

Leighton Contractors (Asia) Ltd

## **KCRC Light Rail Extension - Civil, Permanent Way, Traction Power and Overhead Line**

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**Monthly EM&A Report  
September 2003**

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## **EXECUTIVE SUMMARY**

Leighton, the main Contractor for KCRC Light Rail Extension Contract No. CC230, set up an Environmental Team to undertake the Environmental Monitoring and Audit (EM&A) works in accordance with the EM&A Manual. Hyder has been employed as the Contractor's Environmental Team (CET). This is the monthly EM&A report which summarises the impact monitoring and auditing data for September 2003.

### Construction Programme

In Tuen Mun Area (including Lam Tei), major site construction activities undertaken during non-restricted hours in September 2003 included water mains & storm water drains with associated road works, utility diversions, removal of LRT interim track diversions and associated overhead line systems, pre-drilling works, overhead line installation work, piling work and pile cap construction work. Construction activities during restricted hours included alterations to LRT track and traction power overhead lines and connection of LRT rail track work to existing LRT system.

In Tin Shui Wai Area, major site construction activities undertaken during non-restricted hours in September 2003 included utility diversions, overhead line installation and alteration work, construction work at stops, platform construction and additional drainage works, ballast track construction. Construction activities during restricted hours included rectification work to LRT track, overhead line and associated equipment at stop.

### EPD Permits/Licences

Two Construction Noise Permits (CNP) were issued by EPD during the reporting month.

### Air Quality Impact Monitoring

No exceedance of Action / Limit Levels was recorded during the reporting month. The monitoring results indicate that the construction activities carried out in September 2003 were in full compliance with the air quality criteria for the project.

### Noise Impact Monitoring

Noise monitoring of  $L_{eq(30\text{ min})}$  was carried out in accordance with the Contract specific EM&A Manual. No exceedance of Limit Levels was recorded during the reporting month. The monitoring results indicate that the construction activities carried out in September 2003 were in full compliance with the noise criteria for the project.

### Water Quality Impact Monitoring

No water sampling for SS analysis was carried out during the reporting month.

### Waste Management

388 m<sup>3</sup> of inert C&D material, 24 m<sup>3</sup> of waste from sewage holding tanks, 120 m<sup>3</sup> of general office waste and 7 x 100kg drums of dry cell batteries were disposed of to Tuen Mun Public Filling Barging Area 38, Pillar Point Sewage Treatment Works, WENT Landfill and Tsing Yi Chemical Waste Treatment Centre respectively in September 2003.

### Landscape and Visual Impact

Landscape works will be carried out at a later stage of the contract. The progress of tree

protection and the transplanting programme will be included in the monthly EM&A report when this information is available.

#### Cultural Heritage

The archaeological watching brief for Tuen Mun area (not including Lam Tei) and Lam Tei area was completed in November 2002 and August 2003 respectively. There was no trace of archaeological material within any of the piles site in both areas.

#### Environmental Auditing

The CET site inspections were carried out on 4, 11, 18 and 25 of September 2003. No significant deficiency was observed throughout the reporting month.

Site audit was undertaken by the IEC on 26 September 2003. The contractor was reminded to provide more frequent water spraying at Junction L since many works are still going on.

#### Complaints

No complaint was received during the reporting month.

#### Notification of Summons, Successful Prosecutions and Corrective Actions

No Notification of Summons was received during the reporting month.

#### Future Key Issues

The major civil construction work for Tin Shui Wai has been substantially completed and therefore the environmental impacts arising from are expected to be minimal. A request had already been made to EPD to cease most of the monitoring in Tin Shui Wai, with the exception of air quality and noise monitoring at Assembly of God Paul Church Kindergarten (MA155/MN155), as potential dust and noise impacts would be rising from remaining road and utilities diversion works. The forecast of construction work for the upcoming three months at Tuen Mun and Lam Tei will be similar in nature to those carried out during the month of September 2003. The results for air quality, water quality and noise impact monitoring for the upcoming three months are expected to be similar to those measured in September 2003.

## **1. BACKGROUND INFORMATION**

### **1.1 PROJECT INFORMATION**

The existing Light Rail (LR) system was introduced to serve residents of Tuen Mun and Yuen Long in September 1988 with an initial network of 24km, 6 routes and 41 stops. To cater for the continual development and population growth of the Northwest New Territories, the LR had further expanded in Tuen Mun and Tin Shui Wai in stages since early 1990s. In March 1995, Phase 3 of Tin Shui Wai Extension, the last portion of the existing LR extension works, was put into passenger service. The whole LR network now comprises 32km of double track, 8 routes and 57 stops. The average daily patronage in 1998 was 350,000 including 37,000 on LR feeder bus.

For the study in Tin Shui Wai Reserve Zone and Grade Separation of the LRT with Pui To Road and Tsing Lun Road in Tuen Mun, the light railway in Tin Shui Wai Reserve Zone is approximately 2.6km long and has 6 stops. The grade separation works in Tuen Mun involves elevating the existing trackworks near Junctions J6, Mj7, Mj8 and LT1. The Project sites at Tin Shui Wai, Tuen Mun Pui To Road, Lam Tei and Tin Shui Wai Phase 4 are shown in Figures 1.1, 1.2, 1.3 and 1.4 respectively.

The future horizontal alignment would generally follow the existing alignment. For the viaduct at LT1, a safety enclosure will be provided for the entire viaduct and paved track would be employed due to the constraints imposed by the overhead electricity power lines. Temporary track diversion will be located directly to the west of the existing track. The temporary track will be on ballast and at grade. The works at LT1 are an option under Contract CC230.

For the viaduct section in Pui To Road Grade Separation, a composite structure consisting of a concrete deck supported by steel portals will be adopted. All the steel elements of the portals will be encased in concrete. Except for the track directly underneath the deck of the future West Rail Tuen Mun Station, ballast track will be employed.

Temporary track diversion in Pui To Road will be close to the existing track. All steel elements of the temporary structure will also be encased in concrete.

The proposed light rail extension starts from the West Rail Tin Shui Wai (TIS) Station, runs across Tin Fuk Road at Junction C and extends along Tin Shing Road to Stop 500 at Tin Wing Road. The proposed alignment is approximately 1.5km and has 5 stops. Rectifier station R14 is located about 70m to the east of Junction C. The project site is shown in Figure 1.4.

The track in TIS Phase 4 is on ballast and at-grade for most of the sections, except on the concrete viaduct across Junction C (i.e. the junction between Tin Fuk Road and Tin Shing Road). Direct fixation will be used in the concrete viaduct.

### **1.2 CONSTRUCTION PROGRAMME**

The construction work is commenced in September 2001. The construction period would last for approximately 3 years and would overlap with the construction work for the grade separation in Pui To Road and Tsing Lun Road.

The works programme for the project is to be finalised by the Contractor. The CET Leader shall make reference to the actual works progress and programme during the construction stage to schedule the EM&A works, and the Contractor shall provide the respective information to the CET Leader for formulating the EM&A schedule.

### **1.3 PROJECT ORGANISATION AND MANAGEMENT**

An Environmental Team is set up for the Project construction phase. The organisation and lines of communication with respect to environmental works are shown in Figure 1.5.

In general, CET is responsible for regular on-site monitoring and audits/inspection on environmental issues and for reporting to the Contractor any potential environmental deficiencies. The Independent Environmental Checker (IEC) is responsible for carrying out the formal audit and verifying the overall environmental performance. Finally, the Environmental Manager of KCRC will manage the IEC who would review the reports prior to the submission to EPD.

## **2. SUMMARY OF EM&A REQUIREMENT**

### **2.1 AIR QUALITY**

#### **2.1.1 Air Quality Parameters**

Monitoring and audit of the Total Suspended Particulates (TSP) levels shall be carried out by the CET to ensure that any deteriorating air quality could be readily detected and timely action taken to rectify the situation.

1-hour and 24-hour TSP levels will be measured to indicate the impacts of construction dust on air quality. The TSP levels shall be measured by following the standard high volume sampling method as set out in the Title 40 of the Code of Federal Regulations, Chapter 1 (Part 50), Appendix B. Upon approval by the ER, 1-hour TSP levels can be measured by direct reading methods which are capable of producing comparable results as that by the high volume sampling method, to indicate short event impacts.

All relevant data including temperature, pressure, weather conditions, elapsed-time meter reading for the start and stop of the sampler, identification and weight of the filter paper, and other special phenomena and work progress of the concerned site etc. shall be recorded down in details.

#### **2.1.2 Monitoring Equipment/Calibration**

High Volume Air Sampler (HVAS) - Model GMW GS2310-105 is used for 24-hour TSP monitoring. It complies with the USEPA specifications in Appendix B Part 5 - Reference Method for the Determination of Suspended Particulate matter in the Atmosphere (High-Volume Method) of the Code of Federal Regulation dated July 1, 1991.

Calibration Kit Model - G2523 are used for calibration of the HVAS. Recalibration will be carried out in accordance with the requirements stated in the manufacturers' operating manual. The calibration worksheets are presented in Appendix I.



### 2.1.3 Monitoring Locations

Thirteen monitoring locations have been identified for air quality monitoring in the Particular Specification (PS) as part of the contractual requirement. Table 2.1 presents a list of the monitoring locations in the PS and also identified name of these locations. The monitoring locations at Tin Shui Wai, Tuen Mun and Lam Tei are shown in Figures 2.1 to 2.7.

Figure No. in EIA Report	ASR No.	Description (in accordance with the PS)	Identified Name	Monitoring Equipment Placement
GSA021/04/D03 /001	MA120	Tin Shui Wai Area 31, Phase 1 Primary School	The HKFYG Lee Shau Kee Primary School	Roof (7/F)
GSA021/04/D03 /003	MA123A	Tin Shui Wai Area 102, Phase 1, Block 4	Ancillary Facilities Block, Tin Chak Estate (replacement).	Roof (7/F)
GSA021/04/D03 /003	MA129A	Tin Shui Wai Area 102, Phase 5, Block 17	Ancillary Facilities Block, Tin Yuet Estate (replacement).	Roof (7/F)
GSA021/04/D03 /002	MA155	Tin Shui Area 30, Kindergarten	Tin Wah Estate- Assembly of God Paul Church Kindergarten	Roof (7/F)
GSA021/01/D03 /001	MA42A	Fire Station and Ambulance Depot	Pui To Road Mj7 – 1-storey Store Room (replacement)	Top of Store Room
GSA021/01/D03 /002	MA50	Tuen Mun Town Plaza	Tuen Mun Town Plaza	Podium (3/F)
GSA021/01/D03 /001	MA45	Tuen Mun Station PDS221 Topside development (future development)	Holy Redeemer Catholic Church (replacement)	Roof (7/F)
GSA021/02/D03 /001	MA65	2-storey residential house next to Ng Lau Road	Sun Hing Tsuen, Ng Lau Road.	G/F
GSA021/03/D03 /001	MA2A	Yiu Foo House, Tin Yiu Estate	Queen Elizabeth Primary School (replacement)	Roof (7/F)
GSA021/03/D03 /001	MA6	TWGH's Kwok Yat Wai College	TWGH's Kwok Yat Wai College	Top of Assembly Hall
GSA021/03/D03 /002	MA10A	Yau Hong House	Tin Yau Court Car Park (3-storey) (replacement)	Roof
GSA021/03/D03 /002	MA15A	The Church of Christ in China Hong Kong Council Fong Yan Wah School	Tin Yiu Estate II , Yiu Fung House (replacement)	G/F
GSA021/03/D03 /004	MA33	Queen Elizabeth School Old Student's Association Secondary School <i>(Monitoring suspended)</i>	Queen Elizabeth School Old Student's Association Secondary School	Top of Assembly Hall

**Table 2.1 List of Air Monitoring Locations**

Due to works being carried out on the assembly hall building of the QE Secondary School (monitoring location no. 33) since August 2003, the air quality sampling equipment had been removed from the monitoring location in early August.

**2.1.4 Action and Limit Levels**

The baseline monitoring results form the basis for determining the air quality criteria for the impact monitoring. The CET shall compare the impact monitoring results with air quality criteria set up for 24-hr TSP and 1-hr TSP. Table 2.2 and Table 2.3 show the air quality criteria for 24-hr and 1-hr respectively, namely Action and Limit levels to be used. Should non-compliance of the air quality criteria occurs, the CET, the Engineer and the Contractor shall undertake the relevant action in accordance with the Event Contingency Plan (ECP) in Tables 2.4a and 2.4b.

In addition, the ECP for complaints handling is shown in Table 2.5.

Level	Total Suspended Particulates ( $\mu\text{g m}^{-3}$ )
Baseline	Derived from physical measurements prior to construction commencing
Action	For baseline $< 108 \mu\text{g m}^{-3}$ , average of 130% of baseline and the Limit level
	For $108 < \text{baseline} < 154 \mu\text{g m}^{-3}$ , $200 \mu\text{g m}^{-3}$
	For Baseline $> 154 \mu\text{g m}^{-3}$ , 130% of baseline level
Limit	AQO for TSP : $260 \mu\text{g m}^{-3}$ averaged over 24-hours

**Table 2.2 Derivation of Action and Limit Levels for 24-Hour Air Quality Monitoring**

Level	Total Suspended Particulates ( $\mu\text{g m}^{-3}$ )
Baseline	Derived from physical Measurements prior to construction commencing
Action	For baseline $< 154 \mu\text{g m}^{-3}$ , average of 130% of baseline and the Limit level
	For $154 < \text{baseline} < 269 \mu\text{g m}^{-3}$ , $350 \mu\text{g m}^{-3}$
	For baseline $> 269 \mu\text{g m}^{-3}$ , 130% of baseline level
Limit	$500 \mu\text{g m}^{-3}$

**Table 2.3 Derivation of Action and Limit Levels for 1-Hour Air Quality Monitoring**

Step	Day	Action	Contractor/ CET	ER	IEC
1.	1	Identify exceedance from monitoring data and initiate corrective action. Submit data to ER with observed source(s) of pollution.	■		
2.	1	Input monitoring data and observed pollution source(s) into WREMS on same day when data is submitted from CET. WREMS will automatically generate a Notice of Exceedance (NOE) and send it to the IEC via email.		■	
3.	1	On same day of receipt of the NOE, check monitoring data trend and Contractor's work method. Decide if a formal NOE will be issued. If so, forward the NOE via email to KCRC and ER. If not, close the Exceedance record in the WREMS.			■ □
4.	1	Confirm receipt of NOE to IEC.		■	
5.	1	Issue NOE to Contractors and remind their contractual obligations.		■	
6.	2	Propose remedial measures to ER within 1 working day of receipt of NOE.	■	□	
7.	2	Review and agree the proposed remedial measures and make recommendations where necessary.		■ □	■ □
8.	2	Implement the proposed remedial measures once they have been agreed.	■		
9.	-	Arrange site visit to ensure implementation of the agreed remedial measures.		■	■
10.	-	Increase monitoring frequency to assess effectiveness of remedial measures. (Be specific about the frequency for the different parameters. e.g. once every 3 days for 24-hr dust, daily for 1-hr dust) Submit monitoring data to ER for entering into the WREMS once they are available.	■		
11.	-	If exceedance continues, arrange meeting with Contractor and ER to review the implemented remedial measures and identify further remedial measures. Go to step 8.  If exceedance stops for 3 consecutive monitoring, resume normal monitoring frequency.	■	■ □	■
12.	-	Inform IEC the closure of exceedance.		■	
13.	-	Close the exceedance record in the WREMS.			■

**Table 2.4a Event Contingency Plan for Action Level Exceedance**

Step	Day	Action	Contractor/ CET	ER	IEC
1.	1	Identify exceedance from monitoring data and initiate corrective action. Submit data to ER with observed source(s) of pollution.	■		
2.	1	Input monitoring data and observed pollution source(s) into WREMS on same day when data is submitted from CET. WREMS will automatically generate a Notice of Exceedance (NOE) and send it to the IEC via email.		■	
3.	1	On same day of receipt of the NOE, check monitoring data trend and Contractor's work method. Decide if a formal NOE will be issued. If so, forward the NOE via email to KCRC and ER. If not, close the Exceedance record in the WREMS.			■ □
4.	1	Confirm receipt of NOE to IEC on receipt of NOE.		■	
5.	1	Issue NOE to Contractors and remind their contractual obligations.		■	
6.	1	Take immediate action to avoid further exceedance.	■		
7.	2	Propose remedial measures to ER within 1 working days of receipt of NOE.	■	□	
8.	2	Review and agree with the proposed remedial measures and make recommendations where necessary.		■ □	■ □
9.	2	Implement the proposed remedial measures once they have been agreed.	■		
10.	-	Arrange site visit to ensure implementation of agreed remedial measures.		■	■
11.	-	Increase monitoring frequency to assess effectiveness of remedial measures. (Be specific about the frequency for the different parameters. e.g. daily for all parameters) Submit monitoring data to ER for entering into the WREMS once they are available.	■		
12.	-	If exceedance continues, arrange meeting with Contractor and ER to review the implemented remedial measures and identify further remedial measures. Go to step 9.  If exceedance stops for 3 consecutive monitoring, resume normal monitoring frequency.	■	■ □	■
13.	-	Inform IEC the closure of exceedance.		■	
14.	-	Close the exceedance record in the WREMS.			■

**Table 2.4b Event Contingency Plan for Limit Level Exceedance**

Step	Day	Action	Contractor/ CET	KCR C	ER	IEC
1.	1	Party receiving complaint shall create a new complaint record in the WREMS. If the Contractor receives a complaint, the Contractor shall pass the information to the ER for entering into the WREMS. WREMS then automatically sends a Notification of Complaint to KCRC, ER and IEC via email.	■	■	■	
2.	1	ER forward the complaint to Contractor/CET if that is not already received by the Contractor.		■		
3.	2	Within 1 working day after the receipt of the Notification of Complaint, provide ER relevant works site information, e.g. types and locations of construction works.	■		□	
4.	2	Investigate the complaint to determine its validity, and to assess whether the source of the problem is due to the works activities. Report the validity of the complaint to KCRC and ER.				■ □
5.	2	If complaint is valid and due to works, ER shall notify the Contractor. If complaint is invalid or not due to works, Go to Step 11.			■	
6.	2	Propose mitigation measures to ER within 1 working day of the receipt of the Notification.	■		□	
7.	2	Review and agree with the proposed mitigation measures and make recommendations where necessary.			■ □	■ □
8.	2	Implement the mitigation measures once they have been agreed.	■			
9.	4	Audit the implementation of the proposed mitigation measures on site within 2 working days after the measures have been agreed.			■ □	■ □
10.	-	Undertake additional monitoring to verify the situation where necessary.	■			
11.	4	Report the investigation results and subsequent actions taken to ER within 2 working days after the implementation of mitigation measures.	■		□	
12.	5	Respond to the complainant within 1 working day after receiving the investigation report.		■		
13.	25	If no further comments or complaints are received from the complainant within 20 working days after responding to the complainant, close the complaint record in the WREMS.  If the complainant has further comments or complaints on the same issue, notify other parties on the same day and go to step 2.		■	■ □	

■ action party

□ enter comments/proposals into the appropriate exceedance record in WREMS where applicable.

CET – Contractor’s Environmental Team

IEC – Independent Environmental Checker

KCRC – Designated personnel at KCRC

ER –Engineer’s Representative

WREMS – West Rail Environmental Management System

**Table 2.5 Event Contingency Plan for Complaints Handling**

## 2.2 NOISE

### 2.2.1 Noise Parameters

The construction noise level should be measured in terms of equivalent A-weighted sound pressure level ( $L_{eq}$ ) in decibels (dB). Monitoring of  $L_{eq(30 \text{ min})}$  ( $6 \times L_{eq(5 \text{ min})}$ ) is carried at the noise monitoring locations once every week during normal construction working hours (07:00-19:00 hours Monday to Saturday). Restricted hour noise monitoring (19:00-07:00 hours or any time on general holidays including Sunday) in terms of  $L_{eq(15 \text{ min})}$  should be undertaken if construction activities are being undertaken during restricted hours under the conditions of valid Construction Noise Permits (CNPs).

The two statistical sound levels  $L_{10}$  and  $L_{90}$ ; the level exceeded for 10 and 90 percent of the time respectively, is also recorded during monitoring. Major noise sources observed, both on-site and off-site, will be recorded on the data record sheet. All measured data are provided in the electronic format and results are recorded to the nearest 0.1 dB.

### 2.2.2 Monitoring Methodology

Sound level meters, which comply with the International Electrotechnical Commission (IEC) Publication 651:1979 (Type 1) and 804:1985 (Type 1) specification as referred to the Technical Memorandum (TM) issued under the Noise Control Ordinance (NCO), are used. Continuous baseline noise for the A-weighted levels  $L_{eq}$ ,  $L_{10}$  and  $L_{90}$  are measured over a two week period, sampling period of 5 minutes is used throughout the monitoring. Average, by sound power, of six consecutive 5 minutes readings is used to provide  $L_{eq(30 \text{ min})}$  for non-restricted hours (07:00-19:00 hours Monday to Saturday) and three consecutive  $L_{eq(5 \text{ min})}$  reading is used to provide  $L_{eq(15 \text{ min})}$  for the restricted period. A facade correction of 3dB(A) will be applied to measurements which are carried out under free field conditions.

During the impact monitoring, parameters such as dates, weather conditions, equipment used, measurement results and major noise sources are recorded on the field data record sheet. In relation to the monitored noise levels, other noise sources such as road traffic may make a significant contribution to the overall noise environment. Therefore, the results of noise monitoring activities will take into account such as influencing factors, which may not have been presented during the baseline monitoring period. All measurements are recorded to the nearest 0.1dB(A).

### 2.2.3 Monitoring Equipment/Calibration

Bruel & Kjaer (B&K) Precision Integrating Sound Level Meters of Type 2238 in compliance with the International Electrotechnical Commission Publication 651: 1979 (Type 1) and 804: 1985 (Type 1) Specifications, stated in the TM issued under the NCO, are used for impact monitoring.

Prior to and following each noise measurement, the accuracy of the sound level meter is checked using an acoustic calibrator (B&K Type 4231) generating a known sound pressure level at a known frequency. Measurements are considered as valid only if the calibration level from before and after the noise measurement agree to within 1 dB.

## 2.2.4 Monitoring Locations

Eleven monitoring locations have been identified in the Particular Specification (PS) for noise monitoring as part of the Contractor's contractual requirement. Table 3.1 presents a list of the monitoring locations in the PS and also identified name of these locations. The monitoring locations at Tin Shui Wai, Tuen Mun, Lam Tei and Tin Shui Wai Phase 4 are shown in Figures 2.1 to 2.7.

Figure No. in EIA Report	NSR No.	Description (in accordance with the PS)	Identified Name	Monitoring Equipment Placement
GSA021/04/D02 /001	MN120	Tin Shui Wai Area 31, Phase 1 Primary School	The HKFYG Lee Shau Kee Primary School	Roof (7/F)
GSA021/04/D02 /003	MN123A	Tin Shui Wai Area 102, Phase 1, Block 4	Ancillary Facilities Block, Tin Chak Estate (replacement)	Roof (7/F)
GSA021/04/D02 /003	MN129A	Tin Shui Wai Area 102, Phase 5, Block 17	Ancillary Facilities Block, Tin Yuet Estate (replacement)	Roof (7/F)
GSA021/04/D02 /002	MN155	Tin Shui Area 30, Kindergarten	Tin Wah Estate- Assembly of God Paul Church Kindergarten	Roof (7/F)
GSA021/01/D02 /002	MN50	Tuen Mun Town Plaza	Tuen Mun Town Plaza	Podium (3/F)
GSA021/01/D02 /001	MN48	Tuen Mun Station PDS221 Topside development (future development)	Kam Wah Garden (replacement)	Podium (3/F)
GSA021/02/D02 /001	MN65	2-storey residential house next to Ng Lau Road	Sun Hing Tsuen, Ng Lau Road	G/F
GSA021/03/D02 /001	MN6	TWGH's Kwok Yat Wai College	TWGH's Kwok Yat Wai College	Top of Assembly Hall
GSA021/03/D02 /002	MN10A	Yau Hong House	Tin Yau Court Car Park (3-storey) (replacement)	Roof
GSA021/03/D02 /002	MN15A	The Church of Christ in China Hong Kong Council Fong Yan Wah School	Tin Yiu Estate II – Yiu Fung House (replacement)	G/F
GSA021/03/D02 /004	MN33	Queen Elizabeth School Old Student's Association Secondary School	Queen Elizabeth School Old Student's Association Secondary School	Relocated to G/F from original position (top of Assembly Hall) since August 2003 due to works being carried out on the assembly hall building.

**Table 2.6 List of Noise Monitoring Locations**

## 2.2.5 Action and Limit Levels

The Action and Limit Levels for construction noise is shown in Table 2.7. The construction site is located within the designated area EPD/NP/NT-04 and the Area Sensitivity Rating (ASR) is classified as "C", for urban area which are indirectly affected by the Influencing Factor (IF).

In cases where exceedances of Action level occur, since Action Level is based on receiving documented complaints, ECP for Complaints Handling (Table 2.5) should be implemented. If exceedance of the Limit Level occurs, ECP for Limit Level Exceedance (Table 2.4a) should be implemented.

Time Period	Action	Limit
0700-1900 on normal weekdays;	When one or more documented complaints are received	75dB(A)*
restricted hours (1900-0700 on any day including general holiday and Sunday)	When one or more documented complaints are received	refer to relevant valid Construction Noise Permit (CNP) listed in Section 3.2

Notes: The ASR for the site is classified as "C", which is for urban area indirectly affected.

\*Between 0700-1900 on normal weekdays, the construction noise limit for schools with noise insulation is 80dB(A) during normal term time and 75dB(A) during examination period.

**Table 2.7 Action and Limit Levels for Construction Noise, dB(A)**

**2.3 WATER QUALITY**

**2.3.1 Water Quality Parameters**

Monitoring of the suspended solids (SS) was carried out by the CET at designated discharge points once every two months in accordance with the relevant Contractor’s effluent discharge licences issued by EPD.

**2.3.2 Monitoring Methodology**

Water samples for SS measurements are collected in high density polythene bottles, packed in ice (cooled to 4°C without being frozen), and delivered to a HOKLAS accredited laboratory as soon as possible after collection.

Analysis of SS is carried out in a HOKLAS or other international accredited laboratory. Water samples of about 500ml were collected from the monitoring locations. The SS determination should be conducted within 24 hours after collection of the water samples. The SS determination has followed APHA 19ed 254D or equivalent methods subject to approval of EPD.

**2.3.3 Monitoring Locations**

The water quality monitoring locations should be set at all discharge points. Due to the nature of work programmes, the discharge points may change from time to time. The actual number of the monitoring stations will depend on the number of the discharge point at a time.

**3. SUMMARY OF CONSTRUCTION ACTIVITIES**

**3.1 CONSTRUCTION ACTIVITIES**

Major site construction activities undertaken during non-restricted hours in September 2003 included the following:



#### Tuen Mun Area (including Lam Tei)

- Water mains & storm water drains with associated road works are progressing at Mj7 north & west work areas;
- Utility diversions in progress, i.e. PCCW cables;
- Removal of LRT interim track diversions and associated overhead line systems is progressing;
- Pre-drilling works for the new Heung Sze Wui Road pedestrian footbridge has started;
- Pre-drilling works for the Tuen Mun West Rail Station propping work at the former San Fat Stop area has started;
- Overhead line installation work is complete at all areas in Tuen Mun; and
- Piling work and pile cap construction work at LT1 is progressing.

#### Tin Shui Wai Area

- Utility diversions are in progress, i.e. Storm / surface water drains;
- Overhead line installation and alteration work is complete;
- Construction work at all Stops is complete;
- Platform construction and additional drainage works are complete at the new LRT Terminus (Stop 550); and
- Ballast track construction is complete in Phase 4 and the Reserve Zone.

Major site construction activities undertaken during restricted hour in September 2003 included the following:

#### Tuen Mun Area (including Lam Tei)

- Alterations to LRT track and traction power overhead lines at J6 South, J6 East & Mj7 North work areas; and
- Connection of LRT rail track work to existing LRT system at J6 South, J6 East & Mj7 North work areas.

#### Tin Shui Wai Area

- Rectification work to LRT track, overhead line and associated equipment at Stop 500 & junctions B, I and J.

### **3.2 EPD PERMITS/LICENCES**

Two Construction Noise Permits (CNP) were issued by EPD during the reporting month. Appendix H summarize the Environmental Licences and Construction Noise Permits (CNPs) for the Project.

### **3.3 ENVIRONMENTAL MITIGATION IMPLEMENTATION SCHEDULE**

The schedule for implementation of the construction phase mitigation measures has been extracted from the Contractor's Environmental Management Plan and is presented in Appendix D.

## 4. MONITORING RESULTS

### 4.1 AIR QUALITY

Results of 24-hours TSP level are shown in Table 4.1. Detailed results, including weather conditions and the graphical presentations are included in Appendix A.

Location	Action level ( $\mu\text{g}/\text{m}^3$ )	Limit level ( $\mu\text{g}/\text{m}^3$ )	Date	TSP (24hr) ( $\mu\text{g}/\text{m}^3$ )
Store Room-[Fire Station] (MA42A)	182	260	03-Sep-03	76.22
			10-Sep-03	46.54
			17-Sep-03	64.22
			24-Sep-03	98.66
Tuen Mun Town Plaza (MA50)	160	260	01-Sep-03	75.25
			08-Sep-03	81.17
			15-Sep-03	86.60
			22-Sep-03	90.19
			29-Sep-03	86.65
Assembly of God Paul Church Kindergarten (MA155)	180	260	03-Sep-03	72.80
			10-Sep-03	68.85
			17-Sep-03	65.70
			24-Sep-03	71.14
Holy Redeemer Catholic Church (MA45)	164	260	01-Sep-03	70.52
			08-Sep-03	68.61
			15-Sep-03	54.37
			22-Sep-03	91.68
			29-Sep-03	94.80
QE School Old Student's Association Primary School (MA2A)	185	260	03-Sep-03	104.30
			10-Sep-03	94.12
			17-Sep-03	107.64
			24-Sep-03	130.73
TWGH's Kwok Yat Wai College (MA6)	186	260	03-Sep-03	113.55
			10-Sep-03	111.80
			17-Sep-03	93.02
			24-Sep-03	118.32
HKFYG Lee Shau Kee Primary School (MA120)	167	260	03-Sep-03	74.89
			10-Sep-03	51.61
			17-Sep-03	50.63
			24-Sep-03	48.33
Tin Yiu Estate II (MA15A)	163	260	03-Sep-03	65.39
			10-Sep-03	53.87
			17-Sep-03	47.58
			24-Sep-03	61.41
Tin Yau Court (MA10A)	200	260	03-Sep-03	63.70
			10-Sep-03	65.57
			17-Sep-03	77.03
			24-Sep-03	66.70

Location	Action level (µg/m <sup>3</sup> )	Limit level (µg/m <sup>3</sup> )	Date	TSP (24hr) (µg/m <sup>3</sup> )
San Hing Tsuen (MA65)	200	260	01-Sep-03	43.62
			08-Sep-03	56.16
			15-Sep-03	60.60
			22-Sep-03	90.65
			29-Sep-03	98.31
Tin Chak Estate (MA123A)	184	260	03-Sep-03	41.44
			10-Sep-03	77.91
			17-Sep-03	66.58
			24-Sep-03	41.19
Tin Yuet Estate (MA129A)	169	260	03-Sep-03	55.97
			10-Sep-03	57.30
			17-Sep-03	66.57
			24-Sep-03	54.52

Note: The Contractor was advised by the QE Secondary School (monitoring location no. 33) on 28th July 2003 that there would be some work carried out on the assembly hall building in August and was requested to remove the air quality sampling equipment before the works started in early August.

**Table 4.1 Results of Air Quality Impact Monitoring**

No Exceedance of Action / Limit Levels was recorded during the reporting month. The monitoring results indicate that the construction activities carried out in September 2003 were in full compliance with the air quality criteria for the project.

**4.2 NOISE**

Results of noise monitoring are shown in Table 4.2. Detailed data, including weather conditions, monitoring time and graphical presentations are included in Appendix B. A facade correction of 3dB(A) has been applied to measurements carried out under free field conditions.

Location	Date	Limit Level dB(A)	Average Impact noise measurement (30 min.) dB(A)		
			L <sub>eq</sub> (30 min)	L <sub>10</sub>	L <sub>90</sub>
*Assembly of God Paul Church Kindergarten (MN155)	04-Sep-03	80	67.4	69.2	61.5
	11-Sep-03		71.8	73.6	67.0
	18-Sep-03		71.6	74.1	68.4
	25-Sep-03		68.7	69.9	61.9
*Tuen Mun Town Plaza (MN50)	01-Sep-03	75	68.2	70.2	63.9
	08-Sep-03		70.7	73.4	65.7
	17-Sep-03		67.0	69.4	63.5
	22-Sep-03		68.3	70.3	62.9
	29-Sep-03		71.3	73.4	65.7
Kam Wah Garden (MN48)	01-Sep-03	75	69.7	72.5	64.7
	08-Sep-03		70.9	73.0	67.1
	16-Sep-03		70.2	72.9	66.6
	22-Sep-03		70.9	74.8	66.9
	29-Sep-03		72.5	74.9	68.7

Location	Date	Limit Level dB(A)	Average Impact noise measurement (30 min.) dB(A)		
			L <sub>eq(30 min)</sub>	L <sub>10</sub>	L <sub>90</sub>
*HKFYG Lee Shau Kee Primary School (MN120)	04-Sep-03	80	68.9	71.0	64.2
	11-Sep-03		70.7	73.3	65.2
	18-Sep-03		69.5	72.2	60.8
	25-Sep-03		65.7	68.3	61.4
*QE School Old Student's Association Secondary School (MN33)	04-Sep-03	80	72.5	74.4	69.8
	11-Sep-03		70.4	71.5	64.5
	18-Sep-03		68.8	70.6	64.2
	25-Sep-03		66.6	70.0	63.8
Tin Yiu Estate II (MN15A)	04-Sep-03	75	67.2	68.3	61.8
	11-Sep-03		61.5	63.7	57.7
	18-Sep-03		61.3	64.1	58.0
	25-Sep-03		61.4	63.1	57.7
*Tin Yau Court (MN10)	04-Sep-03	75	68.6	70.5	64.8
	11-Sep-03		66.6	68.5	61.9
	18-Sep-03		67.3	70.1	63.0
	25-Sep-03		70.5	73.5	64.9
*TWGH's Kwok Yat Wai College (MN6)	04-Sep-03	80	66.3	68.9	62.0
	11-Sep-03		64.5	66.4	60.8
	18-Sep-03		65	67.5	61.7
	25-Sep-03		65.7	68.0	61.7
*San Hing Tsuen (MN65)	02-Sep-03	75	67.5	70.2	60.8
	09-Sep-03		71.4	74.2	67.8
	16-Sep-03		71.8	75.4	69.3
	23-Sep-03		71.6	73.9	59.2
	30-Sep-03		68.5	72.2	65.2
*Tin Chak Estate (MN123A)	04-Sep-03	75	59.0	60.0	54.8
	11-Sep-03		60.7	61.8	56.3
	18-Sep-03		67.8	71.8	61.7
	25-Sep-03		62.1	65.0	57.2
*Tin Yuet Estate (MN129A)	04-Sep-03	75	62.7	64.6	60.5
	11-Sep-03		62.2	65.4	56.6
	18-Sep-03		62.3	63.9	59.3
	25-Sep-03		63.2	65.3	58.6

Note:

\*\*\* Measurement undertaken at free field condition and façade correction of 3dB(A) had been added.

**Table 4.2 Results of Noise Impact Monitoring During Non-Restricted Hour**

No Exceedance of Limit Level was recorded during the reporting month. The monitoring results indicate that the construction activities carried out in September 2003 were in full compliance with the noise criteria for the project.

**4.3 WATER QUALITY**

No water monitoring was carried out in the reporting month. Bi-monthly water sampling for SS analysis at effluent discharge points in accordance with EPD discharge licences will be carried out in October 2003.

**4.4 SUMMARY OF EXCEEDANCES**

A summary table of exceedances for the air quality and noise are shown in Table 4.3.

Exceedance	Total no. of measurement	Action Level Exceedance	% of Action Level Exceedance	Limit Level Exceedance	% of Limit Level Exceedance
Air Quality	51	0	0%	0	0%
Noise Non-Restricted hour	47	N/A	N/A	0	0%

*Note: "N/A" - no action level for noise monitoring relates to number of documented complaints received; no action level was set for water quality monitoring.*

**Table 4.3 Summary of Exceedances**

No Notice of Exceedance (NoE) was received in the reporting month.

**5. NON-COMPLIANCE AND DEFICIENCY**

**5.1 SITE INSPECTION/AUDIT BY CET**

The CET site inspections were carried out on 4, 11, 18 and 25 of September 2003. All observations have been recorded in the audit checklist and passed to the Contractor together with the appropriate recommended mitigation measures where necessary. Details of observations/deficiencies and proposed corrective actions are presented in Appendix J.

**5.2 SITE AUDIT BY IEC**

Site audit was undertaken by the IEC on 26 September 2003. A copy of the site audit checklist and details of observations/deficiencies and proposed corrective actions is presented in Appendix J.

**6. WASTE MANAGEMENT**

388 m<sup>3</sup> of inert C&D material, 24 m<sup>3</sup> of waste from sewage holding tanks, 120 m<sup>3</sup> of general office waste and 7 x 100kg drums of dry cell batteries were disposed of to Tuen Mun Public Filling Barging Area 38, Pillar Point Sewage Treatment Works, WENT Landfill and Tsing Yi Chemical Waste Treatment Centre respectively in September 2003.

**7. LANDSCAPE AND VISUAL IMPACT**

Landscape works will be carried out at a later stage of the contract. The progress of trees protection and transplanting programme will be included in the monthly EM&A

report when those information is available.

## **8. CULTURAL HERITAGE**

The archaeological watching brief for Tuen Mun area (not including Lam Tei) and Lam Tei area was completed in November 2002 and August 2003 respectively. The Archaeological Watching Brief Final Report was submitted to relevant parties in late April 2003.

There was no trace of archaeological material within any of the pile sites in Tuen Mun area and Lam Tei area. For the information of archaeological monitoring methodology, monitoring locations and the archaeological watching brief results, please refer to the November 2002 EM&A report (for Tuen Mun area) and August 2003 EM&A report (for Lam Tei area).

## **9. COMPLAINT**

There have been no complaints received during the reporting month.

## **10. SUMMARY OF NOTIFICATION OF SUMMONS, SUCCESSFUL PROSECUTIONS AND CORRECTIVE ACTIONS**

There have been no Notification of Summons received during the reporting month.

Appendix K summarizes the information on notification of summons and prosecutions received since the commencement of the Project.

## **11. FUTURE KEY ISSUES**

Appendix L presents the construction programme for the next three months. The major civil construction work for Tin Shui Wai has been substantially completed and therefore the environmental impacts arising from are expected to be minimal. A request had already been made to EPD to cease most of the monitoring in Tin Shui Wai, with the exception of air quality and noise monitoring at Assembly of God Paul Church Kindergarten (MA155/MN155), as potential dust and noise impacts would be rising from remaining road and utilities diversion works. The forecast of construction work for the upcoming three months at Tuen Mun and Lam Tei will be similar in nature to those carried out during the month of September 2003. The results for air quality, water quality and noise impact monitoring for the upcoming three months are expected to be similar to those measured in September 2003.

A weekly monitoring schedule for the next three months is presented in Appendix F of this report.

## **12. CONCLUSION**

Air quality, water quality and noise monitoring has been undertaken in September 2003 in accordance with the contract specific EM&A Manual.

No Exceedances of Action / Limit Levels for the air quality and noise were recorded during the reporting month.

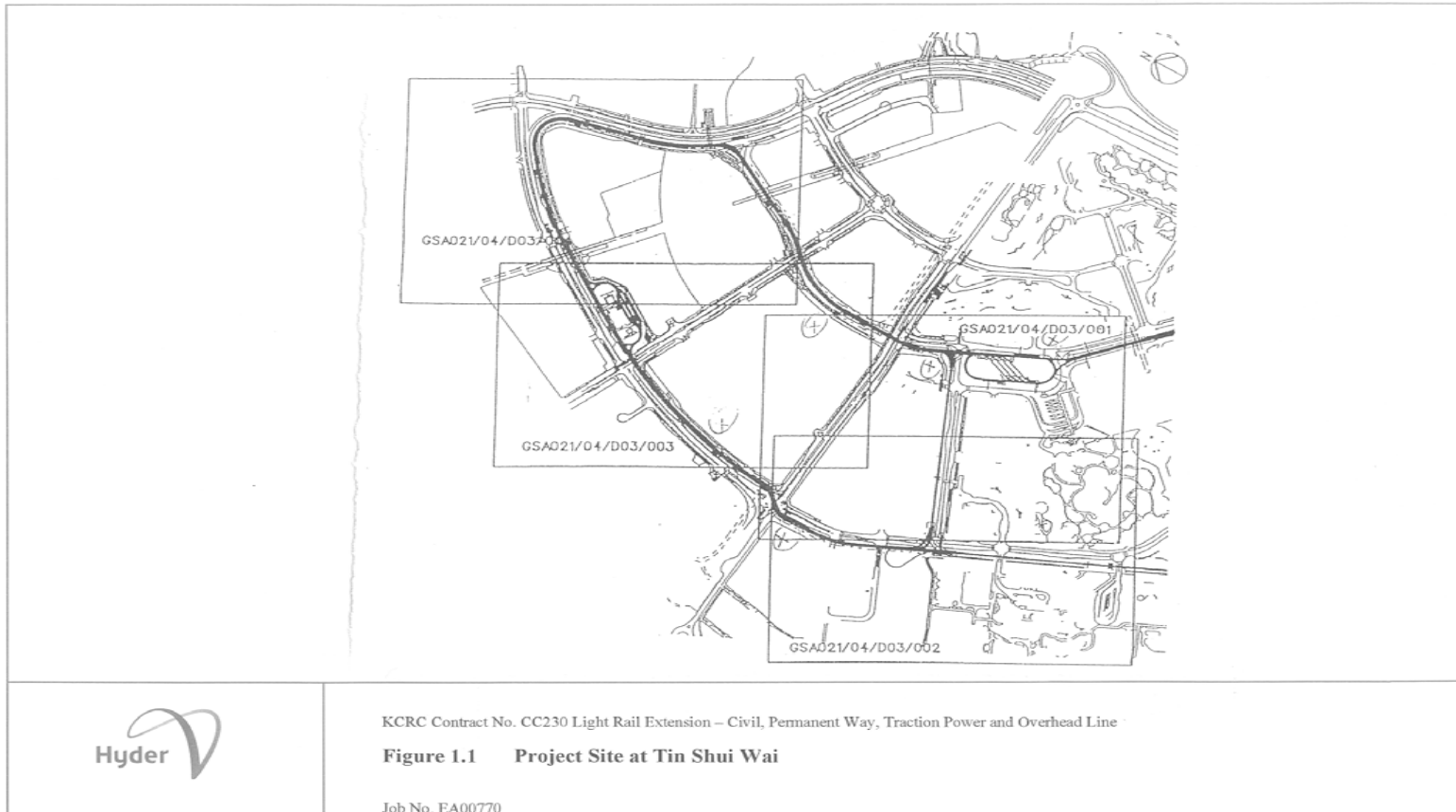
The CET site inspections were carried out on 4, 11, 18 and 25 of September 2003. No significant deficiency was observed throughout the reporting month.

Site audit was undertaken by the IEC on 26 September 2003. The contractor was reminded to provide more frequent water spraying at Junction L since many works are still going on.

388 m<sup>3</sup> of inert C&D material, 24 m<sup>3</sup> of waste from sewage holding tanks, 120 m<sup>3</sup> of general office waste and 7 x 100kg drums of dry cell batteries were disposed offsite in September 2003.

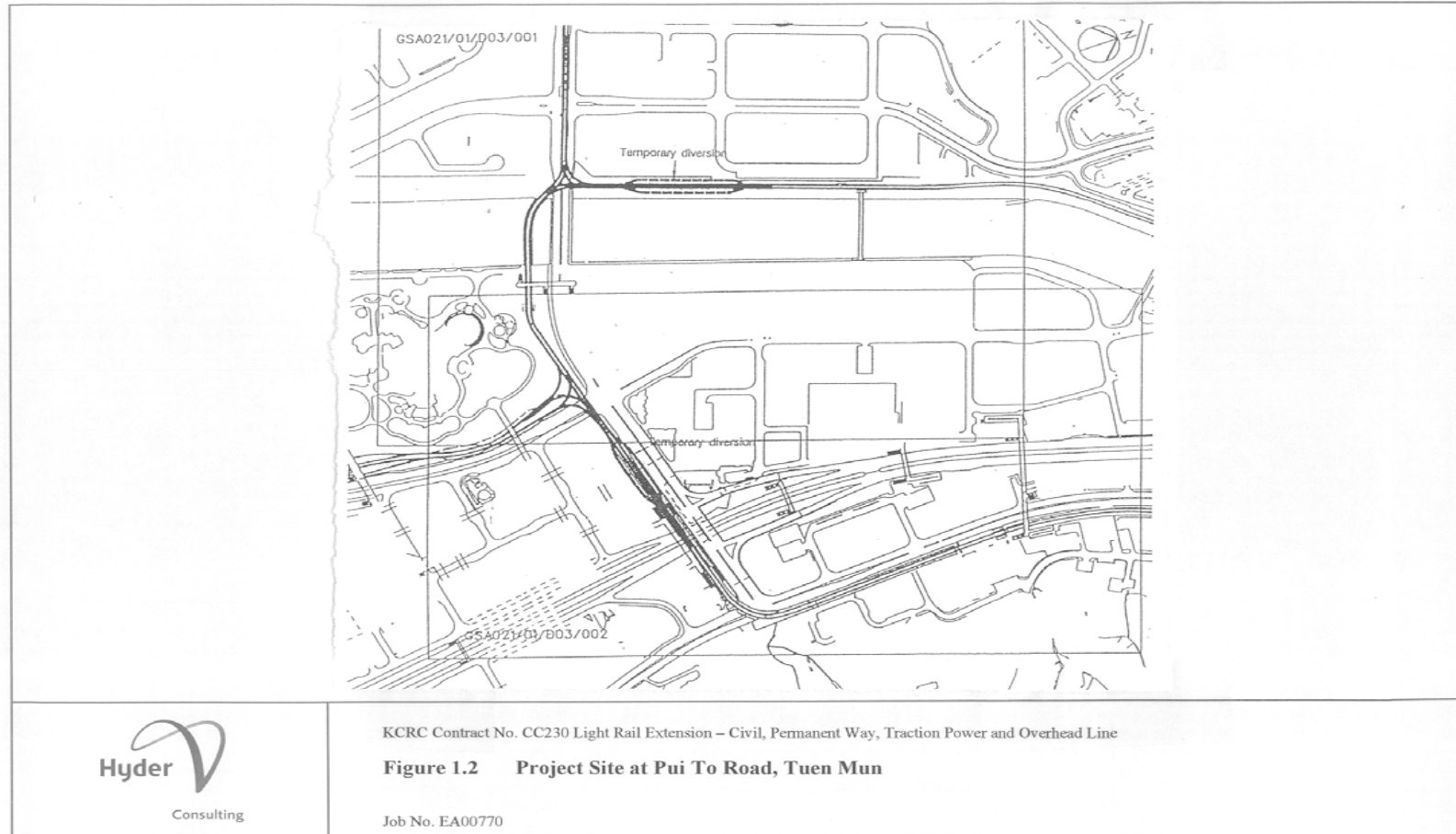
There have been no Notification of Summons / complaints received during reporting month.

**FIGURE 1.1 PROJECT SITE AT TIN SHUI WAI**





**FIGURE 1.2 PROJECT SITE AT PUI TO ROAD, TUEN MUN**



**FIGURE 1.3 PROJECT SITE AT LAM TEI**

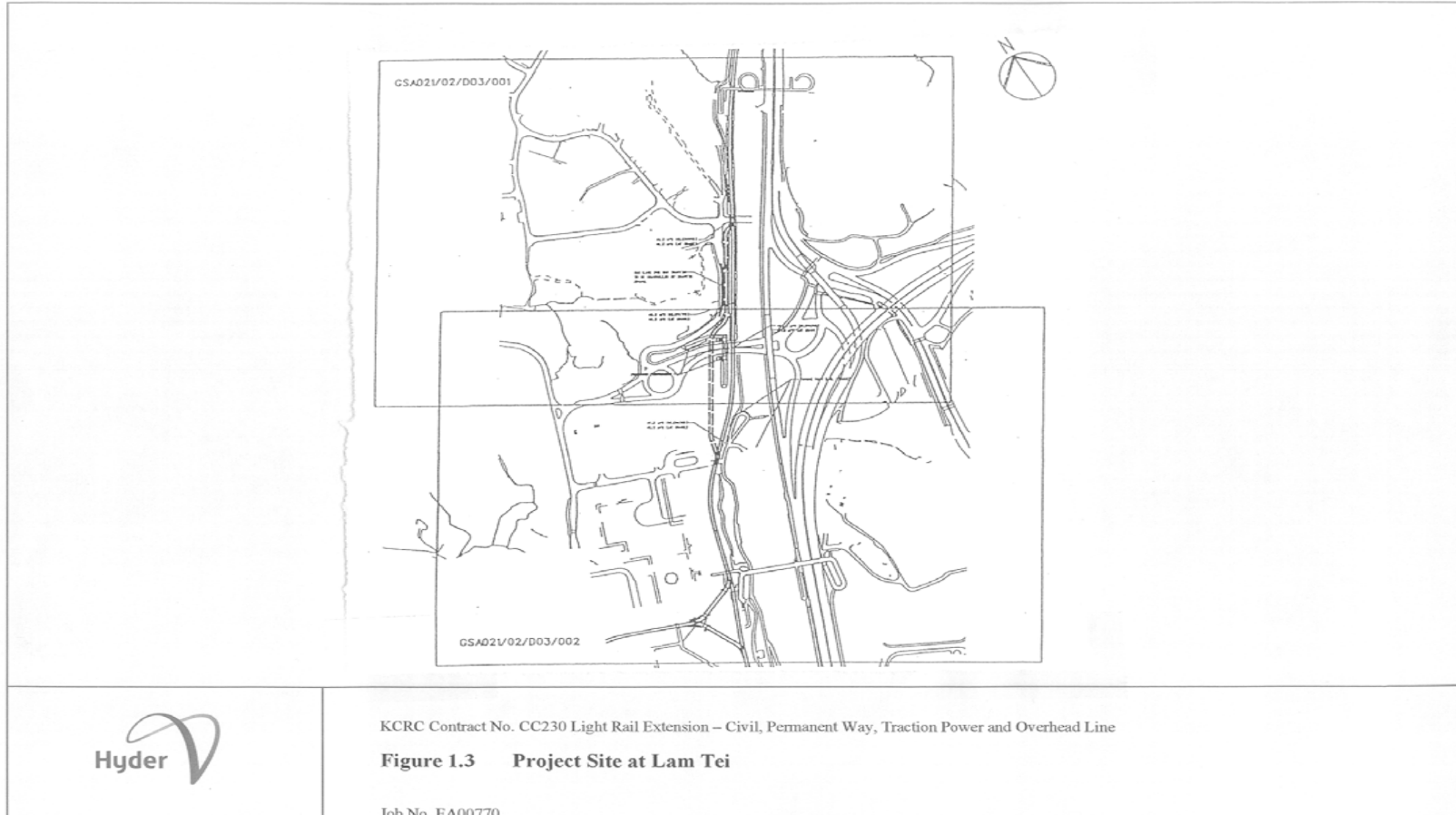
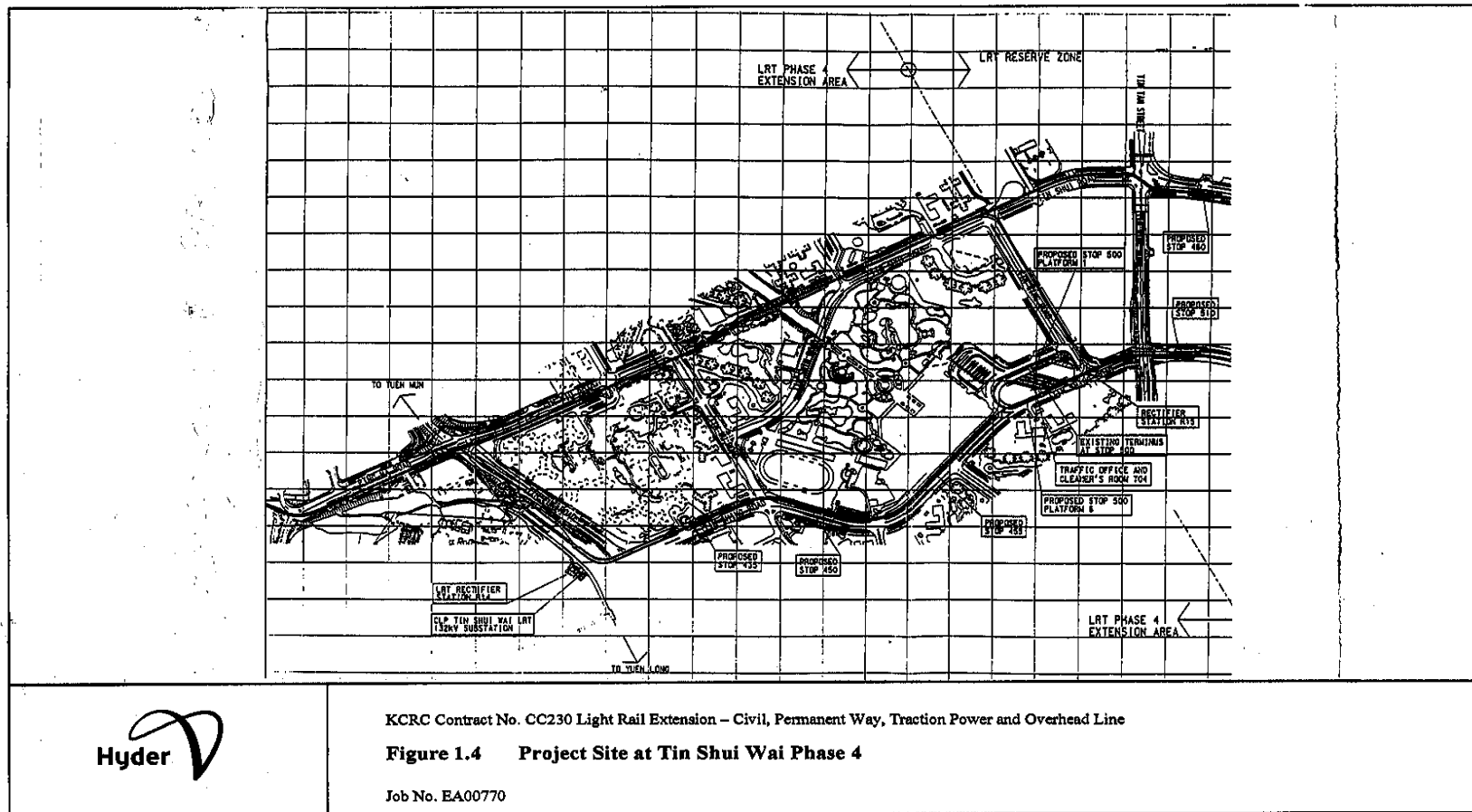


FIGURE 1.4 PROJECT SITE AT TIN SHUI WAI PHASE 4

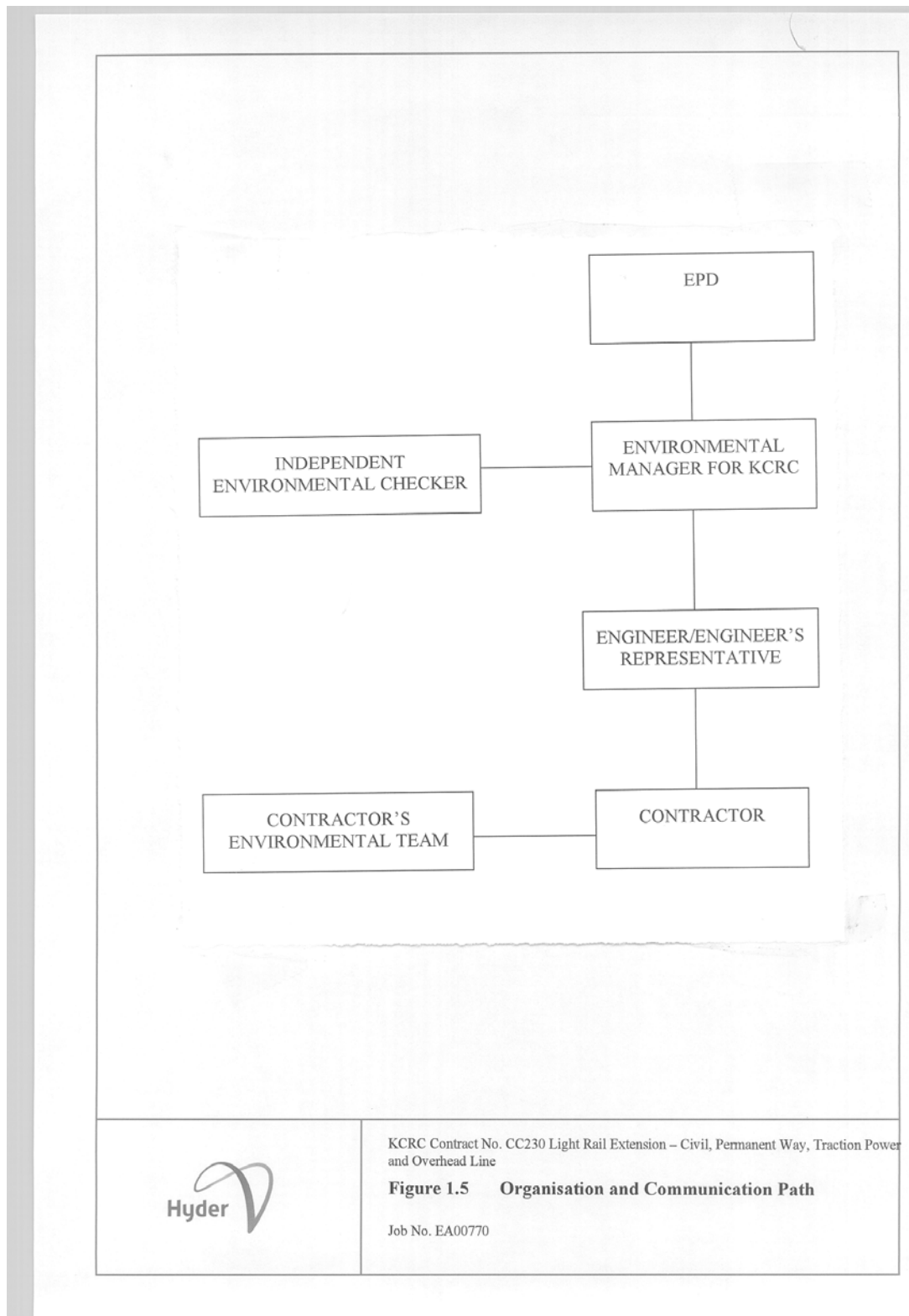


KCRC Contract No. CC230 Light Rail Extension – Civil, Permanent Way, Traction Power and Overhead Line

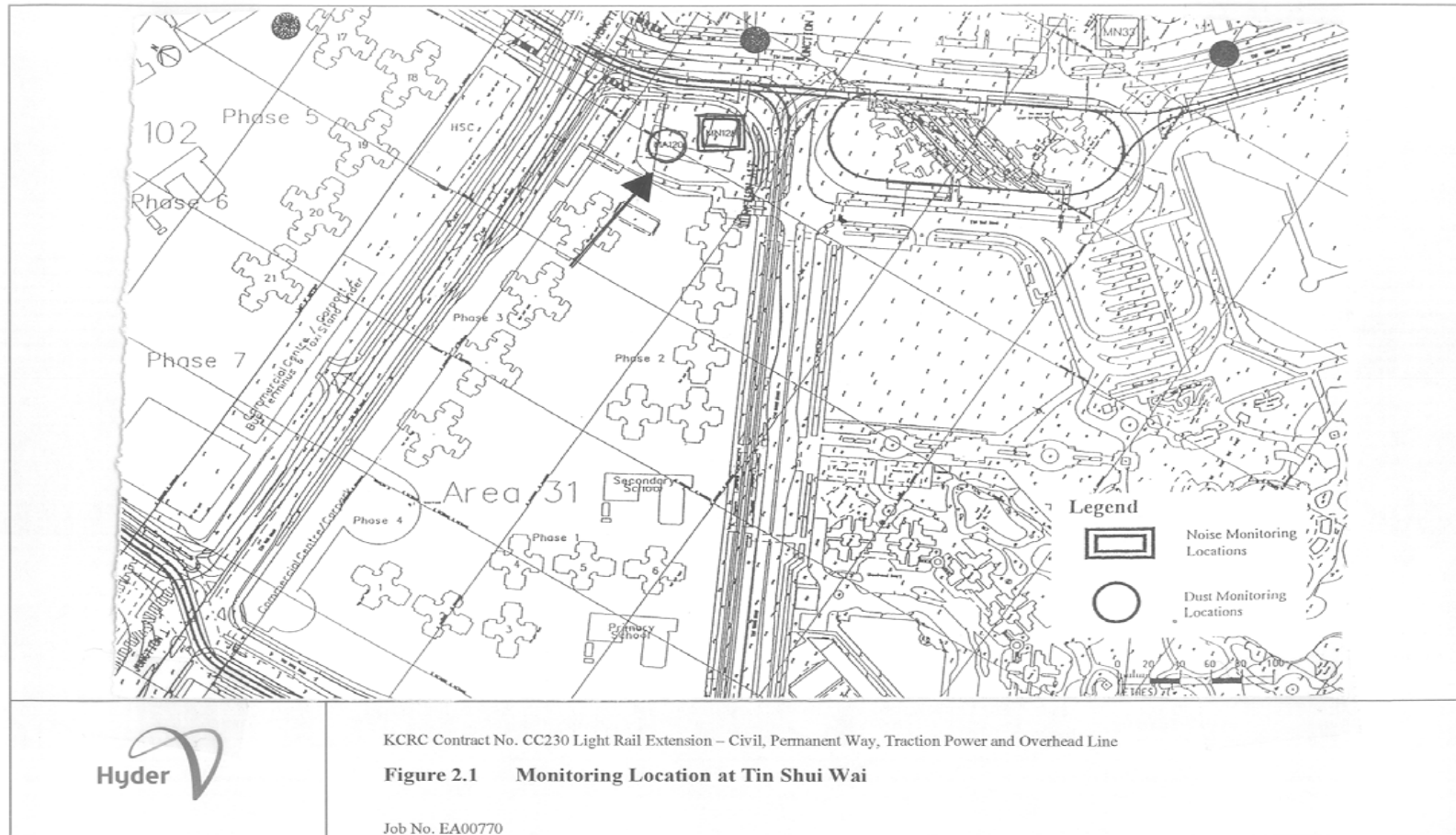
Figure 1.4 Project Site at Tin Shui Wai Phase 4

Job No. EA00770

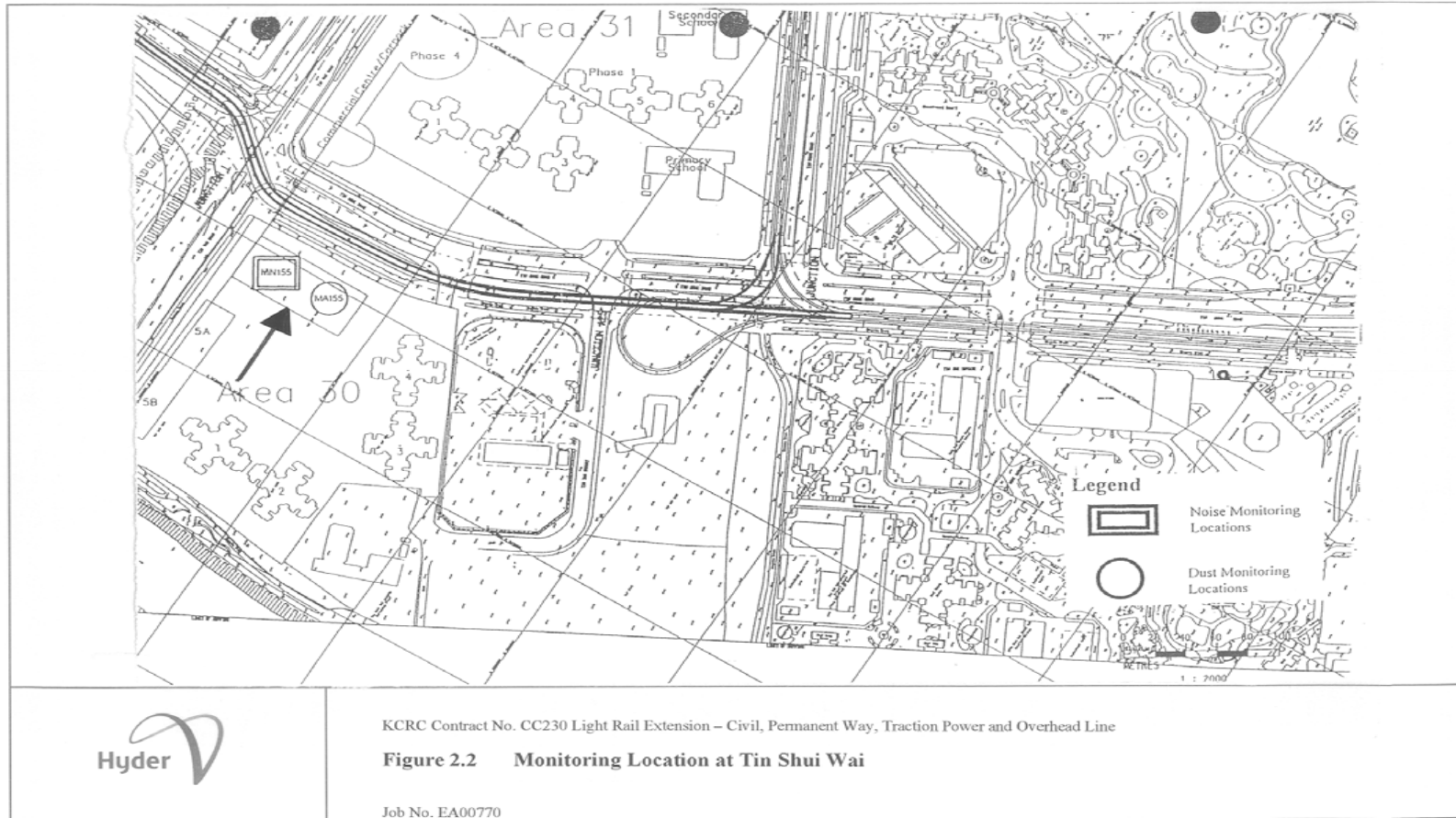
**FIGURE 1.5 ORGANIZATION AND COMMUNICATION PATH**



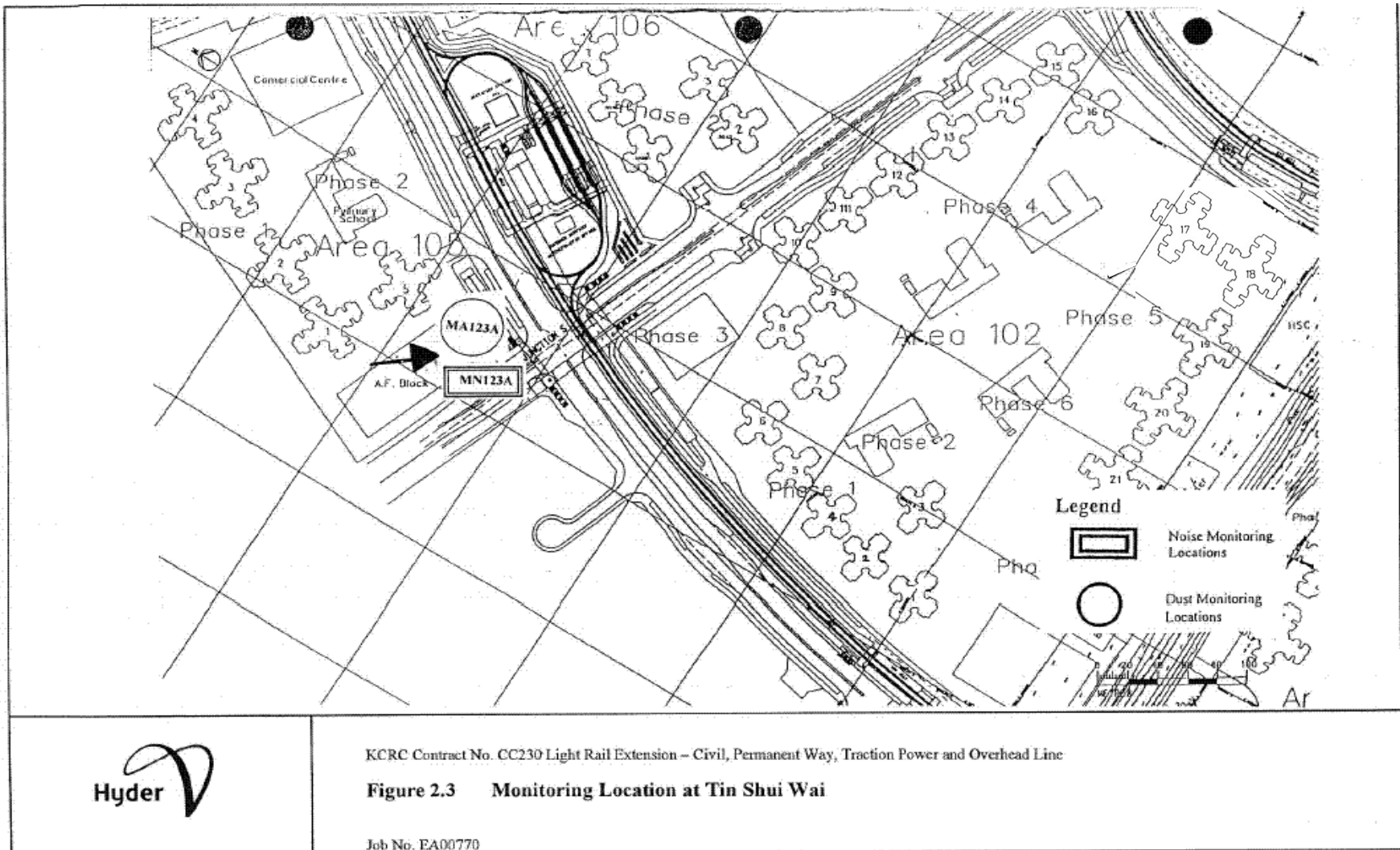
**FIGURE 2.1 MONITORING LOCATION AT TIN SHUI WAI**



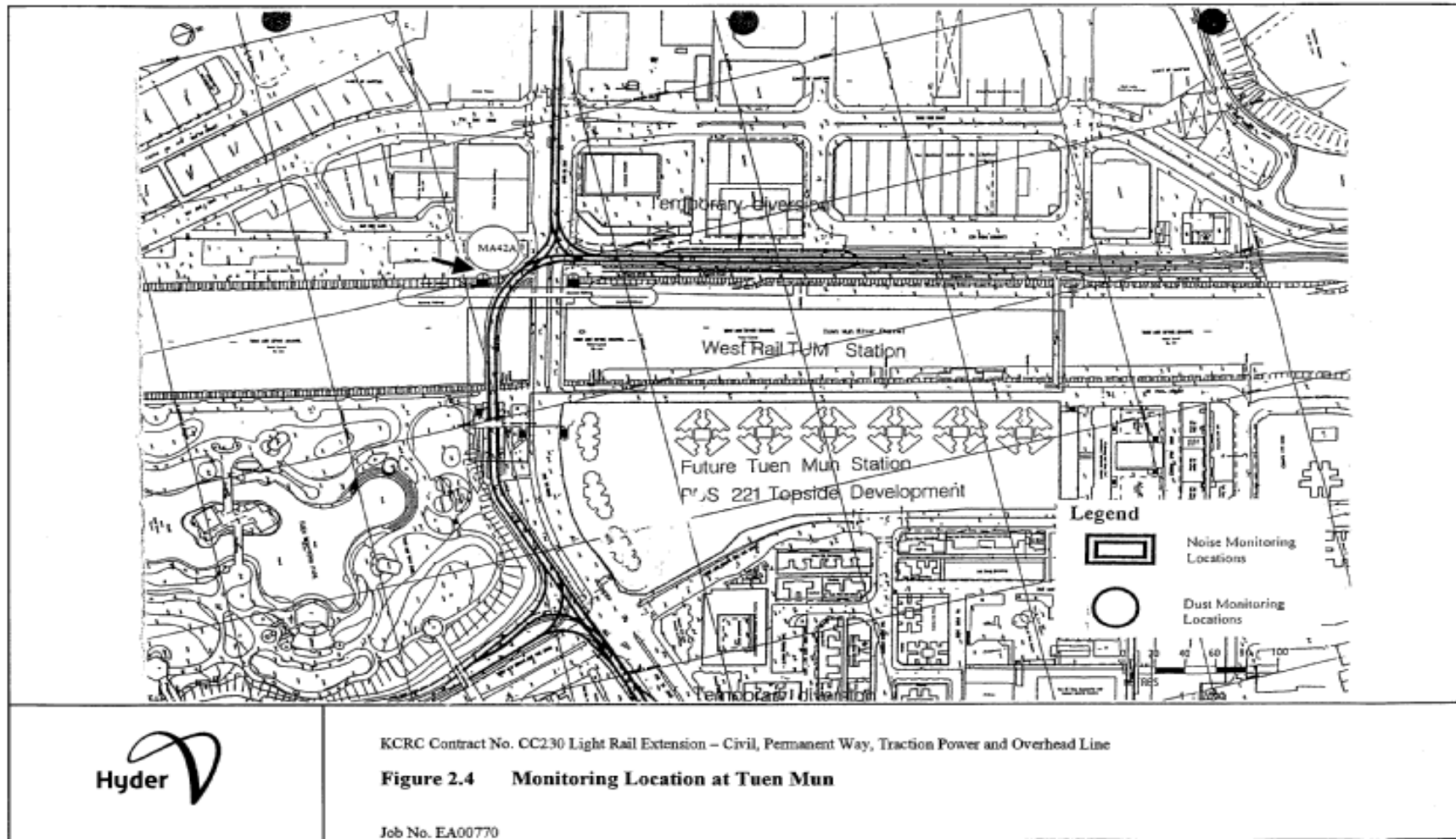
**FIGURE 2.2 MONITORING LOCATION AT TIN SHUI WAI**



**FIGURE 2.3 MONITORING LOCATION AT TIN SHUI WAI**

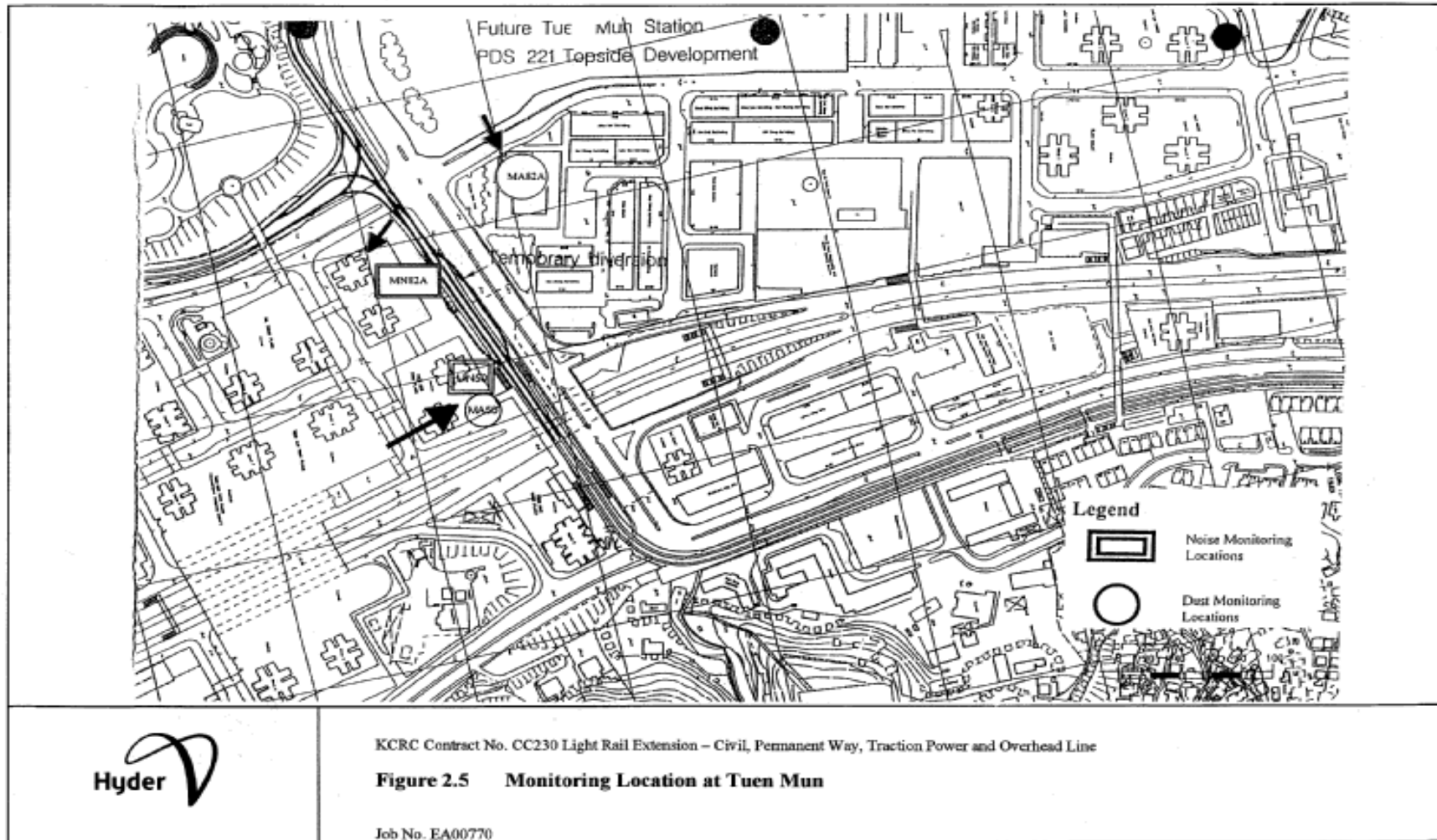


**FIGURE 2.4 MONITORING LOCATION AT TUEN MUN**

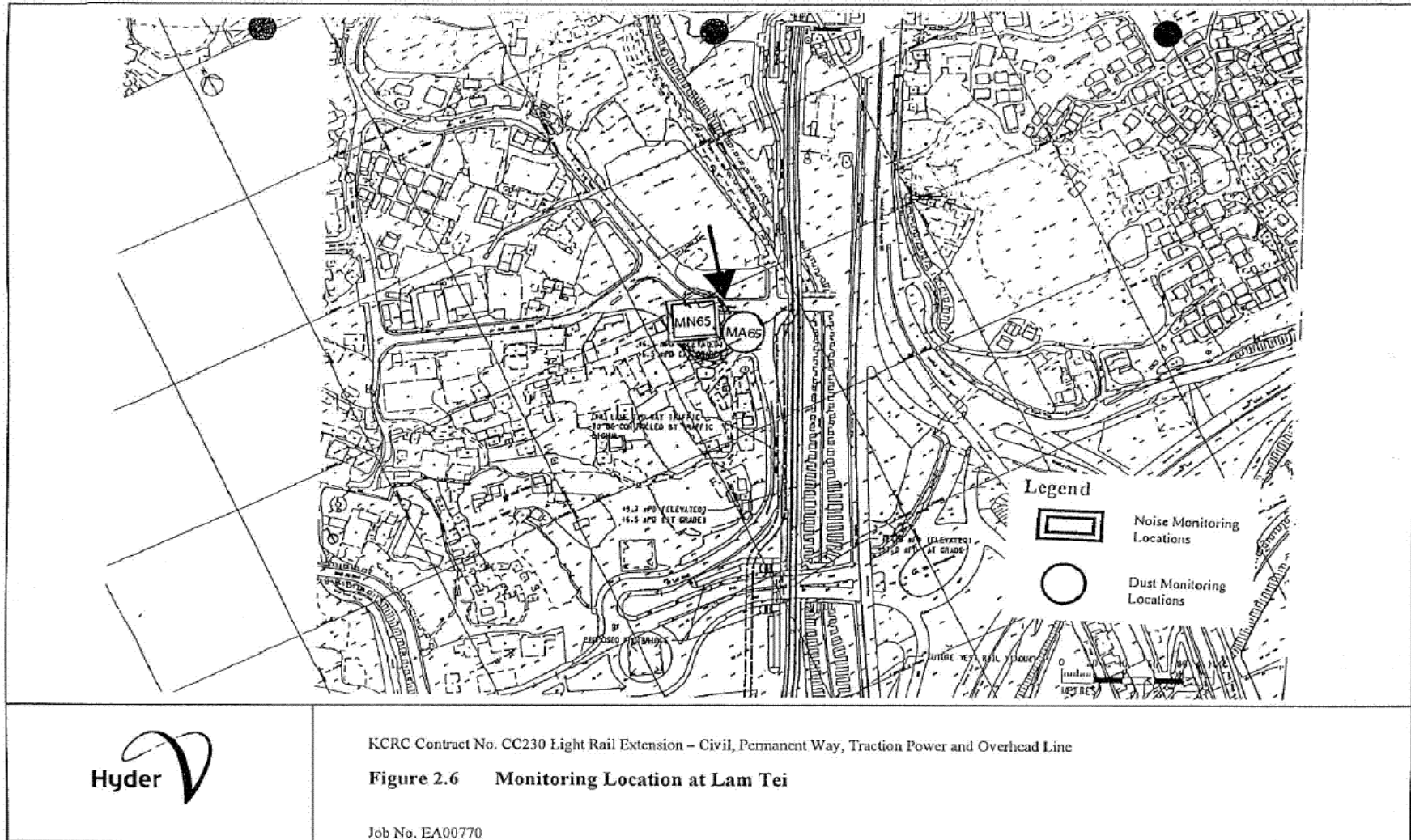




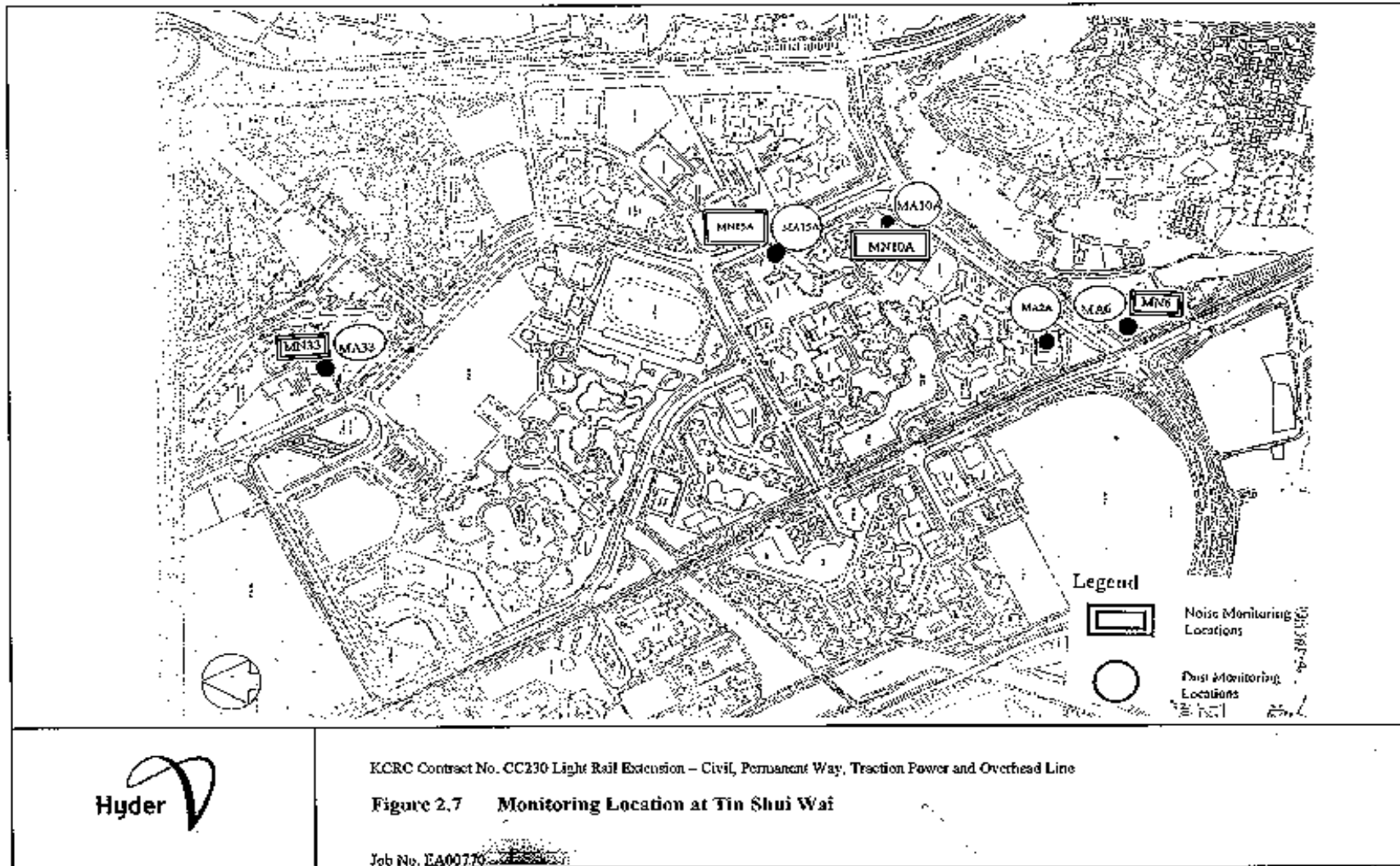
**FIGURE 2.5 MONITORING LOCATION AT TUEN MUN**



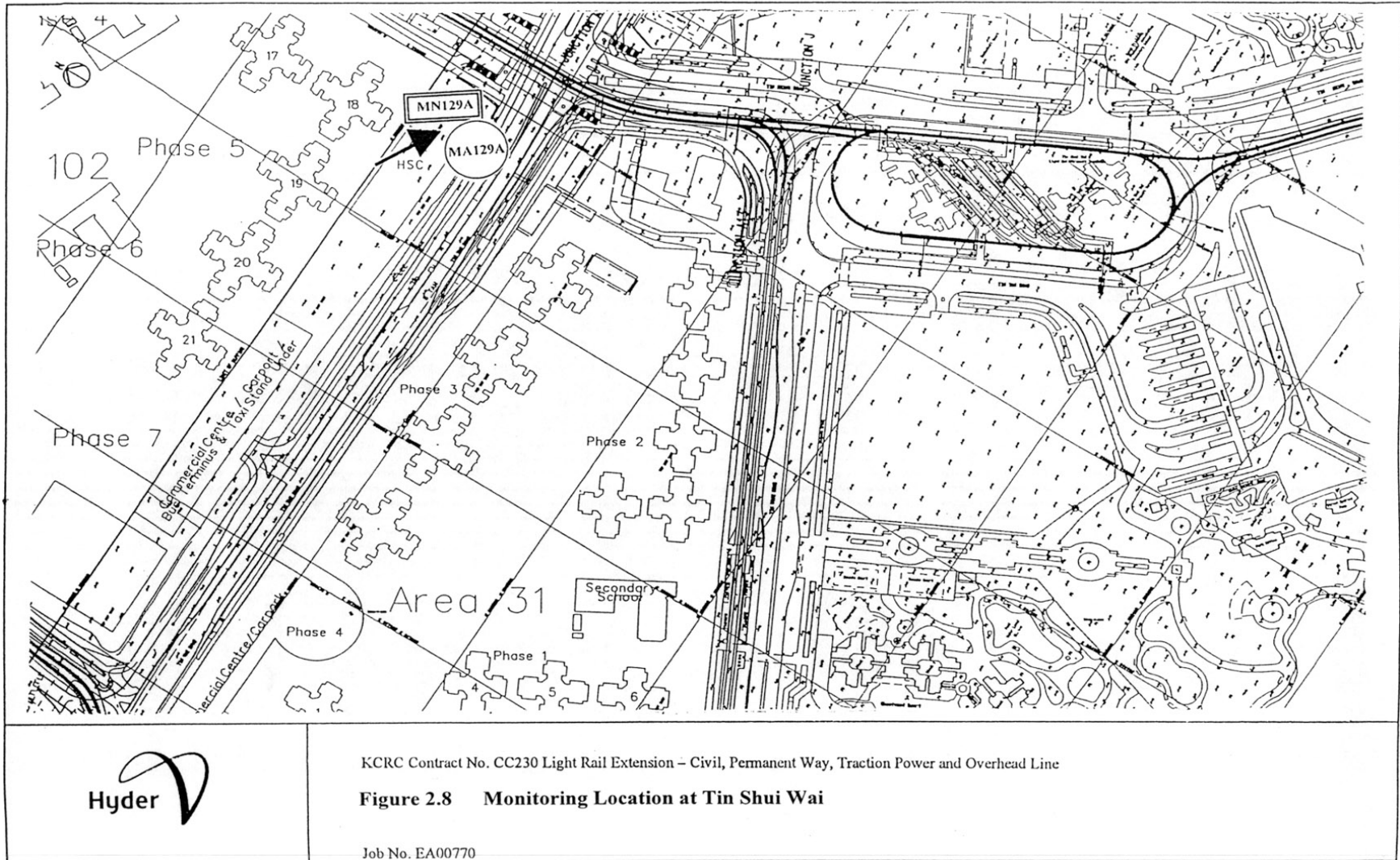
**FIGURE 2.6 MONITORING LOCATION AT TUEN MUN**



**FIGURE 2.7 MONITORING LOCATION AT TIN SHUI WAI**



**FIGURE 2.8 MONITORING LOCATION AT TIN SHUI WAI**

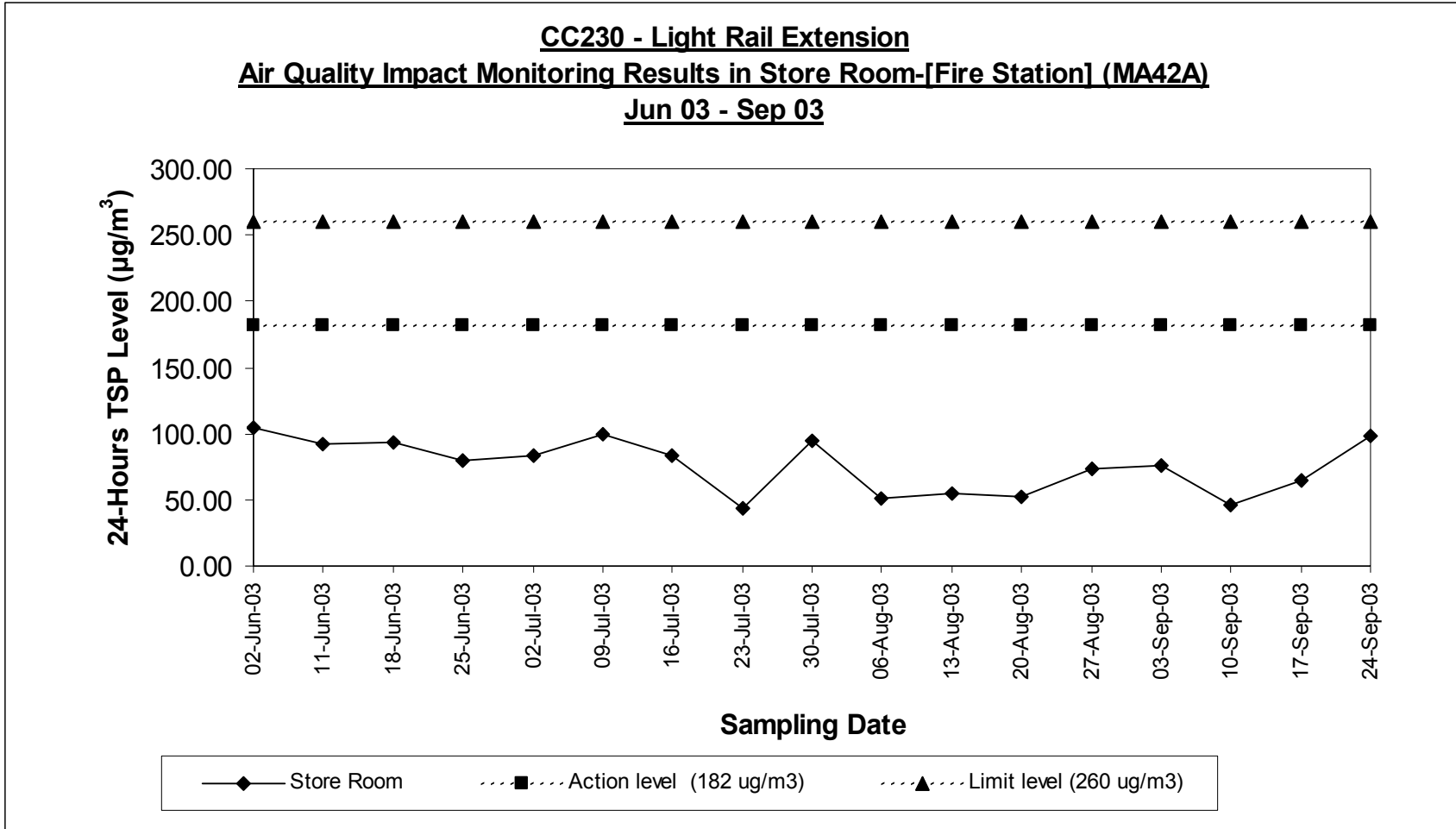


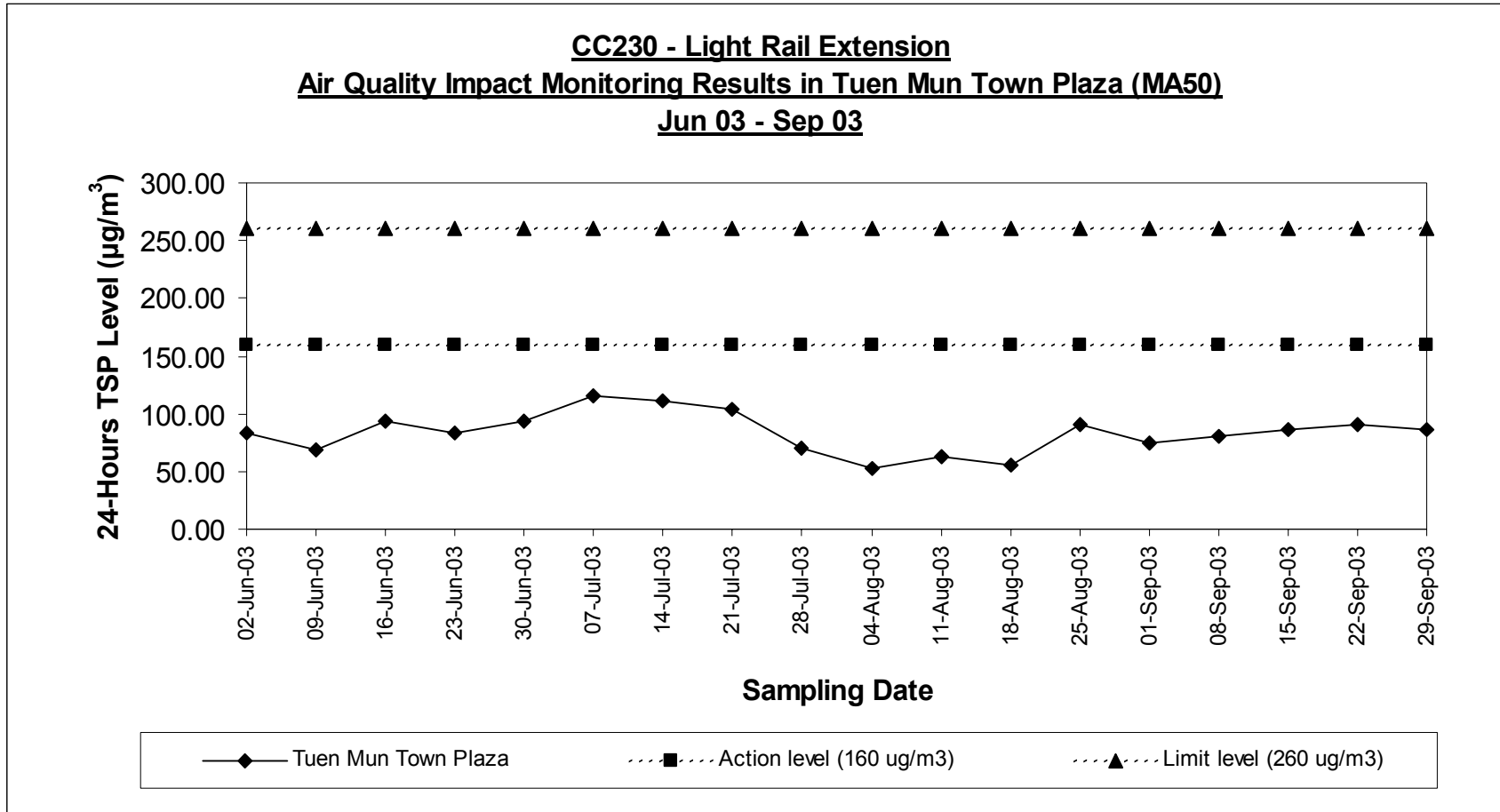
**APPENDIX A – SUMMARY OF AIR QUALITY IMPACT MONITORING RESULTS**

Location	Monitoring Date	Starting Time	Weather Conditions	Wind Speed with direction (m/s)	24-hr TSP ( $\mu\text{g}/\text{m}^3$ )
Store Rm-[Fire Station] (MA42A)	03-Sep-03	09:00	Cloudy	2.5W	76.22
	10-Sep-03	09:00	Fine	1.5W	46.54
	17-Sep-03	09:00	Fine	0.5W	64.22
	24-Sep-03	09:00	Sunny	2.5E	98.66
Tuen Mun Town Plaza (MA50)	01-Sep-03	09:00	Fine	1.5S	75.25
	08-Sep-03	09:00	Fine	2.5S	81.17
	15-Sep-03	09:00	Cloudy	1.5W	86.60
	22-Sep-03	09:00	Rainy	2.0E	90.19
Assembly of God Paul Church Kindergarten (MA155)	29-Sep-03	09:00	Fine	2.0E	86.65
	03-Sep-03	09:00	Cloudy	4.0W	72.80
	10-Sep-03	09:00	Fine	2.0W	68.85
	17-Sep-03	09:00	Fine	2.5W	65.70
Holy Redeemer Catholic Church (MA45)	24-Sep-03	09:00	Sunny	4.5E	71.14
	01-Sep-03	09:00	Fine	1.0S	70.52
	08-Sep-03	09:00	Fine	2.0S	68.61
	15-Sep-03	09:00	Cloudy	0.5W	54.37
QE School Old Student's Association Primary School (MA2A)	22-Sep-03	09:00	Rainy	2.0E	91.68
	29-Sep-03	09:00	Fine	2.0E	94.80
	03-Sep-03	09:00	Cloudy	3.0NW	104.30
	10-Sep-03	09:00	Fine	1.0W	94.12
TWGH's Kwok Yat Wai College (MA6)	17-Sep-03	09:00	Fine	0.5W	107.64
	24-Sep-03	09:00	Sunny	2.0E	130.73
	03-Sep-03	09:00	Cloudy	2.5NW	113.55
	10-Sep-03	09:00	Fine	2.5W	111.80
	17-Sep-03	09:00	Fine	0.5W	93.02
	24-Sep-03	09:00	Sunny	2.0E	118.32

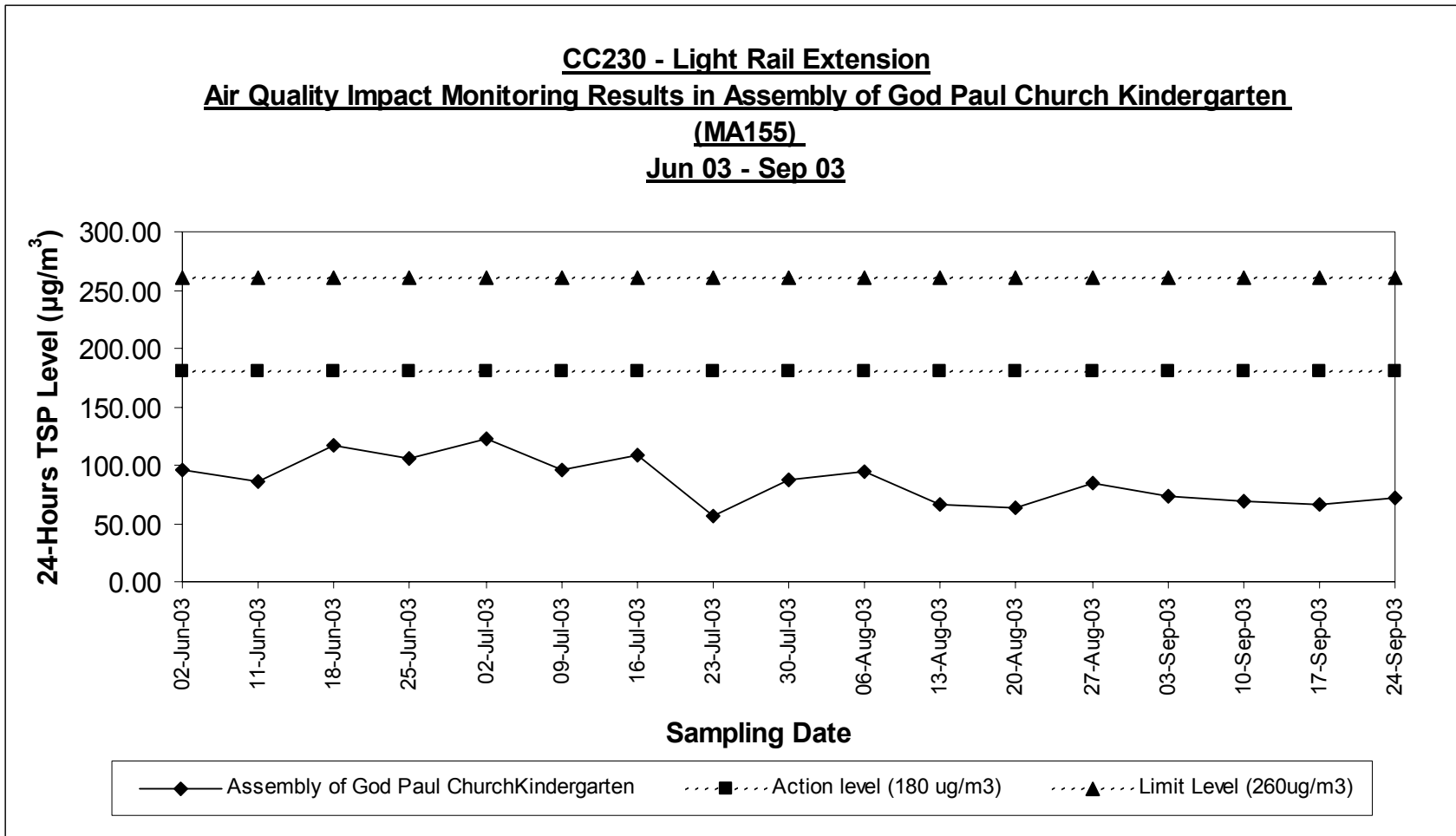
Location	Monitoring Date	Starting Time	Weather Conditions	Wind Speed with direction (m/s)	24-hr TSP ( $\mu\text{g}/\text{m}^3$ )
QE School Old Student's Association Secondary School (MA33)	03-Sep-03	/			
	10-Sep-03	/			
	17-Sep-03	/			
	24-Sep-03	/			
HKFYG Lee Shau Kee Primary School (MA120)	03-Sep-03	09:00	Cloudy	3.0W	74.89
	10-Sep-03	09:00	Fine	2.5W	51.61
	17-Sep-03	09:00	Fine	0.5W	50.63
	24-Sep-03	09:00	Sunny	4.5E	48.33
Tin Yiu Estate II (MA15A)	03-Sep-03	09:00	Cloudy	3.5W	65.39
	10-Sep-03	09:00	Fine	2.5W	53.87
	17-Sep-03	09:00	Fine	2.0W	47.58
	24-Sep-03	09:00	Sunny	2.0E	61.41
Tin Yau Court (MA10A)	03-Sep-03	09:00	Cloudy	0.5S	63.70
	10-Sep-03	09:00	Fine	3.0W	65.57
	17-Sep-03	09:00	Fine	1.0W	77.03
	24-Sep-03	09:00	Sunny	1.0E	66.70
San Hing Tsuen (MA65)	01-Sep-03	09:00	Fine	2.0S	43.62
	08-Sep-03	09:00	Fine	3.5S	56.16
	15-Sep-03	09:00	Cloudy	3.0W	60.60
	22-Sep-03	09:00	Rainy	2.0E	90.65
	29-Sep-03	09:00	Fine	3.5E	98.31
Tin Chak Estate (MA123A)	03-Sep-03	09:00	Cloudy	0.5W	41.44
	10-Sep-03	09:00	Fine	2.5W	77.91
	17-Sep-03	09:00	Fine	1.5W	66.58
	24-Sep-03	09:00	Sunny	3.0E	41.19
Tin Yuet Estate (MA129A)	03-Sep-03	09:00	Cloudy	2.0W	55.97
	10-Sep-03	09:00	Fine	2.5W	57.30
	17-Sep-03	09:00	Fine	0.5W	66.57
	24-Sep-03	09:00	Sunny	2.0E	54.52

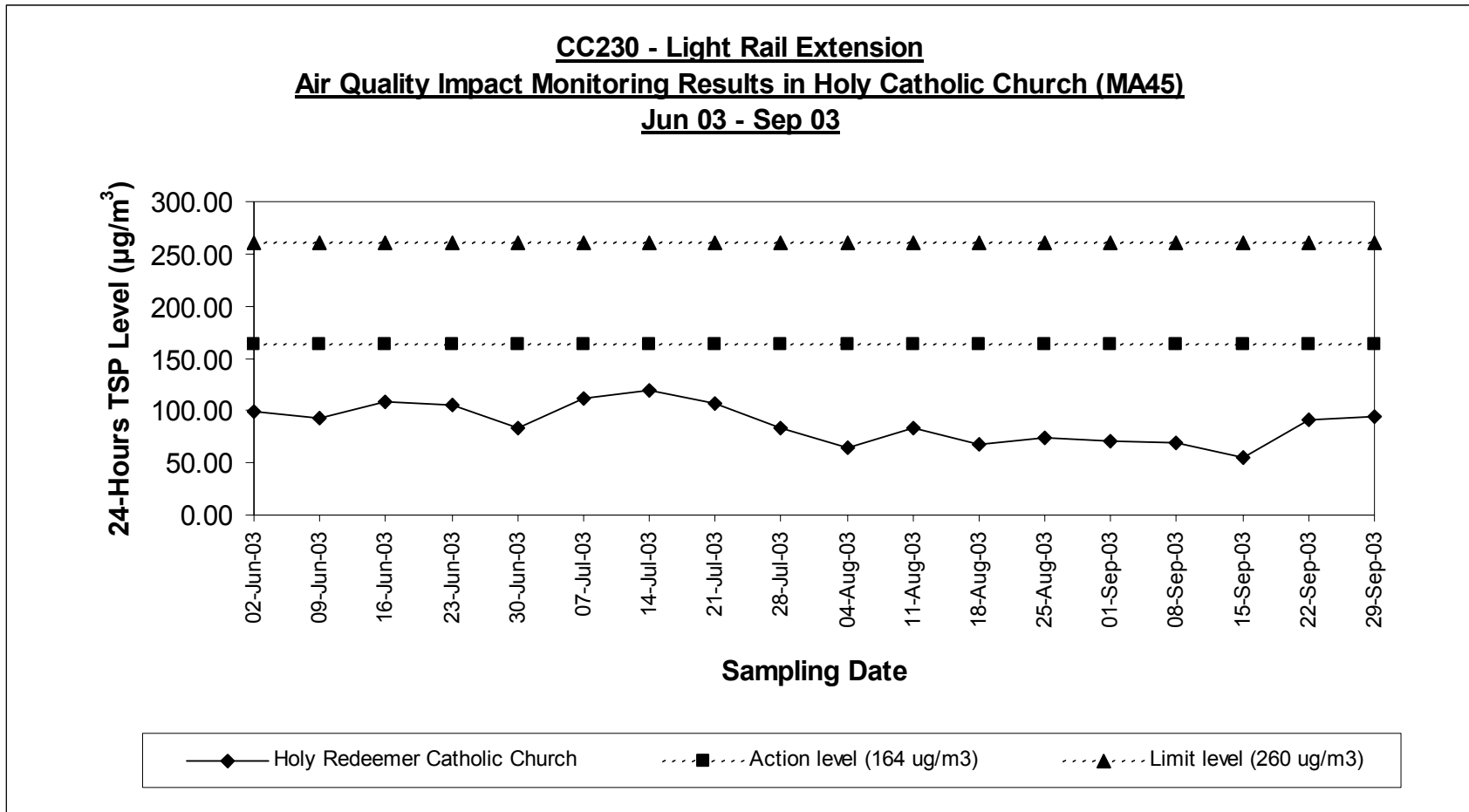
As requested by the tenant, the HVS had been demolished from the monitoring location since the early August 2003

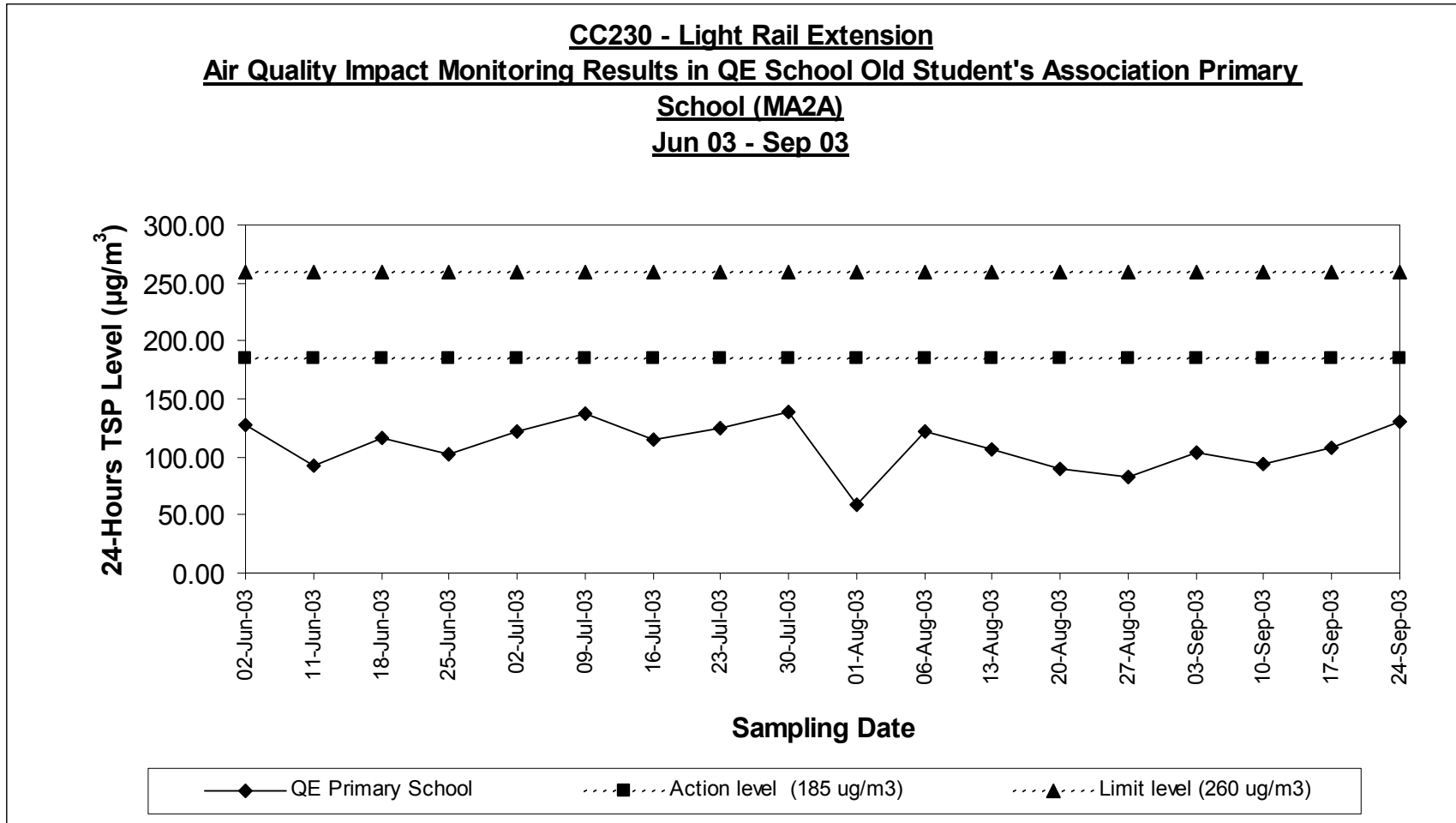


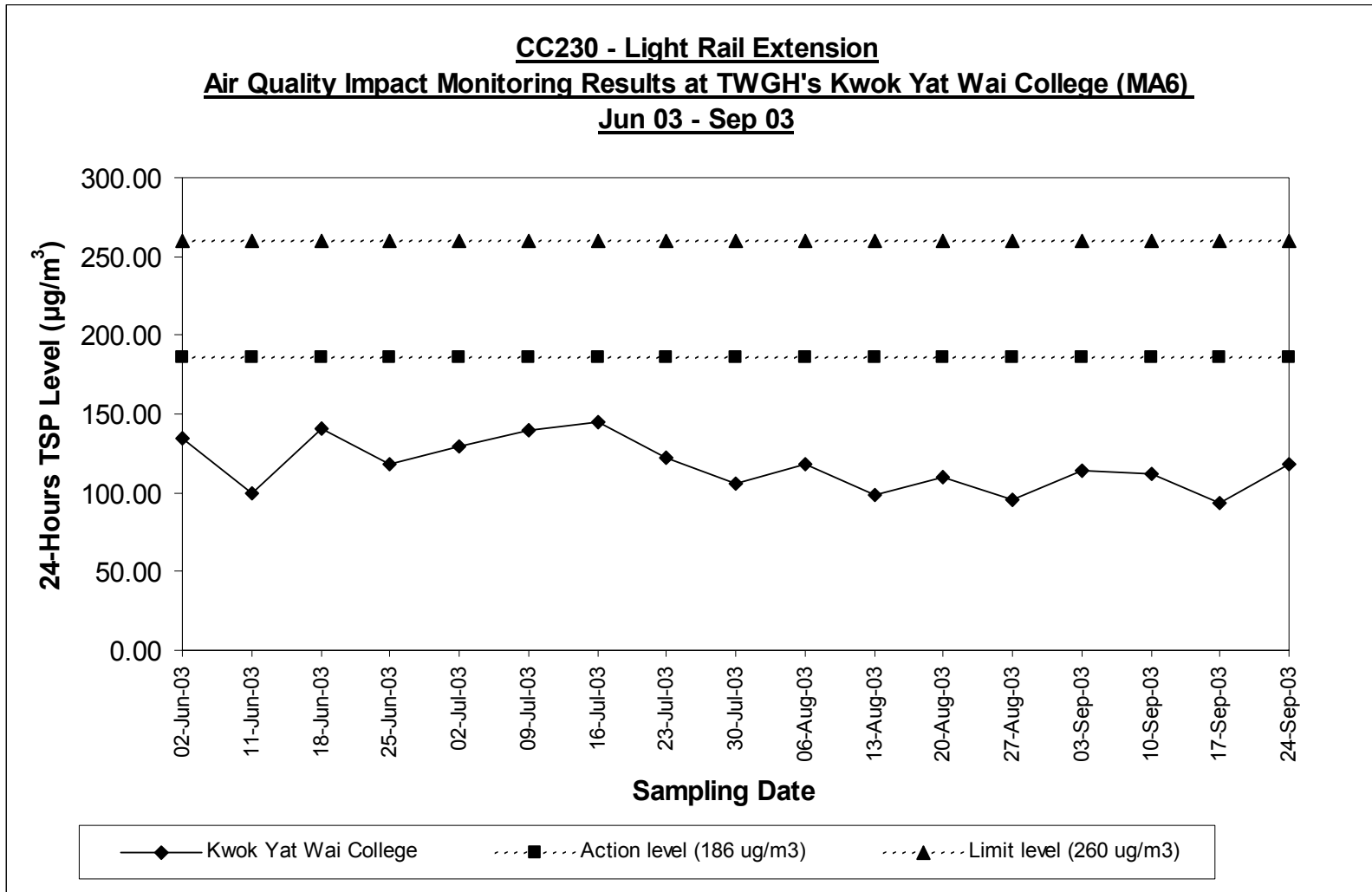


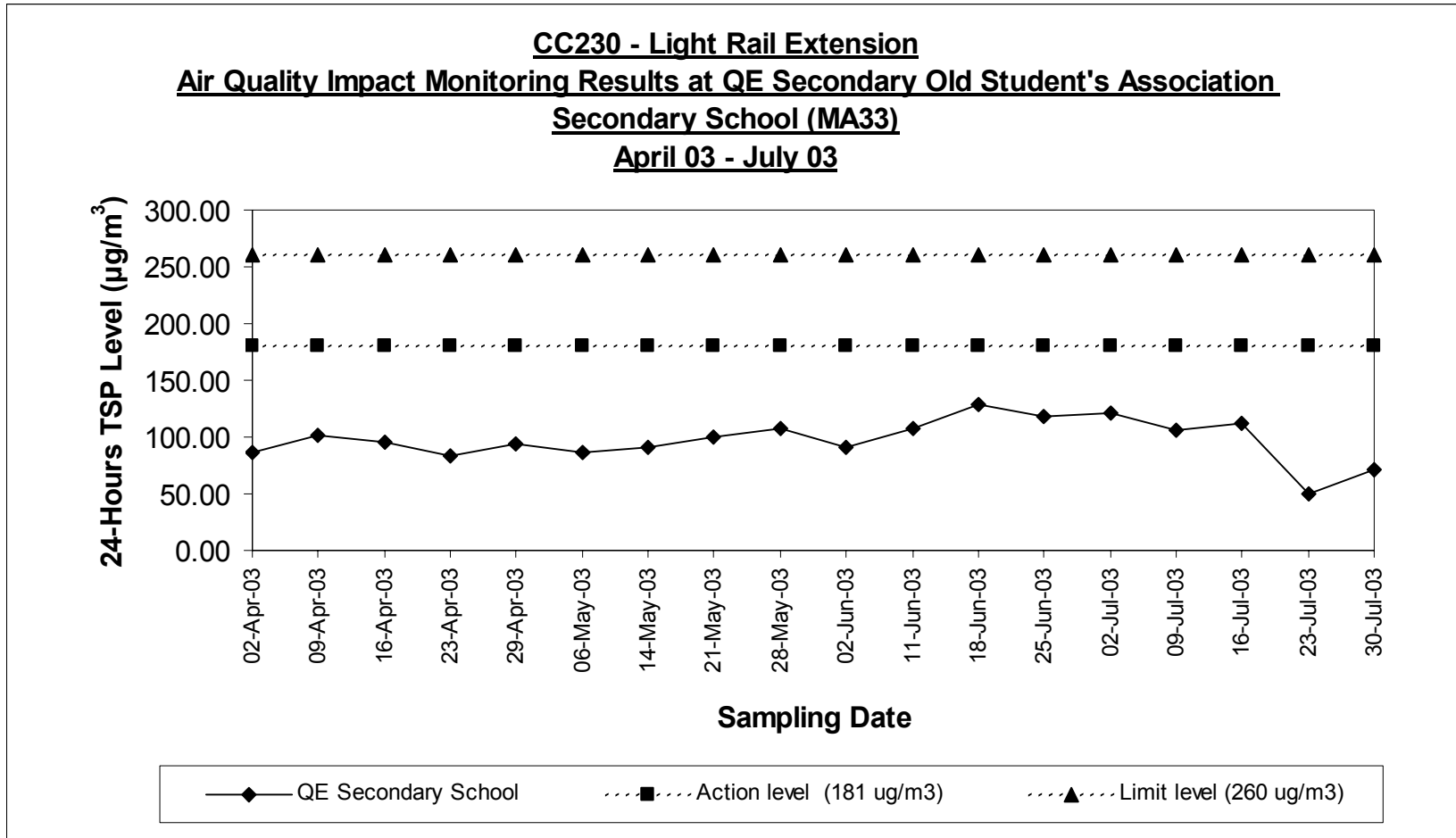


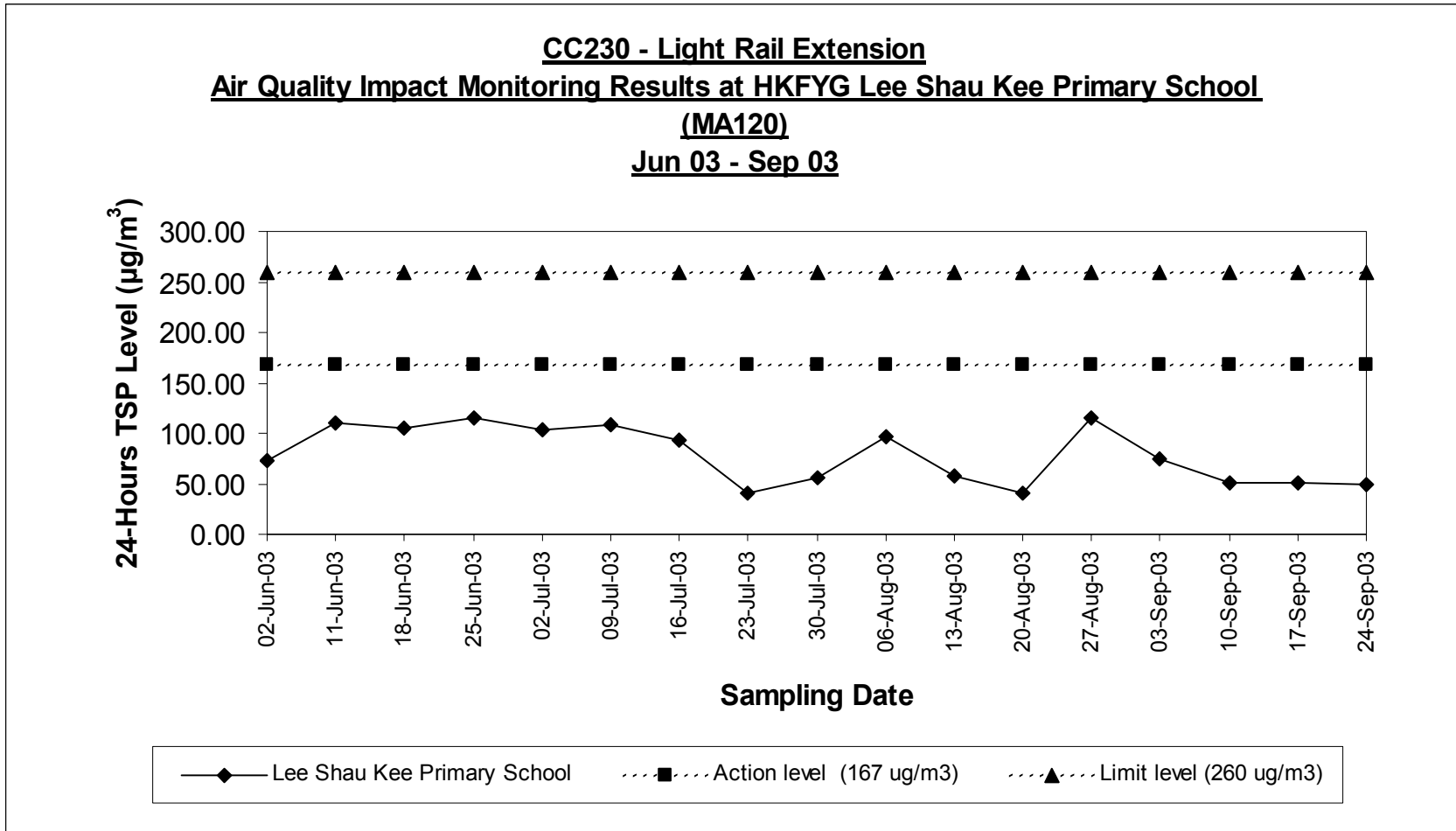


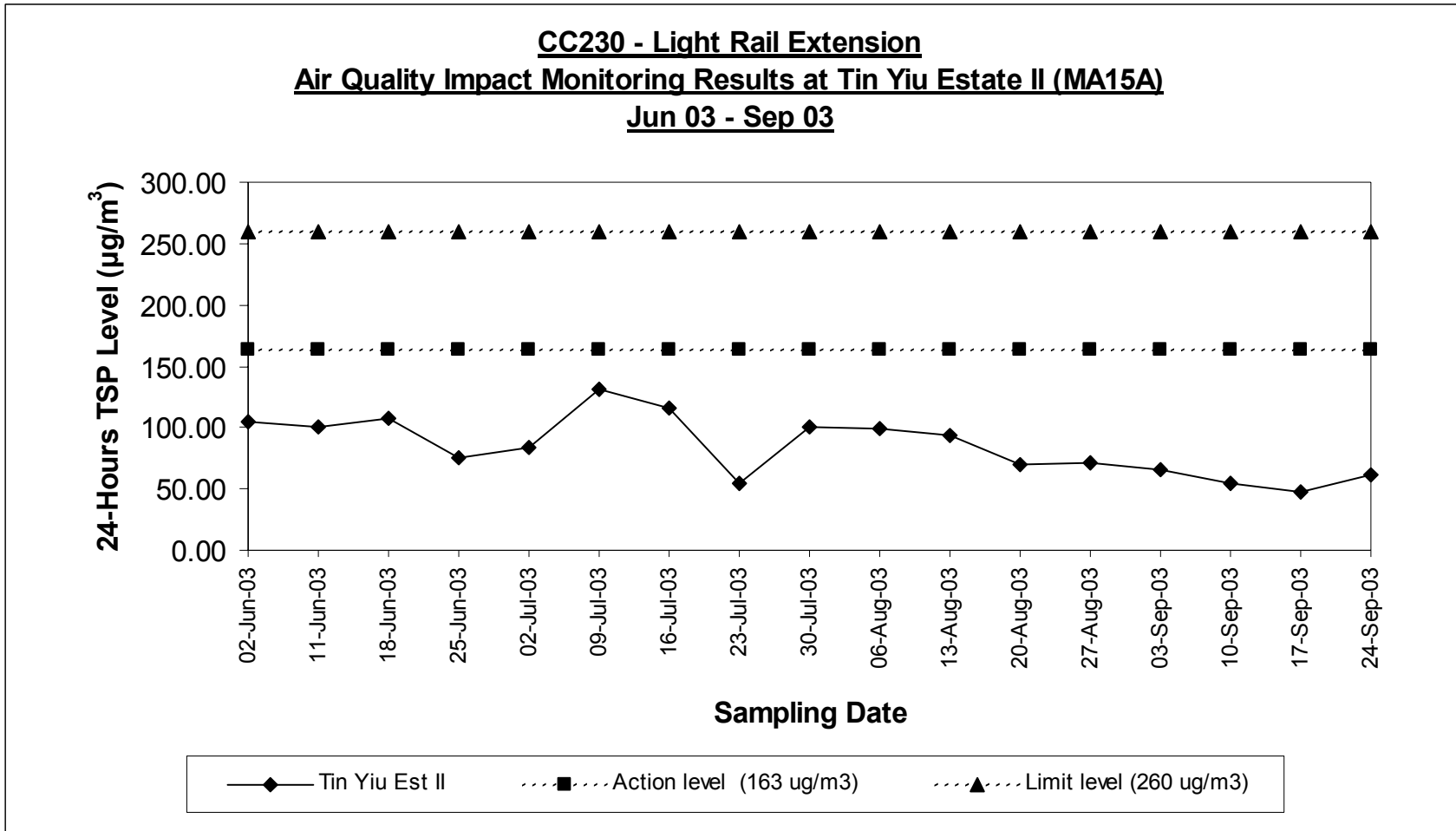


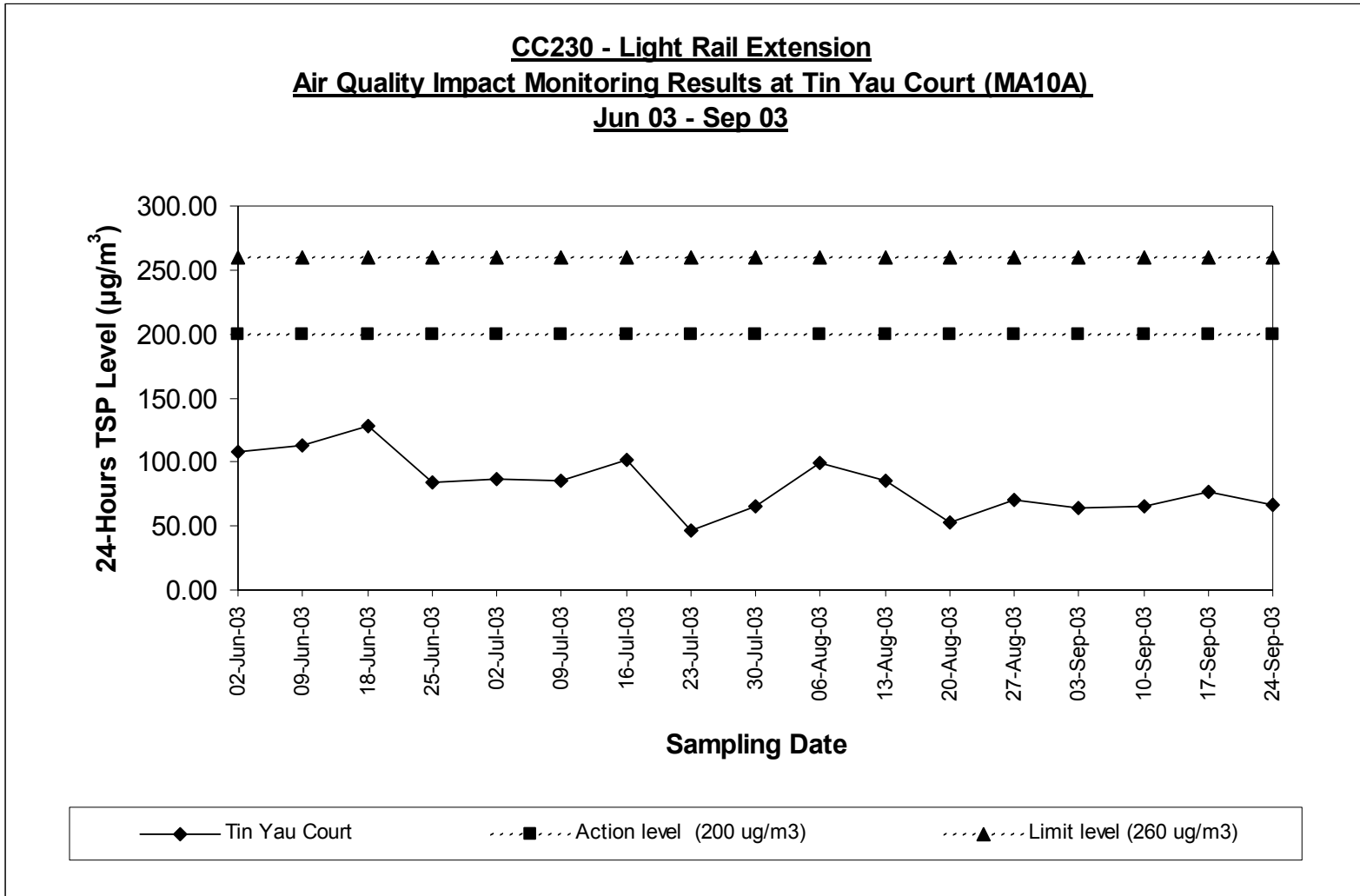




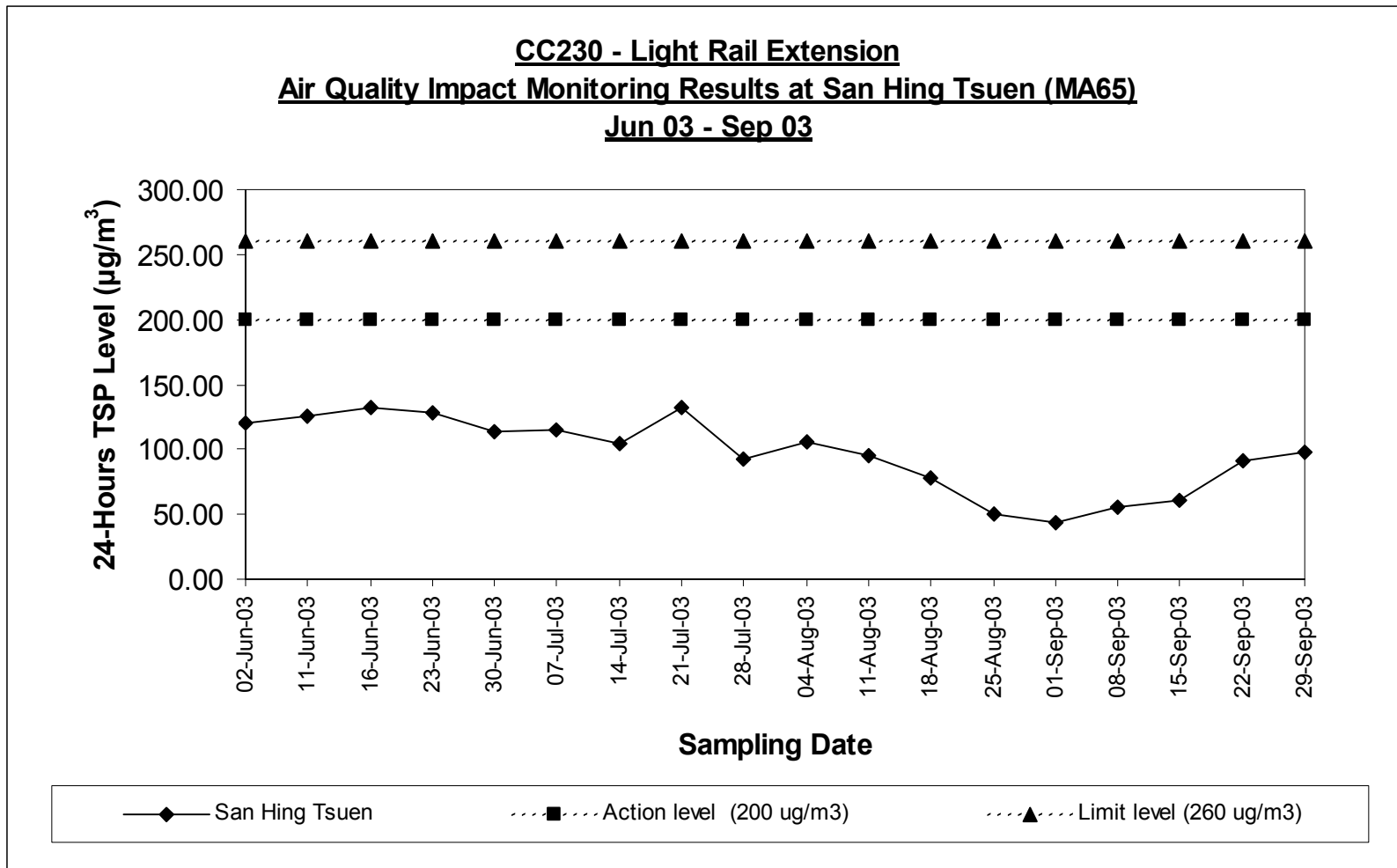


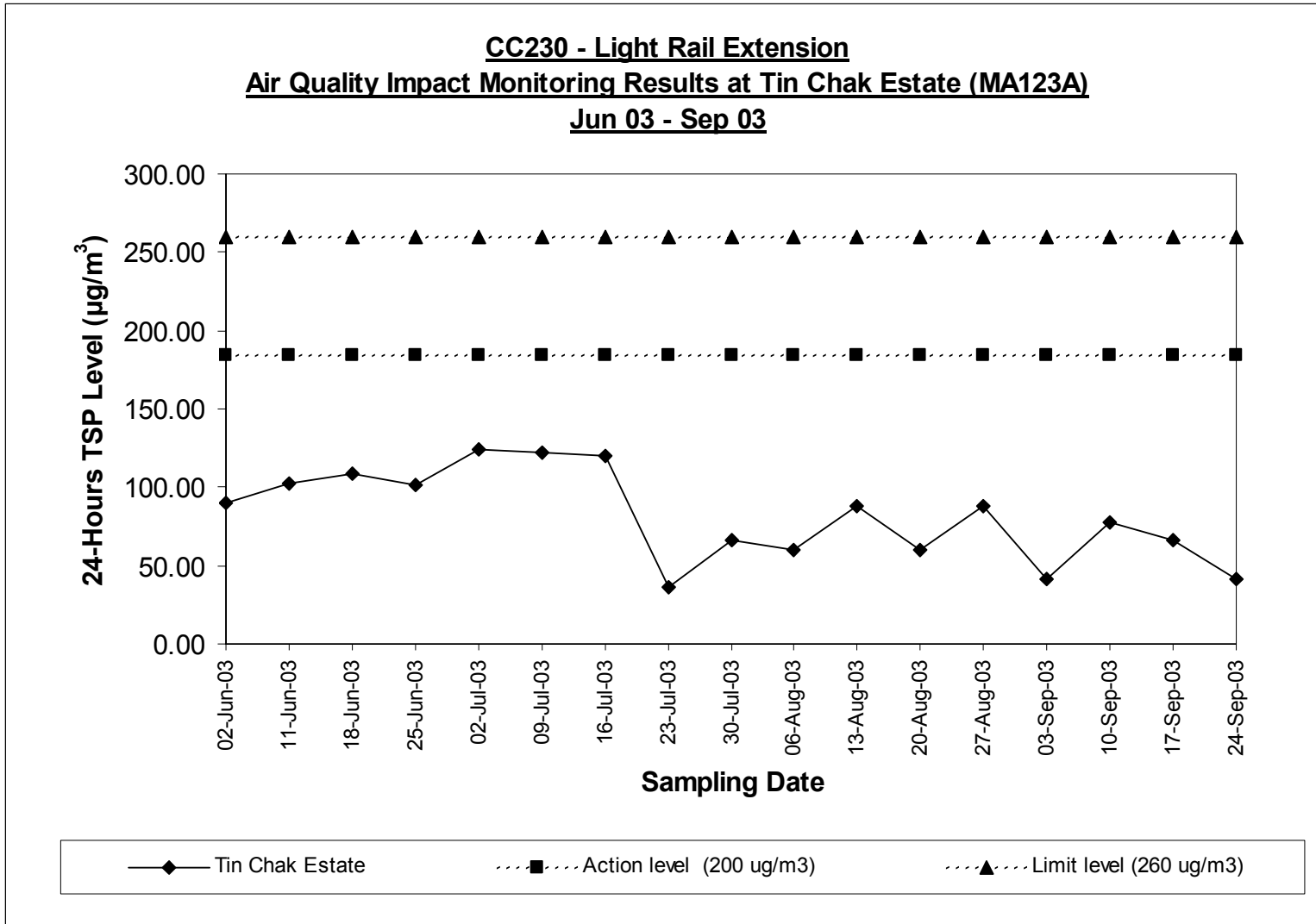


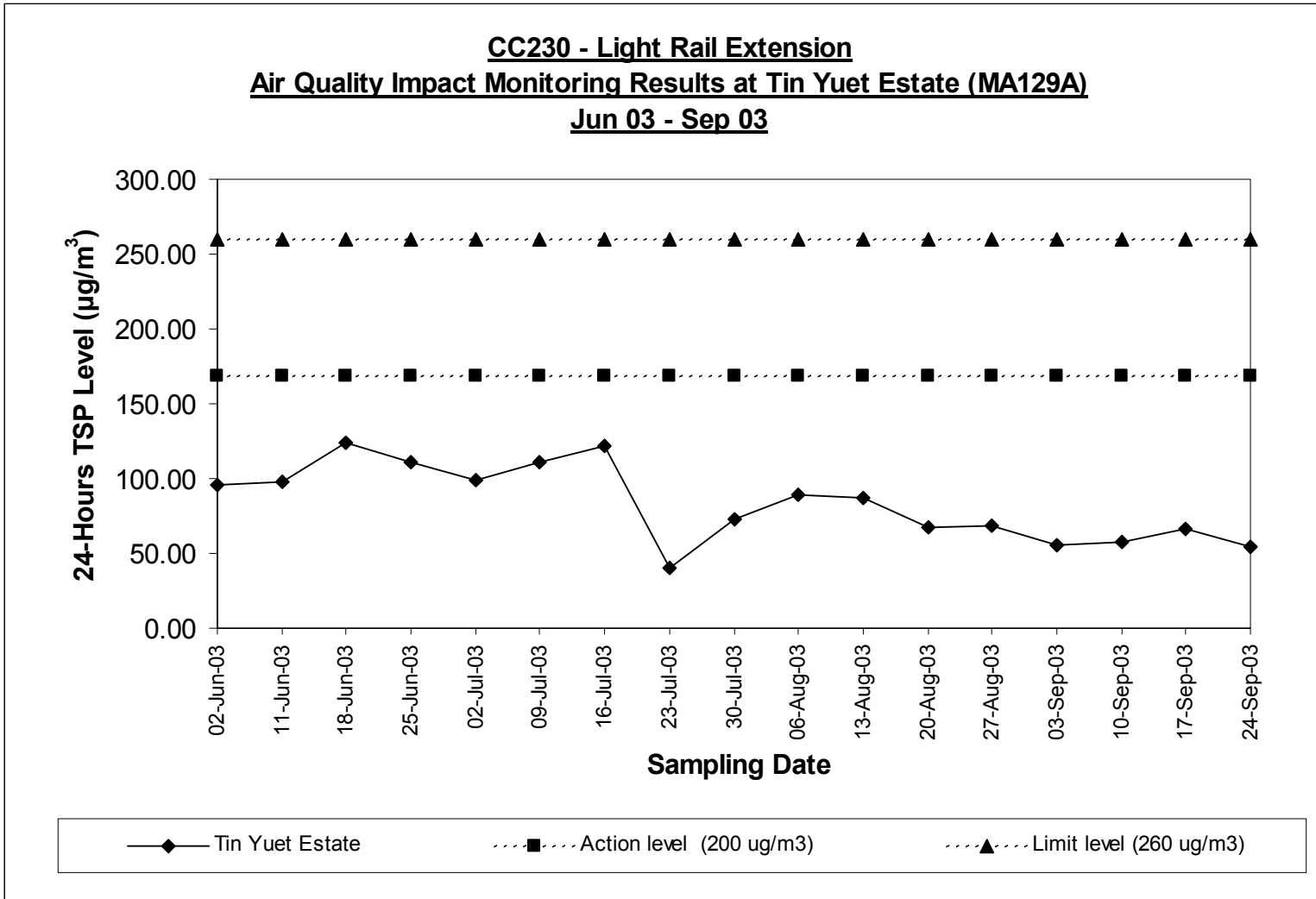












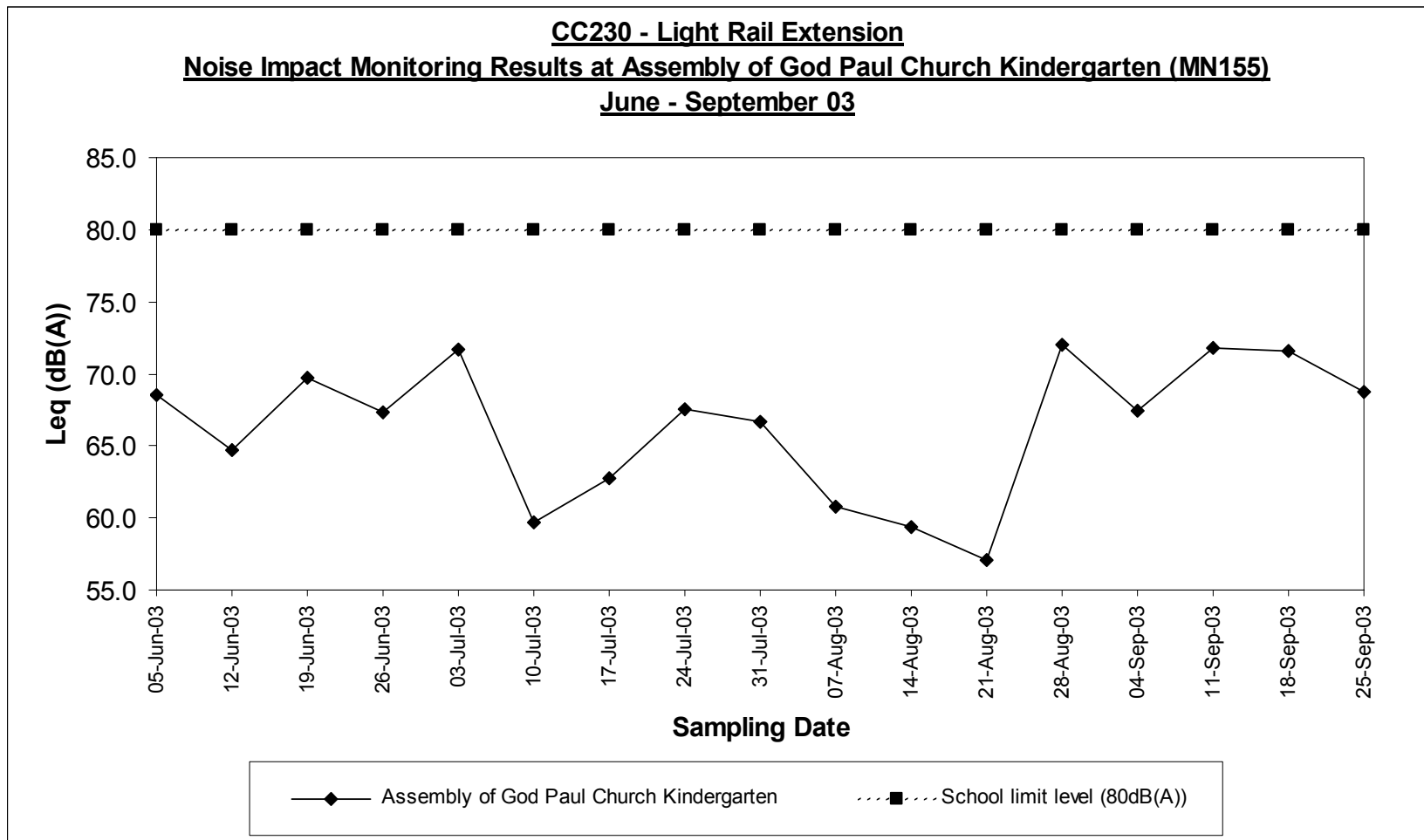
**APPENDIX B – SUMMARY OF NOISE IMPACT RESULTS**

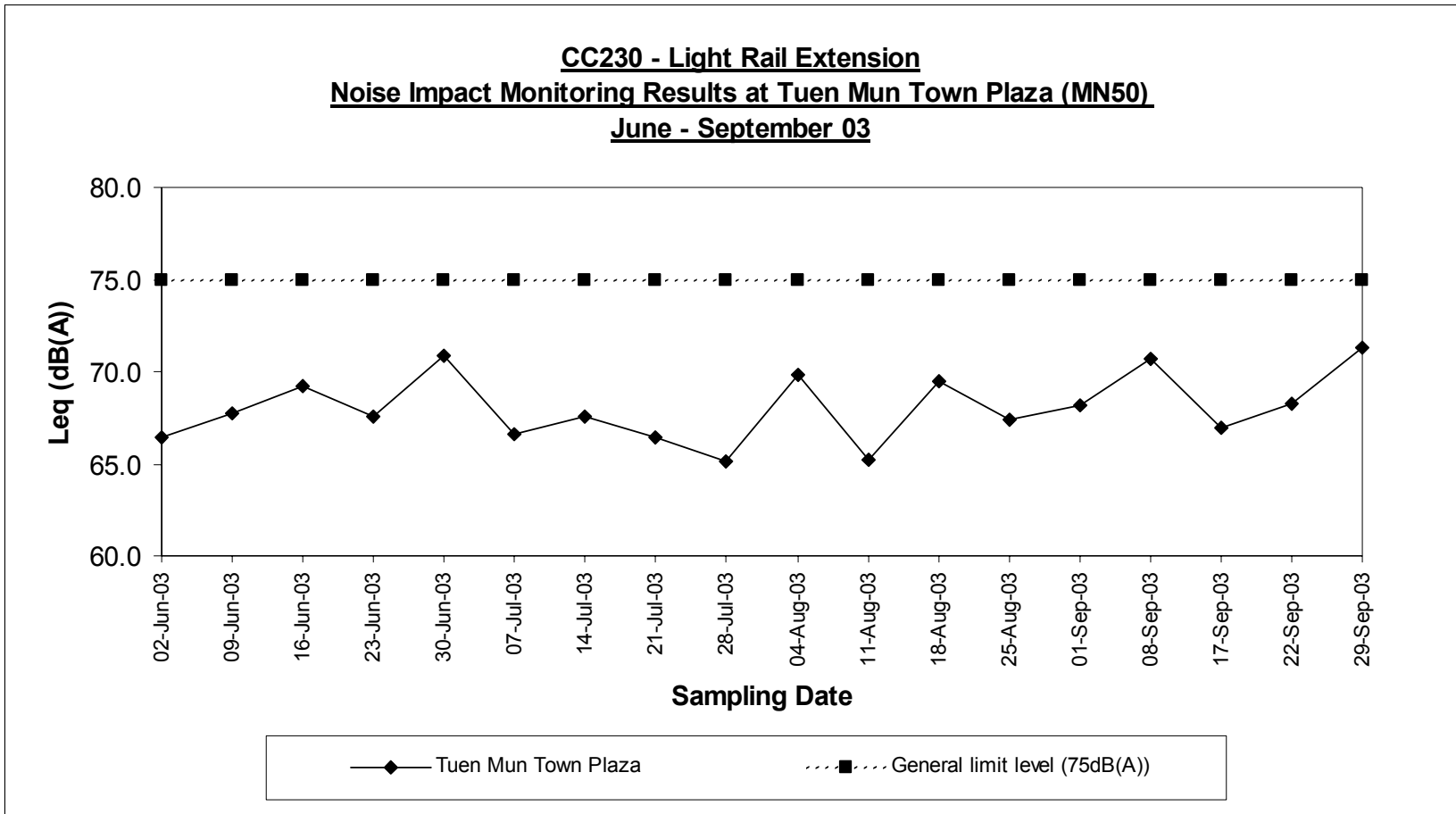
Location	Monitoring Date	Sampling Time	Weather Conditions	Wind Speed with direction (m/s)	L <sub>eq</sub> (30min) corrected level	L <sub>10</sub> (30min) corrected level	L <sub>90</sub> (30min) corrected level
Assembly of God Paul Church Kindergarten	04-Sep-03	14:44	cloudy	2.5E	67.4	69.2	61.5
	11-Sep-03	13:11	Fine	1.0W	71.8	73.6	67.0
	18-Sep-03	15:51	Sunny	0.5W	71.6	74.1	68.4
	25-Sep-03	16:52	Sunny	0.5E	68.7	69.9	61.9
Tuen Mun Town Plaza (MN50)	01-Sep-03	14:00	Sunny	2.0S	68.2	70.2	63.9
	08-Sep-03	15:15	Fine	1.5S	70.7	73.4	65.7
	17-Sep-03	16:22	Fine	1.0W	67.0	69.4	63.5
	22-Sep-03	16:17	Fine	3.0NE	68.3	70.3	62.9
	29-Sep-03	14:28	Fine	2.5E	71.3	73.4	65.7
Kam Wah Garden (MN48)	01-Sep-03	11:22	Sunny	1.5S	69.7	72.5	64.7
	08-Sep-03	11:07	Fine	0.5S	70.9	73.0	67.1
	16-Sep-03	17:54	Fine	1.5W	70.2	72.9	66.6
	22-Sep-03	16:20	cloudy	2.5NE	70.9	74.8	66.9
	29-Sep-03	11:18	Fine	2.5E	72.5	74.9	68.7
HKFYG Lee Shau Kee Primary School (MN120)*	04-Sep-03	13:51	Cloudy	3.0E	68.9	71.0	64.2
	11-Sep-03	13:50	Fine	1.5W	70.7	73.3	65.2
	18-Sep-03	13:48	Sunny	1.0W	69.5	72.2	60.8
	25-Sep-03	13:57	Sunny	1.0E	65.7	68.3	61.4
QE School Old Student's Association Secondary School (MN33)*	04-Sep-03	15:40	Cloudy	3.5E	72.5	74.4	69.8
	11-Sep-03	14:29	Fine	0.5W	70.4	71.5	64.5
	18-Sep-03	13:04	Sunny	2.0W	68.8	70.6	64.2
	25-Sep-03	15:00	Sunny	1.5E	66.6	70.0	63.8
Tin Yiu Estate II (MN15A)	04-Sep-03	09:44	Cloudy	2.5E	67.2	68.3	61.8
	11-Sep-03	09:52	Fine	2.5W	61.5	63.7	57.7
	18-Sep-03	10:19	Sunny	1.5W	61.3	64.1	58.0
	25-Sep-03	08:51	Sunny	3.0NE	61.4	63.1	57.7

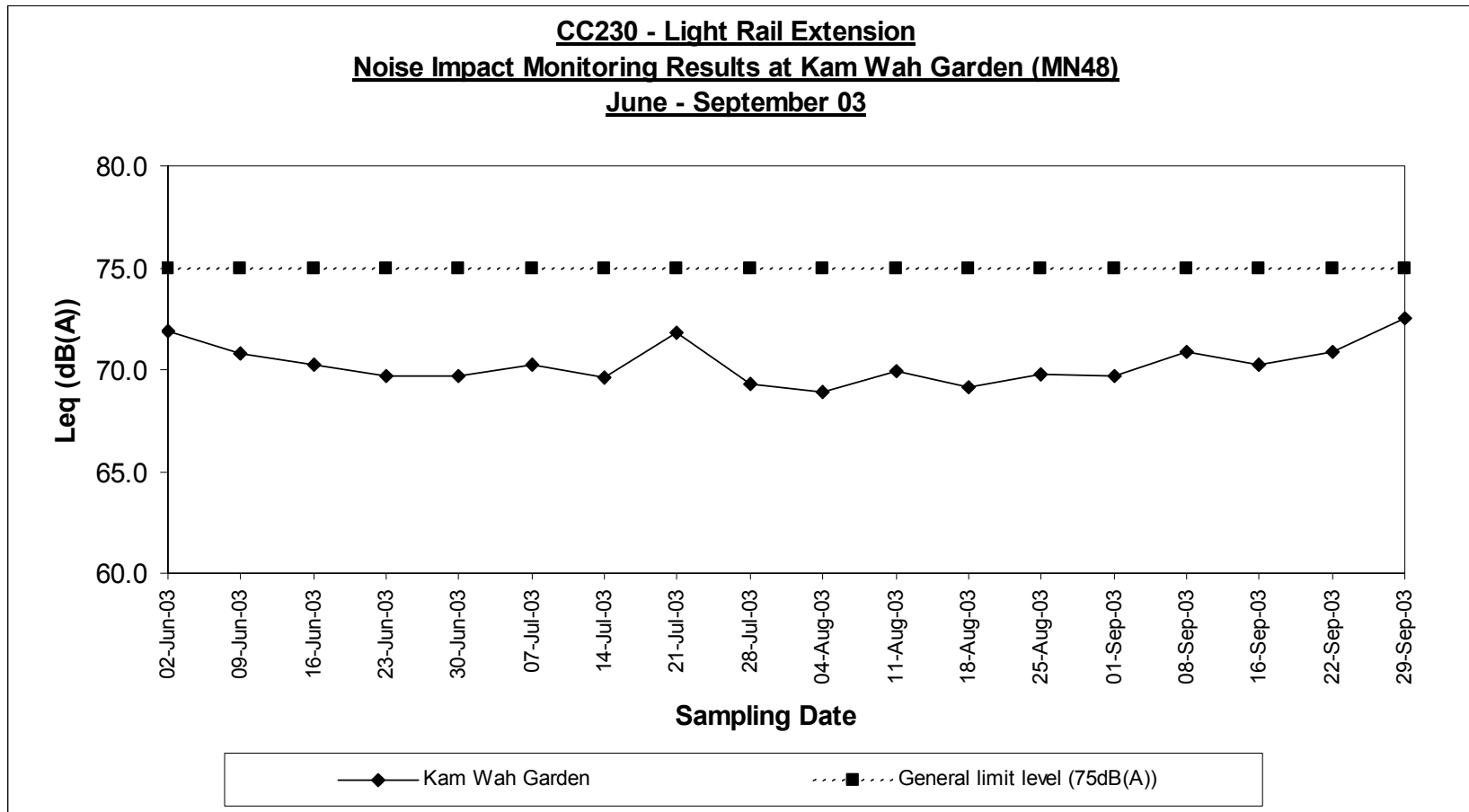
Location	Monitoring Date	Sampling Time	Weather Conditions	Wind Speed with direction (m/s)	L <sub>eq</sub> (30min) corrected level	L <sub>10</sub> (30min) corrected level	L <sub>90</sub> (30min) corrected level
Tin Yau Court (MN10A)*	04-Sep-03	10:21	Cloudy	2.0E	68.6	70.5	64.8
	11-Sep-03	09:09	Fine	1.0W	66.6	68.5	61.9
	18-Sep-03	09:43	Sunny	1.0W	67.3	70.1	63.0
	25-Sep-03	09:29	Sunny	2.5NE	70.5	73.5	64.9
TWGH's Kwok Yat Wai College (MN6)*	04-Sep-03	08:59	Cloudy	2.5E	66.3	68.9	62.0
	11-Sep-03	10:39	Fine	0.5W	64.5	66.4	60.8
	18-Sep-03	11:02	Sunny	0.5W	65	67.5	61.7
	25-Sep-03	10:14	Sunny	1.5NE	65.7	68.0	61.7
San Hing Tsuen (MN65)*	02-Sep-03	16:45	Cloudy	2.5W	67.5	70.2	60.8
	09-Sep-03	10:12	Sunny	2.0W	71.4	74.2	67.8
	16-Sep-03	09:52	Cloudy	2.5W	71.8	75.4	69.3
	23-Sep-03	11:21	Fine	2.5E	71.6	73.9	59.2
	30-Sep-03	16:21	Fine	2.0E	68.5	72.2	65.2
Tin Chak Estate (MN123A)*	04-Sep-03	17:33	Cloudy	3.0E	59.0	60.0	54.8
	11-Sep-03	15:57	Fine	2.0W	60.7	61.8	56.3
	18-Sep-03	15:13	Sunny	2.5W	67.8	71.8	61.7
	25-Sep-03	14:42	Sunny	1.5E	62.1	65.0	57.2
Tin Yuet Estate (MN129A)*	04-Sep-03	14:02	Cloudy	3.5E	62.7	64.6	60.5
	11-Sep-03	15:13	Fine	1.0W	62.2	65.4	56.6
	18-Sep-03	14:32	Sunny	2.5W	62.3	63.9	59.3
	25-Sep-03	13:05	Sunny	1.0E	63.2	65.3	58.6

Cell shaded with thicker border represents an exceedance of Limit Level

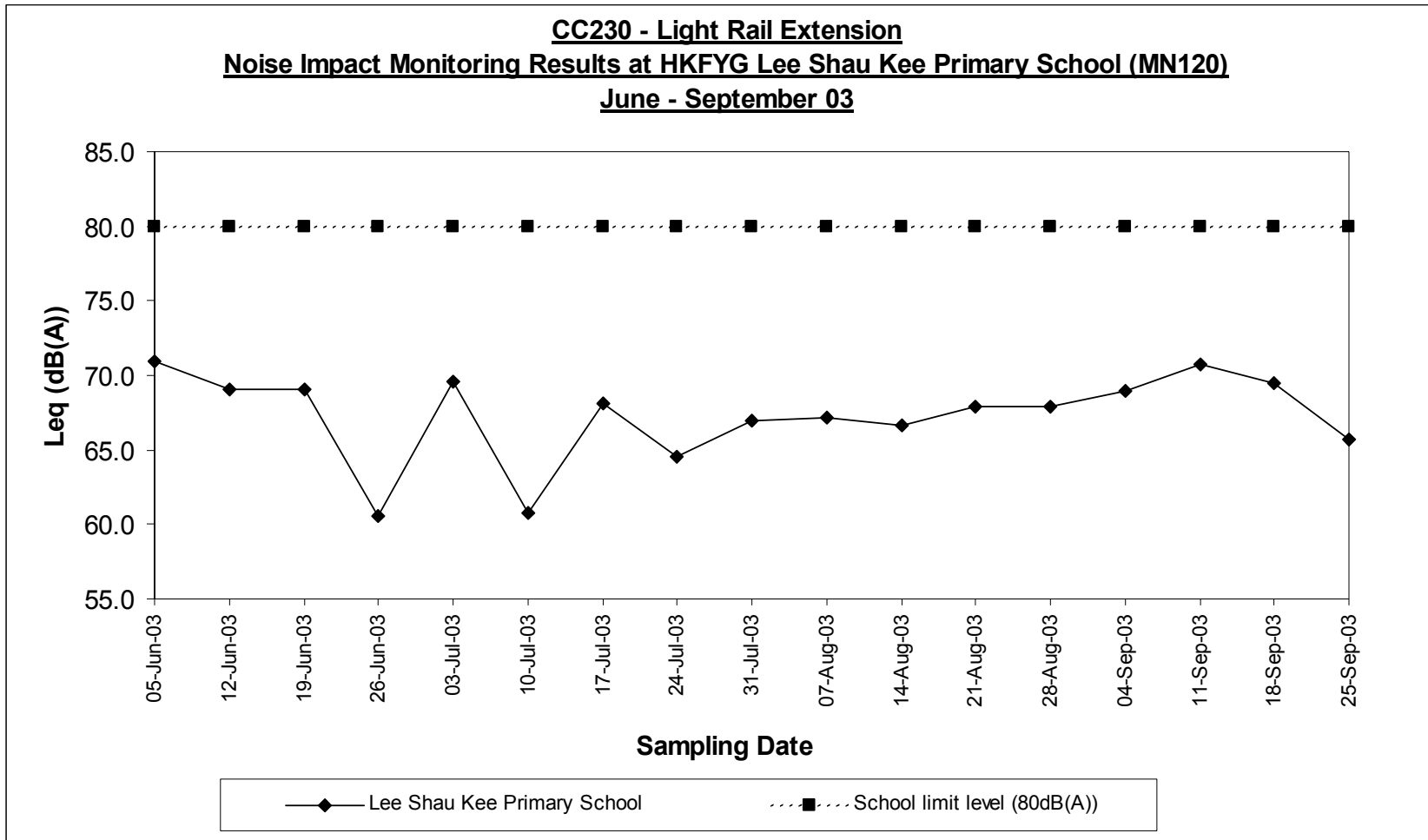
\* Measurement undertaken at free field condition and facade correction of 3dB(A) has been applied.

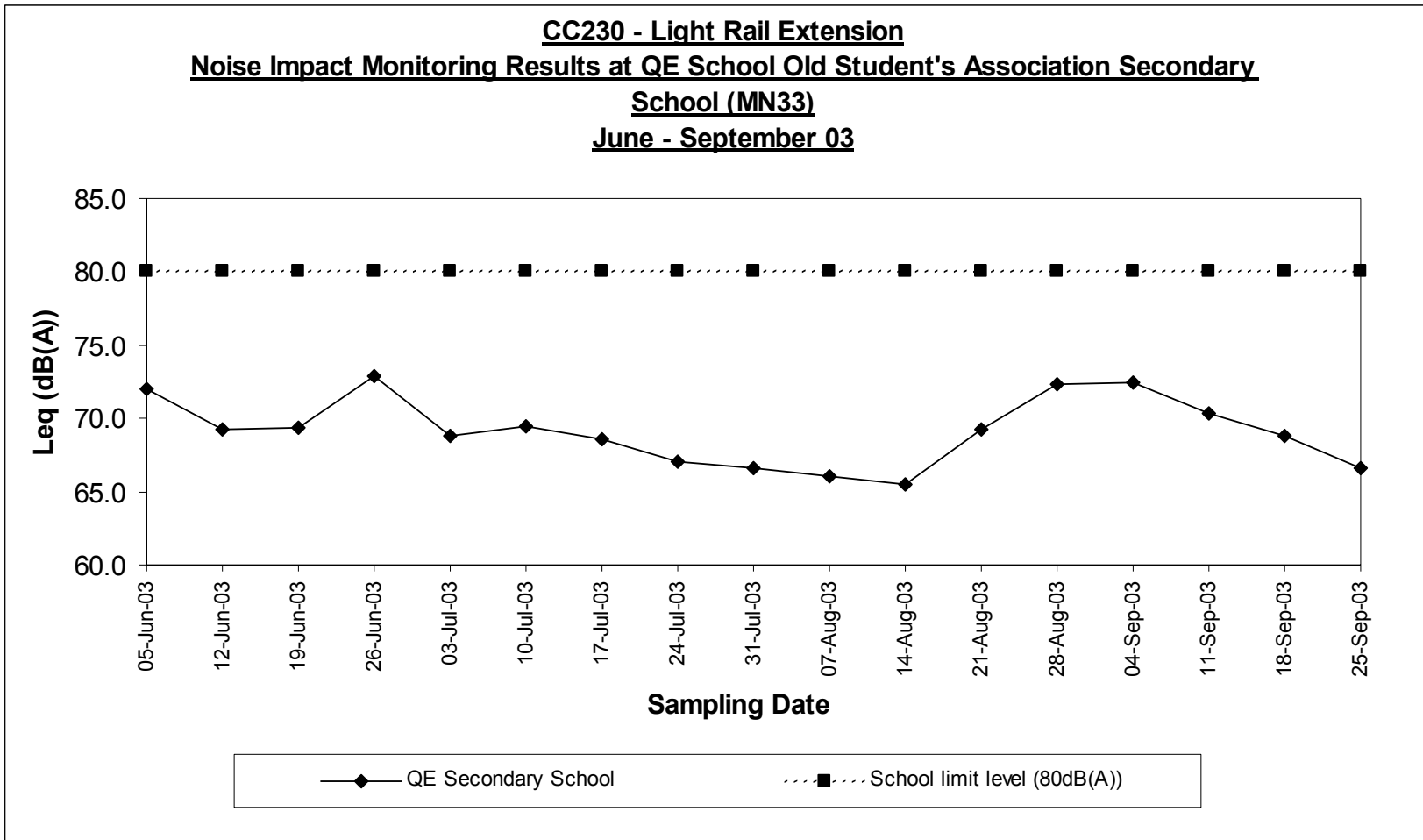


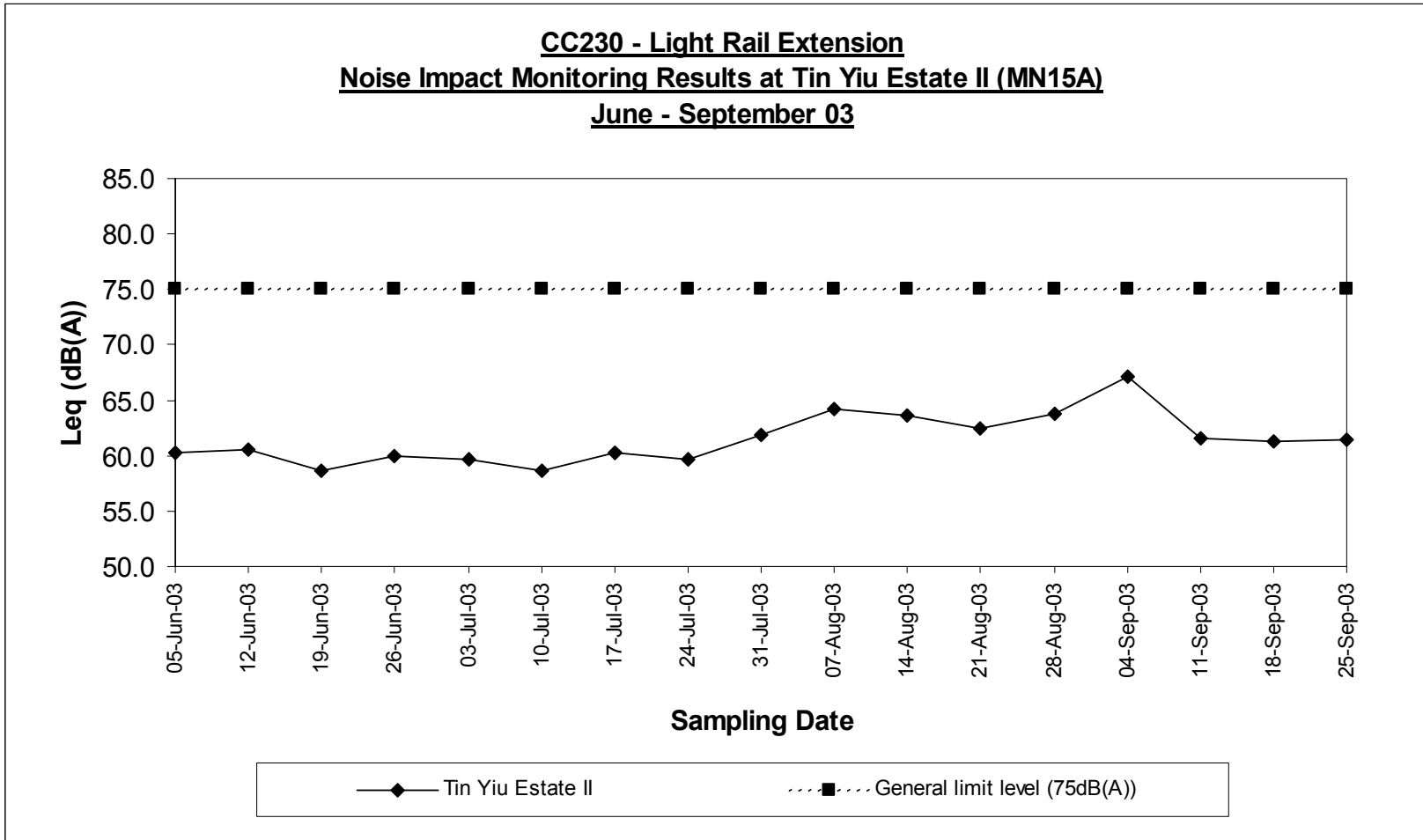


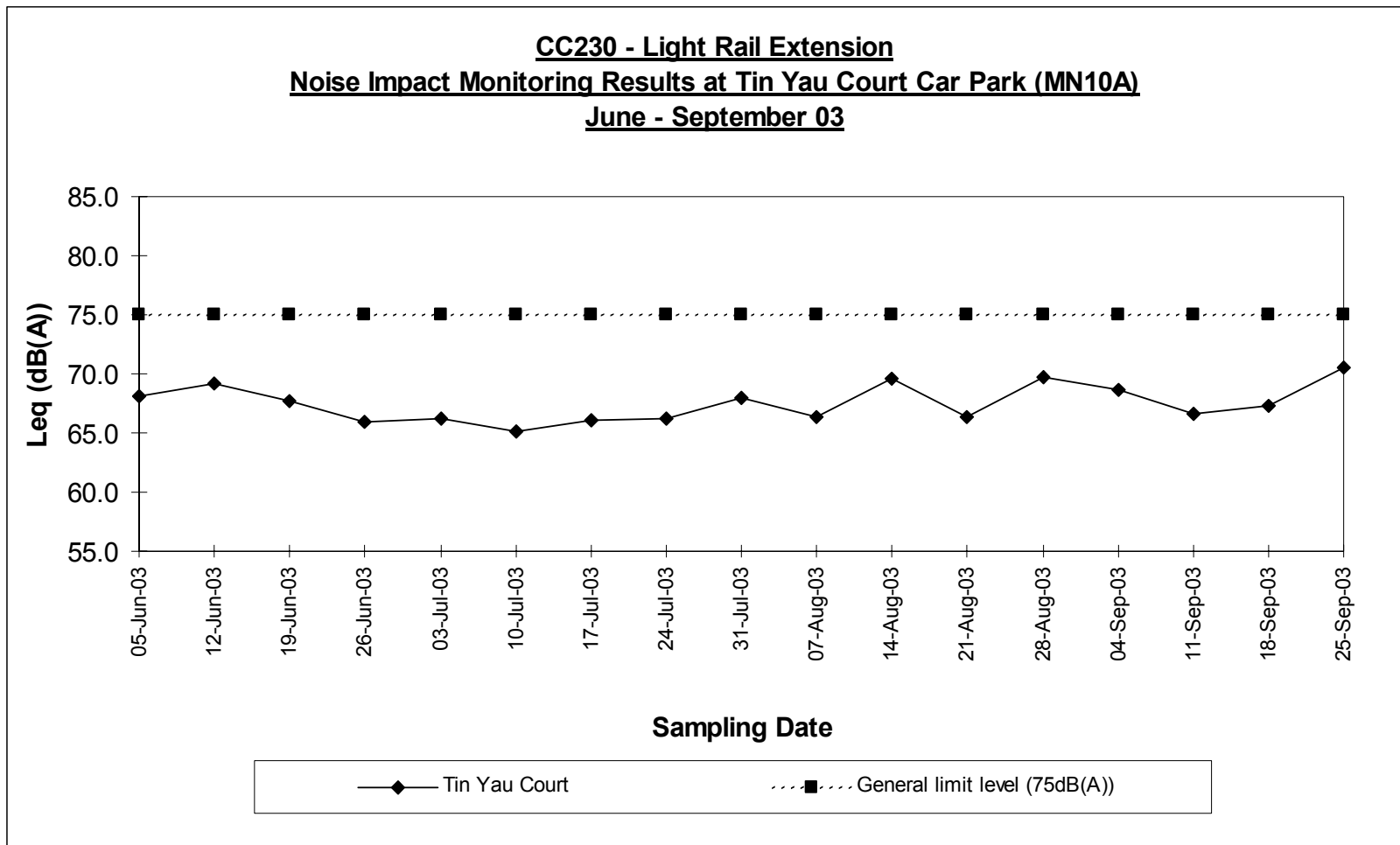




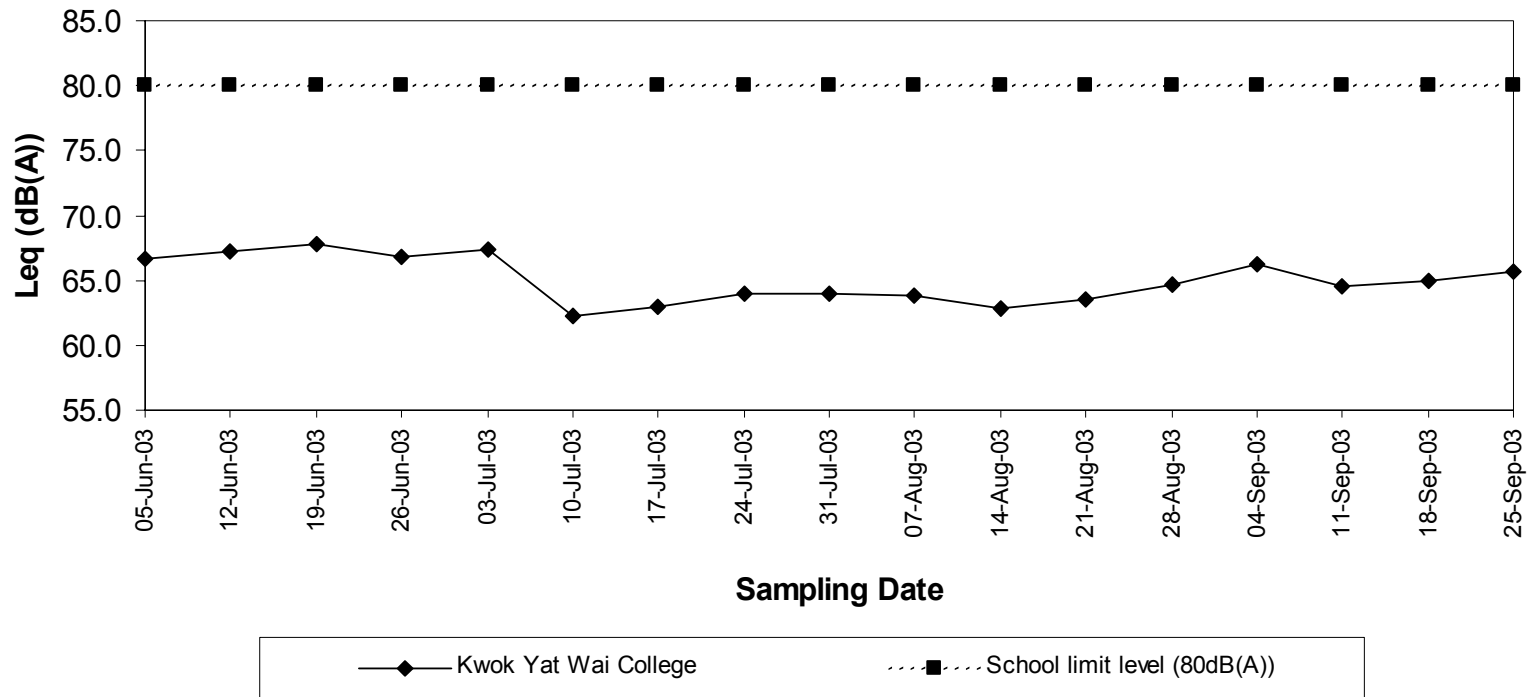


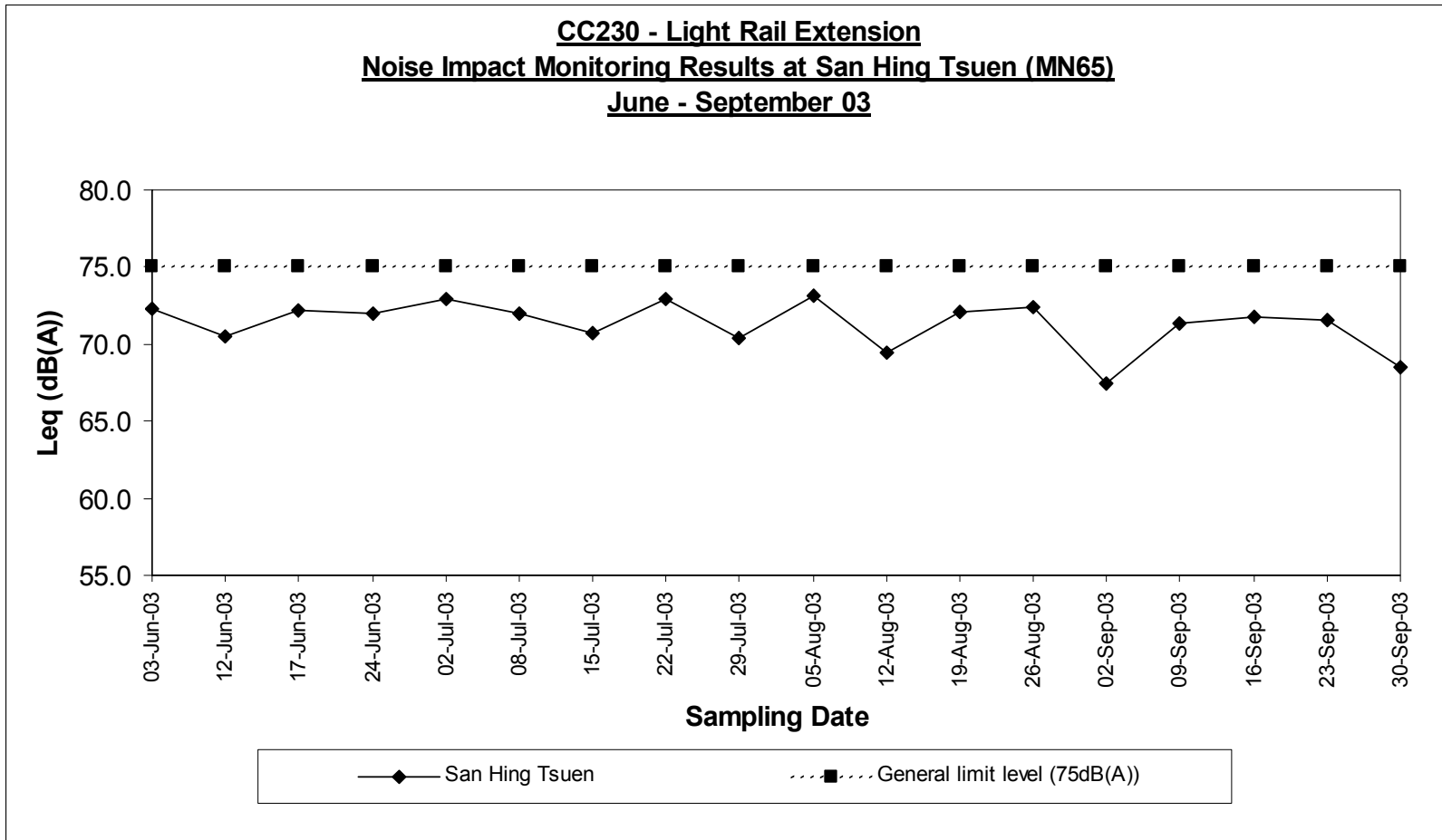


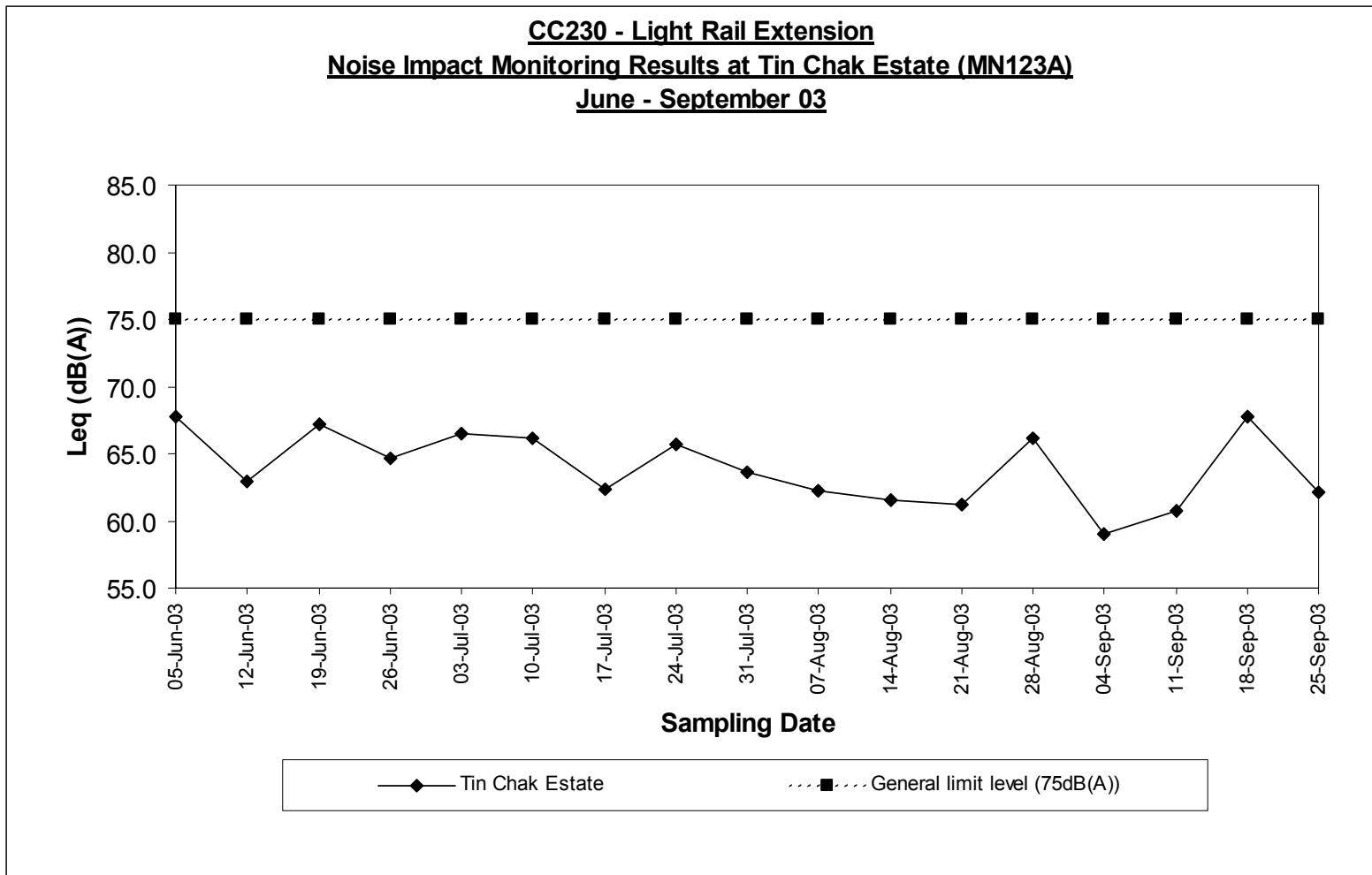


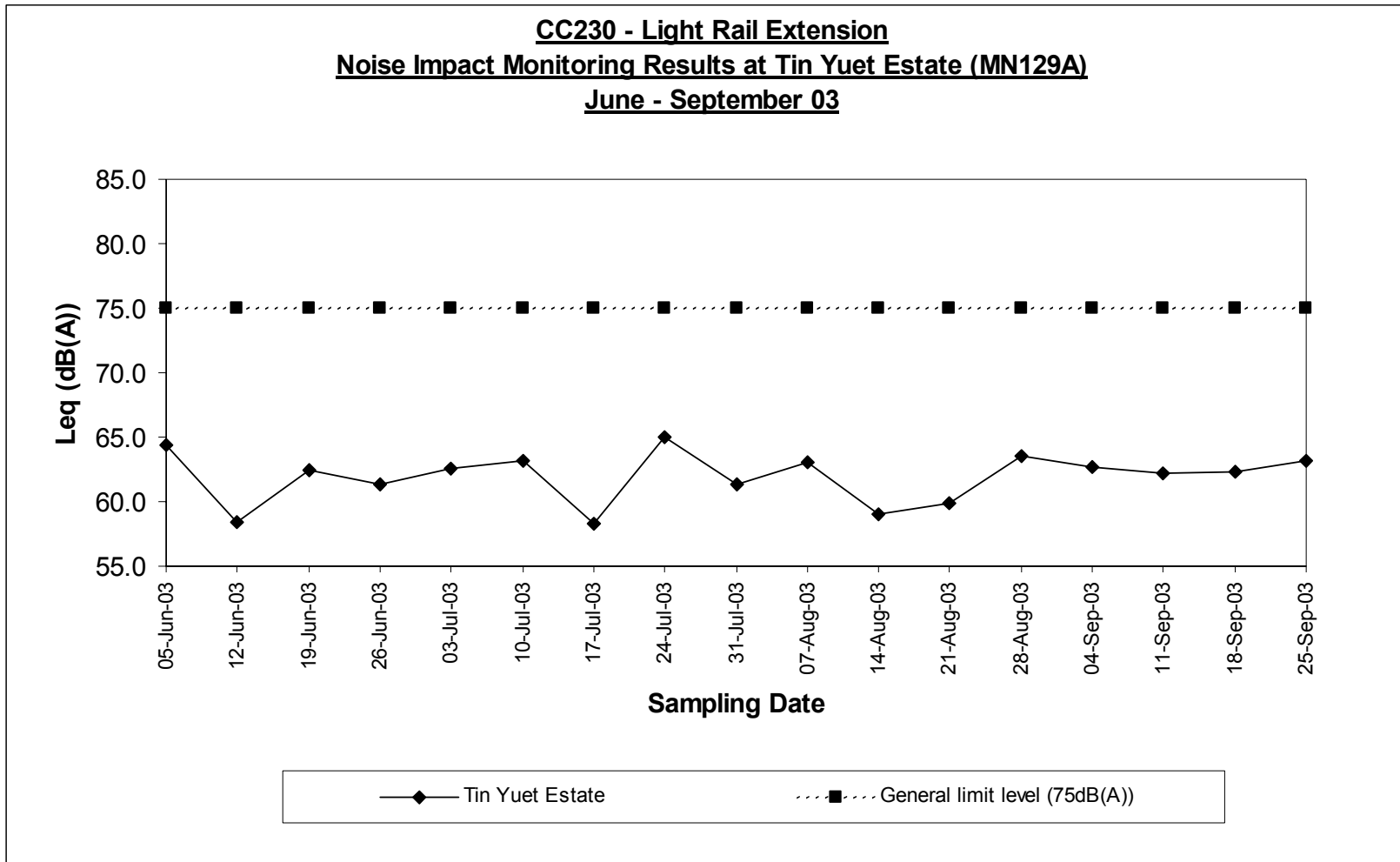


**CC230 - Light Rail Extension**  
**Noise Impact Monitoring Results at TWGH's Kwok Yat Wai College (MN6)**  
**June - September 03**



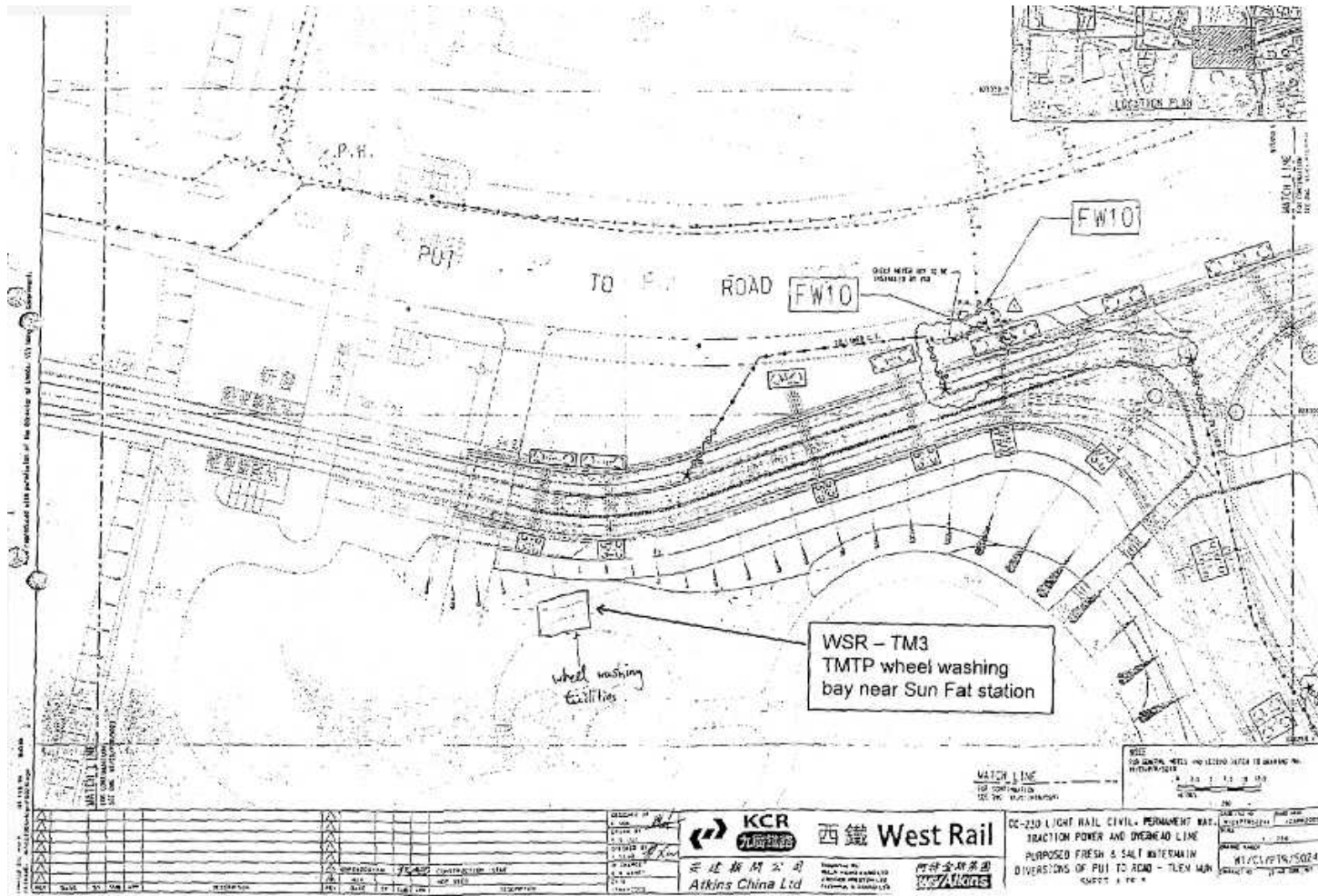




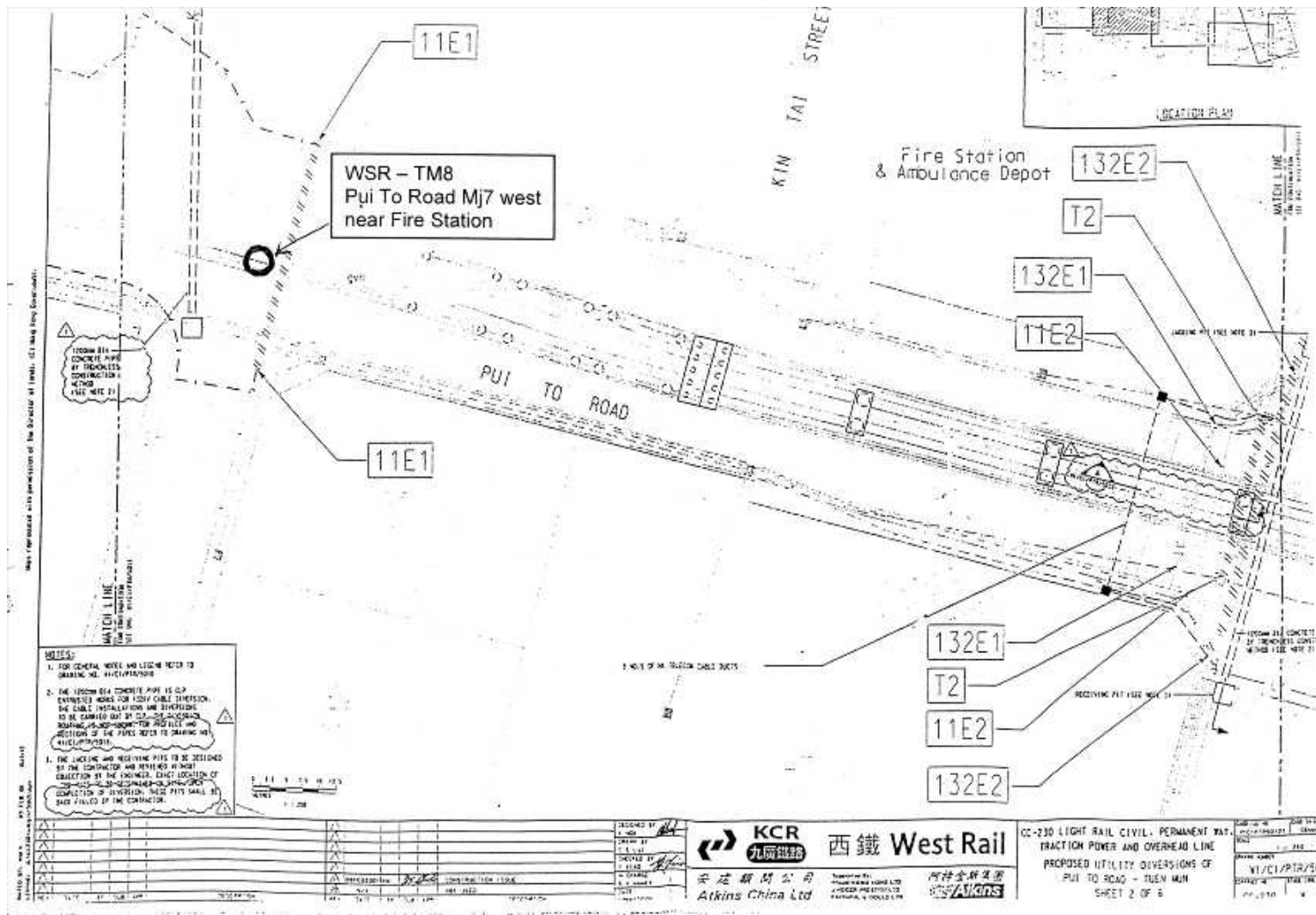




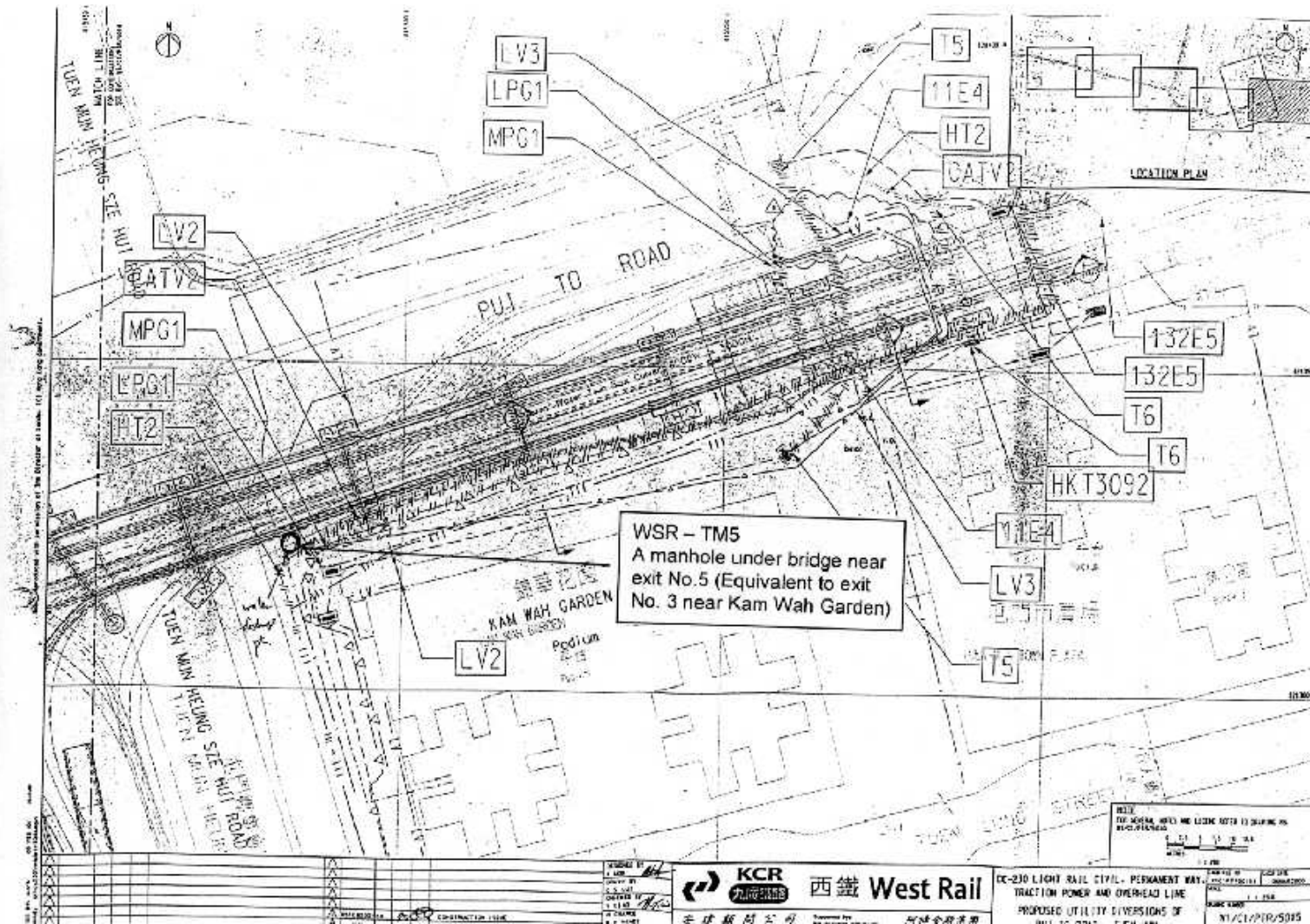
**APPENDIX C – EFFLUENT DISCHARGE SAMPLING LOCATION**

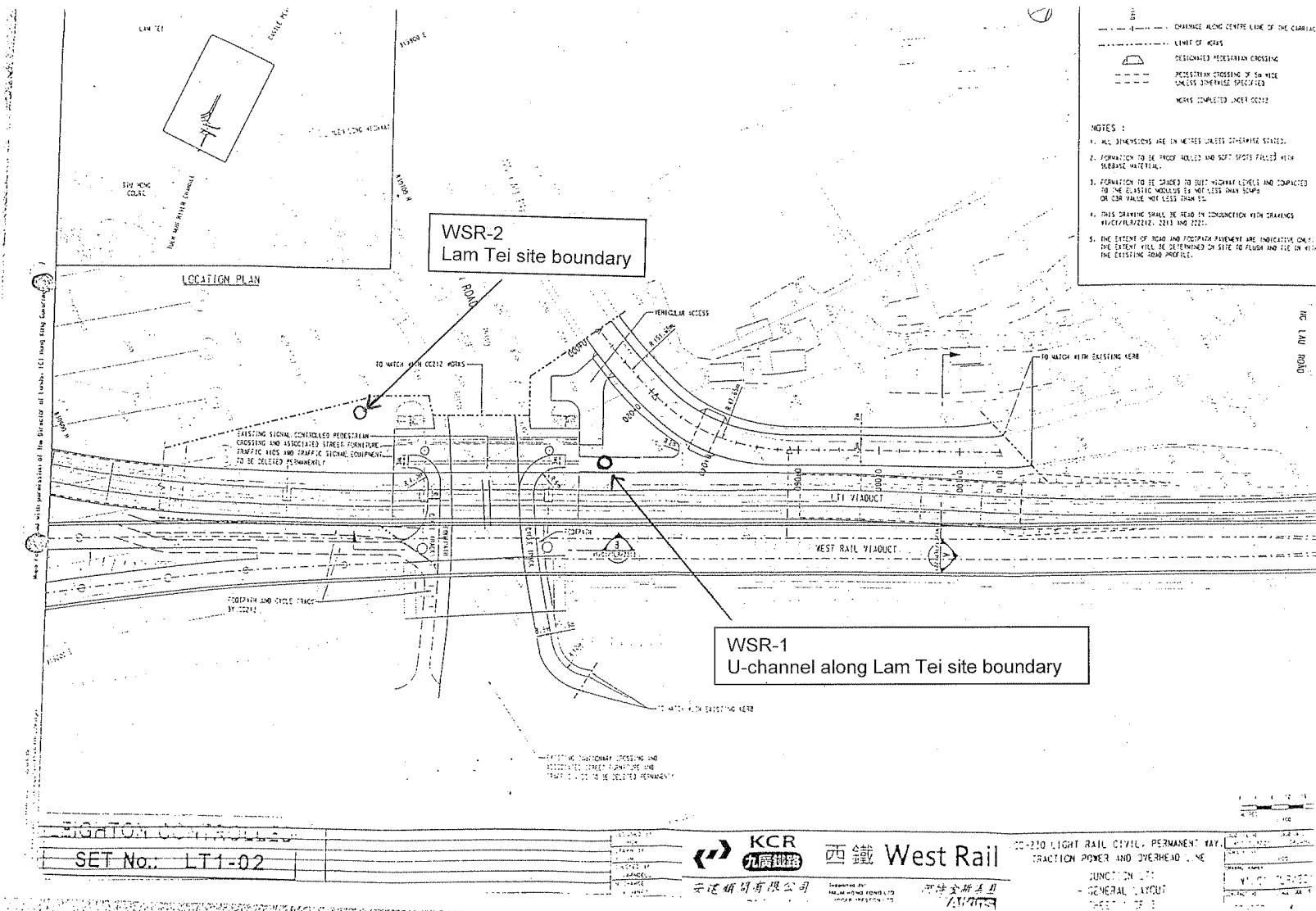




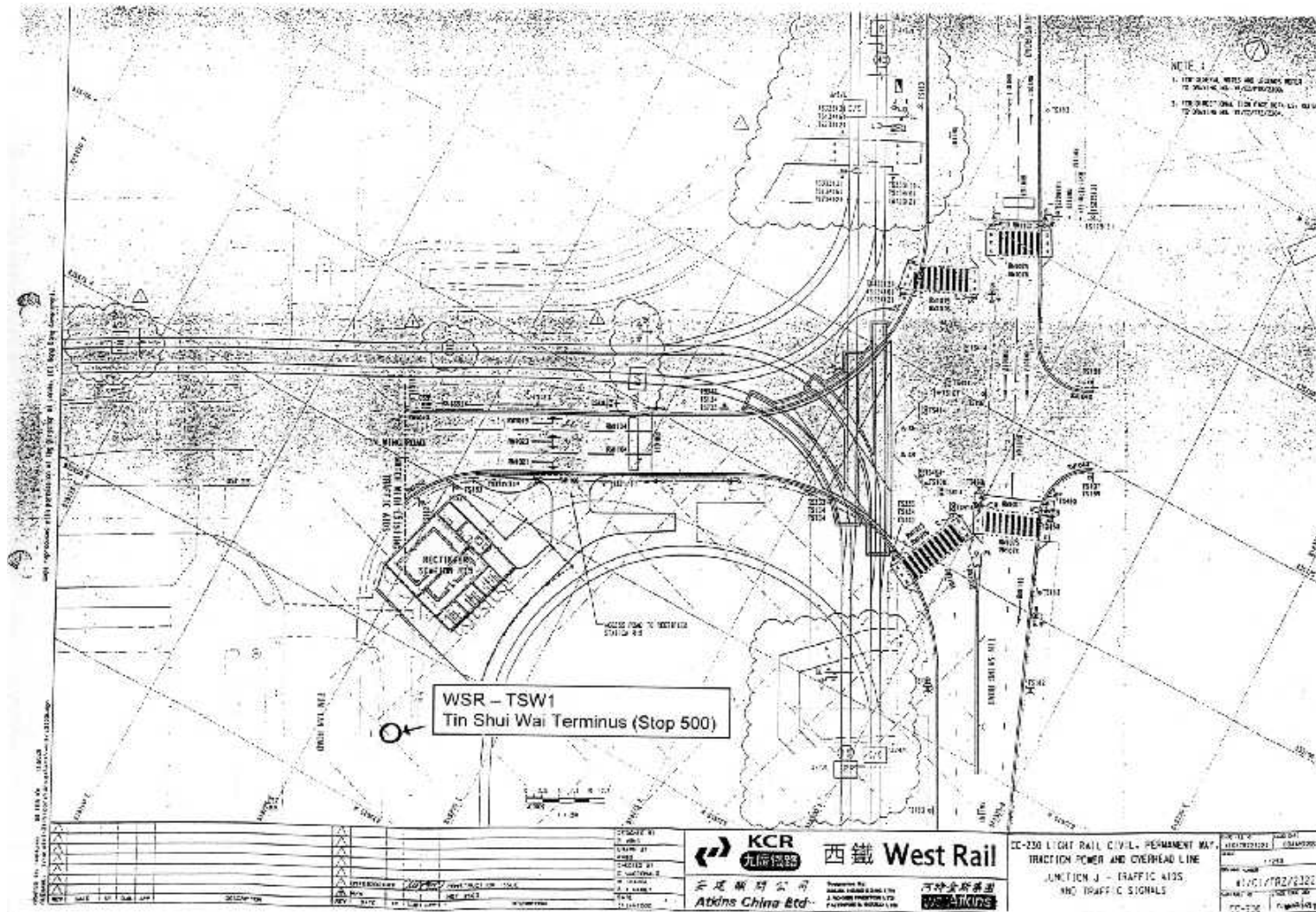


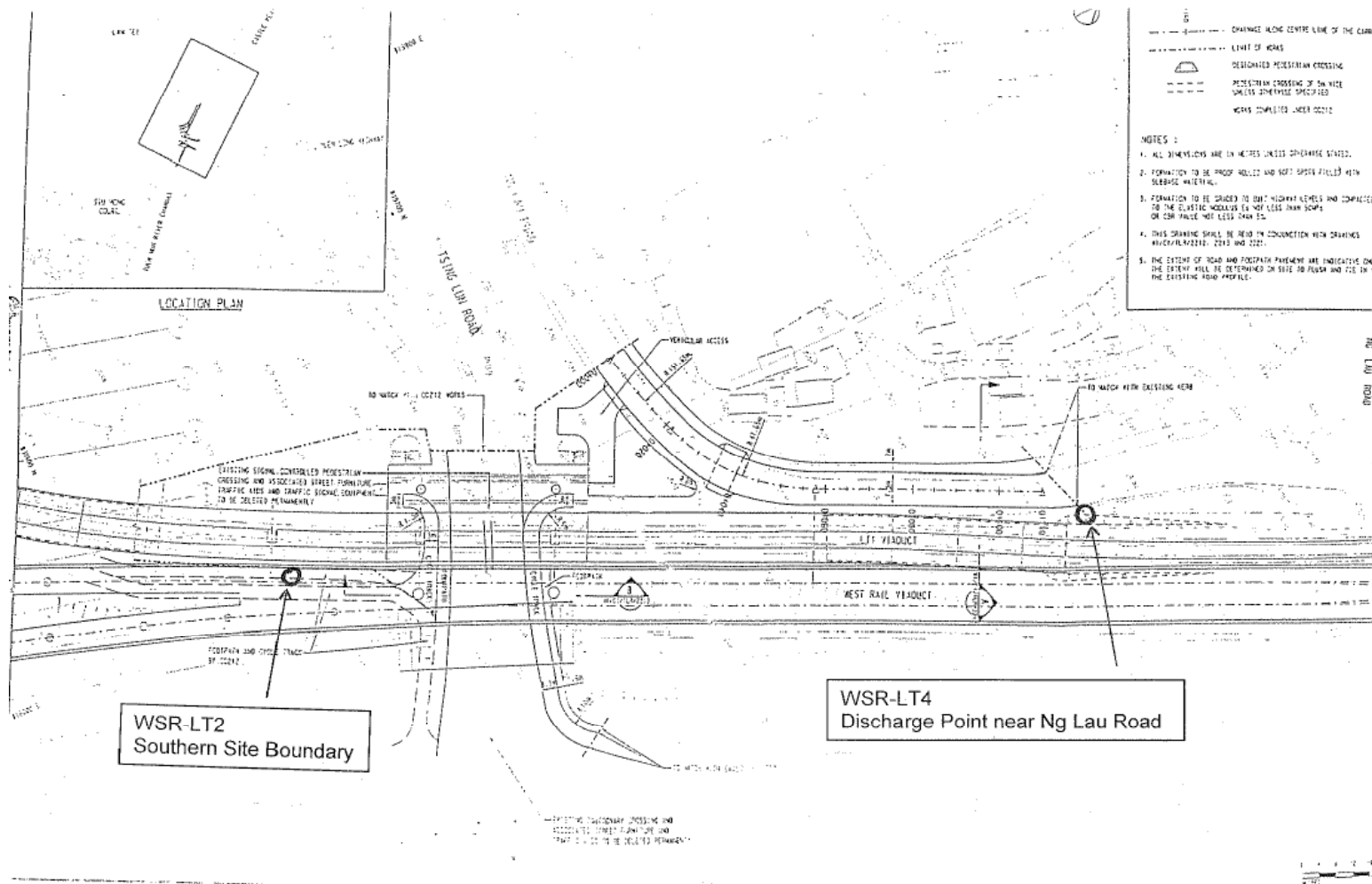




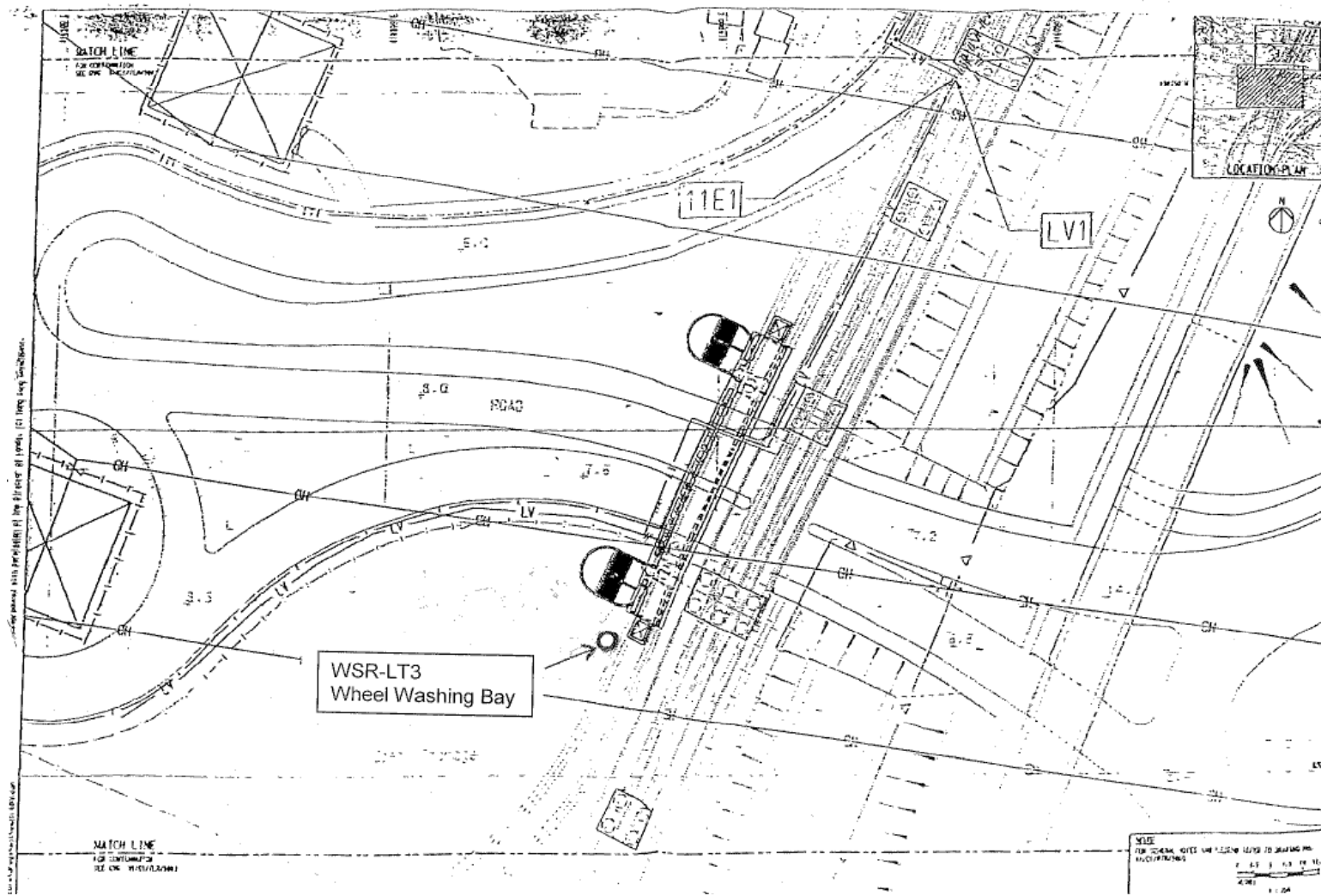












**APPENDIX D – ENVIRONMENTAL MITIGATION IMPLEMENTATION SCHEDULE (EMIS)**

**Part B – Mitigation, Operating Controls, Monitoring and Inspection**

1 Environmental Control Plan - Air Pollution Controls

Item No.	Mitigation, Operation Control, Monitoring and Inspection	Method and Acceptance Criteria	Verification Document	Frequency / Duration	Action By
1	Mitigation measure – Erect hoarding not less than 2.4m high from ground level along site boundary (except entrances) adjoining street, road and the like and areas accessible to the public (not applicable to hard-paved sites)	As per mitigation description	-	At all times	Site Supervision
2	Mitigation measure - Any excavated dusty materials or stockpile of dusty materials shall be covered entirely by impervious sheeting or sprayed with water so as to maintain the surface wet	As per mitigation description	-	At all times	Site Supervision
3	Mitigation measure – Establish vehicle washing facilities at each vehicle exit point from site except where site is completely hard paved	Constructed in accordance with drawings, where appropriate  Maintenance of facility in accordance with maintenance schedule	-	At all times whilst site exit point is in use	Site Supervision
4	Mitigation measure - Every stock of more than 20 bags of cement should be covered entirely by impervious sheeting or placed in an area sheltered on the top and the 3 sides;	As per mitigation description	-	At all times	Site Supervision
5	Mitigation measure - Cement, or any dusty materials collected by fabric filters or other air pollution control system or equipment should be disposed of in totally enclosed containers;	As per mitigation description	-	At all times	Site Supervision
6	Mitigation measure - Stockpiles of dusty materials shall be either covered entirely by impervious sheeting, placed in an area sheltered on the top and 3 sides; or sprayed with water so as to maintain the surface wet;	As per mitigation description	-	At all times	Site Supervision

1 Environmental Control Plan - Air Pollution Controls

Item No.	Mitigation, Operation Control, Monitoring and Inspection	Method and Acceptance Criteria	Verification Document	Frequency / Duration	Action By
7	Mitigation measure – Carry out regular watering using fine spray or water truck during dry conditions to reduce dust from exposed site surfaces and unpaved roads  Frequently water particular dusty construction areas close to the site boundary and sensitive receivers	As per mitigation description	-	At all times during dry conditions	Site Supervision
8	Mitigation measure – provide wheel wash bay with silt trap and/or high pressure water jet or similar cleaning facility at vehicle entry/exit points to work site areas (except where completely hard paved).	Wheel wash with silt trap and/or high pressure water jet to be provided and hard paving of road between road and exit	-	At all times during dry conditions	Site Supervision
9	Mitigation measure – water or spray haul roads and work areas, including such activities as concrete drilling and breaking, to suppress dust where necessary (e.g. during dry and windy conditions).	Water spray or similar method	-	At all times during dry conditions	Nominated staff
10	Mitigating measure – minimise number and size of stockpiles of dusty material and protect when necessary (e.g. windy condition).	As per mitigation description	-	At all times during dry conditions	Supervision staff
11	Operating control – ensure that trucks delivering ballast are cleaned before loading and material on trucks is covered during transport.	Remove residue and fine materials that could cause dust, use tarpaulin or similar to cover trucks	-	During handling and laying of ballast	Supervision staff
12	Operating control – check ballast material when received on site to ensure that it is in a dampened state.	In accordance with Receipt Inspection Procedure – QMP 10.1	-	During handling and laying of ballast	Supervision staff
13	Operating control – during ballast profiling, spray water on to material to minimise dust generation.	Prepare and follow Method Statement for laying ballast	-	During handling and laying of ballast	Supervision staff
14	Operating control - cover trucks carrying dusty materials with tarpaulin or similar when transporting materials off site	As per mitigation measure	-	At all times	Supervision staff
15	Operating control - Construction plant and vehicles are to use vehicle wheel and body washing facilities when leaving the site	Erect notices and include in awareness training for subcontractors	-	At all times	PEC or nominee

1 Environmental Control Plan - Air Pollution Controls

Item No.	Mitigation, Operation Control, Monitoring and Inspection	Method and Acceptance Criteria	Verification Document	Frequency / Duration	Action By
16	Mitigation measures – Control vehicle speeds on site	Establish speed limit signs on site (max 15kph on unpaved road section)  Ensure that signs are positioned prominently on site	-	At all times	Nominated site staff
17	Mitigation measure - Position plant as far as possible from sensitive receiver wherever practicable	As per mitigation measure	-	At all times	Supervision staff
18	Monitoring – check that mitigation measures and operating controls are effective.	Conduct inspections of each site using checklist	Routine Environmental Monitoring Checklist -	Weekly, following complaint or before extreme weather	PEC or nominee
19	Monitoring - Periodically check and monitor condition of plant with respect to exhaust emissions.	Observe operating plant to ensure no excessive black smoke (Better than Ringelmann chart no.1)	Routine Environmental Monitoring Checklist -	Weekly or on receipt of complaint or in case of dispute	PEC or nominee

2 Environmental Control Plan - Water Pollution Controls

Item No.	Mitigation, Operation Control, Monitoring and Inspection	Method and Acceptance Criteria	Verification Document	Frequency / Duration	Action By
1	Mitigation measures – design temporary drainage system for each site location complete with appropriate facilities to treat water prior to discharge off site from areas such as exposed earth slopes, material stockpiles, wheel wash bays, etc.	In accordance with the guidelines provided in ProPECC PN 1/94 and the Leighton Environmental Management Reference Volume	Layout drawings showing drainage, treatment facilities and discharge points	Following Contract Award	Technical Manager or nominee
2	Mitigation measures – install temporary site drainage and treatment facilities.	In accordance with design and drawings	-	Once, following design of system	Nominated site staff
3	Mitigation measures – install oil interceptors into temporary drainage system downstream of any oil/fuel pollution sources.	As per temporary drainage drawing	-	Once, following design of system	Nominated site staff
4	Mitigation measure and control – install foul water holding tanks for project office facilities	As per site layout drawings, capacity to suit office requirements	-	Once, following design of system	Nominated site staff
5	Mitigation measure - Incorporate drip trays or similar under major items of static plant and bulk storage of oil, fuel and chemical tanks	Adequate capacity (110% of tank capacity) Good condition / no leakage Valves operating / shut	-	Throughout duration of contract	Foremen Subcontractor
6	Mitigation measure– provide chemical toilet facilities along site where required	Number to suit site requirements	-	Throughout duration of contract	Nominated site staff
7	Operating control - arrange regular emptying of holding tanks / chemical toilets by reputable disposal company	In accordance with maintenance schedule	Trip tickets for disposal	Throughout duration of contract	Nominated site staff
8	Operating controls – clean and maintain temporary site drainage system, site facilities, wheel wash bays and silt / sand traps	In accordance with maintenance schedules to ensure effective operation	-	Throughout duration of contract	Nominated site staff
9	Operating controls – check drainage at discharge point	In accordance with maintenance schedule to keep clear of debris and silt that could cause flooding	-	Throughout duration of contract	Nominated site staff

2 Environmental Control Plan - Water Pollution Controls

Item No.	Mitigation, Operation Control, Monitoring and Inspection	Method and Acceptance Criteria	Verification Document	Frequency / Duration	Action By
10	Operating controls – ensure that cementitious construction effluent (e.g. concrete truck washout and slurry) is discharged with care to avoid water and soil contamination	Use wash out skips / pits to minimise water and land contamination	-	Throughout duration of contract	Foremen / Subcontractor
11	Operating controls – carry out site checks following the raising of a rainstorm or typhoon warning	In accordance with environmental emergency procedures (see appendix B, section 5.7).	-	Throughout duration of contract	Nominated site staff
12	Monitoring and inspection - check effectiveness of mitigation measures	As per checklist requirements	Routine Environmental Monitoring Checklist	Weekly or following complaint	PEC or nominee
13	Monitoring – Check water quality of effluent discharged from site	Method in accordance with Leighton Environmental Reference Volume to meet quality requirements stated on the Discharge Licence.	Routine Water Quality Monitoring Checklist	Weekly or following complaint	PEC or nominee
14	Monitoring – sample and test effluent from each discharge point in accordance with the conditions for sampling and testing on the Site Discharge Licence	Sampling and testing in accordance with EM&A Manual  Test results to meet Discharge Licence water quality parameters	Test results	As per the Discharge Licence requirements	PEC or nominee

3 Environmental Control Plan - Noise Control

Item No.	Mitigation, Operation Control, Monitoring and Inspection	Method and Acceptance Criteria	Verification Document	Frequency / Duration	Action By
1	Mitigation measures – Use temporary movable noise barriers where cumulative noise impacts due to Leighton construction activities are likely to exceed 75 dB (A) at NSR. (or as modified by baseline results).	Assess cumulative noise levels using methods from the Technical Memorandum and from site measurement  Barriers to be sized to shield plant activities from NSRs.  Barriers to be positioned as close to plant as is safe and practicable  Surface density of barriers to be not less than 7 kg/m <sup>2</sup>	-	Throughout grade separation works and	Technical Manager or nominee  Production staff
2	Mitigation measures – Check physical condition of plant and other mechanical equipment with respect to production of noise where appropriate and remove and repair plant and equipment that generates excessive noise.	Plant maintained and in good order  No loose fittings  Silencers effective	-	All activities throughout the duration of the project	Supervision staff
3	Mitigation measures – Operation of plant and other mechanical equipment with respect to noise where appropriate and switch off or throttle down equipment while not in use. Valid noise labels should be displayed on handheld breakers and air compressors.	Engine compartment doors shut  Static plant located and/or orientated away from sensitive areas  Plant shut down when not in use	-	All activities throughout the duration of the project	Supervision staff
4	Mitigation measure – use of quiet plant where practicable.	Select plant with effective silencers and mufflers to reduce noise levels	-	All activities throughout the duration of the project	Supervision staff
5	Mitigation measure – reduction in number of plant operating simultaneously and/or in close proximity of critical NSRs	Minimise the number of construction activities being carried out at the same time when near to NSRs.	-	Throughout duration of project	Supervision staff
6	Mitigation measure – using stockpiles or other structures to screen noisy site activities	Arrange stockpiles or other structures near NSRs to screen noise where practicable	-	Throughout duration of project	Supervision staff
7	Operating controls – Display Construction Noise Permits on site	Display in accordance with CNP requirement and on notice boards	CNP on display	While CNP is valid	PEC or nominee

3 Environmental Control Plan - Noise Control

Item No.	Mitigation, Operation Control, Monitoring and Inspection	Method and Acceptance Criteria	Verification Document	Frequency / Duration	Action By
8	Operating controls - Implement contingency plan (EM&A Manual) for construction noise in response to cases of reported exceedances of Maximum Acceptable Impact Level at NSRs	Follow Event Contingency Plan for Construction Noise (see EM&A Manual)	-	Following receipt of reported exceedance, throughout duration of project	PEC or nominee
9	Monitoring and Inspection – Check the effectiveness of mitigation measures and operating controls	Visual monitoring of activities in accordance with checklist requirements	Routine Environmental Monitoring Checklist	Weekly, or following complaint	PEC or nominee
10	Monitoring and inspection – check infrastructure and buildings in vicinity of site for any damage caused by plant and equipment or site activity.	Visual monitoring of infrastructure and buildings	Routine Environmental Monitoring Checklist	Weekly, or following complaint	PEC or nominee



4 Environmental Control Plan - Waste Management

Item No.	Mitigation, Operation Control, Monitoring and Inspection	Method and Acceptance Criteria	Verification Document	Frequency / Duration	Action By
1	Mitigation measure - establish Chemical Waste Storage Facility(s) on site (see Waste Management Plan for details and location maps).	In accordance with Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes.	-	Before production of Chemical Waste	PEC
2	Mitigation measure – provide and maintain adequate number of waste skips on site to avoid littering and visual impacts.	Adequate capacity	-	Throughout the duration of the project	Supervision staff
3	Mitigation measure – check that waste skips are being changed in timely manner and that no refuse and food remnants are littering work areas	Adequate capacity for workforce / activities	-	Throughout the duration of the project	Supervision staff
4	Mitigation measure – check that chemical (waste oil etc) waste drums are available, in use, labelled and suitably stored	In accordance with Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes.	-	Throughout the duration of the project	Supervision staff
5	Mitigation measure - disposal of chemical waste via licensed waste collectors	In accordance with Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes.	-	Throughout the duration of the project	PEC or nominee
6	Mitigation measure – ensure that surplus concrete is discharged in a controlled manner	No waste concrete disposed to landfill where practicable	-	Throughout the duration of the project	PEC or nominee
7	Operating Controls - Where site conditions permit, segregate main waste streams eg steel, inert materials, general waste	Establish site area for storage of scrap Provide space for segregation of waste where practicable	-	Throughout the duration of the project	PEC or nominee
8	Operating control – Dispose surplus inert excavated material.	Either: Transport to the Western Section of West Rail for reuse, if practicable; or Transport to other land formation sites in the Tuen Mun and Yuen Long areas for reuse; or Transport to public filling areas or barging points.	Trip tickets	Throughout duration of the project	Nominated site staff

4 Environmental Control Plan - Waste Management

Item No.	Mitigation, Operation Control, Monitoring and Inspection	Method and Acceptance Criteria	Verification Document	Frequency / Duration	Action By
9	Monitoring – check effectiveness of on-going mitigation measures described above and check waste management facilities and general housekeeping.	In accordance with checklist requirements	Routine Environmental Monitoring Checklist	Weekly or following complaint	PEC or nominee
10	Monitoring - carry out routine inspections of plant and fuel storage to minimise soil and water contamination	No excess oil visible on plant No leakage of trays Valves closed	Routine Environmental Monitoring Checklist	Weekly or following complaint	PEC or nominee
11	Maintain records of the quantities of wastes generated, recycled and disposed.	Trip ticket system or similar	Monthly Environmental Report and Site Records	Throughout project duration	PEC

5 Environmental Control Plan - Dangerous Goods and Chemicals Management

Item No.	Mitigation, Operation Control, Monitoring and Inspection	Method and Acceptance Criteria	Verification Document	Frequency / Duration	Action By
1	Mitigation measure - Provide and maintain suitable storage facilities for dangerous goods as appropriate	In accordance with drawings submitted to Fire Services Department	Site Layout Drawings	Throughout project duration	Safety Manager
2	Mitigation measure - Provide and maintain suitable facilities for the bulk storage of other chemicals	Provide drip trays with capacity or impervious sheeting with sand	-	Throughout project duration	Supervision staff
3	Operating control - Establish and maintain an inventory and associated Material Safety Data Sheet for chemicals to be used for construction activities on site.	Obtain from manufacturers and suppliers and maintain inventory and file	Inventory and MSDS records on site	Throughout project duration	Safety Manager
4	Mitigation Measure - ensure dangerous goods/chemicals are properly stored.	Visual inspection to verify that storage facilities conform to statutory requirements, manufacturers recommendations and the project Waste Management Plan requirements.	-	Throughout project duration	Supervision staff
5	Mitigation Measure – ensure spill clean-up equipment are available for use.	Visual inspection	-	Throughout project duration	Supervision staff
6	Monitoring – Check effective implementation of mitigation measures	In accordance with checklist requirements	Routine Environmental Monitoring Checklist	Weekly or following complaint	PEC or nominee

6 Environmental Control Plan - General Housekeeping					
Item No.	Mitigation, Operation Control, Monitoring and Inspection	Method and Acceptance Criteria	Verification Document	Frequency / Duration	Action By
1	Mitigation Measure - Erect and maintain awareness publications (eg posters) on site regarding the dangers of allowing pests to breed.	As per mitigation measure	-	Throughout duration of project	Safety Manager
2	Mitigating measure – Ensure that no open burning of debris or other matter takes place on site	Awareness training for workforce to ensure legal requirements are known	Training records	Throughout duration of project	PEC / Safety Manager
3	Mitigation measure – Standing water drained or treated with larvicidal oil. Water containers removed or covered	As per mitigation measure	-	Throughout duration of project	Supervision staff
4	Monitoring – check site for mosquito breeding areas, food remnants etc. (stagnant standing water)	As per checklist requirement	Routine Environmental Monitoring Checklist	Weekly, or following complaint	PEC or nominee
5	Monitoring - carry out routine monitoring of site and perimeter to check tidiness and visual impact.	As per checklist requirement	Routine Environmental Monitoring Checklist	Weekly, or following complaint	PEC or nominee

**APPENDIX E - COMPLAINTS LOG**

Date Received	Complainant	Details of the Complaint	Action	Status	Remark
		No complaint was received in the month of September 2001			
		No complaint was received in the month of October 2001			
		No complaint was received in the month of November 2001			
		No complaint was received in the month of December 2001			
		No complaint was received in the month of January 2002			
		No complaint was received in the month of February 2002			
		No complaint was received in the month of March 2002			
		No complaint was received in the month of April 2002			
		No complaint was received in the month of May 2002			
		No complaint was received in the month of June 2002			
		No complaint was received in the month of July 2002			
		No complaint was received in the month of August 2002			
		No complaint was received in the month of September 2002			
		No complaint was received in the month of October 2002			
		No complaint was received in the month of November 2002			
		No complaint was received in the month of December 2002			
		No complaint was received in the month of January 2003			
		No complaint was received in the month of February 2003			
		No complaint was received in the month of March 2003			
		No complaint was received in the month of April 2003			
		No complaint was received in the month of May 2003			
		No complaint was received in the month of June 2003			
		No complaint was received in the month of July 2003			
		No complaint was received in the month of August 2003			

Date Received	Complainant	Details of the Complaint	Action	Status	Remark
No complaint was received in the month of September 2003					

**APPENDIX F – MONITORING SCHEDULE FOR THE NEXT THREE MONTH**

	Air Monitoring		Noise Monitoring	
Mon	MA50	Tuen Mun Town	MN48	Kam Wah Garden
	MA45	Holv Redeemer	MN155	Assembly of God Paul Church
	MA65	San Hina Tsuen	MN50	Tuen Mun Town Plaza
Tue	MA50	<i>Tuen Mun Town</i>		
	MA45	<i>Holv Redeemer</i>		
	MA65	<i>San Hina Tsuen</i>		
Wed	MA155	Assembly of God		
	MA42A	Store Rm		
	MA33	Q.E. Secondary		
	MA15A	Tin Yiu Est II		
	MA10A	Tin Yat Court Car		
	MA123A	Tin Chak Estate		
	MA129A	Tin Yuet Estate		
	MA120	Lee Chau Kee Pri		
	MA2A	Q.E. Primary		
MA6	Kwok Yat Wai			
Thur	MA155	<i>Assembly of God</i>	MN155	Assembly of God Paul Church
	MA33	<i>Q.E. Secondary</i>	MN33	Q.E. Secondary School (suspended)
	MA15A	<i>Tin Yiu Est II</i>	MN15A	Tin Yiu Est II
	MA120	<i>Lee Chau Kee Pri</i>	MN120	Lee Chau Kee Pri School
	MA123A	<i>Tin Chak Estate</i>	MN123A	Tin Chak Estate Ancillary Building
	MA129A	<i>Tin Yuet Estate</i>	MN129A	Tin Yuet Estate Ancillary Building
	MA10A	<i>Tin Yat Court Car</i>	MN10A	Tin Yau Court Car Park
	MA6	<i>Kwok Yat Wai</i>	MN6	Kwok Yat Wai College
MA2A	<i>Q.E. Primary</i>			
Fri	MA42A	<i>Store Rm</i>		

Italics indicate the collection of filter paper from HVAS

## **APPENDIX G - COMMENTS AND RESPONSE**

No specific comment on the monthly EM&A report (August 2003) was received from KCRC/IEC.



**APPENDIX H – LIST OF ENVIRONMENTAL LICENCE/PERMIT**

**Construction Noise Permit (CNP) Register**

**Date: 30 September 2003**

ITEM No.	PERMIT No.	PERMIT DESCRIPTION	ISSUE DATE	EXPIRY DATE	ISSUING OFFICE
1	CNP No. PP-TW0025-01	Construction Noise Permit (Percussive Piling). At Junction Mj7 North & West – Tuen Mun	29 June 2001 for six months	Cancelled. EPD letter 3 August 2001	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
2	CNP No. GW-TW0251-01	Construction Noise Permit (23.00-07.00hrs). LRT crossings at Junction Mj7 North – Tuen Mun	27 June 2001	27 July 2001 @ 07.00 hrs.	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
3	CNP No. GW-TW0280-01	Construction Noise Permit (23.00-07.00hrs). LRT OHL pole relocation at Junction 6 East – Pui To Road, Tuen Mun	14 July 2001	14 August 2001 @ 07.00 hrs.	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
4	CNP No. GW-TW0290-01	Construction Noise Permit (23.00-07.00hrs). Road marking for traffic diversion at Junction L, Tin Shui Wai Reserve Zone.	23 July 2001	31 July 2001 @ 07.00 hrs.	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
5	CNP Application 29 June 2001	Construction Noise Permit (23.00-07.00hrs). Driving sheet piles and excavating pipe jacking receiving pit at side of LR track at Mj7 north Pui To Road; Tuen Mun.	Application refused EPD letter 30 July 2001	N/A	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
6	CNP No. GW-TW0317-01	Construction Noise Permit (23.00-07.00hrs). LRT Plant crossing for access to hand dug caissons at north east corner of Tuen Mun Town Park; Pui To Road; Tuen Mun.	8 September 2001	7 October 2001 @ 05.00 hrs.	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
7	CNP Application 10 August 2001.  GW-TW0368-01	Construction Noise Permit (07.00-19.00hrs Gen. Hol. Inc. Sunday). Bored Piling construction for retaining west bank of Nullah near Police Station; Pui To Road; Tuen Mun.	30 August 2001	28 February 2002	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.

ITEM No.	PERMIT No.	PERMIT DESCRIPTION	ISSUE DATE	EXPIRY DATE	ISSUING OFFICE
8	CNP Application 13 August 2001  TW20010818-001	Construction Noise Permit (23.00-07.00hrs). Temporary relocation of LR track to allow construction of viaducts at east side of Tuen Mun Town Park (Junction 6 South – Tuen Mun Heung Sze Wui Road).	Application refused EPD phone call 7 Sept. 2001	N/A	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
9	CNP Application 17 August 2001.  TW20010839-001	Construction Noise Permit (19.00-23.00hrs). Temporary relocation of LR track to allow construction of viaducts at east side of Tuen Mun Town Park (Junction 6 South – Tuen Mun Heung Sze Wui Road).	Application refused EPD phone call 31 Aug 2001	N/A	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
10	CNP Application 28 August 2001  GW-TW0407-01	Construction Noise Permit (01.00-05.00hrs). LRT OHL pole relocation at Junction 6 West – Pui To Road, Tuen Mun	29 September 2001	29 November 2001	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
11	CNP Application 10 September 2001  GW-TW0432-01	Construction Noise Permit (01.00-05.00hrs). LRT OHL pole relocation to allow construction of viaducts at east side of Tuen Mun Town Park at Junction 6 South – Tuen Mun Heung Sze Wui Road.	21 September 2001	11 December 2001	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
12	CNP Application 10 September 2001  GW-TW0431-01	Construction Noise Permit (19.00-07.00hrs on weekdays & 24hrs on general holidays and Sundays). Pipe Jacking for utility diversion at Junction Mj8 – Pui To Road, Tuen Mun industrial area.	1 October 2001	9 April 2002	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
13	CNP Application 12 September 2001  GW-TW0441-01	Construction Noise Permit (two 36hour periods – end October & mid November 2001). Temporary relocation of LR track to allow construction of viaducts at east side of Tuen Mun Town Park (Junction 6 South – Tuen Mun Heung Sze Wui Road).	13 October 2001 for Start 14 October	23 December 2001	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
14	CNP Application 20 September 2001  GW-TW0449-01	Construction Noise Permit (19.00-07.00hrs on weekdays & 24hrs on general holidays and Sundays). Pipe Jacking for utility diversion at road junction East of Kin On Stop on Pui To Road, Tuen Mun industrial area.	11 October 2001 for Start 19 October	5 January 2002	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.

ITEM No.	PERMIT No.	PERMIT DESCRIPTION	ISSUE DATE	EXPIRY DATE	ISSUING OFFICE
15	CNP Application 28 September 2001  GW-TW0467-01	Construction Noise Permit (23.00-07.00hrs). Drilling and grouting to provide grout curtain for hand dug caissons at junction of Pui To Road and Tuen Mun Heung Sze Wui Road in Tuen Mun.	26 October 2001 for Start 29 October	29 December 2001	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
16	CNP Application 29 September 2001  TW0470-01	Construction Noise Permit (19.00-21.00hrs on weekdays & 07.00-21.00hrs on general holidays and Sundays). Construction of CLP Substation at location S3 on Tin Fuk Road in Tin Shui Wai Phase 4 area.	Application refused EPD letter 12 October 2001	N/A	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
17	CNP Application 16 October 2001  GW-TW0501-01	Construction Noise Permit (00.30-05.30hrs). LRT crossing - Emergency Vehicle Access & construction plant access to Tuen Mun Town Park East of San Fat Stop at Junction 6 West – Pui To Road, Tuen Mun	12 November 2001 for start 15 November 2001	15 December 2001	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
18	CNP Application 18 October 2001  TW0505-01	Construction Noise Permit (19.00-21.00hrs). Concreting to bored piles at Junction L; Tin Shui Road in Tin Shui Wai Reserve Zone.	Application refused EPD letter 29 October 2001	N/A	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
19	CNP Application 29 October 2001  GW-TW0522-01	Construction Noise Permit (Weekdays 01.00-05.00hrs). LRT OHL pole foundation construction and installation of OHL poles at Junction B; Junction of Ping Ha Road and Tin Yiu Road in Tin Shui Wai Phase 4.	19 November 2001 for start 26 November 2001	23 February 2002	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
20	CNP Application 3 November 2001  GW-TW0532-01	Construction Noise Permit (Weekdays 19.00-07.00hrs). Installation of Falsework above road and roundabout to enable construction of new LRT viaduct at Junction L; junction of Tin Shui Road and Tin Wah Road in Tin Shui Wai Reserve Zone.	30 November 2001 for start 01 January 2002	28 February 2002	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.

ITEM No.	PERMIT No.	PERMIT DESCRIPTION	ISSUE DATE	EXPIRY DATE	ISSUING OFFICE
21	CNP Application 10 November 2001  GW-TW0566-01	Construction Noise Permit (Weekdays 01.00-05.00hrs). Light Rail permanent way alterations to facilitate Phase 4 extension of LRT system at Junction B (junction of Ping Ha Road and Tin Yiu Road) in Tin Shui Wai.	06 December 2001 for start 09 December 2001	09 March 2002	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
22	CNP Application 12 November 2001  TW0565-01	Construction Noise Permit (Weekdays 23.00-07.00hrs). Removal of existing footbridge and installation of temporary footbridge across LR tracks and Heung Sze Wui Road to facilitate construction of the LRT viaducts at Tuen Mun town centre.	Re- submitted in two parts (18/12/01 & ?)	N/A	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
23	CNP Application 12 November 2001  TW0564-01	Construction Noise Permit (Weekdays 19.00-07.00hrs). Load-out of prefabricated footbridge units at Hoi Wah Road (S1), Tuen Mun (for installation across LR tracks and Heung Sze Wui Road).	Application withdrawn 6/12/01 at EPD request.	N/A	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
24	CNP Application 18 December 2001  GW-TW0625-01	Construction Noise Permit (Weekdays 23.00-07.00hrs). Removal of part of existing footbridge and installation of new temporary footbridge across LR tracks and Heung Sze Wui Road to facilitate construction of the LRT viaducts north of Tuen Mun Town Centre Stop.	21 Dec. 01 for start 21 Dec. 01	22 February 2002	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
25	CNP Application 21 December 2001  GW-TW0629-01	Construction Noise Permit (07.00-21.00hrs Gen. Hol. Inc. Sunday & weekdays 19.00-23.00hrs). Bored Piling construction for new retaining wall along west bank of Nullah (near Police Station), Pui To Road; Tuen Mun.	11 Jan. 02 for start 16 Jan. 02	15 July 2002	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
26	CNP Application 27 December 2001  GW-TW0634-01	Construction Noise Permit (weekdays 23.00-07.00hrs). Water main diversion across of Pui To Rd at Mj7, Tuen Mun (HK Police require road closure at night to minimise traffic disruption).	Withdrawn at EPD request 28 Jan 02	N/A	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.

ITEM No.	PERMIT No.	PERMIT DESCRIPTION	ISSUE DATE	EXPIRY DATE	ISSUING OFFICE
27	CNP Application 31 December 2001  GW-TW0639-01	Construction Noise Permit (weekdays 01.00-05.00 hrs.). Temporary relocation of LR OHL to allow construction of viaducts at J6 east (west of Pui To Road Stop Tuen Mun.	14 Jan. 02 for start 28 Jan. 02	28 February 2002	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
28	CNP Application 31 December 2001  GW-TW0638-01	Construction Noise Permit (weekdays 01.00-05.00 hrs.). Temporary relocation of LR track to allow construction of viaducts at J6 east (west of Pui To Road Stop) Tuen Mun.	14 Jan. 02 for start 20 Mar. 02	30 April 2002	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
29	CNP Application 21 January 2002  GW-TW0023-02	Construction Noise Permit (weekdays 23.00-07.00hrs). Water main diversion across of Pui To Rd at Mj7, Tuen Mun (HK Police require road closure at night to minimise traffic disruption). <b>RE-APPLICATION</b>	28 Jan. 02 for start 29 Jan. 02	20 March 2002	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
30	CNP Application 22 January 2002  GW-TW0027-01	Construction Noise Permit (weekdays 01.00-05.00 hrs.). Temporary relocation of LR track to allow construction of viaducts at J6 east (west of Pui To Road Stop) Tuen Mun. <b>RE-APPLICATION.</b>	11 Feb. 02 for start 18 Feb 02	17 May 2002	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
31	CNP Application 23 January 2002  GW-TW0028-02	Construction Noise Permit (weekdays 01.00-05.00 hrs.). Cut-out and replace worn LR track (2 x 6mtrs) on Heung Sze Wui Road at J6 south (north of Tuen Mun Town Centre Stop).	11 Feb. 02 for start 24 Feb 02	24 March 2002	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
32	CNP Application 31 January 2002  GW-TW0042-02	Construction Noise Permit (Weekdays 23.00-07.00hrs). Removal of part of existing footbridge and installation of new temporary footbridge across LR tracks and Heung Sze Wui Road north of Tuen Mun Town Centre Stop.  <b>PERMIT RENEWAL.</b>	19 Feb. 02 for start 23 Feb 02 Withdrawn 27 Feb 02	15 March 2002	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.

ITEM No.	PERMIT No.	PERMIT DESCRIPTION	ISSUE DATE	EXPIRY DATE	ISSUING OFFICE
33	CNP Application 18 February 2002  TW0067-02	Construction Noise Permit (Weekdays 01.00-05.00hrs). Light Rail permanent way alterations to facilitate Phase 4 extension of LRT system at Junction B (junction of Ping Ha Road and Tin Yiu Road) in Tin Shui Wai.  <b>PERMIT RENEWAL.</b>	16 Mar. 02 for start 2 Apr. 02	31 July 2002	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
34	CNP Application 18 February 2002  GW-TW0066-02	Construction Noise Permit (weekdays 01.00-05.00 hrs.). Lifting steel reinforcement bars over the LRT tracks and power lines into the hand dug caissons at the junction of Heung Sze Wui Road and Pui To Road in Tuen Mun.	13 Mar. 02 for start 15 Mar 02	15 June 2002	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
35	CNP Application (during meeting) 25 February 2002  GW-TW0075-02	Construction Noise Permit (Weekdays 23.00-07.00hrs). Removal of existing footbridge and installation of new temporary footbridge across LR tracks and Heung Sze Wui Road north of Tuen Mun Town Centre Stop. <b>REPLACEMENT FOR PERMIT No. GW-TW0042-02.</b>	27 Feb. 02 for start 27 Feb 02	16 March 2002	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
36	CNP Application 01 March 2002  GW-TW0081-02	Construction Noise Permit (weekdays 23.00-07.00 hrs.). Temporary relocation of LR OHL to allow construction of viaducts at J6 east (west of Pui To Road Stop Tuen Mun. <b>PERMIT RENEWAL</b>	13 Mar. 02 for start 15 Mar 02	15 May 2002	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
37	CNP Application 07 March 2002  GW-TW0089-02	Construction Noise Permit (weekdays 01.00-05.00 hrs). To construct a crossing over the Light Rail permanent way for construction plant access at existing Tin Shui Wai Terminus (Stop 500).	27 Mar. 02 for start 2 Apr 02	31 May 2002	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
38	CNP Application 27 March 2002  TW0116-02	Construction Noise Permit (weekdays 23.00-07.00hrs). Water main diversion across of Pui To Rd at Mj7, Tuen Mun (HK Police require road closure at night to minimise traffic disruption). <b>PERMIT RENEWAL</b>	17 Apr. 02 for start 19 Apr 02	18 June 2002	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.

ITEM No.	PERMIT No.	PERMIT DESCRIPTION	ISSUE DATE	EXPIRY DATE	ISSUING OFFICE
39	CNP Application 9 April 2002  GW-TW0122-02	Construction Noise Permit (weekdays 23.00-07.00hrs). Footbridge erection / partial removal at Junction L, TSW (HK Police require road closure at night to minimise traffic disruption).	24 Apr. 02 for start 18 May 02	18 June 2002	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
40	CNP Application 15 April 2002  TW0141-02	Construction Noise Permit (Weekdays 01.00-05.00hrs). Light Rail permanent way alterations to facilitate grade separation viaduct construction of LRT system at junction Mj7 on Pui To Road, Tuen Mun.	29 Apr. 02 for start 10 May 02	10 Sept. 2002	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
41	CNP Application 29 April 2002  TW0151-02	Construction Noise Permit (Weekdays 23.00-07.00hrs). Construction of platform No. 6 at existing Tin Shui Wai Terminus – Stop 500, TSW – Phase 4.	17 May 02 for start 1 June 02	30 Sept. 2002	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
42	CNP Application 30 April 2002  GW-TW0154-02	Construction Noise Permit (Weekdays 19.00-23.00hrs & General holidays 07.00-19.00hrs). Utility diversions at Ng Lau Road, Lam Tei (LT1) to facilitate grade separation viaduct construction work.	22 May 02 for start 22 May 02	14 Nov. 2002	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
43	CNP Application 16 May 2002  GW-TW0171-02	Construction Noise Permit (07.00 to 19.00hrs on General holiday incl. Sundays & weekdays 19.00-23.00hrs). Foundation works to facilitate LRT grade separation viaduct construction at junction Mj7 West on Pui To Road, Tuen Mun.	31 May 02 for start 15 June 02	14 Dec. 2002	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
44	CNP Application 17 May 2002  GW-TW0175-02	Construction Noise Permit (any day 23.00-07.00hrs). Footbridge erection / partial removal at Junction L, TSW (HK Police require road closure at night to reduce traffic disruption). <b>PERMIT RENEWAL</b> (GW-TW0122-02).	3 Jun 02 for start 18 June 02	18 July 2002	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
45	CNP Application 18 May 2002  GW-TW0176-02	Construction Noise Permit (weekdays 01.00-05.00hrs). Erection of temporary working platforms over LRT at support columns to facilitate installation of viaduct beams at J6 West area (San Fat Stop to Heung Sze Wui Road) on Pui To Road, Tuen Mun.	14 Jun 02 for start 1 July 02	30 Sept. 2002	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.

ITEM No.	PERMIT No.	PERMIT DESCRIPTION	ISSUE DATE	EXPIRY DATE	ISSUING OFFICE
46	CNP Application 21 May 2002  GW-TW0177-02	Construction Noise Permit (weekdays 01.00-05.00 hrs.). Lifting steel reinforcement bars over the LRT tracks and power lines into the hand dug caissons at the junction of Heung Sze Wui Road and Pui To Road in Tuen Mun. <b>PERMIT RENEWAL</b> (GW-TW0066-02).	3 June 02 for start 15 June 02	15 Aug 2002	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
47	CNP Application 22 May 2002  GW-TW0178-02	Construction Noise Permit (weekdays 23.00-07.00hrs). De-stressing of temporary LRT track at J6 South area, north of Tuen Mun Town Centre Stop, Heung Sze Wui Road, Tuen Mun.	12 June 02 for start 24 June 02	30 Sept. 2002	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
48	CNP Application 30 May 2002  GW-TW0188-02	Construction Noise Permit (weekdays 19.00-07.00hrs). Temporary re-alignment of Pui To Road at Mj7 East to provide space for piling operations in the centre reservation, Tuen Mun area. (Police road closure).	17 June 02 for start 17 June 02	15 July 2002	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
49	CNP Application 10 June 2002  GW-TW0202-02	Construction Noise Permit (weekdays 23.00-07.00hrs). Water main diversion across of Pui To Rd at Mj7, Tuen Mun (HK Police require road closure at night to minimise traffic disruption). <b>PERMIT RENEWAL</b> (GW-TW0116-02).	21 June 02 for start 26 June 02	18 Aug. 2002	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
50	CNP Application 10 June 2002 <b>Permit No.</b> <b>GW-TW0202-02</b>	Construction Noise Permit (weekdays 23.00-07.00hrs). Water main diversion across of Pui To Rd at Mj7, Tuen Mun (HK Police require road closure at night to minimise traffic disruption). <b>PERMIT RENEWAL</b> (GW-TW0116-02).	21 June 02 for start 26 June 02	18 Aug. 2002	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
51	CNP Application 10 June 2001 <b>Permit No.</b> <b>GW-TW0201-02</b>	Construction Noise Permit [weekdays 19.00-23.00hrs & 07.00-21.00hrs general holiday (including Sunday)]. Deck construction along west bank of Nullah (near Police Station & Kin Fung Circuit) off Pui To Road; Tuen Mun.  <b>PERMIT RENEWAL</b> (GW-TW0629-01).	27 June 02 for start 15 Jul. 02	14 Jan. 2003	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
52	CNP Application 14 June 2002 Refused Ref: TW0208-02	Construction Noise Permit (Weekdays 19.00-21.00hrs & General holidays 07.00-19.00hrs). Sewer diversion and site investigation at Tsing Lun Road, Lam Tei (LT1) to facilitate grade separation viaduct construction work.	Refused see EPD letter 9 Jul. 02	N/A	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.



ITEM No.	PERMIT No.	PERMIT DESCRIPTION	ISSUE DATE	EXPIRY DATE	ISSUING OFFICE
53	CNP Application 18 June 2002 <b>Permit No.</b> <b>GW-TW0211-02</b>	Construction Noise Permit (any day 23.00-07.00hrs). Footbridge erection / partial removal at Junction L, TSW (HK Police require road closure at night to reduce traffic disruption). <b>PERMIT RENEWAL</b> (GW-TW0175-02).	10 July 02 for start 19 July 02	18 Aug. 2002	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
54	CNP Application 24 June 2002 <b>Permit No.</b> GW-TW0215-02	Construction Noise Permit (weekdays 24.00-06.00hrs). Erection of viaduct beams & pre-cast Planks over LRT at J6 West work area on Pui To Road, i.e. between San Fat Stop and Heung Sze Wui Road, Tuen Mun.	16 July 02 for start 5 Aug. 02	19 Aug. 2002	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
55	CNP Application 24 June 2002 <b>Permit No.</b> <b>GW-TW0216-02</b>	Construction Noise Permit (Weekdays 19.00-23.00hrs and 01.00-05.30 hrs). Temporary relocation of the Light Rail permanent way to facilitate viaduct construction between Ho Tin Stop and junction Mj7 on Pui To Road, Tuen Mun.	02 July 02 for start 03 July 02	31 Oct. 2002	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
56	CNP Application 25 June 2002 <b>Permit No.</b> GW-TW0222-02	Construction Noise Permit (weekdays 01.00-05.00hrs). Erection of temporary working platforms over LRT at support columns to facilitate installation of viaduct beams at J6 South area (North of Town Centre Stop to Pui To Road) on Heung Sze Wui Road, Tuen Mun.	19 July 02 for start 15 Aug. 02	15 Oct. 2002	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
57	CNP Application 25 June 2002 <b>Permit No.</b> <b>GW-TW0221-02</b>	Construction Noise Permit (weekdays 01.00-05.00hrs). Erection of temporary working platforms over LRT at support columns to facilitate installation of viaduct beams at J6 East area (Pui To Stop to Heung Sze Wui Road) on Pui To Road, Tuen Mun.	19 July.02 for start 30 Aug. 02	30 Oct. 2002	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
58	CNP Application 25 June 2002 <b>Permit No.</b> <b>GW-TW0223-02</b>	Construction Noise Permit (Weekdays 01.00-05.00hrs). Light Rail permanent way alterations to facilitate Phase 4 extension of LRT system at Junction B (junction of Ping Ha Road and Tin Yiu Road) in Tin Shui Wai.  <b>PERMIT RENEWAL</b> (GW-TW0067-02).	16 July 02 for start 1 Aug. 02	31 Jan. 2003	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
59	CNP Application 27 June 2002 <b>Permit No.</b> <b>PP-TW0027-02</b>	Construction Noise Permit for Percussive Piling (08.00 to 09.00 hrs and 12.30 to 14.00 hrs and 15.30 to 18.00 hrs). Sheet Piling with drop hammer for sewer diversion at Tsing Lun Road, Lam Tei (LT1) north Tuen Mun.	23 July 02 for start 24 Jul. 02	23 Dec. 2002	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.

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60	CNP Application 3 July 2002  Ref: TW0234-02	Construction Noise Permit (weekdays 24.00-06.00hrs). Erection of viaduct beams & pre-cast planks over LRT at J6 West work area on Pui To Road, i.e. between San Fat Stop and Heung Sze Wui Road, Tuen Mun. <b>PERMIT RENEWAL</b> (GW-TW0215-02).	<b>Withdrawn</b> for start 3 Aug. 02	N/A	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
61	CNP Application 3 July 2002 <b>Permit No.</b> <b>GW-TW0233-02</b>	Construction Noise Permit (weekdays 19.00-07.00hrs). Temporary re-alignment of Pui To Road at Mj7 East to provide space for piling operations in the centre reservation, Tuen Mun area. (Police road closure). <b>PERMIT RENEWAL</b> (GW-TW0188-02).	19 July 02 for start 22 July 02	21 Aug. 2002	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
62	CNP Application 6 July 2002  Ref: TW0239-02	Construction Noise Permit (weekdays 24.00-06.00hrs). Erection of viaduct beams & pre-cast planks over LRT at J6 South work area on Heung Sze Wui Road, i.e. between Town Centre Stop and Pui To Road, Tuen Mun.	<b>Withdrawn</b> for start 10 Aug. 02	N/A	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
63	CNP Application 6 July 2002  Ref: TW0238-02	Construction Noise Permit (weekdays 24.00-06.00hrs). Erection of viaduct beams & pre-cast planks over LRT at J6 East work area on Pui To Road, i.e. between Pui To Stop and Heung Sze Wui Road, Tuen Mun.	Withdrawn for start 30 Aug. 02	N/A	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
64	CNP Application 16 July 2002  Ref: TW0254-02	Construction Noise Permit (Weekdays 019.00-23.00hrs and 01.00 to 05.30 hrs). Light Rail permanent way alterations to facilitate Phase 4 extension of LRT system at Junction Q (south end of Stop 500) in Tin Shui Wai.	for start 15 Aug. 02	15 Oct. 2002	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
65	CNP Application 24 July 2002  TW0266-02	Construction Noise Permit (any day 23.00-07.00hrs). Southern footbridge erection at Junction L, TSW (HK Police require road closure at night to reduce traffic disruption). <b>PERMIT RENEWAL</b> (GW-TW0211-02).	for start 18 Aug. 02	18 Sept. 2002	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
66	CNP Application 26 July 2002  <b>Ref: TW0269-02</b>	Construction Noise Permit (weekdays 24.00-06.00hrs). Erection of viaduct beams & pre-cast Planks over LRT at J6 West work area on Pui To Road, i.e. between San Fat Stop and Heung Sze Wui Road, Tuen Mun ( Five Week Trial Period). <b>PERMIT RENEWAL</b> (GW-TW0215-02).	for start 26 Aug. 02	30 Sept. 2002	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.

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67	CNP Application 17 August 2002  TW0290-02	Construction Noise Permit (07.00 to 19.00hrs on General holiday incl. Sundays & weekdays 19.00-23.00hrs). Foundation works to facilitate LRT viaduct construction at junction Mj7 North on Pui To Road, Tuen Mun.	for start 15 Sept. 02	14 Jan. 2003	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
68	CNP Application 17 August 2002 <b>Permit No.</b> <b>GW-TW0291-02</b>	Construction Noise Permit (weekdays 24.00-06.00hrs). Erection of viaduct beams & pre-cast planks over LRT at J6 South work area on Heung Sze Wui Road, i.e. between Town Centre Stop and Pui To Road, Tuen Mun.	26 Aug. 02 for start 16 Sept. 02	20 Dec. 2002	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
69	CNP Application 23 Aug. 2002  <b>Ref: TW0300-02</b>	Construction Noise Permit (weekdays 01.00-05.00 hrs.). Lifting steel reinforcement bars over the LRT tracks and power lines into the hand dug caissons at the junction of Heung Sze Wui Road and Pui To Road in Tuen Mun. <b>PERMIT RENEWAL</b> (GW-TW0177-02).	for start 15 Sept. 02	4 Sept. 02for start15 Sept. 02	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
70	CNP Application 30 August 2002 <b>Permit No.</b> <b>GW-TW0305-02</b>	Construction Noise Permit (weekdays 24.00-06.00hrs). Erection of viaduct beams & pre-cast planks over LRT at J6 East work area on Pui To Road, i.e. between Pui To Stop and Heung Sze Wui Road, Tuen Mun.	4 Sept. 02 for start 2 Oct. 02	31 Jan. 2003	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
71	CNP Application 31 August 2002 <b>Permit No.</b> GW-TW0307-02	Construction Noise Permit (weekdays 24.00-06.00hrs). Erection of viaduct beams & pre-cast Planks over LRT at J6 West work area on Pui To Road, i.e. between San Fat Stop and Heung Sze Wui Road, Tuen Mun. <b>PERMIT RENEWAL</b> (GW-TW0269-02).	9 Sept. 02 for start 2 Oct. 02	30 Nov. 2002	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
72	CNP Application 2 September 2002 <b>Permit No.</b> <b>GW-TW0308-02</b>	Construction Noise Permit (Weekdays 19.00-24.00hrs and 01.00 to 05.30 hrs). Light Rail permanent way alterations to facilitate the Reserve Zone extension of LRT system at Junction I on Tin Shui Road in Tin Shui Wai.	24 Sept.02 for start 30 Sept. 02	29 Nov. 2002	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
73	CNP Application 2 September 2002 <b>Permit No.</b> <b>GW-TW0309-02</b>	Construction Noise Permit (Weekdays 19.00-24.00hrs and 01.00 to 05.30 hrs). Light Rail permanent way alterations to facilitate the Reserve Zone extension of LRT system at Junction J (north end of Stop 500) on Tin Shing Road in Tin Shui Wai.	24 Sept. 02 for start 30 Sept. 02	29 Nov. 2002	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.

ITEM No.	PERMIT No.	PERMIT DESCRIPTION	ISSUE DATE	EXPIRY DATE	ISSUING OFFICE
74	CNP Application 2 September 2002 <b>Permit No.</b> <b>GW-TW0312-02</b>	Construction Noise Permit (weekdays 23.00-07.00hrs). Construction of platform No. 6 at the existing TSW Terminus – Stop 500, Tin Shui Wai – Phase 4. <b>PERMIT RENEWAL</b> (GW-TW0151-02).	19 Sept.02 for start 1 Oct. 02	15 Nov. 2002	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
75	CNP Application 5 September 2002 <b>Permit No.</b> <b>GW-TW0317-02</b>	Construction Noise Permit (weekdays 23.00-07.00hrs). Southern footbridge erection at Junction L, TSW (HK Police require road closure at night to reduce traffic disruption). <b>PERMIT RENEWAL</b> (GW-TW0266-02).	18 Sept. 02 for start 19 Sept. 02	18 Oct. 2002	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
76	CNP Application 18 September 2002 <b>Permit No.</b> <b>GW-TW0337-02</b>	Construction Noise Permit (Friday 27/09/02 from 21.00 to 05.00hrs). Light Rail permanent way alterations at Junction B to facilitate Phase 4 extension of LRT system (at junction of Ping Ha Road and Tin Yiu Road) in Tin Shui Wai. <b>PERMIT RENEWAL</b> (GW-TW0223-02).	27 Sept.02 for one night 27 Sept. 02	28 Sept. 2002	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
77	CNP Application 19 September 2002  Ref: TW0343-02	Construction Noise Permit (Weekdays 23.00 - 07.00 hrs). Light Rail permanent way paved track installation at Junction G (junction of Tin Shing Road & Tin Wu Road) to facilitate Phase 4 extension of LRT system in Tin Shui Wai.	12 Oct. 02 for start 17 Oct. 02	09 Jan. 2003	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
78	CNP Application 19 September 2002  Ref: TW0344-02	Construction Noise Permit (Weekdays 23.00 - 07.00 hrs). Light Rail permanent way paved track installation at Junction A17 (junction of Tin Shing Road & Tin Cheung Road) to facilitate Phase 4 extension of LRT system in Tin Shui Wai.	12 Oct. 02 for start 17 Oct. 02	09 Jan. 2003	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
79	CNP Application 23 September 2002  Ref: TW0350-02	Construction Noise Permit (Weekdays 23.00 - 07.00 hrs). Light Rail permanent way paved track installation at Junction Q (junction of Tin Shing Road & Tin Yan Road) to facilitate Phase 4 extension of LRT system in Tin Shui Wai.	16 Oct. 02 for start 16 Oct. 02	15 Dec. 2002	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
80	CNP Application 23 September 2002  Ref: TW0351-02	Construction Noise Permit (Weekdays 23.00 - 07.00 hrs). Light Rail permanent way paved track installation at Junction A4 (junction of Tin Shing Road & Tin Yau Court main entrance) to facilitate Phase 4 extension of LRT system in Tin Shui Wai.	16 Oct. 02 for start 16 Oct. 02	15 Dec. 2002	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.

ITEM No.	PERMIT No.	PERMIT DESCRIPTION	ISSUE DATE	EXPIRY DATE	ISSUING OFFICE
81	CNP Application 24 September 2002  Ref: TW0357-02	Construction Noise Permit (Weekdays 019.00-23.00hrs and 01.00 to 05.30 hrs). Light Rail permanent way alterations to facilitate Phase 4 extension of LRT system at south end of Stop 500 (by junction Q) in Tin Shui Wai. <b>PERMIT RENEWAL</b> (GW-TW0254-02).	16 Oct. 02 for start 16 Oct. 02	15 Jan. 2003	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
82	CNP Application 24 September 2002  Ref: TW0352-02	Construction Noise Permit (weekdays 24.00-06.00hrs). Erection of viaduct beams & pre-cast planks over LRT and main road at J6 Delta work area at the junction of Pui To Road and Heung Sze Wui Road, Tuen Mun.	11 Oct. 02 for start 20 Oct. 02	19 Dec. 2002	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
83	CNP Application 30 September 2002 <b>Permit No.</b> GW-TW0363-02	Construction Noise Permit (Weekdays 23.00 - 07.00 hrs). Cable installation along existing LRT reserve between Yuen Long Terminus, JunctionB Tin Shui Wai and Ho Tin Stop Tuen Mun.	22 Oct. 02 for start 28 Oct. 02	31 Jan. 2003	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
84	CNP Application 26 October 2002 <b>Permit No.</b> GW-TW0390-02	Construction Noise Permit (weekdays 24.00-06.00hrs). Erection of viaduct pre-cast parapets over LRT and main road at J6 work area between San Fat Stop, Pui To Stop & Town Centre Stop, Tuen Mun.	4 Nov. 02 for start 18 Nov. 02	31 January 2003	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
85	CNP Application 28 October 2002  <b>Ref: TW0392-02</b>	Construction Noise Permit (weekdays 24.00-06.00hrs). Excavation of caisson in close proximity to LRT and main road at J6 work area at the junction of Pui To Road and Heung Sze Wui Road, Tuen Mun.	Withdrawn for start 18 Nov. 02	N/A	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
86	CNP Application 5 November 2002 <b>Permit No.</b> <b>GW-TW0396-02</b>	Construction Noise Permit (Weekdays 19.00-24.00hrs and 01.00 to 05.30 hrs). Light Rail permanent way alterations to extend the LRT system into the Reserve Zone at Junction I on Tin Shui Road in Tin Shui Wai. <b>PERMIT RENEWAL</b> (GW-TW0308-02).	18 Nov. 02 for start 30 Nov. 02	29 January 2003	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
87	CNP Application 5 November 2002 <b>Permit No.</b> <b>GW-TW0395-02</b>	Construction Noise Permit (Weekdays 19.00-24.00hrs and 01.00 to 05.30 hrs). Light Rail permanent way alterations to extend the LRT system into the Reserve Zone at Junction J (north of Stop 500) on Tin Shing Rd in Tin Shui Wai. <b>PERMIT RENEWAL</b> (GW-TW0309-02).	18 Nov. 02 for start 30 Nov. 02	29 January 2003	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.

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88	CNP Application 13 November 2002 <b>Permit No.</b> <b>GW-TW0403-02</b>	Construction Noise Permit (07.00 to 19.00hrs on General holiday incl. Sundays & weekdays 19.00-23.00hrs). Foundation works to facilitate LRT grade separation viaduct construction at junction Mj7 West on Pui To Road, Tuen Mun. <b>PERMIT RENEWAL</b> (GW-TW0171-02).	21 Nov. 02 for start 15 Dec. 02	14 February 2003	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
89	CNP Application 13 November 2002 <b>Permit No.</b> <b>GW-TW0404-02</b>	Construction Noise Permit (Weekdays 23.00 - 07.00 hrs). Erection of Portal Frame to facilitate installation of viaduct at Mj7 junction on Pui To Road, Tuen Mun.	21 Nov. 02 for start 27 Nov. 02	24 December 2002	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
90	CNP Application 13 November 2002  Ref: TW0405-02	Construction Noise Permit (Weekdays 19.00 - 05.30 hrs). Construction and installation of OHL masts & equipment for Light Rail interim diversion at Tsing Lun Road, Lam Tei (LT1).	04 Dec. 02 for start 3 Dec. 02	03 April 2003	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
91	CNP Application 14 November 2002  Ref: TW0408-02	Construction Noise Permit (Weekdays 19.00 - 05.30 hrs). Temporary diversion of the Light Rail permanent way to facilitate construction of the new LRT viaduct at Tsing Lun Road, Lam Tei (LT1).	09 Dec.02 for start 9 Dec. 02	31 March 2003	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
92	CNP Application 14 November 2002  Ref: TW0409-02	Construction Noise Permit (Weekdays 23.00 - 07.00 hrs). Light Rail permanent way temporary paved track installation for interim diversion at Tsing Lun Road, Lam Tei (LT1).	09 Dec. 02 for start 16 Dec. 02	15 February 2003	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
93	CNP Application 25 November 2002  Ref: TW0419-02	Construction Noise Permit (weekdays 24.00-06.00hrs). Erection of working platforms, viaduct beams & pre-cast Planks over existing LRT track at Mj7 West Industrial area on Pui To Road from the Police Station to Kin Tai Street, Tuen Mun.	11 Dec. 02 for start 16 Dec. 02	15 March 2003	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
94	CNP Application 25 November 2002  Ref: TW0421-02	Construction Noise Permit (weekdays 19.00 to 07.00 hrs) Excavation of third caisson to support the new LRT viaduct at the junction of Heung Sze Wui Road and Pui To Road, Tuen Mun.	17 Dec. 02 for <b>1 day</b> <b>trial</b> from 17 Dec. 02	31 January 2003	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.

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95	CNP Application 25 November 2002  Ref: TW0420-02	Construction Noise Permit (weekdays 23.00-06.00hrs). Erection of viaduct beams & pre-cast Planks over LRT at J6 West work area on Pui To Road, i.e. between San Fat Stop and Heung Sze Wui Road, Tuen Mun. <b>PERMIT RENEWAL</b> (GW-TW0307-02).	04 Dec. 02 for start 5 Dec. 02	14 January 2003	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
96	CNP Application 28 November 2002  Ref: TW0423-02	Construction Noise Permit (weekdays 23.00-06.00hrs). Erection of working platforms, viaduct beams & pre-cast Planks alongside LRT track at Mj7 North Industrial area from Pui To Road to Kin Fung Circuit, Tuen Mun.	11 Dec. 02 for start 23 Dec. 02	22 March 2003	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
97	CNP Application 28 November 2002  Ref: TW0424-02	Construction Noise Permit (Weekdays 23.00 - 06.00 hrs). Erection of viaduct beams & pre-cast planks over the existing LRT track at Mj7 junction on Pui To Road, Tuen Mun.	06 Dec. 02 for start 2 Jan. 03	01 March 2003	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
98	CNP Application 05 December 2002 Permit No. GW-TW0434-02	Construction Noise Permit (Weekdays 23.00 - 05.30 hrs). Concreting of OHL masts & back stays for Light Rail interim diversion to facilitate construction of the grade separation viaduct at Tsing Lun Road, Lam Tei (LT1).	20 Dec. 02 for start 23 Dec. 02	22 February 2003	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
99	CNP Application 16 December 2002 Permit No. GW-TW0445-02	Construction Noise Permit (weekdays 23.00-07.00 hrs). To construct a crossing over the Light Rail permanent way for construction plant access at Ng Lau Road, near Lam Tei Interchange (LT1 work site).	14 Jan.03 for start 3 Feb. 03	30 April 2003	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
100	CNP Application 18 December 2002 Permit No. GW-TW0450-02	Construction Noise Permit {Any day (incl. Sunday) 01.00 to 06.00 hrs & weekdays 19.00 to 23.00 & general holidays (incl. Sunday) 07.00 to 23.00 hours}. Excavation of third caisson to support the new LRT viaduct at the junction of Heung Sze Wui Road and Pui To Road, Tuen Mun. Permit Renewal (GW-TW0421-02).	23 Dec. 02 for start 23 Dec. 02	22 February 2003	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
101	CNP Application 11 January 2003 Permit No. GW-TW0018-03	Construction Noise Permit (Weekdays 019.hrs to 05.30 hrs). Light Rail permanent way alterations to facilitate Phase 4 extension of LRT system at south end of Stop 500 (by junction Q) in Tin Shui Wai. Permit Renewal (GW-TW0357-02).	29 Jan. 03 for start 30 Jan. 03	29 April 2003	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.

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102	CNP Application 11 January 2003 Permit No. GW-TW0016-03	Construction Noise Permit (Weekdays 19.00 hrs to 05.30 hrs). Light Rail permanent way alterations to extend the LRT system into the Reserve Zone at junction of Tin Wing Road and Tin Shui Road (Junction I) in Tin Shui Wai. Permit Renewal (GW-TW0396-02).	29 Jan. 03 for start 30 Jan. 03	29 April 2003	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
103	CNP Application 11 January 2003 Permit No. GW-TW0017-03	Construction Noise Permit (Weekdays 19.00 hrs to 05.30 hrs). Light Rail permanent way alterations to extend the LRT system into the Reserve Zone at Junction J (north of Stop 500) on Tin Shing Rd in Tin Shui Wai. Permit Renewal (GW-TW0395-02).	29 Jan. 03 for start 30 Jan. 03	29 April 2003	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
104	CNP Application 14 January 2003 Permit No. GW-TW0031-03	Construction Noise Permit (Weekdays 01.00-05.00hrs). Light Rail permanent way alterations to facilitate Phase 4 extension of LRT system at Junction B (junction of Ping Ha Road and Tin Yiu Road) in Tin Shui Wai.  Permit Renewal (GW-TW0223-02).	27 Jan. 03 for start 04 Feb. 03	03 August 2003	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
105	CNP Application 14 January 2003 Permit No. GW-TW0032-03	Construction Noise Permit (Weekdays 23.00 - 07.00 hrs). Cable installation along existing LRT reserve from Yuen Long Terminus to Junction B Tin Shui Wai and Ho Tin Stop Tuen Mun. PERMIT RENEWAL (GW-TW0363-02)	23 Jan. 03 for start 04 Feb. 03	31 March 2003	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
106	CNP Application 17 January 2003 Permit No. GW-TW0039-03	Construction Noise Permit (weekdays 24.00-06.00hrs). Erection of viaduct pre-cast parapets over LRT and main road at J6 work area between San Fat Stop, Pui To Stop & Town Centre Stop, Tuen Mun. PERMIT RENEWAL (GW-TW0390-02)	29 Jan. 03 for start 10 Feb. 03	31 March 2003	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
107	CNP Application 18 January 2003 Permit No. <b>GW-TW0037-03</b>	Construction Noise Permit (weekdays 19.00-23.00hrs & 07.00 to 19.00hrs on General holiday incl. Sundays). Foundation works to facilitate LRT viaduct construction at junction Mj7 North on Pui To Road, Tuen Mun. <b>PERMIT RENEWAL (GW-TW0290-02)</b>	06 Feb. 03 for start 10 Feb. 03	15 April 2003	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
108	CNP Application 18 January 2003 Permit No. <b>GW-TW0038-03</b>	Construction Noise Permit (weekdays 19.00-23.00hrs & 07.00 to 19.00hrs on General holiday incl. Sundays). Foundation works to facilitate LRT grade separation viaduct construction at junction Mj7 West on Pui To Road, Tuen Mun. <b>PERMIT RENEWAL (GW-TW0403-02).</b>	07 Feb. 03 for start 15 Feb. 03	15 March 2003	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.



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109	CNP Application 20 January 2003 <b>Permit No.</b> GW-TW0041-03	Construction Noise Permit (weekdays 24.00-06.00hrs). Erection of viaduct beams & pre-cast planks over LRT and main road at J6 Delta work area at the junction of Pui To Road and Heung Sze Wui Road, Tuen Mun. <b>PERMIT RENEWAL</b> (GW-TW0352-02).	06 Feb. 03 for start 20 Feb. 03	31 March 2003	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
110	CNP Application 20 January 2003 <b>Permit No.</b> GW-TW0042-03	Construction Noise Permit (weekdays 23.00-06.00hrs). Erection of viaduct beams & pre-cast Planks over LRT at J6 West work area on Pui To Road, i.e. between San Fat Stop and Heung Sze Wui Road, Tuen Mun. <b>PERMIT RENEWAL</b> (GW-TW0420-02).	12 Feb. 03 for start 13 Feb. 03	31 March 2003	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
111	CNP Application 24 January 2003 <b>Permit No.</b> <b>GW-TW0044-03</b>	Construction Noise Permit (Weekdays 23.00 - 05.30 hrs). Concreting of OHL masts & back stays for Light Rail interim diversion to facilitate construction of the grade separation viaduct at Tsing Lun Road, Lam Tei (LT1). <b>PERMIT RENEWAL</b> (GW-TW0434-02).	12 Feb. 03 for start 23 Feb. 03	30 April 2003	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
112	CNP Application 27 January 2003 <b>Permit No.</b> <b>GW-TW0045-03</b>	Construction Noise Permit (Weekdays 23.00 - 06.00 hrs). Erection of viaduct beams & pre-cast planks over the existing LRT track at Mj7 junction on Pui To Road, Tuen Mun. <b>PERMIT RENEWAL</b> (GW-TW0424-02).	10 Feb. 03 for start 2 Mar. 03	01 June 2003	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
113	CNP Application 14 February 2003 <b>Permit No.</b> <b>GW-TW0053-03</b>	Construction Noise Permit (weekdays 24.00-06.00hrs). Erection of working platforms, viaduct beams & pre-cast Planks over existing LRT track at Mj7 West Industrial area on Pui To Road from the Police Station to Kin Tai Street, Tuen Mun. <b>PERMIT RENEWAL</b> (GW-TW0419-02).	07 Mar. 03 for start 17 Mar. 03	15 May 2003	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
114	CNP Application 14 February 2003 <b>Permit No.</b> <b>GW-TW0054-03</b>	Construction Noise Permit (weekdays 22.00-05.00hrs). OHL alterations & new connections in the vicinity of junction Q to provide traction power to the LRT Phase 4 extension in Tin Shui Wai.	28 Feb. 03 for start 17 Mar. 03	16 June 2003	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
115	CNP Application 20 February 2003 <b>Permit No.</b> <b>GW-TW0062-03</b>	Construction Noise Permit (weekdays 23.00-06.00hrs). Erection of working platforms, viaduct beams & pre-cast Planks alongside LRT track at Mj7 North Industrial area from Pui To Road to Kin Fung Circuit, Tuen Mun. <b>PERMIT RENEWAL</b> (GW-TW0423-02).	14 Mar. 03 for start 24 Mar. 03	30 April 2003	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.

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116	CNP Application 26 February 2003 <b>Permit No.</b> <b>GW-TW0074-03</b>	Construction Noise Permit (Weekdays 19.00 - 05.30 hrs). Temporary diversion of the Light Rail permanent way to facilitate construction of the new LRT grade separation viaduct at Tsing Lun Road, Lam Tei (LT1). <b>PERMIT RENEWAL</b> (GW-TW0408-02).	21 Mar. 03 for start 01 Apr. 03	31 May 2003	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
117	CNP Application 26 February 2003 <b>Permit No.</b> <b>GW-TW0073-03</b>	Construction Noise Permit (weekdays 22.00-05.00hrs). OHL alterations & new connections in the vicinity of junction B to provide traction power to the LRT Phase 4 extension in Tin Shui Wai.	25 Mar. 03 for start 01 Apr. 03	30 April 2003	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
118	CNP Application 26 February 2003 <b>Permit No.</b> GW-TW0072-03	Construction Noise Permit (weekdays 22.00-05.00hrs). OHL alterations & new connections in the vicinity of junction J to provide traction power to the LRT Reserve Zone extension in Tin Shui Wai.	12 Mar. 03 for start 01 Apr. 03	30 June 2003	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
119	CNP Application 07 March 2003 <b>Permit No.</b> GW-TW0089-03	Construction Noise Permit (Weekdays 22.00 - 05.30 hrs). Installation of OHL masts & equipment for Light Rail interim diversion at Tsing Lun Road, Lam Tei (LT1). <b>PERMIT RENEWAL</b> (GW-TW0405-02)	24 Mar. 03 for start 04 Apr. 03	31 May 2003	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
120	CNP Application 07 March 2003 <b>Permit No.</b> <b>GW-TW0090-03</b>	Construction Noise Permit (Weekdays 23.00 - 07.00 hrs). Cable installation along existing LRT reserve from Yuen Long Terminus to Junction B Tin Shui Wai and Ho Tin Stop Tuen Mun. <b>PERMIT RENEWAL</b> (GW-TW0032-03)	24 Mar. 03 for start 01 Apr. 03	30 June 2003	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
121	CNP Application 13 March 2003 <b>Permit No.</b> <b>GW-TW0097-03</b>	Construction Noise Permit (Weekdays 19.00 hrs to 05.00 hrs). Light Rail permanent way alterations to facilitate Phase 4 extension of LRT system at Stop 500 south & west (by junction Q) in Tin Shui Wai. <b>PERMIT RENEWAL</b> (GW-TW0018-03).	09 Apr. 03 for start 09 Apr. 03	09 May 2003	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
122	CNP Application 13 March 2003 <b>Permit No.</b> <b>GW-TW0095-03</b>	Construction Noise Permit (Weekdays 19.00 hrs to 05.00 hrs). Light Rail permanent way alterations to extend the LRT system into the Reserve Zone at junction of Tin Wing Road and Tin Shui Road (Junction I) in Tin Shui Wai. <b>PERMIT RENEWAL</b> (GW-TW0016-03).	09 Apr. 03 for start 09 Apr. 03	09 May 2003	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.

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123	CNP Application 13 March 2003 <b>Permit No.</b> <b>GW-TW0096-03</b>	Construction Noise Permit (Weekdays 19.00 hrs to 05.00 hrs). Light Rail permanent way alterations to extend the LRT system into the Reserve Zone at Junction J & north east part of Stop 500 on Tin Shing Rd in Tin Shui Wai. <b>PERMIT RENEWAL</b> (GW-TW0017-03).	09 Apr. 03 for start 09 Apr. 03	09 May 2003	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
124	CNP Application 17 March 2003 <b>Permit No.</b> <b>GW-TW0100-03</b>	Construction Noise Permit (Weekdays 21.00-05.00hrs). Light Rail permanent way alterations & drainage to permit Phase 4 extension of LRT at Junction B (junction of Ping Ha Road and Tin Yiu Road) in Tin Shui Wai. <b>PERMIT RENEWAL</b> (GW-TW0031-03).	09 Apr. 03 for start 09 Apr. 03	09 May 2003	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
125	CNP Application 17 March 2003 <b>Permit No.</b> <b>GW-TW0099-03</b>	Construction Noise Permit (Weekdays 21.00 hrs to 05.00 hrs). Excavation of two new OHL pole foundations to extend the LRT system into the Reserve Zone at Junction J West on Tin Wing Rd in Tin Shui Wai.	10 Apr. 03 for start 10 Apr. 03	30 April 2003	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
126	CNP Application 24 March 2003 <b>Permit No.</b> GW-TW0112-03	Construction Noise Permit (weekdays 22.00-05.00hrs). OHL alterations & new connections in the vicinity of junction I to provide traction power to the LRT Reserve Zone extension in Tin Shui Wai.	17 Apr. 03 for start 01 May 03	01 June 2003	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
127	CNP Application 3 April 2003  Ref: TW0125-03	Construction Noise Permit (Holidays 07.00-19.00hrs). Light Rail permanent way thermic welding of track at the new West Rail Station on Tin Fuk Road in Tin Shui Wai (east of junction B) for the LRT Phase 4 extension.	Refused see EPD letter 14 April 03	N/A	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
128	CNP Application 07 April 2003 <b>Permit No.</b> <b>GW-TW0130-03</b>	Construction Noise Permit (weekdays 22.00-05.00hrs). OHL alterations & new connections in the vicinity of junction B to provide traction power to the LRT Phase 4 extension in Tin Shui Wai. <b>PERMIT RENEWAL</b> (GW-TW0073-03).	23 Apr. 03 for start 01 May 03	30 June 2003	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
129	CNP Application 11 April 2003  Ref: TW0135-03	Construction Noise Permit (Weekdays 19.00 hrs to 05.00 hrs). Light Rail permanent way alterations to extend the LRT system into the Reserve Zone at Junction J & north east part of Stop 500 on Tin Shing Rd in Tin Shui Wai. <b>PERMIT RENEWAL</b> (GW-TW0096-03).	09 May 03 for start 10 May 03	30 June 2003	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.

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130	CNP Application 11 April 2003  Ref: TW0134-03	Construction Noise Permit (Weekdays 19.00 hrs to 05.00 hrs). Light Rail permanent way alterations to extend the LRT system into the Reserve Zone at junction of Tin Wing Road and Tin Shui Road (Junction I) in Tin Shui Wai. <b>PERMIT RENEWAL</b> (GW-TW0095-03).	09 May 03 for start 10 May 03	30 June 2003	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
131	CNP Application 11 April 2003 Submitted 15 Apr. Ref: TW0140-03	Construction Noise Permit (Weekdays 19.00 - 21.00 hrs & holidays 07.00 - 19.00 hrs). Foundation piling works for LRT grade separation viaduct at LT1 (Lam Tei work area) Tuen Mun.	07 May 03 for start 07 May 03	31 October 2003	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
132	CNP Application 17 April 2003  Ref: TW0147-03	Construction Noise Permit (Weekdays 21.00 hrs to 05.00 hrs). Light Rail permanent way alterations to facilitate Phase 4 extension of LRT system at Stop 500 south & west (by junction Q) in Tin Shui Wai. <b>PERMIT RENEWAL</b> (GW-TW0097-03).	13 May 03 for start 13 May 03	30 June 2003	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
133	CNP Application 17 April 2003  Ref: TW0148-03	Construction Noise Permit (Weekdays 21.00-05.00hrs). Light Rail permanent way alterations & drainage to permit Phase 4 extension of LRT at Junction B (junction of Ping Ha Road and Tin Yiu Road) in Tin Shui Wai.  <b>PERMIT RENEWAL</b> (GW-TW0100-03).	13 May 03 for start 14 May 03	30 June 2003	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
134	CNP Application 23 April 2003  Ref: TW0150-03	Construction Noise Permit (Weekdays 19.00 hrs to 07.00 hrs). Light Rail permanent way diamond track crossing at junction of Tin Wing Road and Tin Shui Road (Junction I) in Tin Shui Wai. <b>PERMIT SPECIAL FOR ONE NIGHT</b> (GW-TW0095-03).	Refused see EPD letter 30 April 03	N/A	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
135	CNP Application 25 April 2003  Ref: TW0155-03	Construction Noise Permit (Weekdays 21.00 hrs to 05.00 hrs). Excavation of four new OHL pole & back stay foundations north of TM Town Centre Stop (J6 South) on Heung Sze Wui Road in Tuen Mun.	15 May 03 for start 19 May 03	18 June 2003	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
136	CNP Application 07 May 2003 <b>Permit No.</b> GW-TW0163-03	Construction Noise Permit (weekdays 22.00-05.00hrs). OHL alterations & new connections west of Pui To Stop (in J6 east work area) to activate traction power system on new Tuen Mun LRT grade separation viaduct.	29 May 03 for start 01 June 03	31 Aug. 2003	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.

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137	CNP Application 07 May 2003 <b>Permit No.</b> GW-TW0164-03	Construction Noise Permit (weekdays 22.00-05.00hrs). OHL alterations & new connections north of TM Town Centre Stop (in J6 south work area) to provide traction power to the new LRT grade separation viaduct.	29 May 03 for start 01 June 03	31 Aug. 2003	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
138	CNP Application 12 May 2003 <b>Ref: TW0168-03</b>	Construction Noise Permit (weekdays 22.00-05.00hrs). OHL alterations & connections to activate traction power system on new Tuen Mun LRT grade separation viaduct at west end of industrial area on Pui To Road (Mj7 West).	5 June 03 for start 09 June 03	31 Aug. 2003	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
139	CNP Application 12 May 2003 <b>Ref: TW0169-03</b>	Construction Noise Permit (weekdays 22.00-05.00hrs). OHL alterations & connections to activate traction power system on new Tuen Mun LRT grade separation viaduct between Kin Fung Circuit and the Nullah at Mj7 North.	3 June 03 for start 09 June 03	31 Aug. 2003	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
140	CNP Application 13 May 2003 <b>Permit No.</b> GW-TW0170-03	Construction Noise Permit (weekdays 22.00-05.00hrs). OHL alterations & new connections in the vicinity of junction I to provide traction power to the LRT Reserve Zone extension in Tin Shui Wai. <b>PERMIT RENEWAL</b> (GW-TW0112-03).	29 May 03 for start 02 June 03	31 July 2003	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
141	CNP Application 17 May 2003 <b>Ref: TW0178-03</b>	Construction Noise Permit (weekdays 19.00-23.00hrs & general holidays 07.00 to 19.00 hours). Road repairs and connection of the new Tuen Mun LRT grade separation viaduct storm water drainage system in the industrial areas at Mj7 North and along Pui To Road at Mj7 West.	02 June 03 for start 12 June 03	11 Sept. 2003	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
142	CNP Application 17 May 2003 <b>Ref: TW0176-03</b>	Construction Noise Permit (weekdays 23.00-07.00hours). Connection of the storm water drainage pipes above Pui To Road at the underside of the new Tuen Mun LRT viaduct in the industrial area at junctions Mj7 & Mj8.	02 June 03 for start 12 June 03	11 Sept. 2003	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
143	CNP Application 17 May 2003 <b>Ref: TW0177-03</b>	Construction Noise Permit (weekdays 19.00-23.00hrs & general holidays 07.00 to 19.00 hours). Construction of the LRT track on the new Tuen Mun LRT grade separation viaduct in the industrial areas at Mj7 North and along Pui To Road at Mj7 West.	02 June 03 for start 12 June 03	11 Sept. 2003	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.

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144	CNP Application 19 May 2003  <b>Ref: TW0179-03</b>	Construction Noise Permit (weekdays 21.00-05.00hours). Alterations to the existing LRT permanent way between Kin Fung Circuit and the Nullah to connect the LRT track on the new viaduct in the Tuen Mun industrial area at Mj7 North.	03 June 03 for start 16 June 03	15 Sept. 2003	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
145	CNP Application 24 May 2003 (Submitted 27 May) <b>Ref: TW0186-03</b>	Construction Noise Permit (weekdays 21.00-05.00hours). Alterations to the existing permanent way at J6 South (north of TM Town Centre Stop) to connect the LRT track onto the new Tuen Mun viaduct in Hueng Sze Wui Road.	17 June 03 for start 23 June 03	22 Sept. 2003	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
146	CNP Application 24 May 2003 (Submitted 27 May) <b>Ref: TW0185-03</b>	Construction Noise Permit (weekdays 21.00-05.00hours). Alterations to the existing permanent way at J6 East (west of Pui To Stop) to connect the LRT track onto the new Tuen Mun viaduct in Pui To Road.	17 June 03 for start 23 June 03	22 Sept. 2003	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
147	CNP Application 30 May 2003  <b>Ref: TW0???-03</b>	Construction Noise Permit (weekdays 01.00-05.00hours). Connection of the storm water drainage pipes above the LRT track and public Road at the underside of the new viaduct from San Fat Stop to the east side of Heung Sze Wui Road in Tuen Mun.	11 June 03 for start 23 June 03	30 August 2003	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
148	CNP Application 03 June 2003 <b>Permit No.</b> GW-TW0191-03	Construction Noise Permit (weekdays 21.00-05.00hours). Light Rail permanent way alterations to extend the LRT system into the Reserve Zone at junction of Tin Wing Road and Tin Shui Road (Junction I) in Tin Shui Wai.  <b>PERMIT RENEWAL</b> (GW-TW0134-03).	16 June 03 for start 01 July 03	31 July 2003	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
149	CNP Application 03 June 2003 <b>Permit No.</b> GW-TW0192-03	Construction Noise Permit (weekdays 21.00-05.00hours). Light Rail permanent way alterations to extend the LRT system into the Reserve Zone at junction of Tin Wing Road and Tin Shing Road (Junction J) in Tin Shui Wai.  <b>PERMIT RENEWAL</b> (GW-TW0135-03).	16 June 03 for start 01 July 03	31 July 2003	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.

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150	CNP Application 09 June 2003 <b>Permit No.</b> GW-TW0205-03	Construction Noise Permit (weekdays 23.00-05.00hrs). Testing & commissioning of points motors and lever boxes for LRT Phase 4 extension at Junction B (junction of Ping Ha Road and Tin Yiu Road) in Tin Shui Wai. <b>PERMIT RENEWAL</b> (GW-TW0148-03).	(No date) for start 01 July 03	31 July 2003	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
151	CNP Application 09 June 2003 <b>Permit No.</b> GW-TW0206-03	Construction Noise Permit (weekdays 23.00 - 05.00 hrs). Testing & commissioning of points motors and lever boxes at Stop 500 south & west (existing Tin Shui Wai terminus) to facilitate extension of the LRT service. <b>PERMIT RENEWAL</b> (GW-TW0147-03).	19 June 03 for start 01 July 03	31 July 2003	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
152	CNP Application 11 June 2003 <b>Permit No.</b> Ref: TW0209-03	Construction Noise Permit (weekdays 19.00 - 23.00 hrs). Erection of north and south pedestrian footbridge canopies at Stop 468 on the Junction L viaduct (at the junction of Tin Shui Road & Tin Wah Road) in TSW.	23 June 03 for start 30 June 03	31 July 2003	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
153	CNP Application 12 June 2003 <b>Ref: TW0210-03</b>	Construction Noise Permit (weekdays 21.00-05.00hours). Minor permanent way track work at J6 South (north of TM Town Centre Stop) to connect the LRT track onto the new Tuen Mun viaduct in Hueng Sze Wui Road.	25 June 03 for start 01 July 03	30 September 2003	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
154	CNP Application 12 June 2003 <b>Ref: TW0211-03</b>	Construction Noise Permit (weekdays 21.00-05.00hours). Minor permanent way track work at J6 East (west of Pui To Stop) to connect the LRT track onto the new Tuen Mun viaduct in Pui To Road.	25 June 03 for start 01 July 03	30 September 2003	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
155	CNP Application 20 June 2003 <b>Ref: TW0220-03</b>	Construction Noise Permit (weekdays 22.00-05.00hours). OHL traction power testing and commissioning work in the vicinity of junction B in Tin Shui Wai. <b>PERMIT RENEWAL</b> (GW-TW0130-03).	30 June 03 for start 14 July 03	13 August 2003	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
156	CNP Application 23 June 2003 <b>Ref: TW0???-03</b>	Construction Noise Permit (weekdays 22.00-05.00hours). Reduce the height of the existing OHL traction power support poles at Stop 500 (Tin Shui Wai LRT Terminus) to permit air space construction work.	03 July 03 for start 16 July 03	15 October 2003	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.

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157	CNP Application 11 July 2003  <b>Ref: TW0247-03</b>	Construction Noise Permit (weekdays 19.00-05.00hours). Remedial works to rail track installations, overhead line / traction power systems and associated equipment from Junction B to Junction Q in Tin Shui Wai Phase 4 area.	04 Aug. 03 for start 16 Aug. 03	30 September 2003	EPD Local Control Office / Territory West; 7 <sup>th</sup> Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
158	CNP Application 11 July 2003  <b>Ref: TW0246-03</b>	Construction Noise Permit (weekdays 19.00-05.00hours). Remedial works to rail track installations, overhead line / traction power systems and associated equipment at Tin Shui Wai Reserve Zone East area (Stop 500 north).	04 Aug. 03 for start 16 Aug. 03	30 September 2003	EPD Local Control Office / Territory West; 7 <sup>th</sup> Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
159	CNP Application 11 July 2003  <b>Ref: TW0278-03</b>	Construction Noise Permit (weekdays 19.00-05.00hours). Remedial works to rail track installations, overhead line / traction power systems and associated equipment at Tin Shui Wai Reserve Zone West area (junction I north).	04 Aug. 03 for start 16 Aug. 03	30 September 2003	EPD Local Control Office / Territory West; 7 <sup>th</sup> Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
160	CNP Application 15 July 2003  <b>Ref: TW0253-03</b>	Construction Noise Permit (weekdays 01.00-05.00hours). Reinstatement of cable trough (after permanent rail track installation is complete) to carry LRT power and control cables, at west end of Pui To Stop in Tuen Mun (J6 East).	31 Jul. 03 for start 24 Aug. 03	23 September 2003	EPD Local Control Office / Territory West; 7 <sup>th</sup> Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
161	CNP Application 22 July 2003  <b>Ref: TW0259-03</b>	Construction Noise Permit (weekdays 22.00-05.00hours). OHL traction power remedial work from Junction I (junction Tin Shui Road & Tin Wing Road) through Junction J to Stop 500 on Tin Shing Road, Tin Shui Wai.	01 Aug. 03 for start 01 Aug. 03	15 August 2003	EPD Local Control Office / Territory West; 7 <sup>th</sup> Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
162	CNP Application 30 July 2003  <b>Ref: TW02??-03</b>	Construction Noise Permit (weekdays 22.00-05.00hrs). OHL alterations & new connections west of Pui To Stop (in J6 east work area) to activate traction power system on new Tuen Mun LRT grade separation viaduct. <b>RENEWAL OF PERMIT No. GW-TW063-03.</b>	14 Aug. 03 for start 01 Sept. 03	31 October 2003	EPD Local Control Office / Territory West; 7 <sup>th</sup> Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
163	CNP Application 30 July 2003  <b>Ref: TW02??-03</b>	Construction Noise Permit (weekdays 22.00-05.00hrs). OHL alterations & new connections north of TM Town Centre Stop (in J6 south work area) to provide traction power to the new LRT grade separation viaduct. <b>RENEWAL OF PERMIT No. GW-TW064-03.</b>	14 Aug. 03 for start 01 Sept. 03	31 October 2003	EPD Local Control Office / Territory West; 7 <sup>th</sup> Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.



ITEM No.	PERMIT No.	PERMIT DESCRIPTION	ISSUE DATE	EXPIRY DATE	ISSUING OFFICE
164	CNP Application 09 September 2003 <b>Permit No. GW-TW0316-03</b>	Construction Noise Permit (Weekdays 19.00 - 21.00 hrs & holidays 07.00 – 19.00 hrs). Pile head construction & pile cap preparatory works for LRT grade separation viaduct at LT1 (Lam Tei work area) Tuen Mun.	29 Sept. 03 for start 29 Sept. 03	31 December 2003	EPD Local Control Office / Territory West; 7 <sup>th</sup> Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
165	CNP Application 09 September 2003 <b>Permit No. GW-TW0311-03</b>	Construction Noise Permit (weekdays 19.00-23.00 hours & general holidays 07.00 to 19.00 hours). Road repairs and connection of the new Tuen Mun LRT grade separation viaduct storm water drainage system in the industrial areas at Mj7 North and along Pui To Road at Mj7 West. <b>RENEWAL OF PERMIT No. GW-TW178-03.</b>	23 Sept. 03 for start 29 Sept. 03	27 March 2004	EPD Local Control Office / Territory West; 7 <sup>th</sup> Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
166	CNP Application 25 September 2003 <b>Ref: TW0328-03</b>	Construction Noise Permit (weekdays 24.00-06.00 hours). Erection & removal of falsework to facilitate construction of the new LRT grade separation viaduct at LT1 work site (across Tsing Lun Road in north Tuen Mun) with road closure.	for start 20 Oct. 03		EPD Local Control Office / Territory West; 7 <sup>th</sup> Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
167	CNP Application 26 September 2003 <b>Ref: TW0???-03</b>	Construction Noise Permit (weekdays 19.00-05.00hours). Remedial works to rail track installations, overhead line / traction power systems and associated equipment from Junction B to Junction Q in Tin Shui Wai Phase 4 area. <b>RENEWAL OF PERMIT No. GW-TW246-03.</b>	for start 15 Oct. 03		EPD Local Control Office / Territory West; 7 <sup>th</sup> Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
168	CNP Application 26 September 2003 <b>Ref: TW0???-03</b>	Construction Noise Permit (weekdays 19.00-05.00hours). Remedial works to rail track installations, overhead line / traction power systems and associated equipment at Tin Shui Wai Reserve Zone East area (Stop 500 north). <b>RENEWAL OF PERMIT No. GW-TW247-03.</b>	for start 15 Oct. 03		EPD Local Control Office / Territory West; 7 <sup>th</sup> Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
169	CNP Application 26 September 2003 <b>Ref: TW0???-03</b>	Construction Noise Permit (weekdays 19.00-05.00hours). Remedial works to rail track installations, overhead line / traction power systems and associated equipment at Tin Shui Wai Reserve Zone West area (junction I north). <b>RENEWAL OF PERMIT No. GW-TW248-03.</b>	for start 15 Oct. 03		EPD Local Control Office / Territory West; 7 <sup>th</sup> Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
170	CNP Application 30 September 2003 <b>Ref: TW0???-03</b>	Construction Noise Permit (weekdays 21.00-05.00hours). Light Rail permanent way & OHL remedial and rectification work at junction of Tin Wing Road and Tin Shui Road (Junction I) in Tin Shui Wai. <b>RENEWAL OF PERMIT No. GW-TW0191-03.</b>	for start 06 Oct. 03		EPD Local Control Office / Territory West; 7 <sup>th</sup> Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.

ITEM No.	PERMIT No.	PERMIT DESCRIPTION	ISSUE DATE	EXPIRY DATE	ISSUING OFFICE
171	CNP Application 30 September 2003  Ref: TW0???-03	Construction Noise Permit (weekdays 21.00-05.00hours). Light Rail permanent way & OHL remedial and rectification work at junction of Tin Wing Road and Tin Shing Road (Junction J) in Tin Shui Wai. <b>RENEWAL OF PERMIT No. GW-TW0192-03.</b>	for start 06 Oct. 03		EPD Local Control Office / Territory West; 7 <sup>th</sup> Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
172	CNP Application 30 September 2003  Ref: TW0???-03	Construction Noise Permit (weekdays 23.00-05.00hrs). Light Rail permanent way & OHL remedial and rectification work at Junction B (junction of Ping Ha Road and Tin Yiu Road) in Tin Shui Wai. <b>RENEWAL OF PERMIT No. GW-TW0205-03.</b>	for start 06 Oct. 03		EPD Local Control Office / Territory West; 7 <sup>th</sup> Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.

**Environmental Licence/Permit Register**

**Date: 31 July 2003**

ITEM No.	PERMIT / LICENCE OR REGISTRATION No.	PERMIT / REGISTRATION DESCRIPTION	ISSUE DATE	EXPIRY DATE	ISSUING OFFICE
01	Permit No. EP-041/2000/A (KCRC)	Environmental Permit to Construct and Operate a Designated Project – Tin Shui Wai Phase 4 Rail Extension.	4 October 2002	N/A	EPD; 28 / Floor; Southorn Centre; 130, Hennessy Road, Wan Chai.
02	Permit No. EP-042/2000/D (KCRC)	Environmental Permit to Construct and Operate a Designated Project – Light Rail Transit (LRT) Extension in Tin Shui Wai Reserve Zone and Grade Separation of the LRT with Pui To Road and Tsing Lun Road in Tuen Mun.	4 October 2002	N/A	EPD; 28 / Floor; Southorn Centre; 130, Hennessy Road, Wan Chai.
03	Permit No. FEP-041/2001 (LCAL)	Further Environmental Permit to Construct a Designated Project – Light Rail Transit (LRT) Extension in Tin Shui Wai Reserve Zone and Grade Separation of the LRT with Pui To Road and Tsing Lun Road in Tuen Mun.	23 March 2001	N/A	EPD; 28 / Floor; Southorn Centre; 130, Hennessy Road, Wan Chai.
04	Permit No. FEP-042/2001 (LCAL)	Further Environmental Permit to Construct a Designated Project – Tin Shui Wai Phase 4 Rail Extension.	23 March 2001	N/A	EPD; 28 / Floor; Southorn Centre; 130, Hennessy Road, Wan Chai.
05	Form NA Submission Under APCO – EPD Ref: No. TW20010406-001	Notification under Section 3(1) of the Air Pollution Control (Construction Dust) Regulations that construction works are commencing at the Tuen Mun site areas (Jn 6 , Mj7 & Mj8).	3 <sup>rd</sup> May 2001	N/A	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
06	Form NA Submission Under APCO – EPD Ref: No. TW20010407-001	Notification under Section 3(1) of the Air Pollution Control (Construction Dust) Regulations that construction works are commencing at the Tin Shui Wai site areas (Phase 4 & Reserve Zone).	3 <sup>rd</sup> May 2001	N/A	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
07	Registration No. 5211-424-L2174-14	Registration as Chemical Waste Producer under the Waste Disposal (Chemical Waste) (General) Regulation for Pui To Road, Tuen Mun work areas.	14 June 2001	N/A	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
08	Registration No. 5298-515-L2174-16	Registration as Chemical Waste Producer under the Waste Disposal (Chemical Waste) (General) Regulation for Tin Shui Wai – Phase 4 & Reserve Zone work areas.	29 June 2001	N/A	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.

ITEM No.	PERMIT / LICENCE OR REGISTRATION No.	PERMIT / REGISTRATION DESCRIPTION	ISSUE DATE	EXPIRY DATE	ISSUING OFFICE
09	Licence No. W7M17 - 1	Discharge Licence for the North Western Water Control Zone under Section 20 of the Water Pollution Control Ordinance. Applicable in the Tuen Mun work areas.	29 June 2001	30 June 2006	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
10	Licence No. 1T279 / 1	Discharge Licence for the Deep Bay Water Control Zone under Section 20 of the Water Pollution Control Ordinance. Applicable in the Tin Shui Wai – Phase 4 & Reserve Zone work areas.	5 July 2001	31 July 2006	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
11	Licence No. 18628	Dangerous Goods Licence for the storage of Acetylene (18 cylinders x 48 litres – water capacity). Category 2 Class 3 Dangerous Goods.	19 Sept. 2001		Fire Services Department; Licensing & Certification Command; NT North & West; Yuen Long Fire Station.
12	Licence No. 18629	Dangerous Goods Licence for the storage of Oxygen (18 cylinders x 47 litres – water capacity). Category 2 Class 1 Dangerous Goods.	19 Sept. 2001		Fire Services Department; Licensing & Certification Command; NT North & West; Yuen Long Fire Station.
13	Form NA Submission Under APCO – EPD Ref: No. TW20020416-001	Notification under Section 3(1) of the Air Pollution Control (Construction Dust) Regulations that construction works are commencing at the Lam Tei, Tuen Mun site (LT1).	11 <sup>th</sup> April 2002	N/A	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
14	Licence No. W7BI12-1	Discharge Licence for the North Western Water Control Zone under Section 20 of the Water Pollution Control Ordinance. Applicable in the Tuen Mun, Lam Tei (LT1) work area.	22 <sup>nd</sup> May 2002	31 <sup>st</sup> May 2007	EPD Local Control Office / Territory West; 7 / Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
15	Licence No. 018629	Dangerous Goods Licence for the storage at Tin Shui Wai site of Oxygen (18 x 0.047 cu.m. cylinders) - category 2 class 1 dangerous goods.	17 <sup>th</sup> Sept. 2001	16 <sup>th</sup> Sept. 2003	Fire Services Department; Licensing & Certification Command; NT North & West; Yuen Long Fire Station.
16	Form NA Submission Under APCO – EPD Ref: No. TW20020416-001	Notification under Section 3(1) of the Air Pollution Control (Construction Dust) Regulations that construction works are commencing at the Lam Tei, Tuen Mun site (LT1).	11 <sup>th</sup> April 2002	N/A	EPD Local Control Office / Territory West; 7 <sup>th</sup> Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
17	Licence No. W7BI12-1	Discharge Licence for the North Western Water Control Zone under Section 20 of the Water Pollution Control Ordinance. Applicable in the Tuen Mun, Lam Tei (LT1) work area.	22 <sup>nd</sup> May 2002	31 <sup>st</sup> May 2007	EPD Local Control Office / Territory West; 7 <sup>th</sup> Floor; Chinachem Tsuen Wan Plaza; 455-457 Castle Peak Road; Tsuen Wan.
18	Licence No. 018896	Dangerous Goods Licence for the storage at Tuen Mun site of Oxygen (12 x 0.047 cu.m. cylinders) - category 2 class 1 dangerous goods.	17 <sup>th</sup> June 2002	16 <sup>th</sup> June 2004	Fire Services Department; Licensing & Certification Command; NT North & West; Yuen Long Fire Station.

ITEM No.	PERMIT / LICENCE OR REGISTRATION No.	PERMIT / REGISTRATION DESCRIPTION	ISSUE DATE	EXPIRY DATE	ISSUING OFFICE
19	Licence No. 018897	Dangerous Goods Licence for the storage at Tuen Mun site of Acetylene (12 x 0.048 cu.m. cylinders) - category 2 class 3 dangerous goods.	17 <sup>th</sup> June 2002	16 <sup>th</sup> June 2004	Fire Services Department; Licensing & Certification Command; NT North & West; Yuen Long Fire Station.
20	Licence No. A 009832	Dangerous Goods Licence for the storage at Tuen Mun site of the category 1 dangerous goods detailed below. a) Igniters, thermite composition (1,100 rnds); b) Thermit Igniters (1,100 rnds).	28 <sup>th</sup> February 2003	27 <sup>th</sup> February 2004	Civil Engineering Department Mines and Quarries Division 6 <sup>th</sup> Floor Kai Tak Government Buildings 5, Arrivals Road; Kowloon

**APPENDIX I – EQUIPMENT CALIBRATION AND CERTIFICATION RECORD**

High Volume Air Sampler Calibration Worksheet

Project Title: CC230 - KCRC LRT Civil, Permanent Way, Traction Power and Overhead Line  
 Monitoring Location: Tin Yau Court - MA10A  
 Date: 31-Jul-03  
 Time: 17:34

Sampler Model:	GS3310
Calibrator Orifice no.:	3179
Slope (m):	2.07060
Intercept (b):	0.087984
Correction coeff. (c):	0.999944

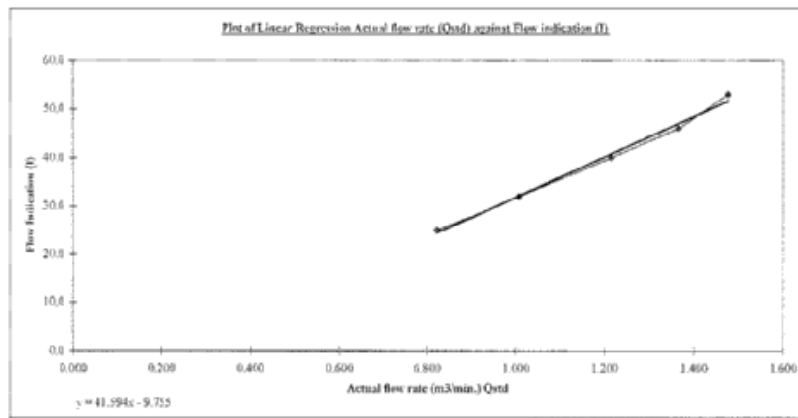
$$Flow\ (corrected) = \sqrt{\frac{P_a}{P_{std}}} \times \frac{T_{std}}{T_a} \times Q_{std}$$

Standard pressure (mmHg) P <sub>std</sub> :	760.0
Standard temp. (K) T <sub>std</sub> :	294.00
Calibration pressure (mmHg) P <sub>a</sub> :	755.0
Calibration temp. (K) T <sub>a</sub> :	305.0

$$Q_{std} = \frac{1}{m} \times \left( \sqrt{\frac{P_a}{P_{std}}} \times \frac{T_{std}}{T_a} - b \right)$$

Sample no.	Pressure Drop (H), inch	Flow (corrected), m <sup>3</sup> /min	Actual flow rate (Q <sub>std</sub> ), m <sup>3</sup> /min	Flow indication (I), arbitrary
1	9.0	2.961	1.476	33.0
2	7.7	2.779	1.765	46.0
3	6.1	2.458	1.215	40.0
4	4.5	2.072	1.007	32.0
5	2.8	1.652	0.822	25.0

Correlation Coefficient: 0.9961



Remark:  
 Q<sub>std</sub> Range 1.1 - 1.7  
 1HPa = 0.750062 mmHg

Calibrated by: Tommy Ho  
 (Tommy Ho)

Date: 31 July 03

Checked by: KF Tsang  
 (KF Tsang)

Date: 4-8-3

**High Volume Air Sampler Calibration Worksheet**

Project Title: CC230 - KCRC LRT Civil, Permanent Way, Traction Power and Overhead Line  
 Monitoring Location: Tin Yiu Estate II (MA15A)  
 Date: 31-Jul-03  
 Time: 16:48

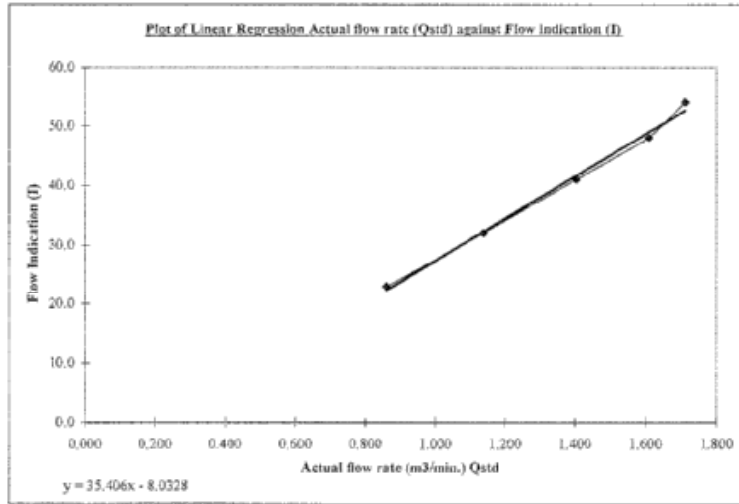
Sampler Model:	GS2310
Serial no.:	1296
Calibrator Orifice no.:	517N
Slope (m):	2.00063
Intercept (b):	0.007984
Correction coeff. (r):	0.999944
Standard pressure (mmHg) Pstd:	766.0
Standard temp. (K) Tstd:	294.50
Calibration pressure (mmHg) Pa:	753.0
Calibration temp. (K) Ta:	303.0

$$Flow (corrected) = \sqrt{H \times \frac{Pa}{Pstd} \times \frac{Tstd}{Ta}}$$

$$Qstd = \frac{1}{m} \times \left( \sqrt{H \times \frac{Pa}{Pstd} \times \frac{Tstd}{Ta}} - b \right)$$

Sample no.	Pressure Drop (H), inch	Flow (corrected), m <sup>3</sup> /min	Actual flow rate (Qstd), m <sup>3</sup> /min	Flow indication (I), arbitra
1	12.2	3.434	1.713	54.0
2	10.8	3.271	1.611	48.0
3	8.2	2.816	1.403	41.0
4	5.4	2.285	1.138	32.0
5	3.1	1.731	0.861	23.0

Correlation Coefficient : 0.9969



Remark  
 Qstd Range 1.1 - 1.7  
 IHPa = 0.750062 mmHg

Calibrated by: Tommy Ho (Tommy)

Date: 31 Jul 03

Checked by: KF Tsang (KF)

Date: 4-8-3

KYW College

High Volume Air Sampler Calibration Worksheet

Project Title: CC230  
 Site Location: Kwok Yat Wai College (14/06)  
 Date: 31-Jul-03 Time: 16:01  
 Transfer Std. type: 517N

Standard Slope of orifice (m): 2.00063 Pressure (mmHg): 753.0  
 Standard Intercept of orifice (b): 0.007984 Temp. (K): 303.0  
 Correction coeff. Of orifice(r): 0.999944

Sample no.	Pressure Drop	Qstd / Qa	Qstd	I
1	11.7	3.377	1.684	58.0
2	8.9	2.945	1.468	51.0
3	6.8	2.574	1.283	45.0
4	5.2	2.251	1.121	36.0
5	2.9	1.681	0.836	27.0

Correlation coeff. of calibration : 0.99583

Plot of Linear Regression Actual Flow Rate ( Qstd ) against Flow Indication (I) at Kwok Yat Wai College (14/06)

$y = 37.53x - 4.5767$

Remark  
 Qstd Range 1.1 - 1.7  
 1HPa = 0.750062 mmHg

Calibrated by: Tommy Ho Date: 31/07/03  
 ( *Tommy* )

Checked by: KF Tsang Date: 4-8-3  
 ( *KF* )



QE Pri

High Volume Air Sampler Calibration Worksheet

Project Title: CC 230  
 Site Location: Queen Elizabeth Primary School  
 Date: 31-Jul-03 Time: 15:13:00 PM  
 Transfer Std. type: 517N

Standard Slope of orifice (m): 2.00063 Pressure (mmHg): 753.0  
 Standard Intercept of orifice (b): 0.007984 Temp. (K): 303.0  
 Correction coeff. Of orifice(r): 0.999944

Sample no.	Pressure Drop	Qstd / Qa	Qstd	I
1	10.5	3.199	1.595	54.0
2	8.2	2.827	1.409	46.0
3	6.7	2.555	1.273	38.0
4	4.9	2.185	1.088	29.0
5	3.4	1.820	0.906	23.0

Correlation coeff. of calibration : 0.99638

Plot of Linear Regression Actual Flow Rate ( Qstd ) against Flow Indication ( I ) at Queen Elizabeth Primary ( 14/05 )

$y = 46.352x - 20.134$

Remark  
 Qstd Range 1.1 - 1.7  
 IHPa = 0.750062 mmHg

Calibrated by: Tommy Ho ( *Tommy* ) Date: 31 July 03

Checked by: KF Tsang ( *KF* ) Date: 4-8-3

**High Volume Air Sampler Calibration Worksheet**

**Project Title:** CC230 - KCRC LRT Civil, Permanent Way, Traction Power and Overhead Line  
**Monitoring Location:** Holy Redeemer Catholic Church (MA45)  
**Date:** 30-Jul-03  
**Time:** 16:02

Sampler Model:	GS2310
Serial no.:	1703
Calibrator Orifice no.:	1185
Slope (m):	2.01844
Intercept (b):	0.027587
Correction coeff (c):	0.99935

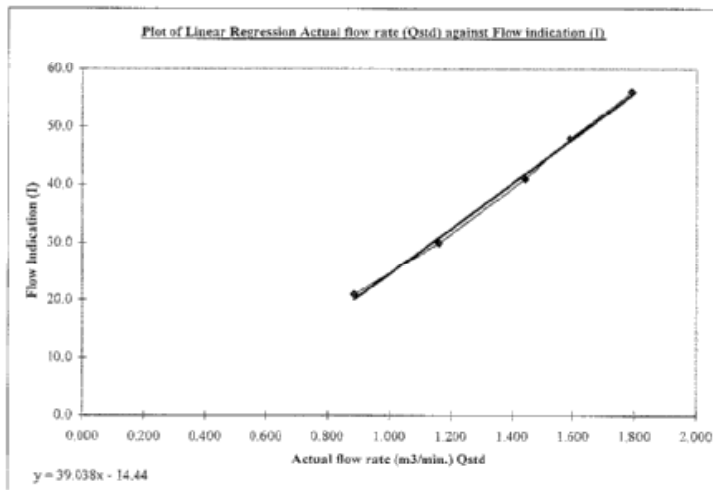
$$\text{Flow (corrected)} = \sqrt{H \times \frac{Pa}{Pstd} \times \frac{Tstd}{Ta}}$$

Standard pressure (mmHg) Pstd:	760.0
Standard temp. (K) Tstd:	292.00
Calibration pressure (mmHg) Pa:	751.7
Calibration temp. (K) Ta:	304.0

$$Qstd = \frac{1}{m} \times \left( \sqrt{H \times \frac{Pa}{Pstd} \times \frac{Tstd}{Ta}} - b \right)$$

Sample no.	Pressure Drop (H), inch	Flow (corrected), m <sup>3</sup> /min	Actual flow rate (Qstd), m <sup>3</sup> /min	Flow indication (I), arbitrary
1	13.7	3.645	1.792	56.0
2	10.8	3.256	1.590	48.0
3	8.9	2.938	1.442	41.0
4	5.8	2.371	1.161	30.0
5	3.4	1.816	0.886	21.0

Correlation Coefficient : 0.9983



Remark  
 Qstd Range 1.1 - 1.7  
 IHPa = 0.750062 mmHg

Calibrated by: **Tommy Ho**  
 ( *Tommy* )

Date: 30 Jul 03.

Checked by: **KF Tsang**  
 ( *KF* )

Date: 4-8-3

**High Volume Air Sampler Calibration Worksheet**

Project Title: CC230 - KCRC LRT Civil, Permanent Way, Traction Power and Overhead Line  
 Monitoring Location: Tuen Mun Town Plaza - MA50  
 Date: 30-Jul-03  
 Time: 16:49

Sampler Model:	GS2310
Serial no.:	1177
Calibrator Orifice no.:	517N
Slope (m):	2.09063
Intercept (b):	0.007984
Correction coeff. (r):	0.999944

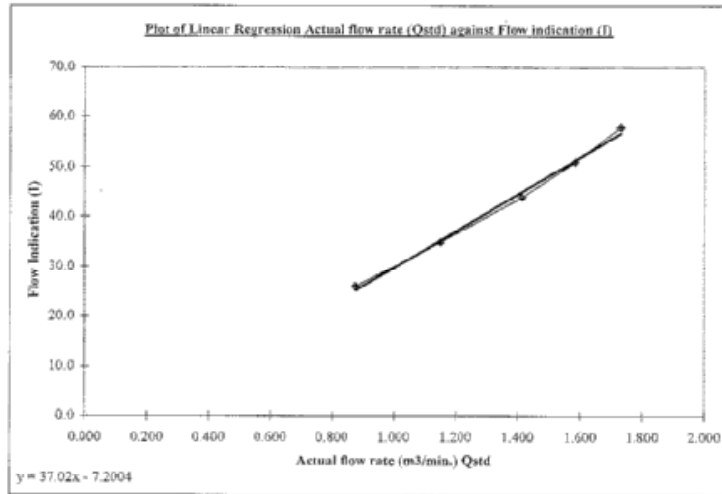
$$\text{Flow (corrected)} = \sqrt{H \times \frac{P_a}{P_{std}} \times \frac{T_{std}}{T_a}}$$

Standard pressure (mmHg) P <sub>std</sub> :	760.0
Standard temp. (K) T <sub>std</sub> :	293.00
Calibration pressure (mmHg) P <sub>a</sub> :	751.7
Calibration temp. (K) T <sub>a</sub> :	304.0

$$Q_{std} = \frac{1}{m} \times \left( \sqrt{H \times \frac{P_a}{P_{std}} \times \frac{T_{std}}{T_a}} - b \right)$$

Sample no.	Pressure Drop (H), inch	Flow (corrected), m <sup>3</sup> /min	Actual flow rate (Q <sub>std</sub> ), m <sup>3</sup> /min	Flow indication (I), arbitrary
1	12.4	3.467	1.729	58.0
2	10.4	3.175	1.585	51.0
3	8.3	2.837	1.414	44.0
4	5.5	2.509	1.150	35.0
5	3.2	1.761	0.876	26.0

Correlation Coefficient : 0.9972



Remark  
 Q<sub>std</sub> Range 1.1 - 1.7  
 IHPa = 0.750062 mmHg

Calibrated by: Tommy Ho  
 ( *Tommy Ho* )

Date: 30 July 03

Checked by: KF Tsang  
 ( *KF Tsang* )

Date: 4-8-3

**High Volume Air Sampler Calibration Worksheet**

Project Title: CC230 - KCRC LRT Civil, Permanent Way, Traction Power and Overhead Line  
 Monitoring Location: Store Room (Tuen Mun Fire Station) -MA 42A  
 Date: 30-Jul-03  
 Time: 17:31

Sampler Model:	GS2310
Serial no.:	1361
Calibrator Orifice no.:	517N
Slope (m):	2.00063
Intercept (b):	0.007984
Correction coeff. (r):	0.999944

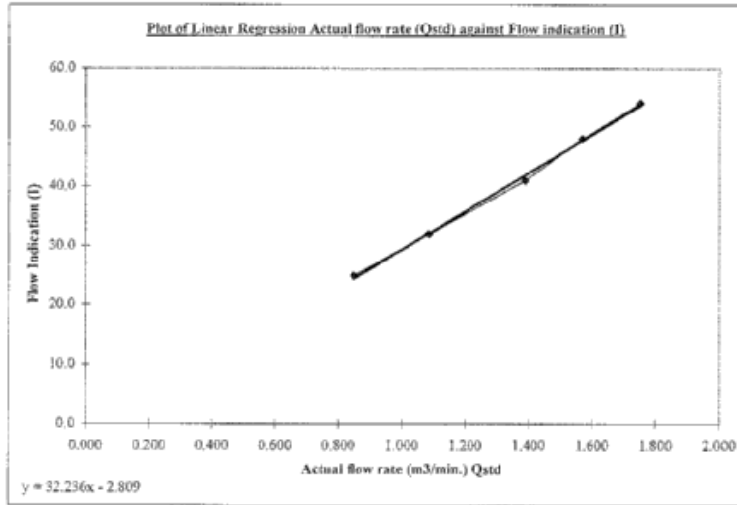
$$\text{Flow (corrected)} = \sqrt{H \times \frac{P_a}{P_{std}} \times \frac{T_{std}}{T_a}}$$

Standard pressure (mmHg) Pstd:	760.0
Standard temp. (K) Tstd:	293.00
Calibration pressure (mmHg) Pa:	751.7
Calibration temp. (K) Ta:	304.0

$$Q_{std} = \frac{1}{n} \times \left( \sqrt{H \times \frac{P_a}{P_{std}} \times \frac{T_{std}}{T_a}} - b \right)$$

Sample no.	Pressure Drop (H), inch	Flow (corrected), m <sup>3</sup> /min	Actual flow rate (Qstd), m <sup>3</sup> /min	Flow indication (I), arbit
1	12.7	2.509	1.750	54.0
2	10.2	2.145	1.568	48.0
3	8.0	2.785	1.388	41.0
4	4.9	2.180	1.085	37.0
5	3.0	1.765	0.848	25.0

Correlation Coefficient : 0.9988



Remark  
 Qstd Range 1.1 - 1.7  
 IHPa = 0.750052 mmHg

Calibrated by: Tommy Ho (Tommy Ho)

Date: 30 July 03

Checked by: KF Tsang (KF Tsang)

Date: 4-8-3

**High Volume Air Sampler Calibration Worksheet**

Project Title: CC230 - KCRC LRT Civil, Permanent Way, Traction Power and Overhead Line  
 Monitoring Location: Tin Yuet Estate - MA129A  
 Date: 28-Jul-03  
 Time: 17:20

Sampler Model:	GS2310
Calibrator Orifice no.:	517N
Slope (m):	2.00063
Intercept (b):	0.807984
Correction coeff (c):	0.999944

$$Flow\ (corrected) = \sqrt{H \times \frac{P_a}{P_{std}} \times \frac{T_{std}}{T_a}}$$

$$Q_{std} = \frac{1}{c} \times \left( \sqrt{H \times \frac{P_a}{P_{std}} \times \frac{T_{std}}{T_a}} - b \right)$$

Standard pressure (mmHg) P <sub>std</sub> :	764.0
Standard temp. (K) T <sub>std</sub> :	291.20
Calibration pressure (mmHg) P <sub>a</sub> :	750.7
Calibration temp. (K) T <sub>a</sub> :	305.0

Sample no.	Pressure Drop (H), inch	Flow (corrected), m <sup>3</sup> /min	Actual flow rate (Q <sub>std</sub> ), m <sup>3</sup> /min	Flow indication (I), arbitrary
1	9.3	2.988	1.490	58.0
2	7.1	2.611	1.301	51.0
3	5.6	2.319	1.155	46.0
4	4.0	1.960	0.975	39.0
5	2.7	1.610	0.801	30.0

Correlation Coefficient: 0.9968

**Plot of Linear Regression Actual flow rate (Q<sub>std</sub>) against Flow indication (I)**

Remark  
 Q<sub>std</sub> Range 1.1 - 1.7  
 IHP<sub>a</sub> = 0.750062 mmHg

Calibrated by: Tommy Ho  
 ( *Tommy* )

Date: 28 July 03

Checked by: KF Tsang  
 ( *KF* )

Date: 4-8-3

**High Volume Air Sampler Calibration Worksheet**

Project Title: CC230 - KCRC LRT Civil, Permanent Way, Traction Power and Overhead Line  
 Monitoring Location: Tin Chak Estate - MA123A  
 Date: 28-Jul-03  
 Time: 16:39

Sampler Model:	GS2310
Calibrator Orifice no.:	517N
Slope (m):	2.00063
Intercept (b):	0.007984
Correction coeff. (c):	0.999944

$$Flow\ (corrected) = \sqrt{H \times \frac{P_a}{P_{std}} \times \frac{T_{std}}{T_a}}$$

$$Q_{std} = \frac{1}{m} \times \left( \sqrt{H \times \frac{P_a}{P_{std}} \times \frac{T_{std}}{T_a}} - b \right)$$

Standard pressure (mmHg) P <sub>std</sub> :	762.0
Standard temp. (K) T <sub>std</sub> :	293.80
Calibration pressure (mmHg) P <sub>a</sub> :	750.7
Calibration temp. (K) T <sub>a</sub> :	305.0

Sample no.	Pressure Drop (H), inch	Flow (corrected), m <sup>3</sup> /min	Actual flow rate (Q <sub>std</sub> ), m <sup>3</sup> /min	Flow Indication (I), arbitrary
1	9.9	3.087	1.539	58.0
2	7.7	2.722	1.357	49.0
3	5.8	2.363	1.177	42.0
4	4.3	2.034	1.013	37.0
5	2.9	1.671	0.831	29.0

Correlation Coefficient : 0.9973

**Plot of Linear Regression Actual flow rate (Q<sub>std</sub>) against Flow indication (I)**

Remark:  
 Q<sub>std</sub> Range 1.1 - 1.7  
 1HPa = 0.750062 mmHg

Calibrated by: Tommy Ho (Tommy)

Date: 28 July 03

Checked by: KF Tsang (KF)

Date: 4-8-3

**High Volume Air Sampler Calibration Worksheet**

**Project Title:** CC230 - KCRC LRT Civil, Permanent Way, Traction Power and Overhead Line  
**Monitoring Location:** (HKFYG) Lee Shau Kee Primary School - MA120  
**Date:** 28-Jul-03  
**Time:** 15:51

Sampler Model:	GS2310
Serial no.:	1713
Calibrator Orifice no.:	517N
Slope (m):	2.00063
Intercept (b):	0.007984
Correction coeff. (r):	0.999944

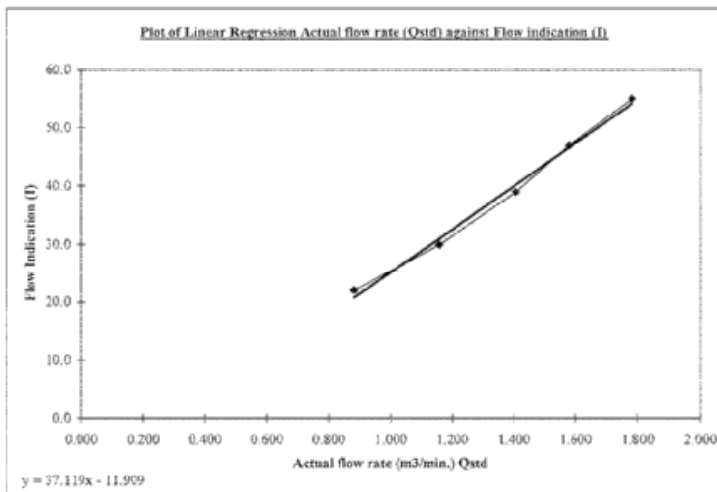
$$Flow (corrected) = \sqrt{H \times \frac{P_a}{P_{std}} \times \frac{T_{std}}{T_a}}$$

Standard pressure (mmHg) P <sub>std</sub> :	760.0
Standard temp. (K) T <sub>std</sub> :	294.00
Calibration pressure (mmHg) P <sub>a</sub> :	758.5
Calibration temp. (K) T <sub>a</sub> :	303.0

$$Q_{std} = \frac{1}{m} \times \left( \sqrt{H \times \frac{P_a}{P_{std}} \times \frac{T_{std}}{T_a}} - b \right)$$

Sample no.	Pressure Drop (H), inch	Flow (corrected), m <sup>3</sup> /min	Actual flow rate (Q <sub>std</sub> ), m <sup>3</sup> /min	Flow indication (I), arbitrary
1	13.0	3.572	1.781	55.0
2	10.2	3.164	1.578	47.0
3	8.1	2.820	1.405	39.0
4	5.5	2.523	1.157	30.0
5	3.2	1.772	0.882	22.0

Correlation Coefficient : 0.9963



Remark  
 Q<sub>std</sub> Range 1.1 - 1.7  
 IHPa = 0.750062 mmHg

Calibrated by: **Tommy Ho**  
 ( *Tommy Ho* )

Date: 28 July 03.

Checked by: **KF Tsang**  
 ( *KF Tsang* )

Date: 28-8-3

**High Volume Air Sampler Calibration Worksheet**

**Project Title:** CC230 - KCRC LRT Civil, Permanent Way, Traction Power and Overhead Line  
**Monitoring Location:** Assembly of God Paul Church Kindergarten (MA155)  
**Date:** 28-Jul-03  
**Time:** 15:04

Sampler Model:	GS2310
Serial no.:	1770
Calibrator Orifice no.:	517N
Slope (m):	2.00063
Intercept (b):	0.007984
Correction coeff. (r):	0.999944

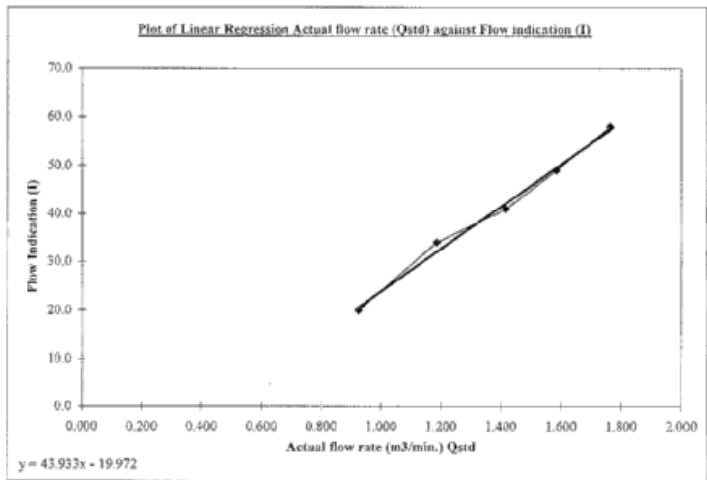
$$Flow(\text{corrected}) = \sqrt{\frac{P_a}{P_{std}} \times \frac{T_{std}}{T_a}}$$

Standard pressure (mmHg) P <sub>std</sub> :	764.0
Standard temp. (K) T <sub>std</sub> :	292.00
Calibration pressure (mmHg) P <sub>a</sub> :	750.7
Calibration temp. (K) T <sub>a</sub> :	305.0

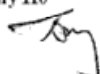
$$Q_{std} = \frac{1}{m} \times \left( \sqrt{\frac{P_a}{P_{std}} \times \frac{T_{std}}{T_a}} - b \right)$$

Sample no.	Pressure Drop (H), inch	Flow (corrected), m <sup>3</sup> /min	Actual flow rate (Q <sub>std</sub> ), m <sup>3</sup> /min	Flow indication (I), arbitrary
1	11.0	3.533	1.762	58.0
2	10.5	3.175	1.583	49.0
3	8.4	2.840	1.415	41.0
4	5.9	2.380	1.186	34.0
5	3.6	1.850	0.925	20.0

Correlation Coefficient : 0.9963



Remark  
 Q<sub>std</sub> Range 1.1 - 1.7  
 1HPa = 0.750062 mmHg

Calibrated by: Tommy Ho  
 (  )

Date: 28 July 03

Checked by: KF Tsang  
 (  )

Date: 4-8-3



**High Volume Air Sampler Calibration Worksheet**

Project Title: CC230 - KCRC LRT Civil, Permanent Way, Traction Power and Overhead Line  
 Monitoring Location: QE School Old Student's Association Secondary School (MA33)  
 Date: 24-Jul-03  
 Time: 17:18

Sampler Model:	GS2310
Serial no.:	1698
Calibrator Orifice no.:	517N
Slope (m):	2.00063
Intercept (b):	0.007984
Correction coeff. (r):	0.999944

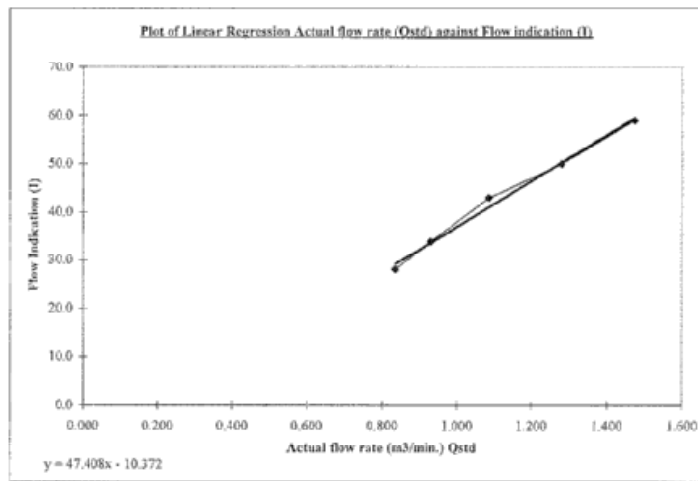
$$Flow (corrected) = \sqrt{H \times \frac{P_a}{P_{std}} \times \frac{T_{std}}{T_a}}$$

Standard pressure (mmHg) P <sub>std</sub> :	760.0
Standard temp. (K) T <sub>std</sub> :	294.00
Calibration pressure (mmHg) P <sub>a</sub> :	753.4
Calibration temp. (K) T <sub>a</sub> :	304.0

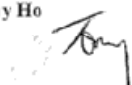
$$Q_{std} = \frac{1}{n} \times \left( \sqrt{H \times \frac{P_a}{P_{std}} \times \frac{T_{std}}{T_a}} - b \right)$$

Sample no.	Pressure Drop (H), inch	Flow (corrected), m <sup>3</sup> /min	Actual flow rate (Q <sub>std</sub> ), m <sup>3</sup> /min	Flow indication (I), arbitrary
1	9.0	2.957	1.271	59.0
2	6.8	2.571	1.281	50.0
3	4.9	2.182	1.087	43.0
4	3.6	1.870	0.931	34.0
5	2.9	1.679	0.835	28.0

Correlation Coefficient : 0.9956



Remark  
 Q<sub>std</sub> Range 1.1 - 1.7  
 1HPa = 0.750062 mmHg

Calibrated by: Tommy Ho  
 (  )

Date: 24 July 03

Checked by: KF Tsang  
 (  )

Date: 4-8-3

High Volume Air Sampler Calibration Worksheet

Project Title: CC 230  
 Site Location: San Hing Tsuen  
 Date: 7/24/03 Time: 16:31  
 Transfer Std. type: 517N

Standard Slope of orifice (m): 2.00063 Pressure (mmHg): 763.58  
 Standard Intercept of orifice (b): 0.007984 Temp. (K): 290  
 Correction coeff. Of orifice(r): 0.999944

Sample no.	Pressure Drop	Qstd / Qa	Qstd	I
1	8.6	2.980	1.485	49.0
2	7.3	2.745	1.368	42.0
3	5.8	2.447	1.219	35.0
4	4.5	2.155	1.073	27.0
5	3.2	1.818	0.905	20.0

corelation coeff. of calibration : 0.99840

Plot of Linear Regression Actual Flow Rate ( Qstd ) against Flow Indication (I) at San Hing Tsuen

$y = 66.817x - 44.04$

Remark  
 Qstd Range 1.1 - 1.7  
 1HPa = 0.750062 mmHg

Calibrated by: Tommy Ho *Tommy* Date: 24/07/03

Checked by: KF Tsang *KF* Date: 4-8-3



Hong Kong Calibration Ltd.  
香港校正有限公司

# Calibration Certificate

Certificate No. **31178**

Page 1 of 2 Pages

**Customer :** Hyder Consulting Limited

**Address :** 3/F, Somerset House, Taikoo Place, 979 King's Road, Quarry Bay, Hong Kong.

**Order No. :** Q30111

**Date of receipt :** 25-Mar-03

## Item Tested

**Description :** Sound Level Calibrator

**Manufacturer :** B&K

**Model :** Type 4231

**Serial No. :** 1770806

## Test Conditions

**Date of Test :** 28-Mar-03

**Supply Voltage :** --

**Ambient Temperature :** (22.5 ± 2.5)°C

**Relative Humidity :** (50 ± 20) %

## Test Specifications

Calibration check according to customer's requirement.

Calibration procedure : F21, Z02.

## Test Results

All results were within the manufacturer's, IEC 942 Class 1 specification.

The results are shown in the attached page(s).


Test equipment used:

Equipment No.	Cert. No.	Due Date	Traceable to
S014	30961	10-Mar-04	PRC-NIM
S024	Z02050078	29-May-03	PRC-NIM
S041	23030	1-Nov-03	PRC-NIM

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

The test equipment used for calibration are traceable to National Standards/International System of Units (SI).  
The test results apply to the above Unit-Under-Test only

Calibrated by : 

Approved by :   
Alan Chu - Manager

Date: 28-Mar-03

This Certificate is issued by:  
Hong Kong Calibration Ltd.  
Unit 8B, 24/F., Well Fung Industrial Centre, No. 58-76, Ta Chuen Ping Street, Kwai Chung, NT, Hong Kong.  
Tel: 2425 8801 Fax: 2425 8646



Hong Kong Calibration Ltd.  
香港校正有限公司

# Calibration Certificate

Certificate No. **31179**

Page 1 of 3 Pages

**Customer :** Hyder Consulting Limited

**Address :** 3/F, Somerset House, Taikoo Place, 979 King's Road, Quarry Bay, Hong Kong.

**Order No. :** Q30111

**Date of receipt :** 25-Mar-03

**Item Tested**

**Description :** Digital Sound Level Meter

**Manufacturer :** B & K

**Model :** Type 2238

**Serial No. :** 2285726

**Test Conditions**

**Date of Test :** 28-Mar-03

**Supply Voltage :** --

**Ambient Temperature :** (22.5 ± 2.5)°C

**Relative Humidity :** (50 ± 20) %

**Test Specifications**

Calibration check according to customer's requirement.

Calibration procedure : Z01.

**Test Results**

All results were within the manufacturer's, IEC 651 Type 1 and IEC 804 Type 1 specification.

The results are shown in the attached page(s).

Test equipment used:

<u>Equipment No.</u>	<u>Cert. No.</u>	<u>Due Date</u>	<u>Traceable to</u>
S017	Z21090068	21-Aug-03	PRC-NIM
S024	Z02050078	29-May-03	PRC-NIM
S031	24782	9-Dec-03	PRC-NIM

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

The test equipment used for calibration are traceable to National Standards/International System of Units (SI).  
The test results apply to the above Unit-Under-Test only

Calibrated by :

Approved by :   
Alan Chu - Manager

Date: 28-Mar-03

This Certificate is issued by:  
Hong Kong Calibration Ltd.  
Unit 8B, 24/F., Well Fung Industrial Centre, No. 58-76, Ta Chuen Ping Street, Kwai Chung, NT, Hong Kong.  
Tel: 2425 8801 Fax: 2425 8646



**Hong Kong Productivity Council**  
**香港生產力促進局**

Environmental Management Division  
 環境管理部

Our ref: HKPC/0102/20613/080/03412sh2

Hong Kong Productivity Council  
 Environmental Management Division  
 3/F, HKPC Building 78 Tat Chee Avenue Road  
 Tel : 27885656

**High Volume Orifice Calibration Certificate**

Client	: Hyder Consulting Limited	Calibrated By	: SHWong
Calibrator Orifice Serial No.	: 517N	Ta	: 290K (17 °C)
Calibration Date	: 09/04/2003	Pa	: 764mmHg
Valid Period	: 08/04/2004	RH	: 65%
Roots Meter Serial No.	: 9550494		

**Q Standard Calibration Data for TSP Sampler**

Point No.	Volume Flow (m <sup>3</sup> )	Elapsed Time (Sec.)	Reading of Water Manometer (in. H <sub>2</sub> O)	Reading of Mercury Manometer (mm Hg)	X Air Flow Rate (cfm)	Y $\sqrt{\Delta H \left( \frac{Pa}{Pstd} \right) \left( \frac{298.18}{Ta} \right)}$	Total Uncertainty %
1	3.92	140.44	11.40	16	59.77	3.40	0.28
2	3.92	152.94	9.60	15	54.96	3.12	0.14
3	3.92	168.93	7.90	13	49.89	2.83	0.21
4	3.92	189.87	6.30	10	44.56	2.53	0.38
5	3.92	217.65	4.85	8	38.98	2.23	0.82
6	3.92	258.25	3.40	6	32.94	1.87	0.03

Slope (m) = 0.056643

Y-intercept (b) = 0.007984

r = 0.999944

**Q Actual Calibration Data for RSP Sampler**

Point No.	Volume Flow (m <sup>3</sup> )	Elapsed Time (Sec.)	Reading of Water Manometer (in. H <sub>2</sub> O)	Reading of Mercury Manometer (mm Hg)	X Air Flow Rate (cfm)	Y $\sqrt{\Delta H \left( \frac{Ta}{Pa} \right)}$	Total Uncertainty %
1	3.92	140.44	11.40	16	59.10	2.08	0.03
2	3.92	152.94	9.60	15	54.27	1.91	0.14
3	3.92	168.93	7.90	13	49.13	1.73	0.07
4	3.92	189.87	6.30	10	43.71	1.55	0.14
5	3.92	217.65	4.85	8	38.13	1.36	0.50
6	3.92	258.25	3.40	6	32.14	1.14	0.48

Slope (m) = 0.034806

Y-intercept (b) = 0.023187

r = 0.999929

(S.H. Wong)  
 Calibrated by

(Grant Chau)  
 Checked by

2003/4/10  
 Date of issue



**APPENDIX J – SITE INSPECTION CHECKLIST**

**EM&A MONTHLY REPORT FOR SEPTEMBER 2003**

KCRC / IEC ENVIRONMENTAL SITE INSPECTION / AUDIT DEFICIENCY REGISTER										
Site Inspection / Audit		Inspected by	Ref. No. of Observed Deficiency	Brief Description of Deficiency	Spec. Ref.	Date Reply Issued	Proposed Corrective / Preventive Action	Action By Date	CA / Follow-up Agreed (Yes / No)	Close-out Date
Date	Location									
22 <sup>nd</sup> Aug 2003	Tuen Mun	Terence Kong. (IEC) H. Leung, Roy Wong, (KCRC) W.C. Lam (LCAL)	Remark No.1	Drainage works were observed near the LRT track at Sun Fat Station. The nearby channel was full of sediment. The Contractor was reminded to clean up the channel and using wheel washing facilities instead of water spraying at the exit since wastewater was observed flowing down to the LRT track.		25 <sup>th</sup> Aug 2003	The wheel washing facilities will be used during vehicle leave.	25 <sup>th</sup> Aug 2003	Yes	26 <sup>th</sup> Sept 2003
22 <sup>nd</sup> Aug 2003	Tuen Mun	Terence Kong. (IEC) H. Leung, Roy Wong, (KCRC) W.C. Lam (LCAL)	Remark No.2	Drainage works were also observed behind the TM Police station. Wastewater was observed muddy at the discharge point. The Contractor was reminded to increase the no. of tanks to ensure the sedimentation operation properly		25 <sup>th</sup> Aug 2003	The sedimentation tank will be provided more for water discharge.	25 <sup>th</sup> Aug 2003	Yes	26 <sup>th</sup> Sept 2003

KCRC / IEC ENVIRONMENTAL SITE INSPECTION / AUDIT DEFICIENCY REGISTER										
Site Inspection / Audit		Inspected by	Ref. No. of Observed Deficiency	Brief Description of Deficiency	Spec. Ref.	Date Reply Issued	Proposed Corrective / Preventive Action	Action By Date	CA / Follow-up Agreed (Yes / No)	Close-out Date
Date	Location									
22 <sup>nd</sup> Aug 2003	LT 1	Terence Kong. (IEC) H. Leung, Roy Wong, (KCRC) W.C. Lam (LCAL)	Remark No.4	Yellow muddy water observed at the discharge point in south of LT 1		25 <sup>th</sup> Aug 2003	Sedimentation tank will be increase chemical dosing and clean the sedimentation tank.	25 <sup>th</sup> Aug 2003	Yes	26 <sup>th</sup> Sept 2003
22 <sup>nd</sup> Aug 2003	LT 1	Terence Kong. (IEC) H. Leung, Roy Wong, (KCRC) W.C. Lam (LCAL)	Remark No.5	Following up the previous audit, access road at Junction L was wetted by rain. Drainage works were also started in the area. The contractor was reminded to post the EP at the exit and to keep the exit & tidy.		25 <sup>th</sup> Aug 2003	The EP will be post at the site exit and wheel wash will be carried out.	25 <sup>th</sup> Aug 2003	Yes	26 <sup>th</sup> Sept 2003
22 <sup>nd</sup> Aug 2003	Tin Shui Wai	Terence Kong. (IEC) H. Leung, Roy Wong, (KCRC) W.C. Lam (LCAL)	Remark No.6	Utilities works & drainage works were still on going at Stop 550. The contractor was also reminded to remove the construction wastes & materials near stop 500		25 <sup>th</sup> Aug 2003	The construction waste will be remove on stop 500.	25 <sup>th</sup> Aug 2003	Yes	26 <sup>th</sup> Sept 2003

**KCRC / IEC ENVIRONMENTAL SITE INSPECTION / AUDIT DEFICIENCY REGISTER**

Site Inspection / Audit		Inspected by	Ref. No. of Observed Deficiency	Brief Description of Deficiency	Spec. Ref.	Date Reply Issued	Proposed Corrective / Preventive Action	Action By Date	CA / Follow-up Agreed (Yes / No)	Close-out Date
Date	Location									
26 <sup>th</sup> Sept 2003	Tin Shui Wai	Terence Kong. (IEC) H. Leung, Roy Wong, (KCRC) W.C. Lam (LCAL)	Remark No.5	Utilities works & drainage works were still on going at Junction L & I. The stockpile at Junction I was covered by tarpaulin. The contractor was reminded to provide more water spraying at Junction L since many work still going on.		29 <sup>th</sup> Sept 2003	Water spraying will be carried out more frequently	30 <sup>th</sup> Sept 2003		



**EM&A MONTHLY REPORT FOR JULY 2003**

**CET ENVIRONMENTAL SITE INSPECTION / AUDIT DEFICIENCY REGISTER**

Site Inspection / Audit		Inspected by	Ref. No. of Observed Deficiencies	Brief Description of Deficiencies	Spec. Ref.	Date Reply Issued	Proposed Corrective / Preventive Action	Action Date	CA / Follow-up Agreed (Yes / No)	Close-out Date
Date	Location									
4 <sup>th</sup> Sept. 2003	All Areas	Michael	NA	No observed deficiencies	N/A	N/A	N/A	N/A	NA	NA
11 <sup>th</sup> Sept. 2003	All Areas	Michael	NA	No observed deficiencies	N/A	N/A	N/A	N/A	NA	NA
18 <sup>th</sup> Sept. 2003	All Areas	Michael	NA	No observed deficiencies	N/A	N/A	N/A	N/A	NA	NA
25 <sup>th</sup> Sept. 2003	All Areas	Michael	NA	No observed deficiencies	N/A	N/A	N/A	N/A	NA	NA

**KCRC - West Rail**  
**Contract GSA-012, Independent Environmental Checker**  
**SITE INSPECTION CHECKLIST**

Inspection Date 26-8-03 Time 9:30 A.M. Inspected By IEC: T. Kung  
KCRC: H. Lewis, Z. Chan  
Contractor: W. C. Lau

Site CP-230 Contractor Leighton

---

**Weather**

Condition  Sunny  Fine  Overcast  Drizzle  Rain  Storm  Hazy  
 Temperature 20 °C Humidity  High  Moderate  Low  
 Wind  Calm  Light  Breeze  Strong

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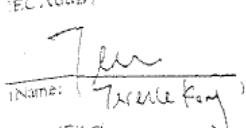
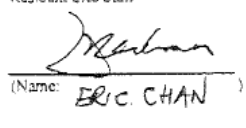
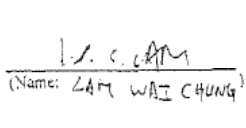
	N/A or not observed	Yes	No	Photo/Remarks
<b>Water Quality</b>				
Is drainage system adequate?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Are there dykes to surround areas of earthworks for flood protection?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are there temporary ditches for runoff discharge into appropriate watercourse? With silt retention pond?	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	
Do permanent drainage channels have: sediment basin? traps and baffles?	<input type="checkbox"/> <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	
Is groundwater pumped out from tunnels discharged via sediment traps/tanks?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are there sediment tanks for settling runoff prior to disposal? Constructed from pre-formed individual cells? Adequate capacity? Free from silt and sediment?	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
Are there oil interceptors in drainage system? Oil and grease removed regularly? Bypass to prevent flushing during periods of heavy rain?	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
Is drainage system well maintained?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Is exposed earth stabilized after earthworks have been completed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Are exposed slope surfaces covered (by tarpaulin or other means)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Are open stockpiles of more than 50 m <sup>3</sup> covered during rainstorm?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are manholes covered and sealed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Are vehicles and plant cleaned of earth, mud and debris before leaving the site?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Is a wheel washing bay provided at every site exit? Adequately designed? Sand and silt settled out and removed at least weekly? Access road leading to and exiting from wheel wash bay paved? Access road sufficiently backfill toward wheel wash bay?	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	

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Contract GSA-012, Independent Environmental Checker				
SITE INSPECTION CHECKLIST				
	N/A or not observed	Yes	No	Photo/Remarks
<b>Modified sections of culverts</b>				
Sediment traps installed upstream and downstream of the section?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Vortex tube silt traps installed within the section?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>Rainy season</b>				
Drainage system adequately designed for storm flow?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Sediment control measures inspected and maintained after rain storms?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>Concrete batching plant</b>				
Discharge diverted to neutralisation tank?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Discharge treated in neutralisation tank?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Discharge from neutralisation tank routed to silt trap?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Disposal to sewage system?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are spent bentonite slurries or grouts collected, reconditioned and reused?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are access roads protected by crushed stone or gravel?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Toilet that connects to foul sewer or chemical toilets provided?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Is debris and rubbish on site collected and disposed of properly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
<b>Air Quality</b>				
Are site vehicles travelling within speed limit of 15 km/hr?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Are site vehicle movements confined to designated haul roads?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Is the public road around the site entrance kept clean and free from dust?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Are areas of site with regular traffic movement have hard surface?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Are the haul roads watered regularly to avoid dust generation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Remark (S)
Are unpaved areas watered regularly to avoid dust generation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Do the site vehicles use the wheel wash at the site exits?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Are materials transported on trucks covered?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are all trucks loaded to a level within the side and tail boards?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are hoarding not less than 2.4 m tall provided beside roads or areas with public access?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Are conveyor belts fitted with windboards, transfer points and hoppers enclosed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are bulk fine grained materials stored in closed silos fitted with high level alarm indicator?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are air vents on cement silos fitted with fabric filters?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are weigh hoppers vented to suitable filters?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are there enclosures around the main dust-generating activities?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is open burning avoided?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Are completed earthworks sealed and hydroseeded and planted as soon as practicable?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Are vehicles and equipment switched off while not in use?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

KCRC - West Rail				
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SITE INSPECTION CHECKLIST				
	N/A or not observed	Yes	No	Photo/Remarks
Concrete batching plant or crushing plant		<input checked="" type="checkbox"/>		
Is 3-sided roofed enclosure with flexible curtain provided for dusty loading of vehicles?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Are the plant areas frequently cleaned and watered?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Is dry mix batching carried out in totally enclosed area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Observable dust sources	<input type="checkbox"/> Wind erosion	<input type="checkbox"/> Vehicle/equipment movements		
	<input type="checkbox"/> Loading/unloading of materials	<input checked="" type="checkbox"/> Others	Nil	
<b>Noise</b>				
Are the construction works scheduled to minimize noise nuisance?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
Are the works or equipment sited to minimize noise nuisance?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
Are all plant and equipment well maintained and in good operating condition?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
Is idle equipment turned off or throttled down?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
Are powered mechanical equipment covered or shielded by appropriate acoustic materials?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Are silenced equipment used where practicable?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
Are noise enclosures, noise barriers, or portable noise barriers used where necessary?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Do air compressors have valid noise labels?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Do compressors operate with doors closed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Major noise source(s)	<input checked="" type="checkbox"/> Traffic	<input checked="" type="checkbox"/> Construction activities inside of site		
	<input checked="" type="checkbox"/> Construction activities outside of site	<input type="checkbox"/> Others	_____	
<b>Waste/Chemical Management</b>				
<b>General refuse</b>				
Accumulation avoided?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
Receptacles (e.g. rubbish bins) available?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
Disposed of regularly and properly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
<b>Chemical waste, waste oil</b>				
Stored properly in designated area?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
Disposed of properly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
<b>Chemical/fuel storage area</b>				
Is storage area bunded?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
Adequate bund capacity? (>110% of the largest tank)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
Area storage areas provided with locks and located on sealed areas?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
<b>Construction Waste</b>				
Reused where practicable?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
Disposed of properly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
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**KCRC - West Rail**  
**Contract GSA-012, Independent Environmental Checker**  
**SITE INSPECTION CHECKLIST**

	N/A or not observed	Yes	No	Photo/Remarks
Excavated material appears uncontaminated? (colour, odour)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
If suspected contaminated, appropriate procedures followed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is foam, oil/grease, litter or other objectionable matters in water of nearby drain/river avoided?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
<b>Permits/Licences</b>				
Are relevant Environmental Permit(s) posted at all vehicle site entrances/exits?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Are Special Process Licences (APCO) available for inspection?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are Construction Noise Permits available for inspection/posted at site entrance?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Is restriction/noise monitoring conducted where necessary?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are water discharge licences available for inspection?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Are permits for chemical waste disposal available for inspection?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Relevant permit for disposal of construction waste or excavated material available for inspection?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>Remarks</b>				
<p>• <u>Tuen Mun:</u> ① Following up the previous audit, the old San Fat Station was closed down. All the old rail track was demolished. Reinstatement works were observed at the area. The nearby channel was demolished and all the silt was presently closed up. The Contractor indicated that drainage works at the area would be started in October 2003. Demolition work was started at job base in the month. Minor work was observed at Tai To Rd.</p> <p>② Following up the previous audit, no wastewater was observed at the discharge point behind the Tuen Mun Police Station. The sedimentation tanks were temporarily removed. M&amp;S was completed and the new rail track has been used.</p> <p>• <u>Lai Tei:</u> ③ Following up the previous audit, no water discharge was observed at LTI south discharge point. The flooding area was mainly cleaned up. No other specific comments was recorded.</p> <p>• <u>Tai Shui Wai:</u> ④ Following up the previous audit, the Contractor indicated that the reinstatement of cycle track &amp; footpath at Stop 500 would be completed by October 2003. Construction wastes &amp; materials at Stop 500 was removed. The majority reinstatement was <sup>at Stop 500</sup> mainly completed. Minor water pipes installation would be also completed within a week.</p> <p>⑤ Utility works &amp; drainage works were still on-going at Junction L &amp; Junction I. The stockpile at Junction I was covered by tarpaulin. The Contractor was reminded to provide more water spraying at Junction L since many works were still going on. Though the EP was displayed at the vehicle exit.</p> <p>Next audit: &gt; 2 October 2003</p>				
<b>Signatures:</b>				
Signature: E.C. Auditor  (Name: Eric Chan)	Resident Site Staff  (Name: ERIC CHAN)	Contractor's Representative  (Name: LAM WAI CHUNG)		
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**APPENDIX K SUMMARY OF NOTIFICATION OF SUMMON AND STATUS**

Summon Ref.	Regulations Affected	Description of Offence	Date Issued	Magistracy	Date of Hearing	Time of Hearing	Outcome of Hearing	Fine if Any
No Notification of Summons were received in September 2001.								
No Notification of Summons were received in October 2001.								
No Notification of Summons were received in November 2001.								
No Notification of Summons were received in December 2001.								
No Notification of Summons were received in January 2002.								
No Notification of Summons were received in February 2002.								
No Notification of Summons were received in March 2002.								
No Notification of Summons were received in April 2002.								
No Notification of Summons were received in May 2002.								
FLS5381/2002	NCO	Concreting of a bored pile at Tin Shui Road near Tin Wah Estate after 19:00 without CNP on 29 January 2002	June 2002	Magistrates Court at Fanling	23 July 2002	09:30 hrs	Leighton pleaded guilty with mitigation	HK\$ 10,000
FLS5382/2002	NCO	Hammering of the casing of a bored pile at Tin Shui Road near Tin Wah Estate after 19:00 without CNP on 29 January 2002	June 2002	Magistrates Court at Fanling	23 July 2002	09:30 hrs	Leighton pleaded guilty with mitigation	HK\$ 10,000
No Notification of Summons was received in July 2002.								
No Notification of Summons was received in August 2002.								
No Notification of Summons was received in September 2002.								
No Notification of Summons was received in October 2002.								
No Notification of Summons was received in November 2002.								
No Notification of Summons was received in December 2002.								
No Notification of Summons was received in January 2003.								
No Notification of Summons was received in February 2003.								

<b>Summon Ref.</b>	<b>Regulations Affected</b>	<b>Description of Offence</b>	<b>Date Issued</b>	<b>Magistracy</b>	<b>Date of Hearing</b>	<b>Time of Hearing</b>	<b>Outcome of Hearing</b>	<b>Fine if Any</b>
		No Notification of Summons was received in March 2003.						
		No Notification of Summons was received in April 2003.						
		No Notification of Summons was received in May 2003.						
		No Notification of Summons was received in June 2003.						
		No Notification of Summons was received in July 2003.						
		No Notification of Summons was received in August 2003.						
		No Notification of Summons was received in September 2003.						

**APPENDIX L CONSTRUCTION PROGRAMME FOR THE NEXT THREE MONTHS**







**APPENDIX M NOE LOG**

NoE No.	NoE Issue Date	Date of Monitoring	Sampling Location	Description
No NoE was received in September 2001				
No NoE was received in October 2001				
No NoE was received in November 2001				
No NoE was received in December 2001				
No NoE was received in January 2002				
No NoE was received in February 2002				
NE-03852-CC-230-NSR-MN48-00	21-Mar-02	25-Feb-02	MN48	Limit Level Exceedance of Noise
/	/	2-Apr-02	MN155	Limit Level Exceedance of Noise
NE-03927-CC-230-NSR-MN48-00	11-Apr-02	25-Mar-02	MN48	Limit Level Exceedance of Noise
NE-04106-CC-230-NSR-MN48-00	/	22-Apr-02	MN48	Limit Level Exceedance of Noise
No NoE was received in June 2002				
No NoE was received in July 2002				
No NoE was received in August 2002				
No NoE was received in July 2002				
No NoE was received in August 2002				
No NoE was received in September 2002				
No NoE was received in October 2002				
No NoE was received in November 2002				
No NoE was received in December 2002				
No NoE was received in January 2003				
No NoE was received in February 2003				
No NoE was received in March 2003				
No NoE was received in April 2003				
No NoE was received in May 2003				
No NoE was received in June 2003				
No NoE was received in July 2003				

NoE No.	NoE Issue Date	Date of Monitoring	Sampling Location	Description
No NoE was received in August 2003				
No NoE was received in September 2003				