## **Highways Department**

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

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

Quarterly EM&A Report
Part II – Eagle's Nest Tunnel and Associated Works
(Version 1.0)

September to November 2006

Approved By

(Environmental Team Leader)

#### REMARKS:

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

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

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#### **EXECUTIVE SUMMARY**

- This is the twelfth Quarterly Environmental Monitoring and Audit (EM&A) Report prepared by Cinotech Consultants Limited for the "Route 8 (previously known as Route 9) between Cheung Sha Wan & Sha Tin, Lai Chi Kok Viaduct & Eagle's Nest Tunnel". This summary report documents the findings of EM&A works performed in the period between September and November 2006 for Contract No. HY/2003/02, Route 8 Eagle's Nest Tunnel and Associated Works (the Project).
- The major site activities undertaken in the reporting quarter included soil nailing/ rock dowel, retaining wall, drainage work, road works, cut slope, haul road and Tunnel Ventilation System.
- The major site activities for Traffic Control and Surveillance System (TCSS) works undertaken in the reporting quarter included:
  - Cable containment;
  - Cable laying; and
  - Cabinet installation.

#### **Environmental Monitoring Works**

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

Table I Summary Table for Events Recorded in the Reporting Quarter

Danam atau	No. of	Events	No. of Events	Action Taken
Parameter	Action Level	Limit Level	Due to the Project	Action Taken
September 2006				
1-hr TSP	0	0	0	N/A
24-hr TSP	0	0	0	N/A
Noise	0	0	0	N/A
October 2006				
1-hr TSP	0	0	0	N/A
24-hr TSP	0	0	0	N/A
Noise	0	0	0	N/A
November 2006				
1-hr TSP	0	0	0	N/A
24-hr TSP	0	0	0	N/A
Noise	0	0	0	N/A

1

## **Environmental Licensing and Permitting**

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

#### **Key Information in the Reporting Quarter**

Summary of key information in the reporting quarter is tabulated in Table II.

Table II Summary Table for Key Information in the Reporting Quarter

Event	Ev	vent Details	Action Taken	Status	Remark
Event	Number	Nature	Action Taken	Status	Kemark
Complaint received	0		N/A	N/A	
Changes to the assumptions and key construction / operation activities recorded	0		N/A	N/A	
Status of submissions under EP	0		N/A	N/A	
Notifications of any summons & prosecutions received	0		N/A	N/A	

#### **Future Key Issues:**

Major site activities for the coming month include:

- Cut slope and haul road;
- Road & Drainage works;
- Rock dowel;
- TTA for watermains crossing Tai Po Road;
- Shotcreting;
- Earth works;
- Louvre, door wall and cladding installation;
- Plumbing & drainage;
- E&M cabling;
- Mechanical ventilation air condition; and
- Tunnel Ventilation System.

Major site activities for TCSS works in the coming months include: Cable-laying, field equipment installation and control equipment installation.

The anticipated environmental issues will be mainly on dust impact from slope work, haul roads and soil nailing, noise nuisance from concreting and installation works.

#### 1. INTRODUCTION

- 1.1 Route 9 (Kowloon Section) (R9K) (hereinafter call the R9K-Project) forms part of the Route 9 between Cheung Sha Wan and Sha Tin (R9-CSWST) project, which will be a new expressway connecting West Kowloon and Sha Tin. It will be the fourth external link between Sha Tin and Kowloon and will form an important link between the northeast New Territories and the west Kowloon, Lantau Island and the western New Territories. R9K is being managed and implemented by the Highways Department (HyD).
- 1.2 The engineering design of R9K is covered under Agreement No. CE 50/98 "Route 9 between Cheung Sha Wan and Sha Tin Design Construction Assignment". The main consultant engaged under Agreement No. CE 50/98 is Maunsell Hyder Joint Venture (MHJV), who will act as the Engineer for the construction contracts. The works of R9K mainly comprise a 1.4km dual 3-lane Lai Chi Kok Viaduct from Lai Wan Interchange to Butterfly Valley; 0.5 km of dual 3-lane at-grade carriageway linking to the 2.1 km dual 3-lane twin-bore Eagle's Nest Tunnel with associated portal buildings; a toll plaza with an administration building located with the Sha Tin valley woodland; a ventilation building and an adit; associated noise barriers, noise enclosures, drainage, slope and landscape works; and electrical and mechanical works for the whole R9-CSWST. The remainder of the R9-CSWST forms the Sha Tin Section (R9S) of the project and is being managed and implemented separately by the Civil Engineering and Development Department (CEDD).
- 1.3 The R9-CSWST project is a Designated Project under the Environmental Impact Assessment Ordinance (Cap. 449) (EIAO). An environmental impact assessment (EIA) report has been prepared in 1998 for the R9-CSWST project (1998 R9 EIA) to consider the key issues of noise, air quality, water quality, ecological, construction waste, landscape and visual, land use and cultural impacts, and identify possible mitigation measures.
- 1.4 An Updated Final EIA report was subsequently completed in August 1999 for the R9-CSWST project (1999 R9 EIA), to cater for some changes in R9K portion as mentioned in paragraph 1 in the report. The 1999 R9 EIA was endorsed by Environmental Protection Department (EPD) in November 1999. The 1998 R9 EIA and the 1999 R9 EIA (R9 EIA Reports) were included in the EIA register under the EIAO as report no. EIA-135/BC and AEIAR-022/1999 respectively. An Environmental Monitoring and Audit (EM&A) Manuals for each of the R9 EIA Reports (EM&A Manuals) were also included as part of the EIA reports in the register.
- 1.5 Subsequent to the endorsement of the R9 EIA Reports by EPD in November 1999, the project programme was deferred to start in 2002/2003 for completion by 2006/07. The implementation of the project was then separated into the R9S and R9K portion. An Environmental Permit (EP) No. EP-103/2001 was issued on 17 September 2001 for R9K to the HyD as Permit Holder. A revised EP No. EP-103/2001/A was issued on 20 May 2003 for R9K (R9K EP) to HyD as Permit Holder. A varied EP-103/2001/C was recently issued on 22 July 2005.

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

#### 2 PROJECT CHARACTERISTICS

#### Project Organization and Contacts of Key Management

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

#### **Construction Programme and Synopsis of Work**

- 2.2 The construction programme is presented in **Appendix B**.
- 2.3 The site activities for civil works undertaken in the reporting month included:
  - Cut slope and haul road, box culvert/open channel & Culvert A, soil nailing, road & drainage works, DN200 & DN200 twin water-main, utility (Draw pit/ Ducting), Retaining Wall (BV-R1 & BV-R2) and shotcreting at Butterfly Valley.
  - LV cable trough sand backfilling activities, VE Panel, E&M cabling, dampers and Tunnel Ventilation System at ENT Tunnel.
  - Louvre installation, screeding, plumbing & drainage, Tunnel Ventilation System at South Portal Building.
  - Louvre installation, rendering, plumbing & drainage, Tunnel Ventilation System at North Portal Building.
  - Utility (draw pit/ ducting), drainage works, louvre, curtain wall & door installation, plumbing & drainage and rendering at Toll Plaza and Administration Building.
  - Concreting of wing wall, louvre door wall & cladding installation, rendering, earth works, plumbing & drainage, watermains crossing Tai Po Road and Tunnel Ventilation System at Ventilation Adit Tunnel and Building.
  - E&M installation works within SHT/T3 works area.

- 2.4 The site activities for TCSS works undertaken in the reporting month included:
  - Cable containment in 1/F, 2/F and 3/F of SHT SPB
  - Cable containment in 1/F, 2/F and 3/F of SHT NPB
  - Cable containment in G/F of ENT SPB
  - Cable containment in G/F, 1/F, 2/F, 3/F and 4/F of ENT NPB
  - Cable containment in ENT tunnel Northbound tube CP01 & CP21
  - Cable containment in ENT tunnel Southbound tube CP01 & CP21
  - Cable laying at SHT portal buildings, tunnel and open road section
  - Cable laying at ENT NPB (1/F 3/F) and tunnel
  - Cabinet installation in SHT CKM to SHT open road
  - Traffic field equipment (LCS) installation at SHT open road section and north bound tunnel.

#### 3 ENVIRONMENTAL MONITORING AND AUDIT REQUIREMENTS

#### **Monitoring Parameters and Monitoring Locations**

3.1 The EM&A Manual designated locations for the ET to monitor environmental impacts in terms of noise and air quality due to the Project. The monitoring locations are depicted in **Figures 1a** and **1b**. **Appendix C** gives details of monitoring requirements.

#### **Monitoring Methodology and Calibration Details**

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

#### **Environmental Quality Performance Limits (Action and Limit Levels)**

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

### **Environmental Mitigation Measures**

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

#### 4 MONITORING RESULTS

#### **Weather Conditions**

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

#### **Air Quality**

1-hr TSP Monitoring

- 4.2 All 1-hour TSP monitoring was conducted as scheduled during the reporting quarter.
- 4.3 No Action/Limit Level exceedance was recorded in this reporting quarter.

24-hr TSP Monitoring

- 4.4 All 24-hr TSP monitoring was conducted as scheduled in this reporting quarter.
- 4.5 No Action / Limit Level exceedance was recorded in the reporting quarter.
- 4.6 The monitoring data of 1-hr and 24-hr TSP Levels are attached in the appendices of the Monthly Reports for September to November 2006. The graphical presentations of the monitoring results are shown in **Appendix E**.

#### **Construction Noise**

- 4.7 Noise monitoring was performed at the four designated locations during the daytime period (0700-1900 hours) on normal as scheduled in this reporting month. Restricted-hour monitoring was also conducted at NM5, NM6 and NM7.
- 4.8 No Action/Limit Level exceedance was recorded in the reporting quarter.
- 4.9 All the Construction Noise Levels (CNLs) reported in this report were adjusted with the corresponding baseline level (i.e. Measured Leq Baseline Leq = Measured CNL), in order to facilitate the interpretation of the noise exceedance.
- 4.10 The monitoring data of construction noise are attached in the appendices of the Monthly Reports for September to November 2006. The graphical presentations of the monitoring results are shown in **Appendix F**.
- 4.11 Construction noise exceedances recorded in the reporting quarter and the associated actions taken are summarized in **Appendix J**.

#### 5 ENVIRONMENTAL AUDIT

#### **Implementation Status of Environmental Mitigation Measures**

According to the Environmental Permit and the EM&A Manuals, the mitigation measures detailed in the documents are required to be implemented. An updated summary of the Environmental Mitigation Implementation Status (EMIS) is provided in **Appendix G**.

### **Site Audit Summary**

- ET's weekly site audits were conducted on 4<sup>th</sup>, 13<sup>th</sup>, 20<sup>th</sup> and 27<sup>th</sup> September 2006, 4<sup>th</sup>, 11<sup>th</sup>, 18<sup>th</sup> and 25<sup>th</sup> October 2006, 1<sup>st</sup>, 8<sup>th</sup>, 14<sup>th</sup>, 22<sup>nd</sup> and 29<sup>th</sup> November 2006. IEC's monthly site audits were conducted on 4<sup>th</sup> September 2006, 11<sup>th</sup> October 2006 and 1<sup>st</sup> November 2006 together with ET.
- 5.3 During site inspections in the reporting period, no non-conformance was identified. The observations and recommendations are summarized in **Table 5.1**.

Table 5.1 Observations and Recommendations of the Site Audits

Parameters	Remedial Actions		
Water Quality	4-Oct-06 <i>F</i>	Observation - Accumulation of slit and sediment was observed at the u-channel of Toll Plaza Portion D-6. The Contractor was reminded to clean/remove the silt from the u-channel.	Rectification / improvement was observed during the site inspection on 13 September 06.
	4-Oct-06	Reminder - The Contractor was reminded to cover the entire exposed slope at loop road 1 near ENT-South Portal Tunnel.	Rectification / improvement was observed during the site inspection on 11 October 2006.
	11-Oct-06	Reminder - The Contractor was reminded to clean up the stagnant muddy water on bare ground to avoid mosquito breeding at Portion A, Mui Kong Tsuen.	Rectification / improvement was observed during the site inspection on 18 October 2006.
	11-Oct-06	Reminder - The Contractor was reminded to maintain the drainage channels and system at Toll Plaza Portions D4, D6 & Ventilation Adit regularly to ensure their efficiency.	Rectification / improvement was observed during the site inspection on 18 October 2006.
	18-Oct-06	Observation - Sandy materials at the Step Channel was noted at Mui Kong Tsuen. The Contractor was recommended to remove the materials from the channel in order to prevent it from being flushed into existing drainage.	Rectification / improvement was observed during the site inspection on 25 October 2006.

Parameters	Date	Observations / Recommendations	Remedial Actions
	25-Oct-06	Reminder - General refuse at the u-channel near the Ventilation Building was observed. The Contractor was reminded to clear the refuse at the u-channel.	Rectification / improvement was observed during the site inspection on 1 November 2006.
	1-Nov-06	Reminder - Accumulation of silts and debris were observed at the drainage channel near RE Wall near SHT Tunnel. The Contractor was reminded to clear the silts and debris to prevent stagnant water.	Rectification / improvement was observed during the site inspection on 8 November 2006.
	22-Nov-06	Observation - Yellow surface runoff directly flowed to the step channel was observed. A temporary ditch should be constructed for the runoff flowed into the desilting facility before discharge.	Rectification / improvement was observed during the site inspection on 29 November 2006.
	22-Nov-06	Reminder - The contractor was reminded to turn on the power of de-silting facility at portion D4 when rainy in order to avoid accumulating yellow water at u-channel and de-silt before discharge.	Rectification / improvement was observed during the site inspection on 29 November 2006.
	29-Nov-06	Reminder - Stagnant water was observed at 2/F Shatin Heights North Portal Building and G/F ENT South Portal Building. The Contractor was reminded to clean it up to avoid mosquito breeding.	The situation will be inspected in next follow-up audit session.
Air Quality	13-Sep-06	Reminder - A stock of cement bags stored within the Administration Building was observed not being covered with impervious sheeting. Fugitive dust is likely to be produced by wind erosion. The Contractor was recommended to cover the stock in order to prevent dust generation even the stock is stored indoor.	Rectification / improvement was observed during the site inspection on 20 September 06.
	11-Oct-06	Reminder - Potential fugitive dust emission from dry haul road at Portion E1 was observed. The Contractor was reminded to spray water on the haul road more frequently in order to avoid dust emission.	Rectification / improvement was observed during the site inspection on 18 October 2006.
	1-Nov-06	Reminder - The haul road and exposed slope at Butterfly Valley was observed to be dry. The Contractor was reminded to spray water on the haul road and exposed slope frequently for dust suppression.	Rectification / improvement was observed during the site inspection on 8 November 2006.

Parameters	Date	Observations / Recommendations	Remedial Actions
	8-Nov-06	Reminder - Dust generation by wind erosion was observed at unpaved road near administration building. The contractor should provide watering for the unpaved road more frequent in this dry season.	Rectification / improvement was observed during the site inspection on 14 November 2006.
Noise Quality	27-Sep-06	Reminder - Breaking works was carrying out at Ventilation Adit during site inspection. However, no mitigation measures for noise reduction were provided for aforesaid works. As advised by the Contractor, the works would last for 2 days more as such the Contractor was recommended to provide sufficient mitigation measures for noise reduction whenever the works is carrying out.	Rectification / improvement was observed during the site inspection on 4 October 06.

## **Status of Environmental Licensing and Permitting**

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

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

#### **Summary of Exceedances**

Air Quality

6.1 No Action/Limit Level exceedance was recorded in the reporting quarter.

**Construction Noise Monitoring** 

6.2 No Action/Limit Level exceedance was recorded in the reporting quarter.

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

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

#### 7 ENVIRONMENTAL COMPLAINTS

- 7.1 No environmental complaints were received in the reporting quarter.
- 7.2 The details of the complaints, the investigation results and the mitigation actions are summarized in **Appendix I**. There were 22 environmental complaints received since the Project commencement.

#### 8 NOTIFICATION OF SUMMONS AND SUCCESSFUL PROSECUTIONS

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

#### 9 COMMENTS, CONCLUSIONS AND RECOMMENDATIONS

9.1 Major site activities for civil works in the coming months include:

#### ENT Tunnel

• VE Panel, Road Work for NB tunnel, E&M cabling, dampers, Tunnel Ventilation System and fire services.

#### **Butterfly Valley**

Cut slope and haul road, rock dowel, road and drainage works, DN200 & DN200 twin water-main, utility (Draw pit/ Ducting), retaining wall (BV-R2) and shotcreting.

#### South Portal Building

• Louvre installation, screeding, rendering, cladding, plumbing & drainage, fire services, mechanical ventilation air condition, Tunnel Ventilation System and T&C for HV, LV cable & switchboard.

#### North Portal Building

• Louvre installation/stone cladding, rendering, plumbing & drainage, fire services, mechanical ventilation air condition, Tunnel Ventilation System, T&C for HV, LV cable & switchboard.

#### Toll Plaza's Structures and Administration Building

• Footbridge and Toll Collector construction, utility (draw pit/ ducting), drainage works, louvre, curtain wall & glazing installation, rendering, mechanical ventilation air condition, plumbing & drainage, cabling, cabling work, lift installation, T&C for HV, LV cable & switchboard and fire services.

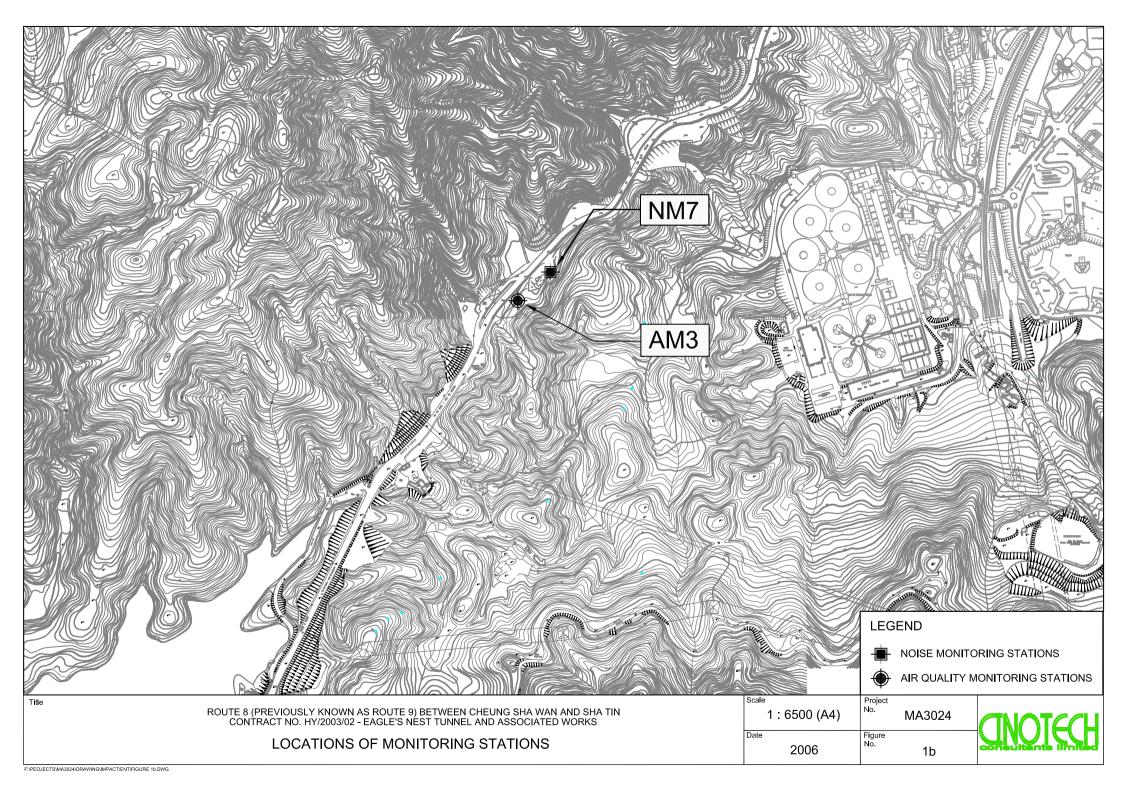
#### Ventilation Adit Tunnel and Building

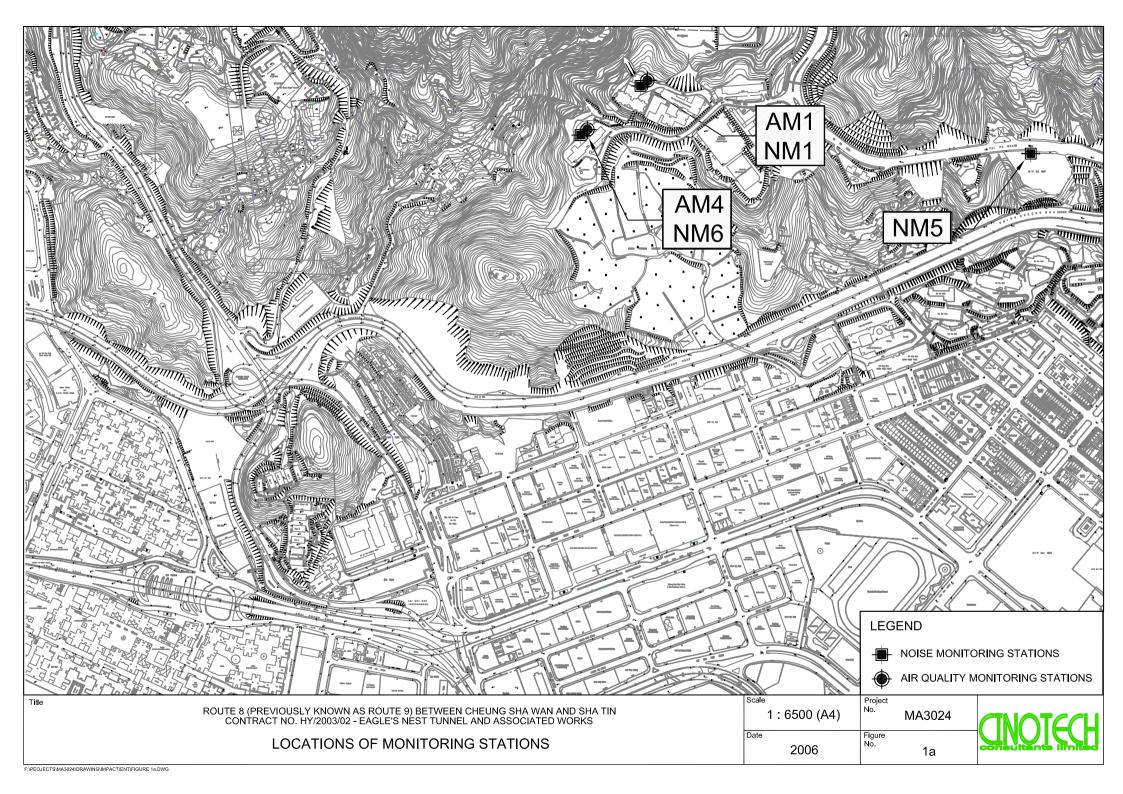
• Concreting of wing wall, louvre door wall & cladding installation, rendering, earth works, TTA for watermains crossing Tai Po Road, plumbing & drainage, fire service, mechanical ventilation air condition, T&C for HV, LV cable & switchboard and Tunnel Ventilation System.

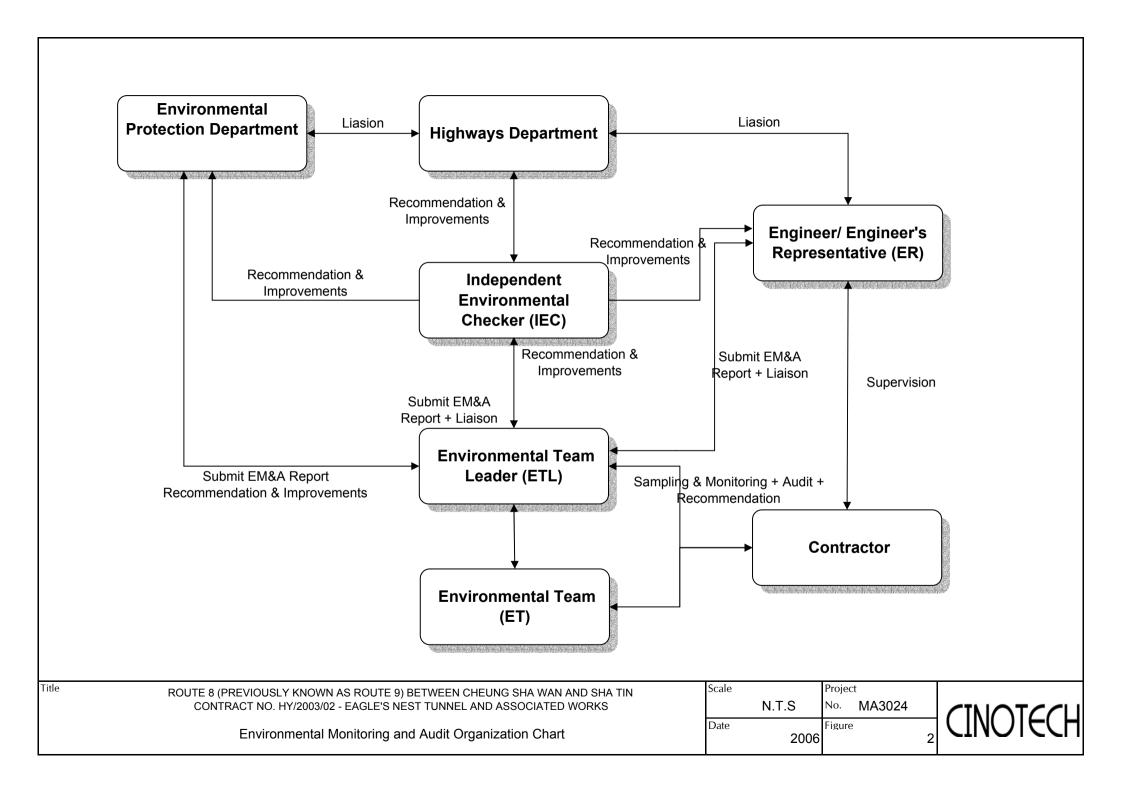
#### Other Works Areas

- E&M installation works within SHT/T3 works area.
- 9.2 The major site activities for TCSS works in the coming months include:
  - On software development aspect
    - Finishing all module tests;
    - Finishing the per-FAT tasks; and
    - Continue Central System FAT scheduled on 11<sup>th</sup> December 2006.
  - FAT for PA and ET System
  - Assist interface contractors for resubmission for DID
  - Prepare equipment mounting detail drawings
  - Resubmission of material installation at ENT and NWT
  - Cable containment for ENT-Ventilation Building
  - Equipment installation and cabling in SHT open area, SHT Tunnel, SHT-SPB, SHT-NPB, ENT tunnel, ENT-SPB, ENT-NPB
  - Video Wall and Console installation for ADB
- 9.3 The anticipated environmental impacts will be mainly on surface runoff during rainy season, dust from slope work, haul roads and stockpiles, noise impact from soil nailing and rock dowel installation.

## **FIGURES**





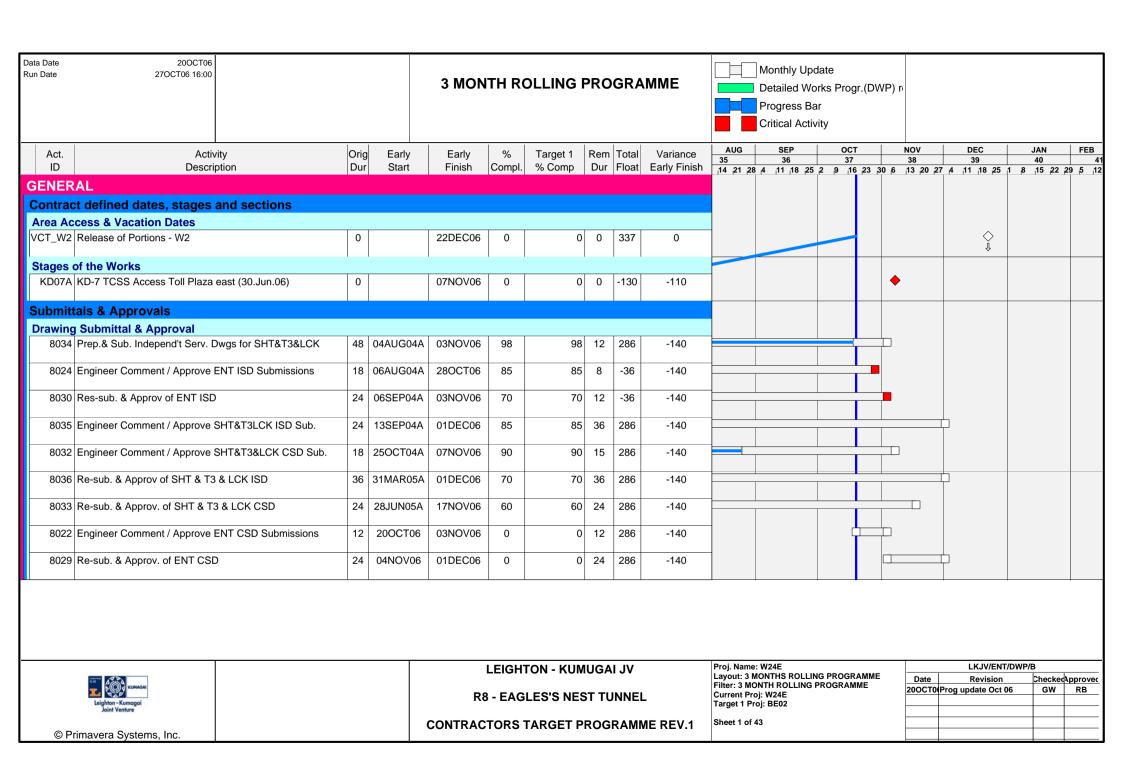


APPENDIX A CONTACT DETAILS OF THE PROJECT ORGANISATION

**Appendix A - Contact Details of the Project Organisation (ENT)** 

Party	Role	Name	Position	Phone No.	Fax No.
HyD	Permit Holder	Mr. Kroc Leung	SE2/R8K	2762 3684	2714 5198
пур	Permit Holder	Mr. George Law	E4/R8K	2762 3675	2/14/3198
	Engineer	Mr. Conrad Ng	Project Manager	2605 6262	2691 2649
MHJV	Enginopr's	Mr. Peter Poon	CRE	3552 2500	
IVITIJ V	Engineer's Representative	Mr. Eric Wong	RE (S & EP)	3552 2551	2743 9200
	Representative	Ms. Sammie Chan	TO (EN)	3552 2605	
		Dr. Priscilla Choy	ET Leader	2151 2089	
		Mr. Jesse Yuen	Project Manager	2151 2090	
Cinotech	Environmental Team	Mr. Edmond Wu	Audit Team Leader	2151 2092	3107 1388
		Mr. Henry Leung	Monitoring Team Leader	2151 2087	
	Independent Environmental Checker	Mr. David Yeung	Independent Environmental Checker	2507 2203	
CH2M-HILL		Mr. Billy Yu	Assistant Independent Environmental Checker	2872 2949	2507 2293
1 17 13 7	G t	Mr. Ray Brewster	Project Director	9092 6128	27.42 1.600
LKJV	Contractor	Mr. Kevin Harman	QA/E Manager	3352 2128	2743 1600
	Engineer's	Mr. Donald Leung	RE	2436 7489	
ARUP	Representative (TCSS)	Mr. Joseph Chow	ARE	2436 7435	2436 1803
DIGJV	Contractor (TCSS)	Ms. Joyce Chan	Quality Manager	2123 0845	2123 0889
Enquiries Hotli	ine			3552 2226	-
Complaint Hot	line			3552 2380	-

# APPENDIX B CONSTRUCTION PROGRAMME



Act.	Activity			Early	%	Target 1			Variance	AUG 35	SEP 36	OCT 37		NOV 38	DEC 39	JAN 40	
ID		Dur	Start	Finish	Compl.	% Comp	Dur	Float	Early Finish				23 30 6		4 11 18 25		
Constru	ction Works																
	duct Noise Enclosure 1						1										
8322	LckVd NE1-Elect Works 1st Fix	36	20OCT06*	01DEC06	0	0	36	-80	-140			1					
8332	LckVd NE1-Elect Works 2nd Fix	30	02DEC06	09JAN07	0	0	30	-80	-140					Ī			
8342	LckVd NE1- Elect Cabling ENT SPB to N.E.	18	10JAN07	30JAN07	0	0	18	-80	-123								
8352	LckVd NE1 Elect Works Fin Fix	18	10JAN07	30JAN07	0	0	18	-80	-140	•							
LCK Via	duct Noise Enclosure 2																
7400	LckVd NE2-Elect Works 1st Fix	36	20OCT06*	01DEC06	0	0	36	-80	-140			•					
7410	LckVd NE2-Elect Works 2nd Fix	30	02DEC06	09JAN07	0	0	30	-80	-140					I			
7420	LckVd NE2- Elect Cabling ENT SPB to N.E.	18	10JAN07	30JAN07	0	0	18	-80	-123								
7430	LckVd NE2 Elect Works Fin Fix	18	10JAN07	30JAN07	0	0	18	-80	-140	<b>-</b>							
LCK Via	duct Noise Enclosure 3							1 1									
6737	LckVd NE3 & Elect Works 1st Fix	72	20OCT06*	16JAN07	0	0	72	-110	-140			•					
6747	LckVd NE3 Elect Works 2nd Fix	60	02DEC06	13FEB07	0	0	60	-110	-140					ı			
6757	LckVd NE3 Cabling ENT SPB to N.E. 3	24	22JAN07	09MAR07	0	0	24	-110	-140								
6767	LckVd NE3 Elect Works Fin Fix	24	22JAN07	09MAR07	0	0	24	-110	-140								-
CMCS L	eased Lines at Pump Houses							1									
6807	E&M at Lai Wan Overpass Pump House	6	07NOV06	13NOV06	0	0	6	-2	-140								
6817	E&M at Lai Po Rd Pump House	6	14NOV06	20NOV06	0	0	6	-2	-140								
6827	E&M at Wai Man Tsuen Pump House	6	21NOV06	27NOV06	0	0	6	-2	-140								
UTTER	RFLY VALLEY																
	Description   Dur   Start   Finish   Compl.   % Comp.   Dur   Float   Early Fin   KOK VIADUCT																
	cess & Vacation Dates						ı										
ACS_A	Access to Portions - A	0	20OCT03A		100	100	0		-169								
CT_ABC	Release of Portions - A,B,C1,C2,C3,C4	0		22DEC06	0	0	0	337	0						\$		
F1234	Release of Portions - E1,E2,E4,E5	0		22DEC06	0	0	0	337	0						<b>₽</b>		

Act.	Activity	Orig	Early	Early	%	Target 1	Dom	Total	Variance	AUG	SEP	ОСТ		NOV	DEC	JAN		FEB
ID	Description	Dur	Start	Finish	Compl.	% Comp			Early Finish	35	36	37	23 30 6	38 43 20 27	39 ' 4 11 18 25	40 1 8 15	22 29	41 5 12
	ess & Vacation Dates				, ,			11		14 21 20 7	¥  11  10   <b>2</b> 5	<u> </u>	23 po p	13 20 21	F  11  10  23	1 0 13	22 23	5 12
	Release of Portions - I1,I2,I3	0		22DEC06	0	0	0	337	0						<b>₽</b>			
Construc	ction Works																	
BUTTER	FLY VALLEY 3RD PARTY WORKS																	
TCSS at F	Butterfly valley Approach																	
S2462 T	CSS Access to Gantry MLS-CAP13 (NB) (15MAY06)	0		23OCT06	0	0	0	-134	-128				•					
S2602 T	CSS Access to Gantry MLS-CAP11 (NB) (15MAY06)	0		23OCT06	0	0	0	-134	-128				<b>•</b>					
S2622 T	CSS Access to Gantry MLS-CAP12 (SB) (11JUN06)	0		23OCT06	0	0	0	-112	-128				<b>•</b>					
S2632 T	CSS Access to VMS MLS-CAP14,15 (11JUN06)	0		24OCT06	0	0	0	-113	-128				•					
S2642 T	CSS Access to Kiosk K4(15MAY06)	0		06NOV06	0	0	0	-145	11				•	Ť.				
S2552 T	CSS Access to Kiosk K3 (11JUN06)	0		13NOV06	0	0	0	-129	11					•				
Noise Barr	rier Works by ACCIONA																	
	Access for 7m N.B. Works by Acciona at BV South	77	23JUN06A	15JAN07	0	0	71	251	-100									
S2612 A	Access for S-Enclosure Works (Primary Elements)	90	08JUL06A	25APR07	0	0	146	-259	-154									
S2662 1	Access for 5m N.B. Works by Acciona at BV South	90	27SEP06A	17MAR07	0	0	117	-98	-101					1				
BUTTER	FLY VALLEY E&M WORKS																	
Noise End	closure 6 at South Portal Area																	
8372 L	.ckVd NE6 - Elect Works 1st Fix	30	20OCT06*	08MAY07	0	0	30	-164	-144									
8382 L	.ckVd NE6 - Elect Works 2nd Fix	24	04NOV06	15MAY07	0	0	24	-164	-144									
8392 L	ckVd NE6 - Elect Cabling ENT SPB to N.E.	9	25NOV06	22MAY07	0	0	9	-164	-144				_	=				
8402 L	ckVd NE6 - Elect Works Fin Fix	12	25NOV06	22MAY07	0	0	12	-164	-144				_	=				
Butterfly \	/alley Miscellaneous E&M Works				1													
	Butterfly Valley - Elect Works 1st Fix	42	27OCT06	15DEC06	0	0	42	-12	-46				,					
8430 E	Butterfly Valley - Elect Works 2nd Fix	36	11NOV06	22DEC06	0	0	36	-12	-46									
8410 E	Butterfly valley - Elect Works Fin Fix	24	02DEC06	02JAN07	0	0	24	-12	-46					l				
8420 E	Butterfly Valley - Cabling	24	02DEC06	02JAN07	0	0	24	-12	-46					1				
8400 E	Butterfly Valley - Ready for Energization	0		03JAN07	0	0	0	-12	-46				1	ļ		<b>•</b>		

Act. Activity	Orig	Early	Early	%	Target 1	Rem	Total	Variance	AUG	SEP	ост		NOV	DEC	JAN	FEB
ID Description	Dur	Start	Finish	Compl.	% Comp		Float		35 14 21 28 A	36 4 11 18 25 2	37 2 9 16	23 30 6	38 13 20 27	39 4 11 18 25	40 1 8 15 22	29 5 12
MAJOR DRAINAGE DIVERSIONS	, ,			,												
Filling																
S2680 Fill on top of Box Culvert 45 & culvert A	9	11NOV06	21NOV06	0	0	9	295	-125				1				
																4
Box Culvert																
S2710 Box Cul. Final Structure (Strip, Clean & Fill)	12	15SEP06A	15OCT06A	100	0	0		-124								
S2800 Culvert A Structure & connection to Bay 45	18	20OCT06	10NOV06	0	0	18	295	-125			Ę.					
EARTHWORKS & SLOPEWORKS																
BV-R1 Remaining Works																
S3240 BV-R1 - Construction of Lagging Wall	91	20MAR06A	13NOV06	78	5	20	302	-85								
S2360 BV-R1 - Backfill	48	10MAY06A	01NOV06	70	0	10	312	-78				$\rightarrow$				
Section 54 (1) Sacram	-0	. 51111 (1 00/1	31110 000	.0	0		"	.0								
SLOPE SP-S2 & SP-S3																
S2370 Remaining Works to Slopes SP-S3 & SP-S2	24	19JUL06A	13NOV06	5	0	20	11	-118								
DAMES A STATE OF THE STATE OF T			0400700*													
S2480 WSD Access Rd No Longer Available for Use	0		31OCT06*	0	0	0	0	0				•				
SLOPE BV-S2																
SLOPE STABILISATION (SOIL NAILS, ROCK BOLTS ETC)																
102691 BV-S2/8 Inst.Rock bolts & Test (60nr.w/3.rig)	22	15FEB06A	31OCT06	92	75	9	0	-143			_					
102694 BV-S2/9 Inst.Rock bolts & Test (4nr.w/1.rig)	5	28MAR06A	01NOV06	80	15	10	5	-148								
20.500.130.180.035																
103811 BV-S2 Berm 9 hydro-seeding & tensar mat	12	09NOV06	20NOV06	0	0	10	-7	-142								
		00.10100	20.10.00		· ·											
103812 BV-S2 Berm 10 hydro-seeding & tensar mat	12	25NOV06	08DEC06	0	0	12	-11	-146								
SURFACE DRAINAGE																
103696 BV-S2 Berm 9 Surface drainage	14	01MAR06A	08NOV06	30	30	16	-11	-146					1			
		001101/05	0.41.01.45			ļ.,										
103697 BV-S2 Berm 10 Surface drainage	14	09NOV06	24NOV06	0	0	14	-11	-146				_				
SLOPE BV-S4																
S3050 Complete Outstanding Soil Nails for BVS4 (5No.)	10	27OCT06	08NOV06	0	0	10	-20	-38					1			
S3520 Remaining Raking Drains (11No.) & Hydroseeding	12	09NOV06	22NOV06	0	0	12	-9	-38								
S3580 Additional Soil Nails - Base of Pier 19	24	11NOV06	08DEC06	0	0	24	-29	-140				1				
SLOPE FINISHES	12	12SEP05A	11DEC06	80	70	30	-197	-154								
102380 BV-S4/3a-4a & 5 hydro-seeding & tensarmat	12	123EPU3A	TIDECOR	60	70	30	-19/	-104								
1				1		1										

Act.	Activity	Orig	Early	Early	%	Target 1	Pom	Total	Variance	AUG	SEP	OCT	NOV	DEC	JAN	FEB
ID	Description	Dur	Start	Finish	Compl.	_		Float		35	36	37	38	39	40	4
SLOPE FINIS	•	Dui	Otart	1 1111311	Compi.	70 Comp	Dui	1 loat	Larry 1 IIII311	14 21 28 4	11 18 25 2	9  16  2	3 30 6 13 2	20 27 4 11 18 25	1 8 15 22	29 5 12
	1nw/434 BV-S4/1-2-3bcd-4b Hydro-seed/Tensarmat	18	14NOV06	04DEC06	0	0	18	-191	-154					-		
SURFACE DR	RAINAGE				•											
103705 B\	V-S4/3 Surface Drainage	8	17MAR05A	13NOV06	75	70	20	-197	-154							
103706 BV	V-S4/4 Surface Drainage	12	07SEP05A	27NOV06	75	5	18	-197	-154							
SLOPE SP	P-S1															
SURFACE DR																
103711 Sp	p-S1/4 Surface Drainage	7	06JUL04A	13NOV06	40	40	20	11	-153							
RC STRUC	CTURES															
RETAINING	G WALL BV-R2															
BACKFILLING																
101126 BV	V-R2(C) Granular Drain & Compacted Backfill	6	20OCT06	26OCT06	0	0	6	12	-136			T				
ROADWO	RKS - North End of BV															
Stormwate	er Drainage															
S2430 W	Vest Loop Rd. Drainage	20	19JAN06A	03NOV06	40	30	12	-24	-95							
S2420 O	outstanding East Loop Rd. Drainage	28	24AUG06A	26OCT06	80	0	6	-52	-128							
S2630 25	50mm pipe connect E./W. stream + 3No. Chamber	24	11OCT06A	01NOV06	60	0	10	-40	-63				•			
Ducting & E	Drawpits															
	V North - TCSS Ducting & Drawpits (West)	18	01APR06A	06OCT06A	100	5	0		-110							
S2580 B\	V North - TCSS Ducting & Drawpits (East)	18	27JUL06A	28SEP06A	100	0	0		-17							
S2770 B	V North - LV Ducting & Drawpits	13	20APR06A	15OCT06A	100	0	0		-36							
Road Pave	ement & Associated Work															
S2890 B	V North - Kerbs & CPB to Sth Bound Carriageway	36	20SEP06A	01DEC06	70	0	11	-23	-31				•			
S2252 B	V North - Bitu Pavement to Sth Bnd Carrig'way	24	29SEP06A	08DEC06	40	0	14	-23	-31							
S2232 B	V North - Subbase to Sth Bound Carriageway	40	03OCT06A	10NOV06	70	0	8	-33	-31							
S2262 B	V North - Typ IV Pavement	40	19OCT06A	04JAN07	5	0	28	260	-41							
S2222 B	V North - Subbase to Nrth Bound Carriageway	43	02NOV06	21DEC06	0	0	43	-40	-50				-			
S2540 B	V North - Kerbs & CPB to Nrth Bound Carriageway	36	02NOV06	13DEC06	0	0	36	-33	-41	<b>&gt;</b>			_			
S2242 B	V North - Bitu. Pavement to Nrth Bnd Carrig'way	24	16NOV06	30DEC06	0	0	24	-40	-48							

Act.	Activity	Orig	Early	Early	%	Target 1		Total	Variance	AUG 35	SEP 36	OC 37	NOV 38	DEC 39	JAN 40	
ID	Description	Dur	Start	Finish	Compl.	% Comp	Dur	Float	Early Finish					7 4 11 18 25		29
Road Pa	vement & Associated Work															
S2920	Road Works to East Loop Rd Typ III (EVA)	13	16NOV06	30NOV06	0	0	13	-4	-126					<u> </u>		
S2900	Road Marking & White Lining (Staged for Access)	24	30NOV06	15JAN07	0	0	24	-40	-48							
S3010	Installation of Road Signage (Sign Plates Only)	24	30NOV06	15JAN07	0	0	24	-40	-48				I			
S2930	Road Works to West Loop Road Typ III (EVA)	13	09DEC06	23DEC06	0	0	13	-24	-95							
/liscella	nenous Works															7
	Erect HML 1	4	20OCT06	24OCT06	0	0	4	27	-111							
S3100	Erect HML 2	4	20OCT06	24OCT06	0	0	4	27	-140			[				
S3450	Erect HML 3	4	20OCT06	24OCT06	0	0	4	27	-89			[				
S2910	Foul Drain Pipe Across SB Tube (3m Below FRL)	6	20SEP06A	26SEP06A	100	0	0		-105							
S2670	Install Twin DN200 Pipes to SPB via E. Loop Rd	18	20OCT06A	15NOV06	2	0	16	-52	-126			[				
S2590	Installation of DN200 Fire Hydrant Pipe and FH's	24	20OCT06	17NOV06	0	0	24	-30	-53	_						
S2690	Installation of Drip Feed Irrigation System	12	14DEC06	29DEC06	0	0	12	-27	-41							
S3400	Base for Kiosk K3	6	23SEP06A	04OCT06A	100	0	0		-22							
S2760	Kiosk K3 - required for TCSS	10	05OCT06A	13NOV06	30	0	20	-129	11							
S3000	Construct Recreated Stream	30	04NOV06	08DEC06	0	0	30	-24	-95							
OADW	/ORKS - South End of BV						'	'								
Stormwa	ater Drainage															
S2490	Storm Drainage to Nrth Bnd (Foot of BVS2)	41	11JUL06A	24OCT06	90	0	4	-145	-81							
loise Ba	arrier Footings & Sign Gantries						,									
S2481	5.5m Barrier Footings Bay 15-17	24	02SEP06A	22SEP06A	100	0	0		-53							
S2250	Footing for CCTV mast	6	21SEP06A	30SEP06A	100	0	0		-54							
S2461	Sign gantry Installation MLS-CAP12	3	20OCT06	23OCT06	0	0	3	-112	-128							
S3370	Signal Gantry Installation MLS-CAP14 & 15	4	20OCT06	24OCT06	0	0	4	-113	-128							
S3380	Sign Gantry Installation MLS-CAP11,13	3	20OCT06	23OCT06	0	0	3	-134	-128							

Act.	Activity	Orig Early	Early	%	Target 1		Total	Variance	AUG 35	SEP 36	OCT 37		NOV 38	DEC 39	JAN 40	FEB
ID	Description	Dur Start	Finish	Compl.	% Comp	Dur	Float	Early Finish	14 21 28	8 4 11 18 25	2 9 16	23 30 6		7 4 11 18 25 1	8 15 22	29 5
	& Drawpits															
S3350	BV South - TCSS Ducts & Drawpits (West)	10 01JUN06A	20SEP06A	100	0	0		-44								
S2740	BV South - LV Ducts & Drawpits	20 01JUN06A	26OCT06	50	0	6	-52	-63								
Road Pa	vement & Associated Work															
S2940	BV Sth - Trim Formation & S'base - Sth Bnd	26 01AUG06A	14NOV06	80	0	5	-49	-52	#							
S2960	BV Sth - Kerbs & CPB to Sth Bound Carriageway	30 12AUG06A	05DEC06	90	0	3	-49	-48	<b>→</b>							
S2510	BV Sth - Trim Formation & S'base - Nth Bnd	35 14AUG06A	29NOV06	50	0	18	-62	-56		<del></del>						
S2950	BV Sth - Kerbs & CPB to Nrth Bound Carriageway	30 18SEP06A	20DEC06	5	0	28	-62	-56								
S2970	BV Sth - Bitu. Pavement to Sth Bnd Carrig'way	20 20SEP06A	04JAN07	70	0	6	-49	-48								
S2980	BV Sth - Bitu. Pavement to Nrth Bnd Carrig'way	23 09NOV06	19JAN07	0	0	23	-62	-56								
S2990	Road Marking & White Lining (Staged Access)	18 20JAN07	09FEB07	0	0	18	-62	-56						_		H
S3190	Installation of Road Signage (Sign Plates Only)	18 20JAN07	09FEB07	0	0	18	-62	-56						_		H
Miscellar	neous Works															
	Kiosk K4	6 21SEP06A	06NOV06	60	0	10	-145	11								
S2850	Erect HML9	4 200CT06	24OCT06	0	0	4	27	-102								
S2790	Installation of DN 200 Fire Hydrant Pipe & FH's	12 25OCT06	08NOV06	0	0	12	-62	-81					•			
S3340	Construction of Weighbridge Pit	10 25OCT06	06NOV06	0	0	10	11	-81	_							
S2780	Install & Commission Weighbridge	24 20JAN07	16FEB07	0	0	24	-50	-56	•							Ħ
I KJV Wo	orks at Abutment M															
	200mm Watermain, valve pit & FH-6	12 19OCT06A	02NOV06	3	0	11	-28	-107								
S3470	Ducting & drawpits in Portion B	12 03NOV06	16NOV06	0	0	12	-28	-107								
S3420	Complete remaining roadworks within Portion B	36 17NOV06	30DEC06	0	0	36	-28	-107								
ACCION	A Works at Abutment						1									
	ACCIONA - Dismantle Launching Girder	24 15SEP06A	16OCT06A	100	0	0		-21								
	INTENANCE ROAD	1 1				1										f
	intenance Rd DSD1-1 (Acciona Interface)															
S3570	WSD Slope Reinstatement	18 09DEC06	02JAN07	0	0	18	-29	-140								

Act. Activity	Orig Early	Early	%	Target 1		Total	Variance	AUG 35	SEP 36	OCT 37		NOV 38	DEC 39	JAN 40	FE
ID Description	Dur Start	Finish	Compl.	% Comp	Dur	Float	Early Finish	14 21 28	4 11 18 25	2 9 16	23 30	6 13 20 2	7 4 11 18 25	1 8 15 22	29 5
OSD Maintenance Rd DSD1-1 (Acciona Interface)	40 0000700	401101/00			40	-29	440					_			
S2340 ACCIONA - Remove Crane Platform	18 20OCT06	10NOV06	0	0	18	-29	-140			Ī		_			
S2380 Complete DSD1-1 Surface Drainage & CP's	18 20OCT06*	10NOV06	0	0	18	-11	-26			_ 🕇					
S2460 LKJV Regain Access at Pier 20	0	10NOV06	0	0	0	-11	-140					<b>•</b>			
S3140 Complete Sub-base & kerbs at DSD1-1	12 11NOV06	24NOV06	0	0	12	-11	-26				_				
S3150 Complete Surfacing at DSD1-1 (Type IV)	8 25NOV06	04DEC06	0	0	8	-7	-26								
OSD Maintenanace Rd DSD1 (Parallel to Channel)		1													
S3210 2 No. Cross Rd Pipes & Roadside Gullies	12 01MAR06A	24OCT06	80	80	4	-103	-140								
S2830 Twin DN200 Water Pipe	45 02MAY06A	09DEC06	25	1	33	-103	-140	-							
S2700 Access rd DSD1 -barrier footings	12 11DEC06	23DEC06	0	0	12	-36	-140	-							
S3390 Complete Formation at DSD1	6 11DEC06	16DEC06	0	0	6	-103	-140	-							
S3120 DN 200 Watermain Diversion EB18 - EB70	40 18DEC06	05FEB07	0	0	40	-103	-140								÷
S3220 Subbase & Kerbs	18 11DEC06	03JAN07	0	0	18	-36	-51	-							
S2720 Access rd DSD1 - Barriers	12 27DEC06	10JAN07	0	0	12	-36	-140	-							
S3160 REINSTATE BV ACCESS	0	10JAN07	0	0	0	-36	-55	\			í	,		<b>•</b>	
S3230 Surfacing (Type IV)	12 27DEC06	10JAN07	0	0	12	-36	-51					_			
orks By CLP					1										T
S2880 Lay CLP Cables Ch490 - CLP Rm (at SP Bldg)	20 04SEP06A	26SEP06A	100	0	0		-21								
S2860 Lay CLP Cables Ch390 - Ch490	12 13SEP06A	26SEP06A	100	0	0		-33								
errain Mitigation	, ,	ı	'		1	'									
TMM - BV-S2															
02350 NTMM - Afforestation of Area	60 22MAR06A	24NOV06	45	5	30	1	-144								
andscaping & Establishment	' '	<u>'</u>	,												
101475 BV - Hard Landscaping	90 12DEC06	11APR07	0	0	90	-197	-154								÷
					1										

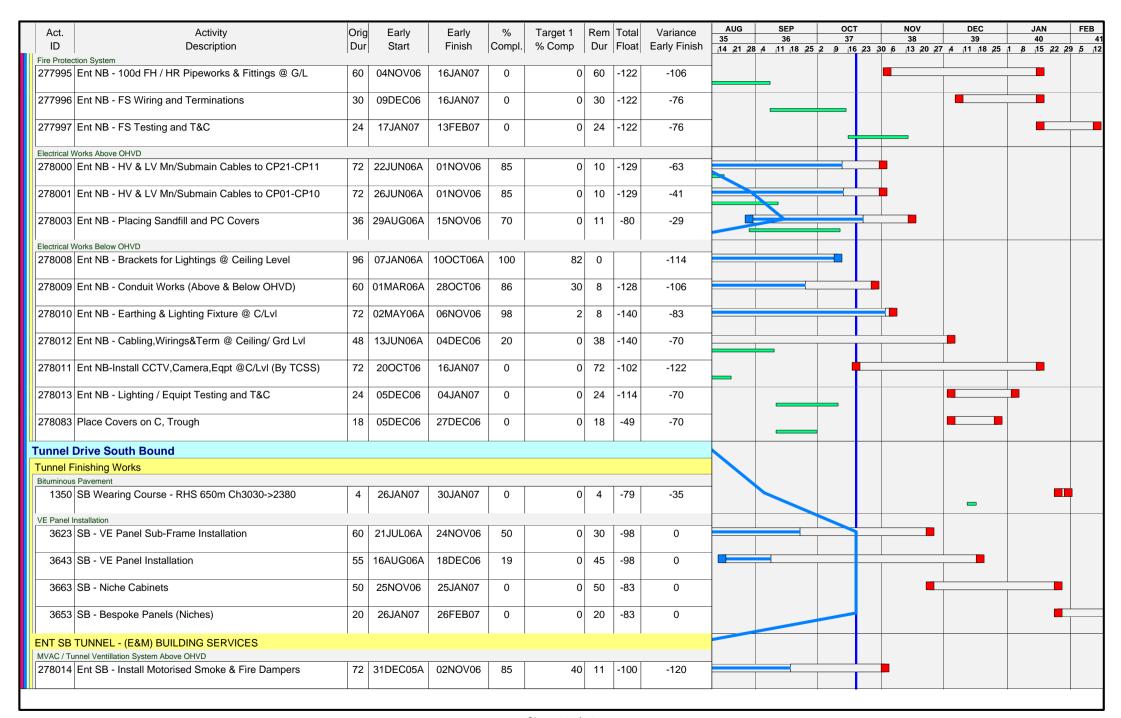
Act.	Activity Description	Orig Dur	Early Start	Early Finish	% Compl	Target 1 % Comp		Total Float	Variance	AUG 35	SEP 36	OCT 37		NOV 38	DEC 39	JAN 40	FE
	•	Dui	Start	Finish	Compl.	% Comp	Dur	Float	Early Finish	14 21 2	8 4 11 18 25	<sub>1</sub> 2 <sub>1</sub> 9 <sub>1</sub> 16	23 30 6	13 20 27	7 4 11 18 25	1 8 15 2	2 29 5
	OUTH PORTAL VENTILATION BUILDING																
	TTALS & APPROVALS																
	PT.& MATERIAL APPROVALS						T										
1919	SP.Bldg Approve doors details	24	07MAY05A	25OCT06	80	80	5	-138	-136								
PROCU	REMENT - MATERIAL																
ABWF	WORKS																
1951	SP.Bldg Procure aluminium composite cladding	180	19APR05A	15NOV06	80	80	22	-128	-140								
1979	SP.Bldg Procure expanded metal mesh cladding	180	06JUN05A	31OCT06	80	80	9	-69	-140								
2018	SP.Bldg Initial deliver fall arrest roof syst	0	20OCT06*		0	0	0	-12	-93	_							
2019	SP.Bldg Initial deliver of slate cladding	0	20OCT06*		0	0	0	-36	-68	-							
2030	SP.Bldg Initial deliver balust & metal works	0	20OCT06*		0	0	0	-12	-93	_							
2025	SP.Bldg- Initial deliver exp metal mesh cladding	0	29NOV06*		0	0	0	-69	-88	Î				•			
2029	SP.Bldg Initial deliv alum composite cladding	0	12JAN07*		0	0	0	-128	-110							<b>•</b>	
MAJOR	EQUIPMENT DELIVERY									`	<i>,</i>						
6033	EntSpBldg-Del. PD pump & tank to G/F	48	06MAR06A	01NOV06	80	55	10	312	-140								
6034	EntSpBldg-Del. PD irrig. pump & tank to G/F	48	02MAY06A	01NOV06	80	0	10	312	-102								
6163	EntSpBldg-Del. AFA & FM200 sys	48	15MAY06A	01NOV06	80	0	10	312	-80								
6744	EntSpBldg-Del. MVAC MCC, & control sys to 3/F	48	15MAY06A	28NOV06	90	0	33	289	-115					•	]		
6194	EntSpBldg-Del. CMCS & ELV equip't	48	01JUN06A	04DEC06	90	0	38	284	-91								
CONST	RUCTION																
	ortal Bldg TCSS Access																
	SP Bldg - TCSS Access Entire Structure	0		20SEP06A	100	0	0		-80		<b>♦</b>						
South P	ortal Bidg CIVIL & ABWF WORKS																
STRUCT	URES																
T2920	Backfilling at South Portal Building	18	18APR06A	08NOV06	95	60	16	-145	-146								
ABWF V	VORKS																
SB Bldg - I	nternal Works GF						1										
T2650	ABWF Initial finishes & Doors to CLP Rm & GF	18	06APR06A	23OCT06	95	5	3	1	-121								

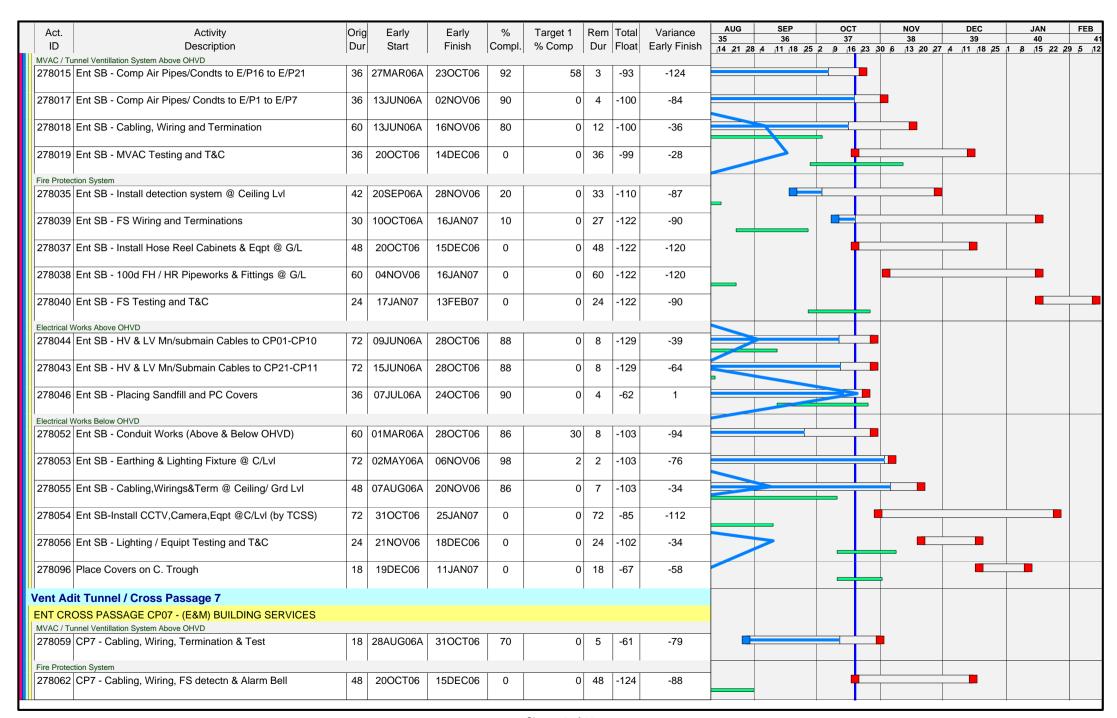
Act. Activity	Orig		Early	%	Target 1		Total	Variance	AUG 35	SEP 36	OCT 37		NOV 38	DEC 39	JAN 40	FEB
ID Description	Dur	Start	Finish	Compl.	% Comp	Dur	Float	Early Finish	14 21 28	4 <sub>1</sub> 11 <sub>1</sub> 18 <sub>2</sub> 5	2 9 16	23 30	6 13 20 2	7 4 11 18 25	1 8 15 22	29 5
SB Bldg - Internal Works GF	10	441101/00	0.41101/00			10										
T2760 GF - Paint touch up & Doors	12	11NOV06	24NOV06	0	C	12	1	-82								
SP Bldg - Internal Works 1F & LP																
T2770 1F & LP - Paint touch up & Doors	12	11NOV06	24NOV06	0	C	12	1	-118								
· ·																
SP Bldg - Internal Works 2F																
T2780 2F - Paint touch up & Doors	12	31OCT06	13NOV06	0	C	12	11	-31		<b>&gt;</b>	_					
SP Bldg - Internal Works 3/F	12	071101/00	001101/00			10	T = 1	75								
T2800 3F - Paint touch up & Doors	12	07NOV06	20NOV06	0	C	12	5	-75								
SP Bldg - Internal Works 4F & Above																
T3150 Intallation of Crane beam to underside of 5FL	12	20OCT06	03NOV06	0	C	12	-92	-97					1			
	-															
T2790 4F - Paint touch up & Doors	12	28DEC06	11JAN07	0	C	12	-37	-39								
Roof & External Facade						1										
T2820 Ent SPB - Ext. Wall Waterproof Render	18	20JUL06A	13NOV06	20	C	20	-72	-99								
T0=40 5 + 000 1 + 1141 1 + 1 + 0 1		00 11 11 00 4	0.455505				100									
T2710 Ent SPB - Install Aluminum louvres & doors	90	26JUL06A	01FEB07	5	C	86	-138	-75								_
T2530 Ent SPB - Roof Waterproofing & Test	12	20OCT06	03NOV06	0	C	12	-54	-76			<u> </u>					
12550 Ent SPB - Roof Waterproofing & Test	12	2000106	USINOVUO	U	C	12	-54	-76			T		•			
T2540 Ent SPB - Slate Cladding above NB/SB Carriageway	36	20OCT06	01DEC06	0	C	36	-36	-68								
12040 Ent of B - diate diadding above Nb/ob camageway	30	2000100	0102000			, 30	-30	-00			T			T		
T2730 Ent SPB - 25thk Roof Screed & Roofing Tiles	18	18NOV06	08DEC06	0	C	18	-54	-76								
g					-											
T2410 Ent SPB - External Wall Painting	34	21NOV06	02JAN07	0	C	34	-72	-99								
-																
T2390 Ent SPB - Expanded metal cladding to Ext Walls	36	29NOV06	12JAN07	0	C	36	-69	-88								
T2360 Ent SPB - GMS,S/S Channel, Balustrade & Railing	24	03JAN07	30JAN07	0	C	24	-72	-94			_					_
T2400 Ent SPB - Alum. Comp Panel Cladding to Ext Walls	60	12JAN07	30MAR07	0	C	60	-128	-110							_	
ENT South Portal Bldg BUILDING SERVICES																
E & M WORKS																
ENT South Portal Bldg (G/F) - E & M Works	36	04850004	100CT004	100		0		-56								
T2310 CLP work in CLP room	36	04SEP06A	10OCT06A	100	C	' 0		-ეხ								
EM1300 Installation of FS Pumps and Pipework at GF	18	20OCT06	10NOV06	0	C	18	1	-118			L					
Emilodo inistaliation of 1 of unips and 1 ipework at of	10	2000100	10140400			, 10	'	-110			T					
T2320 Installation of Earth Mat at SP Bldg	30	09NOV06	13DEC06	0	C	30	-122	-146								
ENT South Portal Bldg (1F/Lwr Plen) - E & M Work							. '									
EM1310 Installation of Compressor	18	20OCT06	10NOV06	0	C	18	1 1	-118								

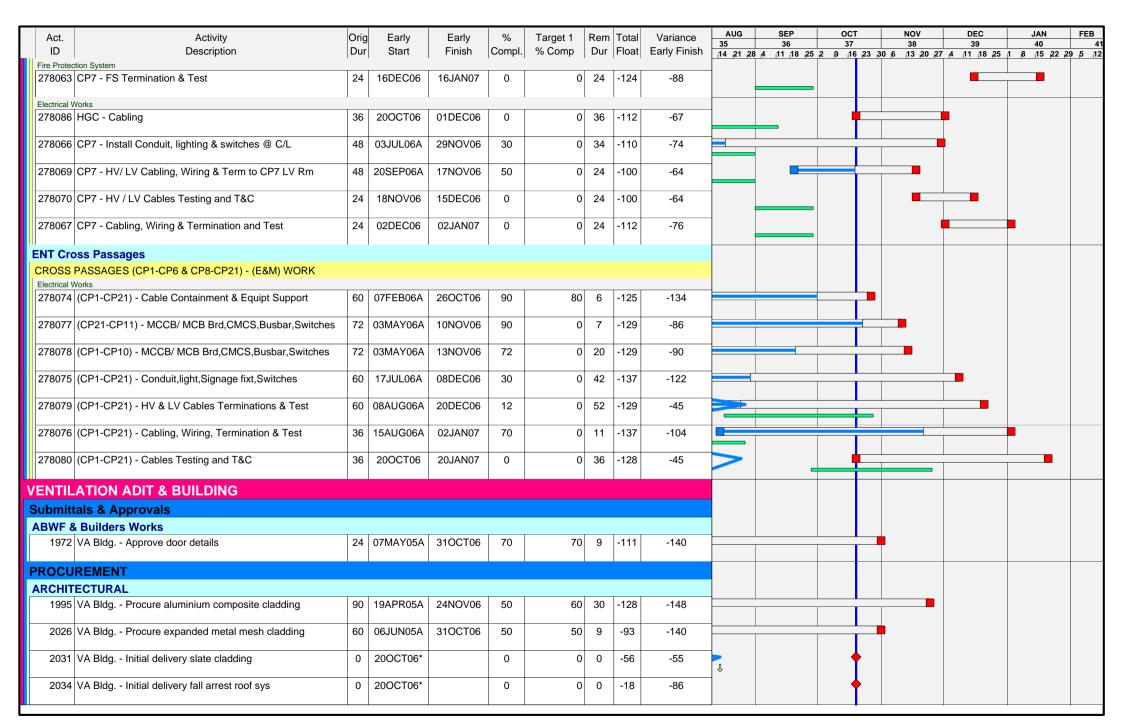
Act.	Activity	Orig	,	Early	%	Target 1		Total	Variance	AUG 35	SEP 36	OCT 37	NOV 38	DEC 39	JAN 40	FE
ID	Description	Dur	Start	Finish	Compl.	% Comp	Dur	Float	Early Finish	14 21 2	8 4 11 18 25	2 9 16 2	3 30 6 13 20 27	7 A 11 18 25	1 8 15 22	29 5
ENT South	Portal Bldg (2F/Silencer) - E & M Work		,													
EM1110	BS Works for Genset	18	24JUN06A	06NOV06	20	0	14	-84	-100							
EM1140	E&M Works in Corridors 2/F	24	24JUN06A	23OCT06	85	0	3	-110	-71				I			
EM1030	BS Works for HV Sw + Tx	12	12JUL06A	21OCT06	90	0	2	-106	-94							
EM1160	E&M Works in Risers	48	31JUL06A	07NOV06	95	0	2	-110	-52							
EM1040	HV Sw + Tx Installation	18	28AUG06A	15OCT06A	100	0	0		-19							
EM1120	Genset Installation	36	04SEP06A	20NOV06	50	0	18	-84	-76							
EM1175	BS Works for TVS Plenums	30	11SEP06A	10NOV06	40	0	18	-90	-91	1						
[						_		"								
ENT South	n Portal Bldg (3F/ Fan Rm) - E & M Works				1		'									
	LV Sw, MCC, UPS, LCC Installation	30	25JUL06A	06NOV06	85	0	5	-107	-75							
M1060	BS Works for LV Sw, MCC, UPS, LCC	12	31JUL06A	21OCT06	90	0	2	-107	-93							
	20 Works for 27 GW, Mice, 61 G, 200	'-	010020071	2100100		Ü	_									
EM1150	E&M Works in Corridors 3/F	24	31JUL06A	21OCT06	95	0	2	-120	-69							
LIVITIOO	Law Works in Comacis on	-	010020071	2100100	30	O	_	120	00							
EM1090	BS Works for 110V Charger Rm	12	01AUG06A	28OCT06	70	0	4	-120	-63							
LIVITUSU	DS Works for 110V Charger Kill	12	OTAGGGGA	2000100	10	U	7	120	-03	_						
EN11170	Termination of overall Elect HV & LV Sys	20	15OCT06A	05JAN07	15	0	25	-140	-56	-			_			
EWIT 170	Termination of overall Elect FIV & EV Sys	30	150C100A	USSAINUT	13	U	25	-140	-30				-			
FNT South	l n Portal Bldg (4F/Upr Plen) - E & M Work															
	TVS Installation	100	22AUG06A	27DEC06	46	0	54	-92	-39							
- IVIII IOO	1 VO Installation	100	22/10/000/1	2702000	70	O	04	52	00							
Testing an	I d Commissioning															_
	110V Charger Rm Installation + T&C	12	20OCT06	06NOV06	0	0	12	-120	-57			<u> </u>				
[	Trov onalger run metallation r rae	'-	2000.00	30.13133		ū			0.							
EM1130	Genset Termination + T&C	12	20OCT06	27NOV06	0	0	12	-84	-70	1						
LIVITIO	Genset remination + rao	12	2000100	2/110/00		O	12	-04	-70		<b>-</b>	T				
EN11080	LV Sw, MCC, UPS, LCC Termination + T&C	30	04NOV06	08DEC06	0	0	30	-119	-55					_		
LIVITOOU	LV 3W, MCG, OF 3, LCC Terrimiation + T&C	30	04110 700	OODLCOO	0	U	30	-119	-33			•				
EN11050	HV Sw + Tx Termination + T&C	30	07NOV06	11DEC06	0	0	30	-120	-37	1				_		
EMITOSO	TV SW + IX Tellillialion + I&C	30	07110706	TIDECOS	U	U	30	-120	-31				_			
Statutory I	nspection & Issued Certificates	ļ					1									
	Submit WR1 to CLP	1	08JAN07	08JAN07	0	0	1	-141	-57							
LIVITZUU	Submit WK1 to CEP	'	UOJANU1	UOJANUT	U	U	!	-141	-57				0		_	
EM1210	CLP insp.	18	09JAN07	29JAN07	0	0	18	-141	-57							
FIVITZ 10	OLF IIISP.	18	09JANU/	ZSJANU/	U	0	18	-141	-3/							
-	Out wit Farm MANO 40 fam M. C		4405000	471410-		_			4.40							
EIVI 1320	Submit Form WWO46 for Water Supply to WSD	30	11DEC06	17JAN07	0	0	30	-73	-140							
L	Water Supply Certificate issued			471410-		_	_		4.40							
	Tyvater Supply Certificate Issued	0	I	17JAN07	0	0	0	-73	-140							

Act.	Activity	Orig		Early	%	Target 1		Total	Variance	AUG 35	SEP 36	OC1		NOV 38	DEC 39	JAN 40	FEE
ID	Description	Dur	Start	Finish	Compl.	% Comp	Dur	Float	Early Finish	14 21 28	4 <sub>1</sub> 11 <sub>1</sub> 18 <sub>2</sub> 25	2 9 16	23 3	0 6 13 20 27	4 11 18 25	1 8 15 22	29 5
	S NEST TUNNEL																
	ct defined dates, stages & sections																
	cess & vacation dates		00007004		400	400			400								
ACS_F1	Access to Portions - F1 (U/Gnd Sth Portal)	0	20OCT03A		100	100	0		-169								
ACS_F2	Access to Portions - F2 (U/Gnd Sth Tunnel)	0	20OCT03A		100	100	0		-169								
_F12345	Release of Portions - F1,F2,F3,F4,F5	0		22DEC06	0	0	0	337	0						$\diamondsuit$		
Γ_GH134	Release of Portions - G,H1,H3,H4	0		22DEC06	0	0	0	337	0						$\diamondsuit$		
	& Engineering - Temporary Works																
Perman	ent Works																
Tunnel																	
	Issue Constr Dwgs Niche Cabinets	0		10OCT06A	100	0	0		-65			<b>*</b>					
	Eng Approve Dsg X-passage/Adit Fire Doors	12	20OCT06	03NOV06	0	0	12	260	-140								
1669	Issue Constr Dwgs X-passage/Adit Fire Doors	0		03NOV06	0	0	0	260	-140					$\Diamond$			
	ement - Material																
	ing Project Wide		<u> </u>	T.													
1685	Order/Manufact/Del Fire Doors	50	04NOV06	04JAN07	0	0	50	260	-140								
Major E	quipemnt Delivery																
Tunnelli	ing Project Wide																
NB Tunn			Г	Г													
6891	EntRtNb-Del. TVS control sys	48	14JAN06A	01NOV06	95	90	10	312	-144								
6888	EntRtNb-Del. AFA & Linear sys	48	15MAY06A	07NOV06	90	0	15	307	-122								
6886	EntRtNb-Del. CMCS & ELV sys	35	01JUN06A	28NOV06	90	0	33	289	-76								
SB Tunn	el	'															
6797	EntRtSb&VA-Del. TVS control sys	48	14JAN06A	04DEC06	90	90	38	284	-172								
6787	EntRtSb&VA-Del. AFA & Linear sys	48	15MAY06A	14NOV06	56	0	21	301	-80								
6801	EntRtSb&VA-Del. CMCS & ELV sys	72	01JUN06A	04DEC06	90	0	38	284	-81								
		ı			1		'					1					_

Act. ID	Activity	Orig	Early	Early	% Compl	Target 1		Total	Variance Early Finish	AUG 35	SEP 36	OC1 37		NOV 38	DEC 39	JAN 40	F
	Description	Dur	Start	Finish	Compl.	% Comp	Dur	Float	Early Finish	14 21 28	4 11 18 25	2 9 16	23 3	0 6 13 20 27	4 11 18 25	1 8 15 22	29
	uction Works																
	Drive North Bound																
	Finishing Works																
	s Pavement NB Base Course - RHS 650m Ch 3030->2380	4	02NOV06	06NOV06	0	0	4	-27	-134								
0000	NAS Base Godise - NAS Goom GA GOOD >2000		02110 100	00110100		· ·	-		104								
3600	NB Base Course - RHS 650m Ch 2380->1730	4	07NOV06	10NOV06	0	0	4	-27	-134								
3601	NB Base Course - RHS 650m Ch 1730->1080	4	11NOV06	15NOV06	0	0	4	-27	-134								
3603	NB Base Course - LHS 650m Ch 3030->2380	4	16NOV06	20NOV06	0	0	4	-27	-134								
3604	NB Base Course - LHS 650m Ch 2380->1730	4	21NOV06	24NOV06	0	0	4	-27	-134								
3605	NB Base Course - LHS 650m Ch 1730->1080	4	25NOV06	29NOV06	0	0	4	-27	-134								
VE Panel	 Installation																
3616	NB - VE Panel Sub-Frame Installation	60	20OCT06	02JAN07	0	0	60	-73	0								
3656	NB - Niche Cabinets	50	25NOV06	06FEB07	0	0	50	-63	0								$\vdash$
3636	NB - VE Panel Installation	55	19DEC06	03MAR07	0	0	55	-98	0								
NT NR	TUNNEL - (E&M) BUILDING SERVICES																
	unnel Ventilation Syst Above OHVD																
	Ent NB - Install Motorised Smoke & Fire Dampers	72	04JAN06A	01NOV06	84	45	10	-148	-121								
277964	Ent NB - Comp Air Pipes/Condts to E/P16 to E/P21	36	10FEB06A	24OCT06	90	40	4	-148	-109								
277965	Ent NB - Comp Air Pipes/Condts to E/P15 to E/P8	36	27MAR06A	24OCT06	90	30	4	-148	-103								
277966	Ent NB - Comp Air Pipes/ Condts to E/P1to E/P7	36	13JUN06A	01NOV06	90	0	4	-110	-73					•			
277967	Ent NB - Cabling, Wiring and Termination	60	20OCT06	02JAN07	0	0	60	-148	-87								
277968	Ent NB - MVAC Testing and T&C	36	03JAN07	13FEB07	0	0	36	-148	-81								
Fire Protec	 ction System																+
	Ent NB - Install FS Conduit for Niches	54	07FEB06A	24OCT06	93	40	4	-122	-112								
277991	Ent NB - Install brckts for detection sys @ C/L	60	29JUL06A	24NOV06	50	0	30	-122	-110								
277992	Ent NB - Install detection system @ Ceiling Lvl	42	20SEP06A	08DEC06	30	0	29	-122	-80								
277004	Ent NB - Install Hose Reel Cabinets & Eqpt @ G/L	48	20OCT06	15DEC06	0	0	48	-122	-130								

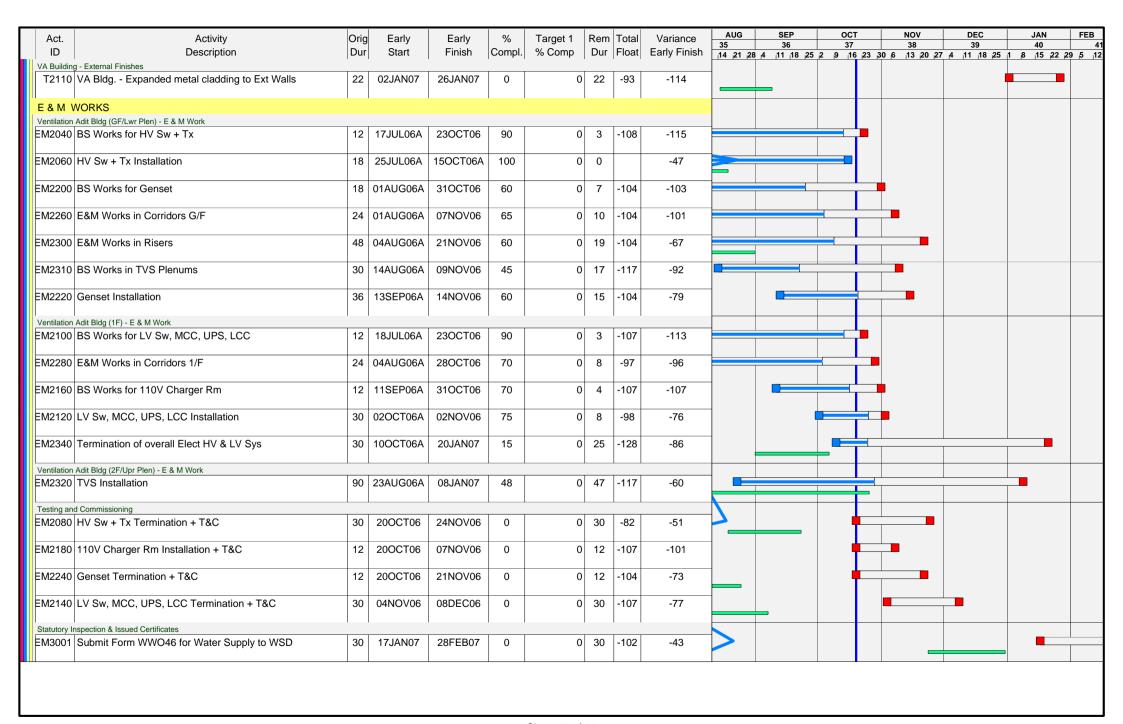




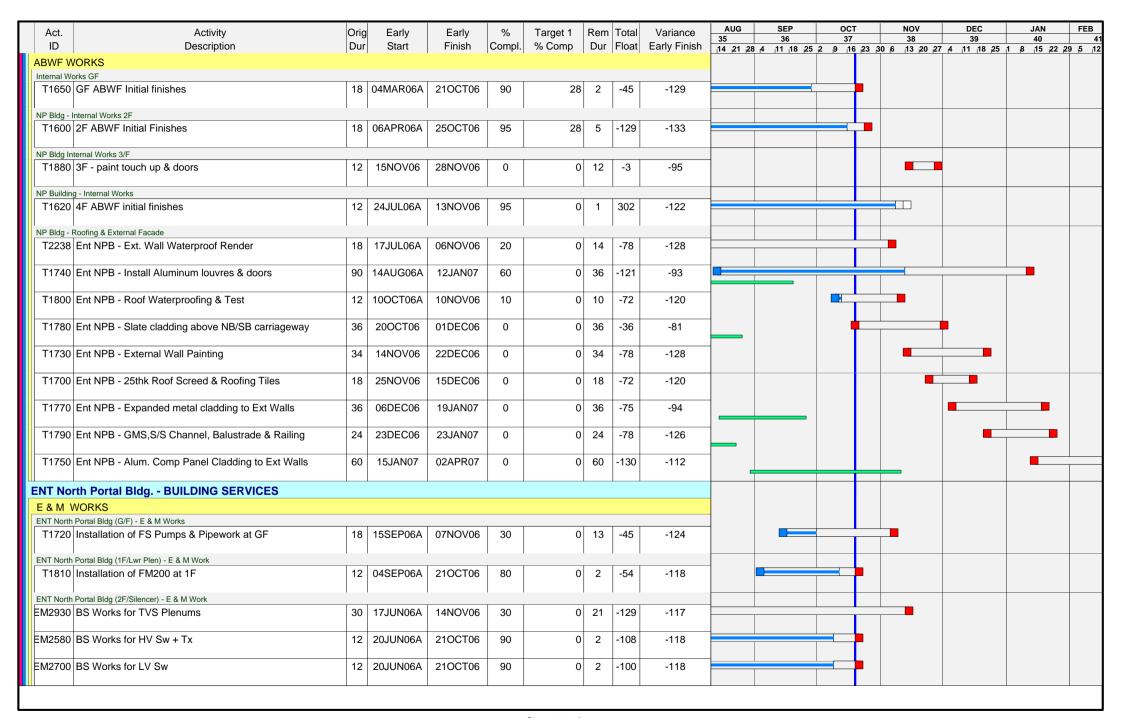


Act.	Activity	Orig Early Dur Start	Early	% Compl	Target 1		Total Float	Variance	AUG 35	SEP 36	OCT 37		NOV 38	DEC 39	JAN 40	FEE
ID	Description	Dui Start	Finish	Compl.	% Comp	Dur	rioat	Early Finish	14 21 28	4 <sub> </sub> 11 <sub> </sub> 18 <sub> </sub> 25	2 <sub>1</sub> 9 <sub>1</sub> 16	23 30	6 13 20 2	7 4 11 18 25	1 8 <sub>1</sub> 15 22 2	29 5
	VA Bldg Initial delivery balust & metal works	0 20OCT06*		0	0	0	-18	-86								
2000	VA Blog Illitial delivery balast & flictal works	0 2000100			O		-10	-00								
2038	VA Bldg Initial delivery alum comp cladding	0 28DEC06*		0	0	0	-128	-114	ļ					•		
2043	VA Bldg Initial deliv exp metal mesh cladding	0 02JAN07*		0	0	0	-93	-114	Û							
2032	VA Bldg Initial delivery doors	0 13JAN07*		0	0	0	-111	-137							•	
IA.IOR	EQUIPMENT DELIVERY															
	VaBldg-Del. PD irrig. pump & tank to G/F	48 07MAR06A	01NOV06	80	55	10	312	-141								
6608	VaBldg-Del. PD pump & tank to G/F	48 02MAY06A	01NOV06	80	0	10	312	-97								
6609	VaBldg-Del. FS pumps & tank to G/F	48 02MAY06A	25OCT06	90	0	5	317	-93								
6698	VaBldg-Del. AFA & FM200 sys	48 15MAY06A	01NOV06	56	0	10	312	-93								
6666	VaBldg-Del. CMCS & ELV equip't	48 01JUN06A	04DEC06	90	0	38	284	-93	_							
	RUCTION WORKS															
EXTERN	IAL WORKS															
Drainag			T													
S1900	Petrol interceptor & Storm Drain at East Side	48 20OCT06	15DEC06	0	0	48	-132	-109								
S1940	Foul Drain Pipe & Holding Tank	24 20OCT06	17NOV06	0	0	24	-108	-109								
S1960	Storm Drain at West Side	24 20OCT06	17NOV06	0	0	24	-138	-123								
S1970	Storm Drain & Gullies at Access Apron	24 18NOV06	15DEC06	0	0	24	-138	-123								
Ducting	& Drawpits															
S1910	Ducting & Drawpits	18 16DEC06	09JAN07	0	0	18	-132	-99								
S1980	HGC Ducting & Drawpits	18 10JAN07	30JAN07	0	0	18	-132	-99								•
Waterma	ain Works															
	Watermain & Valve Chambers at Building Apron	24 16DEC06	16JAN07	0	0	24	-138	-123								
S1990	Irrigation Pipework	18 17JAN07	06FEB07	0	0	18	-138	-123								
Construction	on of Watermains Across Tai Po Rd					I										
	Stage 1 - Watermain Crossing Tai Po Rd	26 11SEP06A	12OCT06A	100	0	0		-51	7							
									/				_			
	Stage 2 - Watermain Crossing Tai Po Rd	22 11OCT06A	06NOV06	64	0	14	-88	-53								

Act.	Activity	Orig		Early	%	Target 1		Total	Variance	AUG 35	SEP 36	OCT 37	NO\ 38	39	JAN 40	
ID	Description	Dur	Start	Finish	Compl.	% Comp	Dur	Float	Early Finish					20 27 4 11 18 25		22 29 5
	on of Watermains Across Tai Po Rd	00	071101/00	0405000		_			F.0							
SB3090	Stage 3 - Watermain Crossing Tai Po Rd	22	07NOV06	01DEC06	0	0	22	-88	-56							
000400	Otana 4 Watannaia Orazaia a Tai Da Dal	00	0005000	0005000		0	00	00	00							
SB3100	Stage 4 - Watermain Crossing Tai Po Rd	22	02DEC06	29DEC06	0	0	22	-88	-29		7 _			_		
000440	Otana F. Watana in Orașaia a Tai Da Dal	1	40 14 10 7	40 14 1107		0	4	40	20							
SB3110	Stage 5 - Watermain Crossing Tai Po Rd	4	10JAN07	13JAN07	0	U	4	-48	-30						_	
000400	0' 0 W ' ' T ' D D I	4	45 14 107	40.144107	0	0	_	40								•
SB3120	Stage 6 - Watermain Crossing Tai Po Rd	4	15JAN07	18JAN07	U	U	4	-48	-22							•
CD2420	Ctore 7 Wetermain Creesing Toi De Dd	4	40 14 10 7	22 14 1107		0	4	40	40							
SB3730	Stage 7 - Watermain Crossing Tai Po Rd	4	19JAN07	23JAN07	0	0	4	-48	-13					_	<u> </u>	
CD2450	Stage 4(R) - Watermain Crosssing Tai Po Rd	4	05JAN07	09JAN07	0	0	4	-48	0							
563150	Stage 4(R) - Watermain Crosssing Tai Po Rd	4	U5JANU7	U9JANU7	U	U	4	-48	U							
/ENIT:	ATION DUIL DING	1		<u> </u>			1	1								
	ATION BUILDING															
	ing - Structure															
T2130	Installation of Exhaust Shaft Steelwork	18	20OCT06	10NOV06	0	0	18	-90	-126			·				
T3130	Installation of Earth mat	30	14DEC06	20JAN07	0	0	30	-128	-139							
T3140	Backfilling Around Ventillation Building	24	20OCT06	13DEC06	0	0	24	-128	0							
/A Build	ing - ABWF															
T3030	ABWF - GL Paint Touch Up & Doors	12	22JAN07	03FEB07	0	0	12	-58	-86							
T3040	ABWF - 1FL Paint Touch Up & Doors	12	22JAN07	03FEB07	0	0	12	-58	-86							
T3050	ABWF - Fan Rooms & Plenums Touch Up & Doors	12	22JAN07	03FEB07	0	0	12	-58	-86							
	g - External Finishes			T	1											
T2050	VA Bldg Ext. Wall Waterproof Render	20	10JUL06A	10NOV06	35	0	18	-128	-121							
T3060	VA Bldg Ext. Wall Waterproof Membrane	21	25JUL06A	01NOV06	85	0	10	-82	-112				_			
T2140	VA Bldg Slate Cladding	44	02NOV06	22DEC06	0	0	44	-66	-65							
T3080	VA Bldg Roof Waterproofing & Test	12	02NOV06	15NOV06	0	0	12	-70	-112							
<b>T</b> 0 · · ·	NA BULL A WALL OF A CO.		441161151	10555		-		<b> </b>								
T3110	VA Bldg Install Aluminum louvres & doors	60	11NOV06	16FEB07	0	0	60	-111	-137							
						_										
Г3070	VA Bldg External Wall Painting	22	18NOV06	13DEC06	0	0	22	-128	-121				_			
						_										
T3090	VA Bldg 25thk Roof Screed & Roofing Tiles	18	30NOV06	20DEC06	0	0	18	-70	-112							
	VA Bldg GMS,S/S Channel, Balustrade & Railing	18	21DEC06	13JAN07	0	0	18	-70	-112							
T3100																
	VA Bldg Alum Comp Panel Cladding to Ext Walls	60	28DEC06	16MAR07	0	0	60	-128	-114					_		



Act.	Activity	_	Early	Early	%	Target 1		Total	Variance	AUG 35	SEP 36	OCT 37		NOV 38	DEC 39	JAN 40	FE
ID	Description	Dur	Start	Finish	Compl.	% Comp	Dur	Float	Early Finish		3 <sub>4</sub> <sub>1</sub> 11 <sub>1</sub> 18 <sub>2</sub> 25	2 9 16	23 30 6	13 20 27	7 4 11 18 25	1 8 15 22 2	29 5
	AL AREAS																
	APING & ESTABLISHMENT WORKS	40 00	OFDOCA	0055007	0.5		10	00	405								
13180	Planting Works	18   02	SEP06A	06FEB07	65	O	18	-60	-105	'							г
NT NO	RTH PORTAL VENTILATION BUILDING	i					·										
SUBMIT	TALS & APPROVALS																
ABWF &	Builders Works																
1954	NP.Bldg Approve door details	24 06	APR05A	31OCT06	80	80	9	-121	-140								
PROCUE	REMENT - MATERIAL																
ABWF V																	
	NP.Bldg Procure aluminium composite cladding	180 19	APR05A	24NOV06	84	50	30	-130	-148								
1981	NP.Bldg Procure expanded metal cladding	180 06	JUN05A	31OCT06	50	50	9	-75	-140				<b>-</b>				
2051	NP.Bldg Initial delivery slate cladding	0 20	OCT06*		0	O	0	-36	-81				•				
2052	NP.Bldg Initial delivery balust & metal works	0 20	OCT06*		0	0	0	-24	-93	_			•				
2053	NP.Bldg Initial delivery fall arrest roof sys	0 20	OCT06*		0	0	0	-24	-93	-			•				
2039	NP.Bldg Initial delivery of doors	0 06	DEC06*		0	0	0	-121	-132						•		
2066	NP.Bldg Initial deliv expanded metal cladding	0 06	DEC06*		0	0	0	-75	-94	Û					<b>•</b>		
2050	NP.Bldg Initial deliv alum composite cladding	0 15	JAN07*		0	0	0	-130	-112	, 						•	
/AJOR	EQUIPMENT DELIVERY									4							
	RTH PORTAL BUILDING																
	EntNpBldg-Del. FS pumps & tank to G/F	48 06	MAR06A	01NOV06	80	50	10	312	-140				$\rightarrow$				
6229	EntNpBldg-Del. PD pump & tank to G/F	48 15	MAY06A	01NOV06	80	0	10	312	-93								
								0.2									
6359	EntNpBldg-Del. AFA & FM200 sys	48 15	MAY06A	01NOV06	80	0	10	312	-80								
6288	EntNpBldg-Del. CMCS & ELV equip't	48 01	JUN06A	04DEC06	90	0	38	284	-91						<b>_</b>		
																	4
	RUCTION																
	ortal Bidg CIVIL & ABWF WORKS																
STRUCTI	URE NP Bldg - Exhaust Shaft (+110.38mPD)	10 04	MAYOGA	2000700	90	0	) 0	00	122								
11390	NF blug - Exhaust Shait (+110.38MPD)	18   24	MAY06A	28OCT06	80	Ü	8	-88	-122								
S1370	Construct earth mat	36 20	OOCT06	01DEC06	0	C	36	-94	-132			•			•		



Act.	Activity	Orig		Early	%	Target 1		Total	Variance	AUG 35	SEP 36	OCT 37		NOV 38	DEC 39	JAN 40	FE
ID FAIT No sets	Description Portal Bldg (2F/Silencer) - E & M Work	Dur	Start	Finish	Compl.	% Comp	Dur	Float	Early Finish	14 21 28	4 11 18 25	2 9 16	23 30 6	13 20 27	4 11 18 25	1 8 15 22	2 29 5
	E&M Works in Corridors 2/F	24	17JUL06A	20OCT06	95	0	1	-83	-105				I				
EM2800	BS Works for Genset	18	01AUG06A	07NOV06	20	0	15	-111	-125								
EM2600	HV Sw + Tx Installation	18	08AUG06A	20OCT06A	100	0	0		-24				l				
EM2900	E&M Works in Risers	48	10AUG06A	06NOV06	95	0	2	-84	-68								
EM2720	LV Sw Installation	30	17AUG06A	06NOV06	90	0	12	-100	-100								
ENT North	Portal Bldg (3F/ Fan Rm) - E & M Works																
EM2640	BS Works for MCC, UPS, LCC	12	20JUN06A	21OCT06	90	0	2	-103	-116				•				
	E&M Works in Corridors 3/F	24	17JUL06A	21OCT06	95	0	2	-84	-104								
	BS Works for 110V Charger Rm		01AUG06A	25OCT06	60	0		-120	-119								
	Genset Installation		01SEP06A	14NOV06	50	0		-111	-95								
	MCC, UPS, LCC Installation		18SEP06A	14NOV06	30	0		-103	-111								
	Termination of overall Elect HV & LV Sys		15OCT06A	11JAN07	15	0		-120	-100			Ī					
	Compressor Room Installation	18	20OCT06	10NOV06	0	0	18	-70	-126								
	Portal Bldg (4F/Upr Plen) - E & M Work TVS Installation	100	02AUG06A	26JAN07	43	0	57	-129	-89								_
		100	UZAUGUBA	ZOJANUT	43	0	57	-129	-09			- 1					
	d Commissioning	12	20000706	03NOV06		0	12	120	-114	-							
	110V Charger Rm Installation + T&C  HV Sw + Tx Termination + T&C			03NOV06	0			-120				Ī			_		
		30		08DEC06	0	0		-120	-35								
	MCC, LCC Termination + T&C	30		08DEC06	0	0		-112	-102	-							
	LV Sw Termination + T&C	30		08DEC06	0	0		-112	-98	-					_		
EM2840	Genset Termination + T&C	12	15NOV06	28NOV06	0	0	12	-111	-95								
	LAZA & ANCILLIARY STRUCTURES ACT DEFINED DATES & SECTIONS																
	CCESS & VACATION DATES			2205000	0	^	0	227	0	-							
D1234	Release of Portions - D1,D2,D3,D4  Release of Portions - D5,D6,D7,D8	0		22DEC06	0	0		337	0	-					$\diamondsuit \Leftrightarrow \diamondsuit \Leftrightarrow$		
		0		22DEC06	0	0	0	337	0								

Act.	Activity	Orig Early	Early	%	Target 1	Rem	Total	Variance	AUG	SEP	ОСТ		DEC	JAN	FEB
ID	Description	Dur Start	Finish	Compl.	% Comp		Float		35 14 21 2	36 3 4 11 18 25	37 2 9 16	23 30 6 13 20 27	39 7 A 11 18 25 (	40 I 8 15 22 2	9 5 1:
SUBMIT	TALS & APPROVALS														
<u> </u>	BW SUBMITTALS														
1522	TP/FB - Approve footbridge details	24 28JUL05A	03NOV06	50	50	12	310	-140							
	& Engineering - Temporary Works														
50.030.0			ı												
1244	Design/ICE Check Tool Booth Canopy	24 20OCT06	17NOV06	0	0	24	-143	-140			Ī				
1341	Eng Approve Dsg Tool Booth Canopy	12 18NOV06	01DEC06	0	0	12	-143	-140							
1358	Issue Constr Dwgs Tool Booth Canopy	0 11DEC06	09DEC06	0	0	0	-143	-140							
Procure	ment - Major Material														
2185	Order/Fabricate/Deliver Tool Booth Canopy	90 01DEC05A	12DEC06	50	11	45	-145	-105							
Toll Plaz	za –					ļ	1								
	TP-Proc & Manuf. MVAC Package AC Units	120 11JAN06A	01NOV06	90	50	10	-52	-90				_			
	· ·														
l c	EQUIPMENT DELIVERY														
TOLL PL															
7549	TP-Del. Package AC Units	48 02NOV06	29DEC06	0	0	48	-52	-90							
Constru	ction Works														
Toll Plaz	za - TCSS Access														
K1162	Toll Plaza - TCSS Access (East Side)	0	07NOV06	0	0	0	-107	-91				•			
TOLL PL	AZA EAST SIDE	<u> </u>		'											
K1282	Provision of micro-satelite-office at East Loop	186 13MAR06A	02JAN07	35	17	60	-66	-70							
K1232	Carriageway Drainage Prior to TCSS	36 27APR06A	27OCT06	80	10	7	-107	-115							
K1222	Main carriageway Ducting & Drawpits	54 02MAY06A	19DEC06	70	0	16	-79	-106							
									_						
S1170	FW Watermains Centre to Admin Bldg & FH12, FH13	36 02MAY06A	16NOV06	80	0	23	-73	-103							
S1160	Installation of Ducting and Drawpits for TCSS	32 08MAY06A	07NOV06	75	0	8	-107	-91							
K1212	Main Carid'way Drain (D3 & D4) - after stockpile	57 20MAY06A	16NOV06	60	0	23	-79	-106							
K1242	Main carriageway - East Subbase and kerbs	53 16OCT06A	20JAN07	10	0	47	-79	-90							
S1420	Road Pavement Surfacing (Flex & Rigid)	56 18OCT06A	07FEB07	10	0	50	-79	-90							
K1182	East Loop Road - Drainage	28 20OCT06	22NOV06	0	0	28	-34	-140			•				

	A	۵.			0,		_		., .	AUG	SEP	ОСТ		NOV	DEC	JAN	ı	FEB
Act.	Activity Description	Orig Dur	Early Start	Early Finish	% Compl.	Target 1 % Comp		Total Float	Variance Early Finish	35	36	37		38	39	40		41
	LAZA EAST SIDE	Dai	Otart	1 1111011	Compi.	70 Oomp	Dui	rioat	Larry Tillion	14 21 28 4	11 18 25 2	9 16	23 30 6	13 20 27	4 <sub>1</sub> 11 <sub>1</sub> 18 <sub>2</sub> 25	1 8 15	22 29	5 12
	E&M / Lighting works	24	20OCT06	17NOV06	0	0	24	-18	-128			•						
K1192	East Loop Road - Formation & Roadworks	36	03JAN07	13FEB07	0	0	36	-66	-70									
S1190	HGC Ducting & Drawpits	24	08MAY06A	19DEC06	50	0	12	-79	-106									
TOLL P	LAZA WEST SIDE	· ·																
K1161	CSJV, Remove TAR1, drainage, formation (RE Wall)	56	24SEP05A	07NOV06	60	60	15	-107	-135									
K1231	CSJV Complete Drainage & Vacate part	24	31DEC05A	26OCT06	90	60	6	-104	-137									
K1201	West Loop Drainage Works	38	15JUN06A	01DEC06	85	25	6	250	-137									
	Main Carriageway - West side drainage - FB-SHT	45	19JUN06A	21NOV06	80	0		-107	-102									
	FW Waterminam Centre to Admin Bldg & FH12, FH13	24	10JUL06A	05DEC06	8	0	21	-107	-108									
	Main Carriageway - West Subbase & kerbs	54	14OCT06A	12JAN07	0	0		-107	-51					3				
	E&M / Lighting works	24	20OCT06	12JAN07	0	0		-63	-51			-		•				
	West Loop road - Roadworks	36	02DEC06	16JAN07	0	0		250	-137					[				
	Road Pavement Surfacing	57	14DEC06	01MAR07	0	0	57	-91	-69						_			
	LAZA - works adjacent to building	, ,																
	SHT SPB - Drainage & Ducting	18	28FEB06A	28OCT06	90	90		22	-140									
	Admin Blg & Wshop - Drainage & ducting		07MAR06A	10NOV06	50	25		-18	-141									
	ENT NPB - Drainage & Ducting		01APR06A	24OCT06	80	25		26	-136			Ţ						
	ENT NPB - Kerbs & Rwks & misc Finishes	12	20OCT06	03NOV06	0	0		18	-132			Ĭ						
	SHT SPB - Kerbs & Rwks & misc finishes	12	20OCT06	03NOV06	0	0		18	-130									
	Install Earth Mat for Admin Bldg & SHT NP Bldg	36	20OCT06	01DEC06	0	0		-94	-140			Ī						
	Admin Blg & Wshop - kerbs, Rwks & misc finishes	30	20DEC06	26JAN07	0	0	30	-51	-135	_								
	LAZA COLLECTOR'S SUBWAY																	
ABWF																		
	TP/CS - Internal Finishes Ptn A, B & C	24	20OCT06	17NOV06	0	0		-60	-126			Ī						
101472	TP/CS - Internal Finishes Ptn D	12	18NOV06	01DEC06	0	0	12	-60	-126									

Act. Activity Orig Early Surf Finish Comp Wiscons Dur Start Finish Comp Wiscons Dur Plast Early Finish Law Finish Comp Wiscons Dur Plast Fin	Act.	Activity	Orig	Early	Early	%	Target 1	Dom	Total	Variance	AUG	SEP	ОСТ		NOV	DEC	JAN	FEB
S1200 Toll Subway - E&M		· ·			•		•				35			22 20 6	38			22 20 5 12
S1200   Totl Subway - EAM							70 00				14 21 20 4		. 10	23 50 0	13 20 21	H  11  16  23		22 23 3 112
S1260   Total Floridgo - Finishes		Toll Subway - E&M	54	02DEC06	06FEB07	0	0	54	-60	-126								
S1264 Installation of Aluminium Cladding   38 200CT06   040EC08   0   0   38 1/20   -132	TOLL P	LAZA FOOTBRIDGE	'					'										
S1200   Toll Pibridge - Finishes	ABWF																	
S1340   Toll Plaza - Erection of Lift Steel Work	S1264	Installation of Aluminium Cladding	38	20OCT06	04DEC06	0	0	38	-120	-132			Ť					
## S 1200 Toll Plaza Footbridge - Lift Installation	S1250	Toll Ftbrdge - Finishes	54	12JAN07	23MAR07	0	0	54	-92	-132			_					
S1200   Toll Pilaza Footbridge   Lift Installation   T2   Z5OCT06   Z0JAN07   O   O   T2   -70   -120	S1340	Toll Plaza - Erection of Lift Steel Work	24	30MAY06A	24OCT06	95	0	4	-70	-120								
\$1450 Toll Plaza Footbridge - Lift Commissioning	E&MV	/ORKS																
\$1470 E&M Installation at Footbridge	S1200	Toll Plaza Footbridge - Lift Installation	72	25OCT06	20JAN07	0	0	72	-70	-120								l
S1500   E&M Footbridge T&C	S1450	Toll Plaza Footbridge - Lift Commissioning	24	22JAN07	26FEB07	0	0	24	-70	-120								
TOLL PLAZA BOOTHS  S1210 Construct Toll Islands 17 No.	S1470	E&M Installation at Footbridge	30	05DEC06	11JAN07	0	0	30	-92	-132								
S1210   Construct Toll Islands 17 No.	S1500	E&M Footbridge T&C	18	12JAN07	01FEB07	0	0	18	-56	-132								
S1220 Construct Toll Booths - 22No. 88 13DEC06 10APR07 0 0 88 -145 -105  ADMIN.BLDG WORKSHOP  S1350 Workshop - External Finishes 60 03AUG06A 15DEC06 20 0 48 -18 -86  S1320 Workshop - Remaining internal Finishes 36 20AUG06A 10NOV06 50 0 18 12 -56  S1280 Workshop - Install Roller Shutters 12 20CCT06 29NOV06 0 0 12 -4 -86  ADMINISTRATION BUILDING  SUBMITTALS & APPROVALS  ABWF. MTRL SUBMITTALS  1885 Admin.Bldg Prep & submit wood ceiling details 24 20NOV04A 03NOV06 50 50 12 256 -140  1887 Admin.Bldg Prep & sub suspend ceiling details 24 12AUG05A 03NOV06 50 50 12 226 -140  1887 Admin.Bldg Approve GRP water tank details 24 04NOV06 01DEC06 0 0 24 256 -140	TOLL P	LAZA BOOTHS																
ADMIN.BLDG WORKSHOP  S1350 Workshop - External Finishes 60 03AUG06A 15DEC06 20 0 48 -18 -86  S1320 Workshop - Remaining internal Finishes 36 20AUG06A 10NOV06 50 0 18 12 -56  S1280 Workshop - Install Roller Shutters 12 20OCT06 29NOV06 0 0 12 -4 -86  ADMINISTRATION BUILDING  SUBMITTALS & APPROVALS  ABWF. MTRL SUBMITTALS  1885 Admin.Bldg Prep & submit wood ceiling details 24 20NOV04A 03NOV06 50 50 12 262 -140  1881 Admin.Bldg Prep & sub GRP water tank details 24 12JAN05A 03NOV06 50 50 12 226 -140  1882 Admin.Bldg Approve GRP water tank details 24 04NOV06 01DEC06 0 0 0 24 256 -140	S1210	Construct Toll Islands 17 No.	51	20OCT06	19DEC06	0	0	51	-125	-132			Ť					
S1350 Workshop - External Finishes 60 03AUG06A 15DEC06 20 0 48 -18 -86  S1320 Workshop - Remaining internal Finishes 36 20AUG06A 10NOV06 50 0 18 12 -56  S1280 Workshop - Install Roller Shutters 12 20OCT06 29NOV06 0 0 12 -4 -86  ADMINISTRATION BUILDING  SUBMITTALS & APPROVALS  ABWF. MTRL SUBMITTALS  1885 Admin.Bldg Prep & submit wood ceiling details 24 20NOV04A 03NOV06 50 50 12 256 -140  1881 Admin.Bldg Prep & sub GRP water tank details 24 12JAN05A 03NOV06 50 50 12 226 -140  1887 Admin.Bldg Prep & sub suspend ceiling details 24 12AUG05A 03NOV06 50 50 12 226 -140  1882 Admin.Bldg Approve GRP water tank details 24 04NOV06 01DEC06 0 0 24 256 -140	S1220	Construct Toll Booths - 22No.	88	13DEC06	10APR07	0	0	88	-145	-105								
S1320 Workshop - Remaining internal Finishes  36 20AUG06A 10NOV06 50 0 18 12 -56  S1280 Workshop - Install Roller Shutters  12 20OCT06 29NOV06 0 0 12 -4 -86  ADMINISTRATION BUILDING  SUBMITTALS & APPROVALS  ABWF. MTRL SUBMITTALS  1885 Admin.Bldg Prep & submit wood ceiling details  24 20NOV04A 03NOV06 50 50 12 262 -140  1887 Admin.Bldg Prep & sub GRP water tank details  24 12JAN05A 03NOV06 50 50 12 256 -140  1887 Admin.Bldg Prep & sub suspend ceiling details  24 12AUG05A 03NOV06 50 50 12 226 -140  1882 Admin.Bldg Approve GRP water tank details  24 04NOV06 01DEC06 0 0 24 256 -140	ADMIN.	BLDG WORKSHOP																
S1280   Workshop - Install Roller Shutters   12 200CT06 29NOV06 0 0 0 12 -4 -86	S1350	Workshop - External Finishes	60	03AUG06A	15DEC06	20	0	48	-18	-86								
ADMINISTRATION BUILDING  SUBMITTALS & APPROVALS  ABWF. MTRL SUBMITTALS  1885   Admin.Bldg Prep & submit wood ceiling details   24   20NOV04A   03NOV06   50   50   12   262   -140    1881   Admin.Bldg Prep & sub GRP water tank details   24   12JAN05A   03NOV06   50   50   12   256   -140    1887   Admin.Bldg Prep & sub suspend ceiling details   24   12AUG05A   03NOV06   50   50   12   226   -140    1882   Admin.Bldg Approve GRP water tank details   24   04NOV06   01DEC06   0   0   24   256   -140	S1320	Workshop - Remaining internal Finishes	36	20AUG06A	10NOV06	50	0	18	12	-56								
SUBMITTALS & APPROVALS         ABWF. MTRL SUBMITTALS         1885 Admin.Bldg Prep & submit wood ceiling details       24 20NOV04A 03NOV06 50 50 12 262 -140         1881 Admin.Bldg Prep & sub GRP water tank details       24 12JAN05A 03NOV06 50 50 12 256 -140         1887 Admin.Bldg Prep & sub suspend ceiling details       24 12AUG05A 03NOV06 50 50 12 226 -140         1882 Admin.Bldg Approve GRP water tank details       24 04NOV06 01DEC06 0 0 24 256 -140	S1280	Workshop - Install Roller Shutters	12	20OCT06	29NOV06	0	0	12	-4	-86	_		ļ.					
ABWF. MTRL SUBMITTALS         1885   Admin.Bldg Prep & submit wood ceiling details       24   20NOV04A   03NOV06   50   50   12   262   -140           1881   Admin.Bldg Prep & sub GRP water tank details       24   12JAN05A   03NOV06   50   50   12   256   -140           1887   Admin.Bldg Prep & sub suspend ceiling details       24   12AUG05A   03NOV06   50   50   12   226   -140           1882   Admin.Bldg Approve GRP water tank details       24   04NOV06   01DEC06   0   0   24   256   -140	ADMIN	IISTRATION BUILDING																
1885 Admin.Bldg Prep & submit wood ceiling details       24 20NOV04A 03NOV06 50       50 12 262 -140         1881 Admin.Bldg Prep & sub GRP water tank details       24 12JAN05A 03NOV06 50       50 12 256 -140         1887 Admin.Bldg Prep & sub suspend ceiling details       24 12AUG05A 03NOV06 50       50 12 226 -140         1882 Admin.Bldg Approve GRP water tank details       24 04NOV06 01DEC06 0       0 24 256 -140	SUBMI	TTALS & APPROVALS																
1881 Admin.Bldg Prep & sub GRP water tank details       24 12JAN05A 03NOV06 50 50 12 256 -140         1887 Admin.Bldg Prep & sub suspend ceiling details       24 12AUG05A 03NOV06 50 50 12 226 -140         1882 Admin.Bldg Approve GRP water tank details       24 04NOV06 01DEC06 0 0 24 256 -140	ABWF.	MTRL SUBMITTALS																
1887 Admin.Bldg Prep & sub suspend ceiling details       24 12AUG05A 03NOV06       50       50       12 226 -140         1882 Admin.Bldg Approve GRP water tank details       24 04NOV06 01DEC06       0       0 24 256 -140	1885	Admin.Bldg Prep & submit wood ceiling details	24	20NOV04A	03NOV06	50	50	12	262	-140			i					
1882 Admin.Bldg Approve GRP water tank details 24 04NOV06 01DEC06 0 0 24 256 -140	1881	Admin.Bldg Prep & sub GRP water tank details	24	12JAN05A	03NOV06	50	50	12	256	-140								
	1887	Admin.Bldg Prep & sub suspend ceiling details	24	12AUG05A	03NOV06	50	50	12	226	-140								
1886 Admin.Bldg Approve wood ceiling details 24 04NOV06 01DEC06 0 0 24 262 -140	1882	Admin.Bldg Approve GRP water tank details	24	04NOV06	01DEC06	0	0	24	256	-140								
	1886	Admin.Bldg Approve wood ceiling details	24	04NOV06	01DEC06	0	0	24	262	-140								

Description   Dur   Start   Frieth   Compt.   No. Comp   Dur   Floot   Early Friesh   Compt.   No. Comp   Dur	Act. Activity	Orig		Early	%	Target 1		Total	Variance	AUG 35	SEP 36	OCT 37		NOV 38	DEC 39	JAN 40	FEB 4
1888   Admin Bidg - Approve suspended ceiling details		Dur	Start	Finish	Compl.	% Comp	Dur	Float	Early Finish	14 21 28	4 11 18 25 2	9 16	23 30 6	13 20 27	7 4 11 18 25	1 8 15 2	2 29 5 12
EAM COPT./ MTRL. SUBMITTALS  8248   Admillidg-Engineer to provide Catering equip detail   0   07APROSA   100   100   0   -140    DESIGN & ENGINEERING  TEMPORARY WORKS  1373   Design/CE Temp False/Formwork Admin Bidg   48   20C0T06   15DEC06   0   0   48   274   -140    PROCUREMENT - MATERIAL  ABMY WORKS  1904   Admin.Bidg Procure wood ceiling   90   19JAN0SA   03NOV06   87   87   12   280   -140    1902   Admin.Bidg Procure supended ceiling   120   08MAY0SA   01DEC06   70   70   36   226   -140    1910   Admin.Bidg Procure supended ceiling   120   08MAY0SA   01DEC06   70   70   36   226   -140    1910   Admin.Bidg Procure supended metal cladding   90   03JUN0SA   13NOV06   87   87   22   -121   -140    1913   Admin.Bidg Initial delivery glass canopy   0   20C0T06   0   0   0   332   -398    2056   Admin.Bidg Initial delivery sheet decking   0   20C0T06   0   0   0   0   18   -93    2058   Admin.Bidg Initial deliver balual & metal wks   0   20C0T06   0   0   0   0   280   -140    2060   Admin.Bidg Initial delivery wood ceiling   0   05AAN07   0   0   0   0   256   -140    2061   Admin.Bidg Initial delivery wood ceiling   0   05AAN07   0   0   0   0   0   0   0   0    2062   Admin.Bidg Initial delivery wood ceiling   0   05AAN07   0   0   0   0   0   0   0   0    2063   Admin.Bidg Initial delivery wood ceiling   0   0   0   0   0   0   0   0   0		24	04NOV00	04DEC00	0	0	24	226	1.10						_		
B248   Admibidg-Engineer to provide Cater's equip detail   0 07APR05A   100 100 0   1140	1888 Admin.Bidg Approve suspended ceiling details	24	04NOV06	01DEC06	0	U	24	226	-140								
DESIGN & ENGINEERING   TEMPORARY WORKS   1373 Design/ICE Trenp False/Formwork Admin Bidg   48   200CT06   15DEC06   0   0   48   274   -140     -140     -140     -140     -140     -140   -140   -140     -140     -140	E&M EQPT. / MTRL. SUBMITTALS	-			<u>'</u>			· '									
TEMPORARY WORKS   1373   Design/ICE Temp False/Formwork Admin Bidg   48   200CT06   15DEC06   0   0   48   274   -140	8248 AdmBldg-Engineer to provide Cater'g equip detail	0	07APR05A		100	100	0		-140								
1373   Design/ICE Temp False/Formwork Admin Bidg	DESIGN & ENGINEERING																
PROCUREMENT - MATERIAL  ABWF WORKS  1904   Admin.Bidg Procure wood ceiling 1902   Admin.Bidg Procure GRP water tank 1905   Admin.Bidg Procure suspended ceiling 120   O9MAY05A   O3NOV06   87   87   12   260   -140   1905   Admin.Bidg Procure suspended ceiling 120   O9MAY05A   O1DEC06   70   70   36   226   -140   1910   Admin.Bidg Procure expanded metal cladding 190   O6JUNOSA   13NOV06   87   87   20   -121   -140   1938   Admin.Bidg Initial delivery glass canopy 190   O2OCT06   O   O   O   -39   -119   2056   Admin.Bidg Initial delivery sheet decking 190   O2OCT06   O   O   O   -18   -93   2059   Admin.Bidg Initial deliver balust & metal wks 190   O2OCT06   O   O   O   -18   -93   2060   Admin.Bidg Initial deliver balust & metal wks 190   O2OCT06   O   O   O   -18   -93   2058   Admin.Bidg Initial delivery wood ceiling 190   O3JAN07   O   O   O   0   0   0   2053   Admin.Bidg Initial delivery wood ceiling 2063   Admin.Bidg Initial delivery wood ceiling 207   O   O   O   O   O   O   O   208   Admin.Bidg Initial delivery depressed of the procure o	TEMPORARY WORKS																
Sample   S	1373 Design/ICE Temp False/Formwork Admin Bldg	48	20OCT06	15DEC06	0	0	48	274	-140			†					
1904   Admin.Bidg Procure wood cailing	PROCUREMENT - MATERIAL																
1902 Admin.Bldg Procure GRP water tank  90 16MAR05A 03NOV06 87 87 12 280 -140  1905 Admin.Bldg Procure suspended ceiling  120 09MAY05A 01DEC06 70 70 36 226 -140  1910 Admin.Bldg Procure expanded metal cladding  90 06JUN05A 13NOV06 87 87 20 -121 -140  1938 Admin.Bldg Initial delivery glass canopy  0 200CT06 0 0 0 332 -98  2056 Admin.Bldg Initial delivery sheet decking  0 200CT06 0 0 0 -18 -93  2058 Admin.Bldg Initial deliver balust & metal wks  0 200CT06 0 0 0 -18 -93  2058 Admin.Bldg Initial delivery wood ceiling  0 05JAN07 0 0 0 260 -140  2053 Admin.Bldg Initial delivery GRP water tank  0 10JAN07 0 0 0 256 -140  Admin.Bldg Initial delivery GRP water tank  0 10JAN07 0 0 0 -121 -138  MAJOR EQUIPMENT DELIVERY  ADMINISTRATION BUILDING  6428 AdmBldg-Del. AFA & FM200 sys  48 15MAY06A 28NOV06 90 20 33 289 -151	ABWF WORKS																
1905 Admin.Bldg Procure suspended ceiling 120 09MAY05A 01DEC06 70 70 36 226 -140  1910 Admin.Bldg Procure expanded metal cladding 90 06JUN05A 13NOV06 87 87 20 -121 -140  1938 Admin.Bldg Initial delivery glass canopy 0 20OCT06* 0 0 0 399 -119  2056 Admin.Bldg Initial delivery sheet decking 0 20OCT06* 0 0 0 322 -98  2059 Admin.Bldg Initial deliver balust & metal wks 0 20OCT06* 0 0 0 18 -93  2050 Admin.Bldg Initial deliver balust & metal wks 0 20OCT06* 0 0 0 0 18 -93  2058 Admin.Bldg Initial delivery wood ceiling 0 05JAN07 0 0 0 260 -140  2063 Admin.Bldg Initial delivery GRP water tank 0 10JAN07 0 0 0 256 -140  2061 Admin.Bldg Initial del expanded metal cladding 0 15JAN07* 0 0 0 -121 -138  MAJOR EQUIPMENT DELIVERY  ADMINISTRATION BUILDING  6428 AdmBldg-Del. AFA & FM200 sys 48 15MAY06A 28NOV06 90 20 33 289 -151	1904 Admin.Bldg Procure wood ceiling	90	19JAN05A	03NOV06	87	87	12	260	-140								
1910 Admin.Bidg Procure expanded metal cladding 90 06JUN05A 13NOV06 87 87 20 -121 -140  1938 Admin.Bidg Initial delivery glass canopy 0 20OCT06* 0 0 0 0 -39 -119  2056 Admin.Bidg Initial delivery sheet decking 0 20OCT06 0 0 0 0 322 -98  2059 Admin.Bidg Initial deliver balust & metal wks 0 20OCT06* 0 0 0 0 -18 -93  2060 Admin.Bidg Initial deliver balust & metal wks 0 20OCT06* 0 0 0 0 -18 -93  2058 Admin.Bidg Initial delivery wood ceiling 0 0 5JAN07 0 0 0 260 -140  2063 Admin.Bidg Initial delivery GRP water tank 0 10JAN07 0 0 0 256 -140  2061 Admin.Bidg Initial delivery GRP water tank 0 10JAN07* 0 0 0 -121 -138  MAJOR EQUIPMENT DELIVERY  ADMINISTRATION BUILDING  6428 AdmBidg-Del. AFA & FM200 sys 48 15MAY06A 14NOV06 56 0 21 301 -80	1902 Admin.Bldg Procure GRP water tank	90	16MAR05A	03NOV06	87	87	12	280	-140								
1938 Admin.Bidg Initial delivery glass canopy  0 200CT06* 0 0 0 322 -98  2059 Admin.Bidg Initial delivery sheet decking  0 200CT06* 0 0 0 322 -98  2059 Admin.Bidg Initial deliver balust & metal wks  0 200CT06* 0 0 0 -18 -93  2060 Admin.Bidg Initial deliver balust & metal wks  0 200CT06* 0 0 0 -18 -93  2060 Admin.Bidg Initial delivery wood celling 0 0 05JAN07 0 0 0 260 -140  2063 Admin.Bidg Initial delivery GRP water tank 0 10JAN07 0 0 0 256 -140  2061 Admin.Bidg Initial del expanded metal cladding 0 15JAN07* 0 0 0 0 -121 -138  MAJOR EQUIPMENT DELIVERY  ADMINISTRATION BUILDING 6428 AdmBidg-Del. building vent. fans 48 06APR06A 28NOV06 90 20 33 289 -151  6534 AdmBidg-Del. AFA & FM200 sys 48 15MAY06A 14NOV06 56 0 21 301 -80	1905 Admin.Bldg Procure suspended ceiling	120	09MAY05A	01DEC06	70	70	36	226	-140								
1938 Admin.Bidg Initial delivery glass canopy  0 200CT06* 0 0 0 322 -98  2059 Admin.Bidg Initial delivery sheet decking  0 200CT06* 0 0 0 322 -98  2059 Admin.Bidg Initial deliver balust & metal wks  0 200CT06* 0 0 0 -18 -93  2060 Admin.Bidg Initial deliver balust & metal wks  0 200CT06* 0 0 0 -18 -93  2060 Admin.Bidg Initial delivery wood celling 0 0 05JAN07 0 0 0 260 -140  2063 Admin.Bidg Initial delivery GRP water tank 0 10JAN07 0 0 0 256 -140  2061 Admin.Bidg Initial del expanded metal cladding 0 15JAN07* 0 0 0 0 -121 -138  MAJOR EQUIPMENT DELIVERY  ADMINISTRATION BUILDING 6428 AdmBidg-Del. building vent. fans 48 06APR06A 28NOV06 90 20 33 289 -151  6534 AdmBidg-Del. AFA & FM200 sys 48 15MAY06A 14NOV06 56 0 21 301 -80																	
2056 Admin.Bidg Initial delivery sheet decking	1910 Admin.Bldg Procure expanded metal cladding	90	06JUN05A	13NOV06	87	87	20	-121	-140					•			
2059 Admin.Bldg Initial delive fall arrest roof syst  2060 Admin.Bldg Initial deliver balust & metal wks  0 200CT06*  0 0 0 -18 -93  2058 Admin.Bldg Initial delivery wood ceiling  0 05JAN07  0 0 0 260 -140  2063 Admin.Bldg Initial delivery GRP water tank  0 10JAN07  0 0 0 256 -140  2061 Admin.Bldg Initial del expanded metal cladding  0 15JAN07*  0 0 0 -121 -138  MAJOR EQUIPMENT DELIVERY  ADMINISTRATION BUILDING  6428 AdmBldg-Del. building vent. fans  48 06APR06A 28NOV06 90 20 33 289 -151  6534 AdmBldg-Del. AFA & FM200 sys  48 15MAY06A 14NOV06 56 0 21 301 -80	1938 Admin.Bldg Initial delivery glass canopy	0	20OCT06*		0	0	0	-39	-119			•					
2060 Admin.Bldg Initial deliver balust & metal wks  0 200CT06*  0 0 0 -18 -93  2058 Admin.Bldg Initial delivery wood ceiling  0 05JAN07  0 0 0 260 -140  2063 Admin.Bldg Initial delivery GRP water tank  0 10JAN07  0 0 0 256 -140  2061 Admin.Bldg Initial del expanded metal cladding  0 15JAN07*  0 0 0 -121 -138  MAJOR EQUIPMENT DELIVERY  ADMINISTRATION BUILDING  6428 AdmBldg-Del. building vent. fans  48 06APR06A 28NOV06 90 20 33 289 -151  6534 AdmBldg-Del. AFA & FM200 sys  48 15MAY06A 14NOV06 56 0 21 301 -80	2056 Admin.Bldg Initial delivery sheet decking	0	20OCT06		0	0	0	322	-98			<b>\</b>					
2058 Admin.Bldg Initial delivery wood ceiling	2059 Admin.Bldg Initial deliv fall arrest roof syst	0	20OCT06*		0	0	0	-18	-93	-		•					
2058 Admin.Bldg Initial delivery wood ceiling  0 05JAN07 0 0 0 260 -140  2063 Admin.Bldg Initial delivery GRP water tank  0 10JAN07 0 0 0 256 -140  2061 Admin.Bldg Initial del expanded metal cladding  0 15JAN07* 0 0 0 -121 -138  MAJOR EQUIPMENT DELIVERY  ADMINISTRATION BUILDING  6428 AdmBldg-Del. building vent. fans  48 06APR06A 28NOV06 90 20 33 289 -151  6534 AdmBldg-Del. AFA & FM200 sys  48 15MAY06A 14NOV06 56 0 21 301 -80	2060 Admin Bldg Initial deliver balust & metal wks	0	20OCT06*		0	0	0	-18	-93	-							
2063 Admin.Bldg Initial delivery GRP water tank  2061 Admin.Bldg Initial del expanded metal cladding  0 15JAN07*  0 0 0 -121 -138   MAJOR EQUIPMENT DELIVERY  ADMINISTRATION BUILDING  6428 AdmBldg-Del. building vent. fans  48 06APR06A 28NOV06 90 20 33 289 -151  6534 AdmBldg-Del. AFA & FM200 sys  48 15MAY06A 14NOV06 56 0 21 301 -80																	
2061 Admin.Bldg Initial del expanded metal cladding 0 15JAN07* 0 0 0 -121 -138  MAJOR EQUIPMENT DELIVERY  ADMINISTRATION BUILDING  6428 AdmBldg-Del. building vent. fans 48 06APR06A 28NOV06 90 20 33 289 -151  6534 AdmBldg-Del. AFA & FM200 sys 48 15MAY06A 14NOV06 56 0 21 301 -80	2058 Admin.Bidg Initial delivery wood ceiling	0	05JAN07		0	0	0	260	-140								
MAJOR EQUIPMENT DELIVERY           ADMINISTRATION BUILDING           6428 AdmBldg-Del. building vent. fans         48 06APR06A 28NOV06 90 20 33 289 -151           6534 AdmBldg-Del. AFA & FM200 sys         48 15MAY06A 14NOV06 56 0 21 301 -80	2063 Admin.Bldg Initial delivery GRP water tank	0	10JAN07		0	0	0	256	-140							$\Diamond$	
ADMINISTRATION BUILDING           6428 AdmBldg-Del. building vent. fans         48 06APR06A 28NOV06 90 20 33 289 -151           6534 AdmBldg-Del. AFA & FM200 sys         48 15MAY06A 14NOV06 56 0 21 301 -80	2061 Admin.Bldg Initial del expanded metal cladding	0	15JAN07*		0	0	0	-121	-138							•	
6428 AdmBldg-Del. building vent. fans  48 06APR06A 28NOV06 90 20 33 289 -151  6534 AdmBldg-Del. AFA & FM200 sys  48 15MAY06A 14NOV06 56 0 21 301 -80	MAJOR EQUIPMENT DELIVERY																
6534 AdmBldg-Del. AFA & FM200 sys 48 15MAY06A 14NOV06 56 0 21 301 -80	ADMINISTRATION BUILDING																
	6428 AdmBldg-Del. building vent. fans	48	06APR06A	28NOV06	90	20	33	289	-151								
6476 AdmBldg-Del. CMCS, ELV & TCS equip't 72 01JUN06A 04DEC06 90 0 38 284 -92	6534 AdmBldg-Del. AFA & FM200 sys	48	15MAY06A	14NOV06	56	0	21	301	-80								
	6476 AdmBldg-Del. CMCS, ELV & TCS equip't	72	01JUN06A	04DEC06	90	0	38	284	-92					_			

Act.	Activity	Orig	Early	Early	%	Target 1	Rem	Total	Variance	AUG	SEP	ОСТ		NOV	DEC	JAN	FEB
ID	Description	Dur	Start	Finish	Compl.	% Comp		Float	Early Finish	35 14 21 28 4	36 11 18 25	37 2 9 16	23 30 6	38 13 20 2	39 7 /4 /11 /18 /25 /	40 1 8 15 £	22 29 5
CONSTRUCTION																	
TCSS Access at Admin B	lda																
T3350 TCSS Works Within	_	140	15SEP06A	24MAR07	0	0	110	-105	-74								
CIVIL & ABWF WORKS																	
Substructure																	
106398 Admin.Bldg Earth	Mat & Rods - All in ptn D4	36	08NOV06	19DEC06	0	0	36	-51	-135	-			•				
ABWF																	
Admin Bldg (G/F) - Internal Work @ G	rid 1 to 21																
T1682 AB (G/F to 1/F) - Sta	ircase Finishing Works	30	18APR06A	02NOV06	65	5	11	-122	-123								
T1685 AB G/F (Grid 1-21) -	Wall Plaster & Flr Screed	20	19APR06A	21OCT06	90	10	2	-123	-128								
T1680 AB G/F (Grid 1-21) -	Windows & door frames	18	24APR06A	31OCT06	50	56	9	-123	-141								
T3245 Rm (G39/G40/G45/0	G46) - Wdws & door frames	8	24APR06A	24OCT06	50	70	4	-114	-142								
T1975 AB G/F (Grid 1-21) -	Base Skirting	18	15JUN06A	14DEC06	80	0	4	-23	-90								
T2995 AB G/F (Grid 1-21) -	Wall & Ceiling Base Paint	30	02AUG06A	09NOV06	45	0	17	-120	-107								
T2990 AB G/F (Grid 1-21) -	Tileworks & Sanitary Fixt	30	20OCT06	24NOV06	0	0	30	-120	-140	-							
T3255 Genset&Fuel Rm (G	45/G46) - Floor Tiles	4	26OCT06	31OCT06	0	0	4	-123	-128								
T3275 AB G/F (Critical Roo	ms) - Access to E&M Works	0		31OCT06	0	0	0	-123	-128				•				
T3285 Rm (G39/G40/G45/0	G46) - Door Leaf & Final Paints	4	22NOV06	25NOV06	0	0	4	-1	-80	_							
T1970 AB G/F (Grid 1-21) -	Install Ceiling Grids	18	25NOV06	15DEC06	0	0	18	-40	-120								
T2160 AB G/F (Grid 1-21) -	Install Ceiling Panels	10	16DEC06	29DEC06	0	0	10	-40	-109	_							
T2150 AB G/F (Grid 1-21) -	Door Leaf & Final Paints	12	30DEC06	13JAN07	0	0	12	-40	-107								
Admin Bldg (1/F) - Internal Work @ Gr	id 1 to 18	' '															
T1982 AB (1/F to 2/F) - Sta	ircase Finishing Works	30	18APR06A	31OCT06	70	5	9	313	-121								
T1985 AB 1/F (Grid 1-18) -	Wall Plaster & Fir Screed	24	18APR06A	25OCT06	90	35	5	-111	-130								
T1980 AB 1/F (Grid 1-18) -	Wdws & Door Frames	18	24APR06A	27OCT06	60	56	7	-100	-138								
T2165 AB 1/F (Grid 1-18) -	Install Skirting	14	15JUN06A	23NOV06	50	0	7	1	-53								
T2015 AB 1/F (Grid 1-18) -	Wall & Ceiling Base Paint	30	10JUL06A	09NOV06	80	0	6	-39	-105								

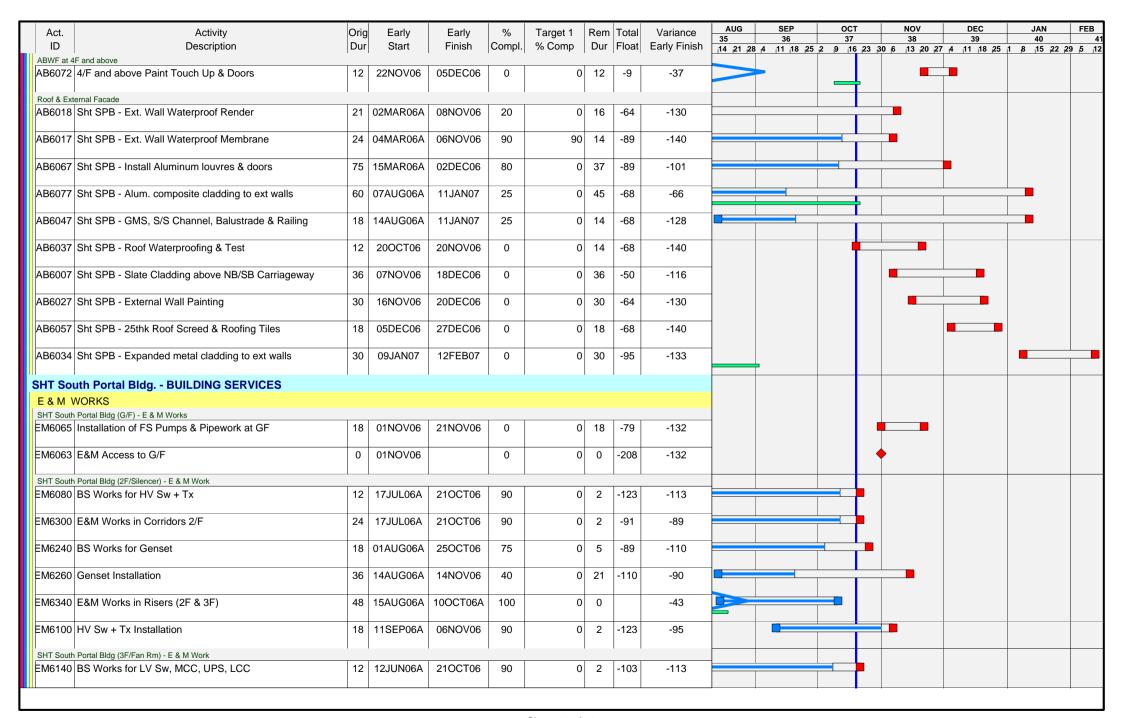
										AUG	SEP	ОСТ	NO	av	DEC	JA	NI	FEB
Act.	Activity	Orig		Early	%	Target 1		Total		35	36	37	3		39	4(		41
ID	Description	Dur	Start	Finish	Compl.	% Comp	Dur	Float	Early Finish	14 21 28	4 11 18 25	2 9 16	23 30 6 13	3 20 27 4	11 18 25	1 8 1	5 22 29	5 12
	(1/F) - Internal Work @ Grid 1 to 18 AB 1/F (Grid 1-18) - Tileworks & Sanitary Fixt	21	20OCT06	14NOV06	0	0	21	-111	-140			+		1				
T2012	AB 1/F (Grid 10-18) - Proprietary Toilet Cubicle	18	04NOV06	24NOV06	0	0	18	-111	-137									
T3268	UPS&UPS Bat Rm (112/115) - Door Lf & Final Paint	6	06NOV06	11NOV06	0	0	6	11	-91									
T3000	AB 1/F (Grid 1-18) - Install Ceiling Grids	18	25NOV06	15DEC06	0	0	18	-52	-108									
T2185	AB 1/F (Grid 1-18) - Install Ceiling Panels	10	16DEC06	29DEC06	0	0	10	-52	-108									
	AB 1/F (Grid 1-18) - Floor Carpets	12	30DEC06	13JAN07	0	0		-52	-108						•			
	AB 1/F (Grid 1-18) - Door Leaf & Final Paints	12	15JAN07	27JAN07	0	0	12	-52	-108	t						•		
Ī	(2/F) - Internal Work @ Grid 1 to 18	10	44400000	0000700	60		_	400	407				_					
	AB 2/F (Grid 1-18) - Wdws & Door Frames		11APR06A	23OCT06	80	50		-102										
	AB 2/F (Tel, Comp, Cont Rm) - Wdws & door frames	8	11APR06A	23OCT06	70	70		-93	-140									
	AB (2/F to Rf/Lvl) - Staircase Finishing Works	30	18APR06A	31OCT06	70 95	5		-102 -95										
	AB 2/F (Grid 1-18) - Wall Plaster & Flr Screed  AB 2/F (Tel, Comp, Cont Rm) - Plaster & Screed		01JUN06A 01JUN06A	21OCT06 31OCT06	95	0		-93	-118 -137									
	AB 2/F (Grid 1-18) - Base Skirting	21	03JUL06A	14NOV06	80	0		9	-16					1				
	AB 2/F (Grid 1-18) - Ceiling & Wall Base Paint	30	10JUL06A	13NOV06	95	0		-50	-99									
	AB 2/F (Tel, Comp, Cont Rm) - Base Skirting	12	15JUL06A	28NOV06	80	0		-3	-25									
	AB 2/F (Grid 1-18) - Tileworks & Sanitary Fixt	18	23OCT06	13NOV06	0	0		-95	-118			1						
T2035	AB 2/F (Non-Critical Room) - Access to E&M Works	0		31OCT06	0	0	0	313	-100	_			<b>\rightarrow</b>					
T3045	AB 2/F (Tel, Comp, Cont Rm) - Ceiling Grids	18	01NOV06	21NOV06	0	0	18	-48	-76					•				
T2028	AB 2/F (Grid 1-18) - Proprietary Toilet Cubicle	10	14NOV06	24NOV06	0	0	10	-95	-118	-			•	_				
T2045	AB 2/F (Grid 1-18) - Install Ceiling Grids	18	14NOV06	04DEC06	0	0	18	-50	-87									
T3055	AB 2/F (Tel, Comp, Cont Rm) - Raised Floors	21	22NOV06	15DEC06	0	0	21	-48	-64									
T3065	AB 2/F (Corridor & Cont Rm) - Ceiling Panels	18	16DEC06	09JAN07	0	0	18	-48	-64				1					
T3068	AB 2/F (Corridor & Cont Rm) - Floor Carpets	12	16DEC06	02JAN07	0	0	12	-42	-64									

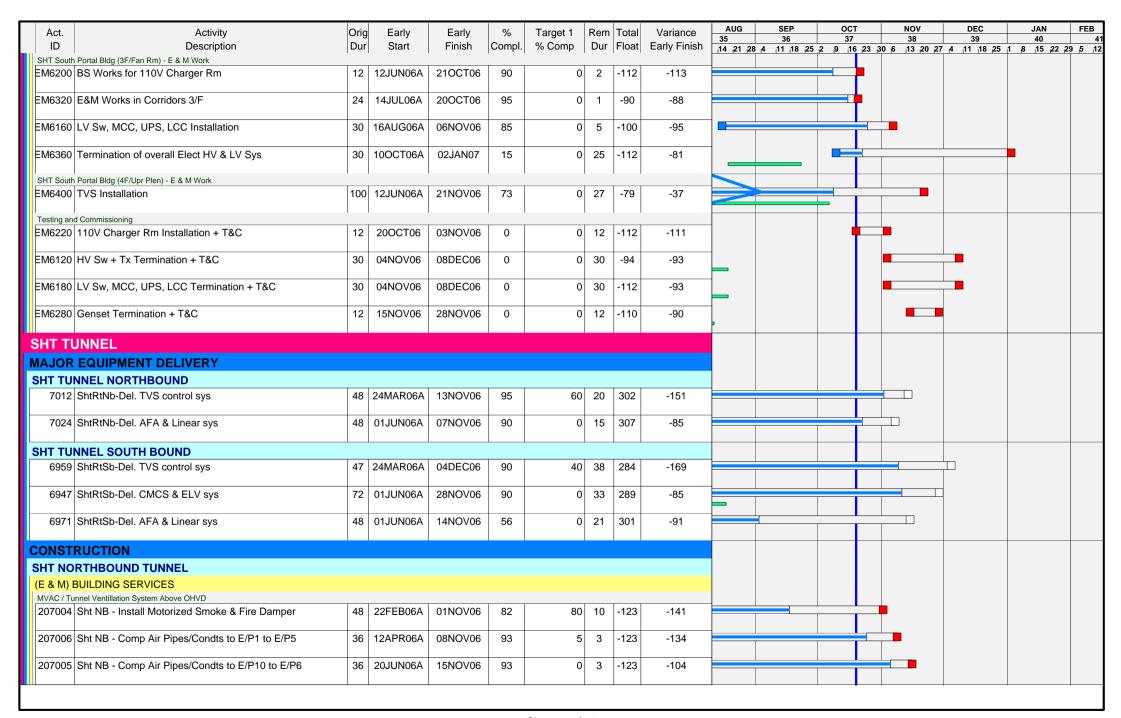
Act.	Activity	Orig		Early	%	Target 1		Total	Variance	AUG 35	SEP 36	OCT 37	NOV 38	DEC 39	JAN 40	FEB
ID	Description	Dur	Start	Finish	Compl.	% Comp	Dur	Float	Early Finish					0 27 4 11 18 25		29 5 1
	g (2/F) - Internal Work @ Grid 1 to 18 AB 2/F (Grid 1-18) - Install Ceiling Panels	18	19DEC06	11JAN07	0	0	18	-50	-72							
12000	(Clid 1-10) - mstair Ceiling Faneis	10	1302000	TIOANOT				50	-12							
T2068	AB 2/F (Grid 1-18) - Floor Carpets	18	19DEC06	11JAN07	0	0	18	-50	-84							
T4005	ABO/E/Tel Comp. Comb. Descrit 9 Final Beint	40	40 14 1107	00 14 1107			10	40	0.4							
11865	AB 2/F (Tel, Comp, Cont) - Door Lf & Final Paint	12	10JAN07	23JAN07	0	0	12	-48	-64							
T2220	AB 2/F (Grid 1-18) - Door Leaf & Final Paints	12	12JAN07	25JAN07	0	0	12	-50	-72							
	g (Roof/Fir) - Inter Works Grid 3 to 16 AB R/F (Grid 3-16) - Window & door frames	6	28APR06A	23OCT06	50	35	3	-102	-137							
12905	AB R/F (Glid 3-16) - Willdow & door frames	6	ZOAPKUOA	2300106	50	33	3	-102	-131				_			
T3280	AB R/F (Grid 3-16) - Wall Plaster & Flr Screed	18	28APR06A	20OCT06	95	50	1	-114	-132							
T2250	AB R/F (Grid 3-16) - Ceiling & Wall Base Paint	12	15JUN06A	04NOV06	95	0	2	-106	-125							
T2235	AB R/F (Grid 3-16) - Door Leaf & Final Paints	6	27NOV06	02DEC06	0	0	6	-7	-98							
	g - Upper Roof & External Facade	1.0	20144 2004	0.4.0.0.		1										
12890	AB Ext (GL 11-21) - Wall Waterproofing	18	28MAR06A	21OCT06	90	40	2	-89	-131							
T2340	AB Ext (GL 11-21) - Slate Cladding	30	03APR06A	14NOV06	30	30	21	-75	-140							
T2850	AB Ext (GL 1-11) - Install Louvres & Wdw Glazing	60	03APR06A	10NOV06	70	70	18	-73	-140							
T2860	AB Ext (GL 11-21)- Install Louvres & Wdw Glazing	60	03APR06A	10NOV06	70	70	18	-67	-140		_					
12000	AB EXT (GE 11-21)- Install Eduvies & Waw Glazing		OOAI ROOA	10110100	70	/ /		"	-140							
T2870	AB Ext UR/LR - Roof Screeding	18	30JUN06A	21OCT06	90	0	2	-80	-124							
Toolo	AD 5 + (OL 0.44)	00	00 11 11 00 4	0.41(0)/00	00		10							_		
12230	AB Ext (GL 6-11) - Curtain Wall & Glass Canopy	30	03JUL06A	24NOV06	60	0	12	-39	-98					-		
T2232	AB Ext (GL 11-18) - Curtain Wall Installation	21	03JUL06A	10NOV06	60	0	9	-39	-116							
	. (2 2, 22 2 2 2 2 2															
T2880	AB Ext (GL 1-11) - Wall Waterproofing	18	20JUL06A	08NOV06	90	0	16	-73	-138							
T29/1	AB Ext UR/LR - Render&wall paint to Open Area Rf	12	25JUL06A	06NOV06	50	0	6	-80	-100							
12041	AB EXTORVER - Renderawali palifit to Open Area Ri	12	2330L00A	00110100	30			-00	-100							
T2840	AB Ext UR/LR - Roof Waterproofing & Test	24	12AUG06A	20NOV06	20	0	19	-80	-124					ı		
12830	AB Ext (GL 11-21) - Ceramic Wall Tiles	30	23OCT06	27NOV06	0	0	30	-89	-131							
T2330	AB Ext (GL 1-11) - Slate Cladding	45	15NOV06	09JAN07	0	0	45	-75	-140							
T2350	AB Ext (GL 1-11) - Ceramic Wall Tiles	30	28NOV06	04JAN07	0	0	30	-89	-131							
T2900	AB Ext UR/LR - Insulation & Conc Roof Tile	30	28NOV06	04JAN07	0	0	30	-80	-118							
12900	AD EAR OWER - Insulation & Conc Roof File	30	20110 000	UTUAINUI			30	-30	-110	-				_		

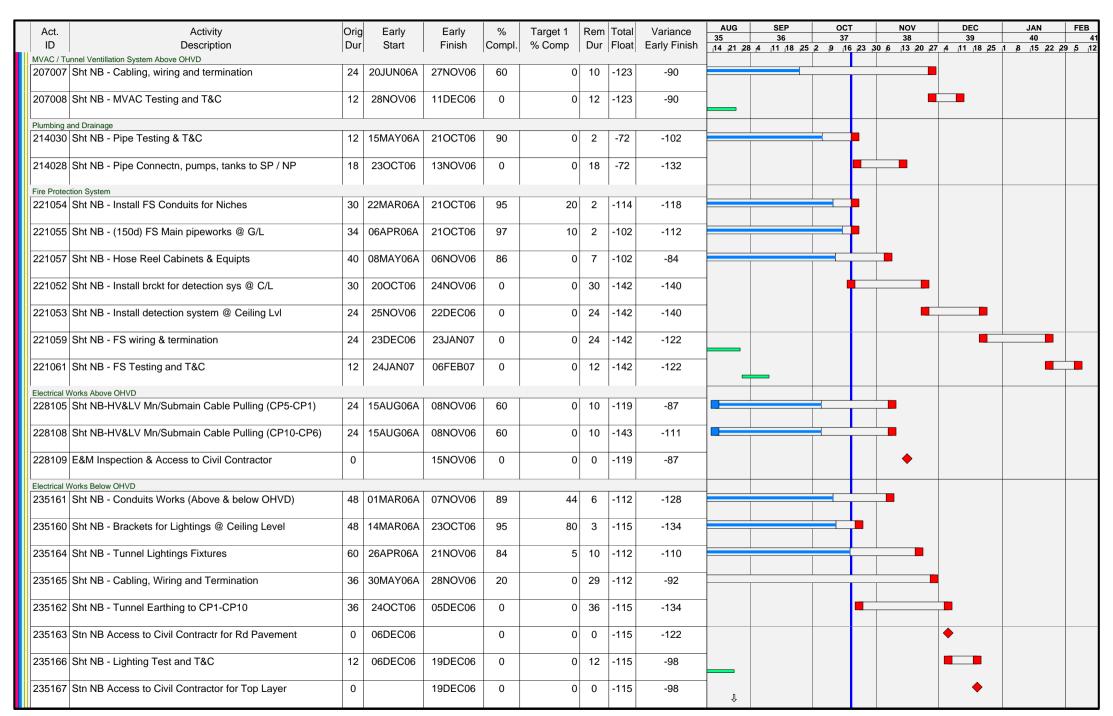
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Act.	Activity Description	Orig Dur		Early Finish	% Compl.	Target 1 % Comp		Total	Variance Early Finish	35	36	6	37		38	0.07.4	39	05.4	40	)	41
- ·	- Upper Roof & External Facade	Dui	Otart	1 1111311	Compi.	70 Comp	Dui	liloat	Lanyimish	14 21 28	8 4 11	18 25 2	9 16	23 30	6 13 2	0 27 4	11 18	25 1	8 11	, 22 2	) 5 12
	AB Ext UR/LR- Install GMS, Balustrades & Railing	21	05JAN07	29JAN07	0	0	21	-80	-100												
T2280	AB Ext (GL 11-16) - Expanded metal mesh cladding	24	15JAN07	10FEB07	0	0	24	-121	-138												
BUILDIN	G SERVICES																				
Admin B	ldg (G/F) - E & M Works																				i /
	BS Works in G/F	90	01JUN06A	07DEC06	85	12	13	-122	-102						_						
EM3620	E&M Works in Risers	90	12JUN06A	04NOV06	85	0	13	-94	-55												
EM3220	BS Works for HV Sw + Tx	12	14JUN06A	21OCT06	80	0	2	-123	-130												
EM3280	BS Works for LV Sw	12	14JUN06A	21OCT06	90	0	2	-123	-118												
	BS Works for 110V Charger Rm	12	14JUN06A	21OCT06	90	0	2	-125													
EM3420	BS Works for Genset		14JUN06A	25OCT06	90	0	5	-123	-109												
	HV Sw + Tx Installation		01OCT06A	10OCT06A	100	0	0		-45												
EM3300	LV Sw Installation	30	01OCT06A	21NOV06	40	0	18	-120	-105												
	ldg (1/F) - E & M Works																				
EM3560	BS Works in 1/F	90	08JUN06A	24NOV06	89	12	10	-111	-91												
	BS Works for UPS Rm (2x)	12	03JUL06A	20OCT06	89	0	1	-127	-110												
EM3400	UPS (2x) Installation	30	15AUG06A	15OCT06A	100	0	0		-74												
	ldg (2/F) - E & M Works																				
EM3580	BS Works in 2/F	90	08JUN06A	14NOV06	80	0	18	-102	-43			-									
	ldg (Int. & Ext. Roof LvI) - E & M Works																				
	BS Works in R/F	78	06JUN06A	25NOV06	60	1	31	-112	-98							•					
EM3190	Admin Bldg - Lift Installation	72	19JUN06A	27OCT06	95	0	7	-1	9												
EM3720	Chiller System in R/F (inc. All AC Units)	72	20JUN06A	24OCT06	95	0	4	-53	12												
EM3480	BS Works for MCC	12	03JUL06A	20OCT06	95	0	1	-114	-101												
EM3500	MCC Installation	30	08AUG06A	23OCT06	90	0	3	-114	-73												
Admin B	ldg - Testing and Commissioning																				
EM3640	Termination of overall Elect HV & LV Sys	36	10OCT06A	23JAN07	10	0	32	-127	-64						-					_	

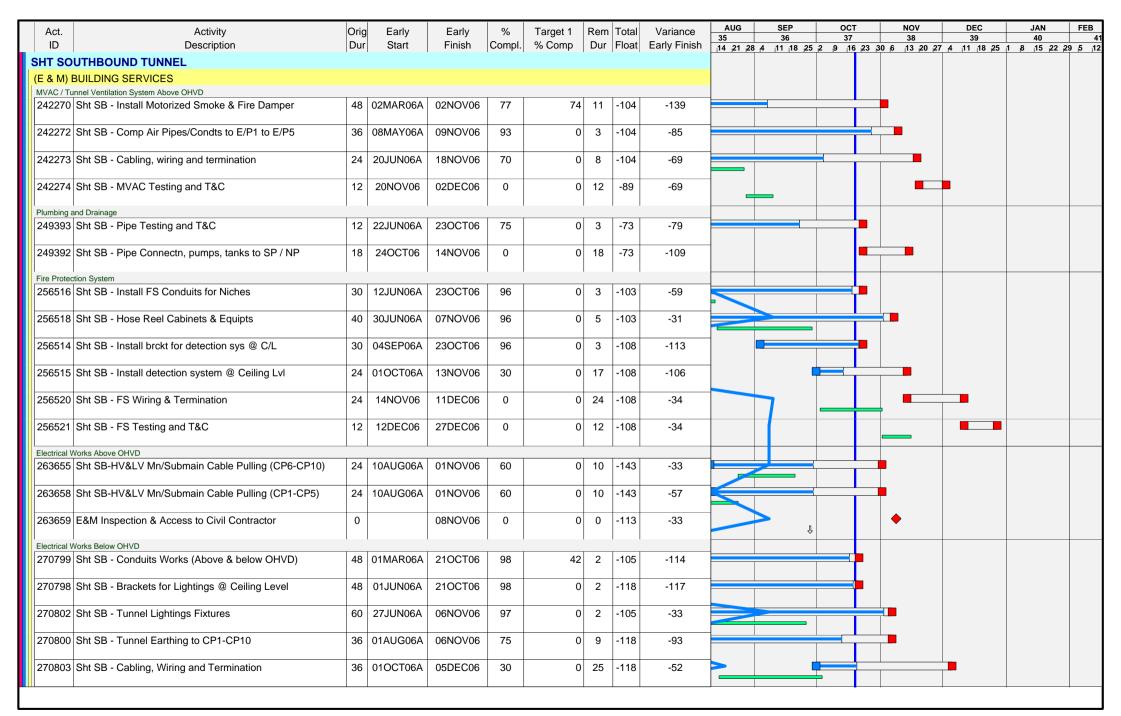
Act.	Activity	Orig		Early	%	Target 1		Total	Variance	AUG 35	SEP 36	OCT 37		NOV 38	DEC 39	JAN 40	FI
ID	Description	Dur	Start	Finish	Compl.	% Comp	Dur	Float	Early Finish				23 30 6		7 4 11 18 25		2 29 5
	oldg - Testing and Commissioning			I										_			
EM3360	110V Charger Rm Installation + T&C	12	23OCT06	08NOV06	0	0	12	-127	-82								
EM3460	Genset Termination + T&C	12	23OCT06	06NOV06	0	0	12	-95	-68					l			
EM3520	MCC Termination + T&C	30	24OCT06	28NOV06	0	0	30	-114	-73								
EM3260	HV Sw + Tx Termination + T&C	30	09NOV06	13DEC06	0	0	30	-127	-69				•		_		
EM3320	LV Sw Termination + T&C	30	09NOV06	13DEC06	0	0	30	-127	-82		_		•		_		
Admin B	oldg - Statutory Inspection and Handover																
EM3370	Admin Bldg - Lift Commissioning	24	28OCT06	25NOV06	0	0	24	-1	9						_		
HATIN	HEIGHTS SOUTH PORTAL BUILDING																
ONTR	ACT DEFINED DATES & SECTIONS																
	CCESS & VACATION DATES																
ACS_J2	Access to - J2 (T.Plate & above) SH-S.Vent.Bldg.	0	10DEC05A		100	100	0		-169								
ACS_D8	Access to Portion - D8	0	03JAN06A		100	100	0		-169								
SUBMIT	TALS & APPROVALS																
ABWF 8	BW APPROVALS																
2000	SHT SPB - Approve doors details	24	07MAY05A	31OCT06	70	70	9	-89	-140				-				
2074	SHT SPB - Approve aluminum composite cladding	24	13DEC05A	13NOV06	50	50	20	-68	-127								
ROCU	REMENT - MATERIAL																
ABWF V	VORKS																
2079	SHT SPB - Procure aluminum composite cladding	180	19APR05A	13NOV06	50	50	20	-68	-127								
2077	SHT SPB - Procure expanded metal mesh cladding	180	06JUN05A	07NOV06	50	50	15	-95	-135					•			
2082	SHT SPB - Initial delivery of slate cladding	0	20OCT06*		0	0	0	-36	-102				•				
2083	SHT SPB - Initial deliv fall arrest roof syst.	0	20OCT06*		0	0	0	-12	-93				•				
2084	SHT SPB - Initial delivery balustrd & metal work	0	20OCT06*		0	0	0	-12	-93				•				
2081	SHT SPB - Initial delivery of doors	0	04DEC06*		0	0	0	-89	-139						•		
2085	SHT SPB - Initial deliv expanded metal cladding	0	09JAN07*		0	0	0	-95	-133							<b>•</b>	
				1	1		1	1 1									

Act.	Activity	Orig	Early	Early	%	Target 1	Rem	Total	Variance	AUG	SEP	ОСТ		NOV	DEC	JAN	FEB
ID	Description	Dur	Start	Finish	Compl.	% Comp	Dur	Float	Early Finish	35 14 21 2	36 8 4 11 18 25	37 2 9 16	23 30 6	38 13 20 27	39 ' 4 <sub>1</sub> 11 <sub>1</sub> 18 <sub>2</sub> 25	40 1 8 15 22	29 5
MAJOR	EQUIPMENT DELIVERY																
E&M W	ORKS																
7157	ShtSpBldg-Del. FS pumps & tank to G/F	48	06MAR06A	25OCT06	90	50	5	317	-136								
7014	01.00 PH - D - DD - 0.0 - 1.0 0/F	40	404 DD004	041101/00	00		40	040									
/211	ShtSpBldg-Del. PD pump & tank to G/F	48	10APR06A	01NOV06	80	0	10	312	-93		<u> </u>						
7231	ShtSpBldg-Del. PD irrig. pump & tank to G/F	48	10APR06A	01NOV06	80	0	10	312	-93								
	3 / 2 / 3 / 3																
7207	ShtSpBldg-Del. AFA & FM200 sys	48	15MAY06A	25OCT06	90	0	5	317	-74			_					
7007	ChtCaDida Dal CMCC 9 FLV agricult	40	04 11 181004	201/01/00	00		22	200	00								
7087	ShtSpBldg-Del. CMCS & ELV equip't	48	01JUN06A	28NOV06	90	0	33	289	-88	_							
CONST	RUCTION																
	ccess to SHT Sout Portal Bldg																
	TCSS Containment in G/F	12	01NOV06	14NOV06	0	0	12	-208	-132								
EM6710	TCSS ACCESS GF (Room G01-G05, G08-G10)	0		31OCT06	0	0	0	-170	-132				•				
EM0700	T000 400500 05(D 007 044 040)			4.41101/00	0		0	000	400								
EIVI6720	TCSS ACCESS GF(Room G07,G11,G12)	0		14NOV06	0	0	0	-208	-132								
CIVIL &	ABWF WORKS				1		ļ										
	U/G Drainages and Utilities under bldg	24	01APR06A	24OCT06	85	0	4	-46	-120								
AB5986	Backfill, G/F Slabs and Walls	24	20APR06A	08NOV06	85	0	4	-46	-108								
4 D) 4/E																	
ABWF	Remedy SHT Contractor Defects	25	12DEC05A	23OCT06	90	90	3	-208	-138								
ABOUZZ	Remedy Stri Contractor Defects	25	IZDECUSA	2300100	90	90	3	-206	-136				_				
ABWF at G																	
AB5989	Initial Finishes to G/F	18	11FEB06A	31OCT06	50	5	9	-208	-132								
A DC0 40	G/F Paint Touch Up & Doors	12	22NOV/00	0505000	0	0	10		-37					_			
AB6042	G/F Paint Touch Up & Doors	12	22NOV06	05DEC06	0	U	12	-9	-37				,	_			
ABWF at 1																	
AB5995	Initial Finishes to Lower Plenum	12	10APR06A	31OCT06	95	15	5	-79	-132								
A DCO22	4F 9 LD Doint Touch Lln 9 Doors	12	22NOV06	05DEC06	0	0	10		07					_			
AD0032	1F & LP Paint Touch Up & Doors	12	22110 000	0305000		U	12	-9	-37				,	_			
ABWF at 2																	
AB6052	2/F Paint Touch Up & Doors	12	22NOV06	05DEC06	0	0	12	-9	-37								
A BIME of 3																	
ABWF at 3	3/F Paint Touch Up & Doors	12	22NOV06	05DEC06	0	0	12	-9	-37								
5002		-		2000		· ·	-		<i>-</i> .								
	F and above	,															
UAR6004	Initial Finishes to 4/F and above	24	13APR06A	31OCT06	90	10	9	-45	-114								



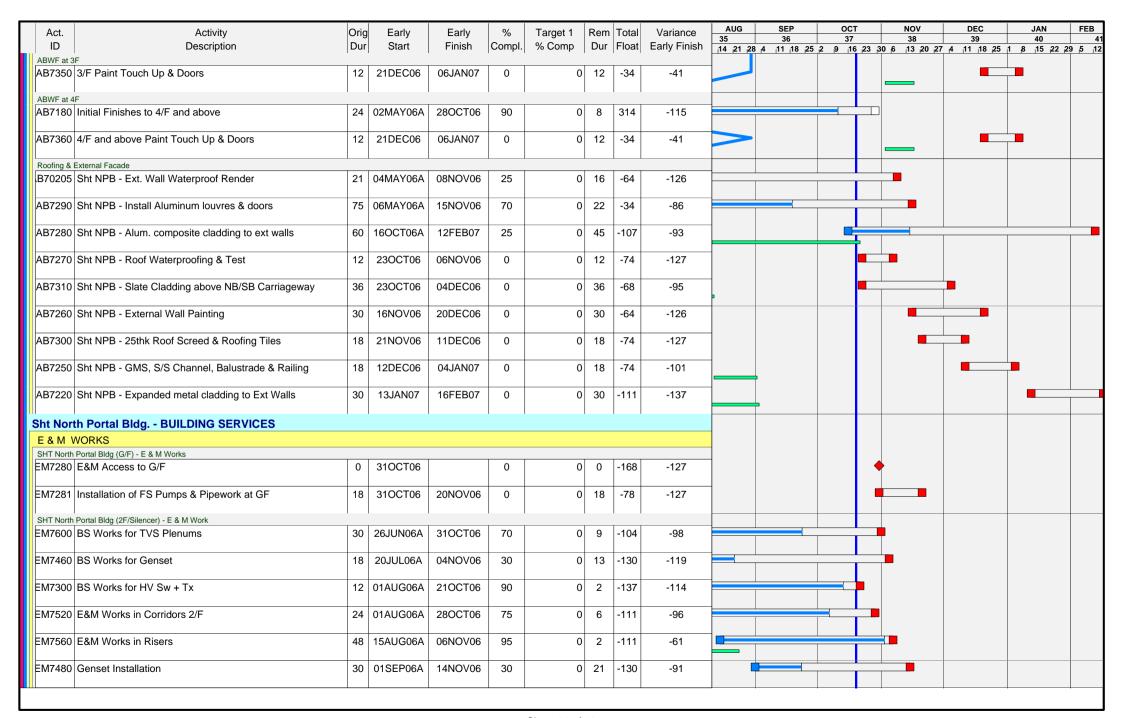


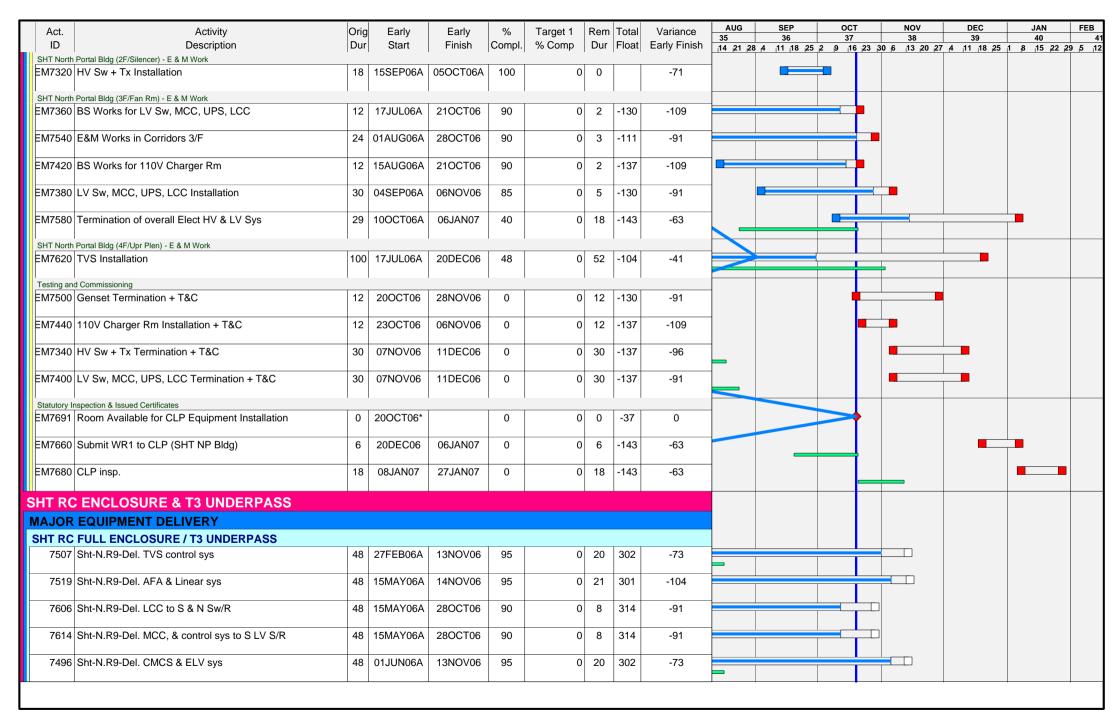




Act.	Activity Description	Orig Dur		Early Finish	% Compl.	Target 1 % Comp		Total Float	Variance Early Finish	AUG 35	SEP 36	OCT 37	3	38	DEC 39	JAN 40	FI
	Description Works Below OHVD	Dui	Start	Finish	Compi.	% Comp	Dur	Float	Early Finish	14 21 28	4 11 18 25	<sub>1</sub> 2 <sub>1</sub> 9 <sub>1</sub> 16	23 30 6 1	20 27 4	11 18 25	1 8 15 22	2 29 5
	Stn SB Access to Civil Contractr for Rd Pavement	0	06DEC06		0	0	0	-115	-118	-				4			
270804	Sht SB - Lighting Test and T&C	12	06DEC06	19DEC06	0	0	12	-115	-52								
270805	Stn SB Access to Civil Contractor for Top Layer	0		19DEC06	0	0	0	-115	-52			Û			<b>•</b>		
SHT CR	OSS PASSAGES (CP1 to CP10)		·		'												
	BUILDING SERVICES																
Electrical		,					,										
	(CP1-CP10) - Cable Containment & Equipt Support	60	03MAY06A	23OCT06	98	2	3	-130	-85								
277959	(CP1-CP10) - MCCB / MCB Bd,CMCS,Busbar,Switches	72	13JUN06A	27OCT06	90	0	7	-127	-32								
277960	(CP1-CP10) - Conduit, light Fixture, Swt & Test	36	15AUG06A	15NOV06	40	0	22	-127	-83								
277962	(CP1-CP10) - Switchboard, CMCS, Eqpt, Testing	48	23OCT06	15DEC06	0	0	22	-127	-47	<u> </u>							
277961	(CP1-CP10) - HV & LV Cables Termination & Test	48	09NOV06	06JAN07	0	0	48	-143	-63								
SHT N	ORTH PORTAL BUILDING		'		·			'									
SUBMI	TTALS & APPROVALS																
ABWF 8	& BUILDERS WORKS																
2094	SHT NPB - Approve alum. composite claddings	24	13DEC05A	28OCT06	90	70	8	-97	-126								
PROCU	REMENT - MATERIAL																
ABWF \	WORKS																
2099	SHT NPB - Procure alum. composite claddings	180	19APR05A	10NOV06	50	50	18	-107	-136				_				
2098	SHT NPB - Procure expanded metal claddings	180	06JUN05A	31OCT06	50	50	9	-111	-140				-				
2101	SHT NPB - Initial delivery of doors	0	20OCT06*		0	0	0	-12	-102				•				
2102	SHT NPB - Initial delivery of slate claddings	0	20OCT06*		0	0	0	-66	-93				•				
2104	SHT NPB - Initial deliv fall arrest roofing syst	0	20OCT06*		0	0	0	-30	-86				•				
2106	SHT NPB - Initial deliv alum. composite cladding	0	19DEC06*		0	0	0	-107	-108	ļ.					<b>•</b>		
	SHT NPB - Initial deliv expanded metal claddings	0	13JAN07*		0	0	0	-111	-137							<b>•</b>	
2103	J. J						1										
MAJOR	EQUIPMENT DELIVERY																
MAJOR SHT NO	,		06MAR06A	25OCT06	90	0		317	-88								

Act.	Activity	_	Early	Early	%	Target 1		Total	Variance	AUG 35	SEP 36	OCT 37		NOV 38	DEC 39	JA 40	)	FE
ID	Description	Dur	Start	Finish	Compl.	% Comp	Dur	Float	Early Finish	14 21 28	3 4 11 18 25	2 <sub>1</sub> 9 <sub>1</sub> 16	23 30 6	13 20 27	4 <sub>1</sub> 11 <sub>1</sub> 18 <sub>2</sub> 5	5 1 8 1	5 22 29	5
	RTH PORTAL BUILDING	40 40	ADDOCA	041101/00	00		40	040	00									
7325	ShtNpBldg-Del. Package AC Units	48 10	APR06A	01NOV06	80	0	10	312	-93									
7433	ShtNpBldg-Del. PD pump & tank to G/F	48 10	APR06A	01NOV06	80	0	10	312	-93									
7429	ShtNpBldg-Del. AFA & FM200 sys	48 15	MAY06A	25OCT06	90	0	5	317	-85									
7309	ShtNpBldg-Del. CMCS & ELV equip't	48 01	JUN06A	28NOV06	90	0	33	289	-86									
CONST	RUCTION																	
TCSS A	ccess to SHT North Portal Bldg																	
	TCSS Containment in 1/F	12 20	OOCT06	03NOV06	0	0	12	310	-124			Ċ.						
EM7289	TCSS Containment in Lower Plenum	18 20	OOCT06	10NOV06	0	0	18	304	-119			ď						
EM7292	TCSS Containment in 2/F	18 20	OOCT06	10NOV06	0	0	18	304	-124			Ċ						
EM7295	TCSS Containment in 3/F and above	18 20	OOCT06	10NOV06	0	0	18	304	-119			Ċ						
EM7283	TCSS Containment in G/F	12 31	1OCT06	13NOV06	0	0	12	-168	-127									
EM7290	TCSS ACCESS - GF (Room G02-G03, G04-G08)	0		28OCT06	0	0	0	-164	-127				•					
EM7293	TCSS ACCESS - GF (Room G09,G15)	0		13NOV06	0	0	0	-168	-127					•				
CIVIL &	ABWF WORKS																	
AB7040	11U/G Drainages and Utilities under bldg	24 20	JUL06A	03NOV06	50	0	12	296	-128									
AB7060	Backfill, G/F Slabs and Walls	24 04	SEP06A	20NOV06	40	0	14	296	-118									
ABWF W	orks																	
AB7130	Remedy defects to SHT Buildings	24 17	DEC05A	21OCT06	95	50	2	-168	-133			_						
ABWF at G								1										
AB7080	Initial Finishes to G/F	18 25	APR06A	28OCT06	95	7	8	-168	-127									
AB7330	G/F paint Touch Up & Doors	12 21	1DEC06	06JAN07	0	0	12	-34	-41									
ABWF at 1		- '	.!		' '			. '										
AB7120	Initial Finishes to Lower Plenum	12 22	APR06A	06NOV06	95	0	8	-104	-133									
AB7320	1F & LP Paint Touch Up & Doors	12 21	1DEC06	06JAN07	0	0	12	-34	-41				_					
ABWF at 2		1 1			1 1		1	1										i
AB7340	2/F Paint Touch Up & Doors	12 21	1DEC06	06JAN07	0	0	12	-34	-41									





Act.	Activity Description	Orig Dur		Early Finish	% Compl.	Target 1 % Comp		Total Float	Variance Early Finish	AUG 35	SEP 36	OC1		NOV 38	DEC 39	JA 40	)	FEE
NTERFACE DATES	•	Dui	Start	FILIISH	Compi.	76 Comp	Dui	riuat	Early Fillish	14 21 28 4	11 18 25 2	9 16	23 30	6 13 20 2	7 4 11 18 25	1 8 1	5 22 29	) 5
	DSURE / T3 UNDERPASS																	
EM4020 LKJV - Posess		0	20OCT06*		0	C	0	-129	-120									
CONSTRUCTION W	ORKS																	
SHT RC FULL ENCLO	OSURE / T3 UNDERPASS																	
Koisk S1 at Shatin North	Control Point																	
EM3950 Kiosk S1 - Stru	cture & Fittings	24	03OCT06A	06NOV06	40	C	14	-129	-130									
EM3960 Wighbridge S1	- Install	12	20OCT06	03NOV06	0	C	12	-139	-140	-								
EM3952 Kiosk S1 - Insta	all E&M Works	18	25OCT06	20NOV06	0	C	18	-129	-124	-								
EM3970 Weighbridge S	1 - Test and T&C	30	04NOV06	08DEC06	0	C	30	-139	-140									
EM3954 Kiosk S1 - E&N	// Testing and T&C	6	21NOV06	27NOV06	0	C	6	-129	-124									
RC Full Enclosure - LV \$	Switch Room																	
280070 E&M Access to	Southern LV Switch Room	0	20OCT06		0	C	0	-142	-140									
280072 LV SW Rm - C	able Containment & Equipt Supports	24	20OCT06	17NOV06	0	C	24	-139	-140									
280074 LV SW Rm - S	WGR, MCCB/ MCB Board, FS Panels	24	27OCT06	24NOV06	0	C	24	-139	-110									
280076 LV SW Rm - E	lect Lightings & Conduits	18	04NOV06	01DEC06	0	C	18	-139	-134						<u> </u>			
280079 LV SW Rm - M	CCB,MCB,LV Sw,FS panels Term & Test	18	11NOV06	08DEC06	0	C	18	-139	-104									
280080 LV SW Rm - C	onnect HV / LV Cables from SHT NPB	24	11NOV06	08DEC06	0	C	24	-134	-92									
280078 LV SW Rm - Li	ghtings wiring, term & test	6	02DEC06	08DEC06	0	C	6	-139	-134									
	URE (North Bound) - E&M WORKS																	
MVAC / Tunnel Ventillation Sys		20	18FEB06A	27OCT06	00	00	7	-106	120									
ZOUUUU KCFE NB - DU	ctworks Supports / Containment @ C/L	36	ISLEBUOA	2/00106	80	30	7	-106	-130									
280002 RCFE NB - MV	AC Ducts, TVF & MSFD Units @ C/L	48	02MAR06A	04NOV06	80	25	10	-106	-118					l				
280004 RCFE NB - MV	AC Pipeworks & Conduits @ C/L	30	08AUG06A	18NOV06	40	C	18	-97	-100									
280006 RCFE NB - Ca	bling, wiring and termination	24	20NOV06	16DEC06	0	C	24	-97	-100									
Fire Protection System				1	1													
280028 RCFE NB - (10	0d) FH / HR Pipeworks & Fittings	18	10JUL06A	26OCT06	90	C	3	-78	-66									

										AUG	SEP	ОСТ		NOV	DEC	JA	NI .	FEB
Act.	Activity	Orig		Early	%	Target 1		Total	Variance	35	36	37		38	39	40		4
ID	Description	Dur	Start	Finish	Compl.	% Comp	Dur	Float	Early Finish	14 21 28	4 11 18 25 2	2 9 16	23 30 6	13 20 27	4 11 18 25	1 8 15	5 22 29	5 12
	ion System RCFE NB - FS Conduit, Hose Reel Cabinets & Eqpt.	16	31JUL06A	21OCT06	40	0	2	-78	-66				•					
280029	RCFE NB - Install Smoke detector @ N1-N3	10	23OCT06	03NOV06	0	0	10	-66	-66									
280030	RCFE NB - FS Wiring & Termination	24	27OCT06	24NOV06	0	0	24	-78	-66		-							
Electrical W	/orks																	
280044	RCFE NB - Brackets for Lightings @ Ceiling Level	60	30MAY06A	24NOV06	50	0	30	-142	-110			i						
280048	RCFE NB - Earthing, Lighting, Equipt. @ C/L	48	26JUN06A	08DEC06	50	0	24	-118	-74			i						
280034	RCFE NB - E&M Access to Southern LV Sw Room	0	20OCT06		0	0	0	-142	-104			<b>†</b>	•					
280038	RCFE NB - HV & LV Cabling Works @ C Trough	36	20OCT06	01DEC06	0	0	36	-142	-104			Ť						
280046	RCFE NB - Conduits Works @ Ceiling Level	36	25NOV06	09JAN07	0	0	36	-142	-110									
280040	RCFE NB - Install Power Distn Panels & Test	30	02DEC06	09JAN07	0	0	30	-142	-104									
280054	RCFE NB - Tunnel Signage, Wiring, Term & Test	40	10JAN07	05MAR07	0	0	40	-142	-80		1							
STN RC I	FULL ENCLOSURE (South Bound) - E&M WORKS																	
	nnel Ventillation System																	
280082	RCFE SB - Ductworks Supports / Containment @ C/L	36	02MAR06A	27OCT06	80	30	7	-127	-130									
280084	RCFE SB - MVAC Ducts, TVF & MSFD Units @ C/L	48	02MAR06A	18NOV06	80	25	10	-127	-130									
280086	RCFE SB - MVAC Pipeworks & Conduits @ C/L	30	20NOV06	23DEC06	0	0	30	-127	-130									
280088	RCFE SB - Cabling, wiring and termination	24	27DEC06	24JAN07	0	0	24	-127	-130									
Fire Protect	tion System				<u>'</u>													
280098	RCFE SB - (100d) FH / HR Pipeworks & Fittings	18	03JUL06A	11NOV06	90	0	2	-91	-116									
280096	RCFE SB - FS Conduit, Hose Reel Cabinets & Eqpt.	16	20OCT06	07NOV06	5	0	15	-91	-116			Î						
280100	RCFE SB - Install Smoke detector @ S1-S4	10	08NOV06	18NOV06	0	0	10	-79	-116									
280102	RCFE SB - FS Wiring & Termination	24	13NOV06	09DEC06	0	0	24	-91	-116				I					
Electrical W	/orks				•													
280116	RCFE SB - Brackets for Lightings @ Ceiling Level		15AUG06A	03NOV06	80	0	12	-124	-92									
280110	RCFE SB - E&M Access to Southern LV Sw Room	0	20OCT06*		0	0	0	-142	-104			•						
280112	RCFE SB - HV & LV Cabling Works @ C Trough	36	20OCT06	01DEC06	0	0	36	-142	-104			Ť						

Act.	Activity	Orig	Early	Early	%	Target 1	Rem	Total	Variance	AUG		SEP	oc.		NOV	DEC	JAN	FEB
	· ·	-	•			•				35		36	37		38	39	40	4
ID	Description	Dur	Start	Finish	Compl.	% Comp	Dur	Float	Early Finish	14 21 28	4 1	1 18 25	2 9 10	23 30 6	13 20 27	4 11 18 25	1 8 15 22	29 5 1
Electrical V				T														
280118	RCFE SB - Conduits Works @ Ceiling Level	36	20OCT06	01DEC06	0	0	36	-112	-80							•		
280120	RCFE SB - Earthing, Lighting, Equipt. @ C/L	48	20OCT06	15DEC06	0	0	48	-124	-80				ı					
280114	RCFE SB - Install Power Distn Panels & Test	30	02DEC06	09JAN07	0	0	30	-142	-104						l			
280124	RCFE SB - Tunnel Signage, Wiring, Term & Test	40	10JAN07	05MAR07	0	0	40	-142	-80	-								
T3 UNDI	ERPASS			I														
Kiosks S	2 at T3 Underpass Portal																	
	Kiosk S2 - Structure & Fittings	24	11SEP06A	06NOV06	40	0	14	-129	-110						l			
EM4000	Kiosk S2 - Install E&M Works	18	20OCT06	20NOV06	0	0	18	-129	-104				-					
EM4002	Kiosk S2 - E&M Testing and T&C	6	21NOV06	27NOV06	0	0	6	-129	-104									

## APPENDIX C MONITORING REQUIREMENTS

Appendix C - Environmental Impact Monitoring Requirements for Eagle's Nest Tunnel and Associated Works

Type of Monitoring	Parameter	Frequency	Location	Measurement Conditions
Air Quality	1-hour TSP	3 times every 6 days	AM1 (Yew Chung Internation School / PLK Choi Kai Yau School)	<ul> <li>AM1 – Rooftop</li> <li>AM3 – On ground</li> <li>AM4 – Ground floor close to</li> </ul>
7 in Quanty	24-hour TSP	Once every 6 days	<ul> <li>AM3 <sup>(3)</sup> (Garden Villa)</li> <li>AM4 (Government Quarters)</li> </ul>	the refuse collection station of Government Quarters
	L <sub>eq</sub> , L <sub>90</sub> & L <sub>10</sub> at 30 minute intervals during (0700 to 1900 on normal weekdays)	Once per week Once per week	NM1 (Yew Chung Internation	NM1 – Rooftop (Façade measurement)
Noise	$L_{eq}$ , $L_{90}$ & $L_{10}$ at 5 minute intervals during (1900 to 2300) $^{(1)}$	(include 3 consecutive 5-min measurements)	School / PLK Choi Kai Yau School)	<ul> <li>NM5 – Ground Floor <sup>(2)</sup> -         (Façade measurement)</li> <li>NM6 – Rooftop of Refuse</li> </ul>
	$L_{eq}$ , $L_{90}$ & $L_{10}$ at 5 minute intervals during (2300 to 0700 of next day) $^{(1)}$	Once per week (include 3 consecutive 5-min measurements)	<ul><li>NM5 (Villa Carlton)</li><li>NM6 (Government Quarters)</li><li>NM7 (Garden Villa)</li></ul>	Collection Station (Free field measurement)  • NM7 – Rooftop (Façade
	$L_{eq}$ , $L_{90}$ & $L_{10}$ at 5 minute intervals during (0700 to 1900 on holidays) <sup>(1)</sup>	Once per week (include 3 consecutive 5-min measurements)		measurement)

<sup>(1) –</sup> Conduct noise monitoring only when construction work is carried out.

<sup>(2) –</sup> The measurement was taken at 2.3 m above ground floor of Villa Carlton, where has a line of sight of the construction site in the opposite.

<sup>(3) –</sup> Station AM3 was relocated from Garden Villa to the nearby slope no. 07SW-D/FR4 and the monitoring was resumed on 14 February 2005.

APPENDIX D ENVIRONMENTAL QUALITY PERFORMANCE (ACTION/LIMIT) LEVELS

# **Appendix D - Action and Limit Levels (ENT)**

#### 1-Hour TSP

Location	Action Level, μg/m <sup>3</sup>	Limit Level, μg/m³
AM1	296	
AM3	350	500
AM4	294	

#### 24-Hour TSP

Location	Action Level, μg/m <sup>3</sup>	Limit Level, μg/m³
AM1	168	
AM3	200	260
AM4	170	

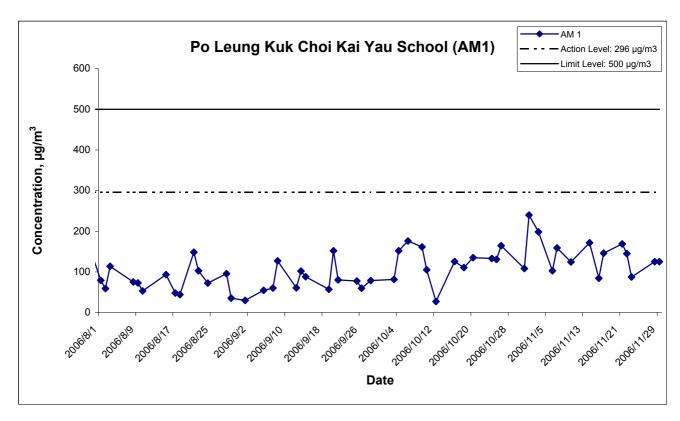
### **Construction Noise**

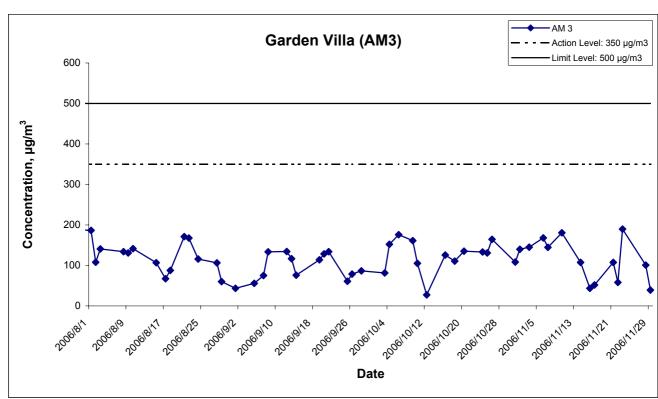
Period	Action Level		Limit Lev	vel, dB(A)	
1 criou	for all stations	NM1	NM5	NM6	NM7
0700-1900 hrs on normal weekdays		70/65*	75	75	75
0700-2300 hrs on holidays & 1900- 2300 hrs on all other days	When one documented complaint is received	-	70	65	60
2300-0700 hrs of next day		-	55	50	45

<sup>(\*)</sup> Since NM1 is an educational institution, the noise Limit Level (0700-1900 hrs on normal days) is taken as 70 dB(A). The Limit Level will be reduce to 65 dB(A) during school examination periods.

APPENDIX E
GRAPHICAL PRESENTATION OF AIR
QUALITY MONITORING RESULTS

#### 1-hr TSP Levels





Route 8 (previously known as Route 9) between Cheung Sha Wan & Sha Tin Contract HY/2003/02 - Eagle's Nest Tunnel and Associated Works Graphical Presentation of 1-hour TSP Impact Monitoring

Results

Title

oring <sup>Da</sup>

Scale

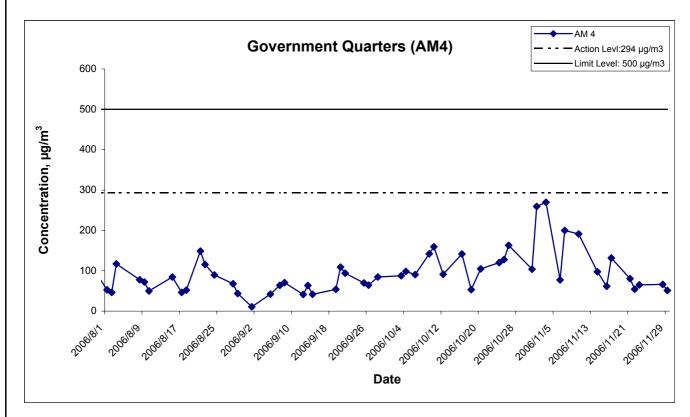
Project No. MA3024

Date Appendix
Nov 06 E

N.T.S



#### 1-hr TSP Levels



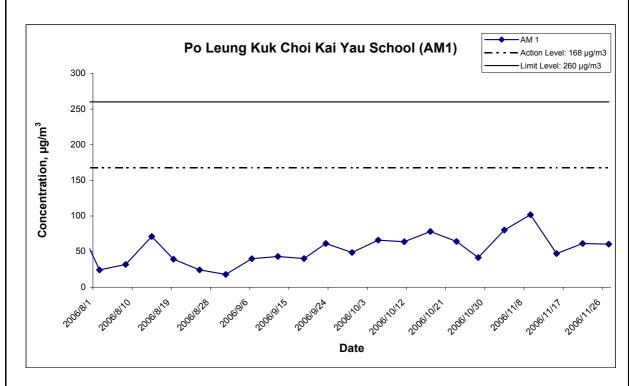
Route 8 (previously known as Route 9) between Cheung Sha Wan & Sha Tin Contract HY/2003/02 - Eagle's Nest Tunnel and Associated Works Graphical Presentation of 1-hour TSP Impact Monitoring Results

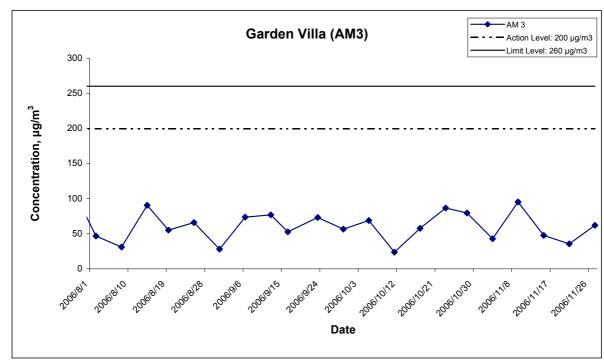
Title

Nov 06

CINOTECH

#### 24-hr TSP Levels





Route 8 (previously known as Route 9) between Cheung Sha Wan & Sha Tin Contract HY/2003/02 - Eagle's Nest Tunnel and Associated Works

Title

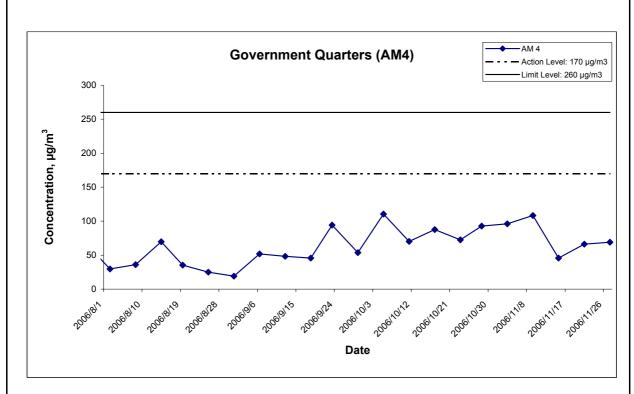
Graphical Presentation of 24-hour TSP Impact Monitoring Results

Scale Project
N.T.S No. MA3024

Date Appendix
Nov 06 E



#### 24-hr TSP Levels



Title

Route 8 (previously known as Route 9) between Cheung Sha Wan & Sha Tin Contract HY/2003/02 - Eagle's Nest Tunnel and Associated Works

Graphical Presentation of 24-hour TSP Impact Monitoring Results

Scale

N.T.S

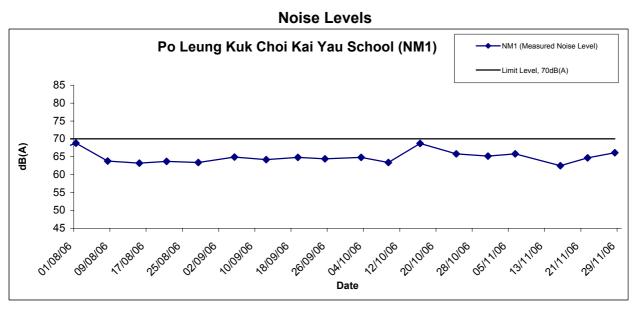
No. MA3024

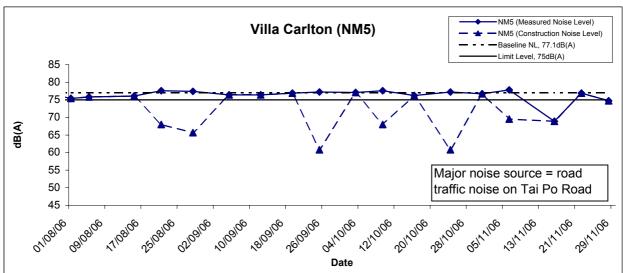
Date

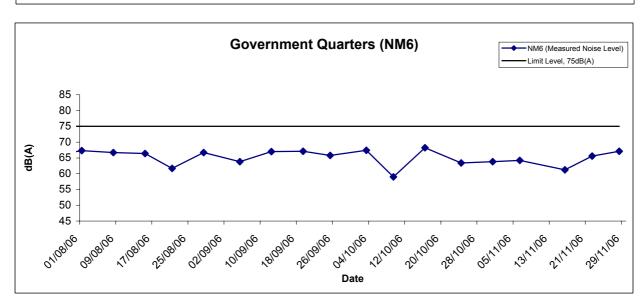
Nov 06

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APPENDIX F GRAPHICAL PRESENTATION OF NOISE MONITORING RESULTS







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

Title
Route 8 (previously known as Route 9) between Cheung Sha Wan & Sha Tin
Contract HY/2003/02 - Eagle's Nest Tunnel and Associated Works

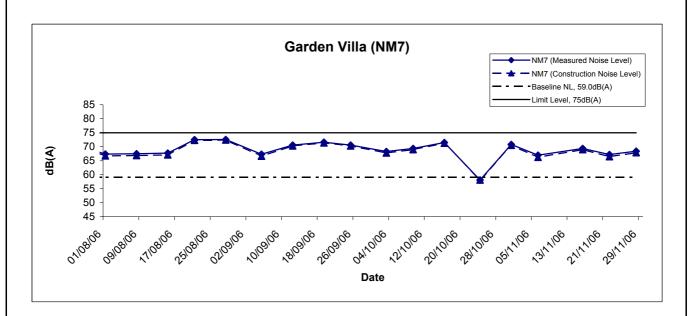
Graphical Presentation of Construction Noise Monitoring Results

Scale Project No. MA3024

Date Nov 06 Appendix F



#### **Noise Levels**



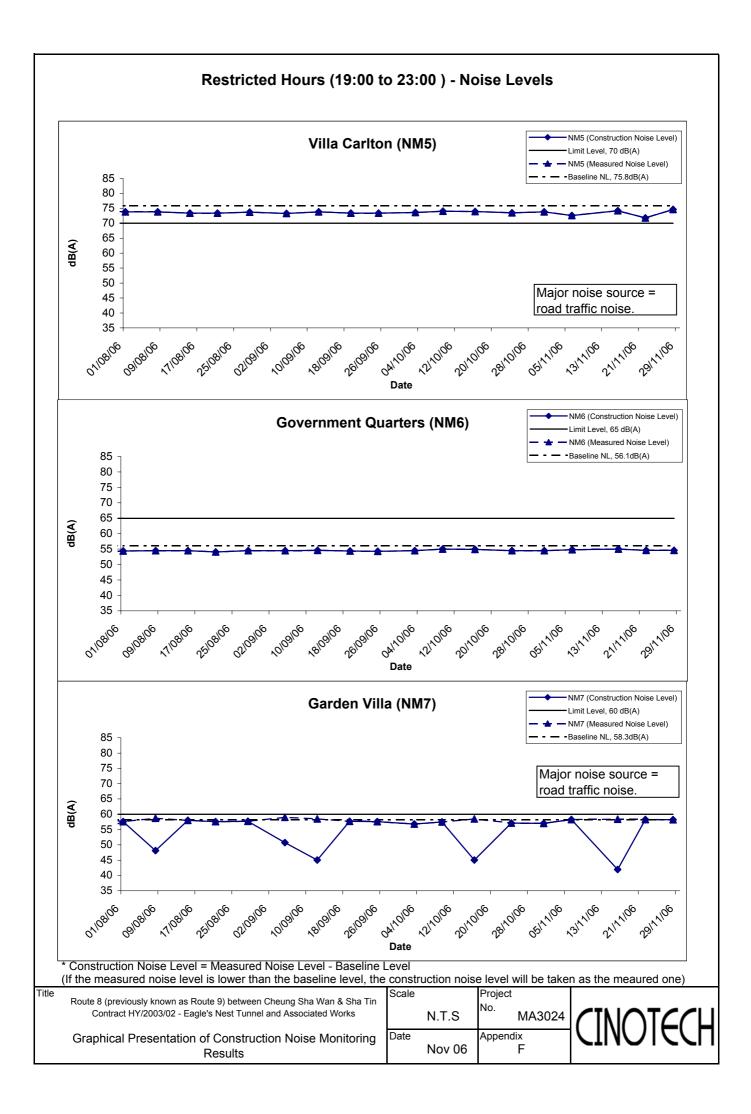
Title
Route 8 (previously known as Route 9) between Cheung Sha Wan & Sha Tin
Contract HY/2003/02 - Eagle's Nest Tunnel and Associated Works

Graphical Presentation of Construction Noise Monitoring Results

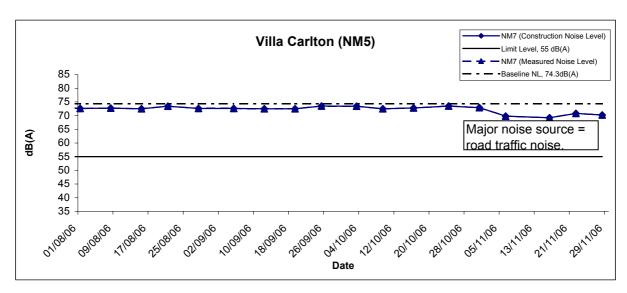
CONSU	uction nois	e level will be take
Scale		Project
	N.T.S	No. MA3024
Date	Nov 06	Appendix F

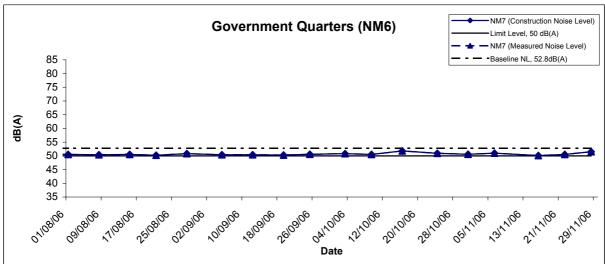


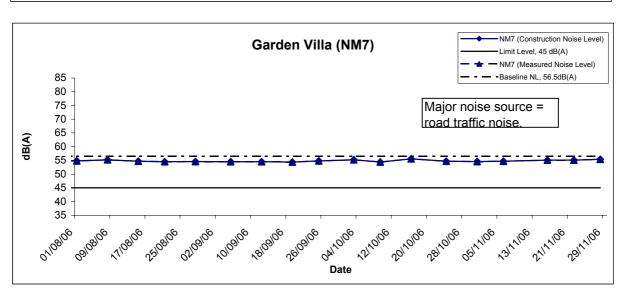
<sup>\*</sup> Construction Noise Level = Measured Noise Level - Baseline Level (If the measured noise level is lower than the baseline level, the construction noise level will be taken as the measured one)



#### Restricted Hours (23:00 to 07:00 ) - Noise Levels







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

Title
Route 8 (previously known as Route 9) between Cheung Sha Wan & Sha Tin
Contract HY/2003/02 - Eagle's Nest Tunnel and Associated Works

Graphical Presentation of Construction Noise Monitoring Results

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	Scale		Project	t
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	Date		Appen	dix
		Nov 06		F



APPENDIX G IMPLEMENTATION SCEDULE OF ENVIRONMENTAL MITIGATION MEASURES (EMIS)

Appendix G - Summary of Environmental Mitigation Implementation Schedule

Types of Impacts	Mitigation Measures	Status
-	<ul> <li>Any stockpile of dusty materials or stockpile of dusty material should be covered entirely by impervious sheeting or sprayed with water so as to maintain the entire surface wet.</li> </ul>	٨
	<ul> <li>A stockpile of dusty materials should not extend beyond the pedestrian barriers, fencing or traffic cones.</li> </ul>	^
	<ul> <li>Vehicle washing facilities should be provided at every exit point.</li> </ul>	^
	• The area where vehicle washing takes place and the section of the road between the washing facilities and the exit point should be paved with concrete, bituminous materials or hardcores.	٨
	• Where a site boundary adjoins a road, street, service lane or other area accessible to the public, hoarding of not less than 2.4m high from ground level should be provided along the entire length of that portion of the site boundary except for a site entrance or exit.	^
Construction Dust	• Every main haul road should be sprayed with water or a dust suppression chemical so as to maintain the entire road surface wet.	٨
Dust	• The portion of any road leading only to a construction site that is within 30m of a discernible or designated vehicle entrance or exit should be kept clear of dusty materials.	٨
	• Any stockpile of dusty materials should be either covered entirely be impervious sheeting, placed in an area sheltered on the top and the 3 sides or sprayed with water or a dust suppression chemical so as to maintain the entire surface wet.	٨
	<ul> <li>All dusty materials should be sprayed with water or a dust suppression chemical immediately prior to any loading, unloading or transfer operation so as to maintain the dusty materials wet.</li> </ul>	٨
	<ul> <li>Every vehicle should be washed to remove any dusty materials from its body and wheels immediately before leaving a construction site.</li> </ul>	٨
	• The working area of any excavation should be sprayed with water or a dust suppression chemical immediately before, during and immediately after the operation so as to maintain the entire surface wet.	٨
Construction Noise	<ul> <li>Only well-maintained plant should be operated on –site and plant should be serviced regularly during the construction works.</li> </ul>	^
	• Machines and plant that may be in intermittent use should be shut down between work periods or should be throttled down to a minimum.	٨
	<ul> <li>Plant know to emit noise strongly in one direction, should where possible, be orientated to direct noise away from the NSRS.</li> </ul>	^
	Mobile plant should be sited as far away from NSRs as possible.	^
	<ul> <li>Material stockpiles and other structures should be effectively utilised, where practicable, to screen noise from on-site construction activities.</li> </ul>	۸
	Use quite plant and Working Method	^
	Reduce the number of plant operating in critical areas close NSRs.	٨

Types of Impacts	Mitigation Measures	Status
	Construct temporary and movable noise barriers	^
Water Quality	Construction Runoff and Drainage	
	<ul> <li>Use of sediment traps and the adequate maintenance of drainage systems to prevent flooding and overflow.</li> </ul>	^
	Boundaries of critical areas of earthworks should be marked and surrounded by dykes or embankments for flood protection.  Temporary ditches should be provided to facilities runoff discharge into the appropriate watercourses, via a silt retention pond. Permanent drainage channels should incorporate sediment basins or traps and baffles to enhance deposition rates.	^
	<ul> <li>All temporary and permanent drainage pipes and culverts provided to facilitate runoff discharge should be adequately designed for the controlled release of storm flows. All sediment traps should be regularly cleaned and maintained. The temporarily diverted drainage should be reinstated to its original condition when the construction works has finished or the temporary diversion is no longer required</li> </ul>	^
	<ul> <li>Sand silt in the wash water from the wheel washing facilities, which ensure no earth, mud and debris is deposited on roads, should be settled out the removed before discharging into storm drains. A section of the road between the wheel washing bay and the public road should be paved with backfill to prevent wash water or other site runoff form entering public road drains.</li> </ul>	^
	<ul> <li>Oil interceptors should be provided in the drainage system and regularly emptied to prevent the release of oils and grease into the storm water drainage system after accidental spillage. The interceptor should have a bypass to prevent flushing during periods of heavy rain.</li> </ul>	^
	<ul> <li>Catchpits and perimeter channels shall be constructed in advance of site formation works and earthworks.</li> </ul>	^
	• Silt removal facilities, channels and manholes shall be suitably maintained with the deposited silt and grit being removed at least once a week, and at the onset of and after each rainstorm to ensure that these facilities are functioning properly at all times.	^
	<ul> <li>Earthworks final surfaces shall be well compacted and the subsequent permanent work or surface protection shall be carried out immediately after the final surfaces are formed to prevent erosion caused by rainstorms. Appropriate intercepting channels shall be provided along the site boundary or at the locations agreed with the ET Leader. Rainwater pumped out from trenches or foundation excavations shall be discharged into silt removal facilities before discharge into storm drains.</li> </ul>	^
	<ul> <li>All generators, fuel and oil storage shall be within bunded areas. Drainage from the areas shall be connected to storm drains via a petrol interceptor.</li> </ul>	۸
	Tunnelling Work	
	<ul> <li>Temporary open storage of excavated materials should be covered with tarpaulin or similar fabric during rainstorms. Any washout of construction or excavated materials form the drill and blast tunnelling work should be diverted to the drainage system via appropriate sediment traps.</li> </ul>	^
	<ul> <li>Ground water pumped out of tunnels should be discharged into the drainage channels which incorporated sediment traps to enhance deposition rates and to remove silt.</li> </ul>	^

Types of Impacts	Mitigation Measures						
	<ul> <li>Spend grouts used in diaphragm wall construction should be collected in a separate slurry collection system, reconditioned and reused wherever practicable. The disposal of used grouting materials will only be permitted if it is treated to the TM standards before discharge to the storm drains or disposal to landfill.</li> </ul>						
	General Construction Activities						
	<ul> <li>Debris and rubbish on site should be collected, handled and disposed of properly to avoid entering the water column and cause water quality impacts.</li> </ul>	٨					
	• All fuel tanks and storage areas will be provided with locks and be located on sealed areas (within bunds of a capacity equal to 110% of the storage capacity of the largest tank or 20% by volume of the fuel stored in that areas, whichever in the greatest).	^					
	Sewage Effluent						
	• Construction work force sewage discharges form fixed toilet facilities on-site should be connected to the nearby existing trunk sewer wherever feasible. However, for areas where existing trunk sewer is not available, it is recommended that appropriate and adequate on site portable chemical toilets should be provided by a licensed contractor who will be responsible for appropriate disposal and maintenance of these facilities.	^					
	• It is considered that sewage discharges could also be treated by on-site septic tanks and soakaway. Minimum clearance away form streams and catchments and other requirements for the proposed septic tank and soakaway should be referred to EPD's Practice Note for Professional Persons, Drainage Plans.	N/A					
Waste	General						
	• Training and instruction shall be given at a site to construction staff to increase awareness and draw attention to waste management issues and the need to minimise waste generation. The training requirement shall be included in the site waste management plan.	^					
	Storage, Collection and Transportation of Waste						
	<ul> <li>Wastes shall be handled and stored in a manner to ensure that they are held securely without loss or leakage.</li> </ul>	^					
	<ul> <li>Authorised or licensed waste hauliers shall be used and they shall only collect wastes prescribed by their permits.</li> </ul>	^					
	Waste shall be removed on a daily basis.	^					
	<ul> <li>Waste storage area shall be maintained and cleaned on a daily basis.</li> </ul>	^					
	<ul> <li>Windblown litter and dust during transportation shall be minimised by either covering trucks or transporting wastes in enclosed containers.</li> </ul>	^					
	<ul> <li>Obtain necessary waste disposal permits from the appropriate authorities if they are required.</li> </ul>	^					
	<ul> <li>Wastes shall be disposed of at licensed waste disposal facilities.</li> </ul>	^					
	<ul> <li>Develop procedure such as ticketing system to facilitate tracking of loads, particularly for chemical waste, and to ensure that illegal disposal of wastes does not occur.</li> </ul>	^					
	Maintain records of the quantities of wastes generated, recycled and disposed.	^					
	Surplus Excavated Materials						

Types of Impacts	Mitigation Measures				
•	<ul> <li>Due to the high risk of loose material being washed into the existing nullah, stockpile materials should be properly compacted and covered from water erosion and located at least 10m away from the nullah wall.</li> </ul>	N/A			
	Construction and Demolition (C&D) Waste				
	<ul> <li>Careful design, planning and good site management shall be adopted to minimise over-ordering and generation of waste materials such as concrete grouts.</li> </ul>	^			
	• The handling and disposal of bentonite slurries shall be undertaken in accordance with Practice Note for Professional Persons – Construction Site Drainage (ProPECC PN 1/94) on construction site drainage.	N/A			
	• Construction and demolition (C&D) material shall be segregated to inert and non-inert parts. The inert portion shall re-used at areas of reclamation or land formation, or to public filling area shall such allocation is deemed necessary. The non-inert portion shall be disposed of to landfill.	^			
	Chemical Waste				
	<ul> <li>Chemical waste that is produce during construction shall be handled in accordance with the Code of Practice on the Packaging, Handling and Storage of Chemical Wastes.</li> </ul>	^			
	<ul> <li>Containers used for the storage of chemical wastes should:</li> <li>a. Be suitable for the substance they are holding, resistant to corrosion, maintained in a good condition, and securely closed;</li> </ul>	^			
	<ul><li>b. Have a capacity of less than 450 litres unless the specifications have been approved by the EPD;</li><li>c. Display a label in English and Chinese in accordance with instructions prescribed in Schedule 2 of the Chemical Waste Regulations.</li></ul>				
	<ul> <li>The storage area for chemical wastes should:</li> <li>a. Be clearly labelled and used solely for the storage of chemical waste;</li> <li>b. Be enclosed on at least 3 sides;</li> </ul>				
	<ul> <li>c. Have an impermeable floor and bunding of capacity to accommodate 110% of the volume of the largest container or 20% by volume of the chemical waste stored in the area, whichever is largest;</li> <li>d. Have adequate ventilation;</li> </ul>	^			
	e. Be covered to prevent rainfall entering (water collected within the bund must be tested and disposed as chemical waste if necessary);				
	<ul> <li>f. Be arranged so that incompatible materials are adequately separated.</li> <li>Disposal of chemical waste shall be via a licensed waste collector; and to a facility licensed to receive chemical waste; or a reuser of the waste (under approval from EPD).</li> </ul>	٨			
	General Refuse	1			
	<ul> <li>General refuse generated on-site shall be stored in enclosed bins or compaction unit separate from C&amp;D and chemical wastes. A reputable waste collector shall be employed by the contractor to remove general refuse from the site, separately from C&amp;D and chemical wastes, on a daily for every second day basis to minimise odour, pest and litter impacts. The burning of refuse on construction sites is prohibited by law.</li> </ul>	^			

Types of Impacts	Mitigation Measures	Status
	Reusable rather than disposable dishware shall be used if feasible.	N/A
	<ul> <li>A sediment barrier shall be erected to minimize stream sedimentation at downstream of the project boundary of the Toll Plaza.</li> </ul>	N/A
	<ul> <li>Conduct a tree survey before commencement of the construction work.</li> </ul>	^
Ecology	<ul> <li>All measures recommended in the approved landscape proposals under Condition 2.4 in EP above shall be fully implemented in accordance with the details and time schedule set out in the submission.</li> </ul>	N/A
	<ul> <li>Loss of the adjacent woodland due to temporary land take shall be returned to the original status immediately.</li> <li>Wild and uncontrolled fire shall be strictly prohibited</li> </ul>	N/A
	• Fences shall be erected along the boundary of the construction sites at the Toll Plaza before commencement of works, to prevent tipping, vehicle movements, and encroachment of personnel onto adjacent wooded areas.	N/A
	• Landscape mitigation measure 1 (LMM1) – Construction programming and management. The periphery of the works areas at street level shall be managed so that they do not appear cluttered, untidy and unattractive and inconvenient to pedestrians. For example, all hoarding shall be colorfully designed with interesting motifs demonstrating the work of Highways Department. Hoardings with bland colours shall be avoided.	N/A
Landscape and Visual Impact	• Landscape mitigation measure 2 (LMM2) – Advanced planting and erosion control works. Where possible, the transplantation of existing valuable trees, the stockpiling of topsoil, new planting and erosion control works shall be carried out as early as possible in the construction period instead of at the end. This will assist in maximizing the time for carrying out transplantation and new planting, resulting in a higher success rate for the survival of transplantation and new planting, resulting in a higher success rate for the survival of transplanted trees and the establishment of new screen trees. The stockpiling of topsoil will provide an abundant use of on-site material for growing media. During detailed design, the issue of stockpiling of topsoil in a manner that would avoid washing into the drainage scheme should be examined comprehensively.	N/A
	<ul> <li>Measurement of vibration would also be carried out on a need basis during the piling work</li> </ul>	N/A

Remarks:

Compliance of mitigation measure; Not Applicable; ^ N/A

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

### APPENDIX H SUMMARY OF ENVIRONMENTAL LICENCES AND PERMITS

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

D '4 M	Valid	Period	D ( 2)	Gt. t
Permit No.	From	To	- Details	Status
Environmental Pern	nit (EP)			
EP-103/2001/C	22/07/05	N/A	Construction and operation of  (a) All civil works (including highways, traffic, geotechnical, drainage, structural, architectural and landscaping works) for the Lai Chi Kok Viaduct, the interchange with Ching Cheung Road, the main road within Butterfly Valley and the Eagle's Nest Tunnel;  (b) All E&M works (including ventilation, Traffic Control & Surveillance System (TCSS), toll collection system and lighting) for the whole Route 9 between Cheung Sha Wan and Sha Tin;  I The permanent slope works above the northern portal of the Eagle's Nest Tunnel;  (d) The architectural works (including fitting out and furnishings) of the portal buildings of the Sha Tin Heights Tunnel.	Valid
Registration of Cher	L nical Waste	Producer	<u> </u>	
WPN 5213-761-L2595-01	26/01/04	N/A	Regulation for disposal of spent oil and waste batteries arising from construction activities in all project areas.	Valid
Water Discharge Lie		1		
EP482/261/0327/I	03/05/04	31/05/09	Discharge of industrial trade effluent and effluent arising from construction activities at the construction site at Ventilation Adit on Tai Po Road (behind Shell Filling Station) opposite Pinehill Development Highways.	Valid
EP482/261/0326/I	01/04/04	30/04/09	Discharge of industrial trade effluent and effluent arising from construction activities at the construction site at Mui Kong Tsuen, Butterfly Valley, Lai Chi Kok, Kowloon.	Valid
No. 3156	23/02/04	22/02/09	Discharge of industrial trade effluent and all other wastewater arising from the works areas at North Portal of Route 9 – Eagle's Nest Tunnel and Associated Works (Contract HY/2003/02).	Valid
<b>Construction Noise</b>	Permit (CN	P)		
GW-RN0143-06	3/4/06	2/10/06	Location: ENT South Portal Site at Butterfly Valley Time period: any day between 2300 and 0700 on next day.	Expired & replaced by CNP No. GW-RN0488- 06
GW-RN0150-06	4/04/06	3/10/06	Location: ENT Tunnel North Portal Site near Garden Villa Time period: Any day not being a general holiday including Sundays between 1900 and 2300.	Expired & replaced by CNP No. GW-RN0487- 06
GW-RN0151-06	3/4/06	2/10/06	Location: ENT North Portal Site near Garden Villa Time period: Any day between 2300 and 0700 on next day.	Expired & replaced by CNP No. GW-RN0486- 06

Permit No.	Valid	Period	Details	
	From	To		Status
GW-RN0226-06	11/5/06	10/11/06	Location: South Portal Time period: Normal weekdays between 1900 and 2300 and general holidays included Sunday between 0900 and 2300.	Expired
GW-RN0281-06	8/6/06	7/12/06	Location: Tunnel North Portal near Tai Po Road and Keng Hau Road  Time period: Any day between 2300 and 0700 on next day.	Valid
GW-RN0282-06	8/6/06	7/12/06	Location: Tunnel South Portal near Garden Villa Time period: Any day between 2300 and 0700 on next day.	Valid
GW-RN0283-06	8/6/06	7/12/06	Location: Tunnel South Portal near Garden Villa Time period: General holiday including Sundays between 0900 and 2300 and any day not being a general holiday including Sundays between 1900 and 2300.	Valid
GW-RN0284-06	8/6/06	7/12/06	Location: Tunnel North Portal near Tai Po Road and Keng Hau Road  Time period: General holiday including Sundays between 0900 and 2300 and any day not being a general holiday including Sundays between 1900 and 2300.	Supersed by GW-RN0473- 06
GW-RW0392-06	6/8/06	5/2/07	Location: Tai Po Road Shell Petrol Filling Station and opposite to Villa Carlton Time Period: General holidays including Sundays between 0700-2300 and any day not being a general holiday between 1900-2300.	Valid
GW-RW0422-06	4/8/06	3/2/07	Location: Butterfly Valley Time Period: General holidays including Sundays between 0700-2300 and any day not being a general holiday between 1900-2300.	Valid
GW-RN0473-06	25/9/06	24/3/07	Location: Tunnel North Portal near Tai Po Road and Keng Hau Road Time period: General holiday including Sundays between 0700 and 2300 and any day not being a general holiday including Sundays between 1900 and 2300.	Valid
GW-RN0486-06	25/9/06	24/3/07	Location: ENT-North Portal Time period: Any day between 2300 and 0700 on next day.	Valid
GW-RN0487-06	10/10/06	9/4/07	Location: ENT-North Portal Time Period: General holidays including Sundays between 0700-2300 and any day not being a general holiday between 1900-2300.	Valid
GW-RN0488-06	10/10/06	9/4/07	Location: ENT-South Portal Time period: Any day between 2300 and 0700 on next day.	Valid

Permit No.	Valid Period		Details	Status
refillt No.	From	To	Details	Status
GW-RN0489-06	10/10/06	9/4/07	Location: ENT-South Portal Time period: General holidays including Sundays between 0700-2300 and any day not being a general holiday between 1900-2300.	Valid
GW-RN0492-06	11/11/06	10/5/07	Location: Administration Building Time period: General holidays including Sundays between 0700-2300 and any day not being a general holiday between 1900-2300.	Valid (New)
GW-RW0536-06	20/9/06	19/3/07	Location: Butterfly Valley Time Period: General holidays including Sundays between 0700-2300 and any day not being a general holiday between 1900-2300.	Valid

## APPENDIX I COMPLAINT LOG

# Appendix I - Complaint Log

Log Ref.	Location of Concern	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
40426	Butterfly Valley	26 April 2004	A public noise complaint was recently received by EPD. The complaint was related to the noise generated from the Route 8 – ENT site near Butterfly Valley at the night time on 21 April 2004. EPD subsequently referred the complaint to the Environmental Team (ET) Leader of the Project on 23 April 2004.	Noise at night time The information provided by the RSS indicated that no works were undertaken by the Contractor during the concerned period. The concerned noise might probably be due to a burglary case occurred at same night.  Noise during day-time  It is believed that the day-time noise complaint was due to the site formation works of the Project. Considering the powered mechanical equipment used at the Butterfly Valley and the echo effect of the valley, ET believe that the day-time construction noise from the site at Butterfly Valley might cause nuisance to the nearby resident to some extent, though there was no noise level exceedance at the Government Quarters during our routine monitoring in last three months.  The Contractor agreed to implement mitigation measures, including good site practices, selecting quieter plant and working methods and reduction in numbers of noisy plant operating currently, in order to mitigate noise impacts at the NSRs.	Closed
40914	Garden Villa	13-Sep-04 (by EPD) 14-Sep-04 (by ET Leader)	Environmental Protection Department (EPD) received a public noise complaint on 13 September 2004 about construction noise generated from the Route 8 – Eagle's Nest Tunnel and Associated Works (R8-ENT) Project, nearby by Garden Villa at Tai Po Road, Sha Tin. EPD subsequently referred the complaint to the Environmental Team (ET) Leader of the Project on 14 September 2004.  The complaint was about general construction noise generated from a construction site nearby Garden Villa at Tai Po Road, Sha Tin. As informed by EPD,	Environmental Permits A Construction Noise Permit (No. GW-RN0405-04) was obtained by the Contractor for the use of powered mechanical equipment (PME) in the concerned works area and use of TAR no.1 during restricted hours.  Blasting Works According to the information provided by the Resident Site Staff (RSS), for carrying out blasting works, a blasting permit should be issued by the Mines Division of Civil Engineering and Development Department (CEDD), but not under the jurisdiction of EPD. The CNP issued by EPD only specified the use of PME but not the blasting works during restricted hours.	Closed

Log Ref. Location Concern	Details of Complaint	Investigation/Mitigation Action	Status
	the complainant was particularly concerned of two issues:  1. The complainant was informed by the Contractor (Leighton – Kumagai Joint Venture) that blasting works would be conducted during restricted hours. He worried about the noise nuisance would be induced by the blasting works.  2. Noise nuisance from some site vehicles traveling on the Temporary Access Road (TAR no.1) near Garden Villa was noted by the complainant during restricted hours.	As advised by the RSS, the Contractor did intend to apply for a permit to the Mines Division of CEDD for blasting works during restricted hours. However, up to the time of preparation of this report, the Contractor still had not obtained the approval from the Mines Division and therefore, no blasting works were performed by the Contractor during restricted hours.    Use of TAR no.1	

Log Ref.	Location of Concern	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
				passing the site entrance was recorded. Therefore, it was considered that the nuisance noted by the complainant was not due to the site vehicles adopted by the Contractor (LKJV).  Nevertheless, the Contractor was reminded to ensure the compliance of the CNP conditions and adopt good site practice to minimize the construction noise.	
41021	Garden Villa	09-Oct-04 (by EPD) 21-Oct-04 (by ET Leader)	Environmental Protection Department (EPD) received a public noise complaint on 9 October 2004 about construction noise generated from the Route 8 – Eagle's Nest Tunnel and Associated Works (R8-ENT) Project, nearby by Garden Villa at Tai Po Road, Sha Tin. EPD subsequently referred the complaint to the Environmental Team (ET) Leader of the Project on 21 October 2004.  The complaint was about nighttime construction noise generated from a construction site nearby Garden Villa at Tai Po Road, Sha Tin. As informed by EPD, the complainant was particularly concerned of two issues:  Construction works undertaken by the Contractor (Leighton–Kumagai Joint Venture) were noted after 2300 hour.  Some workers were noted leaving the site through Temporary Access Road (TAR) no.1 at around 2 am, causing nuisance to the residents in Garden Villa.	According to the information provided by the RSS, no construction activity was undertaken in the nighttime period (2300 – 0700 hours) at the concerned site area.  LKJV did admit that some vehicles had been operating at midnight for transporting LKJV's survey workers from the site. Inconsiderate behaviors were noted causing nuisance to Garden Villa residents:  1. Driving the vehicles too fast, which generated excessive engine noise;  2. Noise inside the vehicles (such as staff talking or radios) escaping through the open vehicle windows; and  3. Vehicle beeping horn to request the guards to open the gate.  In order to rectify the situation, LKJV had notified the relevant staff with the receipt of the complaint and urged them to take appropriate measures when using TAR1 at night:  1. to drive slowly in order to reduce the engine noise, especially when approaching Garden Villa;  2. to roll up the vehicle windows to contain any noise from talking or radios; and  3. to prohibit beeping the vehicle horn for gate opening; instead, to park the car and approach the guard on foot.	Closed

Log Ref.	Location of Concern	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
41023	Government Quarters (Butterfly Valley)	20-Oct-04 (by MHJV) 23-Oct-04 (by ET Leader)	A public complaint was received by the Engineer's Representative (ER) of Route 8 – Eagle's Nest Tunnel and Associated Works (R8-ENT) Project on 20 <sup>th</sup> October 2004. The complaint was raised by a resident of the Government Quarters at Caldecott Road, concerning dust generation as a result of the construction activities at Butterfly Valley. The ER subsequently referred the complaint to the Environmental Team (ET) Leader of the Project on 23 <sup>rd</sup> October 2004.	The complaint was considered valid based on:  1. ER's site observations;  2. ET's weekly site audit; and  3. 1-hr TSP exceedance record.  Also, the sources of dust generation were identified as  1. 2 portions of the haul roads, one at Slope BV-S2 and one linking between South Portal Tunnel to Mui Kong Tsuen, were found to be dry.  2. Dust impact due to the haulage of excavated materials at the South Portal.  Enhanced dust suppression measures had been implemented by the Contractor:  • added rockfill to the haul road between South Portal Tunnel and the Gully fill area;  • maintained watering to haul road at Slope BV-S2;  • requested the fill material supplier to ensure the material was in a damp condition before leaving quarry;  • provided for material not dampened at the Quarry to be directed to the wheel wash for water spray before entering the site;  • when cleaning drill holes along slope BV-S4 to ensure adequate water was available for flushing to suppress dust emission; AND  • provided damper stockpiles of cleared material at BV-S2 before loading.  Based on ER's site observations, most of the above mitigation measures have been implementing by the Contractor. Also, an additional water browser was delivered to site on 29 <sup>th</sup> Oct 04. No significant fugitive dust emission has been found.  During ET's site inspections on 27 <sup>th</sup> Oct and 3 <sup>rd</sup> Nov 2004, the situation was found improved. No deficiency relating to air quality impact was noted by ET during the two audit sessions.  The results of air quality monitoring (1-hr and 24-hr TSP) in the period between 21 <sup>st</sup> Oct and 2 <sup>nd</sup> Nov 2004 were all found to be complied with the Action / Limit Levels.	Closed

Log Ref.	Location of Concern	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
41124	Government Quarters (Butterfly Valley)	21-Nov-04 (by LKJV) 24-Nov-04 (by ET Leader)	A public complaint was received by the Contractor of Route 8 – Eagle's Nest Tunnel and Associated Works (R8-ENT) Project on 21 <sup>st</sup> November 2004 (Sunday). The complaint was concerned about excessive noise generation from construction machinery at Butterfly Valley on the same day. The Engineer's Representative (ER) subsequently referred the complaint to the Environmental Team (ET) Leader of the Project on 24 <sup>th</sup> November 2004.	According to the ER, the only construction activity at Butterfly Valley undertaken on 21 <sup>st</sup> Nov 04 was formation of access road near Slope BV-S2. The activity only involved operations of 1 no. of excavator and 1 no. of dump truck with grab, which complied with the condition stipulated in a valid CNP GW-RW0484-04, which was hold by the Contractor.  Routine noise monitoring was conducted on 21 <sup>st</sup> and 28 <sup>th</sup> Nov 2004 at NM6. All the measured noise levels (48.5 to 56.4 dB(A)) were well below the noise limit level. In addition, the measurement results were within the baseline noise level.  Therefore, the complaint was considered to be invalid. Nevertheless, the Contractor was reminded to ensure the compliance of the conditions stipulated in CNP. The Contractor was also recommended to adopt good site practice in order to minimize the construction noise.	Closed
41201	Government Quarters (Butterfly Valley)	01-Dec-04 (by MHJV & ET Leader)	A public complaint was received by the Engineer's Representative (ER) of Route 8 – Eagle's Nest Tunnel and Associated Works (R8-ENT) Project on 1st December 2004. The complaint was raised by a resident of the Government Quarters at Caldecott Road, concerning dust generation at Butterfly Valley. The Environmental Team (ET) of the Project was informed with the complaint on the same day.  The resident complained that a large portion of the excavated slopes was not properly covered, which caused dust nuisance to her.	The complaint was considered valid based on:  1. ER's site observations;  2. ET's weekly site audit  Upon receipt of the complaint, a series dust control measures had been implemented by the Contractor, such as covering of the exposed slopes with appropriate sheeting, regular watering to the haul roads and excavated slope faces, etc.  During the ET's weekly site audit on 08-Dec-04 together with the representative of HyD, IEC, ER and the Contractor, the above mitigation measures were observed. The idle slopes at BVS2 had been covered by tarpaulin sheeting and erosion mat. The left exposed slope surfaces at BVS2 were under excavation, thus being unable to be covered.  According to the ER, the complainant has expressed his satisfaction to the site condition on 07-Dec-04, after the implementation of dust mitigation measures by the	Closed

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				Contractor.  However, owing to the prevailing of the dry season, the Contractor was reminded to ensure the dust control measures are effectively implemented.	
50125	Garden Villa (North Portal)	21-Jan-05 (by EPD) 25-Jan-05 (by ET Leader)	Environmental Protection Department (EPD) received a public noise complaint on 21 January 2005 about construction noise and dust generated from the Route 8 – Eagle's Nest Tunnel and Associated Works (R8-ENT) Project, nearby by Garden Villa at Tai Po Road, Sha Tin. EPD subsequently referred the complaint to the Environmental Team (ET) Leader of the Project on 25 January 2005.  The complaint was about construction noise and dust generated from a construction site nearby Garden Villa at Tai Po Road, Sha Tin. The complainant was particularly concerned of two issues:  1. Noise from tunnel blasting work carrying out at around 7:30am and 10:00pm; and 2. Dump trucks without covering of canvas when leaving the construction site.	Noise from blasting For carrying out the blasting, the Contractor had obtained the permit from relevant authority. The ET's noise monitoring results did not show any exceedance for the measurement taken when blasting was in place. It should be highlighted that for carrying out blasting works, permission should be obtained by Mines Division of CEDD, but not under the control of EPD. In order to minimize the nuisance from the works, the Contractor was recommended:  • To inform the residents around the area about the time of blasting in advance; and • To re-schedule the blasting time table, if possible, in order to avoid nuisance.  Uncovered dump trucks In order to evaluate the situation, two inspections were carried out by the ET at Garden Villa on 27-Jan and 28-Jan-05 to identify the dump trucks leaving the site with uncovered load. On 27-Jan-05, 3 nos. of trucks, which were working for ENT Project, was noted by-passing Garden Villa without proper cover.  Enhanced control (penalty system) was implemented by the Contractor after the inspection on 27-Jan. During the inspection on 28-Jan-05, 24 nos. of dump trucks for ENT Project were found leaving the site. No non-compliance was noted for the trucks working for ENT Project.  LKJV was reminded to keep closely monitoring on the condition and the effectiveness of the proposed control measures.	Closed

Log Ref.	Location of Concern	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
50308	Garden Villa (North Portal)	05-Mar-05 (by EPD) 08-Mar-05 (by ET Leader)	EPD received a public complaint on 5 March 2005 about construction noise and dust generated from the construction sites of Route 8 – Eagle's Nest Tunnel and Associated Works (R8-ENT) and Route 8 - Sha Tin Heights Tunnel and Approaches (R8-SHT), nearby by Garden Villa at Tai Po Road, Sha Tin. EPD subsequently referred the complaint to the Environmental Team (ET) Leader of the Project on 8 March 2005.  The complaint was about construction noise and dust generated from the construction sites nearby Garden Villa at Tai Po Road, Sha Tin. The complainant was particularly concerned of the following issues:  1. Nighttime & Sunday construction noise 2. Noise from tunnel blasting at early morning and nighttime 3. Dust from construction activities	<ul> <li>Nighttime &amp; Sunday construction noise</li> <li>no exceedance for noise monitoring</li> <li>restricted hour works were found complied with the CNPs</li> <li>records of vehicular trips on TAR1 did not show noncompliance of CNP conditions</li> <li>Noise from tunnel blasting at early morning and nighttime</li> <li>no exceedance for noise monitoring</li> <li>valid blasting permit had been obtained from CEDD</li> <li>blasting work is not under the jurisdiction of EPD</li> <li>Dust from construction activities</li> <li>dump trucks with uncovered / inadequately covered materials were observed leaving site</li> <li>no exceedance for TSP monitoring</li> <li>enhanced dust suppression measures had been implemented by the Contractor</li> <li>Conclusions</li> <li>The complaint against the dust issue (uncovered / inadequately covered dump trucks) was considered justifiable The Contractor was reminded to review the current checking system. Continuous spot checks would be performed by ET and RSS.</li> </ul>	Closed
50330	Garden Villa (TAR1)	30-Mar-05 (by EPD & ET Leader)	Environmental Protection Department (EPD) received a public complaint on 30 <sup>th</sup> March 2005 about construction noise from the sites of Route 8 – Eagle's Nest Tunnel and Associated Works (R8-ENT) near Garden Villa at Tai Po Road, Sha Tin.  The complaint, which was lodged by a resident of Garden Villa on 29 <sup>th</sup> March 2005, was about the noise generated by heavy vehicles traveling in and out of the construction site near Garden Villa. According to the complaint, the noise was made from 7am onwards.	The site of concern was likely to be the Temporary Access Road no.1 (TAR1) connecting Tai Po Road and the construction sites of R8-ENT and Route 8 - Sha Tin Heights Tunnel and Approaches (R8-SHT).  The time period of concern was within normal working hours (7am to 7pm) on a weekday not being holidays. According to the EM&A Manual, the criterion of construction noise in term of $L_{\rm eq}$ -30min within this period is 75 dB(A) for domestic premises.  Since the commencement of the Project, no exceedance of daytime noise criterion of 75 dB(A) was recorded at Station AM3 (Garden Villa). During the 2-hour measurement period of the ad-hoc monitoring (0700-0900 hrs), all the measured noise levels ( $L_{\rm eq}$ -30min) were below the daytime noise	Closed

Log Ref.	Location of Concern	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
				criterion of 75 dB(A).  Based on the results of routine noise monitoring and the adhoc measurement on 1 <sup>st</sup> April 2005 at Garden Villa, no exceedance of daytime noise criterion of 75 dB(A) was recorded. The complaint lodged is therefore considered not justifiable.  In order to minimize the nuisance generated by the vehicle use at Garden Villa, the Contractor has proposed to limit the frequency of trucks existing from TAR1 at a rate of one truck per minute during the time period of concern (7am to 8:30am).	
50415	Government Quarters	09-Apr-05 (by EPD) 15-Apr-05 (by ET Leader)	The complaint, which was lodged by a resident of 7/F, 38B, 8-10 Caldecott Road (Governmental Quarters) on 9 <sup>th</sup> April 2005, was about the noise generated by the construction works at the Butterfly Valley during daytime. The complainant mentioned that the instant noise level taken by himself was 78 to 82 dB(A).  EPD subsequently referred the complaint to the Environmental Team (ET) Leader of the Project on 15 <sup>th</sup> April 2005.  The time period of concern was within normal working hours (7am to 7pm) on a weekday not being public holidays. According to the EM&A Manual, the criterion of construction noise in term of L <sub>eq</sub> -30min within this period is 75 dB(A) for domestic premises.	Governmental Quarters (Station NM6) is one of the designated noise monitoring stations in the EM&A programme. Routine monitoring is undertaken on a weekly basis in accordance with the EM&A Manual.  Since the commencement of the Project, no exceedance of daytime noise criterion of 75 dB(A) was recorded at this station.  Ad-hoc measurement was conducted at the complainant's premises on 22 Apr 05. The measured noise level was 69.0 dB(A), which was well below the daytime noise criterion of 75 dB(A).  Based on the results of routine noise monitoring and the adhoc measurements conducted in the complainant premises, no exceedance of daytime noise criterion of 75 dB(A) was recorded. The complaint lodged is therefore considered not justifiable.	Closed

Log Ref.	Location of Concern	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
50419	Government Quarters	15-Apr-05 (by EPD) 19-Apr-05 (by ET Leader)	The complaint was lodged by a resident of 8-10 Caldecott Road (Government Quarters) on 15 <sup>th</sup> April 2005 to EPD as well as the Chief Resident Engineer of the Project.  EPD subsequently referred the complaint to the Environmental Team (ET) Leader of the Project on 19 <sup>th</sup> April 2005.  The complainant mentioned that they had experienced quite a lot of noise emanating from the tunnel drilling area after 11pm over several nights and most particularly at the night of 14 <sup>th</sup> April 2005 and at 4am on 15 <sup>th</sup> April 2005.	The site of concern was likely to be the South Portal. For carrying out construction works at this area during restricted hours, two Construction Noise Permits (CNPs no. GW-RW0085-05 and GW-RW0086-06) were obtained by the Contractor in accordance with the requirements stipulated in Noise Control Ordinance.  According to the information provided by the Resident Site Staff and the Contractor, the construction activities undertaken in the period between 11 <sup>th</sup> and 15 <sup>th</sup> April 2005 from 1900 to 0700 hours included drilling, breaking, trimming, set up of rock drill, installation of arch-rib and grouting.  The powered mechanical equipment (PME) involved in the above works included backhoe, rock drill, loader, dumper, shot-crete machine, group pump, mobile platform and grout machine, which were covered by the CNPs.  According to the routine monitoring results, for the time period between 2300-0700 hours, the measured noise levels exceeded the corresponding noise Limit Level of 50dB(A). However, the measured levels were found within the range of baseline level and below the average baseline level.  Based on the routine noise monitoring results at Station NM6, the measured noise levels for the period between 2300-0700 hours were below the baseline noise level, which was comparable to the ambient level. According to the RSS's record, the PME items operated during the concerned period were found covered by the 2 CNPs hold by the Contractor.  Based on the available information, there is not enough evidence to prove whether the complaint against nighttime construction noise generated in the concerned period (11 <sup>th</sup> to 15 <sup>th</sup> April 2005) is justifiable or not.	Closed

Log Ref.	Location of Concern	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
50512	Yew Chung International School	12-May-05	On 11 May 05, a notice was sent to Yew Chung International School (YCIS) by the Contractor, providing their tentative blasting schedule on 12 May 05. It was shown that one of the blasting operations was scheduled at 09:30am, at when an examination was being held in YCIS.  Upon receipt of the notice, a representative of YCIS lodged a complaint to the Contractor via the Project's hotline at 07:40 on 12 May 2005. The complainant expressed her objection to the blasting operation taken at 09:30am when the examination was taken place.  The Contractor then agreed on one occasion only to delay the tunnel blast planned for 9:30am until 9:50am (i.e. 5 min after the examination). The complainant satisfied but did expect no future blasting during the examination period. According to the Engineer's Representative, the Contractor did not wish to make any commitment to ensure no blasting would be taken within the examination period.	A 1-day continuous noise measurement was conducted by the Environmental Team at Station NM1 on 26 May 05. According to the ER's record, two blasting operations were taken in the vicinity of YCIS on 26 May 05. One surface blast was taken at Butterfly Valley at 15:42 and one tunnel blasting was taken at South Portal at 16:56.  The measurement results showed that the noise impact in term of Leq-5min and Leq-30min arising from the blasting operations was insignificant. No exceedance of construction noise criterion for examination period was recorded (Leq-30min < 65dB(A)).  The complaint lodged was therefore considered not justifiable. However, in order to minimize the potential nuisance arising from the blasting noise and the siren sounds prior to blasting, the Contractor was recommended to consider scheduling the blasting operations beyond the examination periods.	Closed

Log Ref.	Location of Concern	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
50610	Government Quarters	10-Jun-05	On 10 June 2005, the Resident Site Staff (Maunsell-Hyder Joint Venture) received a complaint from a resident of the Government Quarters at Caldecott Road. The complaint was concerned about the construction dust generation as a result of the construction activities of the Project at Butterfly Valley.  The complainant had not specified which construction activities had contributed to the dust generation.	According to the RSS's preliminary investigation, it was considered that soil nailing at Slope BV-S2 was the dominant dust source and was likely to be the activity of concern. The dust suppression measures taken were found inadequate to control the dust dispersion from the works. Noticeable dust dispersion from the soil nailing work could be observed.  **Corrective Actions**  After the Contractor was notified by the RSS of the complaint, immediate action was taken by the Contractor on the same day (10 June 2005).  The dust mitigation measures for the soil nailing were enhanced. An additional thicker cover was used. Also, continuous water spray was applied to suppress the dust emission.  **Environmental Outcome**  The RSS made a response to the complainant on 10 June 2005. The complainant was informed of the rectification actions taken by the Contractor. No further adverse comment was received from the complainant.  **Conclusions**  Based on the RSS's information, this complaint is considered to be valid and related to the construction activities of the Project. However, corrective action had been taken by the Contractor immediately and the situation was found improved.	Closed

Log Ref.	Location of Concern	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
50712	A scattered house near South Portal and Tai Po Road Water Treatment Works Staff Quarters	12-Jul-05	On 12 July 2005, a resident, whose house is located near South Portal and Tai Po Road Water Treatment Works Staff Quarters, lodged a complaint to the Contractor via the Project's hotline at 11:40am. The complainant expressed his concern on the nuisance caused by the blasting works at early morning (before 07:00 hours) and late night (after 23:00 hours).	According to the information provided by the RSS, tunnel blasting works have been taken place in the concerned period in north bound tunnel from the Ventilation Adit towards the direction of the South Portal.  Environmental Requirements  In the EP, the EM&A Manual of the Project and the NCO, no requirement is specified for the control of blasting operation and the associated environmental impact, such as blasting noise.  It should be highlighted that for carrying out blasting works, permission should be obtained by Mines Division of CEDD, but not under the jurisdiction of EPD.  For carrying out the above-mentioned blasting operations, the Contractor has obtained a valid blasting permit from CEDD under the Dangerous Goods Ordinance (Cap. 295). Under this permit, the Contractor is allowed to carry out 24-hour blasting works within the designated area.  Contractor's Actions  Though the blasting noise is not under the control of any environmental related regulation and the Contractor is allowed to carry out 24-hour blasting, the Contractor would try to keep the blasts of concern undertaken between 07:00 to 23:00 hours. This arrangement could effectively reduce the potential nuisance to the residents within the more sensitive time period (23:00 to 07:00 on next day).  Conclusions  The subjected blasting operations were carried out by the Contractor under a valid blasting permit. The complaint lodged is therefore considered not justifiable.	Closed

Log Ref.	Location of Concern	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
50809	Government Quarters (8-10 Caldecott Road)	09-Aug-05	On 9 August 2005, a resident of 8-10 Caldecott Road (Government Quarters) lodged a complaint to the Contractor via the Project's hotline at 14:30. The complainant expressed her concern on the nuisance caused by the blasting works undertaken at Butterfly Valley.  Noise impact arising from the blasting works was one of the issues raised by the complainant.	An ad-hoc noise measurement was carried out on the roof of Government Quarters during a surface blast on 16 August 2005. According to the record of the RSS and the site observation, a surface blasting was undertaken at Butterfly Valley at around 15:38 on the monitoring day.  The results show that the measured noise level in term of Leq-30min, i.e. 69.1 dB(A) during the surface blasting was well below the daytime construction noise criterion of 75 dB(A).  Conclusion and Recommendation  According to the results of ad-hoc noise measurement taken at Government Quarters on 16 August 2005, the measured noise levels (Leq-30min) did not exceed the noise criterion of 75 dB(A). In addition, the subjected blasting operations were carried out by the Contractor under a valid blasting permit. For the concern of noise impact, the complaint was considered not justifiable.	Closed
50830	Government Quarters (8-10 Caldecott Road)	30-Aug-05	The RSS received a public complaint from a resident of Government Quarters addressing two noise issues:  1. Noise nuisance caused by drilling works at Butterfly Valley; 2. Noise nuisance due to blasting 0045 hrs of 28 August 2005.	No exceedance was recorded for the routine noise monitoring at NM6 (Government Quarters). Ad-hoc noise measurement was conducted on 1 and 2 Sept 05. All measured noise levels complied with the noise criteria.  Conclusion  The complaint was considered not justifiable. However, the Contractor had taken proactive actions in order to minimize the nuisance of the residents, (1) to stop the rock breaking works at BVS2 and (2) to install temporary noise barriers for drilling works.	Closed

Log Ref.	Location of Concern	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
50928	Government Quarters (8-10 Caldecott Road)	28-Sept-05	A resident of Government Quarters complaint about a blast undertaken at 0215hr on 28 Sept 05.	Environmental Monitoring  After receiving the complaint, the ET carried out a continuous noise measurement at Station NM6 (Government Quarters) from 29 to 30 September 2005. All the measured noise levels in term of Leq-5min are close to the baseline noise level. The noise levels after correction of baseline levels were all below the noise criterion of 50 dB(A).  Conclusion  The subjected blasting operations were carried out by the Contractor under a valid blasting permit. In addition, no noise	Closed
			A public complaint was received by the	exceedance was recorded for the ad-hoc noise monitoring.  The complaint lodged is therefore considered not justifiable.  Site Observations	
51025	Caldecott Hill (2 Caldecott Road)	25-Oct-05	MWPMO of Highways Department on 25 October 2005. The complaint was subsequently refereed to the RSS and Environmental Team of Route 8 – Eagle's Nest Tunnel and Associated Works (R8- ENT) Project.  The complaint was lodged by the management company of Caldecott Hill (No.2 Caldecott Road). It was about dust generation when construction vehicles, particularly dump trucks and concrete trucks, traveling along the Water Treatment Works (WTW) access road and its junction with Caldecott Road.  According to the photos provided by the complainant, noticeable dust generation was observed during construction vehicles movement on the roads of concern.	Ad-hoc site inspections were carried out on 25 and 26 Oct 05. On 26 Oct 05, the WTW access road was observed dry. Deposition of dusty materials was noted. Significant dust generation was identified during vehicle movement.  **Contractor's Actions**  Mitigation actions were taken by the Contractor:  1. One labour was appointed to water spray the concerned road junction and clear up of dusty materials deposited on the WTW access road.  2. Regular watering on access road by hose pipe was performed to keep the road wet.  3. All vehicles would be wheel-washed and loads of dusty materials would be covered before leaving the site.  **Conclusions**  Based on the site observations, this complaint was considered to be valid and related to the Project works. However, enhanced dust mitigation measures were taken by the Contractor and the situation was found improved.	Closed

Log Ref.	Location of Concern	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
51031	Po Leung Kuk Choi Kai Yau School	31-Oct-05	The resident site staff (MHJV) of R8-ENT received a complaint from the Principal of PLKCKY School. She commented that the blasting noise (nighttime and daytime) at Butterfly Valley became louder than before.	An ad-hoc noise measurement was taken by ET on 5 Nov 05 to evaluate the noise impact due to daytime surface blasting at the BV. The measurement results revealed that there has been no exceedance of noise level criteria.  The complaint was therefore considered not justifiable.	Closed
51101	Butterfly Valley (Government Quarters)	1-Nov-05	On 1 Nov 05, the Resident Site Staff received a complaint from a resident of the Government Quarters. On 2 Nov 05, a complaint of similar natures and same location was received by the Environmental Protection Department.  The complainant was concerned about the following environmental issues:  1. Noise nuisance due to tunnel blasting works undertaken at midnights and in early mornings (3am to 5am);  2. Noise nuisance due to operation of a generator after 11pm;  3. Construction dust and daytime noise due to processing and stockpiling of crushed rocks at Butterfly Valley;  4. Noise nuisance due to works outside tunnel in the early morning of 2 Nov 05.	For carrying out the above-mentioned blasting For carrying out the above-mentioned blasting operations, the Contractor has obtained a valid blasting permit from CEDD. Under this permit, the Contractor is allowed to carry out 24- hour blasting works. As advised by the Contractor, all the blasting operations had been completed by 12 Nov 05.  Item 2: Noise due to operation of a generator after 11pm According to the Construction Noise Permit issued by EPD, one generator was allowed to be operated after 11pm at South Portal area outside the tunnel. In view of the provision of acoustic enclosure and the separation distance from the generator to Government Quarters (around 300m), the noise impact arising from this generator onto the residents of the Quarters was believed to be insignificant. During the ET's investigation on 11 Nov 05, no engine-like noise generated from the construction site could be identified.  Item 3: Dust and noise due to handling of crushed rocks No noise exceedance was recorded. During the weekly site inspections, deficiencies regarding inadequate dust mitigation measures for the crushed rock processing and stockpiling were occasionally observed. Dry / uncovered stockpiles and dust emissions from crushed rocks handling were sometimes noted.  Item 4: Noise from works out of tunnel in morning of 2 Nov 05 According to the RSS's site records, there has been no activity outside the tunnel in the early morning of 2 November 2005.  Work was undertaken deep inside the tunnel during the concerned period. The mentioned noise nuisance might not be related to R8-ENT Project. An ad-hoc noise measurement was carried out by ET from 8 to 10 November 2005 in order to evaluate the noise at Quarter's residents and no exceedance was recorded.	Closed

Log Ref.	Location of Concern	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
				Conclusion  Based on the information obtained, environmental monitoring results and site observations, this complaint was considered not justifiable, except for the concern of dust nuisance due to crushed rock processing.	
51205	Caldecott Road junction	5-Dec-05	The complaint was lodged by the management company of Villa Carlton. The complainant mentioned that several complaints from the occupants of Villa Carlton were received, against the dust emission when they drove to Kowloon via the Caldecott Road Junction. She also considered that the amount of water spraying by the Contractor was insufficient to suppress dust emission at Caldecott Road Junction.	A similar complaint (Log no. 51025) was received on 25 Oct 05 from Caldecott Hill. Significant dust emission was noted when construction vehicles traveling along the WTW access road and its junction with Caldecott Road.  With implementation of enhanced dust mitigation measures, the situation was found improved and satisfactory.  Site Observations  Since Nov 05, in order to observe the Contractor's actions taken for the above-mentioned complaint, the area of interest was included during the weekly environmental audit. No deficiency had been noted at this area during the audit.  After receiving this new complaint (Log no.51205), several ad-hoc site inspections were carried out on 6, 8 and 14 Dec 05. In addition, the RSS of the Project had carried out daily checking of the condition of the Caldecott Road Junction.  Sufficient dust mitigation measures had been implemented by the Contractor. The condition was found satisfactory. Therefore, this complaint was considered not justifiable.  However, it is noted that the Contractor had stepped up dust mitigation measures to further improve the condition at Caldecott Road junction.	Closed

Log Ref.	Location of Concern	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
60204	Garden Villa	4-Jan-06 (by ETL)	A public complaint was received by the Environmental Protection Department on 3 January 2006. The complaint was subsequently referred to the Environmental Team of Route 8 – Eagle's Nest Tunnel and Associated Works (R8-ENT) Project on 4 January 2006.  According to EPD's information, the complaint was lodged by a complainant, who walked along Tai Po Road on 1-2 January 2006. The following information was given by EPD for our investigation:  • Time of concern: 1-2 January 2006 (Daytime) • Suspected site area of concern: ENT's Toll Plaza and Administration Building. • Dust and noise nuisance was noted by the complainant when he passed Garden Villa. • Noise from wood saw and crane or alike was noted.	According to the Contractor's information, construction activities were carried out on 1 and 2 Jan 06, including:  • Erection and dismantling of formwork  • Fixing water pipe  All the equipment operated by the Contractor on 1-2 Jan 06 complied with the permissible equipment stated in the CNP.  On 1 Jan 06, noise monitoring was carried out. All the results complied with the noise criterion.  B. Construction Dust Impact  Erection and dismantling of formwork and fixing water pipe were considered not dust emissive in nature.  For stockpiles of materials in Toll Plaza area, dust mitigation measures had been implementing by the Contractor. The condition in term of dust control was found satisfactory during the audit sessions on 4 and 11 Jan 06.  Since December 2005, all TSP monitoring results complied with the Action / Limit Level.  Conclusion  Based on the information given, site observations and environmental monitoring results, this complaint was considered not justifiable.  Nevertheless, the Contractor was reminded to adopt good site practice to minimize the environmental impacts at the nearby sensitive receivers	Closed

## APPENDIX J SUMMARY OF EXCEEDANCES

## Summary of exceedances recorded in the reporting quarter

- a) Exceedance Report for 1-hr TSP (NIL)
- b) Exceedance Report for 24-hr TSP (NIL)
- c) Exceedance Report for Construction Noise (NIL)