

Highways Department

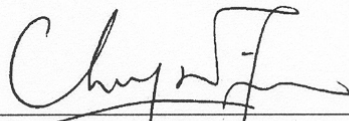
Route 8 (previously known as Route 9) between Cheung Sha Wan & Sha Tin

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

Quarterly EM&A Report Part I – Lai Chi Kok Viaduct (Version 1.0)

September to November 2005

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.

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

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EXECUTIVE SUMMARY

- This is the eighth Quarterly 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 summary report documents the findings of EM&A works performed in the period between September and November 2005 for Contract No. HY/2003/01, Route 8 – Lai Chi Kok Viaduct (the Project).
- The major site activities undertaken in the reporting month included piling works, construction of pile caps and piers, bulk excavation and segment erection works.

Environmental Monitoring Works

- Environmental monitoring for the Project was performed regularly as stipulated in the EM&A Manuals and the results were checked and reviewed. Environmental 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 quarter is tabulated in **Table I**.

Table I Summary Table for Events Recorded in the Reporting Quarter

Parameter	No. of Exceedance		No. of Events due to the Project	Action Taken
	Action Level	Limit Level		
<i>September 2005</i>				
1-hr TSP	1 ^a	0	0	NOE was issued.
24-hr TSP	0	0	0	N/A
Noise	0	0	0	N/A
<i>October 2005</i>				
1-hr TSP	0	0	0	N/A
24-hr TSP	0	0	0	N/A
Noise	0	0	0	N/A
<i>November 2005</i>				
1-hr TSP	0	0	0	N/A
24-hr TSP	0	0	0	N/A
Noise	1 ^b	0	0	Complaint investigation

Remarks:

- (a) The 1hr TSP action level exceedance was recorded on 12 Sept 05. However, based on the field observation and EPD's API records, it was considered that the exceedance was due to poor ambient air quality and not related to the Project works.
- (b) The noise action level exceedance was recorded due to a noise complaint received on 7 Nov 05.

Environmental Licensing and Permitting

- Licenses/Permits granted to the Project include the Environmental Permit (EP) for the Project, Construction Noise Permits (CNP) and Water Discharge Licenses (WDL). The Contractor had also registered as a Chemical Waste Producer.

Key Information in the Reporting Quarter

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

Table II Summary Table for Key Information in the Reporting Quarter

Event	Event Details		Action Taken	Status	Remark
	Number	Nature			
Complaint received	1	Dark smoke, dust and noise	Complaint investigation	Closed	---
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	---
<p>Future Key Issues: Major site activities for the coming month include:</p> <ul style="list-style-type: none"> • Construction of abutment, pile caps and columns; • Bulk excavation, • Buttress wall construction; • Soil nail installation; • Retaining wall construction; • Drainage works; • Cast in-situ of slip roads; and • Segment erection by lifting frame and launching gantry. <p>The anticipated environmental impacts will be mainly on dust generation and construction noise impact from slope works.</p>					

1. INTRODUCTION

- 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. 449) (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. An 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. 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 (previously known as Route 9) 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 was appointed as the ET Leader under Condition 2.2 of the EP. Mr. David YEUNG of CH2M-IDC Hong Kong Ltd. was appointed as the IEC under Condition 2.1 of the EP. This is the eighth quarterly EM&A report summarizing the EM&A works for the LCKV Project between September and November 2005.

2 PROJECT CHARACTERISTICS

Project Organization and Contacts of Key Management

- 2.1 An organization structure and the line of communication were set up for the Project between the Project Proponent, Engineer's Representative (ER), Independent Environmental Checker (IEC), the Contractor and Environmental Team (ET). The organization chart and contact details are shown in **Figure 2** and **Appendix A**.

Construction Programme and Synopsis of Work

- 2.2 The construction programme is presented in **Appendix B**. The site activities during the reporting period include:
- Utility diversions for piling works at Slip Road C;
 - Pre-drilling works for R6;
 - Piling works and Pier construction at Slip Road D;
 - Cast in-situ of Slip Roads C and D;
 - Construction of abutments, pile caps and columns at Slip Roads B, C and D, Lai Wan Overpass and Main Viaduct;
 - Bulk excavation works and retaining wall construction at CCR-R1;
 - Bulk excavation works and soil nails installation at slope CCR-S1 and R3;
 - Bulk excavation works at CCR-R3;
 - Retaining wall construction at CCR-R2;
 - Buttress wall construction at CCR-S1;
 - Drainage works at Rest Garden area, Hoi Lai Estate, Piers B1 and P5;
 - Segment erection by lifting frame for Main Viaduct, Slip Roads A and B;
 - Bored piling work at R3; and
 - Segment erection at Main Viaduct by launching gantry at night at Piers P6 to P8.

3 ENVIRONMENTAL MONITORING AND AUDIT REQUIREMENTS

Monitoring Parameters and Monitoring Locations

- 3.1 The EM&A Manuals designate locations for the ET to monitor environmental impacts in terms of noise and air quality due to the Project. The monitoring locations are depicted in **Figure 1**. **Appendix C** gives details of monitoring requirements.

Monitoring Methodology and Calibration Details

- 3.2 Monitoring works/equipments were conducted/calibrated regularly in accordance with the EM&A Manual. Copies of calibration certificates are attached in the appendices of the Monthly EM&A Reports.

Environmental Quality Performance Limits (Action and Limit Levels)

- 3.3 The environmental quality performance limits, i.e. Action and Limit Levels were derived from the baseline monitoring results. Should the measured environmental quality parameters exceed the Action/Limit Levels, the respective Event Action Plans would be implemented. The Action/Limit Levels for each environmental parameter are provided in **Appendix D**.

Environmental Mitigation Measures

- 3.4 Relevant mitigation measures as recommended in the project EIA report have been stipulated in the EM&A Manual for the Contractor to implement. A list of mitigation measures is provided in **Appendix G**.

4 MONITORING RESULTS

Weather Conditions

- 4.1 The weather during monitoring sessions was mainly sunny or cloudy. The weather conditions for each individual monitoring session were presented in the field record sheets.

Air Quality

1-hr TSP Monitoring

- 4.2 All 1-hr TSP monitoring was conducted as scheduled in this reporting quarter. An Action Level exceedance was recorded for the 1-hr TSP monitoring on 12th September 2005. However, based on our field observation and EPD's monitoring data (Air Pollution Index), it was considered that the exceedance was due to the poor ambient air

quality but not related to R8-LCKV construction works. The exceedance report is provided in **Appendix J**. No Limit Level exceedance was recorded.

24-hr TSP Monitoring

- 4.3 All 24-hr TSP monitoring was conducted as scheduled in this reporting quarter. No Action / Limit Level exceedance was recorded in the reporting quarter.
- 4.4 As observed by the monitoring team, road traffic dust from Ching Cheung Road was identified as the major dust source at the monitoring station during the monitoring.
- 4.5 The monitoring data of 1-hr and 24-hr TSP Levels are attached in the appendices of the Monthly Reports for September to November 2005. The graphical presentations of the monitoring results are shown in **Appendix E**.

Construction Noise

- 4.6 All construction noise monitoring was conducted as scheduled in this reporting quarter. No Limit Level exceedance was recorded.
- 4.7 One noise complaint was received on 7th November 2005, triggering one noise Action Level exceedance. The details can refer to **Appendix I**.
- 4.8 At Stations NM4, NM8a and NM8b, the major noise source identified during the monitoring exercises was mainly road traffic noise. At Station NM9, construction noise from the Project was identified as the major noise source during monitoring.
- 4.9 All the Construction Noise Levels (CNLs) reported in this report were adjusted with the corresponding baseline level (i.e. Measured Leq – Baseline Leq = Measured CNL), in order to facilitate the interpretation of the noise exceedance.
- 4.10 The monitoring data of construction noise are attached in the appendices of the Monthly Reports for September to November 2005. The graphical presentations of the monitoring results are shown in **Appendix F**.

5 ENVIRONMENTAL AUDIT

Implementation Status of Environmental Mitigation Measures

- 5.1 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 Environmental Mitigation Implementation Status (EMIS) is provided in **Appendix G**.

Site Audit Summary

- 5.2 ET's weekly site audits were conducted on 8, 14, 21 and 28 September, 5, 13, 21 and 26 October, 3, 9, 17, 24 and 30 November 2005. IEC's monthly site audits were conducted on 8 September, 5 October and 3 November 2005 together with ET.
- 5.3 During site inspections in the reporting period, no non-conformance was identified. The observations and recommendations are summarized in **Table 5.1**.

Table 5.1 Observations and Recommendations of the Site Audits

Parameters	Date	Observations and Recommendations	Follow-up
<i>Water Quality</i>	8-Sept-05	The Contractor was recommended to construct a bund or ditch channel beside the open channel at Pier 13.	The situation was found improved / rectified during the audit on 14-Sep-05.
	5-Oct-05	Silty water, which was generated from the wheel washing bay at R2, was found discharging into public drains. The Contractor was reminded to improve the de-silting system for the wheel-wash water.	The situation was found improved / rectified during the audit on 13-Oct-05.
<i>Air Quality</i>	21-Sept-05	The contractor was reminded to ensure the impervious sheets near the public roads at Nob Hill and S1 properly maintained.	The situation was found improved / rectified during the audit on 21-Sep-05.
	5-Oct-05	Deposition of sand and silt was observed at the entrance of R2 and on the nearby public road. The Contractor was reminded to clear the silt as soon as possible and ensure the proper functioning of the wheel washing facility.	The situation was found improved / rectified during the audit on 13-Oct-05.
	21-Oct-05	Dust emission was observed at S1 due to the construction activities of the backhoe.	The situation was found improved / rectified during the audit on 26-Oct-05.
	3-Nov-05	Fugitive dust emission was observed at the works area near Pier D14. The Contractor was reminded to water the area more frequently.	The situation was found improved / rectified during the audit on 9-Nov-05.

Parameters	Date	Observations and Recommendations	Follow-up
	9-Nov-05 17-Nov-05	Small parts of soil slope surfaces and stockpiles were observed at the works areas of R2 and R3. The Contractor was recommended to cover the surfaces properly to prevent wind erosion.	The situation was found improved / rectified during the audit on 24-Nov-05.
	17-Nov-05	Some exposed soil slope surfaces at the areas of R2 and R3 were not covered. The Contractor was reminded to cover the slopes properly.	The situation was found improved / rectified during the audit on 24-Nov-05.
	17-Nov-05	Fugitive dust emission was observed during the loading at Slope S1. The Contractor was reminded to provide sufficient water spray for the loading process.	The situation was found improved / rectified during the audit on 24-Nov-05.
	24-Nov-05	Deposition of dusty material was observed at the access road near Slope S6. The Contractor was reminded to keep the access road clean.	The situation was found improved / rectified during the audit on 30-Nov-05.
	30-Nov-05	Open stockpile of soil was observed at R2. The Contractor was recommended to cover the stockpile by impervious sheeting to minimize dust emission.	The situation would be followed up in Dec 05.
Noise	24-Nov-05	An air compressor without noise emission label was operated at R3. The Contractor was reminded to affix a valid NEL on the compressor.	The situation was found improved / rectified during the audit on 30-Nov-05.
Chemical Management	14-Sept-05	A chemical drum without the drip tray was observed at Pier P13. The contractor was reminded to proper storage of fuel and chemical.	The situation was found improved / rectified during the audit on 14-Sep-05.
	21-Sept-05	Oil stained soil was observed under a dump truck at Wai Man Tsuen. The contractor was reminded to remove the oil stain properly and pay more attention during the repairing equipment.	The situation was found improved / rectified during the audit on 21-Sep-05.
	28-Sept-05	Spill of waste liquid from a rubbish bin was observed at Lai Po Road. The contractor was reminded to keep the site clean and tidy.	The situation was found improved / rectified during the audit on 5-Oct-05.
	13-Oct-05	Oil stained soil was observed near the fuel storage area at S1. The contractor was reminded to remove the soil properly.	The situation was found improved / rectified during the audit on 21-Oct-05.
	26-Oct-05	An oil dump was stored without the drip tray at Nob Hill. The contractor was reminded to store the fuel/chemical properly.	The situation was found improved / rectified during the audit on 3-Nov-05.
	3-Nov-05	An oil drum was placed on bared ground without drip trap at R2. The Contractor was reminded to provide a drip tray for the drum as soon as possible.	The situation was found improved / rectified during the audit on 9-Nov-05.

Parameters	Date	Observations and Recommendations	Follow-up
	30-Nov-05	An oil drum was not placed in bunded area at S3. The Contractor was reminded to provide a drip tray for the oil drum.	The situation would be followed up in Dec 05.
Others	8-Sept-05	Stagnant water was observed on the concrete block at Pier 17. The Contractor was recommended to fill the concrete block to prevent water accumulation.	The situation was found improved / rectified during the audit on 14-Sep-05.
	5-Oct-05	Stagnant water was observed accumulating near the workshop's area near Piers B2 and B3. The Contractor was recommended to divert the stagnant water properly.	The situation was found improved / rectified during the audit on 13-Oct-05.

Status of Environmental Licensing and Permitting

- 5.4 Environmental licenses and permits including the Environmental Permit for the Project were in place and valid during the reporting quarter. The status of all licenses and permits obtained for the Project is summarized in **Appendix H**.

6 NON-COMPLIANCE (EXCEEDANCES) OF THE ENVIRONMENTAL QUALITY PERFORMANCE LIMITS (ACTION AND LIMIT LEVELS)

Summary of Exceedances

Air Quality

- 6.1 An Action Level exceedance was recorded on 12 September 2005. However, it was considered that the exceedance was not related to the construction activities of the Project. No further action was required.

Construction Noise

- 6.2 No Limit Level exceedance was recorded in the reporting month. One Action Level exceedance was triggered by a public noise complaint received on 7 November 2005.

Review of the Reasons for and the Implications of Non-compliance

- 6.3 There was no non-compliance from the site audits in the reporting quarter. As mentioned previously in the Section 5.2 of this report, the observations and recommendations made in each individual site audit session were presented.

7 ENVIRONMENTAL COMPLAINTS

- 7.1 An environmental complaint was received on 7th November 2005, regarding construction dark smoke, dust and noise at Ching Cheung Road near Mei Foo Sun Chuen. The complaint was lodged by a resident of Mei Foo Sun Chuen and the sites of concern were CCR-R2, R3 and S4. Ad-hoc noise and dust monitoring was conducted on 8th and 10th November 2005 and no exceedance was recorded. Therefore, the complaint was considered not justifiable. A complaint investigation report was submitted to EPD on 15th November 2005.
- 7.2 There were 16 complaints received since the Project commencement. All complaints have been handled in accordance with the EM&A Manuals. The implementation status of the complaint handling procedure is summarized in **Appendix I**.

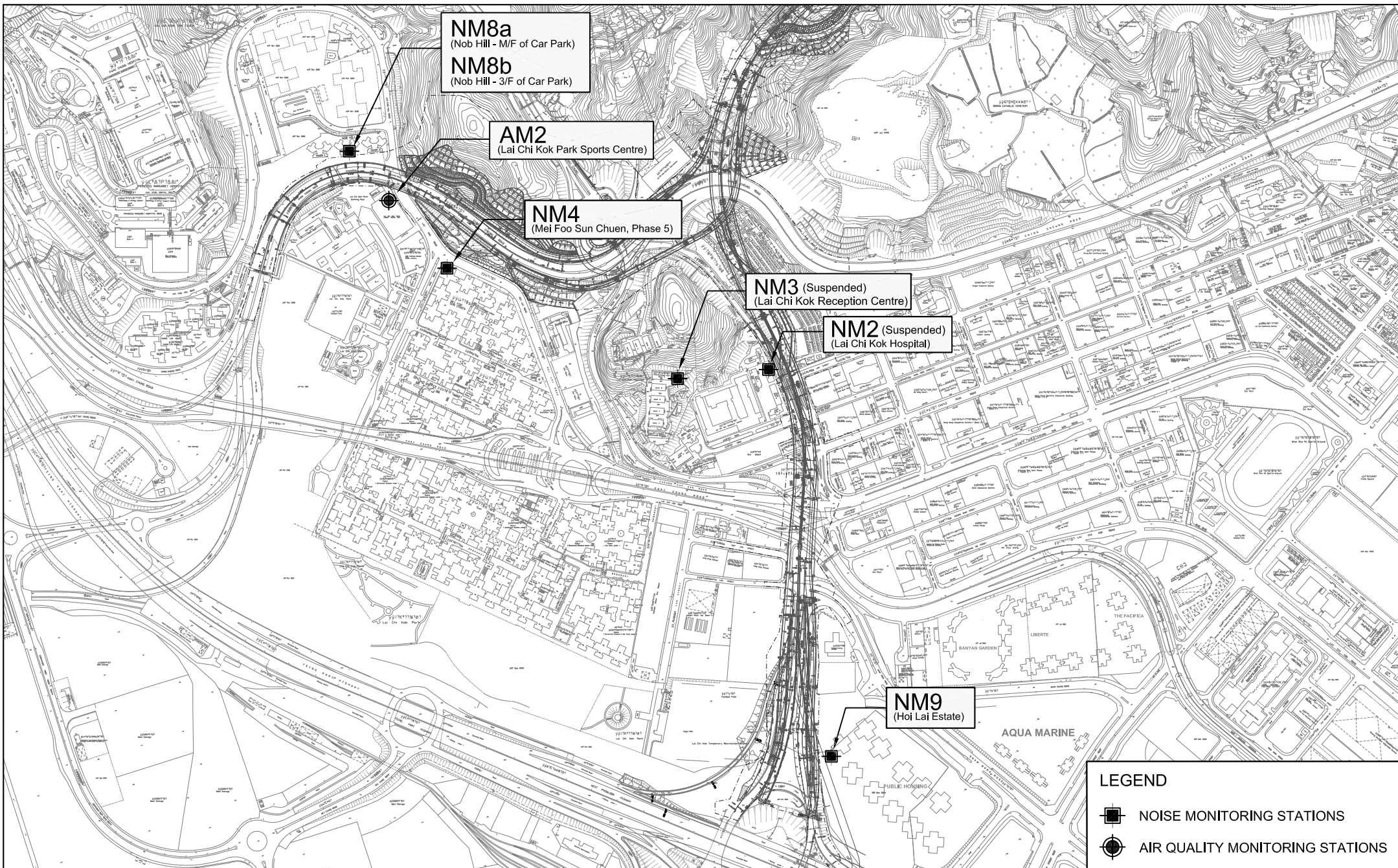
8 NOTIFICATION OF SUMMONS AND SUCCESSFUL PROSECUTIONS

- 8.1 No notification of summon or successful prosecution was recorded in this reporting quarter.
- 8.2 There was no notification of summon or successful prosecution received since the Project commencement.

9 COMMENTS, CONCLUSIONS AND RECOMMENDATIONS

- 9.1 Major site activities for the coming quarter include:
- Construction of abutments, pile caps and piers at Slip Roads C and D, Lai Wan Overpass and Main Viaduct;
 - Bulk excavation works, buttress wall construction and soil nails installation at slope CCR-S1;
 - Bulk excavation works and retaining wall construction at CCR-R1;
 - Bulk excavation works at CCR-R3;
 - Drainage works at Rest Garden area, Hoi Lai Estate, Piers B1 and P5;
 - Segment erection by lifting frame at Piers P4, P14, P15, P18, Slip Roads A and B;
 - Segment erection by launching gantry at night at Piers P9 and P10;
 - Cast insitu of Slip Roads C and D; and
 - Bored piling work at R3.
- 9.2 The anticipated environmental impacts will be mainly on air quality impact from excavation works and nighttime construction noise from segment transportation and erection works.

FIGURES

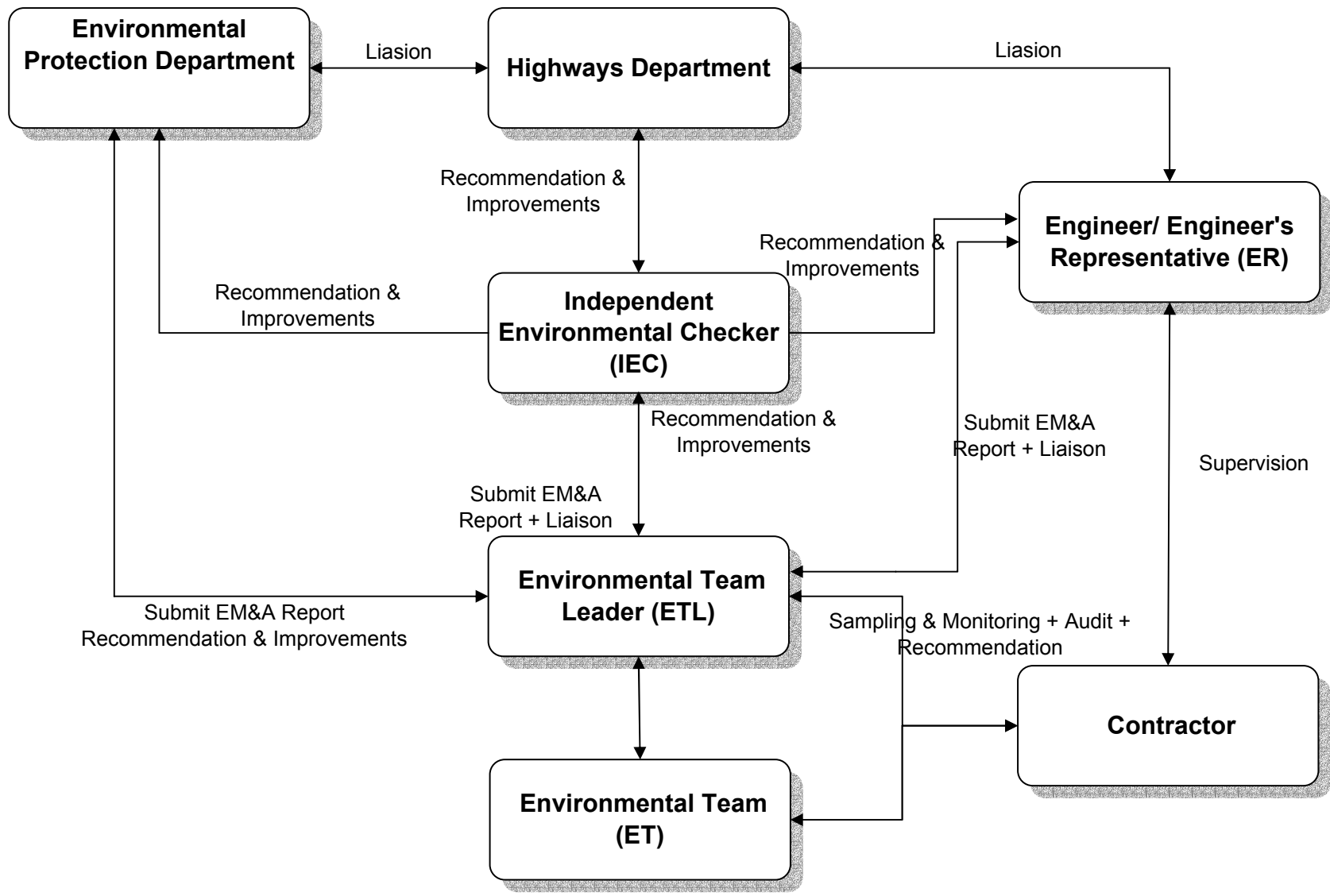


LEGEND	
	NOISE MONITORING STATIONS
	AIR QUALITY MONITORING STATIONS

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)	Project No. MA3024	CINOTECH consultants limited
Date 2005	Figure No. 1	



Title ROUTE 8 (PREVIOUSLY KNOWN AS ROUTE 9) BETWEEN CHEUNG SHA WAN AND SHA TIN
 CONTRACT NO. HY/2003/01 - LAI CHI KOK VIADUCT

Environmental Monitoring and Audit Organization Chart

Scale	N.T.S	Project No.	MA3024
Date	2005	Figure	2

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**APPENDIX A
CONTACT DETAILS OF THE PROJECT
ORGANISATION**

Appendix A - Contact Details of the Project Organisation (LCKV)

Party	Role	Name	Position	Phone No.	Fax No.
HyD	Permit Holder	Mr. K.T. Lee	SE3/R9K	2762 3684	2714 5198
		Mr. Albert Cheung	E6/R9K	2762 3598	
		Mr. L.C. Chung	E4/R9K	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
		Mr. KK Chan	Audit Team Leader	2151 2077	
		Mr. Henry Leung	Monitoring Team Leader	2151 2087	
CH2M-IDC	Independent Environmental Checker	Mr. David Yeung	Independent Environmental Checker	2872 2934	2507 2293
		Mr. Billy Yu	Assistant Independent Environmental Checker	2872 2949	
NECSO	Contractor	Mr. Rafael Rubio	Project Director	2956 3300	2956 3331
		Mr. Lawrence Kwok	QA/E Manager		
24-hour Emergency Hotline				2370 9200	-

APPENDIX B
CONSTRUCTION PROGRAMME

Activity ID	Activity Description	Orig. Durn.	Early Start	Early Finish	Late Start	Late Finish	2005												2006											
							OCT			NOV			DEC			JAN														
							17	24	31	7	14	21	28	5	12	19	26	2	9	16	23									
Procurement																														
Segmental Deck Casting (Type A Units)																														
SD2630	P15/L-Up - Cast 16 Segments Type A	25	21SEP05A	24OCT05	21SEP05A	13JUN05																								
SD2630A	P15/L-Down - Cast 16 Segments Type A	26	26SEP05A	23OCT05	26SEP05A	27JUN05																								
SD2630B	P15/R-Up - Cast 16 Segments Type A	25	27SEP05A	25OCT05	27SEP05A	27JUN05																								
SD2630C	P15/R-Down - Cast 16 Segments Type A	23	25OCT05	19NOV05	14JUN05	08JUL05																								
SD2640	P16/L-Up - Cast 6 Segments Type A	10	20NOV05	30NOV05	09JUL05	20JUL05																								
SD2640A	P16/L-Down - Cast 6 Segments Type A	11	24OCT05	04NOV05	28JUN05	08JUL05																								
SD2640B	P16/R-Up - Cast 4 Segments Type A	8	26OCT05	03NOV05	28JUN05	05JUL05																								
SD2640C	P16/R-Down - Cast 4 Segments Type A	9	05NOV05	15NOV05	09JUL05	19JUL05																								
SD2680A	P18/L-Down - Cast 14 Segments Type A	21	04NOV05	26NOV05	06JUL05	29JUL05																								
SD2680	P18/L-Up - Cast 14 Segments Type A	22	16NOV05	09DEC05	26JUL05	18AUG05																								
SD2670	P18/R-Down - Cast 11 Segments Type A	18	01DEC05	20DEC05	30JUL05	18AUG05																								
SD2670A	P18/R-Up - Cast 11 Segments Type A	18	28NOV05	17DEC05	30JUL05	18AUG05																								
SD2660A	P17/R-Down - Cast 12 Segments Type A	18	10DEC05	29DEC05	19AUG05	07SEP05																								
SD2650A	P17/L-Up - Cast 9 Segments Type A	17	21DEC05	09JAN06	08SEP05	26SEP05																								
SD2660	P17/R-Up - Cast 12 Segments Type A	20	18DEC05	09JAN06	09SEP05	30SEP05																								
SD2650	P17/L-Down - Cast 9 Segments Type A	18	30DEC05	18JAN06	08SEP05	27SEP05																								
SD2700A	P19/R-Down - Cast 10 Segments Type A	16	10JAN06	26JAN06	15NOV05	01DEC05																								
SD2700	P19/R-Up - Cast 10 Segments Type A	17	10JAN06	27JAN06	18NOV05	06DEC05																								
SD2690A	P19/L-Down - Cast 9 Segments Type A	16	19JAN06	09FEB06	30NOV05	17DEC05																								
Segmental Deck Casting (Type B Units)																														
SD3290	PA/L (North) - Cast 9 seg Type B	18	20OCT05	08NOV05	04APR05	22APR05																								
SD3400	D5-Pierhead & Up - Cast 15 seg Type B	25	20OCT05	16NOV05	01AUG05	28AUG05																								
SD3400A	D5-Down - Cast 14 seg Type B	24	20OCT05	15NOV05	01AUG05	27AUG05																								
SD3410	D4-Pierhead & Up - Cast 15 Segments Type B	25	20OCT05	16NOV05	30JUL05	26AUG05																								
SD3410A	D4-Down - Cast 14 Segments Type B	24	20OCT05	15NOV05	31JUL05	26AUG05																								
SD3330	P18 Slip D-Up - Cast 12 Segments Type B	21	22SEP05A	20OCT05	22SEP05A	15JUL05																								
SD3330A	P18 Slip D-Down - Cast 12 Segments Type B	21	09OCT05A	26OCT05	09OCT05A	16JUL05																								
SD3350	D10-Up - Cast 12 Segments Type B	21	21OCT05	12NOV05	16JUL05	08AUG05																								
SD3350A	D10-Down - Cast 11 Segments Type B	20	27OCT05	18NOV05	18JUL05	08AUG05																								
SD3360	D9-Pierhead & Up - Cast 5 Segments Type B	10	20OCT05	29OCT05	12AUG05	23AUG05																								
SD3360A	D9-Pierhead & Down - Cast 5 Segments Type B	10	20OCT05	29OCT05	26AUG05	05SEP05																								

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Activity ID	Activity Description	Orig. Durn.	Early Start	Early Finish	Late Start	Late Finish	2005												2006						
							OCT			NOV			DEC			JAN									
							17	24	31	7	14	21	28	5	12	19	26	2	9	16	23				
SD3420	D3-Up - Cast 10 Segments Type B	19	31OCT05	20NOV05	24AUG05	13SEP05																			
SD3420A	D3-Down - Cast 10 Segments Type B	19	31OCT05	20NOV05	06SEP05	26SEP05																			
SD3430	D2-Pierhead & Up - Cast 14 Segments Type B	22	14NOV05	07DEC05	09AUG05	01SEP05																			
SD3430A	D2-Down - Cast 13 Segments Type B	22	19NOV05	13DEC05	09AUG05	01SEP05																			
SD3440	D1-Pierhead & Up - Cast 11 Segs Type B	20	21NOV05	13DEC05	14SEP05	06OCT05																			
SD3440A	D1-Down - Cast 10 Segments Type B	19	21NOV05	12DEC05	27SEP05	19OCT05																			
SD3390	D6-Pierhead & Up - Cast 9 seg Type B	16	08DEC05	24DEC05	02SEP05	20SEP05																			
SD3390A	D6-Pierhead & Down - Cast 9 seg Type B	16	14DEC05	30DEC05	02SEP05	20SEP05																			
SD3320	C6 Slip C-Up - Cast 3 Segments Type B	6	26DEC05	31DEC05	21SEP05	26SEP05																			
SD3450	Abutment D - Cast 3 Segments Type B	6	31DEC05	06JAN06	21SEP05	26SEP05																			
SD3460	P19 Slip C-Up - Cast 10 Segments Type B	19	02JAN06	21JAN06	27SEP05	19OCT05																			
SD3460A	P19 Slip C-Down - Cast 10 Segments Type B	19	07JAN06	27JAN06	27SEP05	19OCT05																			
SD3470	P19 Slip D-Up - Cast 8 Segments Type B	16	14DEC05	30DEC05	10OCT05	26OCT05																			
SD3470A	P19 Slip D-Down - Cast 8 Segments Type B	16	14DEC05	30DEC05	07OCT05	24OCT05																			
SD3370	D8-Up - Cast 15 Segments Type B	25	31DEC05	27JAN06	27OCT05	23NOV05																			
SD3370A	D8-Down - Cast 15 Segments Type B	25	31DEC05	27JAN06	25OCT05	21NOV05																			
Segmental Deck Casting (Type C Units)																									
SD3210	PA/R-Up - Cast 9 seg Type C	18	20OCT05	08NOV05	30NOV04	20DEC04																			
Precast Parapet Panel Casting																									
PP2000	Casting Type I Parapet Units 1 - 265	55	20OCT05A	22DEC05	20OCT05A	29JUL05																			
PP2010	Casting Type I Parapet Units 266 - 565	45	23DEC05	18FEB06	03SEP05	28OCT05																			
PP2100	Casting Type II Parapet Units 1 - 265	55	15OCT05A	16DEC05	15OCT05A	01JUN05																			
PP2110	Casting Type II Parapet Units 266 - 565	45	17DEC05	13FEB06	29JUL05	20SEP05																			
PP2200	Casting Type III Parapet Units 1 - 22	22	29OCT05	23NOV05	02JUL05	27JUL05																			
PP2300	Casting Type IV Parapet Units 1 - 180	70	10NOV05	04FEB06	09JUN05	31AUG05																			
PP2400	Casting Type V Parapet Units 1 - 180	70	20OCT05	11JAN06	13APR05	06JUL05																			
PP2410	Casting Type V Parapet Units 181 - 383	70	12JAN06	07APR06	13AUG05	05NOV05																			
Noise Barriers & Enclosures																									
NB1010	Noise Encl' - Slip Rd A - Design & Shop Drawings	23	07JUL05A	25OCT05	07JUL05A	14APR05																			
NB1020	Noise Encl' - Slip Rd A - Eng. Review & Approval	28	20OCT05	16NOV05	09APR05	06MAY05																			
NB1030	Noise Encl' - Slip Rd A - Materials Purchasing	60	17NOV05	27JAN06	07MAY05	18JUL05																			
NB1100	Noise Encl' - Slip Rd B - Design & Shop Drawings	23	07JUL05A	25OCT05	07JUL05A	29APR05																			
NB1110	Noise Encl' - Slip Rd B - Eng. Review & Approval	28	20OCT05	16NOV05	25APR05	22MAY05																			

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Activity ID	Activity Description	Orig. Durn.	Early Start	Early Finish	Late Start	Late Finish	2005																
							OCT			NOV				DEC			2006						
							17	24	31	7	14	21	28	5	12	19	26	2	9				
NB1120	Noise Encl' - Slip Rd B - Materials Purchasing	72	17NOV05	14FEB06	23MAY05	16AUG05				NB1120													
NB1130	Noise Encl' - Slip Rd B - Off-site Fabrication	100	10JAN06	11MAY06	15JUL05	11NOV05															NB1130		
NB1200	Noise Encl' - P8 to P11 - Design & Shop Drawings	60	10SEP05A	29DEC05	10SEP05A	30MAY05															NB1200		
NB1210	Noise Encl' - P8 to P11 - Eng. Review & Approval	28	02DEC05	29DEC05	03MAY05	30MAY05															NB1210		
NB1220	Noise Encl' - P8 to P11 - Materials Purchasing	65	30DEC05	20MAR06	31MAY05	16AUG05															NB1220		
NB1300	Noise Encl' - ENT Approach - Design & Shop Dwgs.	23	07JUL05A	25OCT05	07JUL05A	13JUN05				NB1300													
NB1310	Noise Encl' - ENT Approach - Eng. Review & Appro	28	20OCT05	16NOV05	07JUN05	04JUL05					NB1310												
NB1320	Noise Encl' - ENT Approach - Material Purchasing	100	17NOV05	18MAR06	05JUL05	01NOV05					NB1320												
NB2000	Noise Barriers - PA to P4 - Design & Shop Dwgs.	82	19AUG05A	15NOV05	19AUG05A	10FEB06					NB2000												
NB2010	Noise Barriers - PA to P4 - Eng. Review & Appro'	28	20OCT05	16NOV05	14JAN06	10FEB06						NB2010											
NB2020	Noise Barriers - PA to P4 - Materials Purchasing	95	19NOV05	15MAR06	13FEB06	05JUN06							NB2020										
NB2110	Noise Barriers - P5 to P8 - Eng. Review & Appro'	115	20OCT05	11FEB06	11JAN06	05MAY06																	
NB2120	Noise Barriers - P5 to P8 - Materials Purchasing	163	14NOV05	30MAY06	04FEB06	18AUG06						NB2120											
NB2210	Noise Barriers - P11 to P13 -Eng Review & Approv	44	08DEC05	20JAN06	10FEB06	25MAR06																NB2210	
NB2220	Noise Barriers - P11 to P13 - Materials Purchase	82	09JAN06	18APR06	14MAR06	19JUN06																NB2220	
NB2300	Noise Barriers - ENT Approach -Des'n & Shop Dwgs	82	24AUG05A	06DEC05	24AUG05A	28MAR06																NB2300	
NB2310	Noise Barriers - ENT Approach -Eng Rev & Approv	28	09NOV05	06DEC05	01MAR06	28MAR06																NB2310	
NB2320	Noise Barriers - ENT Approach -Material Purchase	70	07DEC05	03MAR06	29MAR06	21JUN06																NB2320	
NB2400	Noise Barriers - Slip Rd. C - Design & Shop Dwgs	82	24OCT05*	31DEC05	09DEC05	21FEB06																NB2400	
NB2410	Noise Barriers - Slip Rd. C - Eng Rev & Approv	28	04DEC05	31DEC05	25JAN06	21FEB06																NB2410	
NB2420	Noise Barriers - Slip Rd. C - Material Purchase	70	03JAN06	28MAR06	22FEB06	16MAY06																NB2420	
NB2500	Noise Barriers - Slip Rd. D - Design & Shop Dwgs	82	11JUL05A	11NOV05	11JUL05A	09FEB06																NB2500	
NB2510	Noise Barriers - Slip Rd. D - Eng Rev & Approv	28	20OCT05	16NOV05	15JAN06	11FEB06																NB2510	
NB2520	Noise Barriers - Slip Rd. D - Material Purchase	105	21NOV05	28MAR06	16FEB06	21JUN06																NB2520	
Bearings																							
BE1010	Detailed Design & Shop Drawings	60	16JAN04A	09NOV05	16JAN04A	18JAN05																BE1010	
BE1020	Review & Approval of Design & Shop Drawings	24	05JUN04A	23NOV05	05JUN04A	01FEB05																BE1020	
BE1030	Off-Site Manufacturing of Bearings	70	07SEP04A	06JAN06	07SEP04A	04MAR05																BE1030	
BE1035	Engineer's Approval of Bearings Before Delivery	42	20OCT05	06JAN06	13DEC04	04MAR05																BE1035	
BE1050	Trial of Bearing Installation Method	10	09JUN05A	26OCT05	09JUN05A	15JUL05																BE1050	
Movement Joints																							
MJ1005	Engineer's approval of Proprietary Type of M.J	0	20OCT05		21JAN06																	MJ1005	
MJ1010	Detailed Design & Shop Drawings	75	20OCT05	17JAN06	21JAN06	22APR06																MJ1010	

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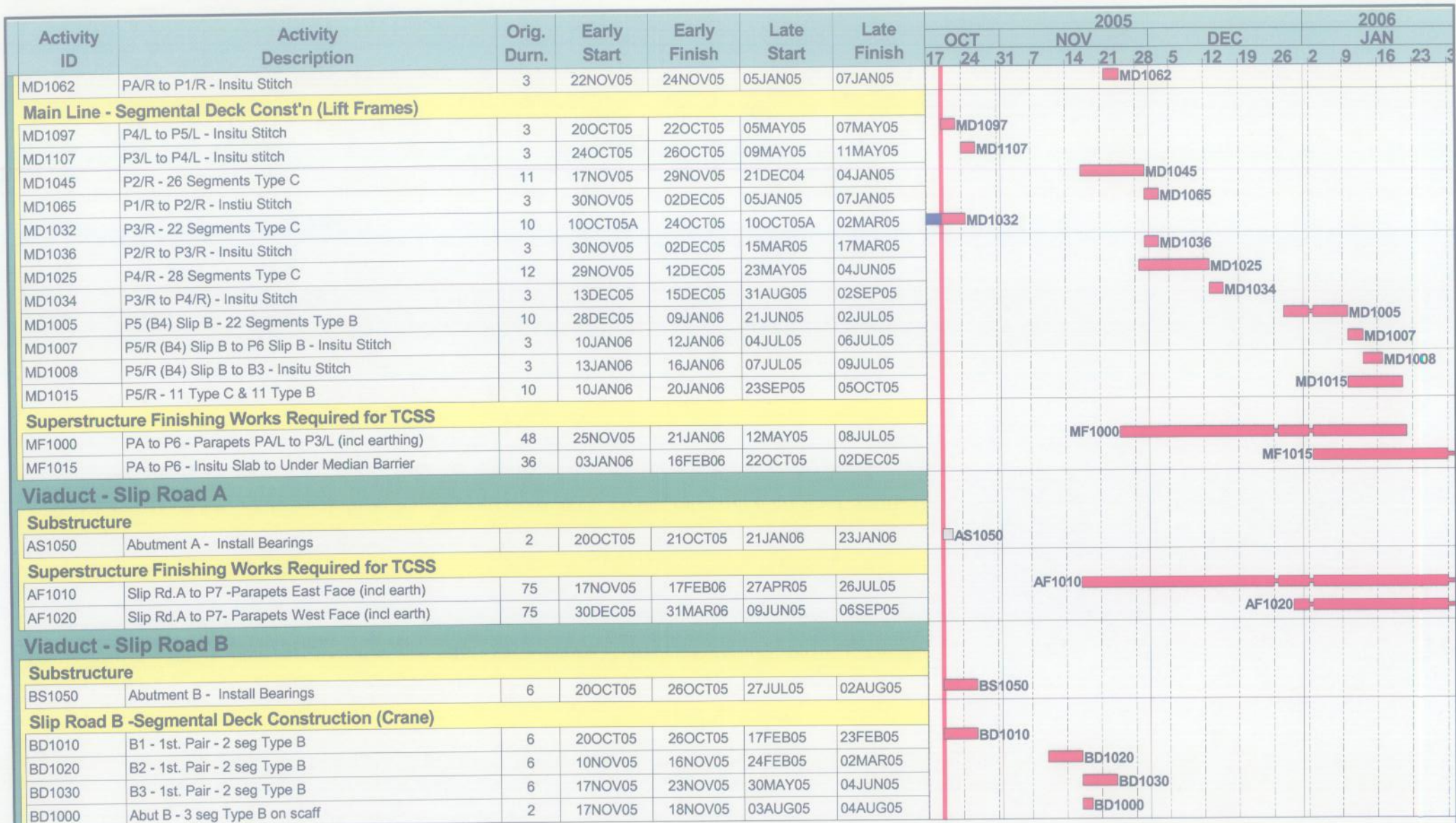
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Activity ID	Activity Description	Orig. Durn.	Early Start	Early Finish	Late Start	Late Finish	2005					2006									
							OCT		NOV			DEC			JAN						
							17	24	31	7	14	21	28	5	12	19	26	2	9	16	23
Main Line - Segmental Deck Const'n (Lift Frames)																					
BD1015	B1 - 28 seg Type B	12	30NOV05	13DEC05	01MAR05	14MAR05															
BD1005	Abut B - B1 Insitu Stitch	3	14DEC05	16DEC05	05AUG05	08AUG05															
BD1025	B2 - 22 seg Type B	10	17NOV05	28NOV05	03MAR05	14MAR05															
BD1027	B1 - B2 Insitu Stitch	3	14DEC05	16DEC05	15MAR05	17MAR05															
BD1035	B3 - 28 seg Type B	12	13DEC05	27DEC05	06JUN05	20JUN05															
BD1045	B2 - B3 Insitu Stitch	3	28DEC05	30DEC05	05AUG05	08AUG05															
At Grade Works - Lai Po Road																					
Temporary Traffic Management Schemes																					
WT3100	3rd. TTMS Lai Po Road - Prepare for Review	18	23NOV05	13DEC05	11MAY05	31MAY05															
WT3110	3rd. TTMS Lai Po Road - CRE Endorsement	6	21DEC05	28DEC05	02JUN05	08JUN05															
WT3120	3rd. TTMS Lai Po Road - Roadworks Advice	6	29DEC05	05JAN06	09JUN05	16JUN05															
WT3130	3rd. TTMS Lai Po Rd - Site Preparation for Divsn	18	06JAN06	26JAN06	17JUN05	08JUL05															
WT4000	TTMS Deck Erect'n @ Rd D S/B -Prepare for Review	18	20OCT05	09NOV05	12JUN08	04JUL08															
WT4010	TTMS Deck Erect'n @ Rd D S/B - CRE Endorsement	6	20OCT05	26OCT05	23NOV04	29NOV04															
WT4020	TTMS Deck Erect'n @ Rd D S/B - Roadworks Advice	6	27OCT05	02NOV05	30NOV04	06DEC04															
WT4030	TTMS Deck Erect'n @ Rd D S/B - Site Preparation	6	03NOV05	09NOV05	07DEC04	13DEC04															
WT4040	TTMS Deck Erect'n @ Rd D S/B - Implementation	60*	10NOV05	20JAN06	14DEC04	05OCT05															
Earthworks & Slope Works																					
WE1030	Lai Po Road S/B - Remove Segment Storage Area	6	29NOV05	05DEC05	26OCT05	01NOV05															
Retaining Wall LCK-R2																					
WW2010	Ret. Wall LCK-R2 - Bases	24	13DEC05	11JAN06	18JAN05	17FEB05															
WW2020	Ret. Wall LCK-R2 - Walls	42	28DEC05	18FEB06	01FEB05	24MAR05															
Kiosk at Lai Wan Interchange																					
WK1000	Kiosk at Lai Wan Interchange - Structure	48	25NOV05	21JAN06	17AUG05	14OCT05															
Lai Po Road Fire Hydrant Pump House																					
WH1000	Lai Po Rd. F/H Pump House - Plate Load Test	6	06DEC05	12DEC05	22JUL06	28JUL06															
WH1010	Lai Po Rd. F/H Pump House - Structure	24	13DEC05	11JAN06	31JUL06	26AUG06															
WH1020	Lai Po Rd. F/H Pump House - Waterproofing	12	12JAN06	25JAN06	02SEP06	15SEP06															
WH1040	Lai Po Rd. F/H Pump House - MVAC Installation	30	12JAN06	18FEB06	28AUG06	03OCT06															

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							OCT			NOV				DEC			JAN	
							17	24	31	7	14	21	28	5	12	19	26	2
Viaduct - Main Line - Piers P7 to P10																		
Substructure																		
MS2052	P7 Install Bearings	2	20OCT05	21OCT05	07NOV06	08NOV06	■ MS2052											
Main Line - Segmental Deck Construction (Crane)																		
MD2120	P10/L - 1st. Pair - 2 Segments Type A	6	20OCT05	26OCT05	23MAY05	28MAY05	■ MD2120											
MD2130	P10/R - 1st. Pair - 2 Segments Type A	6	24OCT05	29OCT05	26MAY05	01JUN05	■ MD2130											
Main Line - Segmental Deck Construction (Gantry)																		
MD2065	P8/L - 30 Segments Type A	13	20OCT05	03NOV05	21APR05	06MAY05	■ MD2065											
MD2075	P8/R - 30 Segments Type A	13	20OCT05	03NOV05	21APR05	06MAY05	■ MD2075											
MD2077	P7-P8 Insitu Stiches	3	04NOV05	07NOV05	07MAY05	10MAY05	■ MD2077											
MD2080	Launch Gantry to P8/P9	2	08NOV05	09NOV05	11MAY05	12MAY05	■ MD2080											
MD2095	P9/R - 28 Segments Type A	12	10NOV05	23NOV05	13MAY05	26MAY05	■ MD2095											
MD2105	P9/L - 24 Segments Type A	12	10NOV05	23NOV05	13MAY05	26MAY05	■ MD2105											
MD2107	P8-P9 Insitu Stiches	3	24NOV05	26NOV05	27MAY05	30MAY05	■ MD2107											
MD2110	Launch Gantry to P9/P10	2	28NOV05	29NOV05	31MAY05	01JUN05	■ MD2110											
MD2125	P10/L - 26 Segments Type A	14	30NOV05	15DEC05	02JUN05	18JUN05	■ MD2125											
MD2135	P10/R - 24 Segments Type A	14	30NOV05	15DEC05	02JUN05	18JUN05	■ MD2135											
MD2145	P9-P10 Insitu Stiches	3	16DEC05	19DEC05	20JUN05	22JUN05	■ MD2145											
Superstructure Finishing Works Required for TCSS																		
MF2000	P7 to P10 - Parapets P7 to P8 (incl earthing)	36	22NOV05	04JAN06	30JUN05	11AUG05	■ MF2000											
MF2002	P7 to P10 - Parapets P9 to P10 (incl earthing)	36	23DEC05	08FEB06	30JUL05	09SEP05	■ MF2002											
MF2005	P7 to P10 - Insitu Slab to Under Median Barrier	48	22NOV05	18JAN06	21JUN05	16AUG05	■ MF2005											
MF2007	P7 to P10 - Median Barrier (incl earthing)	48	20DEC05	18FEB06	20JUL05	13SEP05	■ MF2007											
At Grade Works - Lai Chi Kok Interchange																		
Temporary Traffic Management Schemes																		
MT1300	2nd. TTMS Butterfly Valley Rd-Prepare for Review	12	20OCT05	02NOV05	19JUN08	04JUL08	■ MT1300											
MT1310	2nd. TTMS Butterfly Valley Rd - CRE Endorsement	6	20OCT05	26OCT05	08JUN05	15JUN05	■ MT1310											
MT1320	2nd. TTMS Butterfly Valley Rd - Roadworks Advice	6	27OCT05	02NOV05	16JUN05	22JUN05	■ MT1320											
MT1330	2nd. TTMS Butterfly Valley Rd - Prepare	18	03NOV05	23NOV05	23JUN05	14JUL05	■ MT1330											
MT1400	3rd TTMS Butterfly Valley Rd -Prepare for Review	12	23NOV05	06DEC05	11MAY05	24MAY05	■ MT1400											
MT1410	3rd. TTMS Butterfly Valley Rd - CRE Endorsement	6	21DEC05	28DEC05	10SEP05	16SEP05	■ MT1410											
MT1420	3rd. TTMS Butterfly Valley Rd - Roadworks Advice	6	29DEC05	05JAN06	17SEP05	24SEP05	■ MT1420											

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Activity ID	Activity Description	Orig. Durn.	Early Start	Early Finish	Late Start	Late Finish	2005							2006										
							OCT			NOV			DEC			JAN								
							17	24	31	7	14	21	28	5	12	19	26	2	9	16	23			
Main Line - Segmental Deck Construction (Crane)																								
MD4080	P18/R - 1st. Pair - 2 Segments Type A	6	15DEC05	21DEC05	12AUG05	18AUG05																		
MD4100	P18/L - 1st. Pair - 2 Segments Type A	6	19DEC05	24DEC05	16AUG05	22AUG05																		
MD4110	P18 Slip C - 1st. Pair - 2 Segments Type B	6	22DEC05	29DEC05	19AUG05	25AUG05																		
MD4090	P18 Slip D - 1st. Pair - 2 Segments Type B	6	27DEC05	03JAN06	23AUG05	29AUG05																		
MD4095	P18 Slip D - 22 Segments Type B	11	04JAN06	16JAN06	30AUG05	10SEP05																		
Main Line - Segmental Deck Const'n (Lift Frames)																								
MD4105A	P18/L - 2nd-4th. Pairs - 6 Segments Type A	3	27DEC05	29DEC05	23SEP05	26SEP05																		
MD4115A	P18 Slip C - 2nd-4th. Pairs -6 Segments Type B	3	30DEC05	03JAN06	27SEP05	29SEP05																		
MD4084	CLP SHUT DOWN POWER - O/HEAD LINES NORTH &	0	20DEC05*		30SEP05																			
MD4115	P18 Slip C - 5th-14th Pairs - 20 Segments Type B	7	04JAN06	11JAN06	30SEP05	08OCT05																		
MD4105	P18/L - 5th-14th. Pairs - 20 Segments Type A	7	12JAN06	19JAN06	10OCT05	18OCT05																		
MD4106	CLP RESUME POWER - O/HEAD LINES NORTH &	0		19JAN06*		04JUL08																		
Main Line - Segmental Deck Construction (Gantry)																								
MD4010	P16 - 1st. Pair - 2 Segments Type A	6	18JAN06	24JAN06	23JUL05	29JUL05																		
MD4019A	CLP SHUT DOWN POWER - O/HEAD LINES NORTH &	0	16JAN06*		03NOV05																			
Viaduct - Main Line - Piers 19 to Abutment M																								
Substructure																								
MS5050	P19 - Pier Insitu Deck Segment	48	26SEP05A	23NOV05	26SEP05A	08SEP05																		
MS5055	P19 - Pier Head - Cure & Strip Falsework	24	24NOV05	21DEC05	09SEP05	08OCT05																		
MS5090	P20 - Backfill & Remove Temporary Works	4	03SEP05A	20OCT05	03SEP05A	04JUL08																		
MS5095	P20 - 3rd. Site Access from ENT Contractor	0	21OCT05*		05JUL08																			
MS5105	P20 - Pier Hammer Head	18	20OCT05	09NOV05	21SEP05	13OCT05																		
MS5110	P20 - Pier Insitu Deck Segment	48	10NOV05	06JAN06	14OCT05	08DEC05																		
MS5115	P20 - Pier Head - Cure & Strip Falsework	24	07JAN06	07FEB06	09DEC05	07JAN06																		
MS5165	P21 - Pier Hammer Head	18	20OCT05	09NOV05	08OCT05	29OCT05																		
MS5170	P21 - Pier Insitu Deck Segment	42	10NOV05	29DEC05	31OCT05	17DEC05																		
MS5175	P21 - Pier Head - Cure & Strip Falsework	30	30DEC05	07FEB06	19DEC05	24JAN06																		
MS5210	Abutment M - Backfill & Remove Temporary Works	8	17OCT05A	22OCT05	17OCT05A	04JUL08																		
MS5225	Abutment M - Slope Reinstatement	12	20OCT05	02NOV05	20FEB06	04MAR06																		

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Activity ID	Activity Description	Orig. Durn.	Early Start	Early Finish	Late Start	Late Finish	2005												2006				
							OCT			NOV			DEC			JAN							
							17	24	31	7	14	21	28	5	12	19	26	2	9	16	23	3	
At Grade Works - Butterfly Valley																							
Temporary Traffic Management Schemes																							
QT1040	TTA Butterfly Valley (CCR-S6) - Implementation	528*	07FEB04A	05NOV05	07FEB04A	20OCT05	■ QT1040																
QT2000	TTMS MainLine Deck@ CC Rd E/B-Prepare for Review	12	22OCT05	04NOV05	19APR05	03MAY05	■ QT2000																
QT2010	TTMS MainLine Deck@ CC Rd E/B - CRE Endorsement	6	23NOV05	29NOV05	20JUL05	26JUL05	■ QT2010																
QT2020	TTMS MainLine Deck@ CC Rd E/B - Roadworks Advice	12	30NOV05	13DEC05	27JUL05	09AUG05	■ QT2020																
QT2030	TTMS MainLine Deck@ CC Rd E/B - Site Preparation	6	14DEC05	20DEC05	10AUG05	16AUG05	■ QT2030																
QT2100	TTMS Slip RdD Deck@ CC Rd E/B-Prepare for Review	18	20OCT05	09NOV05	12APR05	03MAY05	■ QT2100																
QT2110	TTMS Slip Rd D Deck@ CC Rd E/B - CRE Endorsement	6	23NOV05	29NOV05	17AUG05	23AUG05	■ QT2110																
QT2120	TTMS Slip RdD Deck@ CC Rd E/B - Roadworks Advice	12	30NOV05	13DEC05	24AUG05	06SEP05	■ QT2120																
QT2130	TTMS Slip RdD Deck@ CC Rd E/B - Site Preparation	6	16DEC05	22DEC05	09SEP05	15SEP05	■ QT2130																
Earthworks & Slope Works - CCR-S6																							
QE1300	Slope CCR-S6 - Slope Finishes	75	04MAR05A	05NOV05	04MAR05A	20OCT05	■ QE1300																
Utilities & Roadworks																							
QR1040	WSD Access Road - Divert Junction to Clear P16/L	6	22OCT05	28OCT05	25MAR05	31MAR05	■ QR1040																
QR1060	WSD Access Road - Permanent C/Way P18 to P19	36	22DEC05	07FEB06	10OCT05	21NOV05	■ QR1060																
Landscape Works																							
QX1020	Landscaping - Soiling & Planting on Slope CCR-S6	75	07NOV05*	07FEB06	21OCT05	18JAN06	■ QX1020																
Viaduct - Slip Road C																							
Substructure																							
CS1130	Abutment C - Backfill & Remove Temporary Works	4	21SEP05A	20OCT05	21SEP05A	24JUL06	■ CS1130																
CS1265	C2 - Install Bearings	3	27OCT05	29OCT05	20JUL05	22JUL05	■ CS1265																
CS1325	C3 - Install Bearings	6	20OCT05	26OCT05	16JUL05	22JUL05	■ CS1325																
CS1380	C4 - Pier Head	12	20OCT05	02NOV05	30JUN05	14JUL05	■ CS1380																
CS1432	C5/R - Install Sheet Temporary Piles	5	19OCT05A	22OCT05	19OCT05A	22APR05	■ CS1432																
CS1435	C5/R - Excavate, Strut & Break Down Piles	12	24OCT05	05NOV05	23APR05	07MAY05	■ CS1435																
CS1436	C5/R - Pile Cap & Pier Kicker	12	07NOV05	19NOV05	09MAY05	21MAY05	■ CS1436																
CS1437	C5/R - Backfill & Remove Temporary Works	6	21NOV05	26NOV05	23MAY05	28MAY05	■ CS1437																
CS1438	C5/R - Pier	6	28NOV05	03DEC05	30MAY05	04JUN05	■ CS1438																
CS1440	C5/L - C5/R Portal	24	05DEC05	03JAN06	06JUN05	05JUL05	■ CS1440																
CS1445	C5/L - C5/R Portal - Cure & Strike Form/Falsewk	14	04JAN06	19JAN06	06JUL05	21JUL05	■ CS1445																
CS1551	C6/R & C6/L - Portal Frame - Cure & Strike F/wk	14	06SEP05A	22OCT05	06SEP05A	20JUN05	■ CS1551																

Start Date
Finish Date
Data Date

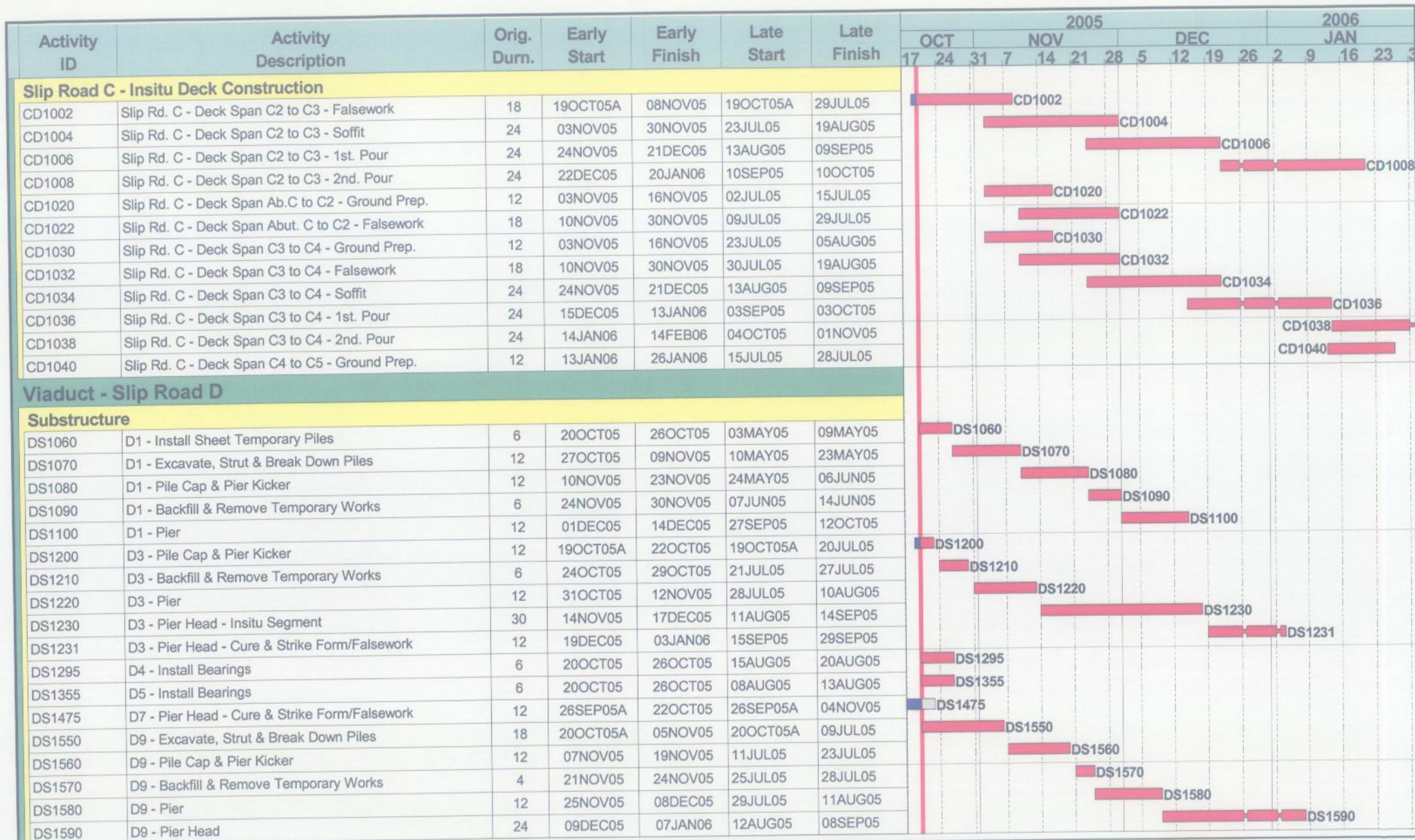
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Highways Department Contract No. HY/2003/01
Route 8 - Lai Chi Kok Viaduct
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Activity ID	Activity Description	Orig. Durn.	Early Start	Early Finish	Late Start	Late Finish	2005												2006		
							OCT			NOV			DEC			JAN					
							17	24	31	7	14	21	28	5	12	19	26	2	9	16	23
DS1610	D10 - Excavate, Strut & Break Down Piles	12	18OCT05A	28OCT05	18OCT05A	02JUL05	[Gantt bar for DS1610]														
DS1620	D10 - Pile Cap & Pier Kicker	12	29OCT05	11NOV05	04JUL05	16JUL05	[Gantt bar for DS1620]														
DS1630	D10 - Backfill & Remove Temporary Works	4	12NOV05	16NOV05	18JUL05	21JUL05	[Gantt bar for DS1630]														
DS1640	D10 - Pier	12	17NOV05	30NOV05	22JUL05	04AUG05	[Gantt bar for DS1640]														
DS1650	D10 - Pier Head	24	01DEC05	29DEC05	05AUG05	01SEP05	[Gantt bar for DS1650]														
Slip Road D - Segmental Deck Const'n (Crane)																					
DD1015	D10 - 22 seg Type B	10	17JAN06	27JAN06	12SEP05	23SEP05	[Gantt bar for DD1015]														
DD1110	D5 - Pierhead Segment - 1 Segment Type B	6	21NOV05*	26NOV05	15AUG05	20AUG05	[Gantt bar for DD1110]														
DD1115	D5 - 28 seg Type B	7	05DEC05	12DEC05	25OCT05	01NOV05	[Gantt bar for DD1115]														
DD1130	D4 - Pierhead Segment - 1 Segment Type B	6	28NOV05	03DEC05	22AUG05	27AUG05	[Gantt bar for DD1130]														
DD1135	D4 - 28 Segments Type B	7	08DEC05	15DEC05	01SEP05	08SEP05	[Gantt bar for DD1135]														
DD1137	D4 to D5 - Insitu Stitch	3	16DEC05	19DEC05	02NOV05	04NOV05	[Gantt bar for DD1137]														
Lai Wan Road Overpass																					
Temporary Traffic Management Schemes																					
LT2120	TTMS LW Rd (for W/B Deck) - Roadworks Advice	6	20OCT05	25OCT05	21JUN08	26JUN08	[Gantt bar for LT2120]														
LT2130	TTMS LW Rd (for W/B Deck) - Site Preparation	6	26OCT05	01NOV05	27JUN08	04JUL08	[Gantt bar for LT2130]														
LT2200	TTMS LW Rd (for E/B Deck) - Prepare for Review	12	20OCT05	02NOV05	19JUN08	04JUL08	[Gantt bar for LT2200]														
LT2210	TTMS LW Rd (for E/B Deck) - CRE Endorsement	6	20OCT05	25OCT05	08JUL05	13JUL05	[Gantt bar for LT2210]														
LT2220	TTMS LW Rd (for E/B Deck) - Roadworks Advice	6	26OCT05	31OCT05	14JUL05	19JUL05	[Gantt bar for LT2220]														
LT2230	TTMS LW Rd (for E/B Deck) - Site Preparation	6	01NOV05	07NOV05	20JUL05	26JUL05	[Gantt bar for LT2230]														
LT2240	TTMS LW Rd (for E/B Deck) - Implementation	143*	18JAN06	11JUL06	27JUL05	07FEB06	[Gantt bar for LT2240]														
LT3000	TTMS CC Rd (on W/B Deck) - Prepare for Review	12	22OCT05	04NOV05	12APR05	25APR05	[Gantt bar for LT3000]														
LT3010	TTMS CC Rd (on W/B Deck) - CRE Endorsement	6	23NOV05	28NOV05	24OCT05	29OCT05	[Gantt bar for LT3010]														
LT3020	TTMS CC Rd (on W/B Deck) - Roadworks Advice	6	29NOV05	04DEC05	30OCT05	04NOV05	[Gantt bar for LT3020]														
LT3030	TTMS CC Rd (on W/B Deck) - Site Preparation	6	05DEC05	10DEC05	05NOV05	11NOV05	[Gantt bar for LT3030]														
LT3100	TTMS CC Rd (on E/B Deck) - Prepare for Review	12	21DEC05	05JAN06	29AUG05	10SEP05	[Gantt bar for LT3100]														
West Bound - Enabling & Piling Works																					
LP1390	D14 - Piling (2No. @ 1500mm dia.)	20	26SEP05A	02NOV05	26SEP05A	18JUN05	[Gantt bar for LP1390]														
LP1400	D14 - Pile Testing	6	15NOV05	21NOV05	02JUL05	08JUL05	[Gantt bar for LP1400]														
West Bound - Substructure																					
LS1065	Abutment DA1 - Install Bearings	6	27OCT05	02NOV05	27JUN08	04JUL08	[Gantt bar for LS1065]														
LS1135	D11 - Bearings	3	20OCT05	22OCT05	02JUL08	04JUL08	[Gantt bar for LS1135]														
LS1185	D12 - Install Bearings	3	27OCT05	29OCT05	02JUL08	04JUL08	[Gantt bar for LS1185]														

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Activity ID	Activity Description	Orig. Durn.	Early Start	Early Finish	Late Start	Late Finish	2005																
							OCT			NOV			DEC			2006 JAN							
							17	24	31	7	14	21	28	5	12	19	26	2	9	16	23		
LS1235	D13 - Install Bearings	3	27OCT05	29OCT05	10SEP05	13SEP05			■ LS1235														
LS1240	D14 - Install Sheet Temporary Piles	6	22NOV05	28NOV05	09JUL05	15JUL05																	
LS1250	D14 - Excavate, Strut & Break Down Piles	18	29NOV05	19DEC05	16JUL05	05AUG05																	
LS1260	D14 - Pile Cap & Pier Kicker	12	20DEC05	04JAN06	06AUG05	19AUG05																	
LS1270	D14 - Backfill & Remove Temporary Works	3	05JAN06	07JAN06	20AUG05	23AUG05																	
LS1280	D14 - Pier (incl. Pier Head)	12	09JAN06	21JAN06	24AUG05	06SEP05																	
LS1286	Abutment DA2 - Remove Existig Rockfall Fence	3	20OCT05	22OCT05	04APR05	07APR05			■ LS1286														
LS1287	Abutment DA2 - Remove Existing Footpath	6	24OCT05	29OCT05	08APR05	14APR05			■ LS1287														
LS1288	Abutment DA2 - Re-instate Rockfall Fence	3	31OCT05	02NOV05	15APR05	18APR05			■ LS1288														
LS1290	Abutment DA2 - Utility Trial Trenches	3	31OCT05	02NOV05	15APR05	18APR05			■ LS1290														
LS1310	Abutment DA2 - Excavation in Rock for Footing	24	03NOV05	30NOV05	19APR05	17MAY05																	
LS1320	Abutment DA2 - Mass Concrete Fill Under Footing	12	01DEC05	14DEC05	18MAY05	31MAY05																	
LS1330	Abutment DA2 - Footing	18	15DEC05	06JAN06	01JUN05	22JUN05																	
LS1340	Abutment DA2 - Bearing Shelf & Walls	24	07JAN06	07FEB06	23JUN05	21JUL05																	
East Bound - Substructure																							
LS2050	Abutment CA1 - Install Bearings	6	27OCT05	02NOV05	27JUN08	04JUL08																	
LS2105	C11 - Install Bearings	6	20OCT05	26OCT05	27JUN08	04JUL08			■ LS2105														
LS2155	C12 - Install Bearings	6	20OCT05	26OCT05	27JUN08	04JUL08			■ LS2155														
LS2205	C13 - Install Bearings	6	20OCT05	26OCT05	10AUG05	16AUG05			■ LS2205														
LS2220	C14 - Excavate for Footing	12	05DEC05	17DEC05	16JUN05	29JUN05																	
LS2230	C14 - Footing & Pier Kicker	12	19DEC05	03JAN06	30JUN05	14JUL05																	
LS2240	C14 - Backfill & Remove Temporary Works	4	04JAN06	07JAN06	15JUL05	19JUL05																	
LS2250	C14 - Pier (incl. Pier Head)	18	09JAN06	28JAN06	20JUL05	09AUG05																	
LS2260	Abutment CA2 - Excavation in Rock for Footing	12	05DEC05	17DEC05	14JUN05	27JUN05																	
LS2270	Abutment CA2 - Footing	12	19DEC05	03JAN06	28JUN05	12JUL05																	
LS2280	Abutment CA2 - Bearing Shelf & Walls	24	04JAN06	03FEB06	13JUL05	09AUG05																	
West Bound - Insitu Deck																							
LD1014	Lai Wan O/pass W/B - Span St. 2 - Soffit	24	22JUN05A	21OCT05	22JUN05A	06SEP05																	
LD1016	Lai Wan O/pass W/B - Span St. 2 - 1st. Pour	36	26SEP05A	18NOV05	26SEP05A	06OCT05																	
LD1018	Lai Wan O/pass W/B - Span St. 2 - 2nd. Pour	24	19NOV05	16DEC05	07OCT05	04NOV05																	
LD1019	Lai Wan O/pass W/B - Span St. 2 - Stressing	6	17DEC05	23DEC05	05NOV05	11NOV05																	
LD1040	Lai Wan O/pass W/B - Demolish F/p for Stage 3	24	20OCT05	16NOV05	03AUG05	30AUG05																	

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Activity ID	Activity Description	Orig. Durn.	Early Start	Early Finish	Late Start	Late Finish	2005																
							OCT			NOV			DEC			2006							
							17	24	31	7	14	21	28	5	12	19	26	2	9	16	23		
East Bound - Insitu Deck																							
LD2016	Lai Wan O/Pass E/B - Span St.2 - 1st. Pour	36	12SEP05A	16NOV05	12SEP05A	06SEP05																	
LD2018	Lai Wan O/Pass E/B - Span St.2 - 2nd Pour	24	17NOV05	14DEC05	07SEP05	06OCT05																	
LD2019	Lai Wan O/Pass E/B - Span St.2 - Stressing	6	15DEC05	21DEC05	07OCT05	14OCT05																	
LD2050	Lai Wan O/Pass E/B - Span St.3 - Ground Prep	18	18JAN06	10FEB06	27JUL05	16AUG05																	
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	23NOV05	06DEC05	11MAY05	24MAY05																	
NT2060	2nd. TTMS CC Rd (E/B C/Way) - CRE Endorsement	6	21DEC05	26DEC05	19OCT06	24OCT06																	
NT2070	2nd. TTMS CC Rd (E/B C/Way) - Roadworks Advice	6	27DEC05	01JAN06	25OCT06	30OCT06																	
NT2080	2nd. TTMS CC Rd (E/B C/Way) - Site Preparation	6	03JAN06	09JAN06	31OCT06	06NOV06																	
Retaining Wall CCR-R1 West Bound																							
NW1030	W/B Ret. Wall CCR-R1A East - Excavate	48	24JUN05A	27OCT05	24JUN05A	30JUN05																	
NW1040	W/B Ret. Wall CCR-R1A East - Bases	48	04JUL05A	17NOV05	04JUL05A	22JUL05																	
NW1050	W/B Ret. Wall CCR-R1A East - Walls	72	13JUL05A	15DEC05	13JUL05A	19AUG05																	
NW1060	W/B Ret. Wall CCR-R1A East - B/fill & Remove T/W	36	02DEC05	14JAN06	06AUG05	16SEP05																	
NW1120	W/B Ret. Wall CCR-R1B - Excavate	15	07NOV05	23NOV05	09APR05	26APR05																	
NW1130	W/B Ret. Wall CCR-R1B - Bases	24	24NOV05	21DEC05	16APR05	14MAY05																	
NW1140	W/B Ret. Wall CCR-R1B - Walls	36	22DEC05	07FEB06	16MAY05	27JUN05																	
NW1200	W/B Ret. Wall CCR-R1A West - Excavate	15	20OCT05	05NOV05	11MAR05	28MAR05																	
NW1210	W/B Ret. Wall CCR-R1A West - Bases	24	27OCT05	23NOV05	18MAR05	15APR05																	
NW1220	W/B Ret. Wall CCR-R1A West - Walls	36	10NOV05	21DEC05	01APR05	14MAY05																	
NW1230	W/B Ret. Wall CCR-R1A West - B/fill Behind Wall	12	22DEC05	06JAN06	13JUL05	26JUL05																	
Retaining Wall CCR-R1 East Bound																							
NW2065	W/B Ret. Wall CCR-R1C (Bays 3 & 4) -Backfill	24	30MAY05A	22OCT05	30MAY05A	05JUL05																	
NW2070	W/B Ret. Wall CCR-R1C - Parapets on Wall	48	21NOV05	17JAN06	03AUG05	28SEP05																	
NW2140	W/B Ret. Wall CCR-R1D - Walls	72	25JAN05A	09NOV05	25JAN05A	13SEP05																	
NW2150	W/B Ret. Wall CCR-R1D -Backfill Behind Wall	24	30MAY05A	23NOV05	30MAY05A	28SEP05																	
NW2160	W/B Ret. Wall CCR-R1D -Parapets on Wall	60	18JAN06	31MAR06	29SEP05	09DEC05																	
NW2240	W/B Ret. Wall CCR-R1E - Parapets on Wall	24	24OCT05	19NOV05	06JUL05	02AUG05																	
Drainage Works																							
NA2010	C.C. Rd. W/B in New C/way - S/water Drainage E3	75	16JAN06	17APR06	26SEP05	23DEC05																	
NA3000	C.C. Rd. E/B in New C/way - Stormwater Drainage	75	24NOV05	24FEB06	24JAN06	25APR06																	

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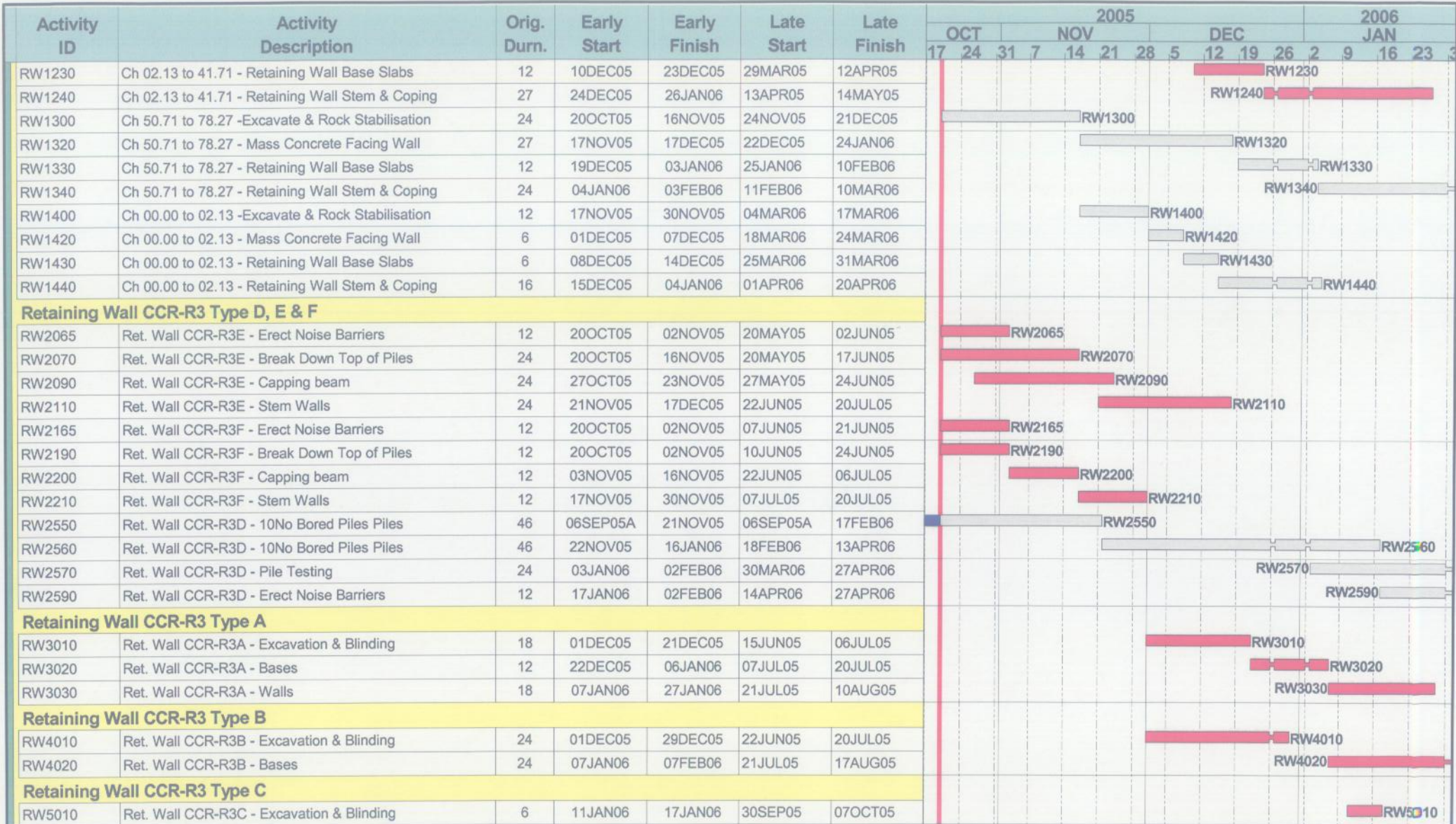
Activity ID	Activity Description	Orig. Durn.	Early Start	Early Finish	Late Start	Late Finish	2005												2006												
							OCT			NOV			DEC			JAN															
							17	24	31	7	14	21	28	5	12	19	26	2	9	16	23	3									
At Grade Work - Ching Cheung Road - Main Section																															
Earthworks & Slope Works - CCR-S1, S2 & S3																															
RE1700	Slope CCR-S1E - Finish Seed & Planting +62.3mPD	6	20OCT05*	26OCT05	09OCT06	14OCT06																									
RE1710	Slope CCR-S1E - Finish Seed & Planting +54.8mPD	12	27OCT05	09NOV05	16OCT06	30OCT06																									
RE1720	Slope CCR-S1E - Finish Seed & Planting +47.3mPD	12	10NOV05	23NOV05	31OCT06	13NOV06																									
RE1710A	Slope CCR-S1C- Finish Seed & Planting +54.9mPD	12	20OCT05	02NOV05	16OCT06	30OCT06																									
RE1720A	Slope CCR-S1C - Finish Seed & Planting +47.3mPD	12	03NOV05	16NOV05	31OCT06	13NOV06																									
RE1630	Slope CCR-S1E&C - Drainage to level +39.8mPD	48	20OCT05	14DEC05	08MAY08	04JUL08																									
RE1810	Slope CCR-S1E&C - Rock Stabilisation to +32.3mPD	48	22AUG05A	29NOV05	22AUG05A	03AUG06																									
RE1820	Slope CCR-S1E&C - Drainage to Level +32.3mPD	48	02NOV05	28DEC05	08MAY08	04JUL08																									
RE1830	Slope CCR-S1E&C -Excavate Rock to Level +25.4mPD	36	08AUG05A	22OCT05	08AUG05A	03OCT05																									
RE1840	Slope CCR-S1E&C- Rock Stabilisation to +25.4mPD	48	11NOV05	28DEC05	15JUL06	31AUG06																									
RE1850	Slope CCR-S1E&C - Drainage to Level +25.4mPD	48	30NOV05	26JAN06	04AUG06	29SEP06																									
RE2000	Slope CCR-S2 -Excavate Rock to Formation	24	10NOV05	07DEC05	29SEP05	28OCT05																									
RE2050	Slope CCR-S2 - Rock Stabilisation	24	01DEC05	29DEC05	06MAY06	02JUN06																									
RE2100	Slope CCR-S2 - Drainage	42	30DEC05	21FEB06	03JUN06	24JUL06																									
RE1630B	Slope CCR-S1W - Drainage to Levell +39.95mPD	24	05SEP05A	02NOV05	05SEP05A	23OCT06																									
RE1720B	Slope CCR-S1W - Seed & Planting to +39.95mPD	36	20OCT05	30NOV05	30SEP06	13NOV06																									
RE1235	Slope CCR-S1W - Bulk Excavate to Level +24.9mPD	18	10AUG05A	22OCT05	10AUG05A	29APR05																									
RE1235A	Slope CCR-S1W -Detailed Excavate to Level +24.9m	12	10AUG05A	22OCT05	10AUG05A	25OCT05																									
RE1550	Slope CCR-S1W - Rock Stabilisation to 24.9mPD	54	24OCT05	24DEC05	23MAY06	26JUL06																									
RE1650	Slope CCR-S1W - Drainage to Level +24.9mPD	24	30SEP05A	10JAN06	30SEP05A	10AUG06																									
RE1250	Slope CCR-S1W - Bulk Excavate to Level +19.0mPD	18	24OCT05	12NOV05	30APR05	21MAY05																									
RE1250A	Slope CCR-S1W -Detailed Excavate to Level +19.0m	18	11JAN06	03FEB06	11AUG06	31AUG06																									
RE1257	Slope CCR-S1W -Platform for Soil Nail R. 1 & 2	6	12OCT05A	21OCT05	12OCT05A	04JUL08																									
RE1260A	Slope CCR-S1W - Soil Nails (R. 1 & 2) Working	12	17OCT05A	28OCT05	17OCT05A	21SEP06																									
RE1560	Slope CCR-S1W - Rock Stabilisation to 19.0mPD	48	27DEC05	24FEB06	27JUL06	21SEP06																									
RE1270	Slope CCR-S1W - Excavate to Lai Wan Road O/pass	18	14NOV05	03DEC05	23MAY05	13JUN05																									
RE1665	Slope CCR-S1W - Seed & Planting to +32.4mPD	24	20OCT05	16NOV05	11AUG06	07SEP06																									
RE1670	Slope CCR-S1W - Seed & Planting to +24.9mPD	24	11JAN06	10FEB06	08SEP06	07OCT06																									
Retaining Wall CCR-R2 (Value Engineering Design)																															
RW1200	Ch 02.13 to 41.71 -Excavate & Rock Stabilisation	36	04APR05A	11NOV05	04APR05A	28FEB05																									
RW1220	Ch 02.13 to 41.71 - Mass Concrete Facing Wall	24	12NOV05	09DEC05	01MAR05	28MAR05																									

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Activity ID	Activity Description	Orig. Durn.	Early Start	Early Finish	Late Start	Late Finish	2005																			
							OCT			NOV			DEC			2006										
							17	24	31	7	14	21	28	5	12	19	26	2	9	16	23					
Slope Works Above Retaining Walls CCR-R3D, E & F																										
RE4205	Slope above CCR-R3E&F -Remove Piling Platform	6	19DEC05	24DEC05	21JUL05	27JUL05																				
RE4207	Slope above CCR-R3E&F -Excavate Slope	12	27DEC05	10JAN06	28JUL05	10AUG05																				
RE4210	Slope above CCR-R3E&F- Filter - Btm. to 1st Berm	6	11JAN06	17JAN06	11AUG05	17AUG05																				
RE4211	Slope above CCR-R3E&F -Rockfill-Bt'm to 1st Berm	12	18JAN06	03FEB06	18AUG05	31AUG05																				
Earthworks & Slope Works - CCR-S4																										
RE4267	Slope CCR-S4 - Relocate Tem Rock Fence	24	20OCT05	16NOV05	12DEC05	10JAN06																				
RE4268	Slope CCR-S4 - Excavate & Bench Upper Slope	24	17NOV05	14DEC05	11JAN06	10FEB06																				
RE4280	Slope CCR-S4 - Fill and Compact	24	15DEC05	13JAN06	11FEB06	10MAR06																				
RE4285	Slope CCR-S4 - Form New Access Road at Footpath	24	15DEC05	13JAN06	11FEB06	10MAR06																				
RE4290	Slope CCR-S4 - Upper Slope Drainage	18	14JAN06	07FEB06	04JUL06	24JUL06																				
Ching Cheung Road NTMM Retaining Wall A																										
RW5990	NNTM Wall A - Excavate to Formation	36	24OCT05	03DEC05	07APR06	19MAY06																				
RW6000	NNTM Wall A - Bases	12	05DEC05	17DEC05	20MAY06	02JUN06																				
RW6010	NNTM Wall A - Walls	18	19DEC05	10JAN06	03JUN06	24JUN06																				
RW6020	NNTM Wall A - Drainage & Fill Behind Walls	12	11JAN06	24JAN06	26JUN06	10JUL06																				
Drainage Works																										
RR1015	1200 dia. Stormwater Diversion at Pier D4	58	21JUN05A	23NOV05	21JUN05A	04JUL08																				
Utilities & Roadworks																										
RA3070	Ching Cheung Rd. New E/B - Sign Gantry Founds	18	08DEC05	29DEC05	10DEC05	31DEC05																				
RA4000	Ching Cheung Rd. New E/B Slip Road - E&M +TCSS	75	24OCT05	20JAN06	26OCT05	23JAN06																				
RA4030	Ching Cheung Rd. New E/B - N/B Founds Base	75	08DEC05	10MAR06	05MAY06	03AUG06																				
RA7000	Lai Wan Road - Watermains & Hydrants FH4 & FH5	24	04JAN06	03FEB06	11FEB06	10MAR06																				
At Grade Works - Butterfly Valley Interchange																										
Earthworks & Slopeworks - 11NW-A/C26																										
PE1010	Slope 11NW-A/C26 - Trim slope	12	01DEC05	14DEC05	11AUG06	24AUG06																				
PE1015	Slope 11NW-A/C26 - Platform for Soil Nailing	6	15DEC05	21DEC05	25AUG06	31AUG06																				
PE1017	Slope 11NW-A/C26 - Soil Nails - Test Nail	12	22DEC05	06JAN06	01SEP06	14SEP06																				
PE1020	Slope 11NW-A/C26 - Soil Nails (incl. Testing)	18	07JAN06	27JAN06	15SEP06	07OCT06																				
Retaining Wall CCR-R5 (Pre-bored "H" Piles)																										
PW2150	Ret. Wall CCR-R5 - R.C. Wall CCR-R5A	48	20OCT05	30NOV05	05AUG05	15SEP05																				
PW2220	Ret. Wall CCR-R5 - Coping & Facing to Ret Wall	90	05SEP05A	05JAN06	05SEP05A	08OCT05																				

Start Date
Finish Date
Data Date

23SEP03
04JUL08
20OCT05

P3 File : LU25

Sheet 19 of 20

Highways Department Contract No. HY/2003/01
Route 8 - Lai Chi Kok Viaduct
3 month Rolling Programme
From 20 October 2005



APPENDIX C
MONITORING REQUIREMENTS

Appendix C - Environmental Impact Monitoring Requirements for Lai Chi Kok Viaduct

Type of Monitoring	Parameter	Frequency	Location	Measurement Conditions
Air Quality	1-hour TSP	3 times every 6 days	<ul style="list-style-type: none"> AM2 (Lai Chi Kok Park Sports Centre) 	<ul style="list-style-type: none"> Rooftop facing the site area
	24-hour TSP	Once every 6 days		
Noise	L_{eq} , L_{90} & L_{10} at 30 minute intervals during (0700 to 1900 on normal weekdays)	Once per week	<ul style="list-style-type: none"> NM2 (Lai Chi Kok Reception Centre)⁽²⁾ NM3 (Lai Chi Kok Hospital)⁽³⁾ NM4 (Mei Foo Sun Chuen, Phase 5) NM8a (M/F of Nob Hill) NM8b (3/F of Nob Hill) NM9 (Hoi Lai Estate) 	<ul style="list-style-type: none"> NM2 – Roadside (Façade measurement) NM3 – Rooftop of Block L (Façade measurement) NM4 – Rooftop of Block 9 (Façade measurement) NM8a – M/F of Nob Hill (Façade measurement) NM8b – 3/F of Nob Hill (Façade measurement) NM9 – G/F of Hoi Fai House
	L_{eq} , L_{90} & L_{10} at 5 minute intervals during (1900 to 2300) ⁽¹⁾	Once per week (include 3 consecutive 5-min measurements)		
	L_{eq} , L_{90} & L_{10} at 5 minute intervals during (2300 to 0700 of next day) ⁽¹⁾	Once per week (include 3 consecutive 5-min measurements)		
	L_{eq} , L_{90} & L_{10} at 5 minute intervals during (0700 to 1900 on holidays) ⁽¹⁾	Once per week (include 3 consecutive 5-min measurements)		

⁽¹⁾ – Conduct noise monitoring only when construction work is carried out.

⁽²⁾ – 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 30 December 2004.

⁽³⁾ - The Lai Chi Kok Hospital (NM3) was also found vacated and noise monitoring could not be conducted since January 05. EPD's approval for suspension of noise monitoring at this station was received on 15th March 2005.

**APPENDIX D
ENVIRONMENTAL QUALITY
PERFORMANCE (ACTION/LIMIT)
LEVELS**

Appendix D - 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

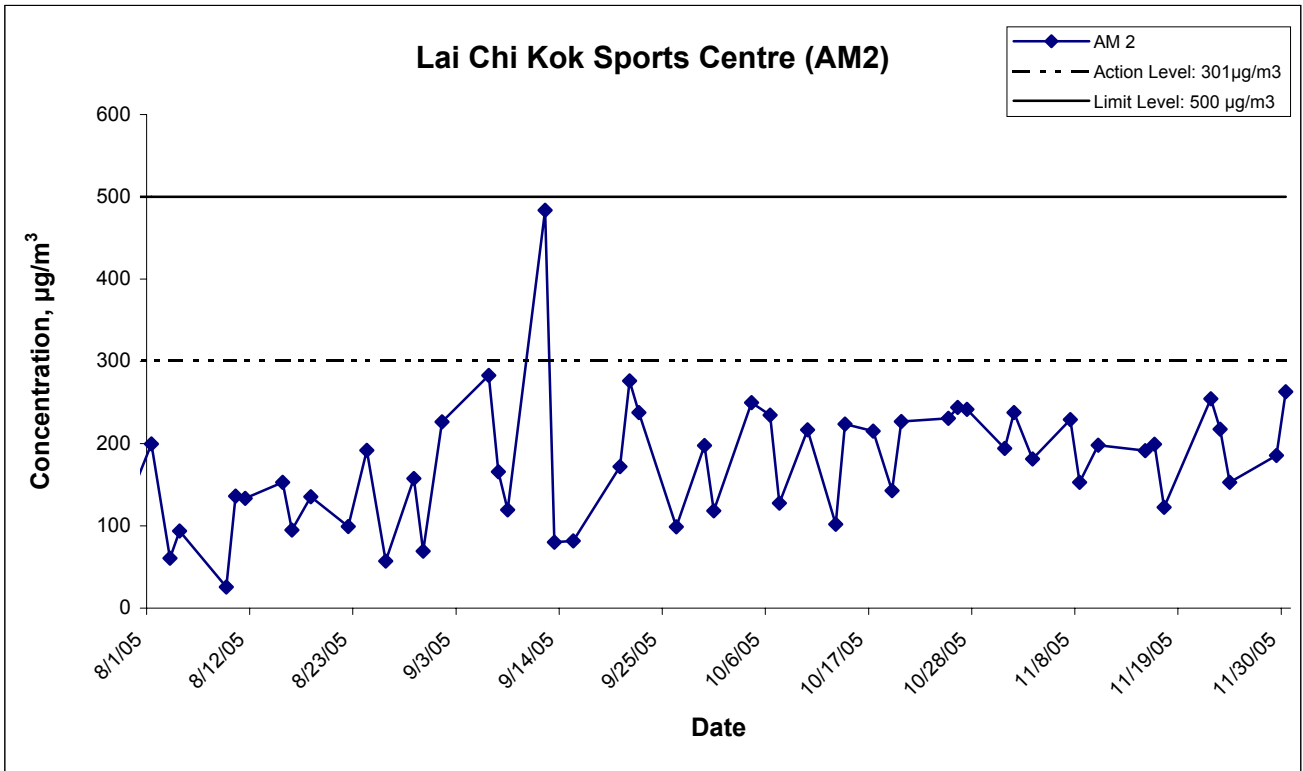
Construction Noise

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 (NM3, 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.

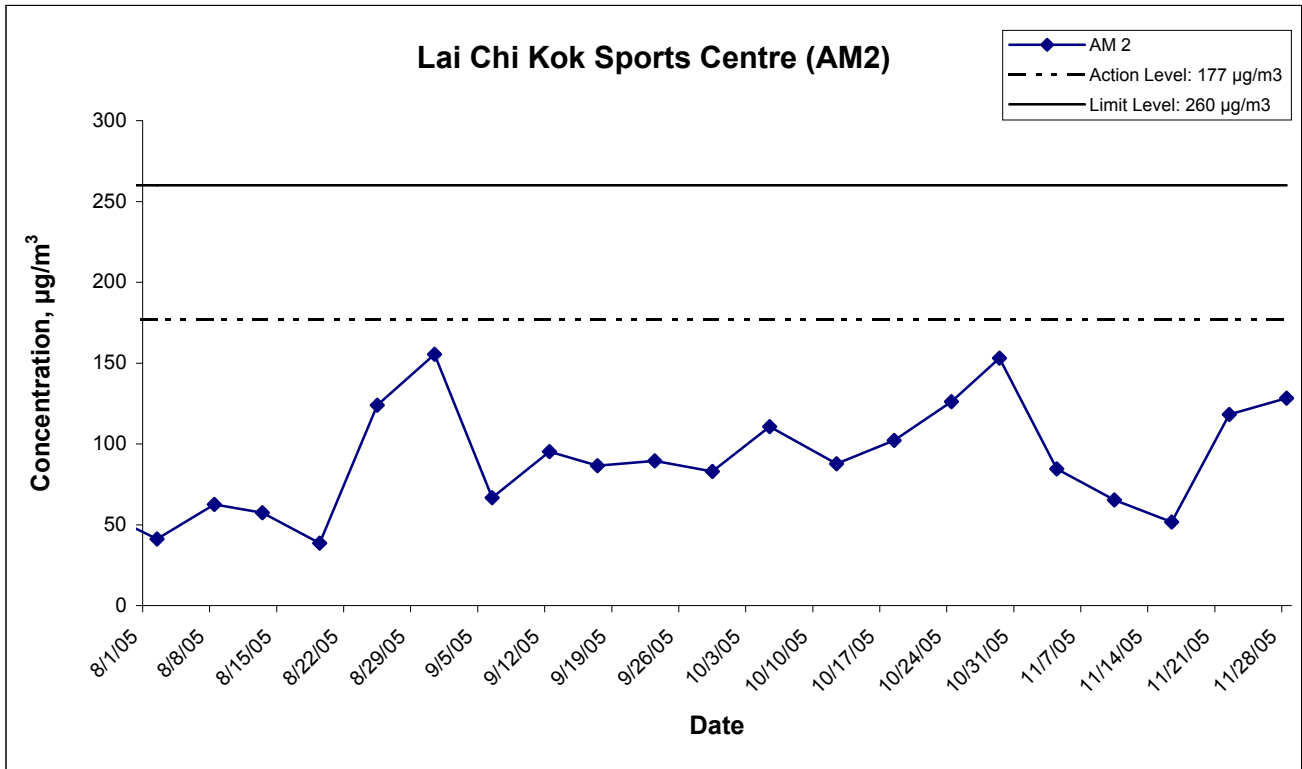
**APPENDIX E
GRAPHICAL PRESENTATION OF AIR
QUALITY MONITORING RESULTS**

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 Nov 05	Appendix E	

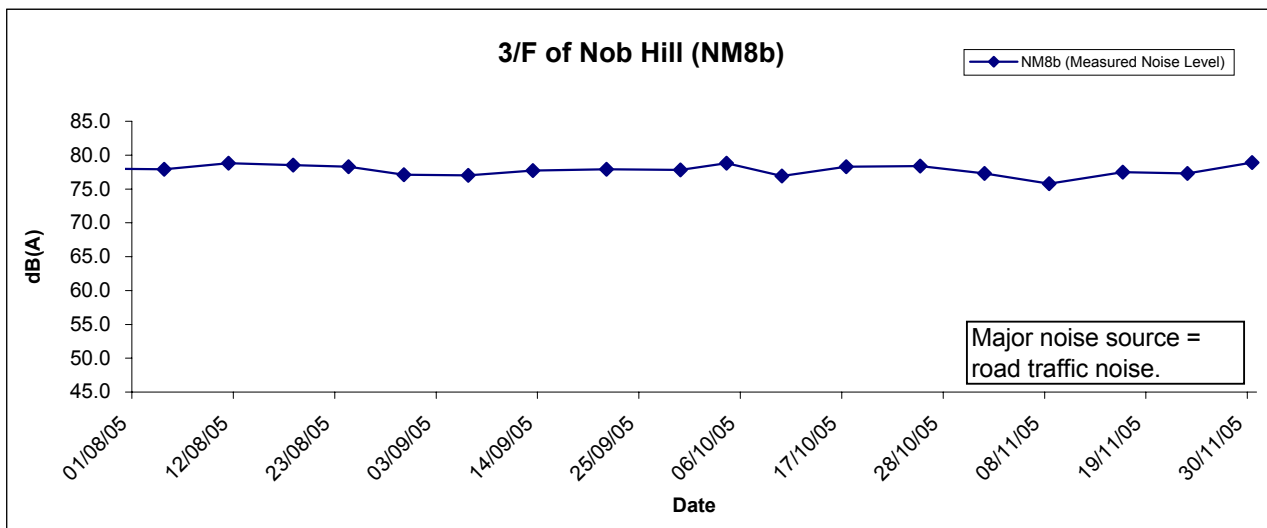
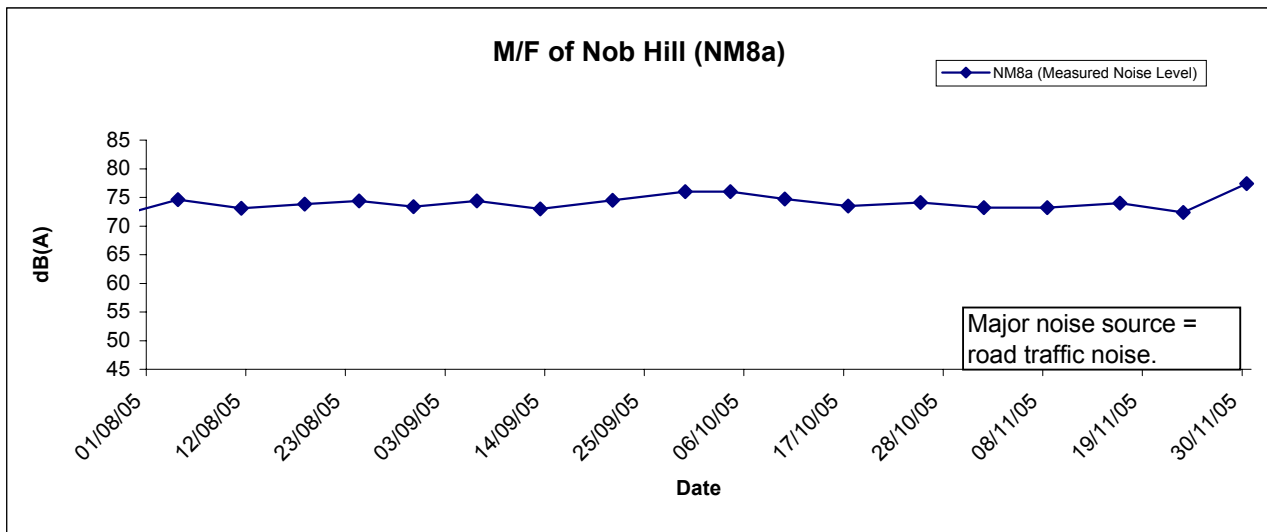
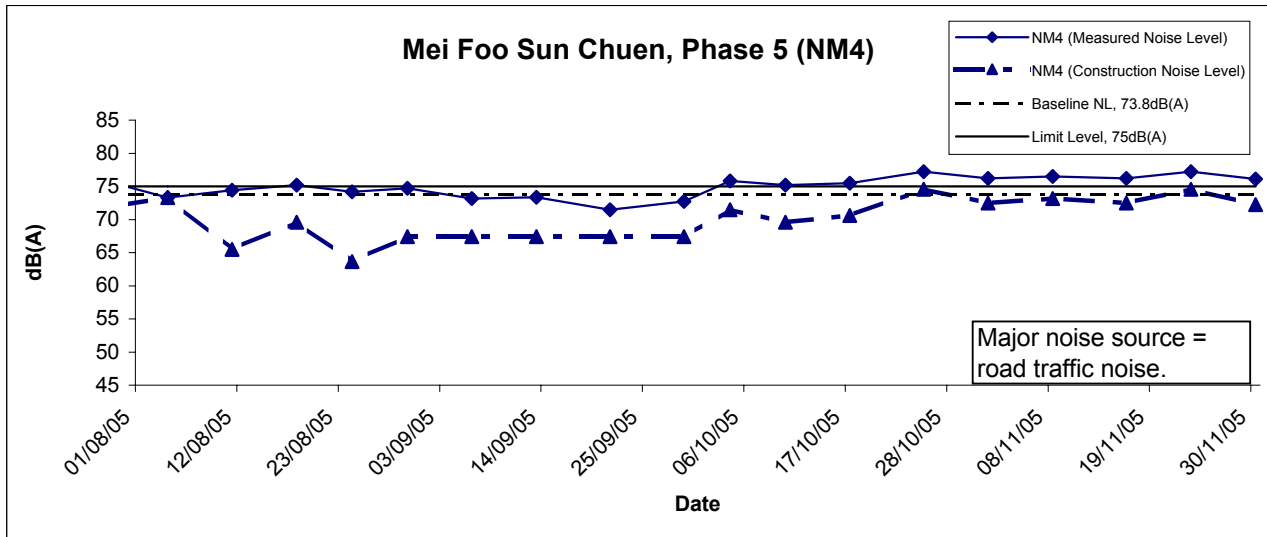
24-hr TSP Levels



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 Nov 05	Appendix E	

**APPENDIX F
GRAPHICAL PRESENTATION OF
NOISE MONITORING RESULTS**

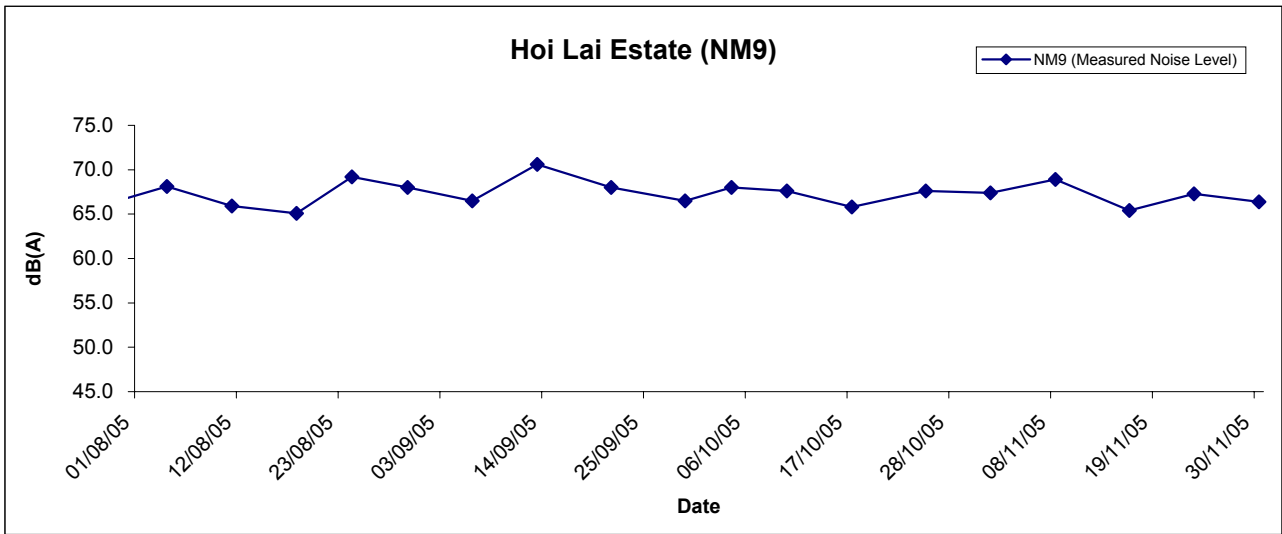
Noise Levels



* 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)

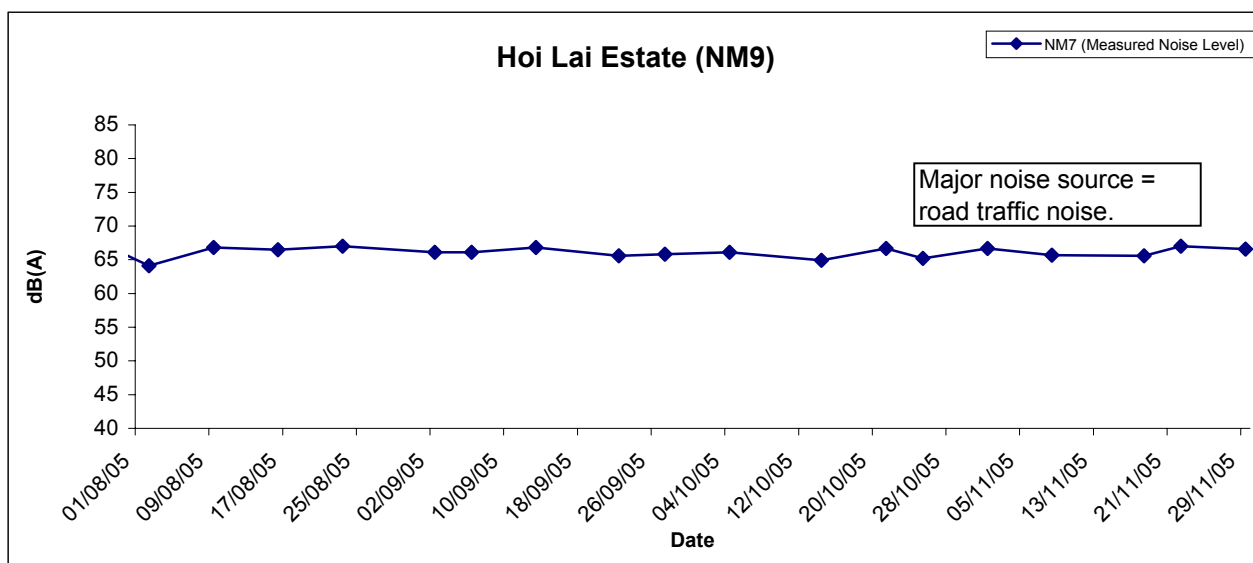
Title Route 8 (previously known as Route 9) between Cheung Sha Wan and Sha Tin Contract HY/2003/01 - Lai Chi Kok Viaduct Graphical Presentation of Construction Noise Monitoring Results	Scale	Project No.	
	Date	Appendix F	
	N.T.S	MA3024	
	Nov 05		

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 Nov 05	Appendix F	

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 Nov 05	Appendix F	

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

Appendix G - Summary of Environmental Mitigation Implementation Schedule

Types of Impacts	Mitigation Measures	Status
Construction Dust	<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. • A stockpile of dusty materials should not extend beyond the pedestrian barriers, fencing or traffic cones. • Vehicle washing facilities should be provided at every exit point. • The area where vehicle washing takes place and the section of the road between the washing facilities and the exit point should be paved with concrete, bituminous materials or hardcores. • 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. • Every main haul road should be sprayed with water or a dust suppression chemical so as to maintain the entire road surface wet. • 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. • 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. • 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. • 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>^</p> <p>^</p> <p>^</p> <p>^</p> <p>^</p> <p>^</p> <p>^</p> <p>^</p> <p>^</p> <p>^</p> <p>^</p>
Construction Noise	<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. • Machines and plant that may be in intermittent use should be shut down between work periods or should be throttled down to a minimum. • Plant known to emit noise strongly in one direction, should where possible, be orientated to direct noise away from the NSRS. • Mobile plant should be sited as far away from NSRs as possible. • 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 	<p>^</p> <p>^</p> <p>^</p> <p>^</p> <p>^</p> <p>^</p>

Types of Impacts	Mitigation Measures	Status
	<ul style="list-style-type: none"> Reduce the number of plant operating in critical areas close NSRs. Construct temporary and movable noise barriers 	<p>^</p> <p>^</p>
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. 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. 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 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. 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. Catchpits and perimeter channels shall be constructed in advance of site formation works and earthworks. 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. 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. 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. 	<p>^</p> <p>^</p> <p>^</p> <p>^</p> <p>^</p> <p>^</p> <p>^</p> <p>^</p>
	<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. 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. 	<p>N/A</p> <p>N/A</p>

Types of Impacts	Mitigation Measures	Status
	<ul style="list-style-type: none"> Spent 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
	<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. 	^
	<ul style="list-style-type: none"> 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). 	^
	<i>Sewage Effluent</i>	
Waste	<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. 	^ N/A
	<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. 	^
	<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. 	^ ^ ^ ^ ^ ^ ^ ^
<ul style="list-style-type: none"> Maintain records of the quantities of wastes generated, recycled and disposed. 	^	

Types of Impacts	Mitigation Measures	Status
	<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. 	^
	<i>Construction and Demolition (C&D) Waste</i>	
	<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. 	^ N/A ^
	<i>Chemical Waste</i>	
	<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). 	^ ^ ^
<i>General Refuse</i>		

Types of Impacts	Mitigation Measures	Status
	<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;">N/A</p>
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. Conduct a tree survey before commencement of the construction work. 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. Loss of the adjacent woodland due to temporary land take shall be returned to the original status immediately. 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. 	<p style="text-align: center;">N/A</p> <p style="text-align: center;">^</p> <p style="text-align: center;">N/A</p> <p style="text-align: center;">N/A</p> <p style="text-align: center;">^</p> <p style="text-align: center;">N/A</p>
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. 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. Measurement of vibration would also be carried out on a need basis during the piling work 	<p style="text-align: center;">N/A</p> <p style="text-align: center;">N/A</p> <p style="text-align: center;">^</p>

Remarks:

^
N/A

Compliance of mitigation measure;
Not Applicable;

X
•

Non-compliance of mitigation measure;
Non-compliance but rectified by the contractor

**APPENDIX H
SUMMARY OF ENVIRONMENTAL
LICENCES AND PERMITS**

Appendix H - Summary of Environmental Licensing and Permit Status (LCKV)

Permit No.	Valid Period		Details	Status
	From	To		
Environmental Permit (EP)				
EP-103/2001/C	22/7/05	N/A	<u>Construction and operation of</u> (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; (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; (c) The permanent slope works above the northern portal of the Eagle's Nest Tunnel; (d) The architectural works (including fitting out and furnishings) of the portal buildings of the Sha Tin Heights Tunnel.	Valid
Registration of Chemical Waste Producer				
WPN 5213-261-N2413-0 4	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-RW0401-05	27/06/05	22/12/05	<i>Location:</i> Butterfly Valley Road near LCK Interchange <i>Time Period:</i> Any day not being a general holiday between 2100-0700 hours	Valid
GW-RW0402-05	27/06/05	23/12/05	<i>Location:</i> Butterfly Valley Road near LCK Fire Station <i>Time Period:</i> Any day not being a general holiday between 2100-0700 hours	Valid
GW-RW0501-05	03/08/05	02/02/06	<i>Location:</i> Hing Wah Street West (Jetty Area) <i>Time Period:</i> Whole day of general holidays (including Sundays) and any other days between 1900-0700 hours on next day	Valid
GW-RW0519-05	13/08/05	12/02/06	<i>Location:</i> Butterfly Valley Road near LCK Reception Center <i>Time Period:</i> Whole day of general holidays (including Sundays) and any other days between 1900-0700 hours on next day	Valid
GW-RW0534-05	17/08/05	16/02/06	<i>Location:</i> Lai Po Road near Yuet Lun Street <i>Time Period:</i> Whole day of general holidays (including Sundays) and any other days between 1900-0700 hours on next day	Valid

Permit No.	Valid Period		Details	Status
	From	To		
GW-RW0535-05	17/08/05	15/02/06	<i>Location:</i> Butterfly Valley Road and Kom Tsun Street <i>Time Period:</i> Any day not being a general holiday between 2100-0700 hours	Valid
GW-RW0563-05	02/09/05	01/03/06	<i>Location:</i> Ching Cheung Road near Mei Foo Sun Chuen <i>Time Period:</i> General holidays (including Sundays) between 0700-2300 hours and any other days between 1900-2300 hours	Valid
GW-RW0585-05	15/09/05	14/03/06	<i>Location:</i> Butterfly Valley, LCK <i>Time Period:</i> General holidays (including Sundays) between 0700-2300 hours and any other days between 1900-2300 hours	Valid
GW-RW0624-05	30/09/05	29/03/06	<i>Location:</i> Lai Wan Road <i>Time Period:</i> Any day not being a general holiday between 2100-0700 hours	Valid
GW-RW0648-05	07/10/05	06/04/06	<i>Location:</i> Junction of Ching Cheung Road and Castle Peak Road <i>Time Period:</i> General holidays (including Sundays) between 0700-2300 hours and any other days between 1900-2300 hours	Valid
GW-RW0662-05	17/10/05	16/03/06	<i>Location:</i> Junction of Ching Cheung Road and Castle Peak Road <i>Time Period:</i> Any day not being a general holiday between 2100-0700 hours	Valid
GW-RW0674-05	23/10/05	19/02/06	<i>Location:</i> Butterfly Valley near LCK Reception Centre <i>Time Period:</i> Whole day of general holidays (including Sundays) and any other days between 1900-0700 hours on next day	Valid
GW-RW0699-05	7/11/05	5/5/06	<i>Location:</i> Lai Po Road near West Kowloon Highway <i>Time Period:</i> Any day not being a general holiday between 2100-0700 hours	Valid
GW-RW0716-05	9/11/05	31/3/06	<i>Location:</i> Kwai Chung Road and Butterfly Valley Road <i>Time Period:</i> Whole day of general holidays (including Sundays) and any other days between 1900-0700 hours on next day	Valid
GW-RW0738-05	15/11/05	14/05/06	<i>Location:</i> Lai Po Road near Hoi Lai Estate <i>Time Period:</i> General holidays (including Sundays) between 0700-2300 hours and any other days between 1900-2300 hours	Valid
GW-RW0745-05	18/11/05	17/05/06	<i>Location:</i> Ching Cheung Road near LCK Swimming Pool <i>Time Period:</i> Whole day of general holidays (including Sundays) and any other days between 1900-0700 hours on next day	Valid

**APPENDIX I
COMPLAINT LOGS**

Appendix I - 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

APPENDIX J
SUMMARY OF EXCEEDANCES

Summary of Exceedances Recorded in the Reporting Quarter

a) Exceedance Report for 1-hr TSP

Exceedance(s) on 12 September 2005

Station No.	Parameter	Particulate Concentration ($\mu\text{g}/\text{m}^3$)	Action Level ($\mu\text{g}/\text{m}^3$)	Limit Level ($\mu\text{g}/\text{m}^3$)	Level exceeded
AM2	1-hr TSP	483.8	301	500	Action
(a) Statement of exceedance(s) 1-hr TSP level at Station AM2 (Lai Chi Kok Park Sports Centre) exceeded the Action level.					
(b) Cause of exceedance(s) It was considered that the exceedance was not related to the R8-LCKV construction works based on the following observations: <ul style="list-style-type: none"> • Based on the EPD monitoring data, the hourly Air Pollution Index (API) from most air quality monitoring stations was ranked as high to very high. The APIs recorded at the EPD's Sham Shui Po and Kwai Chung Stations were 108 and 109 (both ranked as very high), respectively during the sampling period (0900 to 1000 hrs). • High TSP levels were also obtained in our other EM&A Projects, covering the areas of Sha Tin, Yuen Long and Lai Chi Kok, etc. Exceedances of air quality were also recorded at the monitoring stations in the above areas. • Dust mitigation measures had been implemented by the Contractor, such as covering the exposed slope surfaces and watering of haul roads. No observable dust source was identified in the R8-LCKV construction site near the monitoring station. • Therefore, the recorded exceedance of air quality may be due to the high ambient TSP level as a consequence of regional air pollution over Hong Kong. 					
(c) Action required under the action plan N/A					
(d) Action taken under the action plan N/A					
(e) ET's conclusions and recommendations for mitigation The exceedance was not due to the Project works and no further action is required.					

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

c) Exceedance Report for Construction Noise

- One action level exceedances for noise monitoring was triggered by a public noise complaint received by the ET Leader on 7 November 2005. The details of the complaint can refer to **Appendix I**.
- No Limit Level exceedance was recorded in the reporting period.