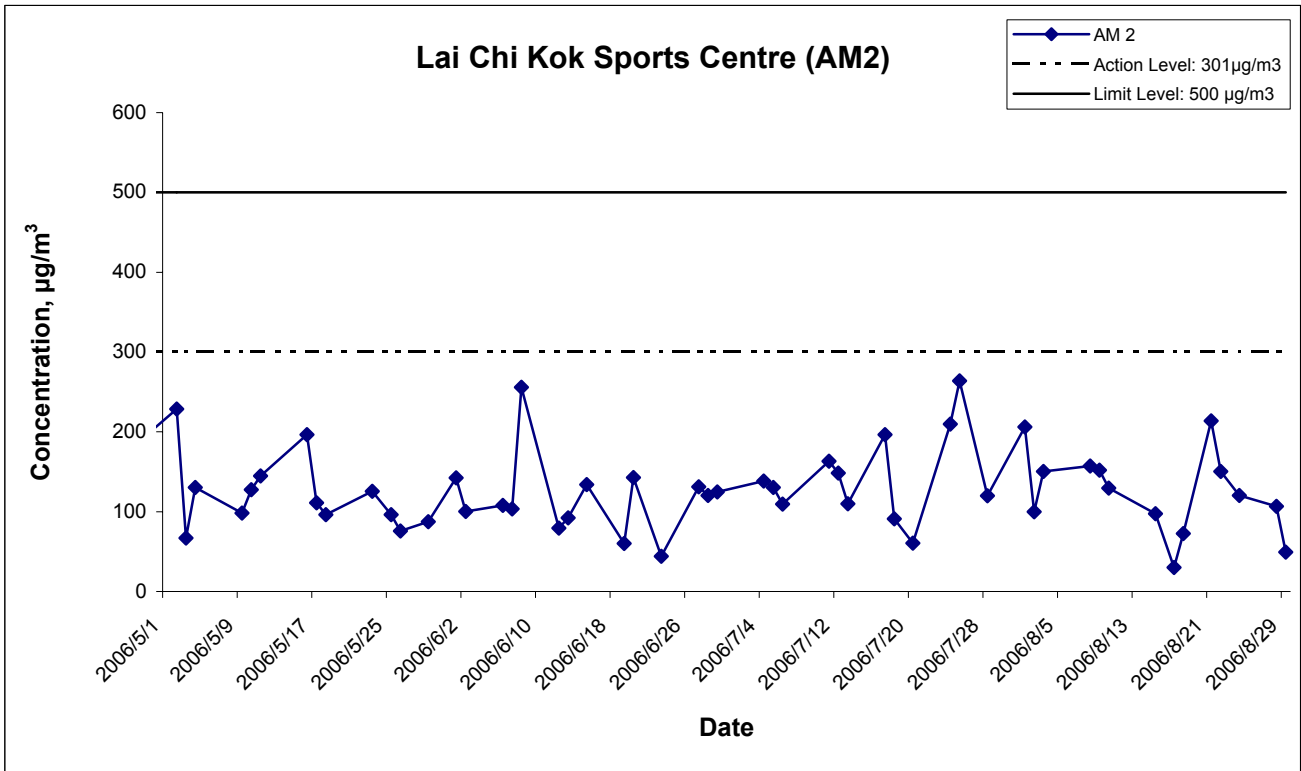
**APPENDIX E
1-HOUR TSP MONITORING RESULTS
AND GRAPHICAL PRESENTATION**

Appendix E - 1-hour TSP Monitoring Results

Location AM 2 - Lai Chi Kok Sports Centre

Date	Weather Condition	Filter Weight (g)		Flow Rate (m ³ /min.)		Elapse Time		Air Temp. (K)	Atmospheric Pressure(Pa)	Particulate weight(g)	Av. flow (m ³ /min)	Total vol. (m ³)	Sampling Time(hrs.)	Conc. (µg/m ³)	
		Initial	Final	Initial	Final	Initial	Final								
1-Aug-06	Sunny	2.8411	2.8562	1.22	1.22	4604.1	4605.1	301.5	756.8	0.0151	1.22	73.2	1.0	206.2	
2-Aug-06	Rainy	2.8803	2.8876	1.22	1.22	4605.1	4606.1	301.8	753.5	0.0073	1.22	73.1	1.0	99.9	
3-Aug-06	Rainy	2.8604	2.8714	1.22	1.22	4630.1	4631.1	299.9	749.1	0.0110	1.22	73.1	1.0	150.5	
8-Aug-06	Sunny	2.8380	2.8495	1.22	1.22	4631.1	4632.1	302.0	754.8	0.0115	1.22	73.1	1.0	157.3	
9-Aug-06	Sunny	2.8750	2.8861	1.22	1.22	4656.1	4657.1	301.7	753.3	0.0111	1.22	73.1	1.0	151.9	
10-Aug-06	Cloudy	2.8636	2.8731	1.22	1.22	4657.1	4658.1	299.1	752.9	0.0095	1.22	73.3	1.0	129.6	
15-Aug-06	Sunny	2.8428	2.8499	1.22	1.22	4682.1	4683.1	303.6	754.6	0.0071	1.22	72.9	1.0	97.3	
17-Aug-06	Sunny	2.8529	2.8551	1.22	1.22	4683.1	4684.1	303.2	755.7	0.0022	1.22	72.9	1.0	30.2	
18-Aug-06	Sunny	2.8343	2.8396	1.22	1.22	4684.1	4685.1	303.2	755.1	0.0053	1.22	73.0	1.0	72.6	
21-Aug-06	Sunny	2.8771	2.8927	1.22	1.22	4709.1	4710.1	303.3	755.0	0.0156	1.22	73.0	1.0	213.8	
22-Aug-06	Sunny	2.8734	2.8844	1.22	1.22	4710.1	4711.1	302.1	757.3	0.0110	1.22	73.2	1.0	150.3	
24-Aug-06	Cloudy	2.8909	2.8997	1.22	1.22	4711.1	4712.1	301.3	756.0	0.0088	1.22	73.2	1.0	120.2	
28-Aug-06	Sunny	2.8779	2.8857	1.22	1.22	4736.1	4737.1	302.7	758.1	0.0078	1.22	73.2	1.0	106.6	
29-Aug-06	Cloudy	2.8387	2.8423	1.22	1.22	4737.1	4738.1	303.3	759.1	0.0036	1.22	73.2	1.0	49.2	
														Min	30.2
														Max	213.8
														Average	124.0

1-hr TSP Levels



Title Route 8 (previously known as Route 9) between Cheung Sha Wan & Sha Tin Contract HY/2003/01 - Lai Chi Kok Viaduct Graphical Presentation of 1-hour TSP Impact Monitoring Results	Scale N.T.S	Project No. MA3024	
	Date Aug 06	Appendix E	

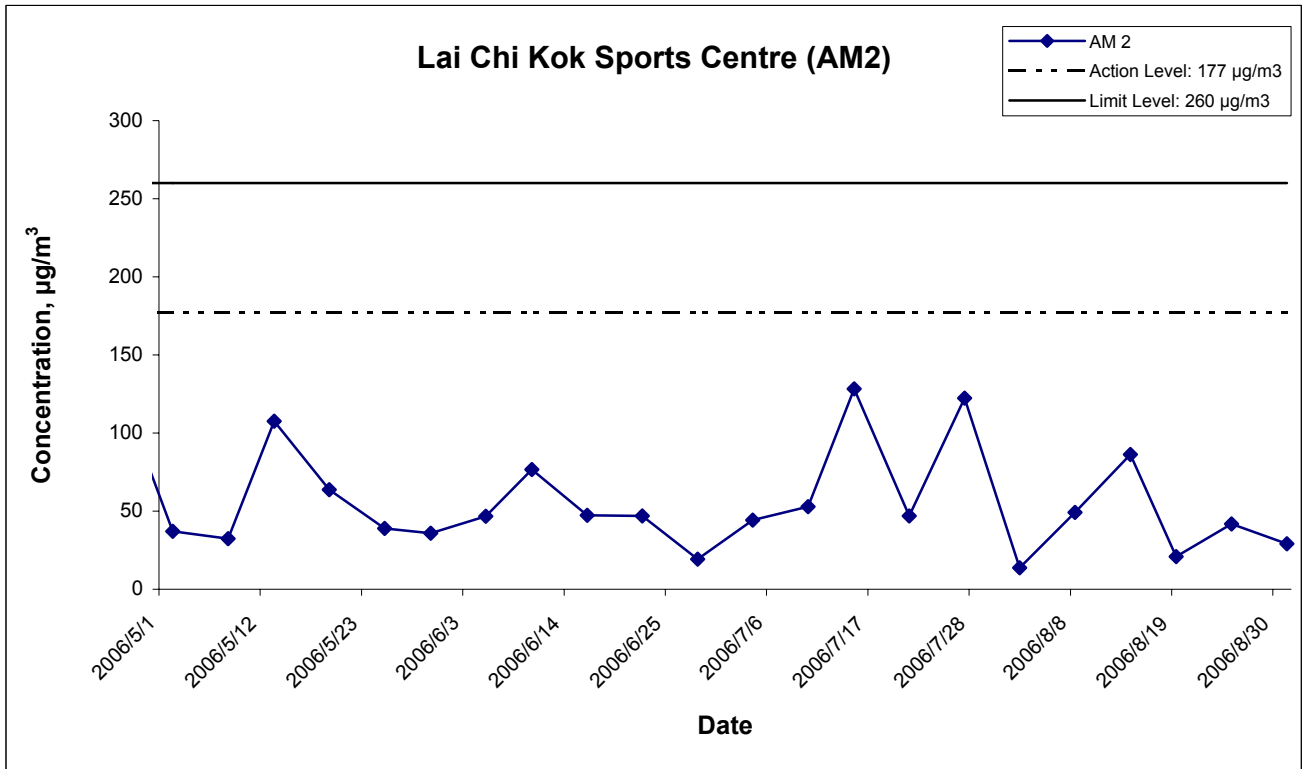
**APPENDIX F
24-HOUR TSP MONITORING RESULTS
AND GRAPHICAL PRESENTATION**

Appendix F - 24-hour TSP Monitoring Results

Location AM 2 - Lai Chi Kok Sports Centre

Date	Weather Condition	Filter Weight (g)		Flow Rate (m ³ /min.)		Elapse Time		Air Temp. (K)	Atmospheric Pressure(Pa)	Particulate weight(g)	Av. flow (m ³ /min)	Total vol. (m ³)	Sampling Time(hrs.)	Conc. (µg/m ³)	
		Initial	Final	Initial	Final	Initial	Final								
2-Aug-06	Rainy	2.8557	2.8797	1.22	1.22	4606.1	4630.1	302.4	753.3	0.0240	1.22	1753.0	24.0	13.7	
8-Aug-06	Sunny	2.8361	2.9224	1.22	1.20	4632.1	4656.1	302.5	754.4	0.0863	1.21	1753.0	24.0	49.2	
14-Aug-06	Sunny	2.8583	3.0095	1.22	1.22	4658.1	4682.1	302.3	755.4	0.1512	1.22	1754.4	24.0	86.2	
19-Aug-06	Sunny	2.8711	2.9080	1.22	1.22	4685.1	4709.1	300.8	756.2	0.0369	1.22	1758.8	24.0	21.0	
25-Aug-06	Cloudy	2.8442	2.9176	1.22	1.22	4712.1	4736.1	301.3	756.6	0.0734	1.22	1758.0	24.0	41.8	
31-Aug-06	Sunny	2.8590	2.9101	1.22	1.22	4738.1	4762.1	302.4	758.4	0.0511	1.22	1757.1	24.0	29.1	
														Min	13.7
														Max	86.2
														Average	40.2

24-hr TSP Levels



Title Route 8 (previously known as Route 9) between Cheung Sha Wan & Sha Tin Contract HY/2003/01 - Lai Chi Kok Viaduct Graphical Presentation of 24-hour TSP Impact Monitoring Results	Scale N.T.S	Project No. MA3024	
	Date Aug 06	Appendix F	

**APPENDIX G
NOISE MONITORING RESULTS AND
GRAPHICAL PRESENTATION**

Appendix G - Noise Monitoring Results

Location NM4 - Mei Foo Sun Chuen, Phase 5								
Date	Time	Weather	Unit: dB (A) (30-min)			Remarks		
			Measured Noise Level				Baseline Level	Construction Noise Level
			L _{eq}	L ₁₀	L ₉₀		L _{eq}	L _{eq}
2-Aug-06	Cancelled due to adverse weather							
9-Aug-06	09:12	Sunny	74.6	77.5	69.5	Road traffic noise from Ching Cheung Road was identified as the major noise source.		
17-Aug-06	10:00	Sunny	74.7	78.5	71.5			
22-Aug-06	11:15	Sunny	75.6	79.0	71.5			
29-Aug-06	13:00	Sunny	75.7	78.0	70.5			

Location NM8a - M/F of Nob Hill						
Date	Time	Weather	Unit: dB (A) (30-min)			Remarks
			L _{eq}	L ₁₀	L ₉₀	
2-Aug-06	Cancelled due to adverse weather					
9-Aug-06	10:00	Sunny	74.6	79.5	70.5	Road traffic noise from Ching Cheung Road was identified as the major noise source.
17-Aug-06	13:00	Sunny	73.8	76.0	70.0	
22-Aug-06	09:45	Sunny	74.0	77.5	71.5	
29-Aug-06	10:30	Fine	74.1	76.5	71.5	

Location NM8b - 3/F of Nob Hill						
Date	Time	Weather	Unit: dB (A) (30-min)			Remarks
			L _{eq}	L ₁₀	L ₉₀	
2-Aug-06	Cancelled due to adverse weather					
9-Aug-06	10:44	Sunny	78.2	80.5	72.0	This Station (NM8b) which is strongly influenced by road traffic noise from Ching Cheung Road. The measurement at this station is for reference purpose, but not for compliance check for construction noise.
17-Aug-06	13:45	Sunny	76.0	78.5	73.0	
22-Aug-06	10:30	Sunny	76.8	79.5	73.0	
29-Aug-06	09:40	Fine	75.8	77.5	71.5	

Location NM9 - Hoi Lai Estate						
Date	Time	Weather	Unit: dB (A) (30-min)			Remarks
			L _{eq}	L ₁₀	L ₉₀	
2-Aug-06	Cancelled due to adverse weather					
9-Aug-06	11:30	Sunny	64.8	66.5	60.0	-
17-Aug-06	14:30	Sunny	71.5	74.0	68.5	
22-Aug-06	09:00	Sunny	68.9	73.0	64.5	
29-Aug-06	14:35	Sunny	73.0	74.5	68.0	

Construction Noise Level (Leq) = Measured Noise Level (Leq) - Baseline Noise Level (Leq)

*Bolted value indicated limit level exceedance

Appendix G - Noise Monitoring Results

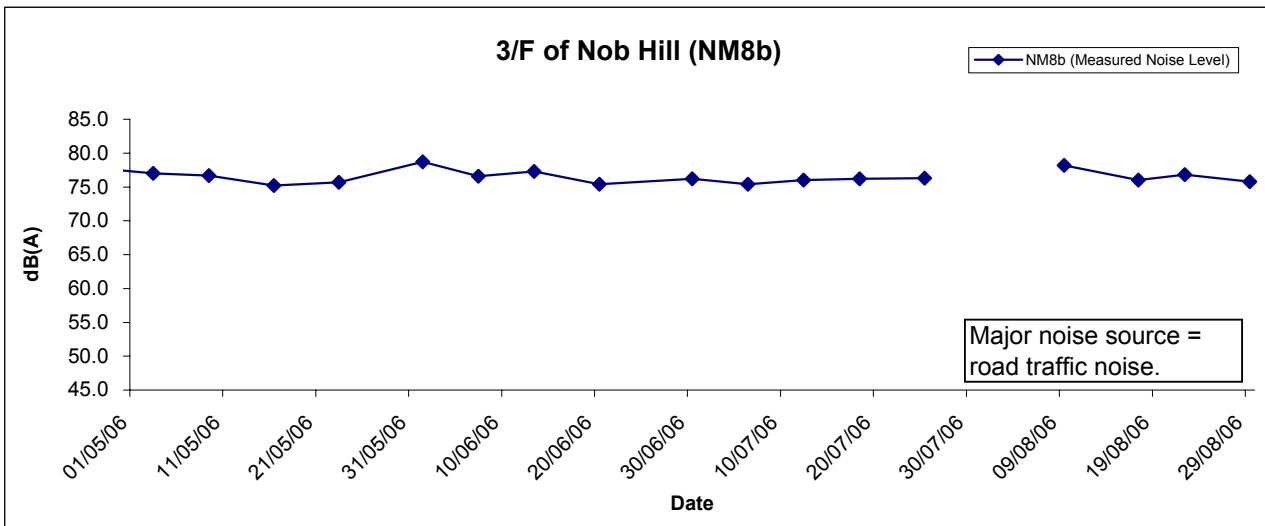
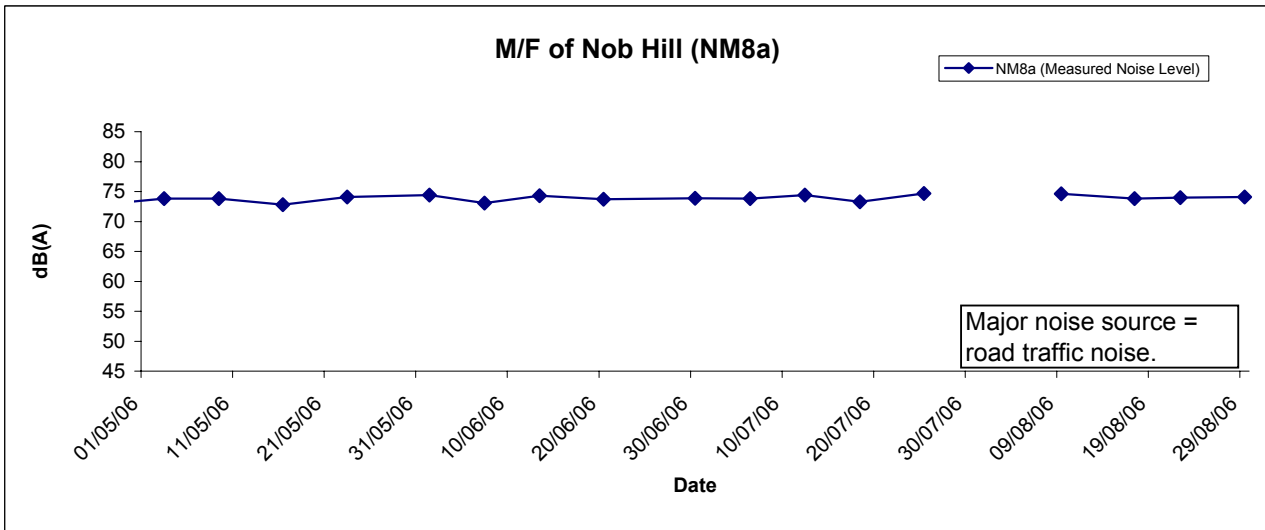
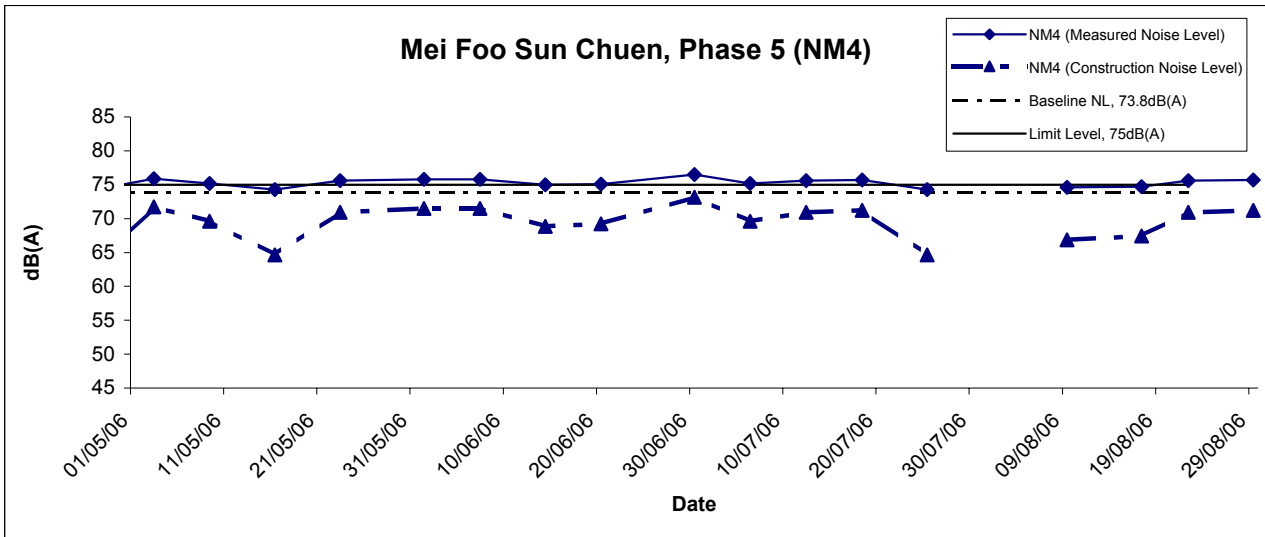
Restricted Hours - 19:00 to 23:00 on normal weekdays

Location NM9 - Hoi Lai Estate						
Date	Time	Weather	dB (A) (5-min)			
			L _{eq}	L ₁₀	L ₉₀	Average L _{eq}
4-Aug-06	19:00	Fine	64.7	68.0	60.5	65.0
	19:05		65.0	68.5	61.0	
	19:10		65.2	68.5	61.0	
11-Aug-06	19:00	Fine	65.7	68.5	62.0	65.3
	19:05		63.9	67.5	59.5	
	19:10		66.1	69.0	61.5	
18-Aug-06	19:00	Fine	66.1	69.5	62.5	66.2
	19:05		67.1	70.0	61.5	
	19:10		65.0	67.5	59.5	
25-Aug-06	19:00	Fine	64.6	67.0	59.5	65.2
	19:05		65.3	68.5	61.5	
	19:10		65.5	68.5	61.5	
29-Aug-06	19:00	Fine	67.2	68.5	61.0	66.4
	19:05		66.1	68.5	61.0	
	19:10		65.6	67.5	60.5	

Construction Noise Level (Leq) = Measured Noise Level (Leq) - Baseline Noise Level (Leq)

*Bolted value indicated limit level exceedance

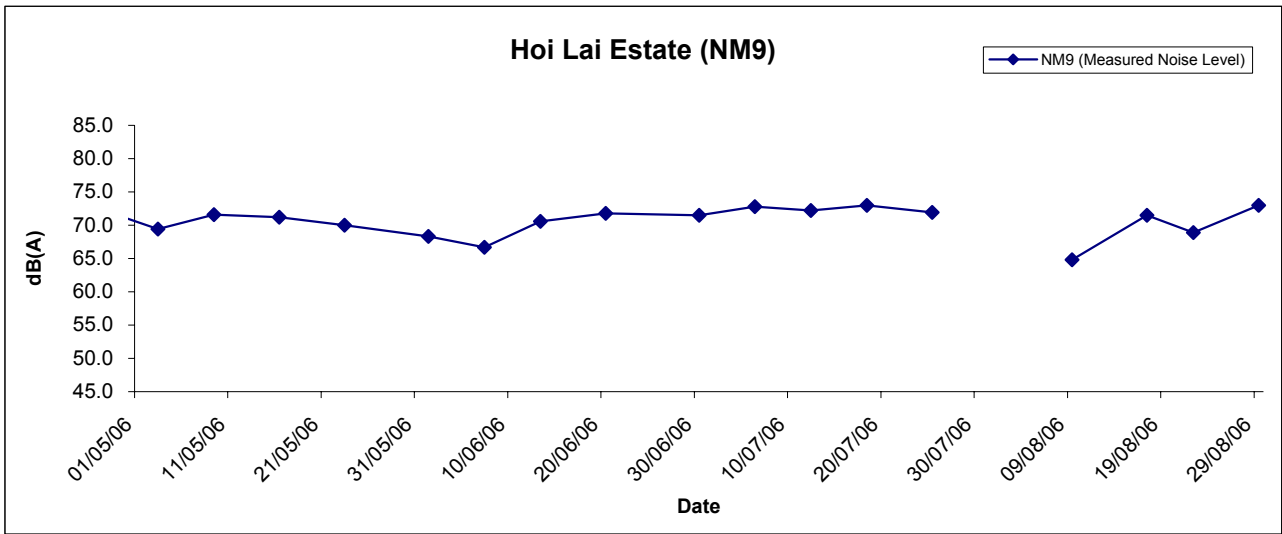
Noise Levels



* Construction Noise Level = Measured Noise Level - Baseline Level
 (If the measured noise level is lower than the baseline level, the construction noise level will be taken as the measured one)

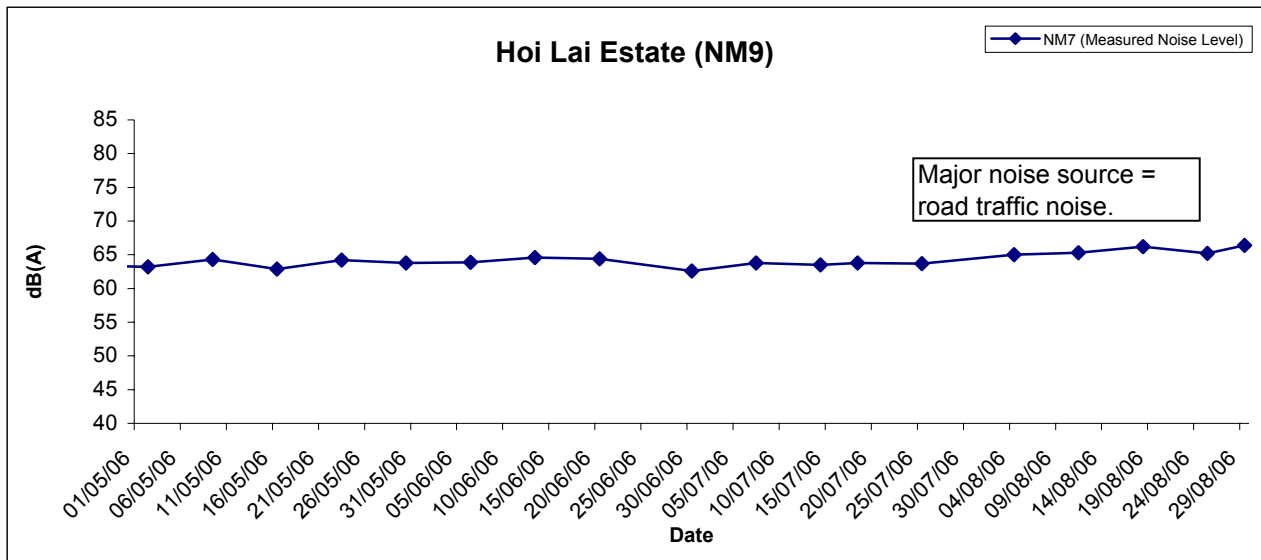
Title Route 8 (previously known as Route 9) between Cheung Sha Wan and Sha Tin Contract HY/2003/01 - Lai Chi Kok Viaduct Graphical Presentation of Construction Noise Monitoring Results	Scale	Project No.	
	Date	Appendix	
	N.T.S	MA3024	
	Aug 06	G	

Noise Levels



Title Route 8 (previously known as Route 9) between Cheung Sha Wan and Sha Tin Contract HY/2003/01 - Lai Chi Kok Viaduct Graphical Presentation of Construction Noise Monitoring Results	Scale N.T.S	Project No. MA3024	CINOTECH
	Date Aug 06	Appendix G	

Restricted Hours (19:00 to 23:00) - Noise Levels



Title Route 8 (previously known as Route 9) between Cheung Sha Wan and Sha Tin Contract HY/2003/01 - Lai Chi Kok Viaduct Graphical Presentation of Construction Noise Monitoring Results	Scale N.T.S	Project No. MA3024	
	Date Aug 06	Appendix G	

APPENDIX H
SUMMARY OF EXCEEDANCE

Summary of Exceedances Recorded in the Reporting Month

a) Exceedance Report for 1-hr TSP (NIL)

b) Exceedance Report for 24-hr TSP (NIL)

c) Exceedance Report for Construction Noise

- One Action Level exceedance was recorded due to noise complaints received on 31st August 2006.
- No Limit Level exceedance was recorded in the reporting month.

**APPENDIX I
SITE AUDIT SUMMARY**

*Route 8 (previously known as Route 9) between Cheung Sha Wan and Sha Tin
 Environmental Team for Lai Chi Kok Viaduct and Eagle's Nest Tunnel
 Contract No. HY/2003/01 - Lai Chi Kok Viaduct*

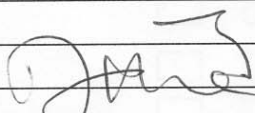
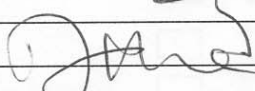
Weekly Site Inspection Record Summary

Inspection Information

Checklist Reference Number	60802-LCKV
Date	2 August 2006 (Wed)
Time	13:30-15:30

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

Ref. No.	Remarks/Observations	Related Item No.
	<p>A. Water Quality</p> <ul style="list-style-type: none"> No environmental deficiency was identified during the site inspection. <p>B. Air Quality</p> <ul style="list-style-type: none"> No environmental deficiency was identified during the site inspection. <p>C. Noise</p> <ul style="list-style-type: none"> No environmental deficiency was identified during the site inspection. <p>D. Waste / Chemical Management</p> <ul style="list-style-type: none"> No environmental deficiency was identified during the site inspection. <p>E. Permit / Licenses</p> <ul style="list-style-type: none"> No environmental deficiency was identified during the site inspection. <p>F. Others</p> <ul style="list-style-type: none"> No environmental deficiency was identified in last audit (ref. 60726-LCKV) 26 July 2006 	

	Name	Signature	Date
Recorded by	Tommy Ho		2 August 2006
Checked by	Attle Hui		2 August 2006

*Route 8 (previously known as Route 9) between Cheung Sha Wan and Sha Tin
 Environmental Team for Lai Chi Kok Viaduct and Eagle's Nest Tunnel
 Contract No. HY/2003/01 - Lai Chi Kok Viaduct*

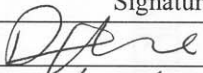

Weekly Site Inspection Record Summary

Inspection Information

Checklist Reference Number	60807-LCKV
Date	7 August 2006 (Mon)
Time	9:30-11:30

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

Ref. No.	Remarks/Observations	Related Item No.
60807L-E01	<p>A. Water Quality</p> <ul style="list-style-type: none"> Accumulation of stagnant water was observed after rain at the deck of Bridge Area, D13 and S1. The Contractor was reminded to remove/spray larvicide onto stagnant water preventing mosquitoes from breeding. 	B14
60807L-E03	<ul style="list-style-type: none"> Sand and silt were observed inside the trench at the discharge outlet of the Aquased, at R3. The Contractor was reminded to remove sand and silt. Besides, the Contractor was reminded to review the Sedimentation System to maintain its efficiency. 	B9
	<p>B. Air Quality</p> <ul style="list-style-type: none"> No environmental deficiency was identified during the site inspection. 	
	<p>C. Noise</p> <ul style="list-style-type: none"> No environmental deficiency was identified during the site inspection. 	
60807L-E02	<p>D. Waste / Chemical Management</p> <ul style="list-style-type: none"> General refuses were scattered on the ground at Abutment B. The Contractor was reminded to clear refuses regularly. 	E1
	<p>E. Permit / Licenses</p> <ul style="list-style-type: none"> No environmental deficiency was identified during the site inspection. 	
	<p>F. Others</p> <p>No environmental deficiency was identified in last audit (ref. 60802-LCKV) 2 August 2006.</p>	

	Name	Signature	Date
Recorded by	Attle Hui		7 August 2006
Checked by	Kenneth Lam		7 August 2006

Route 8 (previously known as Route 9) between Cheung Sha Wan and Sha Tin
Environmental Team for Lai Chi Kok Viaduct and Eagle's Nest Tunnel
Contract No. HY/2003/01 - Lai Chi Kok Viaduct



Weekly Site Inspection Record Summary

Inspection Information

Checklist Reference Number	60816-LCKV
Date	16 August 2006 (Wed)
Time	13:30-15:30

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

Ref. No.	Remarks/Observations	Related Item No.
	<p>A. Water Quality</p> <ul style="list-style-type: none"> No environmental deficiency was identified during the site inspection. No environmental deficiency was identified during the site inspection. <p>B. Air Quality</p> <ul style="list-style-type: none"> No environmental deficiency was identified during the site inspection. <p>C. Noise</p> <ul style="list-style-type: none"> No environmental deficiency was identified during the site inspection. <p>D. Waste / Chemical Management</p> <ul style="list-style-type: none"> No environmental deficiency was identified during the site inspection. <p>E. Permit / Licenses</p> <ul style="list-style-type: none"> No environmental deficiency was identified during the site inspection. <p>F. Others</p> <ul style="list-style-type: none"> The environmental deficiency identified during last audit (ref. 60807L) 07 August 2006, was rectified / improved by the Contractor No environmental deficiency was identified during the site inspection. 	

	Name	Signature	Date
Recorded by	Edmond Wu		16 August 2006
Checked by	Attle Hui		16 August 2006

**Route 8 (previously known as Route 9) between Cheung Sha Wan and Sha Tin
Environmental Team for Lai Chi Kok Viaduct and Eagle's Nest Tunnel
Contract No. HY/2003/01 - Lai Chi Kok Viaduct**

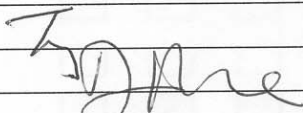
Weekly Site Inspection Record Summary

Inspection Information

Checklist Reference Number	60823-LCKV
Date	23 August 2006 (Wed)
Time	13:30-15:30

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

Ref. No.	Remarks/Observations	Related Item No.
	<p>A. Water Quality</p> <ul style="list-style-type: none"> No environmental deficiency was identified during the site inspection. <p>B. Air Quality</p> <ul style="list-style-type: none"> No environmental deficiency was identified during the site inspection. <p>C. Noise</p> <ul style="list-style-type: none"> No environmental deficiency was identified during the site inspection. <p>D. Waste / Chemical Management</p> <ul style="list-style-type: none"> No environmental deficiency was identified during the site inspection. <p>E. Permit / Licenses</p> <ul style="list-style-type: none"> No environmental deficiency was identified during the site inspection. <p>F. Others</p> <ul style="list-style-type: none"> No environmental deficiency was identified in last audit (ref. 60816-LCKV) 16 August 2006 	

	Name	Signature	Date
Recorded by	Tommy Ho		23 August 2006
Checked by	Attle Hui		23 August 2006

Route 8 (previously known as Route 9) between Cheung Sha Wan and Sha Tin
Environmental Team for Lai Chi Kok Viaduct and Eagle's Nest Tunnel
Contract No. HY/2003/01 - Lai Chi Kok Viaduct

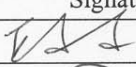

Weekly Site Inspection Record Summary

Inspection Information

Checklist Reference Number	60830-LCKV
Date	30 August 2006 (Wed)
Time	13:30-15:30

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

Ref. No.	Remarks/Observations	Related Item No.
60830L-E01	<p>A. Water Quality</p> <ul style="list-style-type: none"> Accumulation of stagnant water was observed at LCK-R2. The Contractor was reminded to remove/spray larvicide onto stagnant water preventing mosquitoes from breeding. <p>B. Air Quality</p> <ul style="list-style-type: none"> No environmental deficiency was identified during the site inspection. <p>C. Noise</p> <ul style="list-style-type: none"> No environmental deficiency was identified during the site inspection. <p>D. Waste / Chemical Management</p> <ul style="list-style-type: none"> No environmental deficiency was identified during the site inspection. <p>E. Permit / Licenses</p> <ul style="list-style-type: none"> No environmental deficiency was identified during the site inspection. <p>F. Others</p> <ul style="list-style-type: none"> No environmental deficiency was identified in last audit (ref. 60823-LCKV) 23 August 2006 	A14

	Name	Signature	Date
Recorded by	Edmond Wu		30 August 2006
Checked by	Attle Hui		30 August 2006

APPENDIX J
EVENT ACTION PLANS

Appendix J - Event Action Plans

Event/Action Plan for Air Quality

EVENT	ACTION			
	ET	IEC	ER	Contractor
ACTION LEVEL				
1. Exceedance for one sample	<ol style="list-style-type: none"> 1. Identify source 2. Inform ER & IEC 3. Repeat measurement to confirm finding 4. Increase monitoring frequency to daily 	<ol style="list-style-type: none"> 1. Check monitoring data submitted by ET 2. Check Contractor's working methods 	<ol style="list-style-type: none"> 1. Notify Contractor 2. Check monitoring data and Contractor's working methods 	<ol style="list-style-type: none"> 1. Rectify any unacceptable practice 2. Amend working methods if appropriate
2. Exceedance for two or more consecutive samples	<ol style="list-style-type: none"> 1. Identify source 2. Inform ER & IEC 3. Repeat measurement to confirm findings 4. Increase monitoring frequency to daily 5. Discuss with ER & for remedial actions required 6. If exceedance continues, arrange meeting with ER & IEC 7. If exceedance stops, cease additional monitoring 	<ol style="list-style-type: none"> 1. Checking monitoring data submitted by ET 2. Check Contractor's working methods 3. Discuss with ET and Contractor on possible remedial measure 4. Advise the ER & ET on the effectiveness of the proposed remedial measures 5. Supervise the implementation of the remedial measures 	<ol style="list-style-type: none"> 1. Confirm receipt of notification of failure in writing 2. Notify Contractor 3. Check Contractor's working methods 4. Discuss with ET, IEC and Contractor on proposed remedial actions 5. Ensure remedial actions properly implemented 	<ol style="list-style-type: none"> 1. Submit proposals for remedial actions to ER within 3 working days of notification 2. Implement the agreed proposals 3. Amend proposal if appropriate
LIMIT LEVEL				
1. Exceedance for one sample	<ol style="list-style-type: none"> 1. Identify source 2. Inform ER & IEC and EPD 3. Repeat measurement to confirm finding 4. Increase monitoring frequency to daily 5. Assess effectiveness of Contractor's 	<ol style="list-style-type: none"> 1. Checking monitoring data submitted by ET 2. Check Contractor's working methods 3. Discuss with ET and Contractor on possible remedial measure 	<ol style="list-style-type: none"> 1. Confirm receipt of notification of failure in writing 2. Notify Contractor 3. Check Contractor's working methods 4. Discuss with ET, IEC and Contractor on 	<ol style="list-style-type: none"> 1. Take immediate action to avoid further exceedance 2. Submit proposals for remedial actions to ER within 3 working days of notification

EVENT	ACTION			
	ET	IEC	ER	Contractor
	remedial actions and keep EPD and ER & IEC informed of the results	4. Advise the ER & ET on the effectiveness of the proposed remedial measures 5. Supervise the implementation of the remedial measures	proposed remedial actions 5. Ensure remedial actions properly implemented	3. Implement the agreed proposals 4. Amend proposal if appropriate
2. Exceedance for two or more consecutive samples	1. Identify source 2. Inform ER, IEC, Contractor and EPD the cause & actions taken for the exceedances 3. Repeat measurement to confirm findings 4. Increase monitoring frequency to daily 5. Investigate the causes of exceedance 6. Carry out analysis of contractor's working procedures to determine possible mitigation to be implemented. 7. Arrange meeting with EPD, IEC and ER to discuss the remedial actions to be taken 8. Assess effectiveness of Contractor's remedial actions and keep EPD and ER & IEC informed of the results 9. If exceedance stops, cease additional monitoring	1. Checking monitoring data submitted by ET 2. Discuss amongst ER, ET and Contractor on possible remedial measures 3. Review Contractor's remedial measures whenever necessary to ensure their effectiveness and advise the ER accordingly 4. Supervise the implementation of the remedial measures	1. Confirm receipt of notification of failure in writing 2. Notify Contractor 3. Carry out analysis of Contractor's working procedures to determine possible mitigation to be implemented 4. Discuss amongst ET, IEC and the Contractor on proposed remedial actions 5. In consultation with IEC, agree with the contractor remedial measures to be implemented 6. Ensure remedial measure are properly implemented 7. If exceedance continues, consider what portion of the work is responsible and instruct the Contractor to stop that portion of work until the exceedance is abated	1. Take immediate action to avoid further exceedance 2. Submit proposals for remedial actions to IEC, 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 portion of works as determined by the ER until the exceedance is abated

Event/Action Plan for Construction Noise

Exceedance	ACTION			
	ET	.IEC	ER	Contractor
Action Level	<p>1. Discuss with the IEC and ER and seek to identify potential noise source</p> <p>2. Undertake noise measurement to confirm the validity of complaint</p> <p>3. Inform ER&IEC in writing Discuss remedial actions required with ER&IEC if an exceedance is recorded</p> <p>4. Increase monitoring frequency to demonstrate efficacy of remedial measures</p> <p>5. If exceedance continues, meet with ER&IEC to review implementation of appropriate mitigation measures.</p> <p>6. If exceedance stops, cease additional monitoring</p>	<p>1. Review the analyzed results submitted by the ET</p> <p>2. Review the proposed remedial measures by the Contractor and advise the ER & ET accordingly</p> <p>3. Supervise the implementation of remedial measures</p>	<p>1. Confirm receipt of notification of complaint and notify Contractor immediately</p> <p>2. Check monitoring data trends and Contractor's working methods</p> <p>3. Remind the Contractor of his contractual obligations and discuss with ET, IEC and Contractor on proposed remedial actions</p> <p>4. Assess the efficacy of remedial actions and keep the Contractor informed</p> <p>5. Inform complainant of actions taken</p>	<p>1. Submit proposals for remedial actions to ER within three working days of notification</p> <p>2. Amend proposals if required by the Engineer</p> <p>3. Implement the remedial actions immediately upon instruction</p> <p>4. Liaise with the ER to optimize the effectiveness of the agreed mitigation</p> <p>5. Amend proposal if appropriate</p>

Exceedance	ACTION			
	ET	IEC	ER	Contractor
Limit Level	<ol style="list-style-type: none"> 1. Repeat measurement to confirm findings 2. Investigate the cause of the exceedance and identify the main source(s) of impact 3. Inform ER&IEC and EPD in writing 4. Discuss remedial actions required with ER&IEC 5. Increase monitoring frequency to demonstrate efficacy of remedial measures 6. Assess efficacy of remedial actions and keep ER & IEC informed of the results 7. If exceedance continues, meet with ER&IEC to identify appropriate mitigation measures 8. If exceedance stops, cease additional monitoring 	<ol style="list-style-type: none"> 1. Check monitoring data submitted by ET 2. Review Contractor's remedial actions to assure their effectiveness and advise the ER &ET accordingly 3. Supervise the implementation of the remedial measures 	<ol style="list-style-type: none"> 1. Confirm receipt of notification of exceedance and notify Contractor 2. Check monitoring data trends and Contractor's working methods 3. Discuss with ET, IEC and Contractor on proposed remedial actions to be implemented 4. Assess the efficacy of remedial actions and keep the Contractor informed 5. If exceedance continuous, consider what portion of the work is responsible and instruct the Contractor to stop that portion of work until the exceedance is aborted 	<ol style="list-style-type: none"> 1. Take immediate action to avoid further exceedance 2. Submit proposals for remedial actions to ER immediately not more than 3 working days of notification 3. Amend proposals if required by the ER 4. Implement remedial actions immediately upon instruction 5. Liaise with the ER to optimize the effectiveness of the agreed mitigation 6. Resubmit proposals if problem still not under control 7. Stop the relevant portion of works as determined by the ER until the exceedance is aborted

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

Appendix K - Summary of Environmental Mitigation Implementation Schedule

Types of Impacts	Mitigation Measures	Status
<p align="center">Construction Dust</p>	<ul style="list-style-type: none"> Any stockpile of dusty materials or stockpile of dusty material should be covered entirely by impervious sheeting or sprayed with water so as to maintain the entire surface wet. 	^
	<ul style="list-style-type: none"> A stockpile of dusty materials should not extend beyond the pedestrian barriers, fencing or traffic cones. 	^
	<ul style="list-style-type: none"> Vehicle washing facilities should be provided at every exit point. 	^
	<ul style="list-style-type: none"> The area where vehicle washing takes place and the section of the road between the washing facilities and the exit point should be paved with concrete, bituminous materials or hardcores. 	^
	<ul style="list-style-type: none"> Where a site boundary adjoins a road, street, service lane or other area accessible to the public, hoarding of not less than 2.4m high from ground level should be provided along the entire length of that portion of the site boundary except for a site entrance or exit. 	^
	<ul style="list-style-type: none"> Every main haul road should be sprayed with water or a dust suppression chemical so as to maintain the entire road surface wet. 	^
	<ul style="list-style-type: none"> The portion of any road leading only to a construction site that is within 30m of a discernible or designated vehicle entrance or exit should be kept clear of dusty materials. 	^
	<ul style="list-style-type: none"> Any stockpile of dusty materials should be either covered entirely by impervious sheeting, placed in an area sheltered on the top and the 3 sides or sprayed with water or a dust suppression chemical so as to maintain the entire surface wet. 	^
	<ul style="list-style-type: none"> All dusty materials should be sprayed with water or a dust suppression chemical immediately prior to any loading, unloading or transfer operation so as to maintain the dusty materials wet. 	^
	<ul style="list-style-type: none"> Every vehicle should be washed to remove any dusty materials from its body and wheels immediately before leaving a construction site. The working area of any excavation should be sprayed with water or a dust suppression chemical immediately before, during and immediately after the operation so as to maintain the entire surface wet. 	^
<p align="center">Construction Noise</p>	<ul style="list-style-type: none"> Only well-maintained plant should be operated on –site and plant should be serviced regularly during the construction works. 	^
	<ul style="list-style-type: none"> Machines and plant that may be in intermittent use should be shut down between work periods or should be throttled down to a minimum. 	^
	<ul style="list-style-type: none"> Plant known to emit noise strongly in one direction, should where possible, be orientated to direct noise away from the NSRS. 	^
	<ul style="list-style-type: none"> Mobile plant should be sited as far away from NSRs as possible. 	^
	<ul style="list-style-type: none"> Material stockpiles and other structures should be effectively utilised, where practicable, to screen noise from on-site construction activities. Use quiet plant and Working Method 	^
	<ul style="list-style-type: none"> Reduce the number of plant operating in critical areas close NSRs. Construct temporary and movable noise barriers 	^

Types of Impacts	Mitigation Measures	Status
Water Quality	<i>Construction Runoff and Drainage</i>	
	<ul style="list-style-type: none"> Use of sediment traps and the adequate maintenance of drainage systems to prevent flooding and overflow. 	^
	<ul style="list-style-type: none"> Boundaries of critical areas of earthworks should be marked and surrounded by dykes or embankments for flood protection. Temporary ditches should be provided to facilities runoff discharge into the appropriate watercourses, via a silt retention pond. Permanent drainage channels should incorporate sediment basins or traps and baffles to enhance deposition rates. 	^
	<ul style="list-style-type: none"> All temporary and permanent drainage pipes and culverts provided to facilitate runoff discharge should be adequately designed for the controlled release of storm flows. All sediment traps should be regularly cleaned and maintained. The temporarily diverted drainage should be reinstated to its original condition when the construction works has finished or the temporary diversion is no longer required 	^
	<ul style="list-style-type: none"> Sand silt in the wash water from the wheel washing facilities, which ensure no earth, mud and debris is deposited on roads, should be settled out the removed before discharging into storm drains. A section of the road between the wheel washing bay and the public road should be paved with backfill to prevent wash water or other site runoff form entering public road drains. 	^
	<ul style="list-style-type: none"> Oil interceptors should be provided in the drainage system and regularly emptied to prevent the release of oils and grease into the storm water drainage system after accidental spillage. The interceptor should have a bypass to prevent flushing during periods of heavy rain. 	N/A
	<ul style="list-style-type: none"> Catchpits and perimeter channels shall be constructed in advance of site formation works and earthworks. 	^
	<ul style="list-style-type: none"> Silt removal facilities, channels and manholes shall be suitably maintained with the deposited silt and grit being removed at least once a week, and at the onset of and after each rainstorm to ensure that these facilities are functioning properly at all times. 	^
	<ul style="list-style-type: none"> Earthworks final surfaces shall be well compacted and the subsequent permanent work or surface protection shall be carried out immediately after the final surfaces are formed to prevent erosion caused by rainstorms. Appropriate intercepting channels shall be provided along the site boundary or at the locations agreed with the ET Leader. Rainwater pumped out from trenches or foundation excavations shall be discharged into silt removal facilities before discharge into storm drains. 	^
	<ul style="list-style-type: none"> All generators, fuel and oil storage shall be within bunded areas. Drainage from the areas shall be connected to storm drains via a petrol interceptor. 	^
	<i>Tunnelling Work</i>	
	<ul style="list-style-type: none"> Temporary open storage of excavated materials should be covered with tarpaulin or similar fabric during rainstorms. Any washout of construction or excavated materials form the drill and blast tunnelling work should be diverted to the drainage system via appropriate sediment traps. 	N/A
	<ul style="list-style-type: none"> Ground water pumped out of tunnels should be discharged into the drainage channels which incorporated sediment traps to enhance deposition rates and to remove silt. 	N/A
	<ul style="list-style-type: none"> Spend grouts used in diaphragm wall construction should be collected in a separate slurry collection system, reconditioned and reused wherever practicable. The disposal of used grouting materials will only be permitted if it is treated to the TM standards before discharge to the storm drains or disposal to landfill. 	N/A

Types of Impacts	Mitigation Measures	Status
	<i>General Construction Activities</i>	
	<ul style="list-style-type: none"> • Debris and rubbish on site should be collected, handled and disposed of properly to avoid entering the water column and cause water quality impacts. • All fuel tanks and storage areas will be provided with locks and be located on sealed areas (within bunds of a capacity equal to 110% of the storage capacity of the largest tank or 20% by volume of the fuel stored in that areas, whichever in the greatest). 	<p style="text-align: center;">^</p> <p style="text-align: center;">^</p>
	<i>Sewage Effluent</i>	
	<ul style="list-style-type: none"> • Construction work force sewage discharges from fixed toilet facilities on-site should be connected to the nearby existing trunk sewer wherever feasible. However, for areas where existing trunk sewer is not available, it is recommended that appropriate and adequate on site portable chemical toilets should be provided by a licensed contractor who will be responsible for appropriate disposal and maintenance of these facilities. • It is considered that sewage discharges could also be treated by on-site septic tanks and soakaway. Minimum clearance away from streams and catchments and other requirements for the proposed septic tank and soakaway should be referred to EPD's Practice Note for Professional Persons, Drainage Plans. 	<p style="text-align: center;">^</p> <p style="text-align: center;">N/A</p>
Waste	<i>General</i>	
	<ul style="list-style-type: none"> • Training and instruction shall be given at a site to construction staff to increase awareness and draw attention to waste management issues and the need to minimise waste generation. The training requirement shall be included in the site waste management plan. 	<p style="text-align: center;">^</p>
	<i>Storage, Collection and Transportation of Waste</i>	
	<ul style="list-style-type: none"> • Wastes shall be handled and stored in a manner to ensure that they are held securely without loss or leakage. • Authorised or licensed waste hauliers shall be used and they shall only collect wastes prescribed by their permits. • Waste shall be removed on a daily basis. • Waste storage area shall be maintained and cleaned on a daily basis. • Windblown litter and dust during transportation shall be minimised by either covering trucks or transporting wastes in enclosed containers. • Obtain necessary waste disposal permits from the appropriate authorities if they are required. • Wastes shall be disposed of at licensed waste disposal facilities. • Develop procedure such as ticketing system to facilitate tracking of loads, particularly for chemical waste, and to ensure that illegal disposal of wastes does not occur. 	<p style="text-align: center;">^</p> <p style="text-align: center;">^</p> <p style="text-align: center;">^</p> <p style="text-align: center;">^</p> <p style="text-align: center;">^</p> <p style="text-align: center;">^</p> <p style="text-align: center;">^</p> <p style="text-align: center;">^</p>
	<ul style="list-style-type: none"> • Maintain records of the quantities of wastes generated, recycled and disposed. 	<p style="text-align: center;">^</p>
	<i>Surplus Excavated Materials</i>	
	<ul style="list-style-type: none"> • Due to the high risk of loose material being washed into the existing nullah, stockpile materials should be properly compacted and covered from water erosion and located at least 10m away from the nullah wall. 	<p style="text-align: center;">^</p>
<i>Construction and Demolition (C&D) Waste</i>		

Types of Impacts	Mitigation Measures	Status
	<ul style="list-style-type: none"> • Careful design, planning and good site management shall be adopted to minimise over-ordering and generation of waste materials such as concrete grouts. • The handling and disposal of bentonite slurries shall be undertaken in accordance with Practice Note for Professional Persons – Construction Site Drainage (ProPECC PN 1/94) on construction site drainage. • Construction and demolition (C&D) material shall be segregated to inert and non-inert parts. The inert portion shall re-used at areas of reclamation or land formation, or to public filling area shall such allocation is deemed necessary. The non-inert portion shall be disposed of to landfill. 	<p style="text-align: center;">^</p> <p style="text-align: center;">N/A</p> <p style="text-align: center;">^</p>
	<p><i>Chemical Waste</i></p> <ul style="list-style-type: none"> • Chemical waste that is produce during construction shall be handled in accordance with the Cod of Practice on the Packaging, Handling and Storage of Chemical Wastes. • Containers used for the storage of chemical wastes should: <ul style="list-style-type: none"> a. Be suitable for the substance they are holding, resistant to corrosion, maintained in a good condition, and securely closed; b. Have a capacity of less than 450 litres unless the specifications have been approved by the EPD; c. Display a label in English and Chinese in accordance with instructions prescribed in Schedule 2 of the Chemical Waste Regulations. • The storage area for chemical wastes should: <ul style="list-style-type: none"> a. Be clearly labelled and used solely for the storage of chemical waste; b. Be enclosed on at least 3 sides; c. Have an impermeable floor and bunding of capacity to accommodate 110% of the volume of the largest container or 20% by volume of the chemical waste stored in the area, whichever is largest; d. Have adequate ventilation; e. Be covered to prevent rainfall entering (water collected within the bund must be tested and disposed as chemical waste if necessary); f. Be arranged so that incompatible materials are adequately separated. • Disposal of chemical waste shall be via a licensed waste collector; and to a facility licensed to receive chemical waste; or a reuser of the waste (under approval from EPD). 	<p style="text-align: center;">^</p> <p style="text-align: center;">^</p> <p style="text-align: center;">^</p> <p style="text-align: center;">^</p>
	<p><i>General Refuse</i></p> <ul style="list-style-type: none"> • General refuse generated on-site shall be stored in enclosed bins or compaction unit separate from C&D and chemical wastes. A reputable waste collector shall be employed by the contractor to remove general refuse from the site, separately from C&D and chemical wastes, on a daily for every second day basis to minimise odour, pest and litter impacts. The burning of refuse on construction sites is prohibited by law. • Reusable rather than disposable dishware shall be used if feasible. 	<p style="text-align: center;">^</p> <p style="text-align: center;">^</p>

Types of Impacts	Mitigation Measures	Status
Ecology	<ul style="list-style-type: none"> • A sediment barrier shall be erected to minimize stream sedimentation at downstream of the project boundary of the Toll Plaza. 	N/A
	<ul style="list-style-type: none"> • Conduct a tree survey before commencement of the construction work. 	^
	<ul style="list-style-type: none"> • All measures recommended in the approved landscape proposals under Condition 2.4 in EP above shall be fully implemented in accordance with the details and time schedule set out in the submission. 	^
	<ul style="list-style-type: none"> • Loss of the adjacent woodland due to temporary land take shall be returned to the original status immediately. 	N/A
	<ul style="list-style-type: none"> • Wild and uncontrolled fire shall be strictly prohibited • Fences shall be erected along the boundary of the construction sites at the Toll Plaza before commencement of works, to prevent tipping, vehicle movements, and encroachment of personnel onto adjacent wooded areas. 	^ N/A
Landscape and Visual Impact	<ul style="list-style-type: none"> • Landscape mitigation measure 1 (LMM1) – Construction programming and management. The periphery of the works areas at street level shall be managed so that they do not appear cluttered, untidy and unattractive and inconvenient to pedestrians. For example, all hoarding shall be colorfully designed with interesting motifs demonstrating the work of Highways Department. Hoardings with bland colours shall be avoided. 	^
	<ul style="list-style-type: none"> • Landscape mitigation measure 2 (LMM2) – Advanced planting and erosion control works. Where possible, the transplantation of existing valuable trees, the stockpiling of topsoil, new planting and erosion control works shall be carried out as early as possible in the construction period instead of at the end. This will assist in maximizing the time for carrying out transplantation and new planting, resulting in a higher success rate for the survival of transplantation and new planting, resulting in a higher success rate for the survival of transplanted trees and the establishment of new screen trees. The stockpiling of topsoil will provide an abundant use of on-site material for growing media. During detailed design, the issue of stockpiling of topsoil in a manner that would avoid washing into the drainage scheme should be examined comprehensively. 	^
	<ul style="list-style-type: none"> • Measurement of vibration would also be carried out on a need basis during the piling work 	^

Remarks:

- | | | | |
|-----|-----------------------------------|---|--|
| ^ | Compliance of mitigation measure; | X | Non-compliance of mitigation measure; |
| N/A | Not Applicable; | • | Non-compliance but rectified by the contractor |

**APPENDIX L
CONSTRUCTION PROGRAMME**

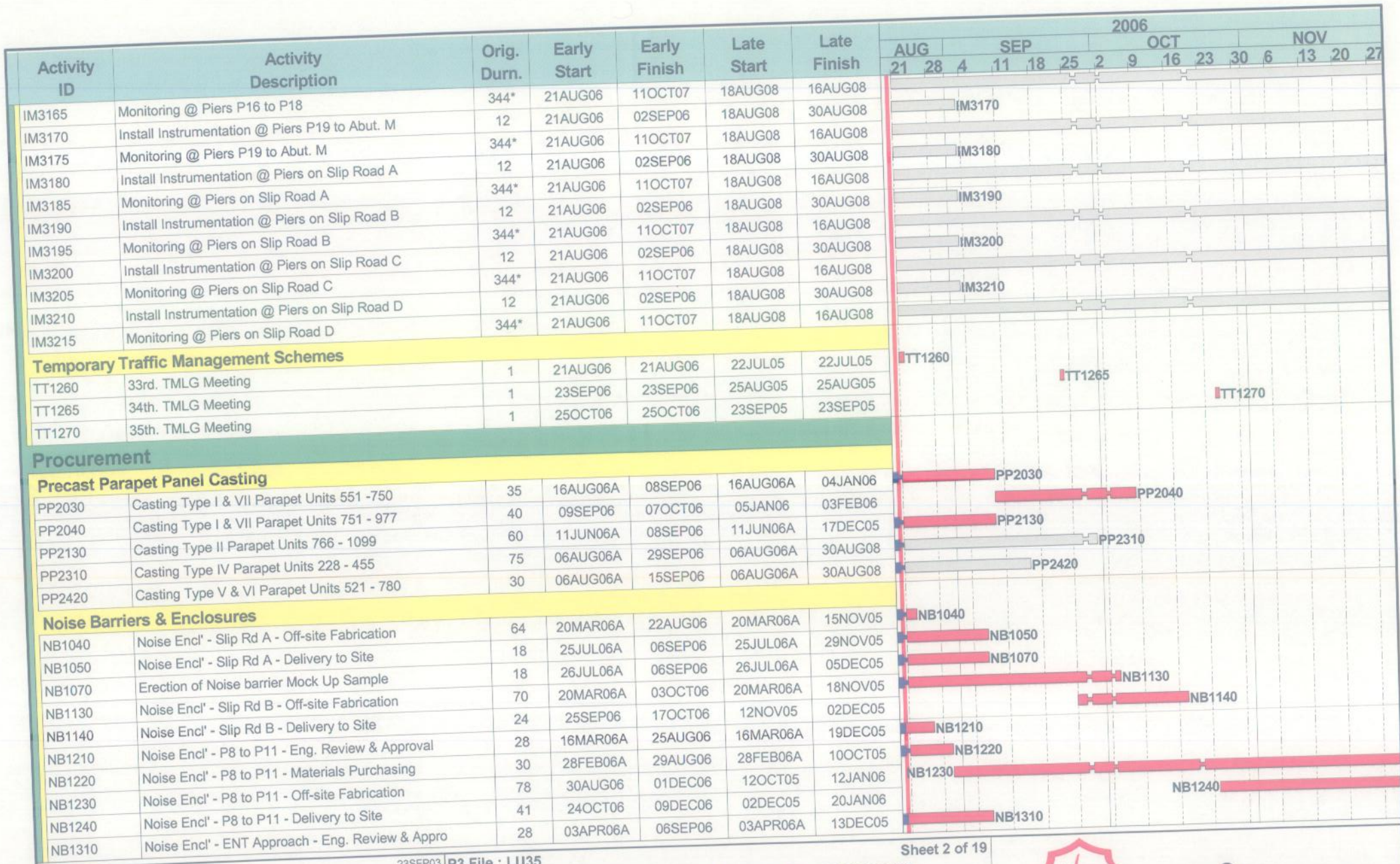
Activity ID	Activity Description	Orig. Durn.	Early Start	Early Finish	Late Start	Late Finish	2006														
							AUG			SEP			OCT			NOV					
							21	28	4	11	18	25	2	9	16	23	30	6	13	20	27
Preliminaries & General Requirments																					
Portion Access Dates																					
PD1140	Access to Portion F1	0	20AUG06*		30MAY06*		◆ PD1140														
Design of Temporary Works																					
TW1370	Design of Temp Works for Feature 11NW-A/C66	36	21AUG06	03OCT06	06MAY06	16JUN06	TW1370														
TW1380	Design of Temp Works for Feature 11NW-A/FR54&55	36	21AUG06	03OCT06	16JUN05	28JUL05	TW1380														
TW1440	Design of Temporary Works for Pumping Stations	12	21AUG06	02SEP06	25JUL06	08AUG06	TW1440														
Monitoring & Instrumentation - New Works																					
IM3010	Install Instrumentation @ Cut Slope CCR-S1	12	21AUG06	02SEP06	18AUG08	30AUG08	IM3010														
IM3015	Monitoring @ Cut Slope CCR-S1	344*	21AUG06	11OCT07	18AUG08	16AUG08	IM3015														
IM3020	Install Instrumentation @ Cut Slope CCR-S2	12	18SEP06	03OCT06	18AUG08	30AUG08	IM3020														
IM3025	Monitoring @ Cut Slope CCR-S2	320*	18SEP06	11OCT07	18AUG08	16AUG08	IM3025														
IM3030	Install Instrumentation @ Cut Slope CCR-S3	12	21AUG06	02SEP06	18AUG08	30AUG08	IM3030														
IM3035	Monitoring @ Cut Slope CCR-S3	344*	21AUG06	11OCT07	18AUG08	16AUG08	IM3035														
IM3040	Install Instrumentation @ Cut Slope CCR-S4	12	04OCT06	17OCT06	18AUG08	30AUG08	IM3040														
IM3045	Monitoring @ Cut Slope CCR-S4	308*	04OCT06	11OCT07	18AUG08	16AUG08	IM3045														
IM3050	Install Instrumentation @ Cut Slope CCR-S5	12	21AUG06	02SEP06	18AUG08	30AUG08	IM3050														
IM3055	Monitoring @ Cut Slope CCR-S5	344*	21AUG06	11OCT07	18AUG08	16AUG08	IM3055														
IM3060	Install Instrumentation @ Cut Slope CCR-S6	12	21AUG06	02SEP06	18AUG08	30AUG08	IM3060														
IM3065	Monitoring @ Cut Slope CCR-S6	344*	21AUG06	11OCT07	18AUG08	16AUG08	IM3065														
IM3080	Install Instrumentation @ Slope 11NW-A/C26	12	21AUG06	02SEP06	18AUG08	30AUG08	IM3080														
IM3085	Monitoring @ Slope 11NW-A/C26	344*	21AUG06	11OCT07	18AUG08	16AUG08	IM3085														
IM3100	Install Instrumentation @ Slope 11NW-A/C687 & 679	12	07OCT06	21OCT06	18AUG08	30AUG08	IM3100														
IM3105	Monitoring @ Slope 11NW-A/C687 & 679	305*	07OCT06	11OCT07	18AUG08	16AUG08	IM3105														
IM3110	Install Instrumentation @ Slip Road A Embankment	12	18NOV06	01DEC06	18AUG08	30AUG08	IM3110														
IM3115	Monitoring @ Slip Road A Embankment	270*	18NOV06	11OCT07	18AUG08	16AUG08	IM3115														
IM3130	Install Instrumentation @ Piers P1 to P6	12	21AUG06	02SEP06	18AUG08	30AUG08	IM3130														
IM3135	Monitoring @ Piers P1 to P6	344*	21AUG06	11OCT07	18AUG08	16AUG08	IM3135														
IM3140	Install Instrumentation @ Piers P7 to P10	12	21AUG06	02SEP06	18AUG08	30AUG08	IM3140														
IM3145	Monitoring @ Piers P7 to P10	344*	21AUG06	11OCT07	18AUG08	16AUG08	IM3145														
IM3150	Install Instrumentation @ Piers P11 to P15	12	21AUG06	02SEP06	18AUG08	30AUG08	IM3150														
IM3155	Monitoring @ Piers P11 to P15	344*	21AUG06	11OCT07	18AUG08	16AUG08	IM3155														
IM3160	Install Instrumentation @ Piers P16 to P18	12	21AUG06	02SEP06	18AUG08	30AUG08	IM3160														

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from 20 August 2006





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Activity ID	Activity Description	Orig. Durn.	Early Start	Early Finish	Late Start	Late Finish	2006														
							AUG		SEP			OCT			NOV						
							21	28	4	11	18	25	2	9	16	23	30	6	13	20	27
NB1320	Noise Encl' - ENT Approach - Material Purchasing	27	28FEB06A	16SEP06	28FEB06A	29OCT05	NB1320														
NB1330	Noise Encl' - ENT Approach - Off-site Fabricat'n	57	18SEP06	25NOV06	31OCT05	06JAN06	NB1330														
NB1340	Noise Encl' - ENT Approach - Delivery to Site	41	26OCT06	12DEC06	05DEC05	23JAN06	NB1340														
NB2010	Noise Barriers - PA to P4 - Eng. Review & Appro'	28	23MAR06A	23AUG06	23MAR06A	04AUG06	NB2010														
NB2020	Noise Barriers - PA to P4 - Materials Purchasing	39	28FEB06A	29AUG06	28FEB06A	05APR06	NB2020														
NB2030	Noise Barriers - PA to P4 - Off-site Fabrication	120	30AUG06	22JAN07	06APR06	28AUG06	NB2030														
NB2040	Noise Barriers - PA to P4 - Delivery to Site	62	17NOV06	30JAN07	23JUN06	05SEP06	NB2040														
NB2110	Noise Barriers - P5 to P8 - Eng. Review & Appro'	47	23MAR06A	23AUG06	23MAR06A	17SEP06	NB2110														
NB2120	Noise Barriers - P5 to P8 - Materials Purchasing	40	28FEB06A	29AUG06	28FEB06A	30MAY06	NB2120														
NB2130	Noise Barriers - P5 to P8 - Off-site Fabrication	110	30AUG06	10JAN07	31MAY06	11OCT06	NB2130														
NB2140	Noise Barriers - P5 to P8 - Delivery to Site	56	09NOV06	15JAN07	10AUG06	16OCT06	NB2140														
NB2210	Noise Barriers - P11 to P13 -Eng Review & Approv	28	23MAR06A	23AUG06	23MAR06A	23JUL06	NB2210														
NB2220	Noise Barriers - P11 to P13 - Materials Purchase	28	28FEB06A	28SEP06	28FEB06A	05JUL06	NB2220														
NB2230	Noise Barriers - P11 to P13 - Off-site Fabric'n	35	29SEP06	10NOV06	06JUL06	16AUG06	NB2230														
NB2240	Noise Barriers - P11 to P13 - Delivery to Site	7	11NOV06	18NOV06	17AUG06	24AUG06	NB2240														
NB2300	Noise Barriers - ENT Approach -Des'n & Shop Dwgs	82	24AUG05A	24AUG06	24AUG05A	30AUG08	NB2300														
NB2310	Noise Barriers - ENT Approach -Eng Rev & Approv	28	03APR06A	06SEP06	03APR06A	31JUL06	NB2310														
NB2320	Noise Barriers - ENT Approach -Material Purchase	65	28FEB06A	16SEP06	28FEB06A	27JUN06	NB2320														
NB2330	Noise Barriers - ENT Approach -Off-site Fabric'n	48	18SEP06	15NOV06	28JUN06	24AUG06	NB2330														
NB2340	Noise Barriers - ENT Approach - Delivery to Site	25	25OCT06	22NOV06	03AUG06	31AUG06	NB2340														
NB2410	Noise Barriers - Slip Rd. C - Eng Rev & Approv	28	23MAR06A	25AUG06	23MAR06A	08JUL06	NB2410														
NB2420	Noise Barriers - Slip Rd. C - Material Purchase	29	28FEB06A	29AUG06	28FEB06A	14JUN06	NB2420														
NB2430	Noise Barriers - Slip Rd.C - Off-site Fabricat'n	38	30AUG06	14OCT06	15JUN06	01AUG06	NB2430														
NB2440	Noise Barriers - Slip Rd. C - Delivery to Site	17	04OCT06	24OCT06	28JUL06	17AUG06	NB2440														
NB2510	Noise Barriers - Slip Rd. D - Eng Rev & Approv	125	16MAR06A	25AUG06	16MAR06A	20SEP06	NB2510														
NB2520	Noise Barriers - Slip Rd. D - Material Purchase	90	28FEB06A	29AUG06	28FEB06A	29AUG06	NB2520														
NB2530	Noise Barriers - Slip Rd. D -Off-site Fabricat'n	38	30AUG06	14OCT06	30AUG06	14OCT06	NB2530														
NB2540	Noise Barriers - Slip Rd. D - Delivery to Site	13	05OCT06	19OCT06	05OCT06	19OCT06	NB2540														
MJ1010	Detailed Design & Shop Drawings	48	20MAR06A	16SEP06	20MAR06A	08DEC05	MJ1010														
MJ1020	Review & Approval of Design & Shop Drawings	24	14JUN06A	03OCT06	14JUN06A	22DEC05	MJ1020														
MJ1040	Off-Site Manufacturing of M.Js. - Main Line	50	15SEP06	15NOV06	07DEC05	08FEB06	MJ1040														
MJ1050	Off-Site Manufacturing of M.Js. - Slip Roads	50	16NOV06	15JAN07	11AUG06	10OCT06	MJ1050														

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Activity ID	Activity Description	Orig. Durn.	Early Start	Early Finish	Late Start	Late Finish	2006														
							AUG			SEP			OCT			NOV					
							21	28	4	11	18	25	2	9	16	23	30	6	13	20	27
Signage																					
SG1010	Sign Gantries - Detailed Design & Shop Drawings	50	17NOV05A	26AUG06	17NOV05A	27OCT05	SG1010														
SG1020	Sign Gantries - Review/Appro of Design & S/Dwgs.	24	20MAR06A	16SEP06	20MAR06A	10NOV05	SG1020														
SG1030	Sign Gantries - Off-Site Fabrication of Gantries	60	18SEP06	29NOV06	11NOV05	21JAN06	SG1030														
SG1040	Sign Gantries - Delivery of Gantries to Site	24	06NOV06	02DEC06	28DEC05	25JAN06	SG1040														
SG2010	Signage - Shop Drawings	50	20OCT05A	16SEP06	20OCT05A	10OCT05	SG2010														
SG2020	Signage - Review & Approval of Shop Drawings.	24	18SEP06	17OCT06	12OCT05	08NOV05	SG2020														
SG2030	Signage - Off-Site Fabrication of Signs	50	18OCT06	15DEC06	09NOV05	07JAN06	SG2030														
Viaduct - Main Line - Piers PA to P6																					
Superstructure Finishing Works Required for TCSS																					
MF1005	P3L to P6 - Parapets P3/L to P7/L (incl earthing)	48	22APR06A	18SEP06	22APR06A	18JAN06	MF1005														
MF1000	PA to P6 - Parapets PA/L to P3/L (incl earthing)	48	14APR06A	25AUG06	14APR06A	04FEB06	MF1000														
MF1010	PA to P6 - Parapets PA/R to P3/R (incl earthing)	48	19JUN06A	25AUG06	19JUN06A	30AUG08	MF1010														
MF1012	PA to P6 - Parapets P3/R to P7 (incl earthing)	48	03JUL06A	23SEP06	03JUL06A	11MAR06	MF1012														
MF1015	PA to P6 - Insitu Slab to Under Median Barrier	36	21AUG06	03OCT06	15NOV05	27DEC05	MF1015														
MF1017	PA to P6 - Median Barrier (incl earthing)	36	11SEP06	25OCT06	06DEC05	18JAN06	MF1017														
MF1020	PA to P6 - Sign Gantry DS2 at P5/R-B4	12	06NOV06	18NOV06	06FEB06	18FEB06	MF1020														
MF1030	PA to P6 - Provision for E & M and TCSS	24	26OCT06	22NOV06	19JAN06	18FEB06	MF1030														
Remaining Superstructure Finishing Works																					
MF1040	PA to P6 - Deck Drainage	60	26OCT06	05JAN07	19JUL06	28SEP06	MF1040														
MF1050	PA to P6 - Top Rail to Parapets	24	25SEP06	25OCT06	24OCT06	20NOV06	MF1050														
MF1090	P6 - Landscaping - Planting On Viaduct	25	25SEP06*	26OCT06	04OCT06	02NOV06	MF1090														
MF1100	P6 - Landscape Establishment Works on Viaduct	301	27OCT06	26OCT07	24NOV06	23NOV07	MF1100														
Noise Barriers & Encl' (Sec.15 Excision)																					
MN1000	Viaduct - 3m Absorptive Barriers N/B Ch.407-670	75	19SEP06	18DEC06	09OCT06	06JAN07	MN1000														
MN7000	Viaduct - 3m Ref. Barriers N/B Ch.S1280-L938	75	09NOV06	06FEB07	09OCT06	06JAN07	MN7000														
Remaining Noise Barriers & Enclosures																					
MN8040	Viaduct - 5m Reflective Barrier N/B Ch.407 - 642	75	20NOV06	16FEB07	09AUG06	07NOV06	MN8040														
Viaduct - Slip Road A																					
Superstructure Finishing Works Required for TCSS																					
AF1010	Slip Rd.A to P7 -Parapets East Face (incl earth)	60	06JAN06A	30AUG06	06JAN06A	11NOV05	AF1010														
AF1020	Slip Rd.A to P7- Parapets West Face (incl earth)	60	17JAN06A	02SEP06	17JAN06A	25NOV05	AF1020														

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							AUG			SEP			OCT			NOV					
							21	28	4	11	18	25	2	9	16	23	30	6	13	20	27
AF1030	Slip Rd. A - Provision for E & M and TCSS	24	08NOV06	05DEC06	19JAN06	18FEB06	AF1030														
Remaining Superstructure Finishing Works																					
AF1040	Slip Rd. A - Deck Drainage	60	08APR06A	19OCT06	08APR06A	19DEC06	AF1040														
Noise Barriers & Encl' (Sec.15 Excision)																					
AN1000	Slip Rd. A - Full Enclosure Ch.1070 - Pier A2	48	31AUG06	28OCT06	12NOV05	09JAN06	AN1000														
AN1010	Slip Rd. A - Full Enclosure Pier A2 - 1280	48	10OCT06	05DEC06	20DEC05	18FEB06	AN1010														
Viaduct - Slip Road B																					
Superstructure Finishing Works Required for TCSS																					
BF1010	Slip Rd. B to P7 - Parapets East Face (incl earth)	60	04MAY06A	24AUG06	04MAY06A	18NOV05	BF1010														
BF1015	Slip Rd. B to P7 - Parapets West Face (incl earth)	60	04MAY06A	25AUG06	04MAY06A	08FEB06	BF1015														
Remaining Superstructure Finishing Works																					
BF1050	Slip Rd. B - Deck Drainage	60	09NOV06	19JAN07	08AUG06	18OCT06	BF1050														
BF1060	Slip Rd. B - Top Rail to Parapets	12	14OCT06	28OCT06	10NOV06	23NOV06	BF1060														
Remaining Noise Barriers & Enclosures																					
BN1000	Slip Road B - Full Enclosure Ch.1038 - Pier B2	48	28SEP06	24NOV06	15NOV05	11JAN06	BN1000														
BN1005	Slip Road B - Full Enclosure Pier B2 - Ch. 1258	48	28OCT06	22DEC06	13DEC05	11FEB06	BN1005														
BN1010	Slip Road B - Semi Enclosures Ch.1258 - 1318	40	14NOV06	30DEC06	30DEC05	18FEB06	BN1010														
At Grade Works - Lai Po Road																					
Temporary Traffic Management Schemes																					
WT3330	5th. TTMS Lai Po Rd (for N/B C/W) - Site Prepare	24	05JUN06A	09SEP06	05JUN06A	16JUN05	WT3330														
WT5100	Transfer Viaduct Access to Slip Rd B	1	11SEP06	11SEP06	16JUN05	16JUN05	WT5100														
WT3340	Divert N/B&S/B Traffic to Divs'n No3 for N/B C/W	1	12SEP06	12SEP06	17JUN05	17JUN05	WT3340														
WT3350	5th. TTMS Lai Po Rd (for N/B C/W) -Implementation	111*	13SEP06	25JAN07	18JUN05	29OCT05	WT3350														
WT3400	6th. TTMS Lai Po Rd (for S/B C/W)-Prepare Review	18	20MAY06A	09SEP06	20MAY06A	22SEP05	WT3400														
WT3410	6th. TTMS Lai Po Rd (for S/B C/W) - CRE Endors't	6	26OCT06	01NOV06	24SEP05	30SEP05	WT3410														
WT3420	6th. TTMS Lai Po Rd (for S/B C/W) -Roadw'k Advice	6	02NOV06	08NOV06	03OCT05	08OCT05	WT3420														
Retaining Wall LCK-R1																					
WW1010	Ret. Wall LCK-R1 - Bases	18	15AUG06A	07SEP06	15AUG06A	16JUL05	WW1010														
WW1020	Ret. Wall LCK-R1 - Walls	24	01SEP06	29SEP06	11JUL05	06AUG05	WW1020														
WW1030	Ret. Wall LCK-R2 - Parapets	24	18NOV06	15DEC06	20SEP05	19OCT05	WW1030														
Retaining Wall LCK-R2																					
WW2020	Ret. Wall LCK-R2 - Walls	60	06JUN06A	02SEP06	06JUN06A	07JUN05	WW2020														

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Activity ID	Activity Description	Orig. Durn.	Early Start	Early Finish	Late Start	Late Finish	2006																	
							AUG			SEP			OCT			NOV								
							21	28	4	11	18	25	2	9	16	23	30	6	13	20	27			
Retaining Wall LCK-R3																								
WW3000	Ret. Wall LCK-R3 - Bases	18	20SEP06	12OCT06	25JUN05	16JUL05																		
WW3010	Ret. Wall LCK-R3 - Walls	24	06OCT06	03NOV06	11JUL05	06AUG05																		
Lai Po Road (D3) Roadworks - Stage 1																								
WR1210	Lai Po Rd N/B Ch.1+250 - 1+360 - Formation	18	29MAR06A	25AUG06	29MAR06A	17NOV05																		
WR1230	Lai Po Rd N/B Ch.1+250 - 1+360 - Sub-base	12	25APR06A	29AUG06	25APR06A	21NOV05																		
WR1240	Lai Po Rd N/B Ch.1+250 - 1+360 - Kerbs	12	10MAY06A	02SEP06	10MAY06A	25NOV05																		
WR1250	Lai Po Rd N/B Ch.1+250 - 1+360- Utilities	24	21AUG06	16SEP06	17NOV05	14DEC05																		
WR1260	Lai Po Rd N/B Ch.1+250 - 1+360 - Road Pavement	6	04SEP06	09SEP06	25AUG08	30AUG08																		
WE1040	Lai Po Rd S/B - Temporary Ramp at Slip Road B	18	21AUG06	09SEP06	25MAY05	15JUN05																		
Lai Po Road (D3) Roadworks - Stage 3																								
WA3200	Lai Po Rd S/B Ch.1+300 - 1+360 - Drainage	12	11SEP06	23SEP06	13AUG05	26AUG05																		
WR2300	Lai Po Rd S/B Ch.1+300 - 1+360 - Formation	6	25SEP06	03OCT06	27AUG05	02SEP05																		
WR2310	Lai Po Rd S/B Ch.1+300 - 1+360 - Sub-base	6	04OCT06	10OCT06	03SEP05	09SEP05																		
WR2320	Lai Po Rd S/B Ch.1+300 - 1+360 - Kerbs	6	11OCT06	17OCT06	10SEP05	16SEP05																		
WR2330	Lai Po Rd S/B Ch.1+300 - 1+360 - Pavement	6	18OCT06	25OCT06	17SEP05	24SEP05																		
Lai Po Road (D3) Roadworks - Stage 4																								
WE1005	Lai Po Rd N/B - Remove Temp Ramp to Slip Rd. A	6	13SEP06	19SEP06	18JUN05	24JUN05																		
WE1007	Lai Po Rd N/B - Remove Temp Road Over Slip Rd A	12	13SEP06	26SEP06	18JUN05	02JUL05																		
WE1010	Lai Po Rd N/B Ch.0+946 - 1+250 - Fill Embankment	36	06OCT06	17NOV06	11JUL05	20AUG05																		
WR0050	Lai Po Rd N/B - Sign Gantry DS6 Founds	12	18OCT06	01NOV06	15AUG05	27AUG05																		
WA2400	Lai Po Rd S/B Ch.1+170 - 1+300 Drainage	24	13SEP06	12OCT06	13OCT05	09NOV05																		
WR2400	Lai Po Rd S/B Ch.1+170 - 1+300 - Formation	12	06OCT06	19OCT06	03NOV05	16NOV05																		
WR2410	Lai Po Rd S/B Ch.1+170 - 1+300- Sub-base	18	21OCT06	10NOV06	17NOV05	07DEC05																		
WR2420	Lai Po Rd S/B Ch.1+170 - 1+300- Kerbs	18	28OCT06	17NOV06	24NOV05	14DEC05																		
WR2430	Lai Po Rd S/B Ch.1+170 - 1+300 - Pavement	6	18NOV06	24NOV06	23FEB06	01MAR06																		
Lai Po Road Fire Hydrant Pump House																								
WH2000	Fire Main at Lai Po Road - at Grade Pipework	18	24JUN06A	01SEP06	24JUN06A	21FEB06																		
WH2010	Fire Main at Lai Po Road - Pipework up Pier P5/R	12	25SEP06	10OCT06	12OCT06	26OCT06																		
WH2020	Fire Main at Lai Po Road - Valves & Connections	24	11OCT06	08NOV06	27OCT06	23NOV06																		
Viaduct - Main Line - Piers P7 to P10																								
Superstructure Finishing Works Required for TCSS																								
MF2000	P7 to P10 - Parapets P7 to P8 (incl earthing)	36	21AUG06	03OCT06	09DEC05	21JAN06																		

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							AUG			SEP			OCT			NOV					
							21	28	4	11	18	25	2	9	16	23	30	6	13	20	27
MF2002	P7 to P10 - Parapets P8 to P10 (incl earthing)	36	02JUN06A	18SEP06	02JUN06A	05DEC05	MF2002														
MF2005	P7 to P10 - Insitu Slab to Under Median Barrier	48	21AUG06	17OCT06	24SEP05	21NOV05	MF2005														
MF2007	P7 to P10 - Median Barrier (incl earthing)	36	18SEP06	01NOV06	25OCT05	05DEC05	MF2007														
MF2010	P7 to P10 - Sign Gantry ??? at P8/L	21	06NOV06	29NOV06	23JAN06	18FEB06	MF2010														
MF2020	P7 to P10 - Sign Gantry FADS2 at P10/R	21	06NOV06	29NOV06	23JAN06	18FEB06	MF2020														
Remaining Superstructure Finishing Works																					
MF2040	P7 to P10 - Deck Drainage	48	02NOV06	28DEC06	26SEP06	23NOV06	MF2040														
MF2050	P7 to P10 - Top Rail to Parapets	18	26OCT06	15NOV06	09SEP06	30SEP06	MF2050														
MF2055	P7 to P10 - Install Movement Joint at P7	12	16NOV06	29NOV06	09SEP06	22SEP06	MF2055														
MF2090	P7 to P10 - Landscaping - Planting On Viaduct	25	04OCT06	02NOV06	11OCT06	09NOV06	MF2090														
MF2091	P7 to P10 - Landscape Establish Works on Viaduct	301	03NOV06	02NOV07	24NOV06	23NOV07	MF2091														
Remaining Noise Barriers & Enclosures																					
MN8000	Viaduct - Semi Enclosure N/B Ch.980 to 1181	60	02NOV06	12JAN07	06DEC05	18FEB06	MN8000														
MN8020	Viaduct - 3m Reflective Barrier C/L Ch.845 - 980	60	13NOV06	23JAN07	14AUG06	25OCT06	MN8020														
At Grade Works - Lai Chi Kok Interchange																					
Temporary Traffic Management Schemes																					
MT1150	B.V. Rd - Divert Traffic to Fast & Slow Lanes	1	17NOV06	16NOV06	05SEP05	03SEP05	MT1150														
MT1310	2nd. TTMS Butterfly Valley Rd - CRE Endorsement	6	19MAY06A	26AUG06	19MAY06A	06AUG05	MT1310														
MT1320	2nd. TTMS Butterfly Valley Rd - Roadworks Advice	6	28AUG06	02SEP06	08AUG05	13AUG05	MT1320														
MT1330	2nd. TTMS Butterfly Valley Rd - Prepare	18	04SEP06	23SEP06	15AUG05	03SEP05	MT1330														
MT1340	2nd. TTMS Butterfly Valley Rd - Implementation	47*	17NOV06	12JAN07	05SEP05	01NOV05	MT1340														
MT1400	3rd TTMS Butterfly Valley Rd -Prepare for Review	12	22AUG06	04SEP06	11AUG05	24AUG05	MT1400														
MT1410	3rd. TTMS Butterfly Valley Rd - CRE Endorsement	6	25SEP06	03OCT06	16SEP05	23SEP05	MT1410														
MT1420	3rd. TTMS Butterfly Valley Rd - Roadworks Advice	6	04OCT06	10OCT06	24SEP05	30SEP05	MT1420														
MT1430	3rd. TTMS Butterfly Valley Rd - Prepare	24	11OCT06	08NOV06	03OCT05	31OCT05	MT1430														
MT2140	TTMS for Pier P8/L - Implementation	768*	23FEB04A	08SEP06	23FEB04A	11NOV05	MT2140														
MT3100	2nd. TTMS Kom Tsun Street - Prepare for Review	12	21AUG06	02SEP06	11JUL08	24JUL08	MT3100														
MT3110	2nd. TTMS Kom Tsun Street - CRE Endorsement	6	04SEP06	09SEP06	25JUL08	31JUL08	MT3110														
MT3120	2nd. TTMS Kom Tsun Street - Roadworks Advice	6	11SEP06	16SEP06	01AUG08	07AUG08	MT3120														
MT3130	2nd. TTMS Kom Tsun Street - Site Preparation	20	18SEP06	12OCT06	08AUG08	30AUG08	MT3130														
MT3140	2nd. TTMS Kom Tsun Street - Implementation	117*	21AUG06	09JAN07	14SEP05	18NOV05	MT3140														
MT3200	3rd. TTMS Kom Tsun Street - Prepare for Review	12	21AUG06	02SEP06	16SEP05	30SEP05	MT3200														
MT3210	3rd. TTMS Kom Tsun Street - CRE Endorsement	6	04SEP06	09SEP06	03OCT05	08OCT05	MT3210														

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							AUG			SEP			OCT			NOV					
							21	28	4	11	18	25	2	9	16	23	30	6	13	20	27
MT3220	3rd. TTMS Kom Tsun Street - Roadworks Advice	6	11SEP06	16SEP06	10OCT05	17OCT05	[Gantt bar for MT3220: 11SEP06 - 16SEP06]														
MT3230	3rd. TTMS Kom Tsun Street - Site Preparation	28	18SEP06	23OCT06	18OCT05	18NOV05	[Gantt bar for MT3230: 18SEP06 - 23OCT06]														
Drainage Works																					
SA5100	Butterfly Valley Rd Stage2 - Stormwater Drainage	36	17NOV06	21NOV06	05SEP05	08SEP05	[Gantt bar for SA5100: 17NOV06 - 21NOV06]														
Utilities & Roadworks																					
SR2000	Castle Peak Road - Roadworks Reinstatement	17	21AUG06	08SEP06	24OCT05	11NOV05	[Gantt bar for SR2000: 21AUG06 - 08SEP06]														
SR5000	Butterfly V. Rd (LCKI) Stage1-Excav. & Formation	36	21AUG06	03OCT06	09JUN05	22JUL05	[Gantt bar for SR5000: 21AUG06 - 03OCT06]														
SR5010	Butterfly V. Rd (LCKI) Stage 1 - Sub-base	36	04SEP06	17OCT06	24JUN05	05AUG05	[Gantt bar for SR5010: 04SEP06 - 17OCT06]														
SR5020	Butterfly V. Rd (LCKI) Stage 1 - Kerbs	24	04OCT06	01NOV06	23JUL05	19AUG05	[Gantt bar for SR5020: 04OCT06 - 01NOV06]														
SR5030	Butterfly V. Rd (LCKI) Stage 1 - Pavement	9	02NOV06	11NOV06	20AUG05	30AUG05	[Gantt bar for SR5030: 02NOV06 - 11NOV06]														
SR5040	Butterfly V. Rd (LCKI) Stage 1 - Street Lighting	4	13NOV06	16NOV06	14JAN06	18JAN06	[Gantt bar for SR5040: 13NOV06 - 16NOV06]														
SR5060	Butterfly V. Rd (LCKI) Stage 1 - Road Marking	4	13NOV06	16NOV06	31AUG05	03SEP05	[Gantt bar for SR5060: 13NOV06 - 16NOV06]														
SR3200	Kom Tsun Street Bus Stn. - Excavate & Formation	18	21AUG06	09SEP06	30JUN05	21JUL05	[Gantt bar for SR3200: 21AUG06 - 09SEP06]														
SR3210	Kom Tsun Street bus Stn. - Sub-base	18	04SEP06	23SEP06	15JUL05	04AUG05	[Gantt bar for SR3210: 04SEP06 - 23SEP06]														
SR3220	Kom Tsun Street Bus Stn. - Kerbs	24	18SEP06	17OCT06	29JUL05	25AUG05	[Gantt bar for SR3220: 18SEP06 - 17OCT06]														
SR3230	Kom Tsun Street Bus Stn. - Concrete Pavement	85	28SEP06	09JAN07	08AUG05	17NOV05	[Gantt bar for SR3230: 28SEP06 - 09JAN07]														
SR3000	Kom Tsun Street L/H C/Way - Excavate & Formation	12	21AUG06	02SEP06	14SEP05	28SEP05	[Gantt bar for SR3000: 21AUG06 - 02SEP06]														
SR3010	Kom Tsun Street L/H C/Way - Sub-base	12	04SEP06	16SEP06	29SEP05	14OCT05	[Gantt bar for SR3010: 04SEP06 - 16SEP06]														
SR3020	Kom Tsun Street L/H C/Way - Kerbs	18	18SEP06	10OCT06	15OCT05	04NOV05	[Gantt bar for SR3020: 18SEP06 - 10OCT06]														
SR3030	Kom Tsun Street L/H C/Way - Pavement	8	11OCT06	19OCT06	05NOV05	14NOV05	[Gantt bar for SR3030: 11OCT06 - 19OCT06]														
SR3035	Kom Tsun Street L/H C/Way - Street Lighting	4	21OCT06	25OCT06	15NOV05	18NOV05	[Gantt bar for SR3035: 21OCT06 - 25OCT06]														
SR3040	Kom Tsun Street L/H C/Way - Road Marking	4	21OCT06	25OCT06	15NOV05	18NOV05	[Gantt bar for SR3040: 21OCT06 - 25OCT06]														
Viaduct - Main Line - Piers P11 to P15																					
Superstructure Finishing Works Required for TCSS																					
MF3000	P11 to P15 - Parapets P10 to P12 (incl earthing)	30	21AUG06	23SEP06	14JUL06	18AUG06	[Gantt bar for MF3000: 21AUG06 - 23SEP06]														
MF3005	P11 to P15 - Parapets P12 to P14 (incl earthing)	24	25MAY06A	07SEP06	25MAY06A	18AUG06	[Gantt bar for MF3005: 25MAY06A - 07SEP06]														
MF3010	P11 to P15 - Parapets P14 to P16 (incl earthing)	24	30MAY06A	07SEP06	30MAY06A	30DEC05	[Gantt bar for MF3010: 30MAY06A - 07SEP06]														
MF3015	P11 to P15 - Insitu Slab to Under Median Barrier	48	14AUG06A	11OCT06	14AUG06A	04JAN06	[Gantt bar for MF3015: 14AUG06A - 11OCT06]														
MF3017	P11 to P15 - Median Barrier (incl earthing)	48	12SEP06	09NOV06	06DEC05	04FEB06	[Gantt bar for MF3017: 12SEP06 - 09NOV06]														
MF3020	P11 to P15 - Provision for E & M and TCSS	24	27OCT06	23NOV06	19JAN06	18FEB06	[Gantt bar for MF3020: 27OCT06 - 23NOV06]														
Remaining Superstructure Finishing Works																					
MF3040	P11 to P15 - Deck Drainage	72	12OCT06	06JAN07	29AUG06	23NOV06	[Gantt bar for MF3040: 12OCT06 - 06JAN07]														
MF3050	P11 to P15 - Top Rail to Parapets	18	04OCT06	25OCT06	19AUG06	08SEP06	[Gantt bar for MF3050: 04OCT06 - 25OCT06]														

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							AUG			SEP			OCT			NOV									
							21	28	4	11	18	25	2	9	16	23	30	6	13	20	27				
MF3055	P11 to P15 - Install Movement Joint at P12	12	16NOV06	29NOV06	29AUG06	11SEP06	MF3055																		
MF3090	P11 to P15 - Landscaping - Planting On Viaduct	25	11OCT06	09NOV06	18OCT06	16NOV06	MF3090																		
MF3100	P11 to P15 - Landscape Establish W'ks on Viaduct	301	10NOV06	09NOV07	24NOV06	23NOV07	MF3100																		
Remaining Noise Barriers & Enclosures																									
MN8030	Viaduct - 3m Reflective Barrier S/B Ch.1181-1302	75	20NOV06	16FEB07	25AUG06	23NOV06	MN8030																		
MN8070	Viaduct - 5m Reflective Barrier N/B Ch.1181-1302	75	20NOV06	16FEB07	25AUG06	23NOV06	MN8070																		
At Grade Works - Wai Man Tsuen																									
Realigned Channel at Wai Man Tsuen																									
VC3000	Channel - Modifications to Channel Floor -VO 299	12	30NOV05A	24AUG06	30NOV05A	18JAN06	VC3000																		
Earthworks & Slope Works																									
VE1060	Slope CCR-S5 - Slope Drainage & Finishes	24	21AUG06	16SEP06	01NOV05	28NOV05	VE1060																		
VE1070	Slope CCR-S5 - Landscaping & Hydroseeding	12	11SEP06	23SEP06	22NOV05	05DEC05	VE1070																		
Earthworks & Slope Works - 11NW-A/C678 & CR679																									
VE2025	Slope 11NW-A/C678 & CR679 - Platform for S.Nails	3	21AUG06	23AUG06	25NOV05	28NOV05	VE2025																		
VE2027	Slope 11NW-A/C678 & CR679 - Test Soil Nail	6	24AUG06	30AUG06	29NOV05	05DEC05	VE2027																		
VE2030	Slope 11NW-A/C678 & CR679 - Soil Nails	18	31AUG06	20SEP06	06DEC05	27DEC05	VE2030																		
VE2000	Slope 11NW-A/C678 & CR679 - Remove Temp Platform	6	21SEP06	28SEP06	28DEC05	04JAN06	VE2000																		
VE2020	Slope 11NW-A/C678 & CR679 - Trim Original Slope	6	29SEP06	06OCT06	05JAN06	11JAN06	VE2020																		
VE2050	Slope 11NW-A/C678 & CR679 -Landscape & Hydroseed	6	07OCT06	13OCT06	12JAN06	18JAN06	VE2050																		
Drainage Works																									
VA1000	Butterfly Valley Rd Stage3 - Stormwater Drainage	48	21AUG06	17OCT06	06AUG05	03OCT05	VA1000																		
Utilities & Roadworks																									
VR3000	Drainage Maintenance Access Rd. - Formation	24	02MAR06A	16SEP06	02MAR06A	04NOV05	VR3000																		
VR3010	Drainage Maintenance Access Rd. - Sub-base	24	28AUG06	23SEP06	18OCT05	14NOV05	VR3010																		
VR3020	Drainage Maintenance Access Rd. - Kerbs	24	04SEP06	03OCT06	25OCT05	21NOV05	VR3020																		
VR3030	Drainage Maintenance Access Rd. - Pavement	48	04SEP06	01NOV06	22NOV05	18JAN06	VR3030																		
VR3040	Drainage Maintenance Access Rd. - Street Lights	12	18OCT06	01NOV06	05JAN06	18JAN06	VR3040																		
VR2100	Butterfly V. Rd (WMT) Stage3- Excav. & Formation	18	04OCT06	25OCT06	17SEP05	10OCT05	VR2100																		
VR2110	Butterfly V. Rd (WMT) Stage 3 - Sub-base	18	11OCT06	01NOV06	26SEP05	18OCT05	VR2110																		
VR2120	Butterfly V. Rd (WMT) Stage 3 - Kerbs	18	18OCT06	08NOV06	04OCT05	25OCT05	VR2120																		
VR2130	Butterfly V. Rd (WMT) Stage 3 - Pavement	6	09NOV06	15NOV06	26OCT05	01NOV05	VR2130																		
VR2140	Butterfly V. Rd (WMT) Stage 3 - Street Lighting	4	16NOV06	20NOV06	02NOV05	05NOV05	VR2140																		
VR2150	Butterfly V. Rd (WMT) Stage 3 - Road Marking	4	16NOV06	20NOV06	02NOV05	05NOV05	VR2150																		

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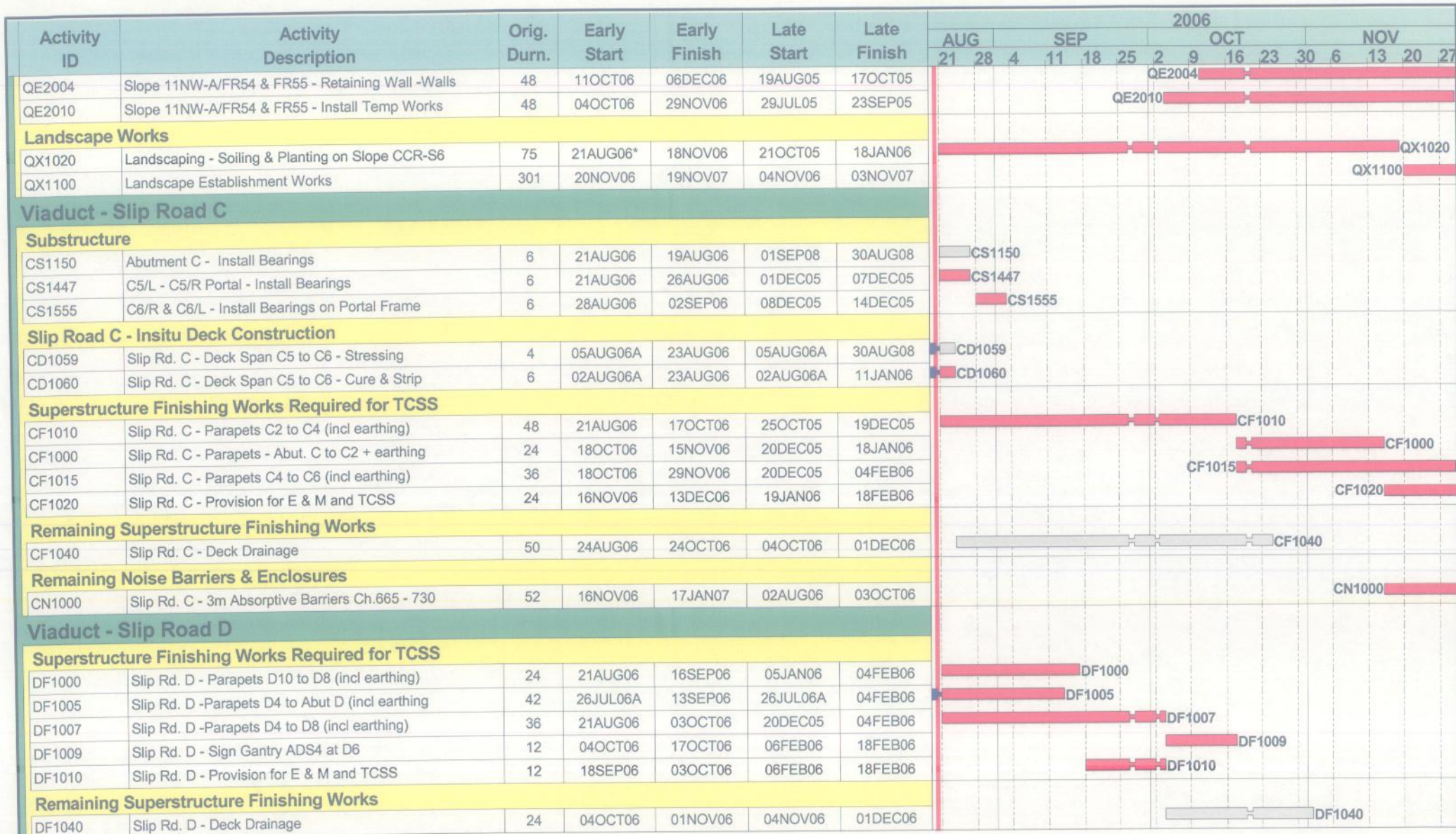
Activity ID	Activity Description	Orig. Durn.	Early Start	Early Finish	Late Start	Late Finish	2006											
							AUG			SEP			OCT			NOV		
							21	28	4	11	18	25	2	9	16	23	30	6
Viaduct - Main Line - Piers 19 to Abutment M																		
Substructure																		
MS5177	P21 - Slope Reinstatement	42	21AUG06	10OCT06	16SEP06	07NOV06	MS5177											
MS5230	Abutment M - Install Bearings	6	21AUG06	26AUG06	25AUG08	30AUG08	MS5230											
MS5290	Abutment M - Remove Ground Support For PC Segs	6	21AUG06	26AUG06	03OCT06	09OCT06	MS5290											
MS5225	Abutment M - Slope Reinstatement	24	28AUG06	23SEP06	10OCT06	07NOV06	MS5225											
Main Line - Segmental Deck Construction (Gantry)																		
MD5185	Gantry Demobilisation	24	18AUG06A	07SEP06	18AUG06A	07NOV06	MD5185											
Superstructure Finishing Works Required for TCSS																		
MF5000	P19 to Abut M -Parapets P18 to Abut M & earthing	42	09SEP06	31OCT06	19DEC05	10FEB06	MF5000											
MF5005	P19 to Abut M - Insitu Slab Under Median Barrier	18	21AUG06	09SEP06	11JAN06	03FEB06	MF5005											
MF5007	P19 to Abut M - Median Barrier (incl earthing)	18	28AUG06	16SEP06	18JAN06	10FEB06	MF5007											
MF5010	P19 to Abut M - Sign Gantry FADS1at Abutment M	12	06NOV06	18NOV06	09MAY06	22MAY06	MF5010											
MF5020	P19 to Abut M - Provision for E & M and TCSS	18	03NOV06	23NOV06	06MAY06	26MAY06	MF5020											
Remaining Superstructure Finishing Works																		
MF5040	P19 to Abut M - Deck Drainage	18	17OCT06	07NOV06	14OCT06	04NOV06	MF5040											
MF5050	P19 to Abut M - Top Rail to Parapets	12	28OCT06	10NOV06	23OCT06	04NOV06	MF5050											
MF5055	P19 to Abut M - Install Movement Joint at Abut M	4	16NOV06	20NOV06	09FEB06	13FEB06	MF5055											
MF5058	P19 to Abut M - Waterproofing of Deck	4	20NOV06	23NOV06	13FEB06	16FEB06	MF5058											
MF5070	P19 to Abut M - Viaduct Road Lighting	18	10NOV06	30NOV06	14OCT06	04NOV06	MF5070											
Viaduct - Main Line - Tunnel Approaches																		
Noise Barriers & Encl' (Sec.10 Excision)																		
MN6100	Semi Enclosure S/B Ch.2005 - 2200 - Frame	60	30OCT06	09JAN07	08DEC05	21FEB06	MN6100											
Remaining Noise Barriers & Enclosures																		
MN8080	At Grade - 7m Reflective Barrier S/B Ch1789-1989	75	28OCT06	25JAN07	07AUG06	04NOV06	MN8080											
MN8100	At Grade - 5.5m Reflective Barrier Ch1799-1997	75	28OCT06	25JAN07	07AUG06	04NOV06	MN8100											
At Grade Works - Butterfly Valley																		
Temporary Traffic Management Schemes																		
QT2130	TTMS Slip RdD Deck@ CC Rd E/B - Site Preparation	2	21AUG06	22AUG06	29AUG08	30AUG08	QT2130											
Earthworks & Slope Works - 11NW-A/FR54 & F55																		
QE2000	Slope 11NW-A/FR54 & FR55 - Remove Temp. Platform	18	21AUG06	09SEP06	30JUN05	21JUL05	QE2000											
QE2002	Slope 11NW-A/FR54 & FR55 - Retaining Wall -Bases	36	11SEP06	25OCT06	22JUL05	01SEP05	QE2002											

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Activity ID	Activity Description	Orig. Durn.	Early Start	Early Finish	Late Start	Late Finish	2006														
							AUG			SEP			OCT			NOV					
							21	28	4	11	18	25	2	9	16	23	30	6	13	20	27
Remaining Noise Barriers & Enclosures																					
DN1000	Slip Rd. D - 3.5m Reflective Barrier Ch.805-881	36	09OCT06	20NOV06	21OCT06	01DEC06	DN1000														
DN1010	Slip Rd. D - 3m Reflective Barriers Ch.680 - 805	36	21OCT06	01DEC06	21OCT06	01DEC06	DN1010														
Lai Wan Road Overpass																					
Temporary Traffic Management Schemes																					
LT2120	TTMS LW Rd (for W/B Deck) - Roadworks Advice	6	20AUG06	25AUG06	19AUG08	24AUG08	LT2120														
LT2130	TTMS LW Rd (for W/B Deck) - Site Preparation	6	26AUG06	01SEP06	25AUG08	30AUG08	LT2130														
LT2210	TTMS LW Rd (for E/B Deck) - CRE Endorsement	6	20AUG06	25AUG06	13AUG08	18AUG08	LT2210														
LT2220	TTMS LW Rd (for E/B Deck) - Roadworks Advice	6	26AUG06	31AUG06	19AUG08	24AUG08	LT2220														
LT2230	TTMS LW Rd (for E/B Deck) - Site Preparation	6	01SEP06	07SEP06	25AUG08	30AUG08	LT2230														
LT2240	TTMS LW Rd (for E/B Deck) - Implementation	292*	24NOV05A	14NOV06	24NOV05A	28FEB06	LT2240														
LT3010	TTMS CC Rd (on W/B Deck) - CRE Endorsement	6	20AUG06	25AUG06	17NOV05	22NOV05	LT3010														
LT3020	TTMS CC Rd (on W/B Deck) - Roadworks Advice	6	26AUG06	31AUG06	23NOV05	28NOV05	LT3020														
LT3030	TTMS CC Rd (on W/B Deck) - Site Preparation	6	01SEP06	07SEP06	29NOV05	05DEC05	LT3030														
LT3050	TTMS CC Rd (on W/B Deck) - Implementation	120*	26OCT06	20MAR07	06DEC05	24AUG06	LT3050														
LT3100	TTMS CC Rd (on E/B Deck) - Prepare for Review	12	22AUG06	04SEP06	04AUG05	17AUG05	LT3100														
LT3110	TTMS CC Rd (on E/B Deck) - CRE Endorsement	6	24SEP06	29SEP06	05AUG06	10AUG06	LT3110														
LT3120	TTMS CC Rd (on E/B Deck) - Roadworks Advice	6	30SEP06	05OCT06	11AUG06	16AUG06	LT3120														
LT3130	TTMS CC Rd (on E/B Deck) - Site Preparation	6	07NOV06	13NOV06	17AUG06	23AUG06	LT3130														
LT3140	Divert 1No. Lane to New East Bound Bridge	1	14NOV06	14NOV06	28FEB06	28FEB06	LT3140														
LT3150	TTMS CC Rd (on E/B Deck) - Implementation	62*	14NOV06	26JAN07	28FEB06	24AUG06	LT3150														
LT3200	TTMS CC Rd (on Both Decks) - Prepare for Review	12	22AUG06	04SEP06	04AUG05	17AUG05	LT3200														
LT3210	TTMS CC Rd (on Both Decks) - CRE Endorsement	6	24SEP06	29SEP06	07AUG06	12AUG06	LT3210														
LT3220	TTMS CC Rd (on Both Decks) - Roadworks Advice	6	30SEP06	05OCT06	13AUG06	18AUG06	LT3220														
LT3300	TTMS CC Rd (on Both Decks) - Prepare for Review	12	25SEP06	10OCT06	01SEP05	14SEP05	LT3300														
LT3310	TTMS CC Rd (on Both Decks) - CRE Endorsement	6	26OCT06	31OCT06	31AUG06	05SEP06	LT3310														
LT3320	TTMS CC Rd (on Both Decks) - Roadworks Advice	6	01NOV06	06NOV06	06SEP06	11SEP06	LT3320														
West Bound - Substructure																					
LS1235	D13 - Install Bearings	3	21AUG06	23AUG06	06OCT05	08OCT05	LS1235														
LS1285	D14 - Install Bearings	6	21AUG06	26AUG06	03OCT05	08OCT05	LS1285														
LS1350	Abutment DA2 - Install Bearings	3	21AUG06	23AUG06	28OCT05	31OCT05	LS1350														
East Bound - Substructure																					
LS2255	C14 - Install Bearings	2	21AUG06	22AUG06	03DEC05	05DEC05	LS2255														

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Activity ID	Activity Description	Orig. Durn.	Early Start	Early Finish	Late Start	Late Finish	2006														
							AUG			SEP			OCT			NOV					
							21	28	4	11	18	25	2	9	16	23	30	6	13	20	27
LS2290	Abutment CA2 - Install Bearings	3	21AUG06	23AUG06	09DEC05	12DEC05	■ LS2290														
West Bound - Insitu Deck																					
LD1040	Lai Wan O/pass W/B - Demolish F/p for Stage 3	6	21AUG06	26AUG06	25AUG08	30AUG08	■ LD1040														
LD1052	Lai Wan O/pass W/B - Span St.3 - Falsework	18	24JUL06A	24AUG06	24JUL06A	14OCT05	■ LD1052														
LD1054	Lai Wan O/pass W/B - Span St.3 - Soffit	24	28AUG06	23SEP06	10OCT05	07NOV05	■ LD1054														
LD1056	Lai Wan O/pass W/B - Span St.3 - 1st. Pour	24	18SEP06	17OCT06	01NOV05	28NOV05	■ LD1056														
LD1058	Lai Wan O/pass W/B - Span St.3 - 2nd. Pour	24	18OCT06	15NOV06	29NOV05	27DEC05	■ LD1058														
LD1059	Lai Wan O/pass W/B - Span St.3 - Stressing	6	16NOV06	22NOV06	28DEC05	04JAN06	■ LD1059														
LD1060	Lai Wan Overpass W/B - Parapets	48	26OCT06	20DEC06	06DEC05	04FEB06	■ LD1060														
East Bound - Insitu Deck																					
LD2052	Lai Wan O/Pass E/B - Span St.3 - Falsework	18	24JUL06A	24AUG06	24JUL06A	25NOV05	■ LD2052														
LD2054	Lai Wan O/Pass E/B - Span St.3 - Soffit	24	21AUG06	16SEP06	22NOV05	19DEC05	■ LD2054														
LD2056	Lai Wan O/Pass E/B - Span St.3 - 1st. Pour	24	04SEP06	03OCT06	06DEC05	04JAN06	■ LD2056														
LD2058	Lai Wan O/Pass E/B - Span St.3 - 2nd. Pour	24	15APR06A	16SEP06	15APR06A	04JAN06	■ LD2058														
LD2059	Lai Wan O/Pass E/B - Span St.3 - Stressing	6	04OCT06	10OCT06	05JAN06	11JAN06	■ LD2059														
LD2060	Lai Wan O/Pass E/B - Insitu Span - Parapets	48	11SEP06	08NOV06	13DEC05	11FEB06	■ LD2060														
LD2065	Lai Wan O/Pass E/B - Movement Joints at CA1&2	6	02NOV06	08NOV06	16FEB06	22FEB06	■ LD2065														
LD2067	Lai Wan O/Pass E/B - Flexible Pavement	4	09NOV06	13NOV06	23FEB06	27FEB06	■ LD2067														
LD2080	Lai Wan O/Pass E/B - Demolish Existing Flanges	36	15NOV06	27DEC06	01MAR06	12APR06	■ LD2080														
At Grade Works - Ching Cheung Road at LCK Park																					
Temporary Traffic Management Schemes																					
NT2050	2nd. TTMS CC Rd (E/B C/Way) - Prepare for Review	12	21AUG06	02SEP06	18AUG08	30AUG08	■ NT2050														
NT2060	2nd. TTMS CC Rd (E/B C/Way) - CRE Endorsement	6	20AUG06	25AUG06	06NOV06	11NOV06	■ NT2060														
NT2070	2nd. TTMS CC Rd (E/B C/Way) - Roadworks Advice	6	26AUG06	31AUG06	12NOV06	17NOV06	■ NT2070														
NT2080	2nd. TTMS CC Rd (E/B C/Way) - Site Preparation	6	01SEP06	07SEP06	18NOV06	24NOV06	■ NT2080														
NT2100	3rd. TTMS CC Rd (E/B C/Way) - Prepare for Review	12	22AUG06	04SEP06	04AUG05	17AUG05	■ NT2100														
NT2110	3rd. TTMS CC Rd (E/B C/Way) - CRE Endorsement	6	24SEP06	29SEP06	07AUG06	12AUG06	■ NT2110														
NT2120	3rd. TTMS CC Rd (E/B C/Way) - Roadworks Advice	6	30SEP06	05OCT06	13AUG06	18AUG06	■ NT2120														
NT2130	3rd. TTMS CC Rd (E/B C/Way) - Site Preparation	6	06OCT06	12OCT06	19AUG06	25AUG06	■ NT2130														
Retaining Wall CCR-R1 West Bound																					
NW1070	W/B Ret. Wall CCR-R1A East - Parapet on Wall	24	21AUG06	16SEP06	01NOV05	28NOV05	■ NW1070														
NW1152	W/B Ret. Wall CCR-R1B - Parapet on Wall	18	18SEP06	10OCT06	29NOV05	19DEC05	■ NW1152														
NW1240	W/B Ret. Wall CCR-R1A West - Parapet on Wall	18	11OCT06	01NOV06	20DEC05	11JAN06	■ NW1240														

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							AUG			SEP			OCT			NOV					
							21	28	4	11	18	25	2	9	16	23	30	6	13	20	27
Drainage Works																					
NA2010	C.C. Rd. W/B in New C/way - S/water Drainage E3	75	21AUG06	18NOV06	14OCT05	11JAN06	NA2010														
NA2020	C.C. Rd. W/B in New C/way - S/water Drainage J2	66	21AUG06	08NOV06	25OCT05	11JAN06	NA2020														
NA3000	C.C. Rd. E/B in New C/way - Stormwater Drainage	75	21AUG06	18NOV06	06OCT05	04JAN06	NA3000														
Utilities & Roadworks																					
NR1000	C.C. Rd. W/B in Portion E3 - Formation	18	06NOV06	25NOV06	28DEC05	18JAN06	NR1000														
NR1010	C.C. Rd. W/B in Portion E3 - Sub-base	12	20NOV06	02DEC06	12JAN06	25JAN06	NR1010														
NR1090	C.C. Rd. W/B in Portion J2 - Sign Gantry	24	06NOV06	02DEC06	19JAN06	18FEB06	NR1090														
NR1100	C.C. Rd. W/B Portion J2 - Formation	18	09NOV06	29NOV06	12JAN06	04FEB06	NR1100														
NR2000	C.C. Rd. E/B - Foundations to Sign Gantry ADS3	18	20NOV06	09DEC06	05JAN06	25JAN06	NR2000														
NR3000	C.C. Rd. E/B - Formation	24	20NOV06	16DEC06	25MAY06	22JUN06	NR3000														
NR3030	C.C. Rd. E/B - E & M and TCSS Provision	36	04OCT06	15NOV06	05JAN06	18FEB06	NR3030														
At Grade Work - Ching Cheung Road - Main Section																					
Temporary Traffic Management Schemes																					
RT2240	3rd. TTMS CC Rd (Slewing) - Implementation	512*	28DEC04A	09SEP06	28DEC04A	01DEC06	RT2240														
RT2300	4th. TTMS CC Rd E/B C/Way - Prepare for Review	12	22AUG06	04SEP06	04AUG05	17AUG05	RT2300														
RT2310	4th. TTMS CC Rd E/B C/Way - CRE Endorsement	6	24SEP06	29SEP06	01OCT06	06OCT06	RT2310														
RT2320	4th. TTMS CC Rd E/B C/Way - Roadworks Advice	6	30SEP06	05OCT06	07OCT06	12OCT06	RT2320														
RT2330	4th. TTMS CC Rd E/B C/Way - Site Preparation	6	06OCT06	12OCT06	13OCT06	19OCT06	RT2330														
Earthworks & Slope Works - CCR-S1, S2 & S3																					
RE1700	Slope CCR-S1E - Finish Seed & Planting +62.3mPD	6	21AUG06*	26AUG06	28OCT06	03NOV06	RE1700														
RE1710	Slope CCR-S1E - Finish Seed & Planting +54.8mPD	12	28AUG06	09SEP06	04NOV06	17NOV06	RE1710														
RE1720	Slope CCR-S1E - Finish Seed & Planting +47.3mPD	12	11SEP06	23SEP06	18NOV06	01DEC06	RE1720														
RE1710A	Slope CCR-S1C- Finish Seed & Planting +54.9mPD	12	21AUG06	02SEP06	04NOV06	17NOV06	RE1710A														
RE1720A	Slope CCR-S1C - Finish Seed & Planting +47.3mPD	12	04SEP06	16SEP06	18NOV06	01DEC06	RE1720A														
RE1840	Slope CCR-S1E&C- Rock Stabilisation to +25.4mPD	48	24OCT05A	05SEP06	24OCT05A	30AUG08	RE1840														
RE1860	Slope CCR-S1E&C- Finish Seed & Planting to +25.4	36	21AUG06	03OCT06	21OCT06	01DEC06	RE1860														
RE2000	Slope CCR-S2 -Excavate Rock to Formation	24	21AUG06	16SEP06	25OCT05	21NOV05	RE2000														
RE2050	Slope CCR-S2 - Rock Stabilisation	48	04SEP06	01NOV06	06MAY06	03JUL06	RE2050														
RE2100	Slope CCR-S2 - Drainage	42	02NOV06	20DEC06	04JUL06	22AUG06	RE2100														
RE1720B	Slope CCR-S1W - Seed & Planting to +39.95mPD	36	21AUG06	03OCT06	21OCT06	01DEC06	RE1720B														
RE1550	Slope CCR-S1W - Rock Stabilisation to 24.9mPD	54	24OCT05A	07SEP06	24OCT05A	30AUG08	RE1550														
RE1560	Slope CCR-S1W - Rock Stabilisation to 19.0mPD	48	21AUG06	17OCT06	16AUG06	12OCT06	RE1560														

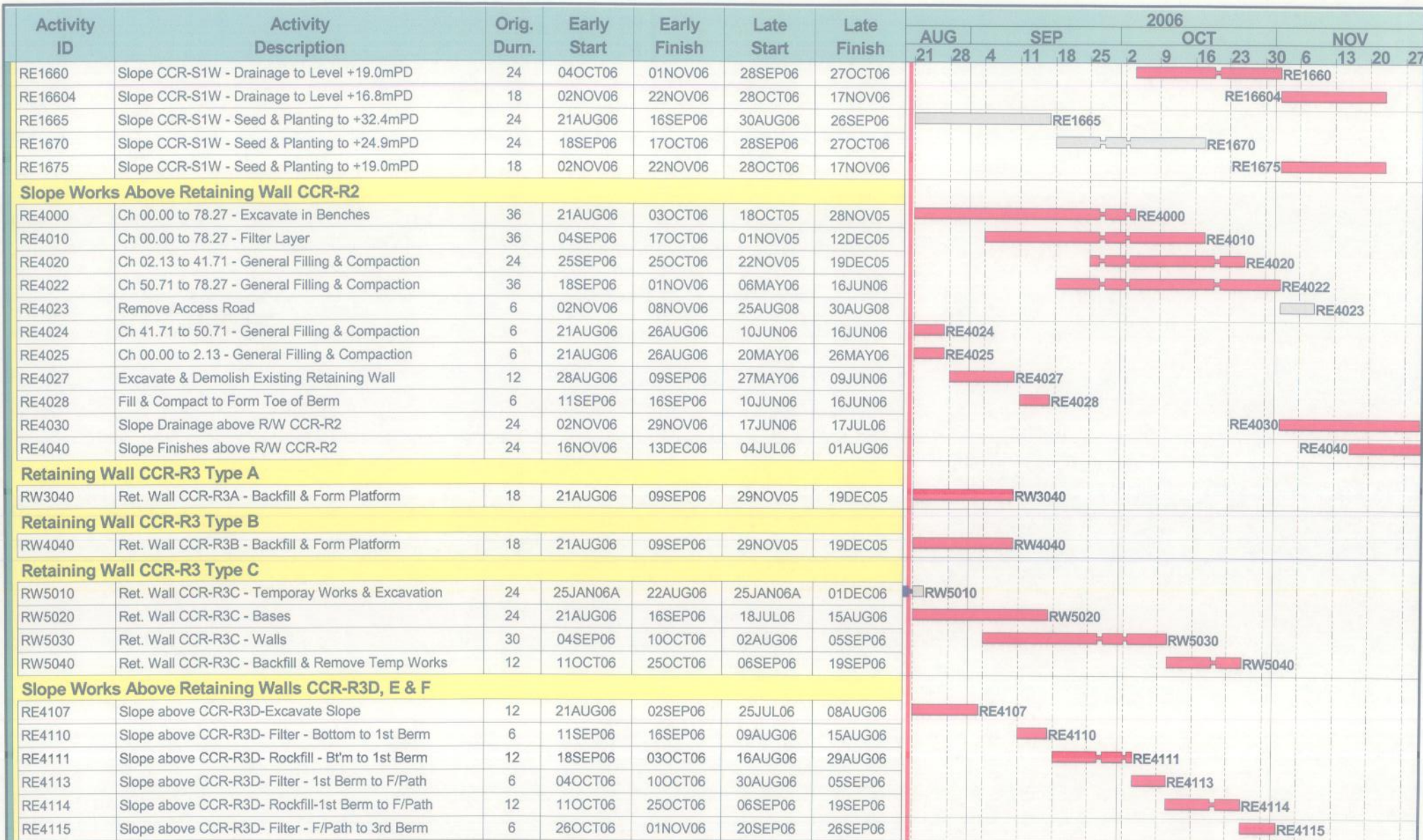
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Activity ID	Activity Description	Orig. Durn.	Early Start	Early Finish	Late Start	Late Finish	2006																		
							AUG			SEP			OCT			NOV									
							21	28	4	11	18	25	2	9	16	23	30	6	13	20	27				
Drainage Works																									
RR2000	Ching Cheung Rd. W/B - Stormwater in New C/Way	36	11OCT06	22NOV06	06DEC05	18JAN06																			
RR3100	Ching Cheung Rd. E/B -S/Water S300-01 to S300-07	60	18SEP06	29NOV06	30MAR06	09JUN06																			
Utilities & Roadworks																									
RA2000	Lai Wan Road - Footpath below Slope CCR-S4	24	21AUG06	16SEP06	04NOV06	01DEC06																			
RA3003	Ching Cheung Rd. W/B New C/Way - Filling	36	21AUG06	03OCT06	08NOV05	19DEC05																			
RA3005	Ching Cheung Rd. W/B - S/Gantry FADS4 Founds	18	11SEP06	03OCT06	23DEC05	14JAN06																			
RA3010	Ching Cheung Rd. W/B New C/Way - Formation	18	09NOV06	29NOV06	05JAN06	25JAN06																			
RA3020	Ching Cheung Rd. W/B New C/Way - Sub-base	18	16NOV06	06DEC06	12JAN06	04FEB06																			
RA3070	Ching Cheung Rd. New E/B -Sign Gantry DS3 Founds	18	18OCT06	08NOV06	05JAN06	25JAN06																			
RA4000	Ching Cheung Rd. New E/B Slip Road - E&M +TCSS	36	18SEP06	01NOV06	05JAN06	18FEB06																			
RA4040	Ching Cheung Rd. New E/B - Fill Behind N/B Base	48	21AUG06	17OCT06	08NOV05	04JAN06																			
RA7000	Lai Wan Road - Watermains & Hydrants FH4 & FH5	24	21AUG06	16SEP06	02MAR06	29MAR06																			
Lai Wan Overpass Irrigation Pump House																									
RI1000	Lai Wan O/pass Irig Pump House - Plate Load Test	6	11OCT06	17OCT06	13MAY06	19MAY06																			
RI1010	Lai Wan O/pass Irig Pump House - Structure	48	18OCT06	13DEC06	20MAY06	17JUL06																			
RI1030	Lai Wan O/pass Irig Pump House - Building Works	75	30OCT06	26JAN07	31MAY06	29AUG06																			
At Grade Works - Butterfly Valley Interchange																									
Temporary Traffic Management Schemes																									
PT2200	TTMS CP Rd-KC S/B for Paving -Prepare for Review	18	21AUG06	09SEP06	04AUG05	24AUG05																			
PT2210	TTMS CP Rd-KC S/B for Paving - CRE Endorsement	6	24SEP06	29SEP06	13AUG06	18AUG06																			
PT2220	TTMS CP Rd-KC S/B for Paving - Roadworks Advice	7	30SEP06	06OCT06	19AUG06	25AUG06																			
PT2230	TTMS CP Rd-KC S/B for Paving - Site Preparation	6	07OCT06	13OCT06	26AUG06	01SEP06																			
PT2300	TTMS CP Rd-KC N/B for 11NW-A/C66-Prep for Review	16	22AUG06	08SEP06	06AUG05	24AUG05																			
PT2310	TTMS CP Rd-KC N/B for 11NW-A/C66 - CRE Endorse	6	22AUG06	27AUG06	21MAY06	26MAY06																			
PT2320	TTMS CP Rd-KC N/B for 11NW-AC66 - Roadwks Advice	7	28AUG06	03SEP06	27MAY06	02JUN06																			
PT2330	TTMS CP Rd-KC N/B for 11NW-A/C66 - Site Prepare	6	04SEP06	09SEP06	03JUN06	09JUN06																			
PT2340	TTMS CP Rd-KC N/B for 11NW-A/C66 - Implement	156*	11SEP06	20MAR07	10JUN06	01DEC06																			
Earthworks & Slopeworks - 11NW-A/C26																									
PE1040	Slope 11NW-A/C26 - Finishing Works	12	21AUG06	02SEP06	18NOV06	01DEC06																			
Earthworks & Slopeworks - 11NW-A/C66																									
PE2000	Slope 11NW-A/C66 - Hoardings / Fencing	6	11SEP06	16SEP06	10JUN06	16JUN06																			
PE2010	Slope 11NW-A/C66 - Trim Slope	18	04OCT06	25OCT06	17JUN06	10JUL06																			

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Highways Department Contract No. HY/2003/01
 Route 8 - Lai Chi Kok Viaduct
 3 Month Rolling Programme
 from 20 August 2006



Activity ID	Activity Description	Orig. Durn.	Early Start	Early Finish	Late Start	Late Finish	2006														
							AUG			SEP			OCT			NOV					
							21	28	4	11	18	25	2	9	16	23	30	6	13	20	27
PE2015	Slope 11NW-A/C66 - Platform for Soil Nailing	18	26OCT06	15NOV06	11JUL06	01AUG06	PE2015														
PE2017	Slope 11NW-A/C66 - Soil Nails - Test Nail	12	16NOV06	29NOV06	02AUG06	15AUG06	PE2017														
Retaining Wall CCR-R5 (Pre-bored "H" Piles)																					
PW2225	Ret. Wall CCR-R5 - Complete Coping & Facing	12	27APR06A	29AUG06	27APR06A	05JUL06	PW2225														
PW2140	Ret. Wall CCR-R5 - Complete Fill Behind Wall	12	30AUG06	12SEP06	06OCT06	19OCT06	PW2140														
PW2230	Ret. Wall CCR-R5 - Slope Works Behind Wall	36	13SEP06	27OCT06	21OCT06	01DEC06	PW2230														
Retaining Wall CCR-R6 (Value Engineering Design)																					
PW3220	Ret. Wall CCR-R6 - Excavate Slope	48	06MAR06A	31AUG06	06MAR06A	07APR06	PW3220														
PW3230	Ret. Wall CCR-R6 - Reinstate Soil Nail Heads	48	21AUG06*	17OCT06	27MAR06	23MAY06	PW3230														
PW3240	Ret. Wall CCR-R6 - Install T40 Tie Back Anchors	48	26JUN06A	15NOV06	26JUN06A	21JUN06	PW3240														
PW3250	Ret. Wall CCR-R6 - Bases to R.C. Walls	48	18OCT06*	13DEC06	07JUN06	04AUG06	PW3250														
PW3260	Ret. Wall CCR-R6 - R.C. Walls	48	16NOV06	12JAN07	07JUL06	01SEP06	PW3260														
Drainage Works																					
PA1200	C.P.Rd Loop to Slip Road C - Stormwater Drainage	18	21AUG06	09SEP06	28DEC05	18JAN06	PA1200														
PA3000	C.P.Rd.-K.C S/B to C.C. Rd E/B - Storm Drainage	36	20SEP06	03NOV06	27JUL06	07SEP06	PA3000														
Utilities & Roadworks																					
PR1117	New CLP 11Kv Cable Laying in front of CCR-R5	18	11OCT06	01NOV06	11NOV06	01DEC06	PR1117														
PR3000	C.P.Rd. Loop to Slip Road C - Formation	13	02SEP06	16SEP06	11JAN06	25JAN06	PR3000														
PR3010	C.P.Rd. Loop to Slip Road C - Sub-base	12	11SEP06	23SEP06	28SEP06	12OCT06	PR3010														
PR3020	C.P.Rd. Loop to Slip Road C - Kerbs	18	18SEP06	10OCT06	06OCT06	27OCT06	PR3020														
PR3040	C.P.Rd. Loop to Slip Road C - Pavement	6	11OCT06	17OCT06	04NOV06	10NOV06	PR3040														
PR3050	C.P.Rd. Loop to Slip Road C - Street Lighting	12	18OCT06	01NOV06	18NOV06	01DEC06	PR3050														
PR3080	C.P.Rd. Loop to Slip Road C - Crash Barriers	18	18OCT06	08NOV06	11NOV06	01DEC06	PR3080														
PR5000	C.P.Rd.-K.C. S/B to C.C.Rd E/B - Excavate Road	18	30AUG06	19SEP06	06JUL06	26JUL06	PR5000														
PR5010	C.P.Rd.-K.C. S/B to C.C.Rd E/B - Formation	12	04NOV06	17NOV06	08SEP06	21SEP06	PR5010														
PR5020	C.P.Rd.-K.C. S/B to C.C.Rd E/B - Sub-base	12	14NOV06	27NOV06	18SEP06	03OCT06	PR5020														
PR5100	C.C. Rd. W/B - Sign Gantry FADS7 at P15-P16	6	21AUG06	26AUG06	25AUG08	30AUG08	PR5100														
Kiosk at Slip Road C																					
PK1000	Kiosk at Slip Rd. C - Structure	24	18SEP06	17OCT06	22NOV05	19DEC05	PK1000														
PK1010	Kiosk at Slip Rd. C - Building Finishes	48	18OCT06	13DEC06	20DEC05	18FEB06	PK1010														
PK1020	Kiosk at Slip Rd. C - MVAC Installation	24	18OCT06	15NOV06	20DEC05	18JAN06	PK1020														
PK1030	Kiosk at Slip Rd. C - Electrical Works	24	02NOV06	29NOV06	05JAN06	04FEB06	PK1030														
PK1040	Kiosk at Slip Rd. C - Drainage Works	24	16NOV06	13DEC06	19JAN06	18FEB06	PK1040														

Start Date
Finish Date
Data Date

23SEP03
30AUG08
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Highways Department Contract No. HY/2003/01
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**APPENDIX M
COMPLAINT LOG**

Appendix M - Complaint Log

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
40318	Nob Hill	18 March 2004	<p>Kwai Tsing District Officer (KTDO) recently received a public noise complaint about construction noise generated from the Route 8 – Lai Chi Kok Viaduct (R8-LCKV) Project, near Nob Hill, Lai Chi Kok. KTDO referred the complaint to the Highways Department (HyD) on the same day. HyD subsequently referred the complaint to the Environmental Team (ET) Leader of the Project on 18 March 2004.</p> <p>The complaint was raised by the Citybase Property Management Ltd. (the management company of Nob Hill) and the Secretary of Nob Hill Owners Committee (Mr. Kevin Tse) about construction noise generated from the R8-LCKV Project at the work areas near Nob Hill. Mr. Kevin Tse mentioned that residents living in Nob Hill have greatly been affected by the noise impacts generating from the R8-LCKV construction works. He also requested relevant government departments to consider installing noise barrier along Ching Cheung Road and to work out possible measures to minimize the noise nuisances to the residents living in the vicinity.</p>	<p>Based on the information provided by the ER, the construction activities conducted in the vicinity of Nob Hill in the period between 2 and 18 March 2004 were:</p> <ul style="list-style-type: none"> ▪ Item 1 – Breaking off existing planter and excavate trial trench to expose underground utilities (using one to two backhoes) ▪ Item 2 – Erect rock fall fence & forming platform for pre-drilling (using one backhoe and occasionally one crane lorry) ▪ Item 4 – Excavate further to expose all underground utilities (using hand tools) ▪ Item 5 – Pre-drilling works (using one drilling rig) <p>Considering the scale of work and the PMEs adopted, the ET believed that the construction noise impact at Nob Hill from the above construction activities of R8-LCKV was not significant.</p> <p>The bored piling work (Item 3) using one crawler crane and one oscillator was started on 19 March 2004, which was two days after the issue date of this complaint, so this activity was not considered in this report.</p> <p>According to the EM&A Manuals, Nob Hill was not selected as Noise Monitoring Location (NML) for the Project. Therefore, no direct noise monitoring data could be provided for the complaint investigation. However, there was no noise level exceedance recorded at the nearby NML (NM4 – Mei Foo Sun Chuen, Phase 5) since the commencement of the project according to ET's inventory.</p> <p>During ET's weekly environmental site inspections on 3, 10, 17 March 2004, no serious noise nuisance induced by the Project works was observed at the sites near Nob Hill.</p> <p>Based on the joint site visit with the representative of HyD, IEC, RSS and ET to the Nob Hill on 30 March 2004, the major noise</p>	Closed

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
				<p>source at Nob Hill was identified as traffic noise on Ching Cheung Road, which is located very close to this building, especially at or above the Podium Floor (i.e. 5/F).</p> <p>Based on the information obtained, this noise complaint is not considered due to the construction activities of the Project. Nevertheless, the Contractor was recommended to adopt good site practice to minimize the construction noise, such as:</p> <ul style="list-style-type: none"> • To space out noisy equipment and position it as far away as possible from the sensitive receivers; • To avoid concurrent uses of noisy equipment near the sensitive area; • To ensure the equipment are maintaining in good operation condition; and • To turned off any idle equipment on site. <p>Adding to that, ET is proposed to install one to two noise monitoring stations at Nob Hill in order to monitor the noise impact generated from the R8-LCKV Project to the resident of Nob Hill or the nearby buildings.</p>	

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
40330	Site Areas near Nob Hill	30 March 2004	<p>Highways Department (HyD) recently received a public noise complaint about construction noise generated from the Route 8 – Lai Chi Kok Viaduct (R8-LCKV) Project, near Nob Hill, Lai Chi Kok. HyD referred the complaint to the RSS and subsequently referred to the ET Leader of the Project on 30 March 2004.</p> <p>The complaint was raised by Mr. Yau, the Office of DCV Member Mr. Cheung Wing Shum, regarding the high pitch construction noise generated at the R8-LCKV site which cause serious nuisance to the residents at Mei Foo.</p>	<p>Based on the information provided by the RSS, the Contractor was not aware of any high pitched construction noise arising from plant employed for their works. The noise complaint referred to may be originated from the damage of a gas main valve on the afternoon of 29 March 2004 in the vicinity of the junction of Mai Lai Road with Lai King Hill Road. The high pitched whistle apparently resulted from the damage which was repaired by TownGas in that afternoon.</p> <p>Based on the information obtained, this noise complaint is considered not due to the construction activities of the Project. Nevertheless, the Contractor was recommended to adopt good site practice to minimize the construction noise, such as:</p> <ul style="list-style-type: none"> • To space out noisy equipment and position it as far away as possible from the sensitive receivers; • To avoid concurrent uses of noisy equipment near the sensitive area; • To ensure the equipment are maintaining in good operation condition; and • To turned off any idle equipment on site. 	Closed
40402	Nob Hill	06 April 2004	<p>A public noise complaint was received by the Contractor (NECSO) on 02 April 2004 regarding the noise generated from the Ching Cheung Road Widening Works of the Route 8 – Lai Chi Kok Viaduct (R8-LCKV) Project, near Nob Hill, Lai Chi Kok.</p> <p>NECSO referred the complaint to the RSS and subsequently referred to the ET Leader of the Project on 6 April 2004</p>	<p>The complaint was raised by Ms Wong, regarding the noise generated from the Ching Cheung Road Widening Works of the R8-LCKV Project, which cause serious nuisance to her.</p> <p>Based on the information provided by the RSS, the plants employed by the Contractor for carrying out bored piling works in front of Nob Hill should not generate excessive noise. The RSS had also checked against the site records that no piling works was in progress in front of Nob Hill on 1-3 April 2004.</p> <p>According to telephone communication between the complainant (Ms Wong) and the RSS on 8 April 2004, the RSS reported that Ms Wong was not complaining about the construction noise generated by the R8-LCKV Project. She was actually complaining about the traffic noise she anticipated to be generated after completion of widening work at Ching Cheung</p>	Closed

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
				<p>Road in front of Nob Hill.</p> <p>During ET's weekly environmental site inspections on 17, 24 & 31 March 2004 and 7 April 2004, no serious noise nuisance induced by the Project works was observed at the construction sites near Nob Hill.</p> <p>Based on the joint site visit with the representative of HyD, IEC, RSS and ET to the Nob Hill on 30 March 2004, the major noise source at Nob Hill was identified as traffic noise on Ching Cheung Road, which is located very close to this building, especially at or above the Podium Floor (i.e. 5/F).</p> <p>Based on the information obtained, this noise complaint is considered not due to the construction activities of the Project.</p> <p>Nevertheless, the Contractor was recommended to adopt good site practice to minimize the construction noise, such as</p> <ul style="list-style-type: none"> • To space out noisy equipment and position it as far away as possible from the sensitive receivers; • To avoid concurrent uses of noisy equipment near the sensitive area; • To ensure the equipment are maintaining in good operation condition; and • To turned off any idle equipment on site. 	
40710	Pier P7 in Portion E1	10 July 2004	<p>A public complaint was raised on 30th June 2004 regarding the washout of muddy water from the site area of the Route 8 – Lai Chi Kok Viaduct (R8-LCKV) Project, at Pier P7 onto Lai Chi Kok Road.</p> <p>The complaint was referred to the RSS on 3rd July 2004 and subsequently referred to the ET Leader of the Project on 10th July 2004.</p>	<p>Based on the information provided by the RSS, the spillage of muddy water was in fact due to a burst in a temporary water pipe being utilized in the piling operations at Pier P7 in Portion E1.</p> <p>Emergency remedial works were undertaken preventing further spillage of muddy water. The remaining ponding water within the works area arising from the burst was all removed from the area on 5th July 2004.</p> <p>During ET's weekly environmental site inspection on 14th July 2004, no serious water quality nuisance induced by the Project works was observed at the construction sites near Pier P7. It was</p>	Closed

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
			<p>The complaint was raised by Mr. Chan, regarding the washout of muddy water from the works area of the R8-LCKV Project onto Lai Chi Kok Road. The washout caused nuisance to the drivers utilizing the road, and may also cause danger to the motorbikes.</p>	<p>also noted that the back of profile barriers along the site boundary had been sealed up by cement as preventive measures.</p> <p>During ET's weekly environmental site inspections on 17, 24 & 31 March 2004 and 7 April 2004, no serious noise nuisance induced by the Project works was observed at the construction sites near Nob Hill.</p> <p>Based on the information obtained, the complaint is considered due to the construction activities of the Project. Emergency remedial works had been taken by the Contractor to rectify the situation and preventive measures had also been implemented.</p> <p>Nevertheless, the Contractor was recommended to adopt the following measures to avoid re-occurrence of similar incidents:</p> <ul style="list-style-type: none"> • to enhance surface runoff control measures along the site boundary; • to provide adequate training to the frontline workers; and • to regularly inspect temporary water supply equipment, such as hose pipe to make sure the equipment is in good condition. 	
40809	Ching Cheung Road area near Nob Hill	<p>22-Jul-04 (by EPD)</p> <p>09-Aug-04 (by ET Leader)</p>	<p>EPD received a public noise complaint on 22 July 2004 about construction noise and dust generated from Route 8 – Lai Chi Kok Viaduct (R8-LCKV) Project, at the Ching Cheung Road Area near Nob Hill. EPD subsequently referred the complaint to the ET Leader of the Project on 9 August 2004.</p> <p>The complaint was about the construction noise and dust observed at the Ching Cheung Road area near Nob Hill. The locations of the works areas being concerned by the complainant include:</p> <p>1. Area A: Works area between Nob</p>	<p>Information Provided by RSS Information (construction activities and equipment adopted) in a 2-week period before the date of complaint, i.e. 7 to 21 July 2004, was obtained from the Resident Site Staff.</p> <p>Area A:</p> <ul style="list-style-type: none"> ▪ Item 1 – Drainage works by using 1 x backhoe; ▪ Item 2 – Bored piling works by using 1 x crawler crane, 1 x air compressor, 1 x reverse circulation drill and 1 x power pack; ▪ Item 3 – Trial trench excavation by man power; ▪ Item 4 – Gas main diversion by 1 x backhoe (performed by TGC's Contractor) <p>Area B: No construction activity was undertaken in the concerned period.</p> <p>Review of Environmental Monitoring Results</p>	Closed

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
			<p>Hill and Lai Chi Kok Park Swimming Pool</p> <p>2. Area B: Works area between Ching Cheung Road and Mei Lai Road / Lai Wan Road opposite to Mei Foo Sun Cheung (Phase 5) and Lai Chi Kok Public Library.</p>	<p>The routine monitoring stations, which are in the vicinity of the concerned works areas, include:</p> <p><u>Noise Monitoring</u> NM4: R/F of Mei Foo Sun Chuen (Phase 5) NM8a: M/F of Nob Hill NM8b: 3/F of Nob Hill</p> <p><u>Air Quality (1-hr TSP / 24-hr TSP) Monitoring</u> AM2: R/F of Lai Chi Kok Sports Centre</p> <p>No Action / Limit level exceedance was identified in July 2004.</p> <p>Environmental Site Inspection During the ET site inspections on 8th, 14th and 20th July 04, no major environmental deficiency with regard to noise and air quality was identified by the auditors.</p> <p>Conclusions Based on the RSS's information, environmental monitoring results as well as the observations made during site inspections, this complaint is considered to be invalid and not due to the construction activities of the Project. Nevertheless, the Contractor was recommended to adopt good site practice to minimize the construction noise and dust impacts, such as:</p> <ul style="list-style-type: none"> • To space out noisy equipment and position it as far away as possible from the sensitive receivers; • To avoid concurrent uses of noisy equipment near the sensitive area; • To ensure the equipment are maintaining in good operation condition; • To turn off any idle equipment on site. • To cover excavated dusty materials by impervious sheeting; • To provide water spray for haul roads, loading/unloading and concrete breaking operations; • To perform wheel wash for every vehicle immediately before leaving the site. 	

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
50215	Mei Foo Sun Chuen, Phase 5 (Retaining Wall CC-R3)	15-Feb-05 (by ET Leader)	<p>A public complaint was raised on 8th Feb 2005 regarding construction noise from the site area of the Route 8 – Lai Chi Kok Viaduct (R8-LCKV) Project near Mei Foo Sun Chuen. The complaint was referred to the Resident Site Staff on 14th Feb 2005 and subsequently referred to the ET Leader of the Project on 15th Feb 2005.</p> <p>The complaint was raised by a resident in Mei Foo Sun Chuen, regarding the noise generation from the piling work at Retaining Wall CC-R3, adjacent to Po Leung Kuk Tong Nai Kan College.</p>	<p>Construction Activities</p> <p>During the weekly site inspection on 17 Feb 05, piling work was being conducted at the concerned. The major powered mechanical equipment (PME) in operation included a mobile crane, an air compressor, a reverse circulation drill and a generator.</p> <p>In view of the separation of the site area and the residential building (around 40 m) and also the high traffic noise from Ching Cheung Road as well as Mei Lai Road, the noise generated from the operation of the PME was believed to be insignificant.</p> <p>Environmental Monitoring</p> <p>The noise monitoring results at Station NM4 (Mei Foo Sun Chuen, Phase 5) for the last 3 months were reviewed in order to evaluate the noise impact from the Project on the noise sensitive receiver. The measured noise levels in last three threes were ranged from 70.8 to 75.8 dB(A). It was observed that the measured noise levels were well within the range of baseline noise levels (69.2 to 75.8 dB(A)).</p> <p>The corrected construction noise levels were found to be ranged from 63.5 to 71.5 dB(A), which were well below the noise criterion of 75 dB(A).</p> <p>Conclusions</p> <p>Based on the information obtained and the noise monitoring results, this complaint is considered to be invalid and not due to the construction activities of the Project.</p> <p>Nevertheless, the Contractor was recommended to adopt good site practice to minimize the construction noise impacts.</p>	Closed

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
50322	Seung Lai House, Wah Lai Estate (Slope S1)	11-Mar-05 (by EPD) 22-Mar-05 (by ET Leader)	<p>Environmental Protection Department (EPD) received a public noise complaint on 11 Mar 05 about daytime construction noise generation from R8-LCKV. EPD subsequently referred the complaint to the Environmental Team (ET) Leader of the Project on 22 Mar 05.</p> <p>The complaint was raised by a resident of Seung Lai House of Wah Lai Estate, regarding the daytime (0800-1800 hrs) construction noise generated from the slope work and road work of R8-LCKV Project. As advised by EPD, the complainant is living on 20/F or above in Seung Lai House.</p>	<p>Construction Activities</p> <p>As advised by the RSS, the major construction work during 25 Feb 05 to 11 Mar 05 (2 weeks before the date of complaint) in the vicinity of Wah Lai Estate included excavation work, soil nail work and installation of u-channel and manholes. The major powered mechanical equipment included excavators, drilling machine and air compressor.</p> <p>In view of the separation of the site area (Slope S1) and the Seung Lai House (around 140 m) and also the traffic noise from Ching Cheung Road, the noise generated from the construction activities at Slope S1 was believed to be insignificant.</p> <p>Environmental Monitoring</p> <p>Ad-hoc noise measurement was conducted at Seung Lai House on 30th Mar 05 and the measured noise level (Leq-30min) was 66.9 dB(A), which was well below the criterion for daytime construction noise of 75 dB(A). The construction noise level (with reduction of background noise level) is expected to be even lower.</p> <p>Conclusion</p> <p>Based on the information obtained and the noise measurement results, this complaint is considered not justifiable. Nevertheless, the Contractor was recommended to adopt good site practice to minimize the construction noise impact.</p>	Closed

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
50330, 50331, 50404 & 50407	Wah Lai Estate	30-Mar-05, 31-Mar-05, 4-Apr-05 & 7-Apr-05 (by ET Leader via RSS)	<p>Four public complaints were lodged by the residents of Wah Lai Estate regarding the construction noise from the site area of the Route 8 – Lai Chi Kok Viaduct (R8-LCKV) Project near Wah Lai Estate. The complaints were referred by the Resident Site Staff to the Environmental Team (ET) Leader on 30th, 31st March, 4th and 7th April 2005, respectively.</p>	<p>Construction Activities</p> <p>The site of concern was likely to be Slope S1, which is around 140 m away from Wah Lai Estate. The major construction work at Slope S1 included trimming of slope, soil nail work and erection of u-channels and step channels.</p> <p>Environmental Monitoring</p> <p>Ad-hoc noise measurement was conducted at Seung Lai House on 30th Mar 05 and 7th Apr 05 and the measured noise levels (Leq-30min) were ranged from 66.9 to 69.1 dB(A), which were well below the criterion for daytime construction noise of 75 dB(A). The construction noise level (with reduction of background noise level) is expected to be even lower.</p> <p>Conclusion</p> <p>Based on the results of the ad-hoc noise measurements at Wah Lai Estate, no exceedance of daytime noise criterion of 75 dB(A) was recorded. The complaints lodged are therefore considered not justifiable.</p> <p>Mitigation</p> <p>The Contractor agreed to arrange the noisy activities to commence after 8:00 am. This arrangement could effectively reduce the disturbance to the residents within the more sensitive time period (7:00 am to 8:00 am).</p>	Closed

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
50404-v2	Mei Foo Sun Chuen	4-Apr-05 (by ET Leader via RSS)	A public complaint was raised on 1 st April 2005 regarding construction noise from the site area of the Route 8 – Lai Chi Kok Viaduct (R8-LCKV) Project near Mei Foo Sun Chuen. The complaint was referred to the Resident Site Staff and the ET Leader on 4 th April 2005.	<p>Construction Activities</p> <p>The site of concern was likely to Retaining Wall CC-R3, adjacent to Po Leung Kuk Tong Nai Kan College. The major construction works at this area included bored piling works and excavation works.</p> <p>Environmental Monitoring</p> <p>According to the EM&A Manual, Mei Foo Sun Chuen, Phase 5 (NM4) is designated as one of the noise monitoring stations.</p> <p>Since the commencement of the impact monitoring programme, the construction noise levels recorded at this station were all below the noise criterion.</p> <p>Conclusion</p> <p>Based on the noise monitoring results at Station NM4 (Mei Foo Sun Chuen), no exceedance of daytime noise criterion of 75 dB(A) was recorded since the commencement of the impact monitoring programme. The complaint lodged is therefore considered not justifiable.</p> <p>Mitigation</p> <p>The Contractor has agreed to arrange the noisy activities to commence after 8:00 am. This arrangement could effectively reduce the disturbance to the residents within the more sensitive time period (7:00 am to 8:00 am). The Contractor also agreed to provide some temporary noise barriers for the noisy machinery if found necessary.</p>	Closed

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
50613	Mei Foo Sun Chuen	<p>7-Jun-05 (by EPD)</p> <p>13-Jun-05 (by ET Leader)</p>	<p>According to EPD, the complaint was raised by a resident of Mei Foo Sun Chuen (Block 7, Phase 5) on 7 June 2005. It was about construction dust emitted intermittently from the slope works undertaken on the other side of Mei Lai Road.</p> <p>The complainant was particularly concerned about the fugitive dust emission during rock / concrete breaking activities.</p>	<p><i>Site Activities</i></p> <p>The site of concern was likely to be CCR-R3. Bored piling works and demolition of existing retaining walls were undertaken at this area in the period between 1 and 7 June 2005. It was believed that the demolition of existing retaining wall, which involved concrete breaking, was the activity of concern.</p> <p><i>Observations</i></p> <p>On 1 Jun 05, one of the environmental deficiencies noted by the ET was about fugitive dust emission from breaking activities at CCR-R3. The Contractor was reminded to provide sufficient dust mitigation measures for the breaking works. Immediate action was taken by the Contractor to apply water spray for the works as observed during the audit session.</p> <p>On 9 Jun 05, the breaking works were still being taken at CCR-R3. Water spray as a dust mitigation measure was being adopted by the Contractor during the audit. No observable dust emission was noted from the breaking works or other site activities.</p> <p>On 15 Jun 05, the same area was re-inspected due to the receipt of the complaint from EPD. The demolition works had been finished and no other dust emissive activity was being taken. No other dust source from the construction site was observed during the inspection.</p> <p><i>Conclusion</i></p> <p>Based on the observations noted during our site inspections, this complaint is considered to be valid and related to the construction activities of the Project.</p> <p>However, corrective action had been taken by the Contractor and the situation was found improved during the follow-up inspections.</p>	Closed

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
50721	Hei Lai House, Wah Lai Estate	21-Jul-05 (by ET Leader)	<p>The complaint was lodged by a resident of Hei Lai House of Wah Lai Estate through a Legislative Council member. The complaint was about construction noise nuisance caused by rock breaking work, which claimed to be started from 8:30am daily, carried out at Ching Cheung Road near Wah Lai Estate.</p> <p>The complainant hoped that the rock breaking work could start later i.e. be carried out from noon to afternoon and the site could be fully enclosed.</p> <p>The Environmental Team (ET) of the Project received the complaint on 21 July 2005 and forwarded it to the Resident Site Staff (RSS) to obtain necessary information.</p>	<p><i>Site Activities</i></p> <p>The slope work at Slope S1 was likely to be the activity of concern. The work at Slope S1 recently included the operation of excavator mounted breakers, excavators and dump trucks.</p> <p>The time period of concern was within normal working hours (7am to 7pm) on a weekday not being a public holiday. The noise criterion is 75 dB(A) for domestic premises.</p> <p><i>Noise Measurement</i></p> <p>Ad-hoc measurements were carried out on the roof of Hei Lai House on 25 July 2005.</p> <p>The results show that the measured noise level is well below the noise criterion of 75 dB(A). The construction noise level (with reduction of background noise) is expected to be even lower.</p> <p><i>Conclusion</i></p> <p>Since the noise measurement results at Wah Lai Estate were below 75 dB(A), the complaint was considered not justifiable.</p> <p>Nevertheless, noise mitigation measures have been implemented by the Contractor to minimize the noise impact arising from the breaking activities:</p> <ol style="list-style-type: none"> 1. Employment of silenced-type breakers; 2. Temporary noise barriers, attached with sound adsorption materials, were erected to screen the site of breaking from sensitive receivers 3. While the permitted hours for construction works are 7am to 7pm on non-holidays, the Contractor has commenced the rock breaking activity after 8:30am. 	Closed

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
51107	Ching Cheung Road near Mei Foo Sun Chuen	7-Nov-05 (by the ET Leader)	<p>Environmental Protection Department (EPD) received a public complaint about environmental nuisance generated from Route 8 – Lai Chi Kok Viaduct (R8-LCKV) Project. EPD subsequently referred the complaint to the Environmental Team (ET) Leader of the Project on 7 November 2005.</p> <p>According to EPD, the complaint was raised by a resident of Mei Foo Sun Chuen. The complaint was about dark smoke, dust and noise nuisance caused by the construction work of R8-LCKV near Mei Foo Sun Chuen.</p>	<p>The site of concern was likely to be CCR-S4 and CCR-R3. According to RSS's records, bored piling works and soil nail drilling at CCR-R3, excavation works at CCR-S4 in the concerned period.</p> <p>Site Inspection</p> <p>After receipt of the complaint, an ad-hoc site inspection was carried by ET on 9 November 2005 and the following observations were made:</p> <ol style="list-style-type: none"> 1. Breaking activities were undertaken at CCR-R2 and R3. Continuous water spray was applied by the workers for dust suppression. Movable noise barriers were erected to alleviate the noise impact. 2. The haul roads and exposed works areas were observed wet. A water sprinkler was installed at the CCR-S4 for water spraying. 3. Most of the slope was shot-creted to avoid wind erosion. 4. Bored piling work was carried out near the site exit of CCR-R3. Since bored piling mainly involves handling of wet materials, dust nuisance causing by this type of work is not anticipated. Gas exhaust from the machines was visually clear and no dark smoke was identified. <p>Environmental Monitoring</p> <p>Air quality monitoring was conducted at Lai Chi Kok Sports Centre and noise monitoring is conducted at Mei Foo Sun Chuen. No exceedance was recorded for both monitoring.</p> <p>Conclusion</p> <p>Based on the ad-hoc site inspection and the environmental monitoring results, this complaint was considered not justifiable.</p>	Closed

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
60118	Lai Po Road near Hoi Lai Estate	18-Jan-06 (by the ET Leader)	<p>Environmental Protection Department (EPD) received a public complaint about environmental nuisance generated from Route 8 – Lai Chi Kok Viaduct (R8-LCKV) Project. EPD subsequently referred the complaint to the Environmental Team (ET) Leader of the Project on 18 January 2006.</p> <p>According to EPD, the complaint was lodged by a resident of Hoi Ming House of Hoi Lai Estate. The complaint was about construction noise nuisance caused by construction work of R8-LCKV carried out at Lai Po Road near Hoi Lai Estate. The noise nuisance was noted since 14 January 2006 during the periods from 2330 hrs to 0600 hrs.</p>	<p>Site Activities</p> <p>According to the RSS's records, night works were carried out by the Contractor between 2000 hrs on 14 January 2006 and 0530 hrs on 15 January 2006:</p> <ul style="list-style-type: none"> • Delivery of segment from storage yard near Pier P5/L to Pier 15 for erection; • Stressing to temporary PT bars of segments at Pier B3. <p>The above night works, which involved operation of tractor, mobile crane, lifting frame and generator, were undertaken under the two construction noise permits CNP no. GW-RW0739-05 and GW-RW0740-05.</p> <p>Environmental Monitoring</p> <p>In order to evaluate the noise impact onto the residents of Hoi Lai Estate, nighttime noise monitoring was carried out on 18 January 2006 at 23:00. The above monitoring results revealed that the measured noise levels were close to the reference background levels. After correction of the mean background level, all corrected noise levels were below the noise criterion of 55 dB(A).</p> <p>Conclusion</p> <p>Based on the information collected and the monitoring results, the complaint is considered not justifiable.</p> <p>Nevertheless, the Contractor was reminded to take sufficient noise mitigation measures to minimize the environmental impact on the nearby community.</p>	Closed

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
60119	Mei Foo Sun Chuen (Phase 5)	18-Jan-06 (by the ET Leader)	<p>Environmental Protection Department (EPD) received a public complaint about environmental nuisance generated from Route 8 – Lai Chi Kok Viaduct (R8-LCKV) Project. EPD subsequently referred the complaint to the Environmental Team (ET) Leader of the Project on 19 January 2006.</p> <p>According to EPD, the complaint was raised by a resident of Mei Foo Sun Chuen via a Sham Shui Po District Council Member’s Office. The complaint mentioned that residents of Mei Foo Sun Chuen Stage 5 were adversely affected by construction dust caused by the Route 8 work carried out at the slopes adjacent to Ching Cheung Road.</p>	<p>Site Activities</p> <p>The site of concern was likely to be CCR-S4, CCR-R2 and CCR-R3. According to RSS’s records, site activities included:</p> <ul style="list-style-type: none"> • Trimming of existing rock slope at CCR-S4; • Excavation and rock dowel installation at CCR-R2; and • Construction of cable trough at CCR-R3 by CLP’s contractor. <p>Site Inspection</p> <p>After receipt of the complaint, an ad-hoc site inspection was carried by ET on 19 January 2006. No environmental deficiency regarding construction dust was identified during the inspection.</p> <p>Environmental Monitoring</p> <p>All monitoring results in Jan 06 revealed that no exceedance was recorded for the air quality (1-hr and 24-hr TSP) criteria.</p> <p>Contractor’s Action</p> <p>The Contractor of R8-LCKV had implemented several dust mitigation measures:</p> <ul style="list-style-type: none"> • Haul roads, exposed slope surface and soil stockpiles were watered regularly by hose pipes and sprinklers; • Idled exposed slope were shot-creted; and • Watering was applied for the dust emissive activities, such as loading and unloading of dusty materials, excavation and breaking works. <p>Conclusion</p> <p>Based on the ad-hoc site inspection and the environmental monitoring results, this complaint was considered not justifiable. Nevertheless, the Contractor was reminded to keep on the dust mitigation measures being implemented and step up the measures if necessary.</p>	Closed

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
60213 60216 60220 60222	Hoi Lai Estate (Lai Po Road)	13-Feb-06 16-Feb-06 20-Feb-06 22-Feb-06 (by the ET Leader)	<p>Four environmental complaints were received in this reporting month. Three of them were referred by EPD on 13th, 20th and 22nd Feb 06 and the other one was referred by HyD via MHJV on 16th Feb 06.</p> <p>All about construction noise due to night works at Lai Po Road near Hoi Lai Estate.</p>	<p>Site Activities</p> <p>Since around mid-January 2006, segments were transported to Piers P15 and B4, under the permission of construction noise permit (CNP).</p> <p>It was suspected that the sound of concern was generated from tractors for precast segment transportation. In view of the safety of workers, an alert sound and flashing are maintained during backing action of the tractors.</p> <p>Site Inspection</p> <p>An ad-hoc inspection was carried out by the ET on 16 Feb 06 from 00:30 to 02:30 am. Noise measurement was carried out during the inspection to evaluate the noise impact onto the residents of Hoi Lai Estate. During the monitoring, the major noise source identified was the road traffic noise from Sham Mong Road and Lai Po Road. No alarm sound or alike from the construction equipment was noted. The above monitoring results revealed that the measured noise levels were close to the reference baseline level. After correction of the mean background level, most of data were below the noise criterion of 55 dB(A).</p> <p>Conclusion</p> <p>Based on the information collected and the monitoring results, the complaints are considered not justifiable.</p> <p>It was suspected that the nuisance was caused by the alert sound of tractors during backward movement which serves as a safety measure. However, the RSS and the Contractor are considering the possibility of lowering the alert sound level or replacing by a less disturbing pitch in order to minimize the noise nuisance to residents of Hoi Lai Estate.</p>	Closed

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
60420	Near both Hoi Lai Estate and West Kowloon Highway	20-Apr-06 (by the ET Leader)	<p>Environmental Protection Department (EPD) received a public complaint about environmental nuisance generated from Route 8 – Lai Chi Kok Viaduct (R8-LCKV) Project. EPD subsequently referred the complaint to the ET Leader on 20 April 2006.</p> <p>The complaint is about construction noise nuisance caused by construction work of night works at location near both Hoi Lai Estate and West Kowloon Highway between 14 and 17 April 2006.</p>	<p>Site Activities</p> <p>According to the Resident Site Staff (RSS)'s records, the construction works were carried out by the Contractor from daytime to 2230 hours on 14 April and from 2000 hours to 0600 hours 16 April 2006.</p> <p>The construction activities near Hoi Lai estate included: -</p> <ul style="list-style-type: none"> • Erecting segments at column PA/R; • Stressing of top tendon wires of segments and erecting segments at column P1/R; and • Transporting segments to storage yard. <p>The above construction activities were undertaken under a construction noise permit CNP no. GW-RW0172-06.</p> <p>Base on the RSS's preliminary investigation, it was suspected that the noise nuisance of concern was caused by loading and unloading of materials, hammering and/or dropping of materials on ground during the stressing works and transportation of precast segment by tractors.</p> <p>Contractor's Action</p> <p>The Contractor had implemented a short term mitigation measures:-</p> <ul style="list-style-type: none"> • Turned off the alert sound of tractors during backward movement in order to reduce the potential for noise impact; • Strengthened their management on worker's working manner such as avoid dropping of material on ground, wrapping up of hammering equipment and etc.; and • Conducted training of worker in order to reducing noise nuisance during the night works. 	Close

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
				<p>Conclusion</p> <p>Based on the information collected and the monitoring results, the complaints are considered not justified.</p> <p>It was suspected that the nuisance was caused by loading and unloading of materials, hammering and/or dropping of materials on ground during the stressing works and transportation of precast segment by tractors.</p> <p>The Contractor has strictly complied with PME allowed in the CNP No. GW-RW0172-06. Besides, night work at the concerned location was completed. No further construction work at night at this location is anticipated.</p>	
60428	Between Ching Cheung Road and Mei Lai Road (near Phase 5 of Mei Foo Sun Chuen)	28-Apr-06 (by the ET Leader)	<p>Environmental Protection Department (EPD) received a public complaint about tree cutting in the area between Ching Cheung Road and Mei Lai Road (near Phase 5 of Mei Foo Sun Chuen). EPD subsequently referred the complaint to the ET Leader on 28 April 2006.</p> <p>The complaint was about the Contractor cut trees in the area between Ching Cheung Road and Mei Lai Road (near Phase 5 of Mei Foo Sun Chuen). This had removed the traffic noise barrier effect of the trees and hence made the residents of Mei Foo Sun Chuen becoming being seriously affected by the traffic noise nuisance.</p>	<p>Site Activities</p> <p>According to the Resident Site Staff (RSS)'s records, current construction activities included segment erection works for Slip Road D, excavation works for cut slope CCR-S4 and retaining wall construction at CCR-R2 and CCR-R3.</p> <p>Since excavation for cut slopes and construction of slip road D are required at this area, tree cutting is unavoidable. Tree felling application was approved by DLO/KW.</p> <p>Contractor Action</p> <p>Under the EP condition and EIA, there is no need for this project to mitigate the traffic noise barrier effect due to the removal of trees.</p> <p>No follow up action was required for this complaint.</p> <p>Conclusion</p> <p>Under the EP conditions and EIAO, there is no need for this</p>	Close

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
				<p>project to mitigate the traffic noise barrier effect due to the removal of trees.</p> <p>Based on the information collected, the complaint is considered not justifiable.</p> <p>Since excavation for cut slopes and construction of slip road D are required at this area, tree cutting is unavoidable. Tree felling application was approved by DLO/KW.</p> <p>Compensatory planting will be provided at the concerned area after completion of the construction works in order to improve the landscape and visual impacts.</p> <p>No follow up action will be required for this complaint.</p>	
60522	Hoi Lai Estate (Hoi Fai House)	22-May-06 (by ET Leader)	<p>Environmental Protection Department (EPD) received a public complaints about noise nuisance generated from Route 8 – Lai Chi Kok Viaduct Project. EPD subsequently referred the complaint to ET Leader on 22 May 2006.</p> <p>The complaint was concerned about the noise produced from construction work during the period between 2300 hours and 0100 hours every night since 3 weeks ago. The complaint described the noise being like sound of poring concrete.</p>	<p>Site Activities</p> <p>According to the RSS's records, only precast segment transportation works at the concerned area which was used as the segment storage yard near Pier P5L to Piers near Mui Kong Tsuen.</p> <p>No concreting activities were carried out at the abovementioned area between 2300 hours and 0100 hours every night in concerned period. In addition, the transportation works were usually carried out from 2000 hours to 0300 hours (or before 0300 hours).</p> <p>Contractor Action</p> <p>The idle and backup equipments such as tractors has turned off or throttled down in order to reduce the noise impact since the last complaint on this issue near Hoi Lai Estaet. Besides, the above night works were undertaken with three construction noise permits.</p>	Closed

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				<p>Site Inspection</p> <p>An ad-hoc inspection was carried out by the ET at 2300 on 26 May 2006. During the inspection, no construction activities were carried out at the concerned area, where the tractor and mobile crane were throttled down.</p> <p>Conclusion</p> <p>According to RSS's information, no concreting activities were carried out at the concerned area. Therefore, the major noise nuisance (pouring concrete) might not be generated from the abovementioned area. Besides, the Contractor strictly complied with PME allowed in the CNP No. GW-RW0172-06. In addition, the Contractor had turned off the alert sound of tractors during backward movement.</p> <p>Based on the information collected, the complaint is considered not justifiable.</p> <p>However, the Contractor was reminded to continuously implement their practice to prevent noise nuisance generation due to the construction works. The site situation will be continuously reviewed by ET and RSS also.</p>	
60609	Near Phase 5 of Mei Foo Sun Chuen	9-Jun-06 (by ET Leader)	<p>The Integrated Complaint Centre (ICC) of HKSAR received a public complaint about environment nuisance generated from Route 8 – Lai Chi Kok Viaduct (R8-LVKC). Resident Site Staff (RSS) subsequently referred the complaint to the ET Leader on 9 June 2006.</p> <p>The complaint was about the noise generated from rock excavation work from 9 a.m. to 6 p.m. at the area between Ching Cheung Road and Mei Lai Road (near Phase 5 of Mei Foo Sun</p>	<p>Site Activities</p> <p>As advised by the RSS, the site of concerned area was likely to be CCR-S4.</p> <p>According to the RSS's records, 1 number of excavator mounted breaker was used to carry out rock breaking work at CCR-S4 during the period between 9 a.m. and 6 p.m.</p> <p>The excavation and rock breaking activities at the concerned area will likely be completed by end of September 2006.</p>	Closed

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
			Cheun).	<p>Contractor Action</p> <p>The silent rock breaking equipment has been used and noise barriers were erected to minimize the noise impact generated from the breaking activity.</p> <p>Site Inspection and Environmental Monitoring</p> <p>An ad-hoc inspection was carried out by ET on 14 June 2006 from 1:30 p.m. to 4:30 p.m. and 16 June 2006 from 4:00 p.m. to 4:45 p.m.</p> <p>During the inspections, the construction activities at CCR-S4 included handheld breaking, excavation and rock breaking activities were carried out at CCR-S4. However, the temporary noise barriers were erected at the abovementioned location as same as RSS's mentioned.</p> <p>Noise measurement was carried out during the inspection to evaluate the noise impact onto the residents of Mei Foo Sun Chuen. The monitoring location was original monitoring location NM4 (Mei Foo Sun Chuen Phase 5).</p> <p>The measured monitoring results were close to the reference baseline level. After correction of the mean background level, the monitoring data were below the noise criterion of 75 dB(A).</p> <p>Conclusion</p> <p>Base on the information collection and the monitoring result, the complaint was considered not justifiable.</p> <p>The Contractor had implemented noise mitigation measures to minimize the noise impact. Besides, the monitoring result were below the noise criteria of 75dB(A). However, the Contractor was still reminded to continuously implement their practice to prevent noise nuisance generation from the construction works.</p>	

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
				The environmental conditions of the site will be continuously reviewed by the RSS and the ET.	
60626	Near Phase 5 of Mei Foo Sun Chuen	26-Jun-06 (by ET Leader)	<p>The Integrated Complaint Centre (ICC) of HKSAR received a public complaint through a facsimile on 12 June 2006 about an environmental nuisance generated from Route 8 – Lai Chi Kok Viaduct 9R8-LCKV) Project. Resident Site Staff (RSS) subsequently referred the complaint to the ET Leader on 26 June 2006.</p> <p>According to the explanation from the RSS, this complaint was indeed the same as that received by the ET on 9 June 2006. The complaint initiated the complaint verbally to the ICC on 8 June 2006 and then also issued a facsimile to the ICC. The facsimile was transferred to the RSS on 12 June 06 and eventually reached the ET on 26 June 2006.</p> <p>The complaint was about the noise generated from rock excavation work from 9 a.m. to 6 p.m. at the area between Ching Cheung Road and Mei Lai Road (near Phase 5 of Mei Foo Sun Cheun).</p> <p>This complaint was made by the same complainant to the ICC through two different channels (by phone and by facsimile) and the ET of the Project was firstly notified on 9 June 2006. A complaint investigation report was issued on 22 June 06.</p>	<p><i>Site Activities</i></p> <p>As advised by the RSS, the site of concerned area was likely to be CCR-S4.</p> <p>According to the RSS's records, 1 number of excavator mounted breaker was used to carry out rock breaking work at CCR-S4 during the period between 9 a.m. and 6 p.m.</p> <p>The excavation and rock breaking activities at the concerned area will likely be completed by end of September 2006.</p> <p><i>Contractor Action</i></p> <p>The silent rock breaking equipment has been used and noise barriers were erected to minimize the noise impact generated from the breaking activity.</p> <p><i>Site Inspection and Environmental Monitoring</i></p> <p>As the complaint was identical to the one received on 9 June 06 by the ET, the ad-hoc inspections carried out on 14 June 2006 from 1:30 p.m. to 4:30 p.m. and 16 June 2006 from 4:00 p.m. to 4:45 p.m. were still applicable to this report. In addition, further ad-hoc inspections were carried out on 28 June 2006 from 1:30 p.m. to 4 :00 p.m. and 3 July 2006 from 9:30 a.m. to 11:30 a.m.</p> <p>During the aforesaid inspections, the construction activities at CCR-S4 included handheld breaking, excavation and rock breaking activities were carried out at CCR-S4. However, the temporary noise barriers were erected at the abovementioned location.</p> <p>In addition to the noise measurement conducted on 14 and 16 June 2006, further noise measurement was carried out on 30</p>	Closed

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			<p>As the ET received this separate complaint after the issue of the complaint investigation report and considered the nature of the complained event (general construction during daytime but not single event at a particular moment), the complaint investigation procedures were initiated.</p>	<p>June 2006 to evaluate the noise impact onto the residents of Mei Foo Sun Chuen. The monitoring location was original monitoring location NM4 (Mei Foo Sun Chuen Phase 5).</p> <p>Noise measurement carried out on 30 June 06, after correction of the mean background level, the monitoring data were below the noise criterion of 75 dB(A)</p> <p>Conclusion</p> <p>This complaint was identical to the one received by the ET on 9 June 06 because the complainant addressed the complaint to the ICC through two different channels (by phone and by facsimile). The facsimile was transferred to the RSS on 12 June 06 and eventually reached the ET on 26 June 06.</p> <p>Base on the information collection and the monitoring result, the complaint was considered not justifiable.</p> <p>The Contractor had implemented noise mitigation measures to minimize the noise impact. Besides, the monitoring result were below the noise criteria of 75dB(A). However, the Contractor was still reminded to continuously implement their practice to prevent noise nuisance generation from the construction works.</p> <p>The environmental conditions of the site will be continuously reviewed by the RSS and the ET.</p>	
60830	Near Mei Foo and Lai King Hill Road	30-Aug-06 (by ET Leader)	<p>The Integrated Complaint Centre (ICC) of HKSAR received a public complaint on 25 August 2006 about an environmental nuisance generated from Route 8 – Lai Chi Kok Viaduct 9R8-LCKV) Project. Resident Site Staff (RSS) subsequently referred the complaint to the ET Leader on 30 August 2006.</p> <p>The complaint was concerned about</p>	<p>Site Activities</p> <p>According to RSS's record, rock dowel installation for slope stabilization at CCR-S1 was commenced on 22 August 2006 and would likely last for at least 6 months.</p> <p>Contractor Action</p> <p>After receiving the complaint, the Contractor has further enhanced the dust mitigation measures as follows:-</p>	In progress

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
			<p>dust generated from the rock drilling works affected the nearby ASRs. The complaint described that spraying of water during rock drilling works was not implemented.</p>	<ul style="list-style-type: none"> • Enclosing the rock dowel drilling work on three sides, i.e. top, back and the left hand side, with tarpaulin sheets; • Spraying of water at the hole during drilling; • Wrapping the head of the drilling rig with a wet thick towel. <p>Site Inspection and Environmental Monitoring</p> <p>During the monthly site inspection on 4th September 2006, rock drilling at the slope CCR-S1 was carrying out. The ET observed that the work area was enclosed by tarpaulin sheets at three sides. Water was sprayed continuously at the drilling hole and head of the drilling rig was enclosed with a wet thick towel. All the mitigation measures mentioned by the RSS were implemented.</p> <p>Conclusion</p> <p>Base on the information collected and the monitoring results, the complaints are considered not justifiable.</p> <p>It was because there was no exceedance of the air quality monitoring results and dust mitigation measures were implemented by the Contractor during the rock drilling works.</p> <p>However, the Contractor was still reminded to take sufficient dust mitigation measures to minimize the environmental impact on the nearby community:</p> <ul style="list-style-type: none"> • Enclose dusty activity such as rock drilling with tarpaulin sheet; • Apply water spraying for any dust emissive activities, such as breaking, excavation, loading and unloading of dusty materials; • Cover long-term idle exposed slope surfaces and stockpiles with tarpaulin sheets. <p>The environmental conditions of the site will be continuously</p>	

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
				reviewed by the RSS and the Environmental Team through site inspections and monitoring exercises.	
60831	Between Lai Wan Road and Lai King Hill Road	31-Aug-06 (by ET Leader)	<p>Environmental Protection Department (EPD) received a public complaint about environment nuisance generated from Route 8 – Lai Chi Kok Viaduct Project. EPD subsequently referred the complaint to ET Leader on 31 August 2006.</p> <p>The complaint was concerned about construction noise, dust and waste water generated from the construction work affect the nearby NSRs after 19.00 hrs, the nearby ASRs and discharged to exiting road respectively</p>	<p>Site Activities</p> <p>According to RSS’s record, rock dowel installation for slope stabilization at CCR-S1 was commenced on 22 August 2006 and would likely last for at least 6 months.</p> <p>Contractor Action</p> <p>With reference to RSS’s site diary, all site activities including drilling works at the concerned area were conducted between 8:00 and 18:00 daily. Ad hoc site observation carried out by the RSS confirmed that no construction activity was carried out after 18:00.</p> <p>As advised by the RSS, tarpaulin sheet covering and water spraying were provided by the Contractor to mitigate the dust nuisance generated from the rock drilling works. On 31 August 2006, the Contractor was further enhanced the dust mitigation measures as follows:-</p> <ul style="list-style-type: none"> • Enclosing the rock dowel drilling work on three sides, i.e. top, back and the left hand side (LHS) with tarpaulin sheets; • Spraying water at the hole during drilling; • Wrapping the head of the drilling rig with a wet thick towel. <p>Site Inspection and Environmental Monitoring</p> <p>During the monthly site inspection on 4th September 2006, rock drilling at the slope CCR-S1 was carrying out. The ET observed that the work area was enclosed by tarpaulin sheets at three sides. Water was sprayed continuously at the drilling hole and head of the drilling rig was enclosed with a wet thick towel. All the mitigation measures mentioned by the RSS were implemented.</p>	In progress

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
				<p>Conclusion</p> <p>Base on the information collected and the monitoring results, the complaint was considered not justifiable.</p> <p>It was because there was no exceedance of the air quality monitoring results and dust mitigation measures were implemented by the Contractor during the rock drilling works. No construction activities were carried after 18:00 in the period mentioned by the complainant. In addition, no wastewater discharge was observed.</p> <p>However, the Contractor was still recommended to take the following mitigation measures to minimize the environmental impact on the nearby community:</p> <p><u>Dust Nuisance</u></p> <ul style="list-style-type: none"> • Enclose dusty activity such as rock drilling by tarpaulin sheet; • Apply water spraying for any dust emissive activities, such as breaking, excavation, loading and unloading of dusty materials; • Cover long-term idle exposed slope surfaces and stockpiles with tarpaulin sheets. <p><u>Construction Noise</u></p> <p>The Contractor was reminded that construction activities during restricted hours could only be carried out with a valid Construction Noise Permit (CNP). In addition, appropriate noise mitigation measures described in the CNP should be implemented in order to minimize the noise impact on the nearby noise sensitive receivers.</p> <p><u>Wastewater Discharge</u></p> <ul style="list-style-type: none"> • Fill up the gaps under the footings of hoarding fence along Lai King Hill Road so as to prevent spillage of muddy water during heavy rain onto the existing road. 	

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				The environmental conditions of the site will be continuously reviewed by the Resident Site Staff and the Environmental Team through site inspections and monitoring exercises.	