Highways Department

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

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

Monthly EM&A Report
Part II – Eagle's Nest Tunnel & Associated Works
(Version 1)

January 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.

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

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ABBREVIATION AND ACRONYM

AL Levels	Action and Limit Levels
E / ER	Engineer/Engineer's Representative
EIA	Environmental Impact Assessment
EM&A	Environmental Monitoring and Audit
EMIS	Environmental Mitigation Implementation Schedule
EP	Environmental Permit
EPD	Environmental Protection Department
ET	Environmental Team
HVS	High Volume Sampler
IEC	Independent Environmental Checker
RE	Resident Engineer
RH	Relative Humidity
TSP	Total Suspended Particulates
TDD	Territory Development Department
QA/QC	Quality Assurance / Quality Control
SLM	Sound Level Meter
WMP	Waste Management Plan

EXECUTIVE SUMMARY

Introduction

- This is the twenty-sixth monthly Environmental Monitoring and Audit (EM&A) Report prepared by Cinotech Consultants Limited for the "Route 8 (previously known as Route 9) between Cheung Sha Wan & Sha Tin, Lai Chi Kok Viaduct & Eagle's Nest Tunnel". This report documents the findings of EM&A Works conducted in January 2006 for Contract No. HY/2003/02, Eagle's Nest Tunnel and Associated Works (the Project).

- The major site activities undertaken in the reporting month included slope cutting, excavation works, tunnel lining and concreting works for portal buildings and Administration Buidling.

Environmental Monitoring and Audit Works

- Environmental monitoring and audit works for the Project was performed regularly as stipulated in the EM&A Manual and the results were checked and reviewed. Site audits were conducted once per week. The implementation of the environmental mitigation measures, Event Action Plans and environmental complaint handling procedures were also checked.

- Summary of events and actions taken in the reporting month is tabulated in **Table I**.

Table I Summary of Events Recorded in the Reporting Month

Parameter	***No. of Events***		***No. of Events Due to the Project***	***Action Taken***
	Action Level	***Limit Level***		
1-hr TSP	0	0	0	N/A
24-hr TSP	0	0	0	N/A
Noise	1	0	0	Complain investigation

Environmental Licenses and Permits

- Licenses/Permits granted to the Project include the Environmental Permit (EP) for the Project, Registration of Chemical Waste Producer (RCWP), Construction Noise Permits (CNPs) and Water Discharge Licenses (WDLs).

Key Information in the Reporting Month

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

Table II Summary Table for Key Information in the Reporting Month

Event	Event Details		Action Taken	Status	Remark
	Number	Nature			
Complaint received	1	Dust and noise	Complaint investigation	Closed	---
Changes to the assumptions and key construction / operation activities recorded	0	---	N/A	N/A	---
Status of submissions under EP	0	---	N/A	N/A	---
Notifications of any summons & prosecutions received	0	---	N/A	N/A	---

Future Key Issues:

Major site activities for the coming month include:

- Slope cutting;
- Haul road construction;
- Soil nail installations;
- Retaining wall construction;
- Installation of water proofing membrane in tunnels;
- Portal building construction.

The anticipated environmental impacts will be mainly on dust from slope work, haul roads and stockpiles.

1. INTRODUCTION

Background

1.1 Route 9 (Kowloon Section) (R9K) (hereinafter call the R9K-Project) forms part of the Route 9 between Cheung Sha Wan and Sha Tin (R9-CSWST) project, which will be a new expressway connecting West Kowloon and Sha Tin. It will be the fourth external link between Sha Tin and Kowloon and will form an important link between the northeast New Territories and the west Kowloon, Lantau Island and the western New Territories. R9K is being managed and implemented by the Highways Department (HyD).

1.2 The engineering design of R9K is covered under Agreement No. CE 50/98 "Route 9 between Cheung Sha Wan and Sha Tin – Design Construction Assignment". The main consultant engaged under Agreement No. CE 50/98 is Maunsell Hyder Joint Venture (MHJV), who acts as the Engineer for the construction contracts. The works of R9K mainly comprise a 1.4km dual 3-lane Lai Chi Kok Viaduct from Lai Wan Interchange to Butterfly Valley; 0.5 km of dual 3-lane at-grade carriageway linking to the 2.1 km dual 3-lane twin-bore Eagle's Nest Tunnel with associated portal buildings; a toll plaza with an administration building located with the Sha Tin valley woodland; a ventilation building and an adit; associated noise barriers, noise enclosures, drainage, slope and landscape works; and electrical and mechanical works for the whole R9-CSWST. The remainder of the R9-CSWST forms the Sha Tin Section (R9S) of the project and is being managed and implemented separately by the Civil Engineering and Development Department (CEDD).

1.3 The R9-CSWST project is a Designated Project under the Environmental Impact Assessment Ordinance (Cap. 499) (EIAO). An environmental impact assessment (EIA) report has been prepared in 1998 for the R9-CSWST project (1998 R9 EIA) to consider the key issues of noise, air quality, water quality, ecological, construction waste, landscape and visual, land use and cultural impacts, and identify possible mitigation measures.

1.4 An Updated Final EIA report was subsequently completed in August 1999 for the R9-CSWST project (1999 R9 EIA), to cater for some changes in R9K portion as mentioned in paragraph 1 of 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 and a varied EP No. EP-103/2001/A was subsequently issued on 20 May 2003 for R9K (R9K EP) to HyD as Permit Holder. A varied EP-103/2001/C was recently issued on 22 July 2005.

1.6 The major construction activities of two civil contracts of the R9K project, Contract No. HY/2003/01 entitled "Route 9 – Lai Chi Kok Viaduct" and Contract No. HY/2003/02 entitled "Route 9 – Eagle's Nest Tunnel and Associated Works", were commenced on 15th December 2003 for completion in April 2007.

1.7 "Route 9" was recently re-tiled 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 Consultants Ltd. was appointed as the ET Leader under Condition 2.2 of the EP. Mr. David YEUNG of CH2M-IDC Hong Kong Ltd. was appointed as the IEC under Condition 2.1 of the EP. This is the twenty-sixth monthly EM&A report summarizing the EM&A works for the Project in January 2006.

Project Organizations

1.8 Different parties with different levels of involvement in the project organization include:

- Project Proponent – Major Works Project Management Office (MWPMO) of Highways Department (HyD)
- Engineer / Engineer's Representative (E/ER) – Maunsell-Hyder Joint Venture (MHJV)
- Environmental Team (ET) – Cinotech Consultants Limited
- Independent Environmental Checker (IEC) – CH2M-IDC Hong Kong Ltd.
- Contractor – Leighton-Kumagai Joint Venture (LKJV)

1.9 The responsibilities of respective parties are detailed in Section 1.8.3 of the EM&A Manual (1999) of the Project.

1.10 The key contacts of the Project are shown in **Table 1.1**.

Construction Programme

1.11 The site activities undertaken in the reporting month were:

- Soil nailing, box culvert and water-main works at Butterfly Valley;
- Cut slope, haul road and box culvert construction at Butterfly Valley;
- Chlorine barrier wall construction at Portion X;
- Water proofing membrane and tunnel lining construction at ENT Tunnel;
- OHVD slab and road construction at ENT Tunnel;
- Tunnel drainage, cross passage, ventilation adit shotcreting and concrete lining, E&M works at ENT Tunnel;
- Excavation, construction of building's column and wall at South Portal, North Portal, Toll Plaza and Ventilation Adit;
- Footbridge and subway construction and drainage work at Toll Plaza.

Summary of EM&A Requirements

1.12 The EM&A programme requires construction phase monitoring for air quality and construction noise, and environmental site audit. The EM&A requirements for each parameter are described in the following sections, including:

- All monitoring parameters;
- Action and Limit levels for all environmental parameters;
- Event / Action Plans;
- Environmental mitigation measures, as recommended in the project EIA study final report; and
- Environmental requirements in contract documents.

Table 1.1 Key Project Contacts

Party	Role	Name	Position	Phone No.	Fax No.
HyD	Permit Holder	Mr. Kroc Leung	SE2/R8K	2762 3662	2714 5198
		Mr. George Law	E4/R8K	2762 3675	
MHJV	Engineer	Mr. Conrad Ng	Project Manager	2605 6262	2691 2649
	Engineer's Representative	Mr. Peter Poon	CRE	3552 2500	2743 9200
		Mr. Eric Wong	RE (S & EP)	3552 2551	
		Ms. Sammie Chan	TO (EN)	3552 2605	
Cinotech	Environmental Team	Dr. Priscilla Choy	The ET Leader	2151 2089	3107 1388
		Mr. KK Chan	Audit Team Leader	2151 2077	
		Mr. Henry Leung	Monitoring Team Leader	2151 2087	
CH2M-IDC	Independent Environmental Checker	Mr. David Yeung	Independent Environmental Checker	2507 2203	2507 2293
		Mr. Billy Yu	Assistant Independent Environmental Checker	2872 2949	
LKJV	Contractor	Mr. Ray Brewster	Project Director	9092 6128	2743 1600
		Mr. Kevin Harman	QA/E Manager	3352 2128	
Enquiries Hotline				3552 2226	-
Complaint Hotline				3552 2380	-

1.13 The advice on the implementation status of environmental protection and pollution control/mitigation measures is summarized in Section 4 of this report.

1.14 This report presents the monitoring results, observations, locations, equipment, period, methodology and QA/QC procedures of the required monitoring parameters, namely dust and noise levels and audit works for the Project in January 2006.

2. AIR QUALITY

Monitoring Requirements

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

Monitoring Locations

2.2 Three designated monitoring stations, AM1, AM3 and AM4 was selected for impact dust monitoring for the Project. **Table 2.1** describes the air quality monitoring locations, which are also depicted in **Figure 1a** and **1b**.

Table 2.1 Locations for Air Quality Monitoring

Station	Description	Location
AM1	Yew Chung International School / PLK Choi Kai Yau School	Rooftop
AM3	Slope no. 07SW-D/FR4 near Garden Villa	On Ground
AM4	Government Quarters	Ground Floor[1]

Note: [1]The HVS was installed on the ground floor, which is close to the refuse collection station of the Government Quarters.

Monitoring Equipment

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

Table 2.2 Air Quality Monitoring Equipment

Equipment	Model and Make	Quantity
Calibrator	GMW25; S/N: 1536	1
HVS Sampler	Graseby GMW Model GS2310 High Volume TSP Sampler and associated equipment and shelter	3

Monitoring Parameters, Frequency and Duration

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

Table 2.3 Impact Dust Monitoring Parameters, Frequency and Duration

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

Monitoring Methodology and QA/QC Procedure

Instrumentation

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

Operating/Analytical Procedures

2.6 Operating/analytical procedures for the operation of HVS were as follows:

- A horizontal platform was provided with appropriate support to secure the samplers against gusty wind.
- No two samplers were placed less than 2 meters apart.
- The distance between the sampler and an obstacle, such as buildings, was at least twice the height that the obstacle protrudes above the sampler.
- A minimum of 2 meters of separation from walls, parapets and penthouses was required for rooftop samples.
- A minimum of 2 meters separation from any supporting structure, measured horizontally was required.
- No furnaces or incineration flues were nearby.
- Airflow around the sampler was unrestricted.
- The sampler was more than 20 meters from the drip line.
- Any wire fence and gate, to protect the sampler, should not cause any obstruction during monitoring.

2.7 Prior to the commencement of the dust sampling, the flow rate of the high volume sampler was properly set (between 1.1 m^3/min. and 1.4 m^3/min.) in accordance with the manufacturer's instruction to within the range recommended in USEPA Standard Title 40, CFR Part 50. For TSP sampling, fiberglass filters (G810) were used.

2.8 The power supply was checked to ensure the sampler worked properly. On sampling, the sampler was operated for 5 minutes to establish thermal equilibrium before placing any filter media at the designated air monitoring station.

2.9 The filter holding frame was then removed by loosening the four nuts and a weighted and conditioned filter was carefully centered with the stamped number upwards, on a supporting screen.

2.10 The filter was aligned on the screen so that the gasket formed an airtight seal on the outer edges of the filter. Then the filter holding frame was tightened to the filter holder with swing bolts. The applied pressure should be sufficient to avoid air leakage at the edges.

2.11 The shelter lid was closed and secured with the aluminum strip. The timer was then programmed. Information was recorded on the record sheet, which included the starting time, the weather condition and the filter number (the initial weight of the filter paper can be found out by using the filter number). After sampling, the filter was removed and sent to the laboratory for weighing. The elapsed time was also recorded.

2.12 Before weighing, all filters were equilibrated in a conditioning environment for 24 hours. The conditioning environment temperature should be between 25°C and 30°C and not vary by more than ±3°C; the relative humidity (RH) should be < 50% and not vary by more than ±5%. A convenient working RH is 40%.

Maintenance/Calibration

2.13 The following maintenance/calibration was required for the HVS:

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

Results and Observations

2.14 All TSP monitoring was conducted as scheduled during the reporting month.

2.15 No Action/Limit Level exceedance was recorded for both 1-hr and 24-hr TSP monitoring in the reporting month.

2.16 Wind data monitoring equipment has been installed in Shatin Heights for logging wind speed and wind direction. These wind data is summarized in **Appendix D**.

2.17 The monitoring data and graphical presentations of 1-hour and 24-hour TSP monitoring results are shown in **Appendices E** and **F**, respectively.

3. NOISE

Monitoring Requirements

3.1 Monitoring and audit of construction noise levels is required to be conducted, in accordance with the EM&A Manual, to ensure that any unacceptable noise impacts could be readily detected and timely and appropriate action be undertaken to rectify the situation.

3.2 The construction noise levels shall be measured in terms of the A-weighted equivalent continuous sound pressure level (L_{eq}). L_{eq} (30min) shall be used as the monitoring parameter for the time period between 0700-1900 hours on normal weekdays. For all other time periods, L_{eq} (5min) shall be employed for comparison with the Noise Control Ordinance (NCO) criteria. As supplementary information for data auditing, statistical results such as L_{10} and L_{90} shall also be obtained for reference.

3.3 Three designated noise monitoring stations, namely NM1, NM5 & NM6 were selected for impact monitoring in accordance to the EM&A manual (1999) and the subsequent EPD approval of the relocations.

3.4 Noise monitoring is also required to be conducted at station NM7 in accordance with the EM&A Manual (1998). The noise monitoring at the station is required to be conducted under CEDD's construction Contract No. ST 89/02 "Sha Tin Heights Tunnel and Approaches" in accordance with the requirement of Environmental Permit No. EP104/2001/A. The impact noise monitoring results at station NM7 are also presented in this report.

3.5 **Appendix A** shows the established Action and Limit Levels for the environmental monitoring works.

Monitoring Locations

3.6 Noise monitoring was conducted at four designated monitoring stations as summarized in Table 3.1. Figures 1a & 1b show the locations of these stations.

Table 3.1 Noise Monitoring Stations

Monitoring Station	Description	Location
NM1	Yew Chung International School / PKL Choi Kai Yau School	Rooftop
NM5	Villa Carlton	Ground Floor[1]
NM6	Government Quarters	Rooftop of Refuse Collection Station
NM7	Garden Villa	Rooftop

Note: [1] The noise measurement was taken at 2.3m above the ground floor of Villa Carlton, where has a line of sight of the construction site in the opposite.

Monitoring Equipment

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

Table 3.2 Noise Monitoring Equipment

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

Monitoring Parameters, Frequency and Duration

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

Table 3.3 Noise Monitoring Parameters, Frequency and Duration

Station	Parameter	Period[1]	Frequency	Measurement
NM1	L_{10}(30 min.)dB(A) L_{90}(30 min.)dB(A) L_{eq}(30 min.)dB(A)	(a) 0700-1900 hrs. on weekdays (b) 1900-2300 hrs. on weekdays (c) 0700-2300 hrs. on holidays (d) 2300-0700 hrs on any days	Once per week	Façade
NM5				Façade
NM6				Free Field
NM7				Façade

Note: [1](b), (c) and (d) will only be conducted if construction works are undertaken during these periods.

Monitoring Methodology and QA/QC Procedures

- The Sound Level Meter was generally set on a tripod at a height of 1.2 m above the ground, depending to the actual monitoring condition.
- For free field measurement (if any), the meter was positioned away from any nearby reflective surfaces. All records for free field noise levels were adjusted with a correction of +3 dB(A).
- The battery condition was checked to ensure the correct functioning of the meter.
- Parameters such as frequency weighting, the time weighting and the measurement time were set as follows:
  - frequency weighting : A
  - time weighting : Fast
  - time measurement : 30 minutes / 5 minutes
- Prior to and after each noise measurement, the meter was calibrated using a Calibrator for 94.0 dB at 1000 Hz. If the difference in the calibration level before and after measurement was more than 1.0 dB, the measurement would be considered invalid and repeat of noise measurement would be required after re-calibration or repair of the equipment.
- The wind speed was frequently checked with the portable wind meter.

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

Maintenance and Calibration

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

Results and Observations

3.10 Noise monitoring was performed at the four designated locations during the daytime period (0700-1900 hours) as scheduled in this reporting month. Restricted-hour monitoring was also conducted at NM5, NM6 and NM7.

3.11 All the Construction Noise Levels (CNLs), except the monitoring (0700-1900 on weekdays) at NM1 and NM6, reported in this report were adjusted with the corresponding baseline level, in order to facilitate the interpretation of the noise exceedance.

3.12 Noise monitoring results and graphical presentations are shown in **Appendix G**.

3.13 One Action Level exceedance was recorded due to a noise complaint received on 4 January 2006. No Limit Level exceedance was recorded in the reporting month.

4. ENVIRONMENTAL AUDIT

Site Audits

4.1 Site audits were carried out on a weekly basis to monitor the timely implementation of proper environmental management practices and mitigation measures in the Project site. The summaries of site audits are attached in **Appendix I**.

4.2 Site audits were conducted on 4, 11, 19 and 25 January 2006 by ET. The audit session on 4 January 2006 was conducted with the representatives of HyD, IEC, ER, the Contractor and ET.

Review of Environmental Monitoring Procedures

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

Air Quality Monitoring

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

Noise Monitoring

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

Status of Environmental Licensing and Permitting

4.4 All permits/licenses obtained for the Project are summarized in **Table 4.1**.

Implementation Status of Environmental Mitigation Measures

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

Table 4.1 Summary of Environmental Licensing and Permit Status

Permit No.	Valid Period		Details	Status
	From	To		
Environmental Permit (EP)				
EP-103/2001/C	22/07/05	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 Chemical Waste Producer				
WPN 5213-761-L2595-01	26/01/04	N/A	N/A	Valid
Water Discharge Licence				
EP482/261/0327/I	03/05/04	31/05/09	Discharge of industrial trade effluent and effluent arsing from construction activities at the construction site at Ventilation Adit on Tai Po Road (behind Shell Filling Station) opposite Pinehilll Development Highways.	Valid
EP482/261/0326/I	01/04/04	30/04/09	Discharge of industrial trade effluent and effluent arsing 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
Construction Noise Permit (CNP)				
GW-RW0643-05	08/10/05	07/04/06	*Location*: Butterfly Valley *Time period*: general holiday (including Sundays) between 0700 and 2300 hours, and any other day between 1900 and 2300 hours.	Valid
GW-RW0503-05	06/08/05	05/02/06	*Location*: Ventilation Adit *Time period*: general holiday (including Sundays) between 0700 and 2300 hours, and any other day between 1900 and 2300 hours.	Valid
GW-RW0504-05	06/08/05	05/02/06	*Location*: Ventilation Adit *Time period*: Any day between 2300 and 0700 hours on next day.	Valid

Permit No.	Valid Period		Details	Status
	From	To		
GW-RN0532-05	04/10/05	03/04/06	*Location*: South Portal *Time period*: general holiday (including Sundays) between 0900 and 2300 hours, and any other day between 1900 and 2300 hours.	Valid
GW-RN0447-05	04/10/05	03/04/06	*Location*: South Portal *Time period*: Any day between 2300 and 0700 hours on next day.	Valid
GW-RN0449-05	04/10/05	03/04/06	*Location*: North Portal *Time period*: general holiday (including Sundays) between 0900 and 2300 hours, and any other day between 1900 and 2300 hours.	Valid
GW-RN0448-05	04/10/05	03/04/06	*Location*: North Portal *Time period*: Any day between 2300 and 0700 hours on next day.	Valid
GW-RN0537-05	11/11/05	10/05/06	*Location:* Toll Plaza *Time period:* general holiday (including Sundays) between 0900 and 2300 hours, and any other day between 1900 and 2300 hours.	Valid
GW-RN0593-05	08/12/05	07/06/06	*Location*: South and North Portal Buildings *Time period:* general holiday (including Sundays) between 0900 and 2400 hours, and any other day between 1900 and 2400 hours.	Valid

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

Table 4.2 Observations and Recommendations of Site Audit

Parameters	Date	Observations / Recommendations	Remedial Actions
Air Quality	4-Jan-06	Fugitive dust emission was observed from soil nailing work at BVS2. The Contractor was reminded to provide proper cover and sufficient water spray for the works. Immediate action was taken by the Contractor to rectify the problem.	Rectification / improvement was observed during the site audit on 11-Jan-06.
	4-Jan-06 11-Jan-06	Dark smoke was emitted from an air compressor at BVS2. The Contractor was reminded to ensure proper maintenance for the equipment used on site.	Rectification / improvement was observed during the site audit on 19-Jan-06.
Noise	25-Jan-06	Noise label of Air Compressor was found missing at BVS-2. The Contractor was reminded to provide a label for the compressor.	Rectification / improvement was observed during the site audit on 2-Feb-06.
Chemical and Waste Management	4-Jan-06	An oil drum was placed on bare ground besides the air compressor at BVS2. A drip tray should be provided for the drum.	Rectification / improvement was observed during the site audit on 11-Jan-06.

Parameters	Date	Observations / Recommendations	Remedial Actions
	4-Jan-06	Refuse was found scattering on site behind the container barrier and in the sand trap at Ventilation Adit.	Rectification / improvement was observed during the site audit on 11-Jan-06.
	11-Jan-06	A hole was observed on the drip tray at Portion D3. The contractor was reminded to block the hole to prevent oil dripping on the ground.	Rectification / improvement was observed during the site audit on 19-Jan-06.
	11-Jan-06	Oil stain was observed beside drip tray near sub-contractor office at Toll Plaza. The contractor was reminded to collect the stained soil.	Rectification / improvement was observed during the site audit on 19-Jan-06.
	19-Jan-06	Oil drum was placed on the bare ground at Ventilation Adit. The contractor was reminded to provide a drip tray for the oil drum.	Rectification / improvement was observed during the site audit on 25-Jan-06.
	25-Jan-06	Oil drum was placed on the bare ground near the Air Compressor at BVS-2. The contractor was reminded to provide a drip tray for the oil drum.	Rectification / improvement was observed during the site audit on 2-Feb-06.
	25-Jan-06	Refuse was found scattering on site near aqur-sed at South Portal. The Contractor was reminded to clean the refuse.	Rectification / improvement was observed during the site audit on 2-Feb-06.

Summary of Exceedances

1-hr TSP Monitoring

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

24-hr TSP Monitoring

4.8 No Action/Limit Level exceedance was recorded in this reporting month.

Construction noise

4.9 One Action Level exceedance was recorded due to a noise complaint received on 4 January 2006. No Limit Level exceedance was recorded in the reporting month.

Implementation Status of Event Action Plans

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

Summary of Complaints and Prosecutions

4.11 One environmental complaint (Log no. 60104) was received on 4 January 2006 from EPD. According to EPD's information, the complainant, who walked along Tai Po Road on 1-2 January 2006, commented that construction dust and noise was noted on 1-2 January 2006 during daytime when he pass Garden Villa. The site of concern was likely to be ENT's Toll Plaza and Administration Building. Complaint investigation was undertaken by ET. Based on the monitoring results, the complaint was considered not justifiable. The complaint investigation report was submitted on 13 January 2006.

4.12 No environmental related prosecution was received in the reporting month.

4.13 There were 22 environmental complaints and no prosecution received since the commencement of the Project. The updated Complaint Log is shown in **Appendix M**.

5. FUTURE KEY ISSUES

Key Issues for the Coming Month

5.1 Key issues to be considered in coming months include:

- Potential dust emission from slope works and haul road construction at Butterfly Valley, excavation, soil nailing and vehicle movement on haul roads;
- Noise generation from excavation works, rock breaking works at Butterfly Valley;
- Performance of wheel washing facilities at South Portal area;
- Storage of chemicals/fuel and chemical oil at Portion D3 and Toll Plaza area.

Monitoring Schedule for the Next Month

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

Construction Program for the Next Month

5.3 The tentative construction program for the Project is provided in **Appendix L**. The major construction activities in coming months include:

ENT Tunnel
- Water-proofing membrane, tunnel lining, OHVD slab, road slab, tunnel drainage, cross passage, Ventilation Adit lining, Kicker construction, OHVD soffit and E&M works.

Butterfly Valley
- Cut slope and haul road, soil nailing, box culvert, retaining wall, water mains construction, noise barrier footing and drainage works.

South Portal Building
- Concreting of columns, walls and slab at 1/F and 2/F levels.

North Portal Building
- Concreting of columns, walls and slabs at 2/F and 3/F levels.

Toll Plaza's Structures and Administration Building
- Footbridge and subway, drainage works, concreting of columns, walls and slabs at roof level.

Ventilation Adit Tunnel and Building
- Concreting of columns, walls and slabs at 1/F and 2/F levels.

Other Works Areas
- Chlorine barrier wall construction at Portion X.
- E&M installation works within SHT works area.
- Plastering and painting of wall at SHT Portal Buildings.

6. CONCLUSIONS AND RECOMMENDATIONS

Conclusions

6.1 Environmental monitoring works were performed in the reporting month and all monitoring results were checked and reviewed.

6.2 No exceedance was recorded for the 1-hr and 24-hr TSP monitoring in the reporting month. A noise Action Level exceedance was triggered by a complaint.

6.3 One environmental complaint was received on 4 January 2006. Complaint investigation was undertaken and the complaint was considered not justifiable.

Recommendations

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

Dust Impact

- To ensure adequate water spray or other dust suppression measures are applied for the WTW access road and the haul roads and stockpile areas in Butterfly Valley.
- To ensure vehicles' wheels are free of dust before exiting the site.
- To cover idle soil slope surface and stockpile of dusty materials to prevent wind erosion.

Noise Impact

- To provide temporary noise barriers for noisy activities (such as breaking works).
- To avoid concurrent operation of noisy equipment near noise sensitive receivers.

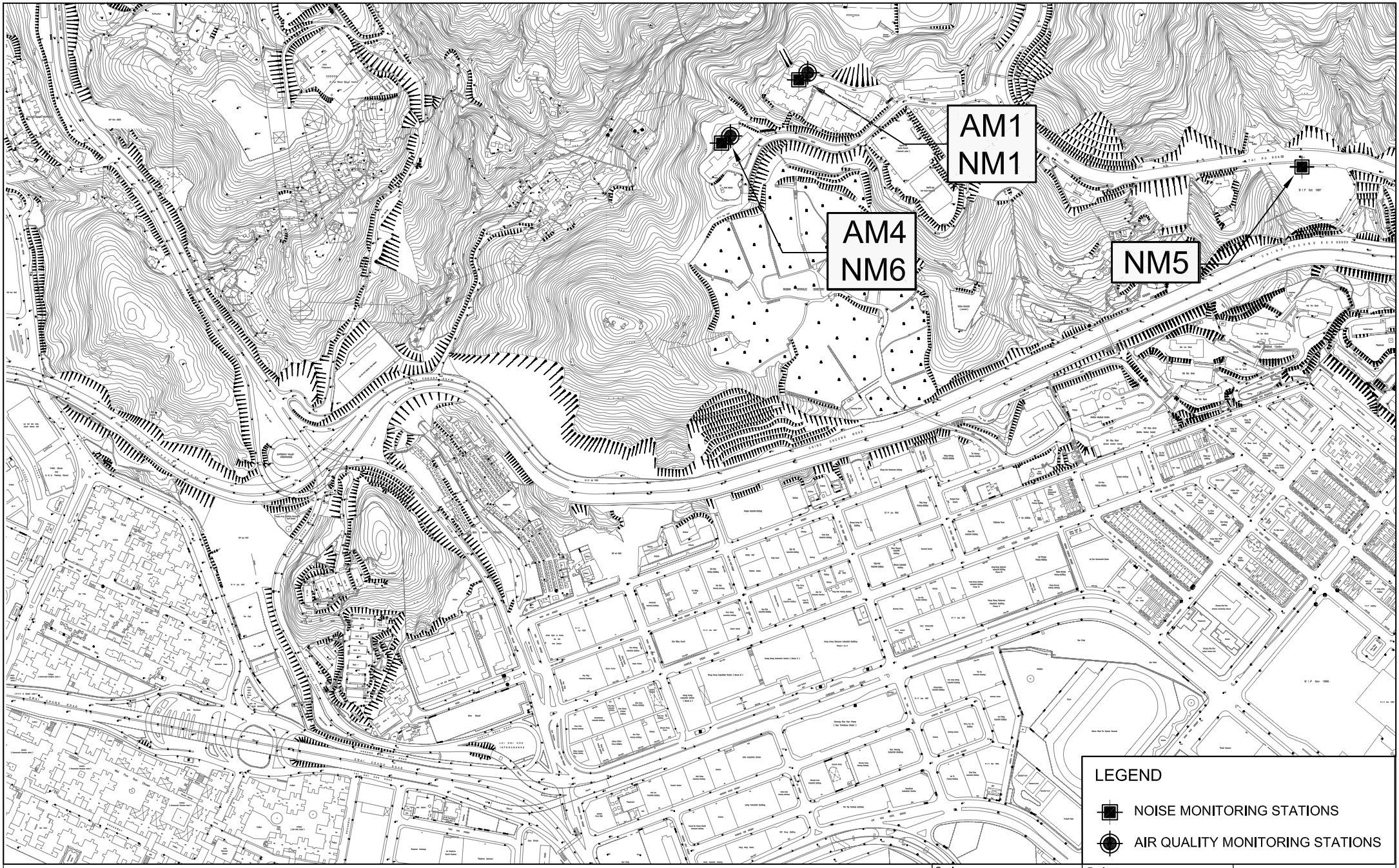
Water Impact

- To closely monitor the capacity of existing desilting facility on site, especially for the discharge at the site in Butterfly Valley and Toll Plaza.
- To keep the sedimentation facilities well maintained and perform de-silting regularly.

Waste/Chemical Management

- To ensure proper storage of chemical and chemical waste on site.
- To check for any accumulation of waste materials or rubbish on site.
- To avoid any discharge or accidental spillage of chemical waste or oil directly.

FIGURES



Title

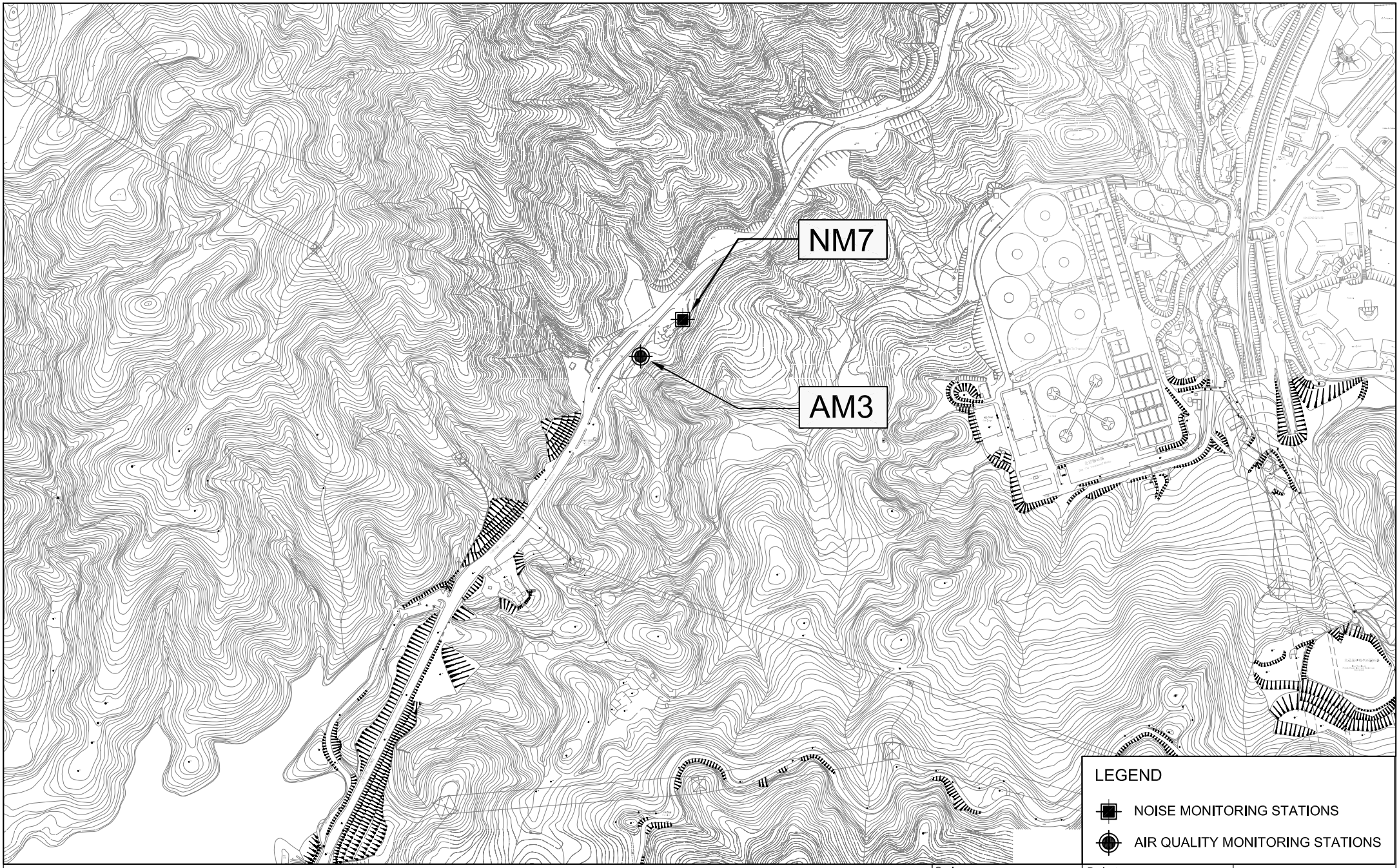
ROUTE 8 (PREVIOUSLY KNOWN AS ROUTE 9) BETWEEN CHEUNG SHA WAN AND SHA TIN
CONTRACT NO. HY/2003/02 - EAGLE'S NEST TUNNEL AND ASSOCIATED WORKS

LOCATIONS OF MONITORING STATIONS

Scale	Project No.
1 : 6500 (A4)	MA3024
Date	Figure No.
2005	1a

CINOTECH consultants limited

F:\PEOJECTS\MA3024\DRAWING\IMPACT\ENT\FIGURE 1a.DWG



Title

ROUTE 8 (PREVIOUSLY KNOWN AS ROUTE 9) BETWEEN CHEUNG SHA WAN AND SHA TIN
CONTRACT NO. HY/2003/02 - EAGLE'S NEST TUNNEL AND ASSOCIATED WORKS

LOCATIONS OF MONITORING STATIONS

Scale	Project No.
1 : 6500 (A4)	MA3024
Date	Figure No.
2005	1b

CINOTECH consultants limited

F:\PEOJECTS\MA3024\DRAWING\IMPACT\ENT\FIGURE 1b.DWG

APPENDIX A
ACTION AND LIMIT LEVELS

Appendix A - Action and Limit Levels (ENT)

1-Hour TSP

Location	Action Level, µg/m^3	Limit Level, µg/m^3
AM1	296	500
AM3	350	
AM4	294	

24-Hour TSP

Location	Action Level, µg/m^3	Limit Level, µg/m^3
AM1	168	260
AM3	200	
AM4	170	

Construction Noise

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

(*) 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 reduced to 65 dB(A) during school examination periods.

APPENDIX B
COPIES OF CALIBRATION CERTIFCATES

High-Volume TSP Sampler
5-POINT CALIBRATION DATA SHEET

CINOTECH

File No. MA3024/18/0014

Station: Po Leung Kuk Choi Kai Yau School
Operator: WK
Date: 28-Nov-05
Next Due Date: 27-Jan-06
Equipment No.: A-01-18
Serial No. 0723

Ambient Condition			
Temperature, Ta (K)	295.9	Pressure, Pa (mmHg)	766

Orifice Transfer Standard Information					
Equipment No.:	A-04-03	Slope, mc	0.0572	Intercept, bc	0.0261
Last Calibration Date:	23-Apr-05	**mc x Qstd + bc = $[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$**			
Next Calibration Date:	22-Apr-06	**Qstd = $\{[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$ -bc} / mc**			

Calibration of TSP Sampler

Calibration Point	Orfice			HVS	
	ΔH (orifice), in. of water	$[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$	Qstd (CFM) **X - axis**	ΔW (HVS), in. of oil	$[\Delta W \times (Pa/760) \times (298/Ta)]^{1/2}$ **Y-axis**
1	12.5	3.56	61.82	7.5	2.76
2	9.6	3.12	54.12	5.6	2.38
3	7.3	2.72	47.13	4.2	2.06
4	5.1	2.28	39.32	3.1	1.77
5	3.2	1.80	31.05	1.9	1.39

By Linear Regression of Y on X

Slope , mw = 0.0439 **Intercept, bw =** 0.0249

Correlation coefficient* = 0.9991

*If Correlation Coefficient < 0.990, check and recalibrate.

Set Point Calculation

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

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

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

Therefore, Set Point; $W = (mw \times Qstd + bw)^2 \times (760 / Pa) \times (Ta / 298) =$ **3.60**

Remarks:

Conducted by: W.K. Tang Signature: Date: 28 Nov 05
Checked by: Signature: Date: 28 NOV 05

F:\Equipment\Calibration\HVS\A-01-18\20051128

High-Volume TSP Sampler
5-POINT CALIBRATION DATA SHEET

CINOTECH

File No. MA2027/A14/0015

Station: Garden Vilia
Operator: WK
Date: 12-Dec-05
Next Due Date: 11-Feb-06
Equipment No.: A-01-14
Serial No. 1354

Ambient Condition			
Temperature, Ta (K)	287.3	Pressure, Pa (mmHg)	770.1

Orifice Transfer Standard Information					
Equipment No.:	A-04-03	Slope, mc	0.0572	Intercept, bc	0.0261
Last Calibration Date:	23-Apr-05	**mc x Qstd + bc = $[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$**			
Next Calibration Date:	22-Apr-06	**Qstd = $\{[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$ -bc} / mc**			

Calibration of TSP Sampler

Calibration Point	Orfice			HVS	
	ΔH (orifice), in. of water	$[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$	Qstd (CFM) **X - axis**	ΔW (HVS), in. of oil	$[\Delta W \times (Pa/760) \times (298/Ta)]^{1/2}$ **Y-axis**
1	11.4	3.46	60.06	7.0	2.71
2	9.2	3.11	53.91	5.4	2.38
3	6.5	2.61	45.24	4.1	2.08
4	4.5	2.17	37.56	2.9	1.75
5	3.0	1.78	30.59	1.7	1.34

By Linear Regression of Y on X

Slope , mw = 0.0449 **Intercept, bw =** 0.0109

Correlation coefficient* = 0.9965

*If Correlation Coefficient < 0.990, check and recalibrate.

Set Point Calculation

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

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

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

Therefore, Set Point; $W = (mw \times Qstd + bw)^2 \times (760 / Pa) \times (Ta / 298) =$ **3.58**

Remarks:

Conducted by: WK. Tang Signature: Date: 12/12/05

Checked by: Signature: Date: 12 Dec 2005

High-Volume TSP Sampler
5-POINT CALIBRATION DATA SHEET

CINOTECH

File No. MA3024/17/0016

Station: Government Quarter
Operator: KY
Date: 28-Nov-05
Next Due Date: 27-Jan-06
Equipment No.: A-01-17
Serial No. 3460

Ambient Condition			
Temperature, Ta (K)	295.9	Pressure, Pa (mmHg)	766

Orifice Transfer Standard Information					
Equipment No.:	A-04-03	Slope, mc	0.0572	Intercept, bc	0.0261
Last Calibration Date:	23-Apr-05	**mc x Qstd + bc = $[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$**			
Next Calibration Date:	22-Apr-06	**Qstd = $\{[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$ -bc} / mc**			

Calibration of TSP Sampler					
Calibration Point	Orfice			HVS	
	ΔH (orifice), in. of water	$[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$	Qstd (CFM) **X - axis**	ΔW (HVS), in. of oil	$[\Delta W \times (Pa/760) \times (298/Ta)]^{1/2}$ **Y-axis**
1	12.9	3.62	62.81	7.6	2.78
2	10.5	3.26	56.62	6.5	2.57
3	7.8	2.81	48.74	4.9	2.23
4	5.4	2.34	40.47	3.3	1.83
5	2.7	1.66	28.49	1.8	1.35

By Linear Regression of Y on X

Slope , mw = 0.0424 **Intercept, bw =** 0.1407

Correlation coefficient* = 0.9990

*If Correlation Coefficient < 0.990, check and recalibrate.

Set Point Calculation

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

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

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

Therefore, Set Point; $W = (mw \times Qstd + bw)^2 \times (760 / Pa) \times (Ta / 298) =$ **3.80**

Remarks:

Conducted by: KLim Signature: Date: 28 NOV 05

Checked by: Signature: Date: 28 NOV 05

F:\Equipment\Calibration\HVS\A-01-17\20051128

WELLAB LTD.

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

TEST REPORT

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

ATTN: **Mr. Henry Leung**

Test Report No.:	C/05/50503
Date of Issue:	2005-05-03
Date Received:	2005-05-03
Date Tested:	2005-05-03
Date Completed:	2005-05-03
Page:	1 of 1

Certificate of Calibration

Item for calibration:

Description	: RS232 Integral Vane Digital Anemometer
Manufacturer	: AZ Instrument
Model No.	: 451104
Serial No.	: 9020746
Project No.	: C13
Equipment No.	: A-03-01

Test conditions:

Room Temperature	: 21 degree Celsius
Relative Humidity	: 70%
Pressure	: 100.8 kPa

Methodology:

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

Results:

	Reference Set Point	Instrument Readings
Measuring Air Velocity, m/s	2.00	2.00
Temperature, °C	20.0	20.1

PREPARED AND CHECKED BY:
For and On Behalf of **WELLAB Ltd.**

Patrick.

PATRICK TSE
Operation Manager

A.04.03

Andersen Instruments, Inc.

Orifice Transfer Standard Certification Worksheet

Date: 04/23/2005 **Rootsmeter S/N:** 9736553 **Ta:** 22.00 C
Operator: RA **Calibrator S/N:** 1888A **Pa:** 761.0 mm Hg
Calibrator Model #: G25A **Placed in service:**

Run	Vol. Init. (m3)	Vol. Final (m3)	Δ Vol. (m3)	Δ Time (min)	ΔP (mm Hg)	ΔH (in H2O)
1	1.00	2.00	1.00	1.404	3.08	2.00
2	3.00	4.00	1.00	0.997	6.17	4.00
3	5.00	6.00	1.00	0.889	7.85	5.00
4	7.00	8.00	1.00	0.848	8.59	5.50
5	9.00	10.00	1.00	0.700	12.42	8.00

Data Tabulation

Vstd (m3)	Qstd (x-axis)	$\sqrt{\Delta H\left(\frac{Pa}{Pstd}\right)\left(\frac{Tstd}{Ta}\right)}$ (y-axis)	Va	Qa (x-axis)	$\sqrt{\Delta H(Ta / Pa)}$ (y-axis)
1.007	0.717	1.422	0.996	0.709	0.881
1.003	1.006	2.011	0.992	0.995	1.246
1.000	1.125	2.248	0.990	1.113	1.393
0.999	1.179	2.358	0.989	1.166	1.461
0.994	1.420	2.844	0.984	1.405	1.762
	m =	2.0208		m =	1.2658
	b =	-0.024947		b =	-0.015460
	r =	0.999989		r =	0.999989

Calculations

$$Vstd = \Delta Vol((Pa - \Delta P) / Pstd)(Tstd / Ta)$$
$$Qstd = Vstd / \Delta Time$$
$$Va = \Delta Vol((Pa - \Delta P) / Pa)$$
$$Qa = Va / \Delta Time$$

For subsequent flow rate calculations:

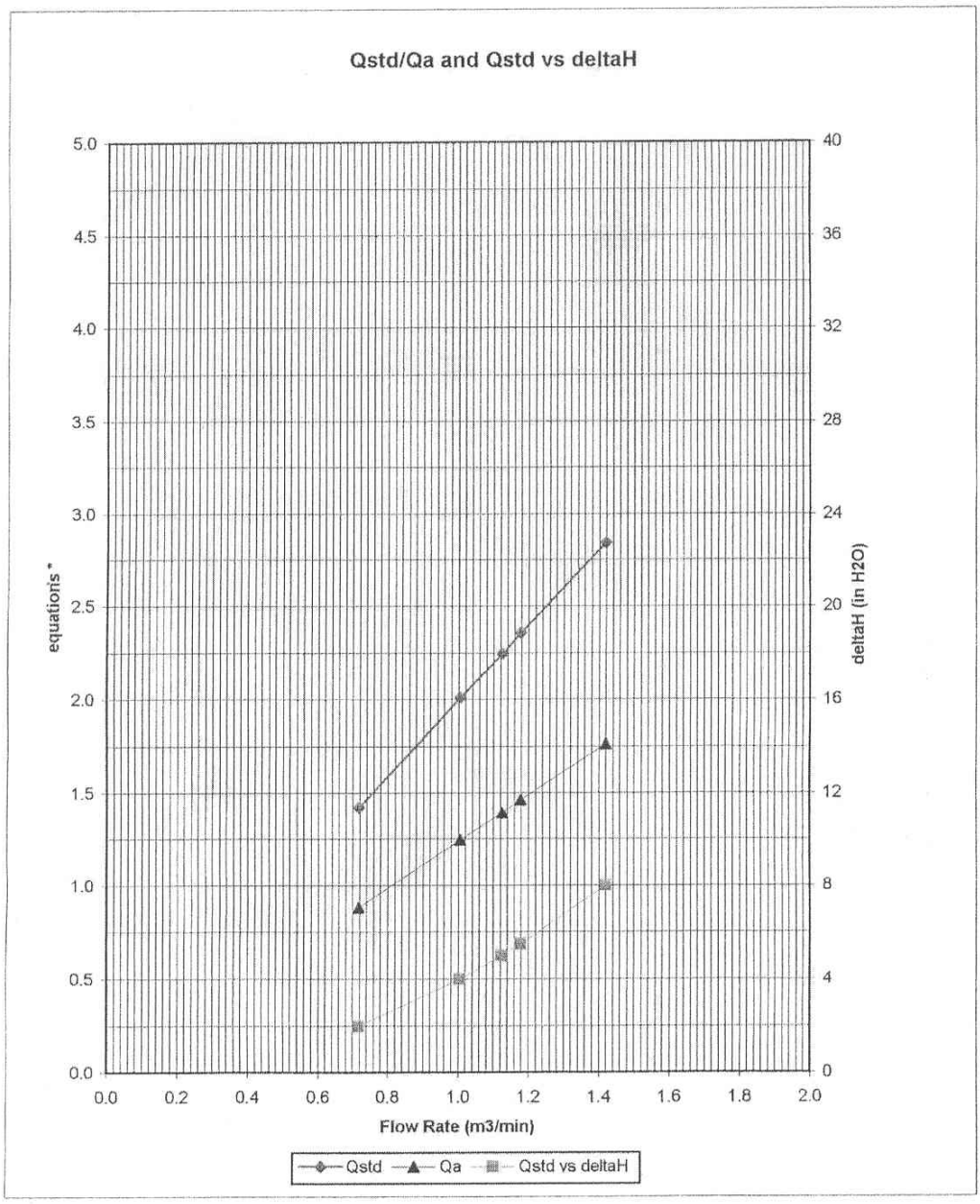
$$Qstd = 1 / m\left(\left(\sqrt{\Delta H\left(\frac{Pa}{Pstd}\right)\left(\frac{Tstd}{Ta}\right)}\right) - b\right)$$
$$Qa = 1 / m\left(\left(\sqrt{\Delta H(Ta / Pa)}\right) - b\right)$$

Standard Conditions:
Tstd: 298.18 ° K
Pstd: 760 mm Hg

where:
ΔH: calibrator manometer reading (in H2O)
ΔP: rootsmeter manometer reading (mm Hg)
Ta: actual absolute temperature (° K)
Pa: actual barometric pressure (mm Hg)
b: intercept
m: slope

For additional information consult:
1. The Federal Register, Vol. 47, No.234, pp. 54896-54921, Dec. 6, 1982
2. Quality Assurance Handbook, Vol II (EPA 60074-77-277a), Section 2.11
3. Andersen Instruments, Inc. Instruction Manual

Notes:
1. Copies of this calibration are not kept on file.
2. EPA recommends calibrators should be recalibrated after one year of use.



* y-axis equations:

Qstd series: $\sqrt{\Delta H\left(\frac{Pa}{Pstd}\right)\left(\frac{Tstd}{Ta}\right)}$

Qa series: $\sqrt{(\Delta H(Ta / Pa))}$

WELLAB LTD.

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

TEST REPORT

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

ATTN: **Mr. Henry Leung**

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

Certificate of Calibration

Item for calibration:

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

Test conditions:

Room Temperatre	: 20 degree Celsius
Relative Humidity	: 63%

Test Specifications:

Performance checking at 94 and 114 dB

Methodology:

In-house method, according to manufacturer instruction manual

Results:

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

PREPARED AND CHECKED BY:
For and On Behalf of **WELLAB Ltd.**

Patrick

PATRICK TSE
Operation Manager

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

TEST REPORT

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

ATTN: **Mr. Henry Leung**

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

Certificate of Calibration

Item for calibration:

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

Test conditions:

Room Temperatre	: 20 degree Celsius
Relative Humidity	: 60%

Test Specifications:

Performance checking at 94 and 114 dB

Methodology:

In-house method, according to manufacturer instruction manual

Results:

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

PREPARED AND CHECKED BY:
For and On Behalf of **WELLAB Ltd.**

Patrick.

PATRICK TSE
Operation Manager

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

TEST REPORT

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

ATTN: **Mr. Henry Leung**

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

Certificate of Calibration

Item for calibration:

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

Test conditions:

Room Temperatre	: 22 degree Celsius
Relative Humidity	: 65%

Test Specifications:

Performance checking at 94 and 114 dB

Methodology:

In-house method, according to manufacturer instruction manual

Results:

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

PREPARED AND CHECKED BY:
For and On Behalf of **WELLAB Ltd.**

Patrick.

PATRICK TSE
Laborary Manager

WELLAB LTD.

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

TEST REPORT

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

ATTN: **Mr. Henry Leung**

Test Report No.:	C/N/50905-2
Date of Issue:	2005-09-06
Date Received:	2005-09-05
Date Tested:	2005-09-05
Date Completed:	2005-09-06
Next Due Date:	2006-09-05
Page:	1 of 1

Certificate of Calibration

Item for calibration:

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

Test conditions:

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

Test Specifications:

Performance checking at 94 and 114 dB

Methodology:

In-house method, according to manufacturer instruction manual

Results:

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

PREPARED AND CHECKED BY:
For and On Behalf of **WELLAB Ltd.**

Patrick.

PATRICK TSE
Operation Manager

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

TEST REPORT

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

ATTN: **Mr. Henry Leung**

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

Certificate of Calibration

Item for calibration:

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

Test conditions:

Room Temperatre	: 22 degree Celsius
Relative Humidity	: 65%

Test Specifications:

Performance checking at 94 and 114 dB

Methodology:

In-house method, according to manufacturer instruction manual

Results:

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

PREPARED AND CHECKED BY:
For and On Behalf of **WELLAB Ltd.**

Patrick.

PATRICK TSE
Operation Manager

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

TEST REPORT

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

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

ATTN: **Mr. Henry Leung**

Item for calibration:

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

Test conditions:

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

Methodology:

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

Results:

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

PREPARED AND CHECKED BY:
For and On Behalf of **WELLAB Ltd.**

Patrick.

PATRICK TSE
Operation Manager

WELLAB LTD.

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

TEST REPORT

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

Test Report No.:	C/05/50305
Date of Issue:	2005-03-05
Date Received:	2005-03-04
Date Tested:	2005-03-05
Date Completed:	2005-03-05
Next Due Date:	2006-03-04

ATTN: **Mr. Henry Leung**

Page: 1 of 1

Item for calibration:

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

Test conditions:

Room Temperatre	: 19 degree Celsius
Relative Humidity	: 70%
Pressure	: 1020.1hPa

Methodology:

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

Results:

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

PREPARED AND CHECKED BY:
For and On Behalf of **WELLAB Ltd.**

Patrick.

PATRICK TSE
Operation Manager

WELLAB LTD.

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

TEST REPORT

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

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

ATTN: **Mr. Henry Leung**

Item for calibration:

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

Test conditions:

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

Methodology:

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

Results:

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

PREPARED AND CHECKED BY:
For and On Behalf of **WELLAB Ltd.**

Patrick.

PATRICK TSE
Operation Manager

APPENDIX C
ENVIRONMENTAL MONITORING AND AUDIT SCHEDULE

Environmental Monitoring for Eagle's Nest Tunnel
Air Quality and Noise Monitoring Schedule for January 2006

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

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

AM1	Yew Chung International School /Po Leung Kuk Choi Kai Yau School
AM3	Garden Villa
AM4	Government Quarters

NM1	Yew Chung International School /Po Leung Kuk Choi Kai Yau School
NM5	Villa Carlton
NM6	Government Quarters
NM7	Garden Villa

Environmental Monitoring for Eagle's Nest Tunnel
Tentative Air Quality and Noise Monitoring Schedule for February 2006

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

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

AM1	Yew Chung International School /Po Leung Kuk Choi Kai Yau School
AM3	Garden Villa
AM4	Government Quarters

NM1	Yew Chung International School /Po Leung Kuk Choi Kai Yau School
NM5	Villa Carlton
NM6	Government Quarters
NM7	Garden Villa

APPENDIX D
WIND DATA

Appendix D - Wind Data

Date	Time	Wind Speed m/s	Direction
1-Jan-2006	0:00	0	SW
1-Jan-2006	1:00	0.9	W
1-Jan-2006	2:00	1.8	WSW
1-Jan-2006	3:00	2.2	WNW
1-Jan-2006	4:00	2.2	W
1-Jan-2006	5:00	2.2	WSW
1-Jan-2006	6:00	2.7	WSW
1-Jan-2006	7:00	2.2	WSW
1-Jan-2006	8:00	1.8	WSW
1-Jan-2006	9:00	2.2	WNW
1-Jan-2006	10:00	2.2	WNW
1-Jan-2006	11:00	2.2	WNW
1-Jan-2006	12:00	1.3	WNW
1-Jan-2006	13:00	1.3	WNW
1-Jan-2006	14:00	2.2	WNW
1-Jan-2006	15:00	1.8	NE
1-Jan-2006	16:00	2.7	NE
1-Jan-2006	17:00	1.3	NE
1-Jan-2006	18:00	0.4	NNE
1-Jan-2006	19:00	0	NNE
1-Jan-2006	20:00	0	---
1-Jan-2006	21:00	0.4	SSW
1-Jan-2006	22:00	0.9	SSW
1-Jan-2006	23:00	1.3	SSW
2-Jan-2006	0:00	1.8	SSW
2-Jan-2006	1:00	0.4	SSW
2-Jan-2006	2:00	0	SW
2-Jan-2006	3:00	0	W
2-Jan-2006	4:00	0	---
2-Jan-2006	5:00	0.9	W
2-Jan-2006	6:00	0.9	WNW
2-Jan-2006	7:00	0	WNW
2-Jan-2006	8:00	1.3	WNW
2-Jan-2006	9:00	3.1	WNW
2-Jan-2006	10:00	2.7	WNW
2-Jan-2006	11:00	2.2	WNW
2-Jan-2006	12:00	1.3	WNW
2-Jan-2006	13:00	1.8	WNW
2-Jan-2006	14:00	1.8	WNW
2-Jan-2006	15:00	2.7	WNW
2-Jan-2006	16:00	2.7	WNW
2-Jan-2006	17:00	2.2	W
2-Jan-2006	18:00	3.1	WSW
2-Jan-2006	19:00	3.6	W
2-Jan-2006	20:00	3.1	WSW
2-Jan-2006	21:00	3.1	W
2-Jan-2006	22:00	3.1	W
2-Jan-2006	23:00	3.1	WSW
3-Jan-2006	0:00	2.2	SW
3-Jan-2006	1:00	2.7	SW
3-Jan-2006	2:00	2.2	WSW
3-Jan-2006	3:00	2.7	SSW
3-Jan-2006	4:00	3.1	SW
3-Jan-2006	5:00	2.7	SW

Appendix D - Wind Data

Date	Time	Wind Speed m/s	Direction
3-Jan-2006	6:00	4	WSW
3-Jan-2006	7:00	5.4	W
3-Jan-2006	8:00	5.4	WSW
3-Jan-2006	9:00	4.5	WSW
3-Jan-2006	10:00	4.5	W
3-Jan-2006	11:00	4.9	WNW
3-Jan-2006	12:00	4.9	W
3-Jan-2006	13:00	4.5	W
3-Jan-2006	14:00	4.5	W
3-Jan-2006	15:00	3.6	W
3-Jan-2006	16:00	3.6	W
3-Jan-2006	17:00	3.1	W
3-Jan-2006	18:00	3.1	W
3-Jan-2006	19:00	2.7	W
3-Jan-2006	20:00	2.7	WSW
3-Jan-2006	21:00	3.6	WSW
3-Jan-2006	22:00	3.1	WSW
3-Jan-2006	23:00	2.2	WSW
4-Jan-2006	0:00	1.3	WSW
4-Jan-2006	1:00	2.7	W
4-Jan-2006	2:00	3.6	WSW
4-Jan-2006	3:00	3.6	W
4-Jan-2006	4:00	3.6	WSW
4-Jan-2006	5:00	4.5	WSW
4-Jan-2006	6:00	4	W
4-Jan-2006	7:00	2.7	WNW
4-Jan-2006	8:00	4.5	WNW
4-Jan-2006	9:00	2.7	W
4-Jan-2006	10:00	4.5	WSW
4-Jan-2006	11:00	4.5	W
4-Jan-2006	12:00	4	W
4-Jan-2006	13:00	2.7	W
4-Jan-2006	14:00	2.2	W
4-Jan-2006	15:00	2.2	W
4-Jan-2006	16:00	1.8	WSW
4-Jan-2006	17:00	1.3	WSW
4-Jan-2006	18:00	1.3	SW
4-Jan-2006	19:00	1.8	WNW
4-Jan-2006	20:00	0.9	W
4-Jan-2006	21:00	0.9	W
4-Jan-2006	22:00	0	W
4-Jan-2006	23:00	0	W
5-Jan-2006	0:00	0	---
5-Jan-2006	1:00	0	SW
5-Jan-2006	2:00	0	---
5-Jan-2006	3:00	0	---
5-Jan-2006	4:00	0	---
5-Jan-2006	5:00	0	---
5-Jan-2006	6:00	0	---
5-Jan-2006	7:00	0	WNW
5-Jan-2006	8:00	2.7	W
5-Jan-2006	9:00	3.6	WNW
5-Jan-2006	10:00	6.3	WNW
5-Jan-2006	11:00	6.7	WNW

Appendix D - Wind Data

Date	Time	Wind Speed m/s	Direction
5-Jan-2006	12:00	6.7	WNW
5-Jan-2006	13:00	3.6	W
5-Jan-2006	14:00	3.1	WSW
5-Jan-2006	15:00	3.1	WNW
5-Jan-2006	16:00	3.1	WNW
5-Jan-2006	17:00	3.6	WSW
5-Jan-2006	18:00	2.7	WNW
5-Jan-2006	19:00	2.7	SW
5-Jan-2006	20:00	4	WNW
5-Jan-2006	21:00	3.6	WSW
5-Jan-2006	22:00	3.1	W
5-Jan-2006	23:00	3.6	W
6-Jan-2006	0:00	4	WNW
6-Jan-2006	1:00	4.5	WNW
6-Jan-2006	2:00	3.6	WNW
6-Jan-2006	3:00	2.7	WSW
6-Jan-2006	4:00	2.7	WSW
6-Jan-2006	5:00	2.7	WSW
6-Jan-2006	6:00	3.1	SW
6-Jan-2006	7:00	2.7	WSW
6-Jan-2006	8:00	2.7	WSW
6-Jan-2006	9:00	3.6	WSW
6-Jan-2006	10:00	4.5	WNW
6-Jan-2006	11:00	2.7	WNW
6-Jan-2006	12:00	3.1	SW
6-Jan-2006	13:00	1.8	WNW
6-Jan-2006	14:00	1.3	W
6-Jan-2006	15:00	3.1	WSW
6-Jan-2006	16:00	2.7	SW
6-Jan-2006	17:00	3.1	WSW
6-Jan-2006	18:00	2.7	SW
6-Jan-2006	19:00	3.1	WSW
6-Jan-2006	20:00	2.7	SW
6-Jan-2006	21:00	2.2	WSW
6-Jan-2006	22:00	2.7	WSW
6-Jan-2006	23:00	1.8	WSW
7-Jan-2006	0:00	3.1	SW
7-Jan-2006	1:00	2.7	WSW
7-Jan-2006	2:00	3.1	WSW
7-Jan-2006	3:00	2.2	WSW
7-Jan-2006	4:00	3.6	WSW
7-Jan-2006	5:00	4.9	WNW
7-Jan-2006	6:00	4	WNW
7-Jan-2006	7:00	3.6	WNW
7-Jan-2006	8:00	3.1	WNW
7-Jan-2006	9:00	2.7	WSW
7-Jan-2006	10:00	4.9	WNW
7-Jan-2006	11:00	3.6	WNW
7-Jan-2006	12:00	3.1	WNW
7-Jan-2006	13:00	4	WNW
7-Jan-2006	14:00	4.5	WNW
7-Jan-2006	15:00	3.6	WNW
7-Jan-2006	16:00	3.1	WNW
7-Jan-2006	17:00	1.8	W

Appendix D - Wind Data

Date	Time	Wind Speed m/s	Direction
7-Jan-2006	18:00	1.8	SSW
7-Jan-2006	19:00	0.9	SSW
7-Jan-2006	20:00	1.8	SSW
7-Jan-2006	21:00	1.8	SW
7-Jan-2006	22:00	2.2	SW
7-Jan-2006	23:00	2.2	SW
8-Jan-2006	0:00	1.3	WSW
8-Jan-2006	1:00	2.2	SW
8-Jan-2006	2:00	2.2	SW
8-Jan-2006	3:00	1.8	WSW
8-Jan-2006	4:00	2.2	WSW
8-Jan-2006	5:00	2.2	SW
8-Jan-2006	6:00	2.2	WSW
8-Jan-2006	7:00	1.8	WSW
8-Jan-2006	8:00	1.3	SW
8-Jan-2006	9:00	1.3	WSW
8-Jan-2006	10:00	1.8	WSW
8-Jan-2006	11:00	2.2	WNW
8-Jan-2006	12:00	2.2	WNW
8-Jan-2006	13:00	3.1	WNW
8-Jan-2006	14:00	2.2	WNW
8-Jan-2006	15:00	1.8	WNW
8-Jan-2006	16:00	1.3	W
8-Jan-2006	17:00	0.4	WSW
8-Jan-2006	18:00	0.9	SSW
8-Jan-2006	19:00	0.9	SSW
8-Jan-2006	20:00	1.3	WSW
8-Jan-2006	21:00	1.3	W
8-Jan-2006	22:00	0.9	SW
8-Jan-2006	23:00	0.4	SSW
9-Jan-2006	0:00	0.9	SSW
9-Jan-2006	1:00	0.9	WNW
9-Jan-2006	2:00	0.9	WNW
9-Jan-2006	3:00	1.3	W
9-Jan-2006	4:00	0.9	W
9-Jan-2006	5:00	1.8	WNW
9-Jan-2006	6:00	2.7	W
9-Jan-2006	7:00	2.2	WNW
9-Jan-2006	8:00	1.8	WNW
9-Jan-2006	9:00	1.8	WNW
9-Jan-2006	10:00	3.6	WNW
9-Jan-2006	11:00	2.7	WNW
9-Jan-2006	12:00	2.2	WNW
9-Jan-2006	13:00	1.3	WNW
9-Jan-2006	14:00	0.9	WNW
9-Jan-2006	15:00	1.8	WNW
9-Jan-2006	16:00	0.9	W
9-Jan-2006	17:00	1.3	WNW
9-Jan-2006	18:00	0.9	W
9-Jan-2006	19:00	0.4	W
9-Jan-2006	20:00	0.4	W
9-Jan-2006	21:00	0	W
9-Jan-2006	22:00	0	---
9-Jan-2006	23:00	0	W

Appendix D - Wind Data

Date	Time	Wind Speed m/s	Direction
10-Jan-2006	0:00	0.9	SW
10-Jan-2006	1:00	0.4	W
10-Jan-2006	2:00	1.3	WSW
10-Jan-2006	3:00	2.2	WSW
10-Jan-2006	4:00	1.8	WSW
10-Jan-2006	5:00	1.8	WSW
10-Jan-2006	6:00	2.7	WSW
10-Jan-2006	7:00	2.7	SW
10-Jan-2006	8:00	3.1	WSW
10-Jan-2006	9:00	2.7	WSW
10-Jan-2006	10:00	2.2	W
10-Jan-2006	11:00	2.2	WSW
10-Jan-2006	12:00	2.7	WNW
10-Jan-2006	13:00	3.6	WNW
10-Jan-2006	14:00	1.8	WNW
10-Jan-2006	15:00	1.8	WNW
10-Jan-2006	16:00	1.8	W
10-Jan-2006	17:00	1.3	W
10-Jan-2006	18:00	0.9	W
10-Jan-2006	19:00	0	W
10-Jan-2006	20:00	0	W
10-Jan-2006	21:00	0.4	W
10-Jan-2006	22:00	1.3	W
10-Jan-2006	23:00	1.8	WNW
11-Jan-2006	0:00	0.4	SW
11-Jan-2006	1:00	0.9	W
11-Jan-2006	2:00	0	S
11-Jan-2006	3:00	0	---
11-Jan-2006	4:00	0.4	WNW
11-Jan-2006	5:00	0.4	SW
11-Jan-2006	6:00	0.4	SW
11-Jan-2006	7:00	0.4	WNW
11-Jan-2006	8:00	0	NW
11-Jan-2006	9:00	0	WNW
11-Jan-2006	10:00	2.2	WNW
11-Jan-2006	11:00	2.7	WNW
11-Jan-2006	12:00	4.5	WNW
11-Jan-2006	13:00	3.6	WNW
11-Jan-2006	14:00	3.1	WNW
11-Jan-2006	15:00	3.6	W
11-Jan-2006	16:00	2.7	W
11-Jan-2006	17:00	1.8	WNW
11-Jan-2006	18:00	2.2	W
11-Jan-2006	19:00	2.2	W
11-Jan-2006	20:00	2.7	WSW
11-Jan-2006	21:00	2.7	WSW
11-Jan-2006	22:00	1.8	W
11-Jan-2006	23:00	0.9	WSW
12-Jan-2006	0:00	1.3	WSW
12-Jan-2006	1:00	1.8	WNW
12-Jan-2006	2:00	1.8	WNW
12-Jan-2006	3:00	1.8	WNW
12-Jan-2006	4:00	1.8	W
12-Jan-2006	5:00	1.8	SW

Appendix D - Wind Data

Date	Time	Wind Speed m/s	Direction
12-Jan-2006	6:00	2.7	SW
12-Jan-2006	7:00	1.8	WSW
12-Jan-2006	8:00	2.2	SSW
12-Jan-2006	9:00	1.8	SW
12-Jan-2006	10:00	3.1	W
12-Jan-2006	11:00	2.7	WSW
12-Jan-2006	12:00	3.1	WSW
12-Jan-2006	13:00	2.7	W
12-Jan-2006	14:00	3.6	W
12-Jan-2006	15:00	3.1	W
12-Jan-2006	16:00	2.2	WNW
12-Jan-2006	17:00	1.8	W
12-Jan-2006	18:00	0.4	W
12-Jan-2006	19:00	0.4	SSW
12-Jan-2006	20:00	0	---
12-Jan-2006	21:00	0	---
12-Jan-2006	22:00	0	---
12-Jan-2006	23:00	0	---
13-Jan-2006	0:00	0	---
13-Jan-2006	1:00	0	---
13-Jan-2006	2:00	0	---
13-Jan-2006	3:00	0	---
13-Jan-2006	4:00	0	---
13-Jan-2006	5:00	0	---
13-Jan-2006	6:00	0	---
13-Jan-2006	7:00	0	---
13-Jan-2006	8:00	0	---
13-Jan-2006	9:00	0	SW
13-Jan-2006	10:00	0	WNW
13-Jan-2006	11:00	0	NW
13-Jan-2006	12:00	0.9	WNW
13-Jan-2006	13:00	1.8	NE
13-Jan-2006	14:00	3.1	NE
13-Jan-2006	15:00	2.7	NNE
13-Jan-2006	16:00	2.7	NE
13-Jan-2006	17:00	1.3	NE
13-Jan-2006	18:00	0	NE
13-Jan-2006	19:00	0.4	E
13-Jan-2006	20:00	0	ESE
13-Jan-2006	21:00	0	---
13-Jan-2006	22:00	0	---
13-Jan-2006	23:00	0	---
14-Jan-2006	0:00	0	ESE
14-Jan-2006	1:00	0	---
14-Jan-2006	2:00	0	ESE
14-Jan-2006	3:00	0	---
14-Jan-2006	4:00	0	SW
14-Jan-2006	5:00	0.9	W
14-Jan-2006	6:00	1.3	W
14-Jan-2006	7:00	0.4	WNW
14-Jan-2006	8:00	0	---
14-Jan-2006	9:00	1.3	WNW
14-Jan-2006	10:00	2.2	W
14-Jan-2006	11:00	2.2	WNW

Appendix D - Wind Data

Date	Time	Wind Speed m/s	Direction
14-Jan-2006	12:00	2.2	WNW
14-Jan-2006	13:00	3.1	WNW
14-Jan-2006	14:00	2.7	W
14-Jan-2006	15:00	3.1	WNW
14-Jan-2006	16:00	2.7	W
14-Jan-2006	17:00	2.2	W
14-Jan-2006	18:00	2.2	W
14-Jan-2006	19:00	0.4	W
14-Jan-2006	20:00	0	---
14-Jan-2006	21:00	0	---
14-Jan-2006	22:00	0	---
14-Jan-2006	23:00	0	WNW
15-Jan-2006	0:00	0	WSW
15-Jan-2006	1:00	1.3	SSW
15-Jan-2006	2:00	0.4	WNW
15-Jan-2006	3:00	0	---
15-Jan-2006	4:00	0	---
15-Jan-2006	5:00	0	S
15-Jan-2006	6:00	0	---
15-Jan-2006	7:00	0	SSE
15-Jan-2006	8:00	0	---
15-Jan-2006	9:00	0	SSE
15-Jan-2006	10:00	0	W
15-Jan-2006	11:00	1.8	WNW
15-Jan-2006	12:00	2.2	WNW
15-Jan-2006	13:00	1.8	WNW
15-Jan-2006	14:00	2.7	W
15-Jan-2006	15:00	0.9	W
15-Jan-2006	16:00	2.2	N
15-Jan-2006	17:00	1.8	NNE
15-Jan-2006	18:00	0	NNE
15-Jan-2006	19:00	0	S
15-Jan-2006	20:00	0	---
15-Jan-2006	21:00	0	S
15-Jan-2006	22:00	0	SSW
15-Jan-2006	23:00	0.4	W
16-Jan-2006	0:00	0	N
16-Jan-2006	1:00	0	---
16-Jan-2006	2:00	0.4	W
16-Jan-2006	3:00	0	---
16-Jan-2006	4:00	0	---
16-Jan-2006	5:00	0.9	SSW
16-Jan-2006	6:00	1.8	SSW
16-Jan-2006	7:00	2.2	SSW
16-Jan-2006	8:00	0.4	SSW
16-Jan-2006	9:00	0	---
16-Jan-2006	10:00	0.4	WNW
16-Jan-2006	11:00	1.3	WNW
16-Jan-2006	12:00	1.3	W
16-Jan-2006	13:00	1.8	N
16-Jan-2006	14:00	2.2	N
16-Jan-2006	15:00	2.7	N
16-Jan-2006	16:00	1.8	N
16-Jan-2006	17:00	1.8	N

Appendix D - Wind Data

Date	Time	Wind Speed m/s	Direction
16-Jan-2006	18:00	0.9	NNE
16-Jan-2006	19:00	0	NNE
16-Jan-2006	20:00	0	SSW
16-Jan-2006	21:00	0	SSW
16-Jan-2006	22:00	1.3	W
16-Jan-2006	23:00	0	---
17-Jan-2006	0:00	0	W
17-Jan-2006	1:00	0.4	W
17-Jan-2006	2:00	0.9	W
17-Jan-2006	3:00	0	W
17-Jan-2006	4:00	0	W
17-Jan-2006	5:00	1.3	W
17-Jan-2006	6:00	1.8	W
17-Jan-2006	7:00	2.2	W
17-Jan-2006	8:00	3.1	W
17-Jan-2006	9:00	1.3	S
17-Jan-2006	10:00	2.2	W
17-Jan-2006	11:00	3.1	W
17-Jan-2006	12:00	5.4	WSW
17-Jan-2006	13:00	5.4	WSW
17-Jan-2006	14:00	4.9	WSW
17-Jan-2006	15:00	5.4	WSW
17-Jan-2006	16:00	5.8	W
17-Jan-2006	17:00	4	W
17-Jan-2006	18:00	4.5	W
17-Jan-2006	19:00	4.9	WSW
17-Jan-2006	20:00	4.9	WSW
17-Jan-2006	21:00	4	WSW
17-Jan-2006	22:00	4	W
17-Jan-2006	23:00	4.9	W
18-Jan-2006	0:00	4	WNW
18-Jan-2006	1:00	4.9	WSW
18-Jan-2006	2:00	4	WSW
18-Jan-2006	3:00	4	W
18-Jan-2006	4:00	0.9	NW
18-Jan-2006	5:00	0.9	SSW
18-Jan-2006	6:00	0.9	S
18-Jan-2006	7:00	0.4	S
18-Jan-2006	8:00	3.1	SSW
18-Jan-2006	9:00	4	W
18-Jan-2006	10:00	4	WSW
18-Jan-2006	11:00	3.6	WSW
18-Jan-2006	12:00	4.5	W
18-Jan-2006	13:00	4	W
18-Jan-2006	14:00	3.6	WSW
18-Jan-2006	15:00	3.1	WSW
18-Jan-2006	16:00	3.1	SW
18-Jan-2006	17:00	3.1	WSW
18-Jan-2006	18:00	2.2	WSW
18-Jan-2006	19:00	3.6	WSW
18-Jan-2006	20:00	3.1	W
18-Jan-2006	21:00	3.1	WSW
18-Jan-2006	22:00	3.1	WSW
18-Jan-2006	23:00	4	WSW

Appendix D - Wind Data

Date	Time	Wind Speed m/s	Direction
19-Jan-2006	0:00	4	WSW
19-Jan-2006	1:00	3.1	SSW
19-Jan-2006	2:00	1.8	W
19-Jan-2006	3:00	2.2	SSW
19-Jan-2006	4:00	2.7	SSW
19-Jan-2006	5:00	2.7	SW
19-Jan-2006	6:00	2.2	SW
19-Jan-2006	7:00	3.1	WSW
19-Jan-2006	8:00	3.1	WSW
19-Jan-2006	9:00	2.7	WSW
19-Jan-2006	10:00	3.1	W
19-Jan-2006	11:00	2.7	SW
19-Jan-2006	12:00	2.7	WSW
19-Jan-2006	13:00	3.1	WSW
19-Jan-2006	14:00	2.7	WSW
19-Jan-2006	15:00	2.2	W
19-Jan-2006	16:00	1.8	W
19-Jan-2006	17:00	1.3	W
19-Jan-2006	18:00	2.7	W
19-Jan-2006	19:00	1.8	WSW
19-Jan-2006	20:00	2.2	WSW
19-Jan-2006	21:00	2.7	W
19-Jan-2006	22:00	2.2	WSW
19-Jan-2006	23:00	2.7	W
20-Jan-2006	0:00	2.2	WSW
20-Jan-2006	1:00	2.7	WSW
20-Jan-2006	2:00	1.8	WNW
20-Jan-2006	3:00	1.3	W
20-Jan-2006	4:00	2.2	WSW
20-Jan-2006	5:00	2.7	WSW
20-Jan-2006	6:00	0.4	WNW
20-Jan-2006	7:00	0.9	WNW
20-Jan-2006	8:00	2.7	WNW
20-Jan-2006	9:00	2.7	W
20-Jan-2006	10:00	2.2	WNW
20-Jan-2006	11:00	3.1	WNW
20-Jan-2006	12:00	3.6	W
20-Jan-2006	13:00	2.7	W
20-Jan-2006	14:00	2.2	W
20-Jan-2006	15:00	1.8	WNW
20-Jan-2006	16:00	3.6	WNW
20-Jan-2006	17:00	2.7	WNW
20-Jan-2006	18:00	2.2	WNW
20-Jan-2006	19:00	2.2	WNW
20-Jan-2006	20:00	3.1	WNW
20-Jan-2006	21:00	4	WNW
20-Jan-2006	22:00	2.7	WNW
20-Jan-2006	23:00	1.8	WNW
21-Jan-2006	0:00	2.2	WNW
21-Jan-2006	1:00	3.1	WNW
21-Jan-2006	2:00	4	WNW
21-Jan-2006	3:00	4.5	WNW
21-Jan-2006	4:00	4	WNW
21-Jan-2006	5:00	3.6	WNW

Appendix D - Wind Data

Date	Time	Wind Speed m/s	Direction
21-Jan-2006	6:00	4.9	WNW
21-Jan-2006	7:00	4	WNW
21-Jan-2006	8:00	2.2	W
21-Jan-2006	9:00	0.9	WNW
21-Jan-2006	10:00	1.3	WNW
21-Jan-2006	11:00	1.8	WNW
21-Jan-2006	12:00	2.7	NW
21-Jan-2006	13:00	2.7	WNW
21-Jan-2006	14:00	1.8	WNW
21-Jan-2006	15:00	3.6	W
21-Jan-2006	16:00	4	WNW
21-Jan-2006	17:00	4	WNW
21-Jan-2006	18:00	3.1	WNW
21-Jan-2006	19:00	1.3	W
21-Jan-2006	20:00	0.9	W
21-Jan-2006	21:00	1.3	W
21-Jan-2006	22:00	3.1	WSW
21-Jan-2006	23:00	2.2	WSW
22-Jan-2006	0:00	3.1	WNW
22-Jan-2006	1:00	3.1	WNW
22-Jan-2006	2:00	3.1	WNW
22-Jan-2006	3:00	2.2	WNW
22-Jan-2006	4:00	2.7	WNW
22-Jan-2006	5:00	1.8	WNW
22-Jan-2006	6:00	1.8	WNW
22-Jan-2006	7:00	1.8	WNW
22-Jan-2006	8:00	2.2	WNW
22-Jan-2006	9:00	2.7	WNW
22-Jan-2006	10:00	3.6	WNW
22-Jan-2006	11:00	3.1	W
22-Jan-2006	12:00	3.6	WNW
22-Jan-2006	13:00	3.1	WNW
22-Jan-2006	14:00	3.1	WNW
22-Jan-2006	15:00	3.6	WNW
22-Jan-2006	16:00	3.6	WNW
22-Jan-2006	17:00	4	WNW
22-Jan-2006	18:00	4	WNW
22-Jan-2006	19:00	3.1	W
22-Jan-2006	20:00	3.1	WNW
22-Jan-2006	21:00	2.2	WNW
22-Jan-2006	22:00	2.2	W
22-Jan-2006	23:00	2.7	WSW
23-Jan-2006	0:00	2.7	WSW
23-Jan-2006	1:00	3.1	WSW
23-Jan-2006	2:00	2.7	WSW
23-Jan-2006	3:00	3.1	WSW
23-Jan-2006	4:00	4.5	WNW
23-Jan-2006	5:00	4.5	WNW
23-Jan-2006	6:00	2.7	WNW
23-Jan-2006	7:00	4.5	WNW
23-Jan-2006	8:00	3.6	WSW
23-Jan-2006	9:00	2.7	WSW
23-Jan-2006	10:00	2.2	WSW
23-Jan-2006	11:00	3.6	WNW

Appendix D - Wind Data

Date	Time	Wind Speed m/s	Direction
23-Jan-2006	12:00	4	WNW
23-Jan-2006	13:00	3.6	WNW
23-Jan-2006	14:00	1.8	WNW
23-Jan-2006	15:00	3.1	WNW
23-Jan-2006	16:00	3.1	WNW
23-Jan-2006	17:00	2.7	WSW
23-Jan-2006	18:00	3.1	WSW
23-Jan-2006	19:00	1.8	WSW
23-Jan-2006	20:00	2.2	WSW
23-Jan-2006	21:00	2.2	SW
23-Jan-2006	22:00	2.2	W
23-Jan-2006	23:00	2.2	WNW
24-Jan-2006	0:00	3.1	WNW
24-Jan-2006	1:00	2.2	WNW
24-Jan-2006	2:00	2.7	WSW
24-Jan-2006	3:00	2.7	WSW
24-Jan-2006	4:00	2.7	W
24-Jan-2006	5:00	2.7	WNW
24-Jan-2006	6:00	3.1	WNW
24-Jan-2006	7:00	2.7	WNW
24-Jan-2006	8:00	1.3	WNW
24-Jan-2006	9:00	2.7	WNW
24-Jan-2006	10:00	4	WNW
24-Jan-2006	11:00	2.2	WNW
24-Jan-2006	12:00	0.9	WNW
24-Jan-2006	13:00	1.8	NW
24-Jan-2006	14:00	3.6	WNW
24-Jan-2006	15:00	2.7	W
24-Jan-2006	16:00	3.1	W
24-Jan-2006	17:00	3.1	W
24-Jan-2006	18:00	1.3	SW
24-Jan-2006	19:00	1.3	SSW
24-Jan-2006	20:00	1.3	SSW
24-Jan-2006	21:00	1.8	SW
24-Jan-2006	22:00	1.8	SW
24-Jan-2006	23:00	1.8	WSW
25-Jan-2006	0:00	2.2	SW
25-Jan-2006	1:00	1.8	WSW
25-Jan-2006	2:00	1.8	WSW
25-Jan-2006	3:00	1.3	WSW
25-Jan-2006	4:00	1.8	W
25-Jan-2006	5:00	3.1	WNW
25-Jan-2006	6:00	3.6	WNW
25-Jan-2006	7:00	3.1	WNW
25-Jan-2006	8:00	2.7	WSW
25-Jan-2006	9:00	3.6	WNW
25-Jan-2006	10:00	4	WNW
25-Jan-2006	11:00	5.8	WNW
25-Jan-2006	12:00	4.9	WNW
25-Jan-2006	13:00	4	WNW
25-Jan-2006	14:00	3.1	WNW
25-Jan-2006	15:00	3.1	WNW
25-Jan-2006	16:00	2.7	W
25-Jan-2006	17:00	2.2	WNW

Appendix D - Wind Data

Date	Time	Wind Speed m/s	Direction
25-Jan-2006	18:00	0.4	WSW
25-Jan-2006	19:00	0	W
25-Jan-2006	20:00	0	---
25-Jan-2006	21:00	0	---
25-Jan-2006	22:00	0	---
25-Jan-2006	23:00	0.9	WSW
26-Jan-2006	0:00	2.7	WSW
26-Jan-2006	1:00	3.1	SW
26-Jan-2006	2:00	3.1	W
26-Jan-2006	3:00	4	WNW
26-Jan-2006	4:00	2.7	WSW
26-Jan-2006	5:00	3.6	WSW
26-Jan-2006	6:00	3.1	WNW
26-Jan-2006	7:00	2.7	WSW
26-Jan-2006	8:00	3.6	WSW
26-Jan-2006	9:00	3.1	WSW
26-Jan-2006	10:00	4.9	WNW
26-Jan-2006	11:00	4	WNW
26-Jan-2006	12:00	5.4	WNW
26-Jan-2006	13:00	4.5	WNW
26-Jan-2006	14:00	3.1	W
26-Jan-2006	15:00	3.1	W
26-Jan-2006	16:00	2.2	WNW
26-Jan-2006	17:00	2.2	SW
26-Jan-2006	18:00	0.9	SW
26-Jan-2006	19:00	0	SSW
26-Jan-2006	20:00	0	WSW
26-Jan-2006	21:00	1.8	SSW
26-Jan-2006	22:00	2.7	SW
26-Jan-2006	23:00	2.2	SW
27-Jan-2006	0:00	1.3	SW
27-Jan-2006	1:00	0.9	W
27-Jan-2006	2:00	1.3	WSW
27-Jan-2006	3:00	1.3	WSW
27-Jan-2006	4:00	0.4	SSW
27-Jan-2006	5:00	1.3	WNW
27-Jan-2006	6:00	1.8	SSW
27-Jan-2006	7:00	1.8	WNW
27-Jan-2006	8:00	3.1	W
27-Jan-2006	9:00	3.1	W
27-Jan-2006	10:00	3.1	W
27-Jan-2006	11:00	4	W
27-Jan-2006	12:00	4	W
27-Jan-2006	13:00	3.1	WNW
27-Jan-2006	14:00	2.7	WNW
27-Jan-2006	15:00	1.8	W
27-Jan-2006	16:00	0.9	WNW
27-Jan-2006	17:00	0.9	W
27-Jan-2006	18:00	1.8	W
27-Jan-2006	19:00	1.8	W
27-Jan-2006	20:00	2.2	W
27-Jan-2006	21:00	2.7	W
27-Jan-2006	22:00	2.7	WNW
27-Jan-2006	23:00	3.1	WSW

Appendix D - Wind Data

Date	Time	Wind Speed m/s	Direction
28-Jan-2006	0:00	3.1	WSW
28-Jan-2006	1:00	2.2	WSW
28-Jan-2006	2:00	3.1	W
28-Jan-2006	3:00	3.1	SW
28-Jan-2006	4:00	3.1	W
28-Jan-2006	5:00	2.7	W
28-Jan-2006	6:00	2.2	SW
28-Jan-2006	7:00	0.9	SSW
28-Jan-2006	8:00	0.4	W
28-Jan-2006	9:00	1.8	WNW
28-Jan-2006	10:00	1.8	WSW
28-Jan-2006	11:00	1.8	W
28-Jan-2006	12:00	3.6	WNW
28-Jan-2006	13:00	4.5	WNW
28-Jan-2006	14:00	2.7	W
28-Jan-2006	15:00	1.3	W
28-Jan-2006	16:00	1.8	W
28-Jan-2006	17:00	1.8	W
28-Jan-2006	18:00	2.2	WNW
28-Jan-2006	19:00	0.9	WNW
28-Jan-2006	20:00	0	WNW
28-Jan-2006	21:00	0	---
28-Jan-2006	22:00	0.4	WNW
28-Jan-2006	23:00	1.8	W
29-Jan-2006	0:00	0	SW
29-Jan-2006	1:00	0	WSW
29-Jan-2006	2:00	0.4	W
29-Jan-2006	3:00	1.8	W
29-Jan-2006	4:00	1.8	W
29-Jan-2006	5:00	0.4	W
29-Jan-2006	6:00	0.4	W
29-Jan-2006	7:00	0	W
29-Jan-2006	8:00	0	W
29-Jan-2006	9:00	0	W
29-Jan-2006	10:00	0	W
29-Jan-2006	11:00	0	WNW
29-Jan-2006	12:00	0.4	WNW
29-Jan-2006	13:00	0.4	WNW
29-Jan-2006	14:00	1.3	W
29-Jan-2006	15:00	1.8	WNW
29-Jan-2006	16:00	2.7	WNW
29-Jan-2006	17:00	2.2	W
29-Jan-2006	18:00	2.7	W
29-Jan-2006	19:00	1.8	WSW
29-Jan-2006	20:00	1.3	SSW
29-Jan-2006	21:00	1.3	SSW
29-Jan-2006	22:00	1.8	SSW
29-Jan-2006	23:00	1.3	SSW
30-Jan-2006	0:00	0.4	SW
30-Jan-2006	1:00	0	SW
30-Jan-2006	2:00	0.4	SW
30-Jan-2006	3:00	0.4	WSW
30-Jan-2006	4:00	1.3	SW
30-Jan-2006	5:00	1.8	W

Appendix D - Wind Data

Date	Time	Wind Speed m/s	Direction
30-Jan-2006	6:00	1.3	SW
30-Jan-2006	7:00	0.9	SW
30-Jan-2006	8:00	0	---
30-Jan-2006	9:00	0	W
30-Jan-2006	10:00	0.4	WSW
30-Jan-2006	11:00	0.9	W
30-Jan-2006	12:00	1.3	WNW
30-Jan-2006	13:00	0.9	WNW
30-Jan-2006	14:00	2.7	W
30-Jan-2006	15:00	2.2	W
30-Jan-2006	16:00	1.8	N
30-Jan-2006	17:00	1.8	N
30-Jan-2006	18:00	0.9	NE
30-Jan-2006	19:00	0	NE
30-Jan-2006	20:00	0	---
30-Jan-2006	21:00	0	---
30-Jan-2006	22:00	0	NE
30-Jan-2006	23:00	0	S
31-Jan-2006	0:00	0	SSE
31-Jan-2006	1:00	0	---
31-Jan-2006	2:00	0	---
31-Jan-2006	3:00	0	---
31-Jan-2006	4:00	0	---
31-Jan-2006	5:00	0	NNE
31-Jan-2006	6:00	0	---
31-Jan-2006	7:00	0	---
31-Jan-2006	8:00	0	---
31-Jan-2006	9:00	0	ENE
31-Jan-2006	10:00	0	W
31-Jan-2006	11:00	0	WNW
31-Jan-2006	12:00	1.8	WNW
31-Jan-2006	13:00	2.7	WNW
31-Jan-2006	14:00	3.1	NNE
31-Jan-2006	15:00	2.7	NNE
31-Jan-2006	16:00	1.8	NNE
31-Jan-2006	17:00	1.8	NE
31-Jan-2006	18:00	0.9	NE
31-Jan-2006	19:00	0.4	NE
31-Jan-2006	20:00	0	---
31-Jan-2006	21:00	0	---
31-Jan-2006	22:00	0	---
31-Jan-2006	23:00	0	---

APPENDIX E
1-HOUR TSP MONITORING RESULTS AND GRAPHICAL PRESENTATION

Appendix E - 1-hour TSP Monitoring Results

Location AM1 - Po Leung Kuk Choi Kai Yau School

Date	Weather Condition	Filter Weight (g)		Flow Rate (m^3/min.)		Elapse Time		Air Temp. (K)	Atmospheric Pressure(Pa)	Particulate weight(g)	Av. flow (m^3/min)	Total vol. (m^3)	Sampling Time(hrs.)	Conc. (μg/m^3)
		Initial	Final	Initial	Final	Initial	Final							
3-Jan-06	Cloudy	2.8792	2.8925	1.23	1.23	3638.9	3640.0	290.7	765.4	0.0133	1.23	73.8	1.0	180.1
4-Jan-06	Cloudy	2.8527	2.8622	1.22	1.22	3664.0	3665.0	294.5	763.3	0.0095	1.22	73.0	1.0	130.1
6-Jan-06	Cloudy	2.8409	2.8424	1.25	1.25	3665.0	3666.0	283.3	771.4	0.0015	1.25	74.9	1.0	20.0
10-Jan-06	Cloudy	2.8407	2.8465	1.23	1.23	3690.0	3691.0	289.6	765.5	0.0058	1.23	73.8	1.0	78.6
12-Jan-06	Sunny	2.8437	2.8511	1.23	1.23	3691.0	3692.0	289.8	764.6	0.0074	1.23	73.7	1.0	100.4
13-Jan-06	Sunny	2.8767	2.8838	1.23	1.23	3692.0	3693.0	290.9	763.7	0.0071	1.23	73.5	1.0	96.6
16-Jan-06	Sunny	2.8490	2.8591	1.22	1.22	3717.0	3718.0	293.4	763.5	0.0101	1.22	73.2	1.0	138.0
17-Jan-06	Cloudy	2.8758	2.8816	1.22	1.22	3718.0	3719.0	292.8	763.5	0.0058	1.22	73.2	1.0	79.2
19-Jan-06	Cloudy	2.8785	2.8838	1.22	1.22	3719.0	3720.0	293.4	760.4	0.0053	1.22	73.0	1.0	72.6
23-Jan-06	Cloudy	2.8947	2.8992	1.25	1.25	3744.0	3745.0	283.6	769.1	0.0045	1.25	74.7	1.0	60.2
24-Jan-06	Cloudy	2.8722	2.8779	1.24	1.24	3745.0	3746.0	287.4	768.5	0.0057	1.24	74.9	1.0	76.1
27-Jan-06	Cloudy	2.8628	2.8727	1.23	1.23	3770.0	3771.0	289.9	765.3	0.0099	1.23	73.7	1.0	134.3
													Min	20.0
													Max	180.1
													Average	97.2

Location AM 3 - Garden Villa

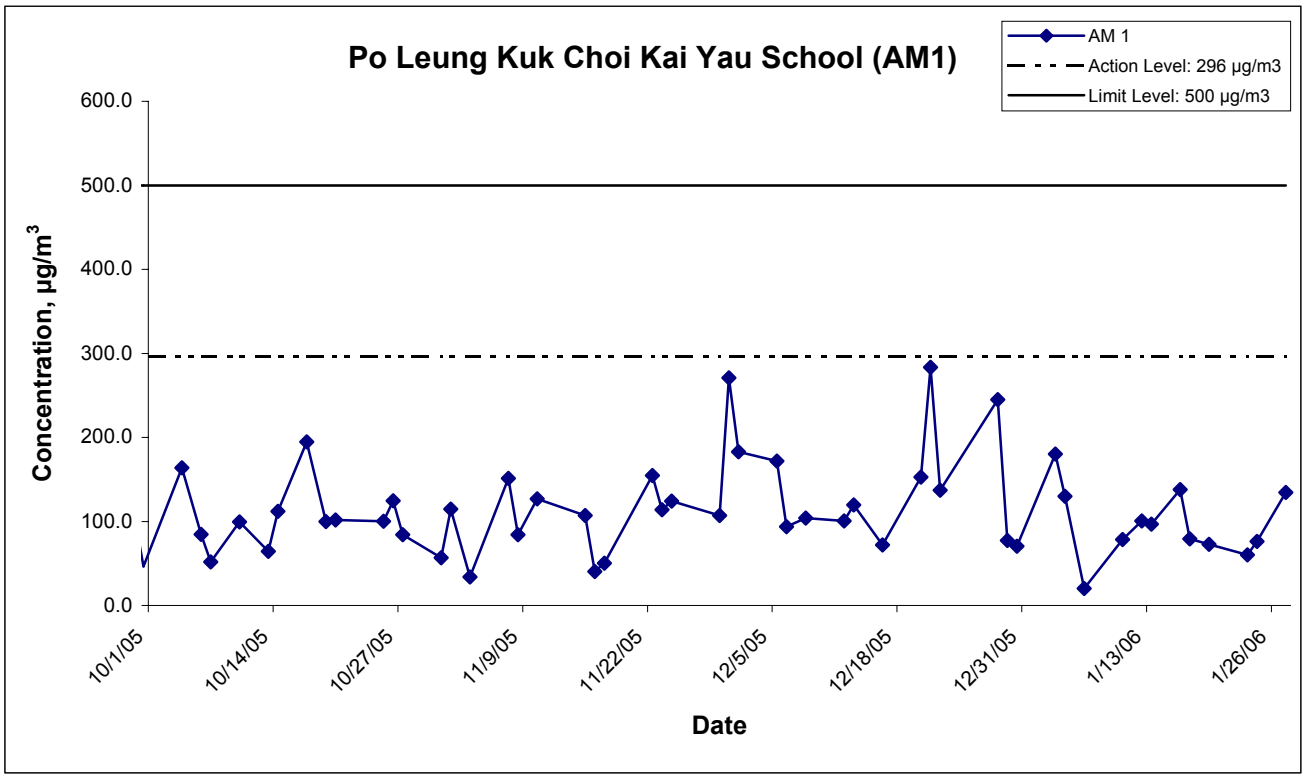
Date	Weather Condition	Filter Weight (g)		Flow Rate (m^3/min.)		Elapse Time		Air Temp. (K)	Atmospheric Pressure(Pa)	Particulate weight(g)	Av. flow (m^3/min)	Total vol. (m^3)	Sampling Time(hrs.)	Conc. (μg/m^3)
		Initial	Final	Initial	Final	Initial	Final							
3-Jan-06	Cloudy	2.8797	2.8945	1.21	1.21	3985.1	3986.1	290.7	765.4	0.0148	1.21	72.5	1.0	204.1
3-Jan-06	Cloudy	2.8372	2.8443	1.20	1.20	4010.1	4011.1	294.5	763.3	0.0071	1.20	71.9	1.0	98.7
6-Jan-06	Cloudy	2.8488	2.8586	1.23	1.23	4011.1	4012.1	283.3	771.4	0.0098	1.23	73.7	1.0	132.9
10-Jan-06	Cloudy	2.8732	2.8810	1.22	1.22	4036.1	4037.1	287.7	767.6	0.0078	1.22	73.0	1.0	106.9
12-Jan-06	Cloudy	2.8803	2.8922	1.21	1.21	4037.1	4038.1	289.8	764.6	0.0119	1.21	72.6	1.0	164.0
13-Jan-06	Sunny	2.8725	2.8942	1.21	1.21	4038.1	4039.1	290.9	763.7	0.0217	1.21	72.4	1.0	299.8
16-Jan-06	Sunny	2.8864	2.8976	1.20	1.20	4063.1	4064.1	292.5	763.0	0.0112	1.20	72.2	1.0	155.2
17-Jan-06	Cloudy	2.8779	2.8911	1.20	1.20	4064.1	4065.1	292.8	763.5	0.0132	1.20	72.1	1.0	183.0
19-Jan-06	Cloudy	2.8469	2.8551	1.20	1.20	4065.1	4066.1	293.4	761.4	0.0082	1.20	71.9	1.0	114.0
23-Jan-06	Cloudy	2.8735	2.8777	1.23	1.23	4090.1	4091.1	283.4	769.3	0.0042	1.23	73.6	1.0	57.1
24-Jan-06	Cloudy	2.8722	2.8779	1.24	1.24	4091.1	4092.1	283.6	769.9	0.0057	1.24	73.6	1.0	77.4
27-Jan-06	Cloudy	2.8769	2.8907	1.22	1.22	4116.1	4117.1	286.6	767.8	0.0138	1.22	73.1	1.0	188.7
													Min	57.1
													Max	299.8
													Average	148.5

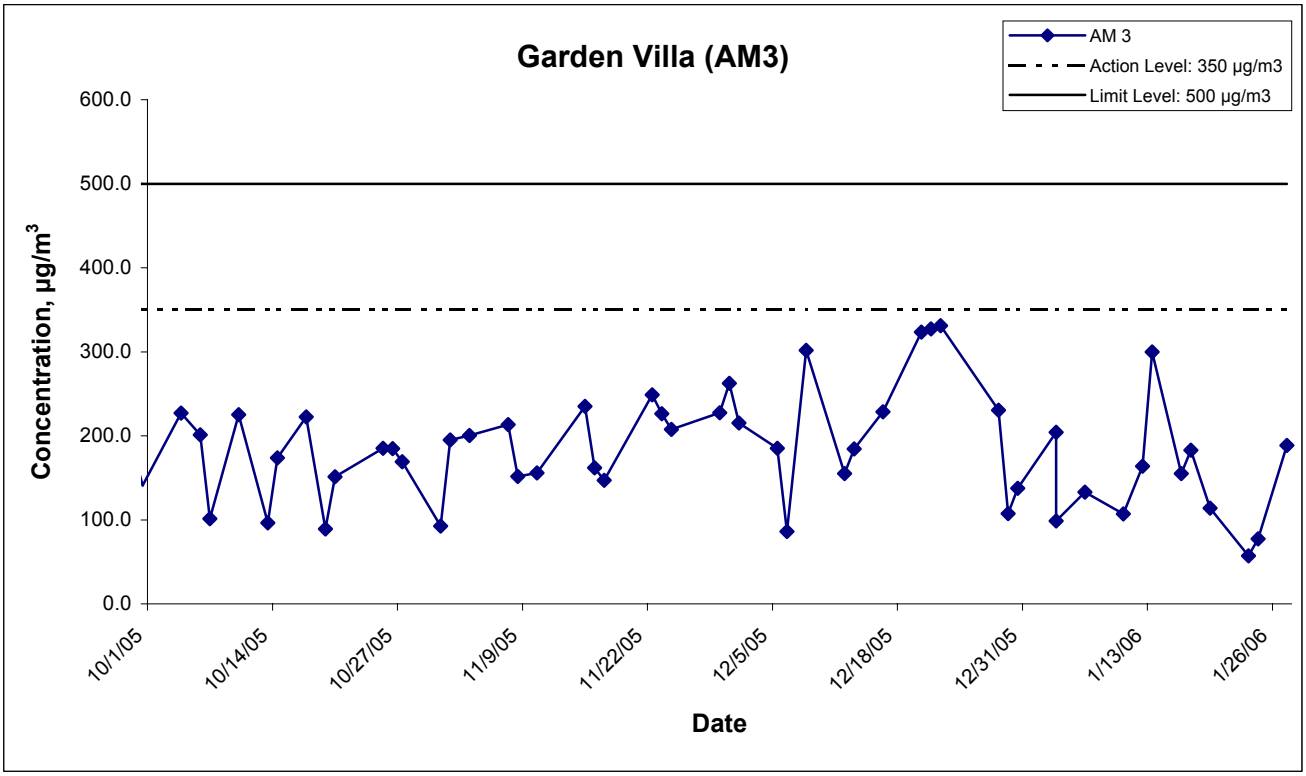
Appendix E - 1-hour TSP Monitoring Results

Location AM 4 - Government Quarters

Date	Weather Condition	Filter Weight (g)		Flow Rate (m^3/min.)		Elapse Time		Air Temp. (K)	Atmospheric Pressure(Pa)	Particulate weight(g)	Av. flow (m^3/min)	Total vol. (m^3)	Sampling Time(hrs.)	Conc. (µg/m^3)
		Initial	Final	Initial	Final	Initial	Final							
3-Jan-06	Cloudy	2.8939	2.9039	1.23	1.23	3597.8	3598.8	290.7	765.4	0.0100	1.23	73.7	1.0	135.7
4-Jan-06	Cloudy	2.8223	2.8285	1.22	1.22	3622.8	3623.8	294.5	763.3	0.0062	1.22	73.1	1.0	84.8
6-Jan-06	Cloudy	2.8498	2.8530	1.25	1.25	3623.8	3624.8	283.5	771.6	0.0032	1.25	75.0	1.0	42.6
10-Jan-06	Cloudy	2.8437	2.8494	1.23	1.23	3648.8	3649.8	289.6	765.5	0.0057	1.23	73.8	1.0	77.2
12-Jan-06	Sunny	2.8352	2.8432	1.23	1.23	3649.8	3650.8	289.8	764.6	0.0080	1.23	73.8	1.0	108.4
13-Jan-06	Sunny	2.8699	2.8756	1.23	1.23	3650.8	3651.8	290.9	763.7	0.0057	1.23	73.6	1.0	77.5
16-Jan-06	Sunny	2.8809	2.8901	1.22	1.22	3675.8	3676.8	294.0	764.0	0.0092	1.22	73.2	1.0	125.6
17-Jan-06	Cloudy	2.8644	2.8704	1.22	1.22	3676.8	3677.8	292.8	763.5	0.0060	1.22	73.3	1.0	81.9
19-Jan-06	Cloudy	2.8511	2.8582	1.22	1.22	3677.8	3678.8	293.4	760.4	0.0071	1.22	73.1	1.0	97.2
23-Jan-06	Cloudy	2.8817	2.8878	1.25	1.25	3702.8	3703.8	283.6	769.1	0.0061	1.25	74.9	1.0	81.5
24-Jan-06	Cloudy	2.8618	2.8671	1.24	1.24	3703.8	3704.8	287.4	768.5	0.0053	1.24	74.3	1.0	71.3
27-Jan-06	Cloudy	2.8942	2.9013	1.23	1.23	3728.8	3729.8	289.9	765.3	0.0071	1.23	73.8	1.0	96.2
													Min	42.6
													Max	135.7
													Average	90.0

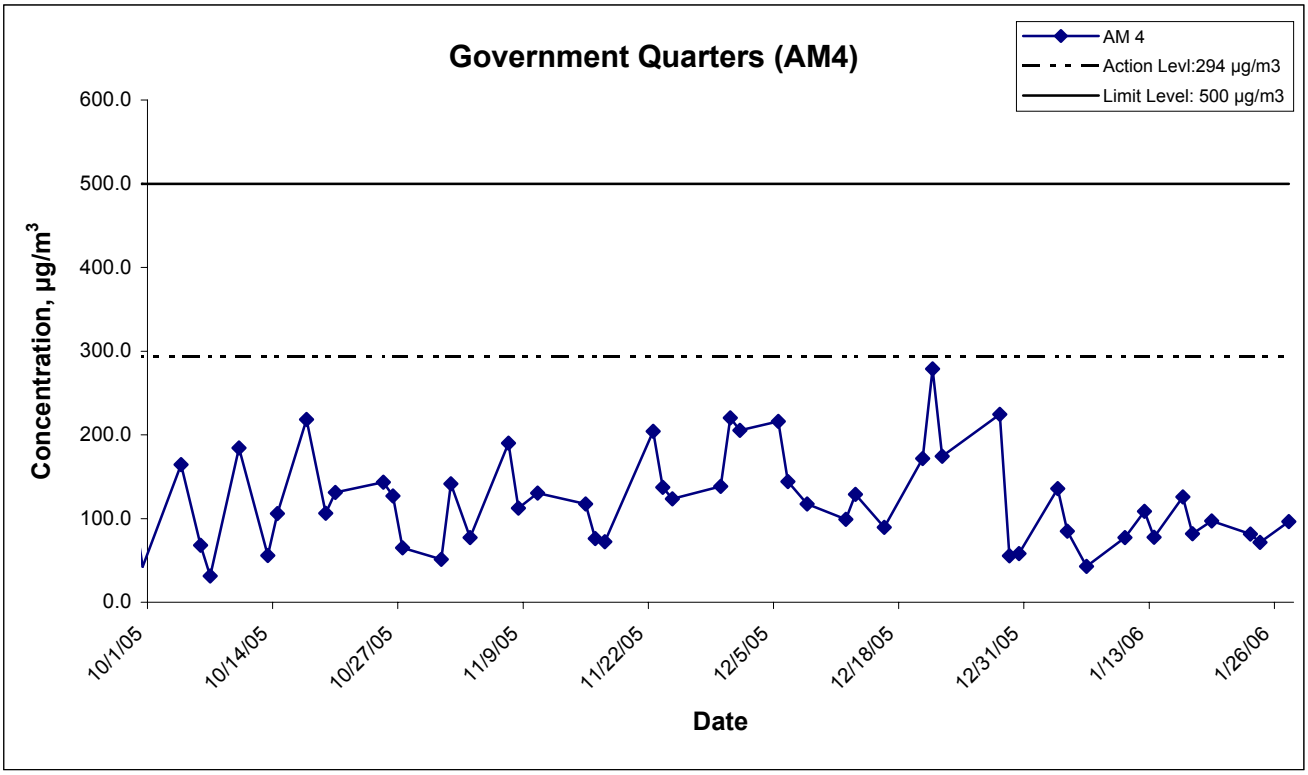
1-hr TSP Levels





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 1-hour TSP Impact Monitoring Results	Scale: N.T.S Date: Jan 06	Project No.: MA3024 Appendix: E	CINOTECH

1-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 1-hour TSP Impact Monitoring Results	Scale: N.T.S Date: Jan 06	Project No.: MA3024 Appendix: E	CINOTECH

APPENDIX F
24-HOUR TSP MONITORING RESULTS AND GRAPHICAL PRESENTATION

Appendix F - 24-hour TSP Monitoring Results

Location AM1 - Po Leung Kuk Choi Kai Yau School

Date	Weather Condition	Filter Weight (g)		Flow Rate (m^3/min.)		Elapse Time		Air Temp. (K)	Atmospheric Pressure(Pa)	Particulate weight(g)	Av. flow (m^3/min)	Total vol. (m^3)	Sampling Time(hrs.)	Conc. ($\mu g/m^3$)
		Initial	Final	Initial	Final	Initial	Final							
3-Jan-06	Cloudy	2.9029	3.0641	1.21	1.21	3640.0	3664.0	296.4	761.1	0.1612	1.21	1744.2	24.0	92.4
9-Jan-06	Cloudy	2.8700	3.0816	1.25	1.25	3666.0	3690.0	283.9	769.5	0.2116	1.25	1792.8	24.0	118.0
14-Jan-06	Sunny	2.8761	3.0481	1.22	1.22	3693.0	3717.0	292.5	764.0	0.1720	1.22	1760.8	24.0	97.7
20-Jan-06	Cloudy	2.8901	2.9246	1.23	1.23	3720.0	3744.0	289.1	762.4	0.0345	1.23	1767.9	24.0	19.5
26-Jan-06	Cloudy	2.8435	2.9144	1.24	1.24	3746.0	3770.0	285.9	770.8	0.0709	1.24	1787.9	24.0	39.7
													Min	19.5
													Max	118.0
													Average	73.5

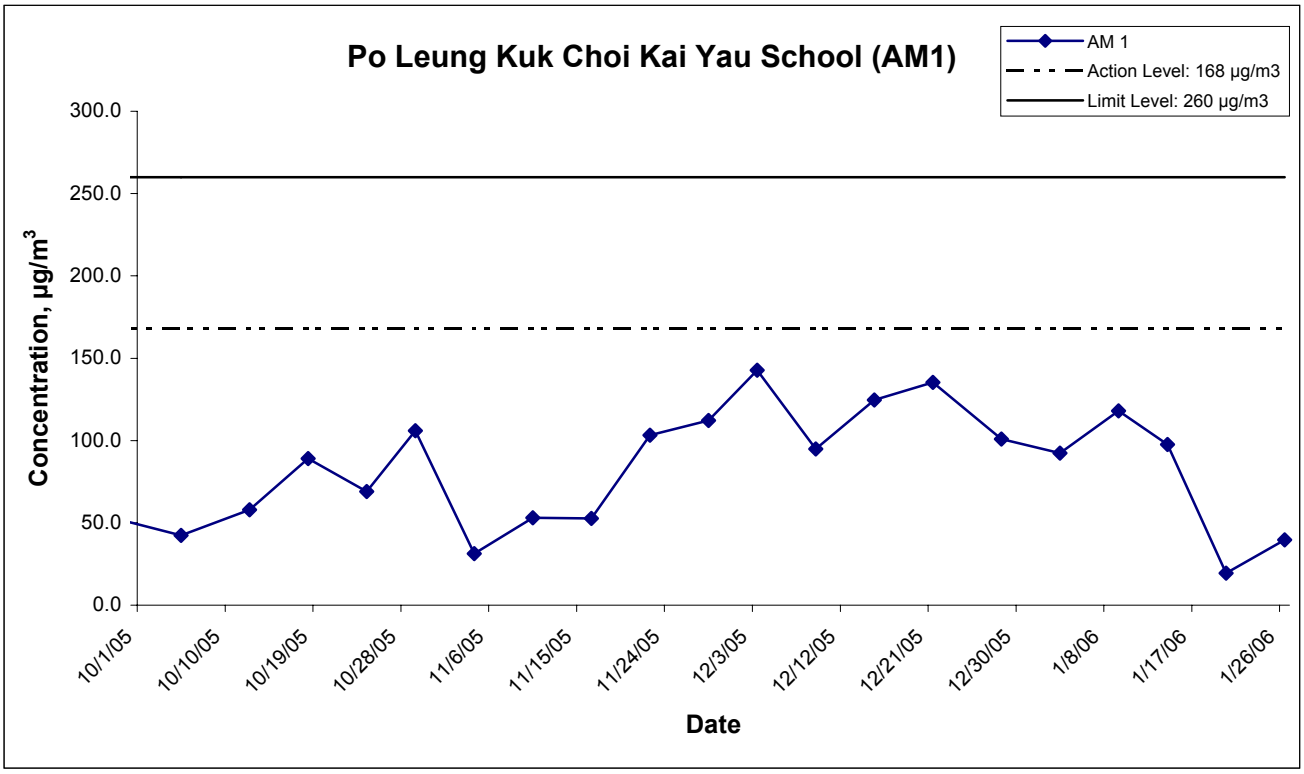
Location AM 3 - Garden Villa

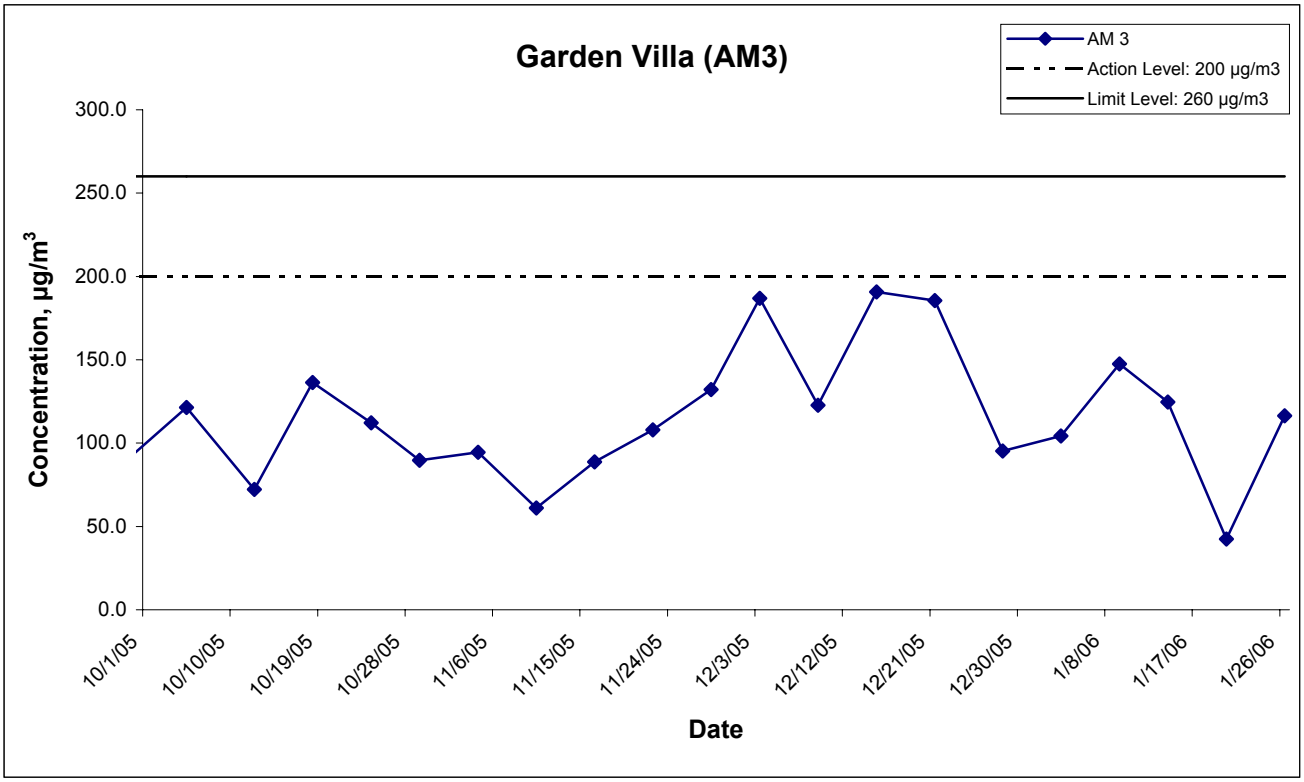
Date	Weather Condition	Filter Weight (g)		Flow Rate (m^3/min.)		Elapse Time		Air Temp. (K)	Atmospheric Pressure(Pa)	Particulate weight(g)	Av. flow (m^3/min)	Total vol. (m^3)	Sampling Time(hrs.)	Conc. ($\mu g/m^3$)
		Initial	Final	Initial	Final	Initial	Final							
3-Jan-06	Cloudy	2.8792	3.0584	1.19	1.19	3986.1	4010.1	296.6	760.9	0.1792	1.19	1717.3	24.0	104.4
9-Jan-06	Cloudy	2.8718	3.1321	1.23	1.23	4012.1	4036.1	283.9	769.5	0.2603	1.23	1765.6	24.0	147.4
14-Jan-06	Cloudy	2.8863	3.1025	1.20	1.20	4039.1	4063.1	291.2	763.1	0.2162	1.20	1735.7	24.0	124.6
20-Jan-06	Rainy	2.8814	2.9553	1.21	1.21	4066.1	4090.1	289.1	762.4	0.0739	1.21	1741.3	24.0	42.4
26-Jan-06	Cloudy	2.8830	3.0879	1.22	1.22	4092.1	4116.1	285.9	770.8	0.2049	1.22	1760.8	24.0	116.4
													Min	42.4
													Max	147.4
													Average	107.0

Location AM 4 - Government Quarters

Date	Weather Condition	Filter Weight (g)		Flow Rate (m^3/min.)		Elapse Time		Air Temp. (K)	Atmospheric Pressure(Pa)	Particulate weight(g)	Av. flow (m^3/min)	Total vol. (m^3)	Sampling Time(hrs.)	Conc. ($\mu g/m^3$)
		Initial	Final	Initial	Final	Initial	Final							
3-Jan-06	Cloudy	2.8512	3.0022	1.21	1.21	3598.8	3622.8	296.6	760.9	0.1510	1.21	1743.9	24.0	86.6
9-Jan-06	Cloudy	2.8519	3.0636	1.25	1.25	3624.8	3648.8	283.9	769.5	0.2117	1.25	1796.5	24.0	117.8
14-Jan-06	Sunny	2.8513	2.9549	1.22	1.22	3651.8	3675.8	292.5	764.0	0.1036	1.22	1760.9	24.0	58.8
20-Jan-06	Cloudy	2.8525	2.8855	1.23	1.23	3678.8	3702.8	289.1	762.4	0.0330	1.23	1770.0	24.0	18.6
26-Jan-06	Cloudy	2.8675	3.0282	1.24	1.24	3704.8	3728.8	285.9	770.8	0.1607	1.24	1791.3	24.0	89.7
													Min	18.6
													Max	117.8
													Average	74.3

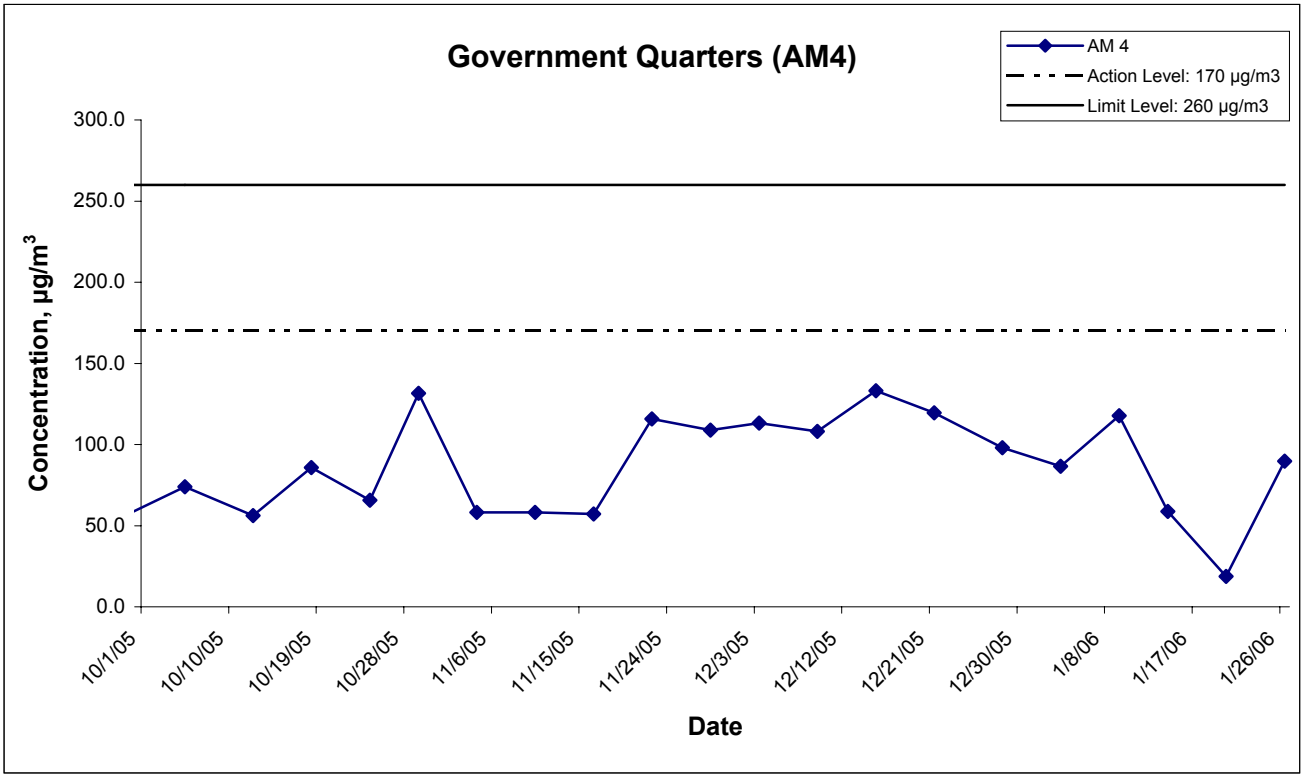
24-hr TSP Levels





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	Project No.: MA3024	CINOTECH
	Date: Jan 06	Appendix: F	

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	Project No.: MA3024	CINOTECH
	Date: Jan 06	Appendix: F	

APPENDIX G
NOISE MONITORING RESULTS AND GRAPHICAL PRESENTATION

Appendix G - Noise Monitoring Results

Location NM1 - Po Leung Kuk Choi Kai Yau School						
Date	Time	Weather	Unit: dB (A) (30-min) Measured Noise Level			Remarks
			L_{eq}	L_{10}	L_{90}	
6-Jan-06	14:30	Fine	64.0	67.5	61.0	-
12-Jan-06	10:10	Sunny	63.5	65.5	58.0	
19-Jan-06	13:50	Cloudy	68.7	72.0	63.0	
27-Jan-06	15:30	Cloudy	63.5	65.5	59.0	

Location NM5 - Villa Carlton								
Date	Time	Weather	Unit: dB (A) (30-min) Measured Noise Level			Baseline Level	Construction Noise Level	Remarks
			L_{eq}	L_{10}	L_{90}	L_{eq}	L_{eq}	
6-Jan-06	16:10	Fine	76.9	80.0	74.5	77.1	76.9, Measured ≤ Baseline	The major noise source was identified as traffic noise from Tai Po Road.
12-Jan-06	13:10	Sunny	74.7	76.5	66.5		74.7, Measured ≤ Baseline	
19-Jan-06	13:00	Cloudy	77.6	83.0	68.5		68.0	
27-Jan-06	17:00	Cloudy	74.5	76.5	70.0		74.5, Measured ≤ Baseline	

Location NM6 - Government Quarters						
Date	Time	Weather	Unit: dB (A) (30-min) Measured Noise Level			Remarks
			L_{eq}	L_{10}	L_{90}	
6-Jan-06	15:15	Fine	67.6	71.0	65.5	-
12-Jan-06	11:00	Sunny	60.4	62.1	57.5	
19-Jan-06	14:30	Cloudy	65.0	65.5	61.0	
27-Jan-06	16:10	Cloudy	64.2	66.0	60.0	

Location NM7 - Garden Vilia								
Date	Time	Weather	Unit: dB (A) (30-min) Measured Noise Level			Baseline Level	Construction Noise Level	Remarks
			L_{eq}	L_{10}	L_{90}	L_{eq}	L_{eq}	
6-Jan-06	15:45	Cloudy	69.2	71.0	64.0	59.0	68.8	-
12-Jan-06	9:00	Cloudy	66.6	69.0	63.0		65.8	
19-Jan-06	9:00	Cloudy	69.2	71.5	64.5		68.8	
27-Jan-06	9:00	Cloudy	68.8	70.5	63.5		68.3	

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

*Bolded value indicated limit level exceedance

Appendix G - Noise Monitoring Results

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

Location NM5 - Villa Carlton									
Date	Time	Weather	dB (A) (5-min)				Baseline Level	Construction Noise Level	Remarks
			L_{eq}	L_{10}	L_{90}	Average L_{eq}	L_{eq}	L_{eq}	
6-Jan-06	19:05	Cloudy	73.1	76.5	70.0	73.2	75.8	73.2, Measured ≤ Baseline	The major noise source was identified as traffic noise from Tai Po Road.
	19:10		73.3	76.5	70.0				
	19:15		73.1	76.5	70.0				
12-Jan-06	19:15	Cloudy	74.4	77.0	71.0	74.6		74.6, Measured ≤ Baseline	
	19:20		74.7	77.5	71.0				
	19:25		74.8	77.5	71.0				
19-Jan-06	19:00	Cloudy	75.3	78.0	72.0	75.2		75.2, Measured ≤ Baseline	
	19:05		75.3	78.0	72.0				
	19:10		74.9	77.5	71.5				
27-Jan-06	19:00	Fine	74.8	77.0	70.0	74.5		74.5, Measured ≤ Baseline	
	19:05		74.3	77.0	70.0				
	19:10		74.4	77.0	70.0				

Location NM6 - Government Quarters									
Date	Time	Weather	dB (A) (5-min)				Baseline Level	Construction Noise Level	Remarks
			L_{eq}	L_{10}	L_{90}	Average L_{eq}	L_{eq}	L_{eq}	
6-Jan-06	19:45	Cloudy	55.7	57.5	51.0	55.8	56.1	55.8, Measured ≤ Baseline	-
	19:50		55.7	57.5	51.0				
	19:55		56.1	58.0	51.5				
12-Jan-06	19:50	Cloudy	54.3	57.5	51.0	54.7		54.7, Measured ≤ Baseline	
	19:55		54.4	57.5	51.0				
	20:00		55.3	58.0	51.5				
19-Jan-06	19:30	Cloudy	55.2	58.5	51.0	55.6		55.6, Measured ≤ Baseline	
	19:35		55.7	58.5	51.0				
	19:40		55.9	59.0	51.0				
27-Jan-06	19:50	Fine	55.8	58.0	51.0	55.5		55.5, Measured ≤ Baseline	
	19:55		55.7	58.0	51.0				
	20:00		54.9	57.0	50.5				

Location NM7 - Garden Villa									
Date	Time	Weather	dB (A) (5-min)				Baseline Level	Construction Noise Level	Remarks
			L_{eq}	L_{10}	L_{90}	Average L_{eq}	L_{eq}	L_{eq}	
6-Jan-06	19:45	Cloudy	59.3	61.5	53.5	59.3	58.3	52.4	The major noise source was identified as traffic noise from Tai Po Road.
	19:50		58.6	60.5	53.5				
	19:55		60.0	62.0	54.0				
12-Jan-06	19:15	Cloudy	58.3	60.5	51.5	58.5		45.0	
	19:20		58.7	61.0	51.5				
	19:25		58.6	60.5	52.0				
19-Jan-06	19:00	Cloudy	58.5	60.5	53.5	58.8		49.2	
	19:05		58.8	60.0	54.0				
	19:10		59.1	60.5	54.0				
27-Jan-06	19:05	Cloudy	58.7	61.0	54.5	58.9		50.0	
	19:10		58.8	60.5	54.5				
	19:15		59.3	60.5	54.0				

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

*Bolded value indicated limit level exceedance

Appendix G - Noise Monitoring Results

Restricted Hours - 23:00 to 07:00 on normal weekdays

Location NM5 - Villa Carlton									
Date	Time	Weather	dB (A) (5-min)				Baseline Level	Construction Noise Level	Remarks
			L_{eq}	L_{10}	L_{90}	Average L_{eq}	L_{eq}	L_{eq}	
6-Jan-06	23:00	Cloudy	73.1	77.5	71.0	72.9	74.3	72.9, Measured ≤ Baseline	The major noise source was identified as traffic noise from Tai Po Road.
	23:05		72.7	77.0	71.0				
	23:10		72.8	77.0	71.0				
12-Jan-06	23:05	Cloudy	73.8	78.0	70.0	74.0		74.0, Measured ≤ Baseline	
	23:10		73.9	78.0	70.0				
	23:15		74.2	78.0	71.0				
19-Jan-06	23:00	Cloudy	73.8	78.0	70.0	73.9		73.9, Measured ≤ Baseline	
	23:05		74.0	78.0	70.0				
	23:10		74.0	78.0	70.0				
27-Jan-06	23:00	Fine	73.8	76.5	69.5	74.0		74.0, Measured ≤ Baseline	
	23:05		73.9	76.5	69.5				
	23:10		74.2	77.0	70.0				

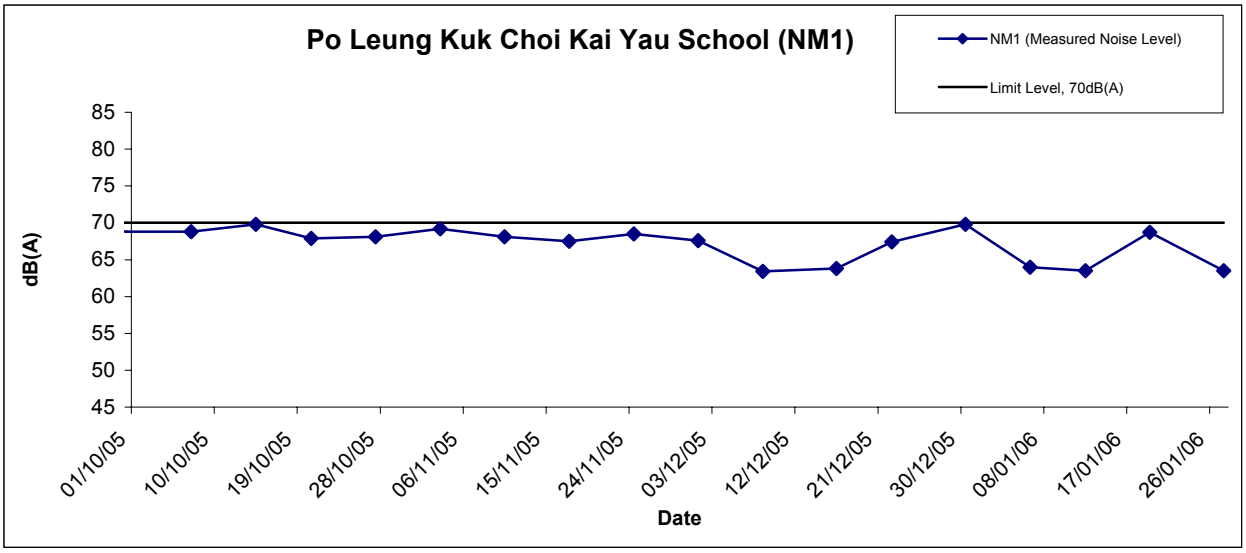
Location NM6 - Government Quarters									
Date	Time	Weather	dB (A) (5-min)				Baseline Level	Construction Noise Level	Remarks
			L_{eq}	L_{10}	L_{90}	Average L_{eq}	L_{eq}	L_{eq}	
6-Jan-06	23:25	Cloudy	51.3	55.0	49.5	51.7	52.8	51.7, Measured ≤ Baseline	-
	23:30		51.7	55.0	49.5				
	23:35		52.0	55.0	50.0				
12-Jan-06	23:35	Cloudy	51.9	55.5	49.5	52.0		52.0, Measured ≤ Baseline	
	23:40		52.0	56.0	49.5				
	23:45		52.0	56.0	49.5				
19-Jan-06	23:27	Cloudy	52.1	56.0	50.0	51.9		51.9, Measured ≤ Baseline	
	23:32		51.7	55.5	50.0				
	23:37		51.8	55.5	50.0				
27-Jan-06	23:25	Fine	51.7	55.5	49.0	51.9		51.9, Measured ≤ Baseline	
	23:30		51.8	55.5	49.0				
	23:35		52.3	56.0	49.5				

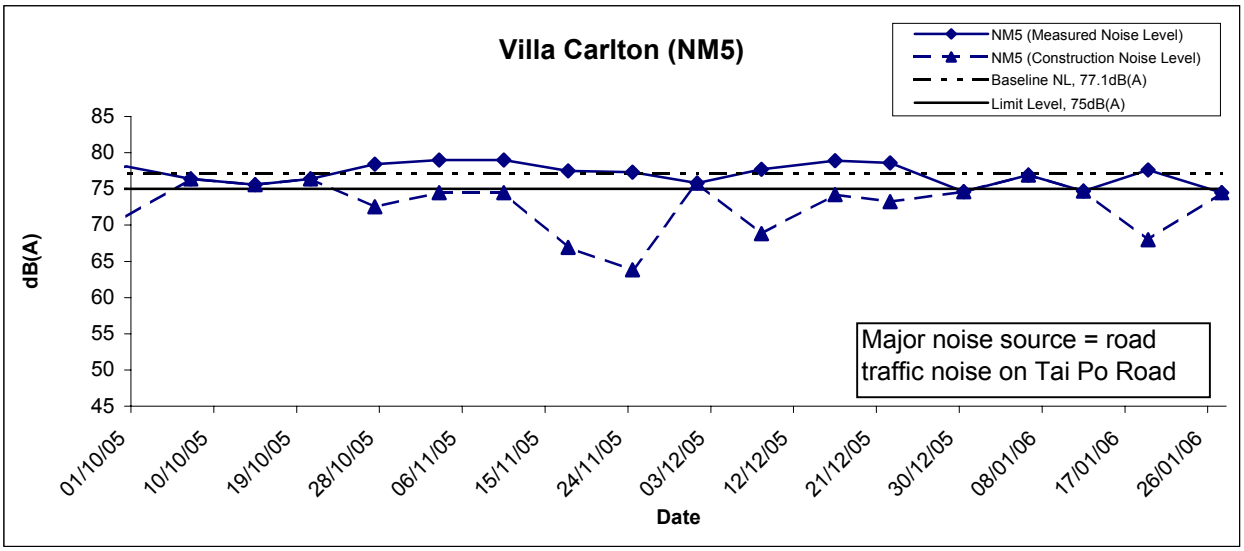
Location NM7 - Garden Villa									
Date	Time	Weather	dB (A) (5-min)				Baseline Level	Construction Noise Level	Remarks
			L_{eq}	L_{10}	L_{90}	Average L_{eq}	L_{eq}	L_{eq}	
6-Jan-06	23:50	Cloudy	54.9	57.0	51.0	55.0	56.5	55.0, Measured ≤ Baseline	The major noise source was identified as traffic noise from Tai Po Road.
	23:55		55.0	57.0	51.5				
	0:00		55.0	57.0	51.5				
12-Jan-06	23:55	Cloudy	55.4	58.0	51.0	55.5		55.5, Measured ≤ Baseline	
	0:00		55.6	58.5	51.0				
	0:05		55.6	58.5	51.5				
19-Jan-06	23:55	Cloudy	55.8	59.0	52.0	55.9		55.9, Measured ≤ Baseline	
	0:00		56.1	59.0	52.0				
	0:05		55.9	59.0	52.0				
27-Jan-06	23:50	Fine	55.7	58.0	51.0	55.8		55.8, Measured ≤ Baseline	
	23:55		55.7	58.0	51.0				
	0:00		56.1	58.5	51.5				

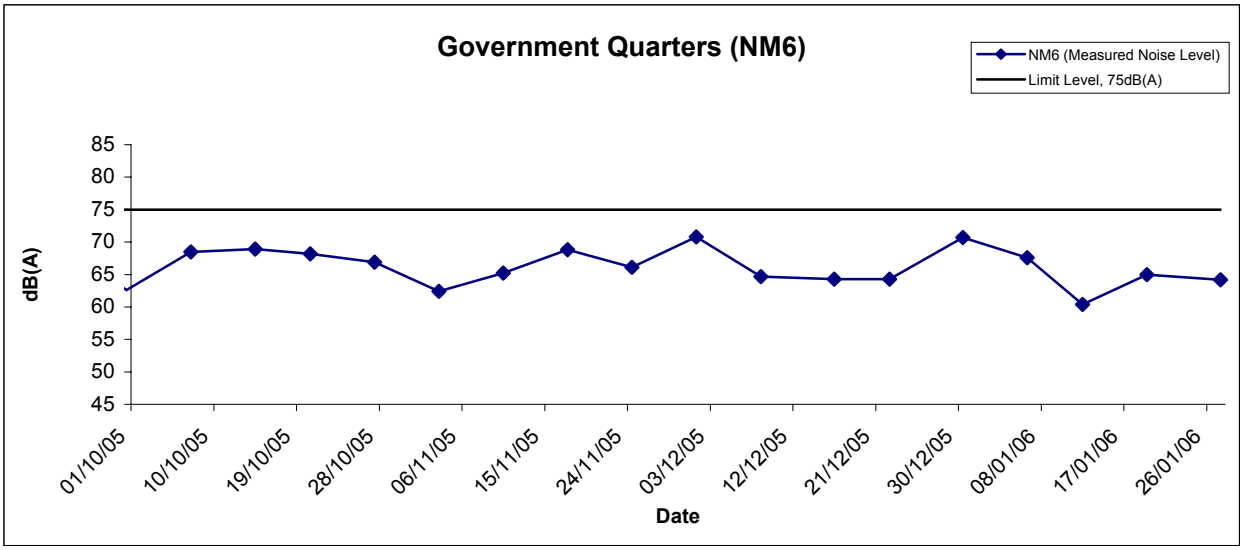
Construction Noise Level (Leq) = Measured Noise Level (Leq) - Baseline Noise Level (Leq)

*Bolded value indicated limit level exceedance

Noise Levels



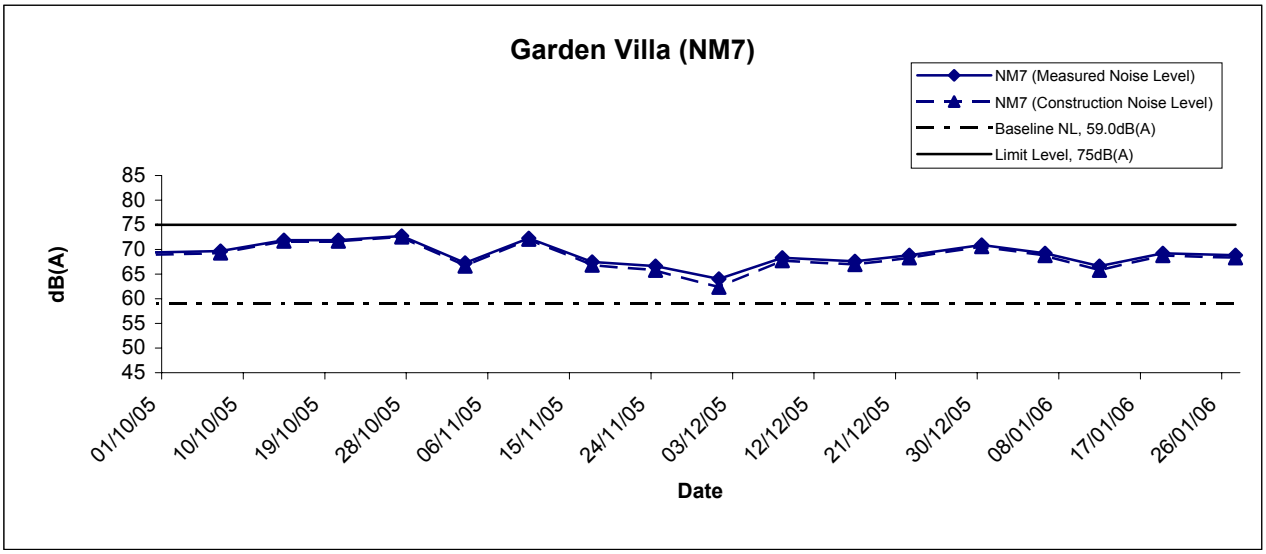




* Construction Noise Level = Measured Noise Level - Baseline Level
(If the measured noise level is lower than the baseline level, the construction noise level will be taken as the meaured one)

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: N.T.S	Project No.: MA3024	CINOTECH
	Date: Jan 06	Appendix: G	

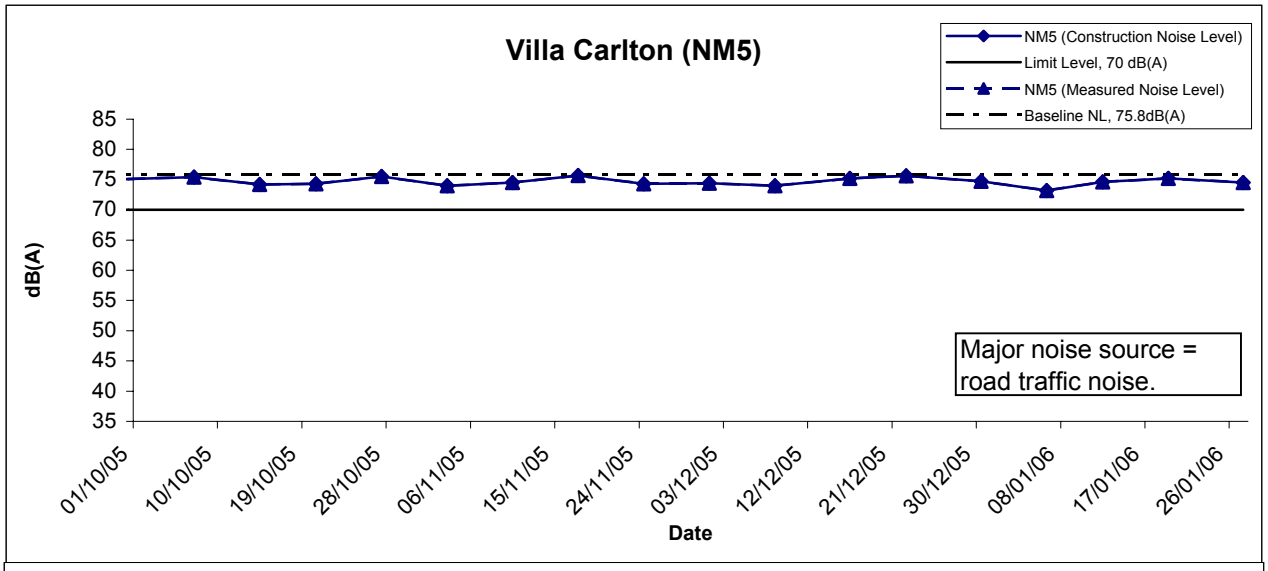
Noise Levels

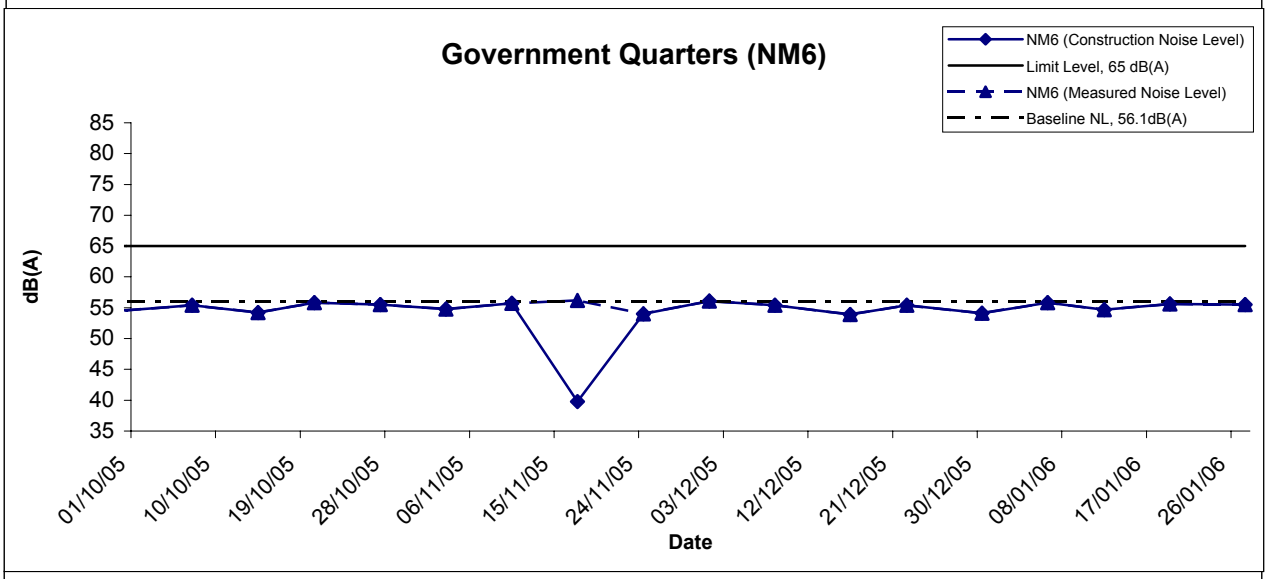


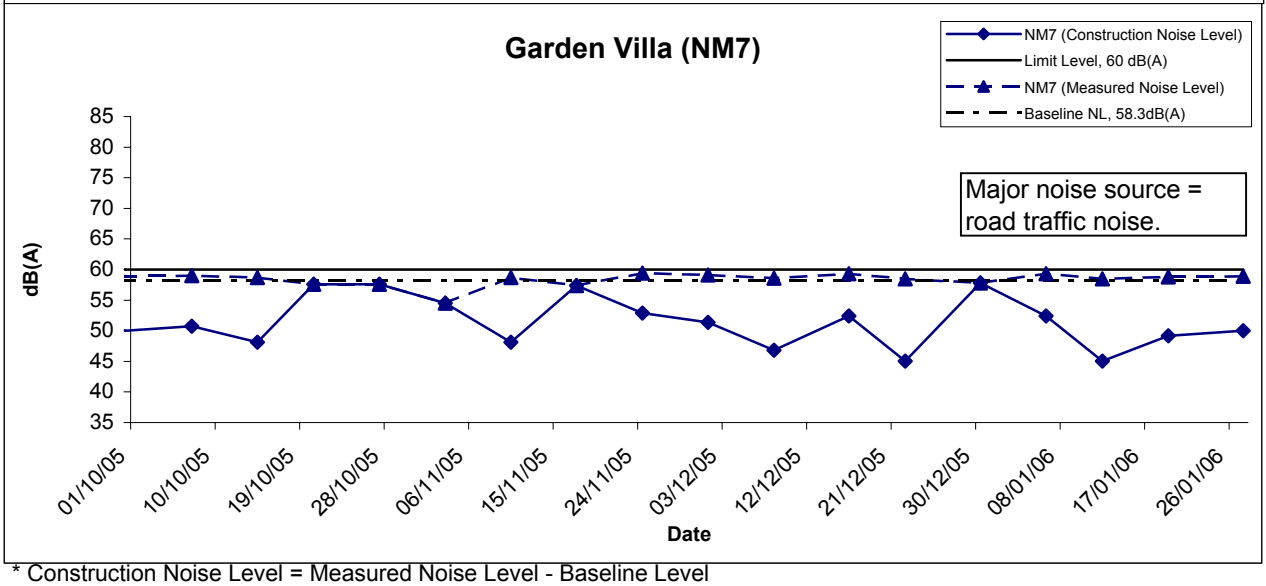
* Construction Noise Level = Measured Noise Level - Baseline Level
(If the measured noise level is lower than the baseline level, the construction noise level will be taken as the meaured one)

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: N.T.S Date: Jan 06	Project No.: MA3024 Appendix: G	CINOTECH

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



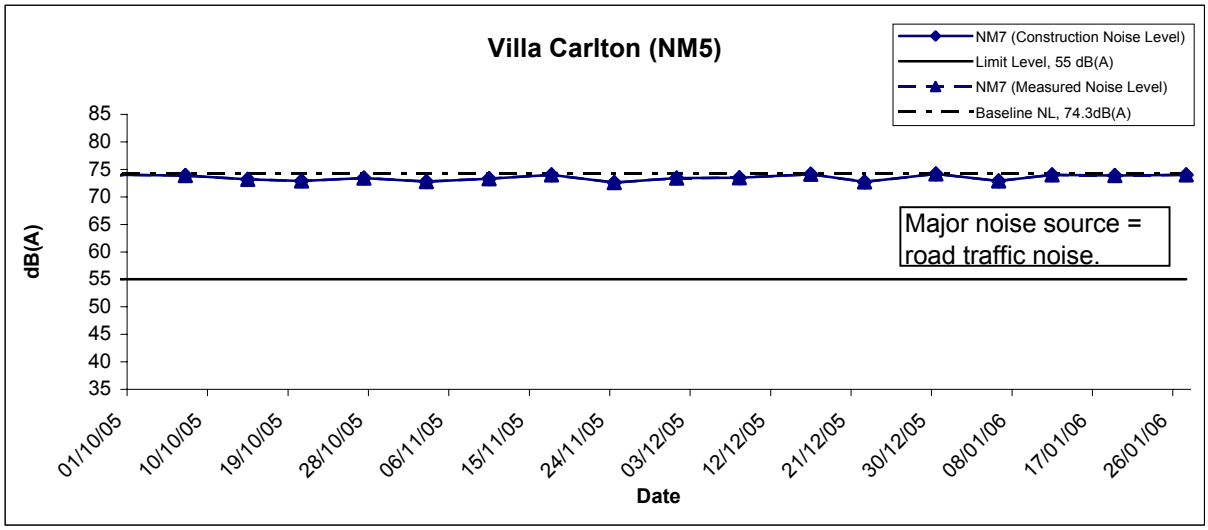


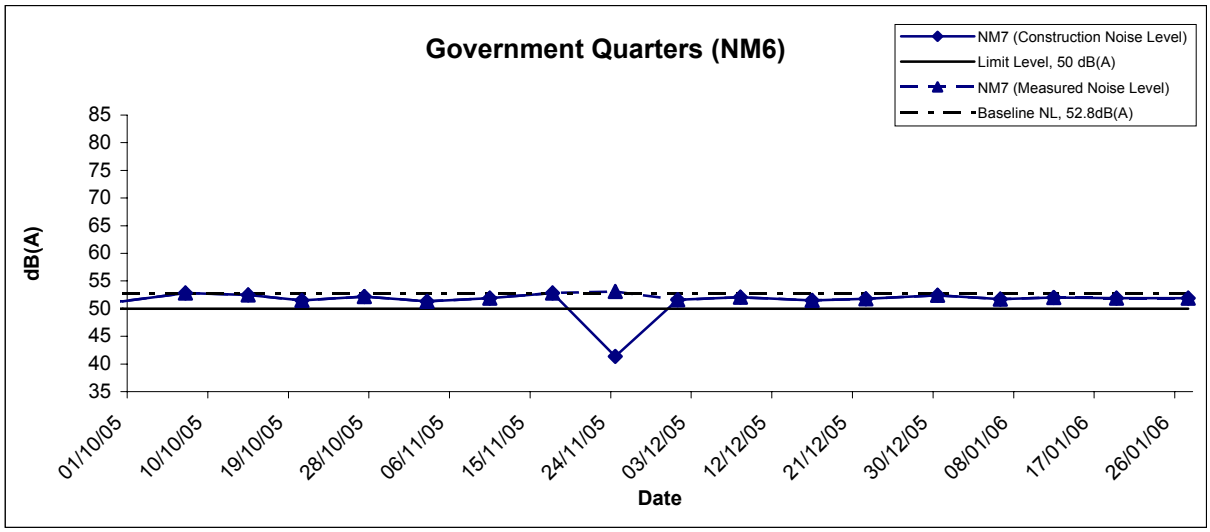


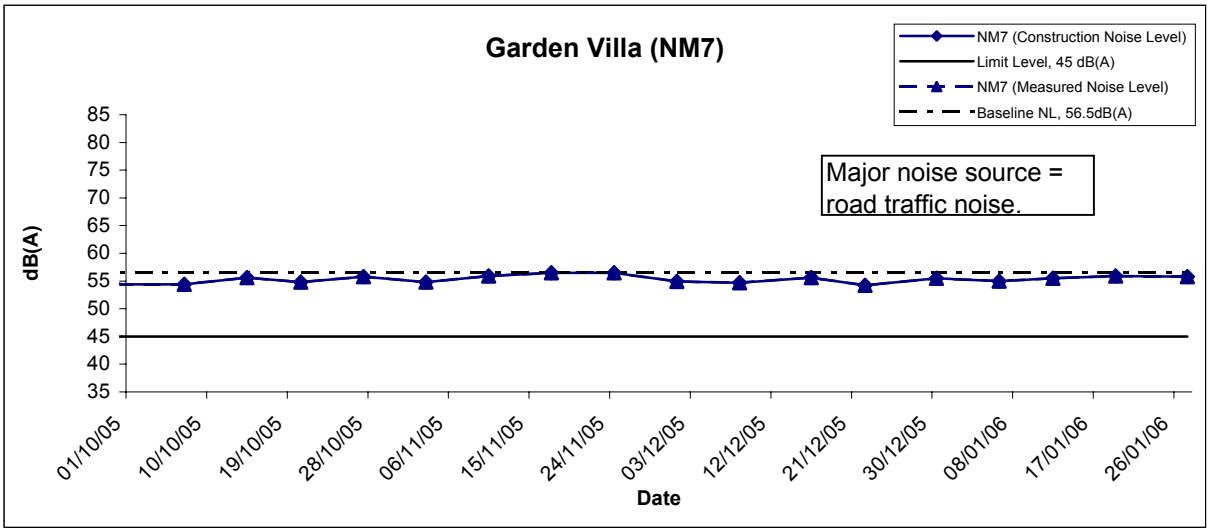
* Construction Noise Level = Measured Noise Level - Baseline Level
(If the measured noise level is lower than the baseline level, the construction noise level will be taken as the meaured one)

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: N.T.S	Project No.: MA3024	CINOTECH
	Date: Jan 06	Appendix: G	

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 meaured 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	Scale: N.T.S	Project No.: MA3024	CINOTECH
Graphical Presentation of Construction Noise Monitoring Results	Date: Jan 06	Appendix: G	

APPENDIX H
SUMMARY OF EXCEEDANCE

Summary of Exceedance Recorded in the Reporting Month

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

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

c) Exceedance Reports for Construction Noise

- One Action Level exceedance was recorded due to a complaint received on 4 January 2006.
- No Limit Level exceedance was recorded.

APPENDIX I
SITE AUDIT SUMMARY

Weekly Site Inspection Record Summary

Inspection Information

Checklist Reference Number	60104-ENT
Date	4 January 2006 (Wed)
Time	1330 – 1600

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

Ref. No.	Remarks/Observations	Related Item No.
	A. Water Quality	
	• No environmental deficiency was identified during the site inspection.	
	B. Air Quality	
60104E-01	• Fugitive dust emission was observed from soil nailing work at BVS2. The Contractor was reminded to provide proper cover and sufficient water spray for the works. Immediate action was taken by the Contractor to rectify the problem.	C2
60104E-02	• Dark smoke was emitted from an air compressor at BVS2. The Contractor was reminded to ensure proper maintenance for the equipment used on site.	C15
	C. Noise	
	• No environmental deficiency was identified during the site inspection.	
	D. Waste / Chemical Management	
60104E-03	• An oil drum was placed on bare ground besides the air compressor at BVS2. A drip tray should be provided for the drum.	E3i
60104E-04	• Refuse was found scattering on site behind the container barrier and in the sand trap at Ventilation Adit.	E1iii & E24
	E. Permit / Licenses	
	• No environmental deficiency was identified during the site inspection.	
	F. Others	
	• The deficiencies identified during last audit (ref. 51229-ENT) on 29 December 2005 were rectified by the Contractor.	

	Name	Signature	Date
Recorded by	KK Chan		5 January 2006
Checked by	Jesse Yuen		5 January 2006

Weekly Site Inspection Record Summary

Inspection Information

Checklist Reference Number	60111-ENT
Date	11 January 2006 (Wed)
Time	1330 – 1600

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

Ref. No.	Remarks/Observations	Related Item No.
	A. Water Quality • No environmental deficiency was identified during the site inspection.	
60111E-01	***B. Air Quality*** • Following up last site audit, dark smoke was still emitted from an air compressor at BVS2. The Contractor was reminded to ensure proper maintenance for the equipment used on site.	I 2
	C. Noise • No environmental deficiency was identified during the site inspection.	
60111E-02	***D. Waste / Chemical Management*** • A hole was observed on the drip tray at Portion D3. The contractor was reminded to block the hole to prevent oil dripping on the ground.	E 3i
60111E-03	• Oil stain was observed beside drip tray near sub-contractor office at Toll Plaza. The contractor was reminded to collect the stained soil.	E 12
	E. Permit / Licenses • No environmental deficiency was identified during the site inspection.	
	F. Others • The deficiencies identified during last audit (ref. 60104-ENT) on 4 January 2006 were rectified by the Contractor.	

	Name	Signature	Date
Recorded by	CM Cheung		13 January 2006
Checked by	KK Chan		13 January 2006

Weekly Site Inspection Record Summary

Inspection Information

Checklist Reference Number	60119-ENT
Date	19 January 2006 (Thr)
Time	0920 – 1115

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

Ref. No.	Remarks/Observations	Related Item No.
60119E-01	***A. Water Quality*** • No environmental deficiency was identified during the site inspection. ***B. Air Quality*** No environmental deficiency was identified during the site inspection. ***C. Noise*** • No environmental deficiency was identified during the site inspection. ***D. Waste / Chemical Management*** • Oil drum was placed on the bare ground at Ventilation Adit. The contractor was reminded to provide a drip tray for the oil drum. ***E. Permit / Licenses*** • No environmental deficiency was identified during the site inspection. ***F. Others*** • The deficiencies identified during last audit (ref. 60111-ENT) on 11 January 2006 were rectified by the Contractor.	E 3i

	Name	Signature	Date
Recorded by	CM Cheung		19 January 2006
Checked by	KK Chan		19 January 2006

Weekly Site Inspection Record Summary

Inspection Information

Checklist Reference Number	60125-ENT
Date	25 January 2006 (Wed
Time	1330 – 1600

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

Ref. No.	Remarks/Observations	Related Item No.
	A. Water Quality • No environmental deficiency was identified during the site inspection. ***B. Air Quality*** No environmental deficiency was identified during the site inspection. ***C. Noise*** • No environmental deficiency was identified during the site inspection. ***D. Waste / Chemical Management***	
60125E-02	• Oil drum was placed on the bare ground near the Air Compressor at BVS-2. The contractor was reminded to provide a drip tray for the oil drum.	E 3i
60125E-03	• Refuse was found scattering on site near aqur-sed at South Portal. The Contractor was reminded to clean the refuse.	E 1
	E. Permit / Licenses	
60125e-01	• Noise label of Air Compressor was found missing at BVS-2. The Contractor was reminded to provide a label for the compressor.	D 9
	F. Others • The deficiencies identified during last audit (ref. 60119-ENT) on 19 January 2006 were rectified by the Contractor.	

	Name	Signature	Date
Recorded by	CM Cheung		25 January 2006
Checked by	KK Chan		25 January 2006

APPENDIX J
EVENT ACTION PLANS

Appendix J - Event Action Plans

Event/Action Plan for Air Quality

EVENT	ACTION			
	ET	IEC	ER	Contractor
ACTION LEVEL				
1. Exceedance for one sample	1. Identify source 2. Inform ER & IEC 3. Repeat measurement to confirm finding 4. Increase monitoring frequency to daily	1. Check monitoring data submitted by ET 2. Check Contractor's working methods	1. Notify Contractor 2. Check monitoring data and Contractor's working methods	1. Rectify any unacceptable practice 2. Amend working methods if appropriate
2. Exceedance for two or more consecutive samples	1. Identify source 2. Inform ER & IEC 3. Repeat measurement to confirm findings 4. Increase monitoring frequency to daily 5. Discuss with ER & for remedial actions required 6. If exceedance continues, arrange meeting with ER & IEC 7. If exceedance stops, cease additional monitoring	1. Checking monitoring data submitted by ET 2. Check Contractor's working methods 3. Discuss with ET and Contractor on possible remedial measure 4. Advise the ER & ET on the effectiveness of the proposed remedial measures 5. Supervise the implementation of the remedial measures	1. Confirm receipt of notification of failure in writing 2. Notify Contractor 3. Check Contractor's working methods 4. Discuss with ET, IEC and Contractor on proposed remedial actions 5. Ensure remedial actions properly implemented	1. Submit proposals for remedial actions to ER within 3 working days of notification 2. Implement the agreed proposals 3. Amend proposal if appropriate
LIMIT LEVEL				
1. Exceedance for one sample	1. Identify source 2. Inform ER & IEC and EPD 3. Repeat measurement to confirm finding 4. Increase monitoring frequency to daily 5. Assess effectiveness of Contractor's	1. Checking monitoring data submitted by ET 2. Check Contractor's working methods 3. Discuss with ET and Contractor on possible remedial measure	1. Confirm receipt of notification of failure in writing 2. Notify Contractor 3. Check Contractor's working methods 4. Discuss with ET, IEC and Contractor on	1. Take immediate action to avoid further exceedance 2. Submit proposals for remedial actions to ER within 3 working days of notification

EVENT	ACTION			
	ET	IEC	ER	Contractor
	remedial actions and keep EPD and ER & IEC informed of the results	4. Advise the ER & ET on the effectiveness of the proposed remedial measures 5. Supervise the implementation of the remedial measures	proposed remedial actions 5. Ensure remedial actions properly implemented	3. Implement the agreed proposals 4. Amend proposal if appropriate
2. Exceedance for two or more consecutive samples	1. Identify source 2. Inform ER, IEC, Contractor and EPD the cause & actions taken for the exceedances 3. Repeat measurement to confirm findings 4. Increase monitoring frequency to daily 5. Investigate the causes of exceedance 6. Carry out analysis of contractor's working procedures to determine possible mitigation to be implemented. 7. Arrange meeting with EPD, IEC and ER to discuss the remedial actions to be taken 8. Assess effectiveness of Contractor's remedial actions and keep EPD and ER & IEC informed of the results 9. If exceedance stops, cease additional monitoring	1. Checking monitoring data submitted by ET 2. Discuss amongst ER, ET and Contractor on possible remedial measures 3. Review Contractor's remedial measures whenever necessary to ensure their effectiveness and advise the ER accordingly 4. Supervise the implementation of the remedial measures	1. Confirm receipt of notification of failure in writing 2. Notify Contractor 3. Carry out analysis of Contractor's working procedures to determine possible mitigation to be implemented 4. Discuss amongst ET, IEC and the Contractor on proposed remedial actions 5. In consultation with IEC, agree with the contractor remedial measures to be implemented 6. Ensure remedial measure are properly implemented 7. If exceedance continues, consider what portion of the work is responsible and instruct the Contractor to stop that portion of work until the exceedance is abated	1. Take immediate action to avoid further exceedance 2. Submit proposals for remedial actions to IEC, ER within 3 working days of notification 3. Implement the agreed proposals 4. Resubmit proposals if problem still not under control 5. Stop the relevant portion of works as determined by the ER until the exceedance is abated

Event/Action Plan for Construction Noise

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

Exceedance	ACTION			
	ET	IEC	ER	Contractor
Limit Level	1. Repeat measurement to confirm findings 2. Investigate the cause of the exceedance and identify the main source(s) of impact 3. Inform ER&IEC and EPD in writing 4. Discuss remedial actions required with ER&IEC 5. Increase monitoring frequency to demonstrate efficacy of remedial measures 6. Assess efficacy of remedial actions and keep ER & IEC informed of the results 7. If exceedance continues, meet with ER&IEC to identify appropriate mitigation measures 8. If exceedance stops, cease additional monitoring	1. Check monitoring data submitted by ET 2. Review Contractor's remedial actions to assure their effectiveness and advise the ER &ET accordingly 3. Supervise the implementation of the remedial measures	1. Confirm receipt of notification of exceedance and notify Contractor 2. Check monitoring data trends and Contractor's working methods 3. Discuss with ET, IEC and Contractor on proposed remedial actions to be implemented 4. Assess the efficacy of remedial actions and keep the Contractor informed 5. If exceedance continuous, consider what portion of the work is responsible and instruct the Contractor to stop that portion of work until the exceedance is aborted	1. Take immediate action to avoid further exceedance 2. Submit proposals for remedial actions to ER immediately not more than 3 working days of notification 3. Amend proposals if required by the ER 4. Implement remedial actions immediately upon instruction 5. Liaise with the ER to optimize the effectiveness of the agreed mitigation 6. Resubmit proposals if problem still not under control 7. Stop the relevant portion of works as determined by the ER until the exceedance is aborted

APPENDIX K
ENVIRONMENTAL MITIGATION IMPLEMENTATION SCHEDULE (EMIS)

Appendix K - Summary of Environmental Mitigation Implementation Schedule

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

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

Types of Impacts	Mitigation Measures	Status
	• Spend grouts used in diaphragm wall construction should be collected in a separate slurry collection system, reconditioned and reused wherever practicable. The disposal of used grouting materials will only be permitted if it is treated to the TM standards before discharge to the storm drains or disposal to landfill.	N/A
	General Construction Activities	
	• Debris and rubbish on site should be collected, handled and disposed of properly to avoid entering the water column and cause water quality impacts. • All fuel tanks and storage areas will be provided with locks and be located on sealed areas (within bunds of a capacity equal to 110% of the storage capacity of the largest tank or 20% by volume of the fuel stored in that areas, whichever in the greatest).	^ ^
	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	
	• Wastes shall be handled and stored in a manner to ensure that they are held securely without loss or leakage. • Authorised or licensed waste hauliers shall be used and they shall only collect wastes prescribed by their permits. • Waste shall be removed on a daily basis. • Waste storage area shall be maintained and cleaned on a daily basis. • Windblown litter and dust during transportation shall be minimised by either covering trucks or transporting wastes in enclosed containers. • Obtain necessary waste disposal permits from the appropriate authorities if they are required. • Wastes shall be disposed of at licensed waste disposal facilities. • Develop procedure such as ticketing system to facilitate tracking of loads, particularly for chemical waste, and to ensure that illegal disposal of wastes does not occur. • Maintain records of the quantities of wastes generated, recycled and disposed.	^ ^ ^ ^ ^ ^ ^ ^ ^

Types of Impacts	Mitigation Measures	Status
	Surplus Excavated Materials	
	• 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.	^
	Construction and Demolition (C&D) Waste	
	• Careful design, planning and good site management shall be adopted to minimise over-ordering and generation of waste materials such as concrete grouts. • The handling and disposal of bentonite slurries shall be undertaken in accordance with Practice Note for Professional Persons – Construction Site Drainage (ProPECC PN 1/94) on construction site drainage. • Construction and demolition (C&D) material shall be segregated to inert and non-inert parts. The inert portion shall re-used at areas of reclamation or land formation, or to public filling area shall such allocation is deemed necessary. The non-inert portion shall be disposed of to landfill.	^ N/A ^
	Chemical Waste	
	• 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. • Containers used for the storage of chemical wastes should: a. Be suitable for the substance they are holding, resistant to corrosion, maintained in a good condition, and securely closed; b. Have a capacity of less than 450 litres unless the specifications have been approved by the EPD; c. Display a label in English and Chinese in accordance with instructions prescribed in Schedule 2 of the Chemical Waste Regulations. • The storage area for chemical wastes should: a. Be clearly labelled and used solely for the storage of chemical waste; b. Be enclosed on at least 3 sides; c. Have an impermeable floor and bunding of capacity to accommodate 110% of the volume of the largest container or 20% by volume of the chemical waste stored in the area, whichever is largest; d. Have adequate ventilation; e. Be covered to prevent rainfall entering (water collected within the bund must be tested and disposed as chemical waste if necessary); f. Be arranged so that incompatible materials are adequately separated. • Disposal of chemical waste shall be via a licensed waste collector; and to a facility licensed to receive chemical waste; or a reuser of the waste (under approval from EPD).	^ ^ ^ ^

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

Remarks:

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

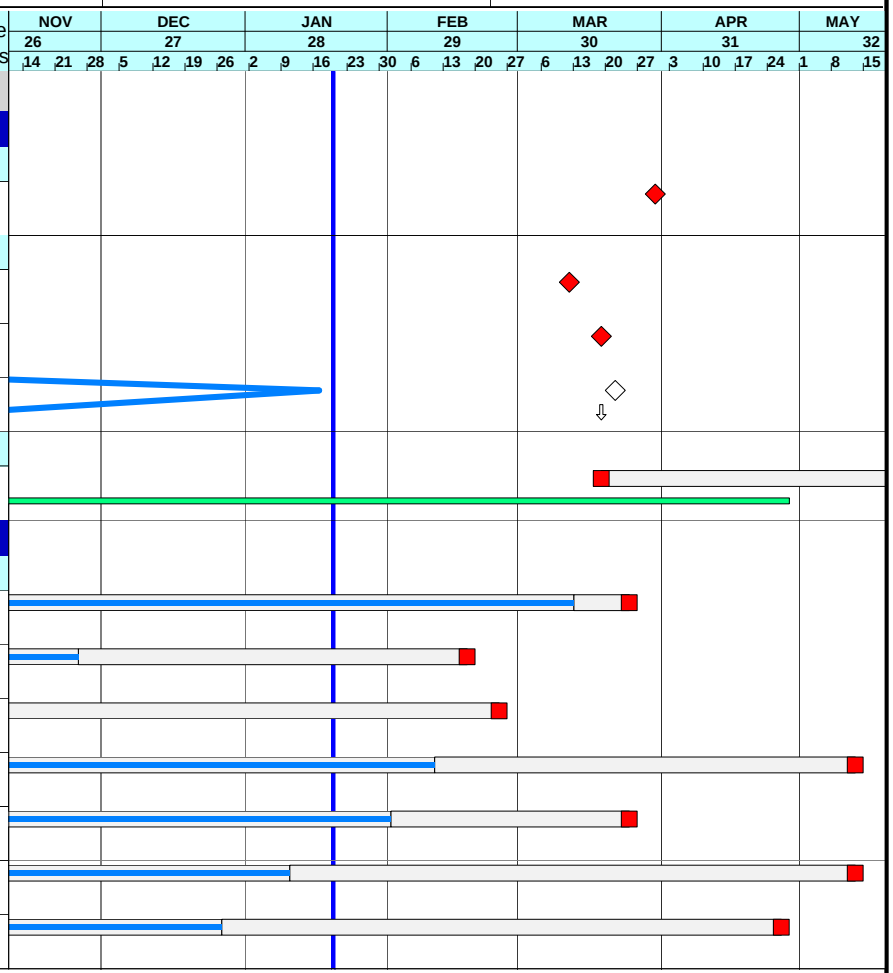
APPENDIX L
CONSTRUCTION PROGRAMME

Data Date 20JAN06
Run Date 26JAN06 16:21

3 MONTH ROLLING PROGRAMME

Monthly Update
Detailed Works Progr.(DWP) r
Progress Bar
Critical Activity

Act. ID	Activity Description	Orig Dur	Early Start	Early Finish	% Compl.	DWP % Compl.	Rem Dur	Total Float	Variance arly Finis
GENERAL & PRELIMINARIES									
CONTRACT DEFINED DATES, STAGES & SECTIONS									
STAGES OF THE WORKS									
KD04	KD-4 Achievement of Stage 4 (17.Dec.05) 03jan06	0		30MAR06	0	100	0	-86	-216
SECTIONS OF THE WORKS									
KD13	KD-13 Compl.Section 5 (10.Jul.05) 15sep05	0		11MAR06	0	100	0	-177	-280
KD22	KD-22 Compl.Section 14 (01June05) 5Jul05	0		18MAR06	0	100	0	-256	-337
KD14	KD-14 Compl.Section 6 of the works (24.Nov.06)	0		21MAR06	0	0	0	248	-3
PROGRAMME RESTRAINTS									
EXC05	LCK Contr.to erect Noise Enclosure C3,C4 & I2	350	19MAR06	03MAR07	0	0	350	-235	-309
SUBMITTALS & APPROVALS									
DRAWING SUBMITTAL & APPROVAL									
8034	Prep.& Sub. Independ't Serv. Dwgs for SHT&T3&LCK	48	04AUG04A	24MAR06	98	100	48	-55	-383
8024	Engineer Comment / Approve ENT ISD Submissions	18	06AUG04A	17FEB06	85	100	18	-115	-473
8030	Res-sub. & Approv of ENT ISD	24	06SEP04A	24FEB06	70	100	24	-115	-455
8035	Engineer Comment / Approve SHT&T3LCK ISD Sub.	24	13SEP04A	12MAY06	85	100	84	-55	-395
8032	Engineer Comment / Approve SHT&T3&LCK CSD Sub.	18	25OCT04A	24MAR06	90	100	48	-7	-455
8036	Re-sub. & Approv of SHT & T3 & LCK ISD	36	31MAR05A	12MAY06	70	100	36	-55	-359
8033	Re-sub. & Approv. of SHT & T3 & LCK CSD	24	28JUN05A	26APR06	60	100	24	-55	-455



Leighton–Kumagai Joint Venture

LEIGHTON - KUMAGAI JV
R8- EAGLE'S NEST TUNNEL

DETAILED WORKS PROGRAMME REVISION C

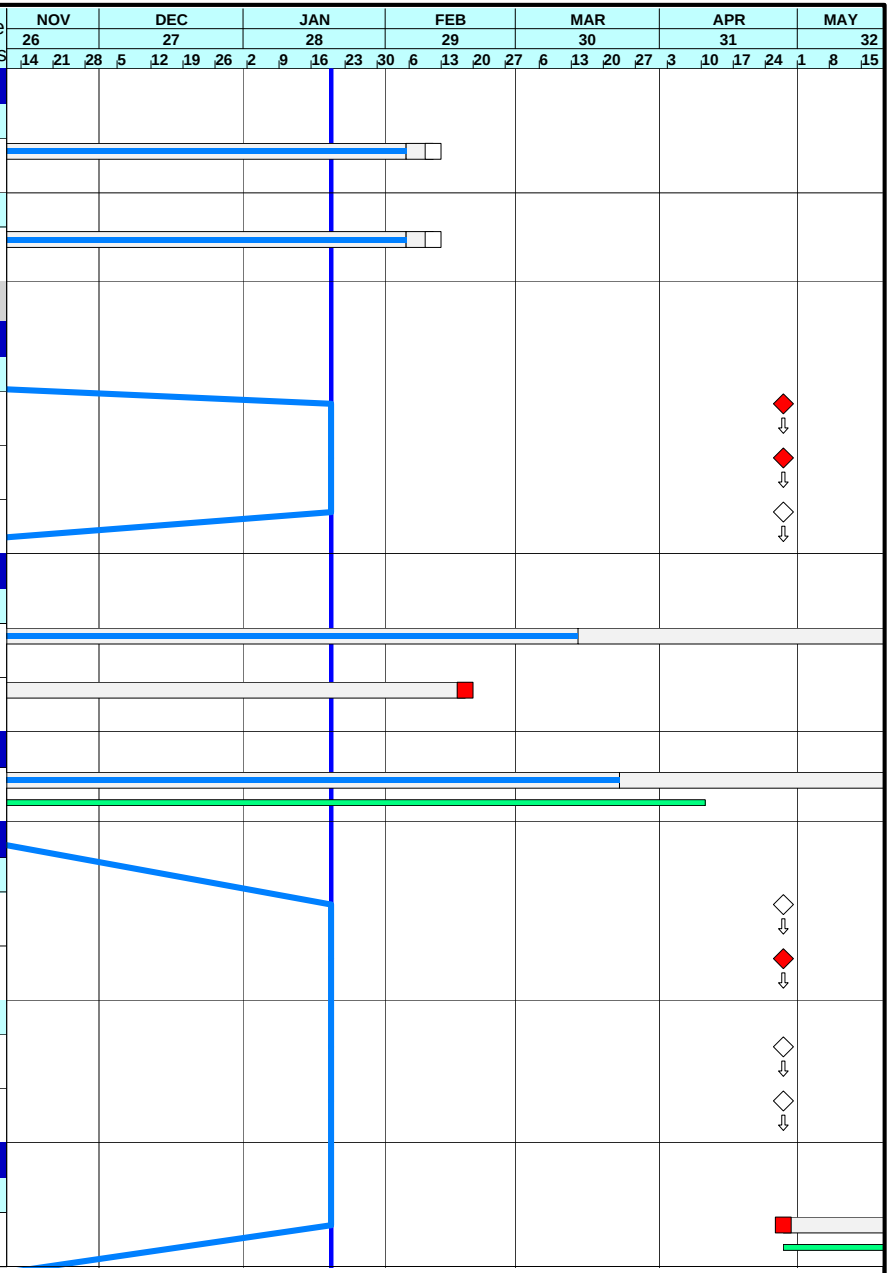
Proj. Name: W15C
Layout: 3 MONTHS ROLLING PROGRAMME
Filter: 3 MONTH ROLLING PROGRAMME
Current Proj: W15C
Target 1 Proj: BLRC
Taget 2 Proj: EOT7

Sheet 1 of 56

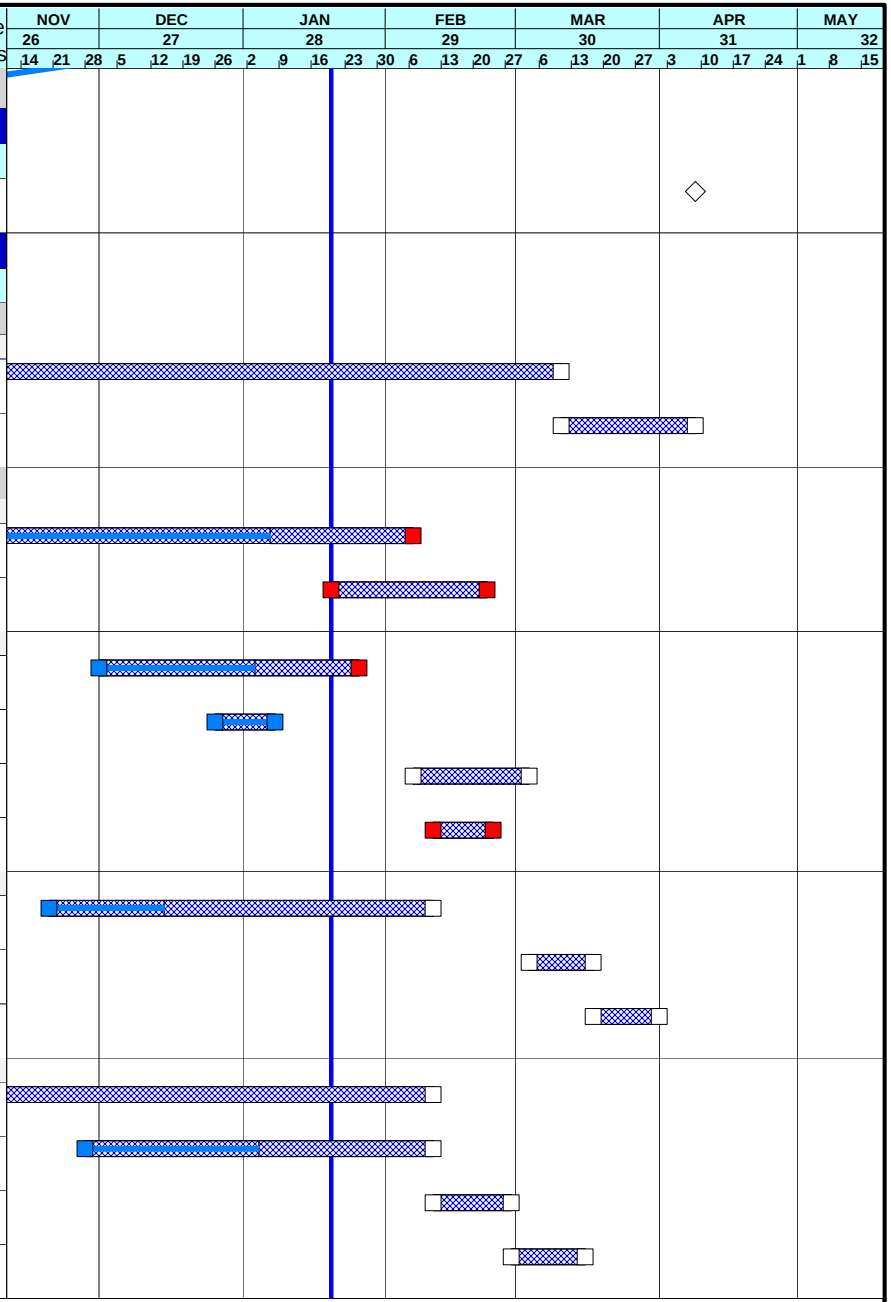
LKJV/ENT/DWP/B

Date	Revision	Checked	Approved
26JAN06	Programme update Jan (	IT/CC	RB

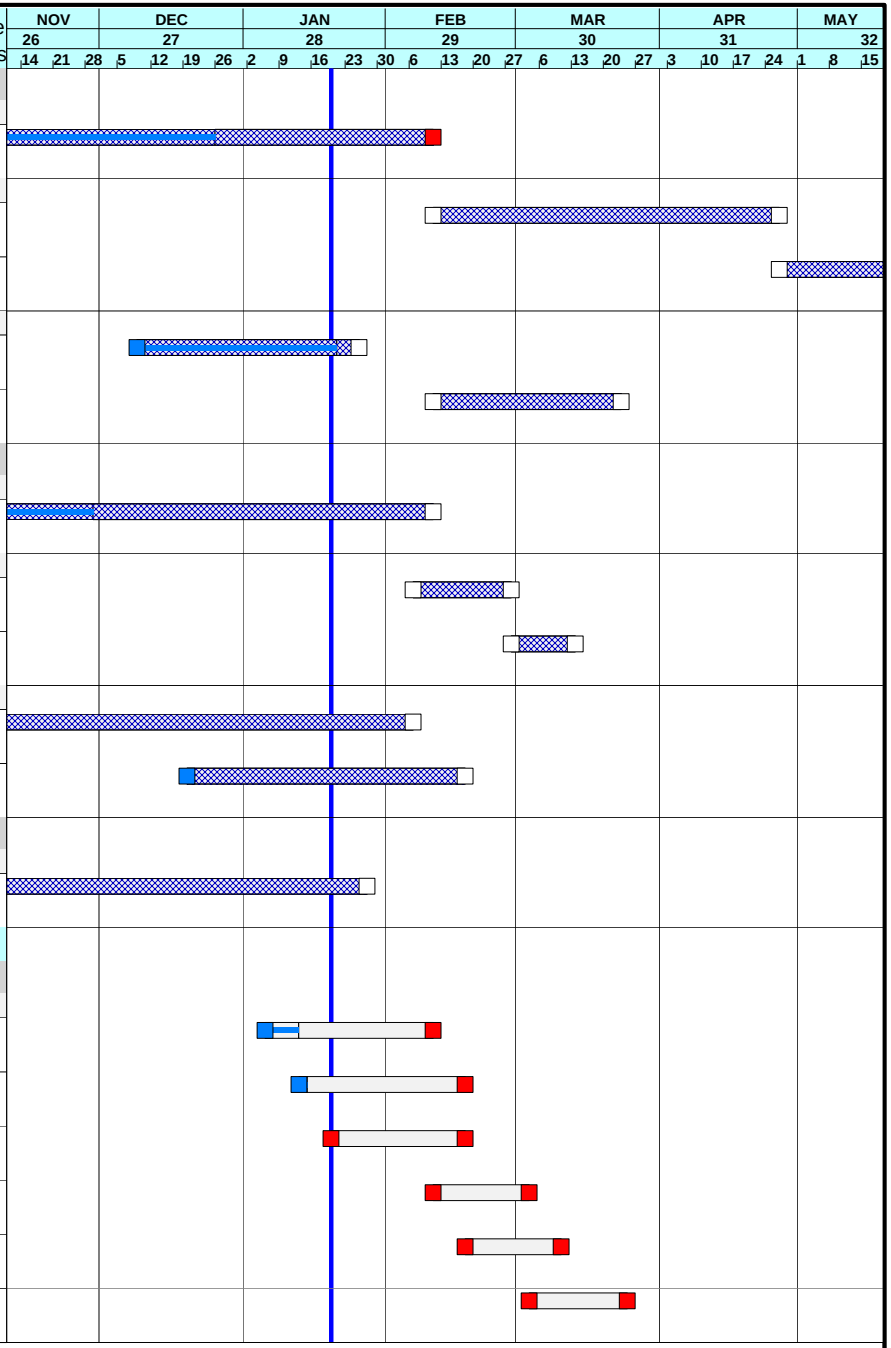
Act. ID	Activity Description	Orig Dur	Early Start	Early Finish	% Compl.	DWP % Compl.	Rem Dur	Total Float	Variance arly Finis
SEM INTERFACE WITH SHT & T3									
SHT RC FULL ENCLOSURE									
2473	Apprv.for Det.Engineering of Encl.Vent.Fans	12	07JUL04A	10FEB06	99	100	12	59	-633
T3 UNDERPASS									
2481	Apprv.for Det.Engineering of T3 Underpass	12	07JUL04A	10FEB06	99	100	12	59	-633
LAI CHI KOK VIADUCT									
CONTRACT DEFINED DATES, STAGES & SECTIONS									
PORTION ACCESS & VACATION									
ACS_M1	Access to Portions - M1	0	28APR06		0	0	0	10	0
ACS_M2	Access to Portions - M2	0	28APR06		0	0	0	10	0
ACS_M3	Access to Portions - M3	0	28APR06		0	0	0	212	0
SUBMITTALS & APPROVALS									
E&M EQPT./MTRL.APPROVALS BY ENGINEER									
8314	LCKVd-App.Enclosure Lgt sys (incl Excision NEs)	18	05AUG04A	07AUG06	80	100	156	-215	-275
8318	LCKVd-App. Elect Power sys (incl Excision NEs)	18	07DEC04A	17FEB06	65	100	18	-95	-137
PROCUREMENT - MATERIAL									
8320	LCKVd-Proc & Manuf. Elect Power sys (incl Excisi	180	20MAY05A	04SEP06	65	70	180	-95	-119
INTERFACE MILESTONES									
LCK VIADUCT NOISE ENCLOSURES 2&3 [CONTRACT]									
6734	LckVd-E&M Access for cabling to Noise Encl. 2&3	0	28APR06		0	0	0	120	0
6735	LckVd-E&M Access to Noise Encl. 2 & 3 Struct	0	28APR06		0	0	0	6	0
LCK VIADUCT NOISE ENCLOSURE 1 (Sec 15, Excision)									
8338	LckVd NE1 (Exc)-E&M Access for cabling frm E SPB	0	28APR06		0	0	0	126	0
8339	LckVd NE1 (Exc) -E&M Access to N. Encl Struct	0	28APR06		0	0	0	60	0
CONSTRUCTION WORKS									
LCK VIADUCT NOISE ENCLOSURES 2&3 (Contract)									
6737	LckVd NE2&3 & But'fly Valley-Elect Works 1st Fix	72	28APR06	25JUL06	0	0	72	6	0



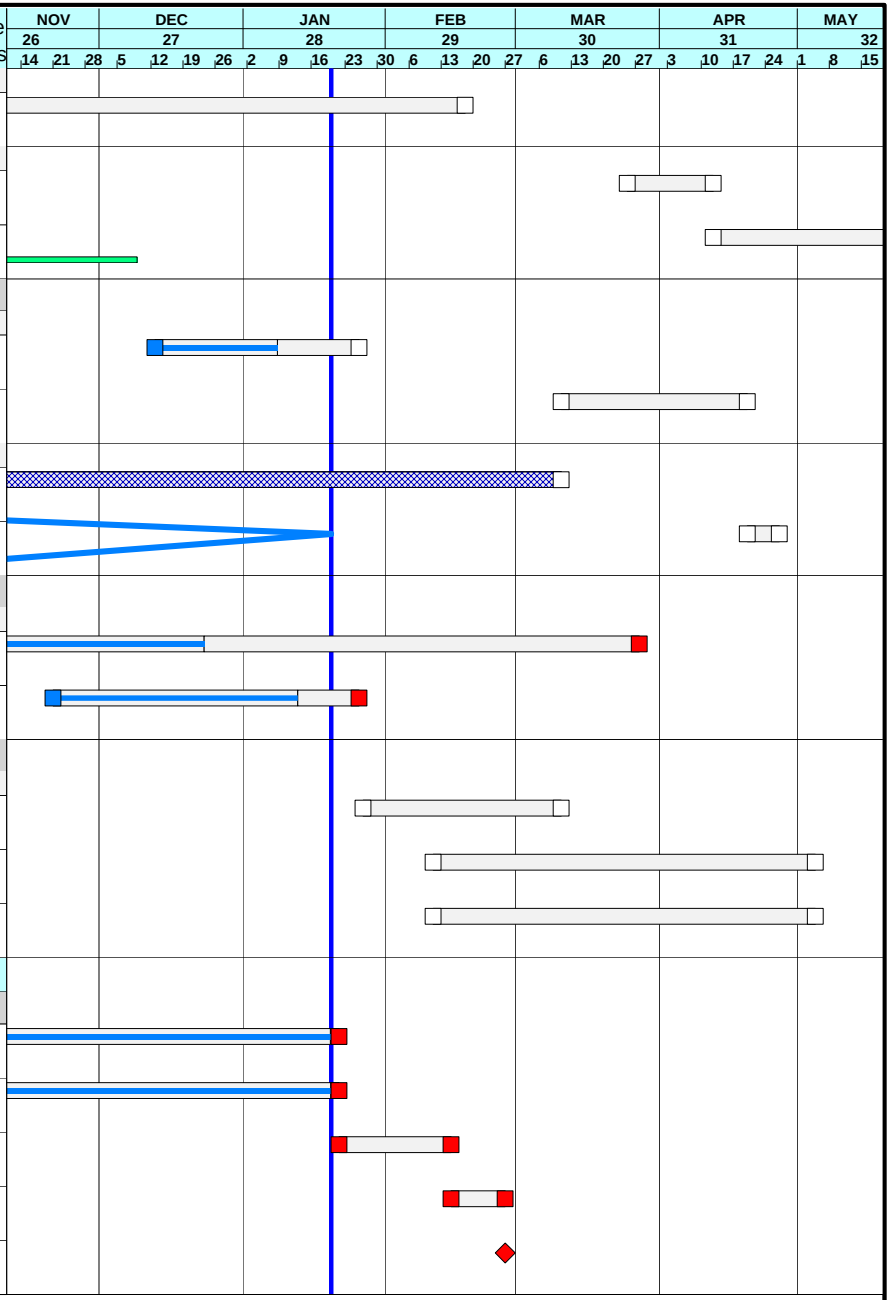
Act. ID	Activity Description	Orig Dur	Early Start	Early Finish	% Compl.	DWP % Compl.	Rem Dur	Total Float	Variance arly Finis
BUTTERFLY VALLEY									
CONTRACT KEY DATES & MILESTONES									
AREA ACCESS & VACATION DATES									
VCT_X	Release of Portions - X	0		08APR06	0	100	0	768	-244
CONSTRUCTION WORKS									
EARTHWORKS & SLOPEWORKS									
SLOPE SP-S2 & SP-S3									
SLOPE STABILISATION (SOIL NAILS,ROCK BOLTS ETC)									
1110	SP-S2/S3 Inst.Soil Nails & Test (97nr.w/3rig)	18	08SEP05A	10MAR06	0	100	36	61	-479
3798	SP-S2/S3 hydro-seeding & tensar mat	24	11MAR06	08APR06	0	100	24	188	-479
SLOPE BV-S2									
EXCAVATION (SOFT & ROCK)									
2692	BV-S2/9 (South)Slope excvtn (rock & some soft)	83	05SEP05A	06FEB06	80	100	8	-134	-221
2695	BV-S2/10 (South)Slope excvtn (rock & some soft)	22	20JAN06	22FEB06	0	100	22	-134	-202
SLOPE STABILISATION (SOIL NAILS,ROCK BOLTS ETC)									
2694	BV-S2/9 Inst.Rock bolts&Test (4nr.w/1.rig) D6/8	5	01DEC05A	25JAN06	60	100	5	-134	-220
3664	BV-S2/9 Row B2 Soil Nails & Test 38nr.w/1.rig	21	26DEC05A	07JAN06A	100	100	0		-189
2691	BV-S2/8 Inst.Rock bolts & Test (60nr.w/3.rig)	22	07FEB06	03MAR06	0	100	22	194	-322
2696	BV-S2/10 Row B3 Soil Nails & Test 39nr.w/2.rig	11	11FEB06	23FEB06	0	100	11	-134	-202
HYDRO-SEEDING & TENSAR MAT									
3805	BV-S2 Berm 8 hydro-seeding & tensar mat	12	20NOV05A	10FEB06	30	100	12	236	-206
3811	BV-S2 Berm 9 hydro-seeding & tensar mat	12	04MAR06	17MAR06	0	100	12	194	-222
3812	BV-S2 Berm 10 hydro-seeding & tensar mat	12	18MAR06	31MAR06	0	100	12	194	-207
SURFACE DRAINAGE									
3694	BV-S2 Berm 7 Surface drainage	14	25APR05A	10FEB06	20	100	12	660	-315
3695	BV-S2 Berm 8 Surface drainage	14	28NOV05A	10FEB06	50	100	12	196	-218
3696	BV-S2 Berm 9 Surface drainage	14	11FEB06	27FEB06	0	100	14	196	-218
3697	BV-S2 Berm 10 Surface drainage	14	28FEB06	15MAR06	0	100	14	196	-205



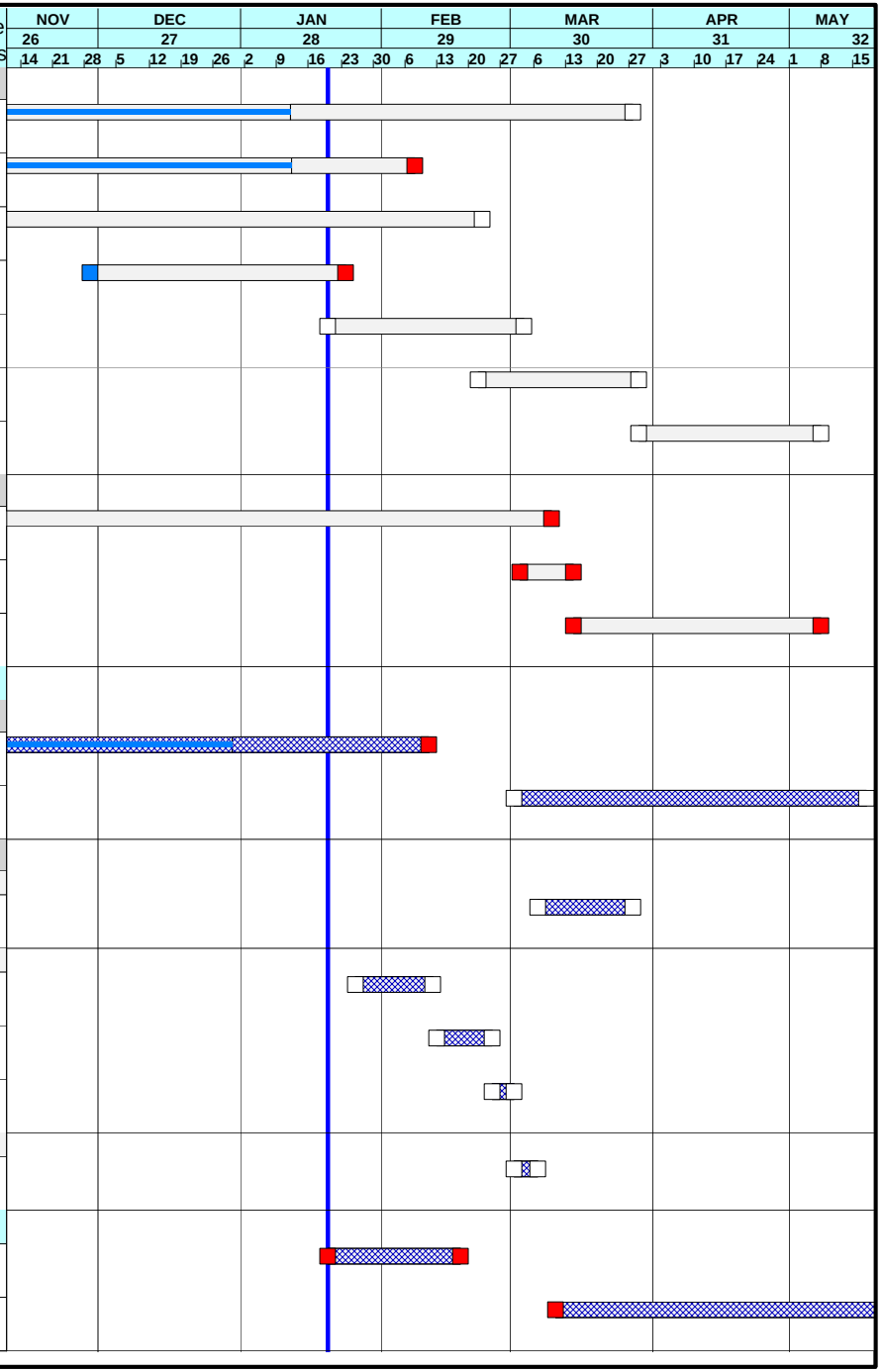
Act. ID	Activity Description	Orig Dur	Early Start	Early Finish	% Compl.	DWP % Compl.	Rem Dur	Total Float	Variance arly Finis
SLOPE BV-S3									
COMPACTED FILLING									
1987	BV-S3 Compact Fill to +56.0mPD ch.1+740 to 1+860	36	20JUN05A	10FEB06	80	100	12	-155	-346
HYDRO-SEEDING & TENSAR MAT									
3806	BV-S3 hydro-seeding & tensarmat to +41.0mPD	60	11FEB06	26APR06	0	100	60	152	-346
3913	BV-S3 hydro-seeding & tensarmat to +56.0mPD	24	27APR06	26MAY06	0	100	24	152	-309
SURFACE DRAINAGE									
1983	BV-S3 Slope Surface Drainage +48.5mPD	50	09DEC05A	25JAN06	90	100	5	667	-277
1984	BV-S3 Slope Surface Drainage +56.0mPD	35	11FEB06	23MAR06	0	100	35	177	-284
SLOPE BV-S4									
SLOPE STABILISATION (SOIL NAILS,ROCK BOLTS ETC)									
2352	BV-S4/4b Row A2/A3 Soil Nail & Test 28nr.w/2rig	13	11AUG05A	10FEB06	60	100	12	83	-505
SLOPE FINISHES									
1139	11NW&434 BV-S4/1-2-3bcd-4b Hydro-seed/Tensarmat	18	07FEB06	27FEB06	0	100	18	69	-426
2380	BV-S4/3a-4a & 5 hydro-seeding & tensarmat	12	28FEB06	13MAR06	0	100	12	69	-398
SURFACE DRAINAGE									
3705	BV-S4/3 Surface Drainage	8	17MAR05A	06FEB06	25	100	8	69	-512
3706	BV-S4/4 Surface Drainage	12	20DEC05A	17FEB06	0	100	18	83	-410
SLOPE SP-S1									
SURFACE DRAINAGE									
3711	Sp-S1/4 Surface Drainage	7	06JUL04A	27JAN06	40	100	7	241	-443
RC STRUCTURES									
RETAINING WALL BV-R1									
CONCRETE WORKS									
1145	BV-R1(A) RC Base Slab ch.2+060	18	06JAN06A	10FEB06	20	100	12	-7	-207
1147	BV-R1(B) RC Base Slab ch.2+070 to B1(BP wall)	18	13JAN06A	17FEB06	5	100	18	-13	-201
1146	BV-R1(A) RC Ret.Wall ch.2+060	18	20JAN06	17FEB06	0	100	18	5	-207
1143	BV-R1(C) Pile Capping Beam	18	11FEB06	03MAR06	0	100	18	-7	-156
1148	BV-R1(B) RC Ret.Wall ch.2+070 to B1(BP wall)	18	18FEB06	10MAR06	0	100	18	-13	-204
1160	BV-R1(C) Extend BP Wall	18	04MAR06	24MAR06	0	100	18	-7	-156



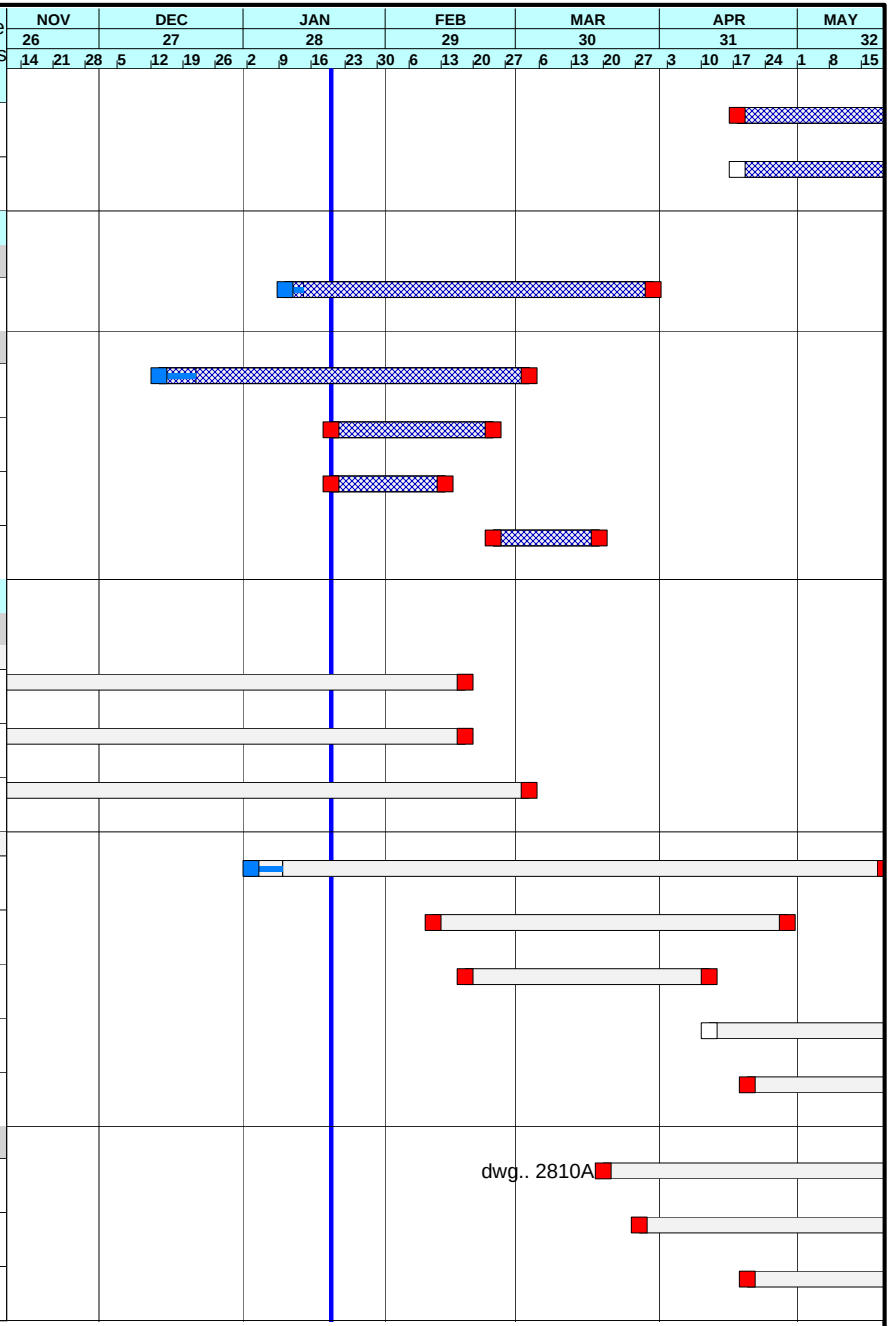
Act. ID	Activity Description	Orig Dur	Early Start	Early Finish	% Compl.	DWP % Compl.	Rem Dur	Total Float	Variance arly Finis
EXCAVATION (SOFT & ROCK)									
2700	BV-R1 Excavation (BV-S2/8 rock)	61	23JUL05A	17FEB06	0	100	18	654	-250
FINISHES									
1144	BV-R1(C) Wall Finishes to BP Wall	15	25MAR06	12APR06	0	100	15	89	-156
1150	BV-R1 Wall finishes	60	13APR06	28JUN06	0		60	89	-156
RETAINING WALL BV-R2									
CONCRETE WORKS									
1116	BV-R2 (7) Capping Beam and wall	30	13DEC05A	25JAN06	60	100	5	92	-297
1117	BV-R2 (8) Capping Beam and wall	30	11MAR06	19APR06	0	100	30	61	-328
BACKFILLING									
1122	BV-R2(A&B) Granular Drain & Compacted Backfill	36	07APR05A	10MAR06	5	100	36	93	-226
1126	BV-R2(C) Granular Drain & Compacted Backfill	6	20APR06	26APR06	0	100	6	111	0
STEPPED CHANNEL & BOX CULVERT									
CONCRETE WORKS									
1911	Box culvert bays (32to43) ch.2+010 to 2+110	55	20SEP05A	27MAR06	50	100	50	-184	-251
1161	Box culvert bays (44&45) ch.2+110 to 2+140	18	21NOV05A	25JAN06	80	100	5	12	-180
INLET HEADWALLS									
INLET HEAD WALL									
3715	Inlet headwall @SP-S2/3	30	27JAN06	10MAR06	0	100	30	212	-461
3796	Inlet headwall ch.1+810	66	11FEB06	04MAY06	0	100	66	170	-346
3797	Inlet headwall ch.1+830	66	11FEB06	04MAY06	0	100	66	170	-346
WSD WORKS									
WSD 900 MAIN DIVERSION									
1929	Inst.900.dia pipe (incl.thrust blocks) westside	90	19JUL05A	21JAN06	99	100	2	-55	-336
1174	Inst.DN900 pipe (incl.thrust blocks) to BV-S4	66	01AUG05A	21JAN06	99	100	2	-55	-354
3163	DN900 main clean/pressure test & WSD approve	54	22JAN06	14FEB06	0	100	24	-67	-376
1175	DN900 connection by WSD	12	15FEB06	26FEB06	0	100	12	-67	-442
1176	DN900 WSD Diversion Implemented	0		26FEB06	0	100	0	-67	-388



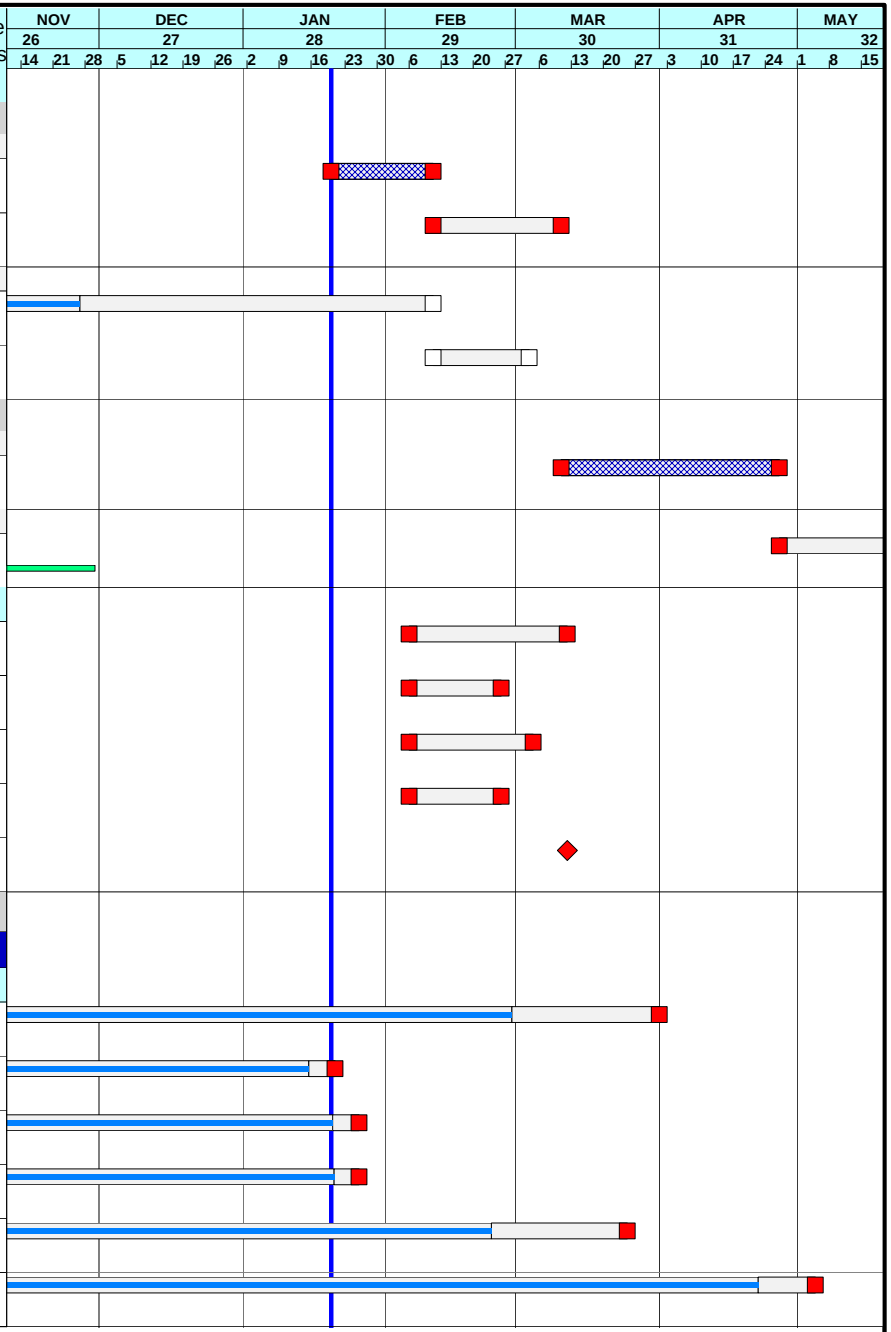
Act. ID	Activity Description	Orig Dur	Early Start	Early Finish	% Compl.	DWP % Compl.	Rem Dur	Total Float	Variance arly Finis
	WSD 2x600 MAIN DIVERSION								
1169	Inst.2xDN600 WSD Pipe down BV-S2/6-7	90	21JUL05A	27MAR06	70	100	50	75	-327
1165	Construct DN600 pipe tunnel	66	26SEP05A	07FEB06	80	100	9	-173	-277
1167	Inst.DN600 WSD Pipe along BV-S2/8 (CH140>200)	40	31OCT05A	22FEB06	0	100	22	37	-94
1164	Inst.DN600 WSD Pipe in Pipe Tunnel	18	29NOV05A	23JAN06	0	100	3	-108	-235
1163	Inst.DN600 WSD Pipe along BV-S2/8 (CH140>45)	30	20JAN06	03MAR06	0	100	30	48	-190
1166	Construct DN600 Pipe Bridge 'D' (CH225>280)	30	22FEB06	28MAR06	0	100	30	48	-352
3791	DN600 main clean/pressure test & WSD approve	40	29MAR06	07MAY06	0	100	40	63	-188
	WSD 200 MAIN								
2338	Inst.DN200 pipe (incl.thrust blocks) to BV-S4	60	03OCT05A	09MAR06	20	100	35	-79	-393
2340	DN200 connection by WSD	12	03MAR06	14MAR06	0	100	12	-104	-493
3164	DN200 main clean/pressure test & WSD approve	54	15MAR06	07MAY06	0	100	54	-104	-493
	TERRAIN MITIGATION								
	NTMM - BV-S2								
2392	NTMM - Constr.Peforated Drain Channel	24	11JUL05A	10FEB06	80	100	12	-134	-304
2350	NTMM - Afforestation of Area	60	02MAR06	17MAY06	0	100	60	160	-320
	NTMM - CULVERT 'A'								
	CONCRETE WORKS								
2388	Culvert 'A' - Constr.Culvert 'A' Ch.2+140	18	07MAR06	27MAR06	0	100	18	622	-225
	SOIL STABILISATION (SOIL NAILS,ROCK BOLTS ETC)								
2384	Culvert 'A' Prep.access for Soil Nails Ch.2+140	8	26JAN06	11FEB06	0	100	8	160	-225
2385	Culvert A-Soil Nails & Test ch.2+140 19nr.w/1rig	11	13FEB06	24FEB06	0	100	11	160	-225
2386	Culvert 'A' - excavate gabion benches Ch.2+140	4	25FEB06	01MAR06	0	100	4	160	-225
	FINISHES								
2387	Culvert 'A' - place gabions Ch.2+140	4	02MAR06	06MAR06	0	100	4	622	-225
	RECREATED STREAM								
3808	Recreated stream DN525 pipe (east) ch.1+740	18	20JAN06	17FEB06	0	100	18	-7	-491
1927	Recreated stream (east) ch.1+720 to 2+010	64	11MAR06	01JUN06	0	100	64	-25	-163



Act. ID	Activity Description	Orig Dur	Early Start	Early Finish	% Compl.	DWP % Compl.	Rem Dur	Total Float	Variance arly Finis
RECREATED STREAM									
3809	Recreated stream pond [east) ch.1+880	36	18APR06*	01JUN06	0	100	36	-25	-163
3810	Recreated stream pond [east) ch.1+920	36	18APR06	01JUN06	0	100	36	148	-163
EXCISION WORKS - NOISE BARRIERS & ENCLOSURES									
NOISE BARRIER (SB)									
2741	SB Barrier.Fnds.-RC Base (C2)	58	10JAN06A	30MAR06	5	100	53	-68	-172
NOISE SEMI-ENCLOSURE [SB]									
2739	SB Semi-Encl.Fnds.- RC Base (C3,C4,I2)	51	14DEC05A	03MAR06	10	100	30	-219	-259
2735	SB Semi-Encl.Fnds.- RC Base (C4)	23	20JAN06	23FEB06	0	100	23	-207	-266
2737	SB Semi-Encl.Fnds.- RC Base (I2)	14	20JAN06	13FEB06	0	100	14	-178	-243
2733	SB Semi-Encl.Fnds. - RC Base (C3)	20	24FEB06	18MAR06	0	100	20	-207	-310
SB/NB ROADWORKS & FINISHES									
ROADS - FORMATION									
FILLING									
1103	BV Compact.Fill to Form.ch.1+920 to 2+020	84	14JUN04A	17FEB06	80	100	18	-182	-286
1102	BV Compact.Fill to Form.ch.2+020 - 2+200	48	11AUG04A	17FEB06	80	100	18	-182	-322
2732	BV Compact.Fill to Form.ch.1+860 to 1+920	78	03OCT05A	03MAR06	20	100	30	-135	-256
DRAINAGE									
2381	SB/NB Sth.Appr.Rd.Drainage ch.2+030 - 2+200	114	03JAN06A	19MAY06	5	100	90	-219	-280
2727	BV.Appr.Rd.Drainage ch.1+780 to 1+920	62	11FEB06	28APR06	0	100	62	-155	-238
1178	BV.Appr.Rd.Drainage ch.1+920 to 1+960	44	18FEB06	11APR06	0	100	44	-167	-286
2721	BV.Appr.Rd.Drain Testing ch.1+920 to 1+960	30	12APR06	22MAY06	0	100	30	41	-286
2726	SB/NB Sth.Appr.Rd.Drain Testing ch.2+030 - 2+200	42	20APR06	10JUN06	0	100	42	-219	-280
ROADS - FINISHES									
2717	BV CLP Inst.HV cable duct to SP	90	20MAR06	11JUL06	0	100	90	-200	-272
2742	TCSS Ducts NB & SB Carriageway ch.1+800 to 1+900	90	28MAR06	19JUL06	0	100	90	-155	-214
1253	TCSS Ducts NB & SB Carriageway ch.1+920 to 2+200	90	20APR06	07AUG06	0		90	-171	-256



Act. ID	Activity Description	Orig Dur	Early Start	Early Finish	% Compl.	DWP % Compl.	Rem Dur	Total Float	Variance arly Finis
EVA ROADWORKS & FINISHES									
SB (EAST SIDE) EVA ROADWORKS									
FILLING									
1980	BV Fill Temp.covered culvert ch.2+000	12	20JAN06	10FEB06	0	100	12	-33	-163
2378	BV Fill to Formation (east) ch.1+840 - 1+980	24	11FEB06	10MAR06	0	100	24	-33	-163
DRAINAGE									
1979	SB EVA rd.drainage (east) ch.2+000 to 2+200	31	11APR05A	10FEB06	75	100	12	93	-171
1978	SB EVA rd.drain testing (east) ch.2+000 to 2+200	18	11FEB06	03MAR06	0	100	18	93	-171
NB (WESTSIDE) EVA ROADWORKS									
FILLING									
1149	Granular Drain & Comp.B/Fill to BV-R1 Wall	36	11MAR06	26APR06	0	100	36	-13	-162
DRAINAGE									
2730	NB EVA Rd.Drainage (west) ch.2+020 to 2+190	31	27APR06	05JUN06	0		31	-13	-144
EXCISION WORK-SHEK LEI PUI WATER TREATMENT PLANT									
2751	Soilid Barrier Type II - Cladding	30	06FEB06*	11MAR06	0	100	30	-140	-285
2752	Soilid Barrier Type I - Cladding	18	06FEB06	25FEB06	0	100	18	-134	-255
2753	Soilid Barrier Type III - Cladding	24	06FEB06	04MAR06	0	100	24	-134	-237
2754	Soilid Barrier Type IV - Cladding	18	06FEB06	25FEB06	0	100	18	-128	-213
TARG1	Target Date WTW - complete	0		11MAR06	0	100	0	-177	-280
ENT SOUTH PORTAL VENTILATION BUILDING									
SUBMITTALS & APPROVALS									
E&M EQPT.& MATERIAL.SUBMITTALS									
8201	EntSpBldg-Sub.MVAC MCC, power & control sys	54	02JUL04A	31MAR06	95	100	54	-163	-314
8204	EntSpBldg-Sub.TVF, Ductworks & Control sys	78	02JUL04A	20JAN06	99	100	1	-127	-240
8212	EntSpBldg-Sub.FS AFA & FM200 sys	54	05JUL04A	25JAN06	99	100	5	-37	-131
8207	EntSpBldg-Sub.FS wet sys	54	05AUG04A	25JAN06	99	100	5	-61	-254
8208	EntSpBldg-Sub.MVAC / TVF pneumatic sys	54	14AUG04A	24MAR06	95	50	48	-85	-119
8200	EntSpBldg-Sub.CMCS & ELV sys	78	26AUG04A	04MAY06	98	100	78	-139	-293



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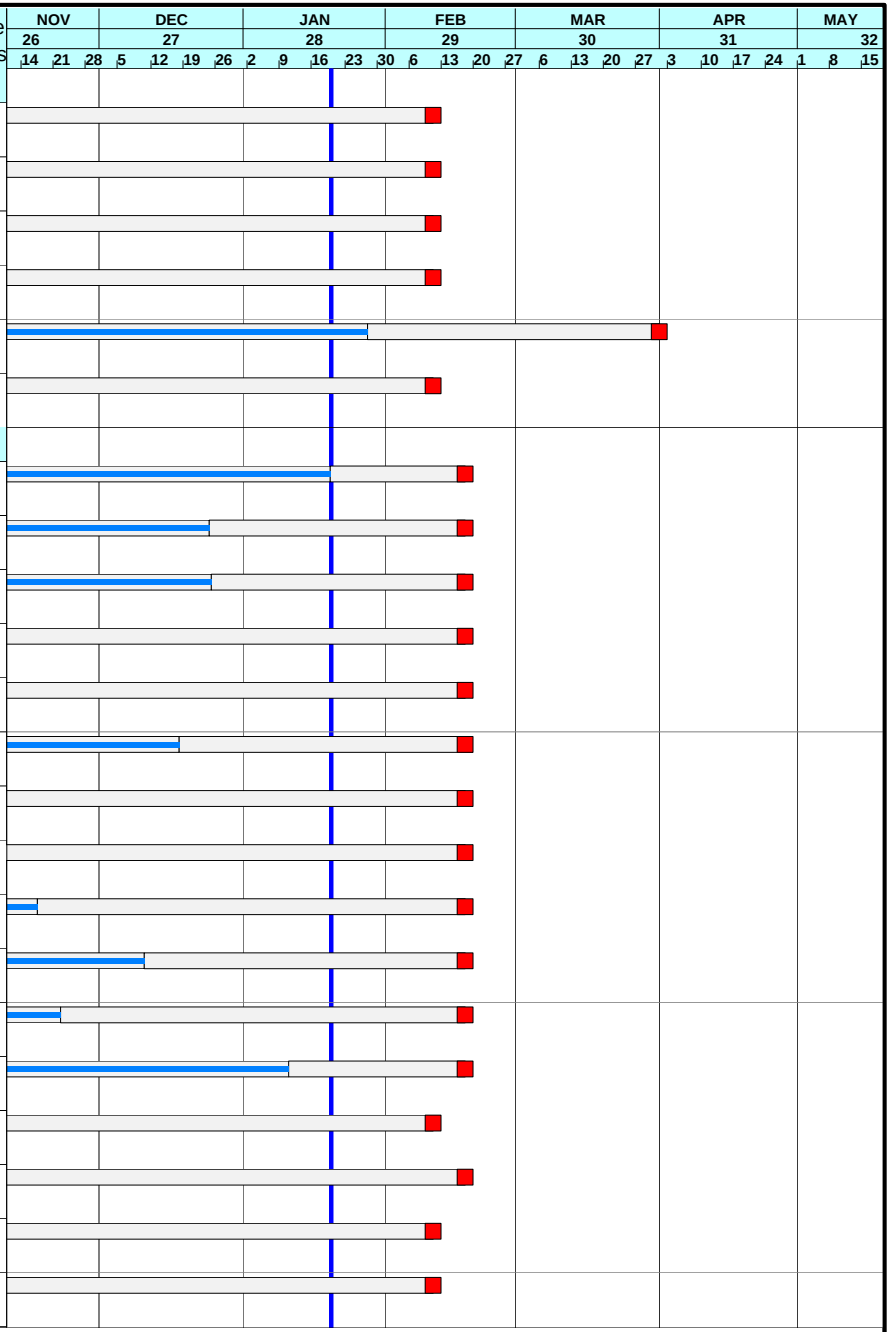
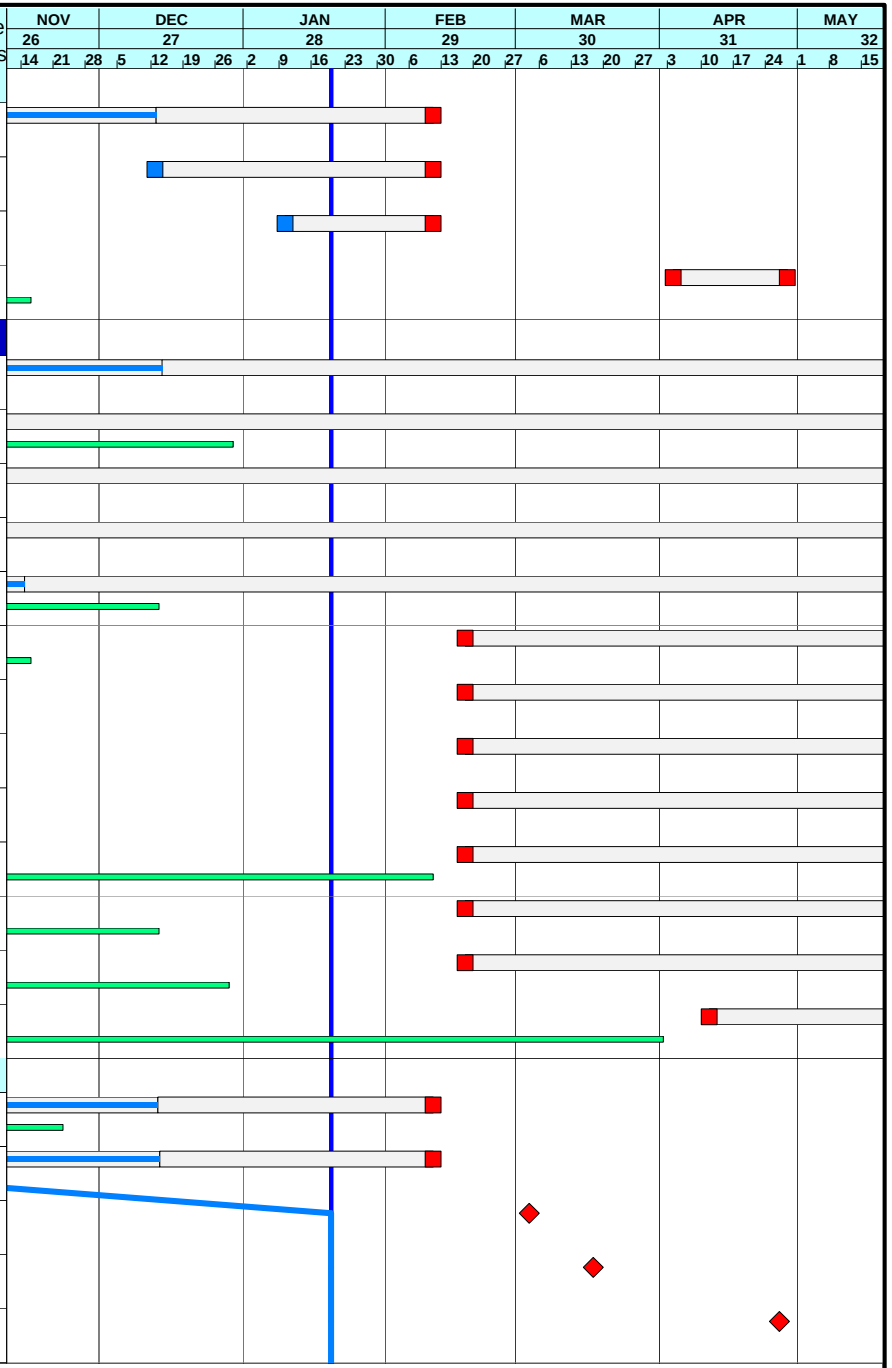
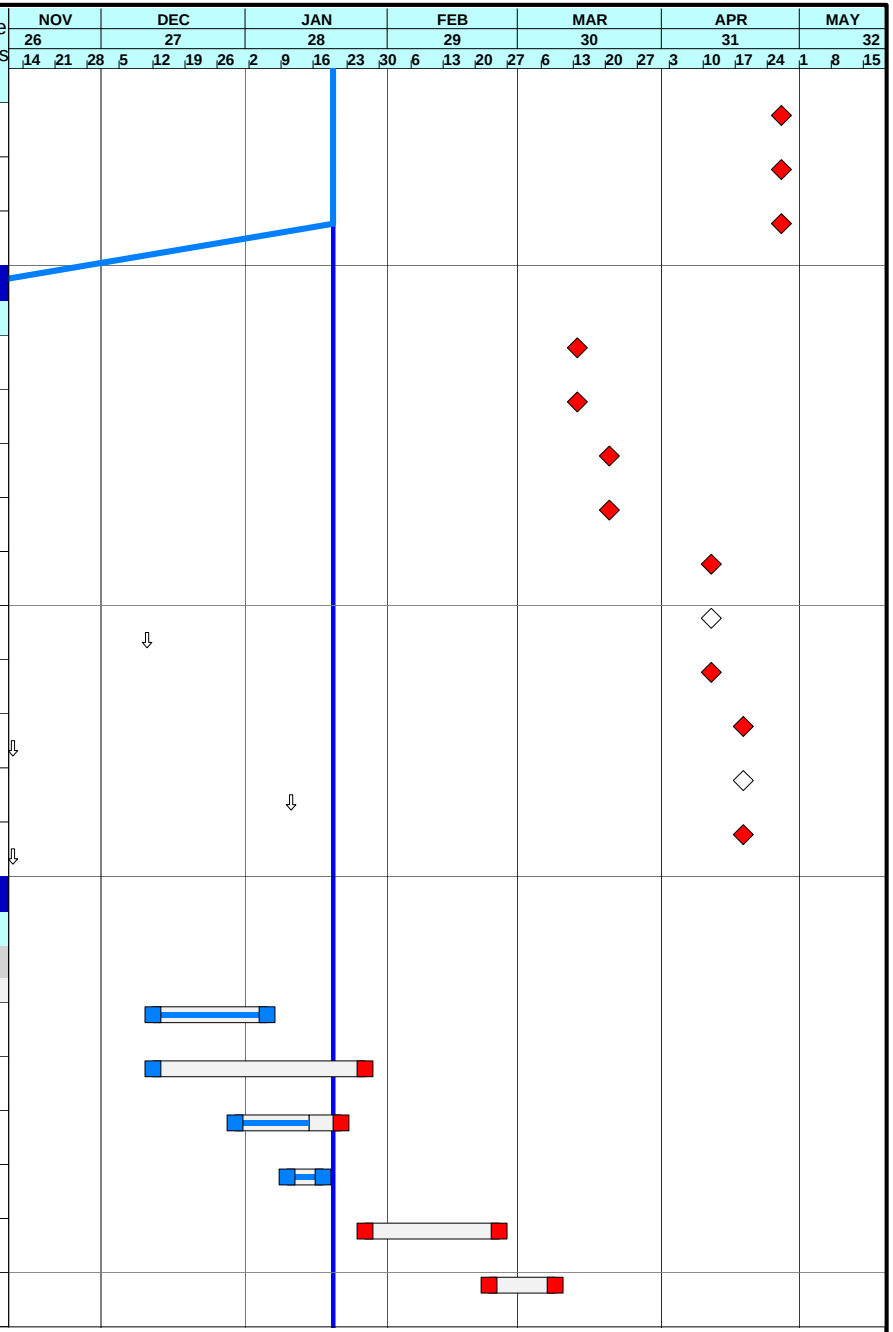
E&M EQPT.& MATERIAL.SUBMITTALS									
1922	SP.Bldg. - Prep & submit louvre details	24	19NOV04A	10FEB06	50	100	12	-67	-263
1942	SP.Bldg. - Prep & sub aluminium cladding	24	19NOV04A	10FEB06	50	100	12	-67	-263
1940	SP.Bldg. - Prep & sub balustrade & metal wks	24	20JAN05A	10FEB06	50	100	12	-25	-261
1944	SP.Bldg. - Prep & sub fall arrest system	24	01FEB05A	10FEB06	50	100	12	-13	-149
8205	EntSpBldg-Sub.PD irrig. sys	54	04FEB05A	31MAR06	85	100	54	-61	-309
1918	SP.Bldg. - Prep & submit door & window detail	24	17FEB05A	10FEB06	50	100	12	-37	-203
E&M EQPT.& MATERIAL APPROVALS									
6001	EntSpBldg-App. HV power dist. sys	18	14JUL04A	17FEB06	95	100	18	-217	-275
6002	EntSpBldg-App. LV power dist. sys	18	13AUG04A	17FEB06	90	100	18	-223	-251
8491	EntSpBldg-App. building related luminaires	18	18AUG04A	17FEB06	90	100	18	-157	-216
6006	EntSpBldg-App. FS wet sys	18	04SEP04A	17FEB06	80	100	18	-61	-249
6036	EntSpBldg-App. FS AFA & FM200 sys	18	14SEP04A	17FEB06	70	100	18	-37	-126
6192	EntSpBldg-App. of CMCS & ELV sys	18	20SEP04A	17FEB06	88	100	18	-139	-215
6005	EntSpBldg-App. MVAC mech.vent. sys	18	23SEP04A	17FEB06	70	100	18	-91	-212
6003	EntSpBldg-App. PD cleans. & flush water sys	18	04NOV04A	17FEB06	78	100	18	-61	-255
6742	EntSpBldg-App. MVAC MCC, power & control sys	18	12NOV04A	17FEB06	80	100	18	-163	-260
6760	EntSpBldg-App. TVF, Ductworks & Control sys	18	12NOV04A	17FEB06	85	100	18	-127	-239
7615	EntSpBldg-App. HV/LV main & submain cable sys	18	07DEC04A	17FEB06	80	100	18	-205	-227
6013	EntSpBldg-App. MVAC Package AC Unit sys	18	01FEB05A	17FEB06	90	100	18	-25	-83
1939	SP.Bldg. - Approve louvre details	24	07APR05A	10FEB06	50	100	12	-67	-239
6004	EntSpBldg-App. PD irrig. sys	18	05MAY05A	17FEB06	30	100	18	-61	-255
1919	SP.Bldg. - Approve door & window details	24	07MAY05A	10FEB06	50	100	12	-37	-179
1947	SP.Bldg. - Approve slate cladding design	24	15JUN05A	10FEB06	50	100	12	-67	-239



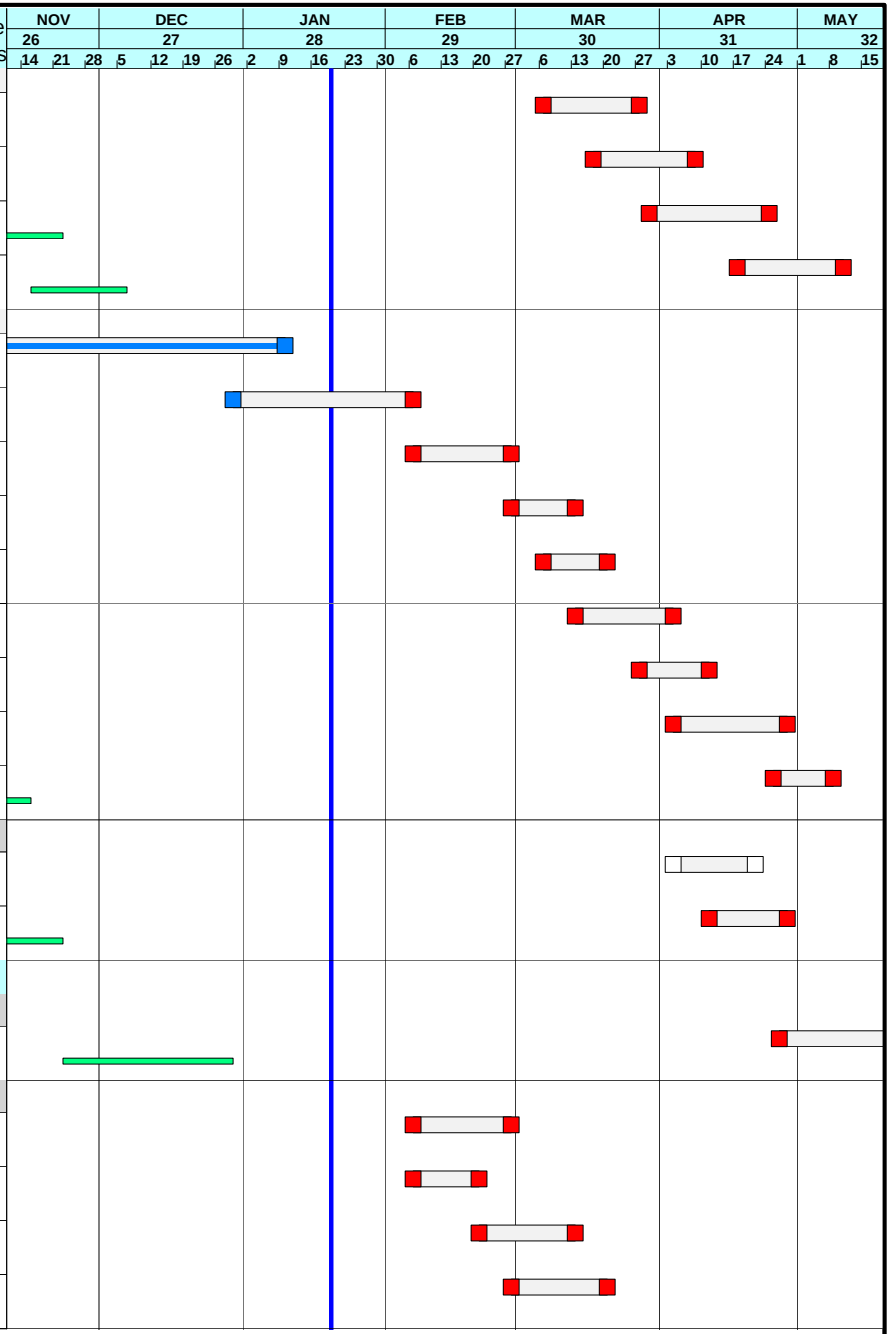
Act. ID	Activity Description	Orig Dur	Early Start	Early Finish	% Compl.	DWP % Compl.	Rem Dur	Total Float	Variance arly Finis
E&M EQPT.& MATERIAL APPROVALS									
1945	SP.Bldg. - Approve fall arrest system	24	14OCT05A	10FEB06	50	100	12	-13	-125
1943	SP.Bldg. - Approve aluminium cladding	24	13DEC05A	10FEB06	0	100	12	-67	-239
1941	SP.Bldg. - Approve balustrade & metal works	24	10JAN06A	10FEB06	0	100	12	-25	-237
6750	EntSpBldg-App. MVAC / TVF pneumatic sys	18	04APR06	28APR06	0		18	-93	-127
PROCUREMENT - MATERIAL									
6007	EntSpBldg-Proc. & Manuf. of HV dist. equip't	180	25MAR05A	04SEP06	50	100	180	-217	-257
6193	EntSpBldg-Proc. & Manuf. of CMCS & ELV sys	180	25MAR05A	04SEP06	20	100	180	-139	-197
6743	EntSpBldg-Proc & Manuf. MCC, power & control sys	180	25MAR05A	04SEP06	20	100	180	-163	-242
6012	EntSpBldg-Proc & Manuf. FS wet sys	120	06JUN05A	24JUN06	30	100	120	-61	-231
6761	EntSpBldg-Proc & Manuf. TVF,Ductwks & Cont'l sys	180	09JUN05A	04SEP06	35	100	180	-127	-209
6008	EntSpBldg-Proc & Manuf. LV power dist. equip't	180	18FEB06	25SEP06	0	100	180	-223	-251
6009	EntSpBldg-Proc & Manuf. MVAC mech.vent. sys	120	18FEB06	17JUL06	0	100	120	-91	-212
6010	EntSpBldg-Proc & Manuf. Cleans & flush water sys	120	18FEB06	17JUL06	0	100	120	-61	-255
6011	EntSpBldg-Proc & Manuf. PD irrig. sys	120	18FEB06	17JUL06	0	100	120	-61	-255
6079	EntSpBldg-Proc & Manuf. FS AFA & FM200 sys	120	18FEB06	17JUL06	0	90	120	-37	-126
7616	EntSpBldg-Proc & Manuf. HV/LV cable	180	18FEB06	25SEP06	0	100	180	-205	-227
8492	EntSpBldg-Proc & Manf bldg related luminaires	180	18FEB06	25SEP06	0	100	180	-157	-216
6035	EntSpBldg-Proc & Manuf. MVAC Package AC Units	120	12APR06	06SEP06	0		120	-69	-127
ABWF WORKS									
1951	SP.Bldg. - Procure aluminium cladding	180	19APR05A	10FEB06	80	100	12	-67	-59
1950	SP.Bldg. - Procure balustrade & metal works	60	21APR05A	10FEB06	80	100	12	-73	-117
2030	SP.Bldg. - Initial deliver balust & metal works	0	04MAR06		0	100	0	-25	0
1977	SP.Bldg. - Initial deliver doors & windows	0	18MAR06		0		0	-37	0
2017	SP.Bldg. - Initial delivery louvres	0	27APR06		0		0	-67	0



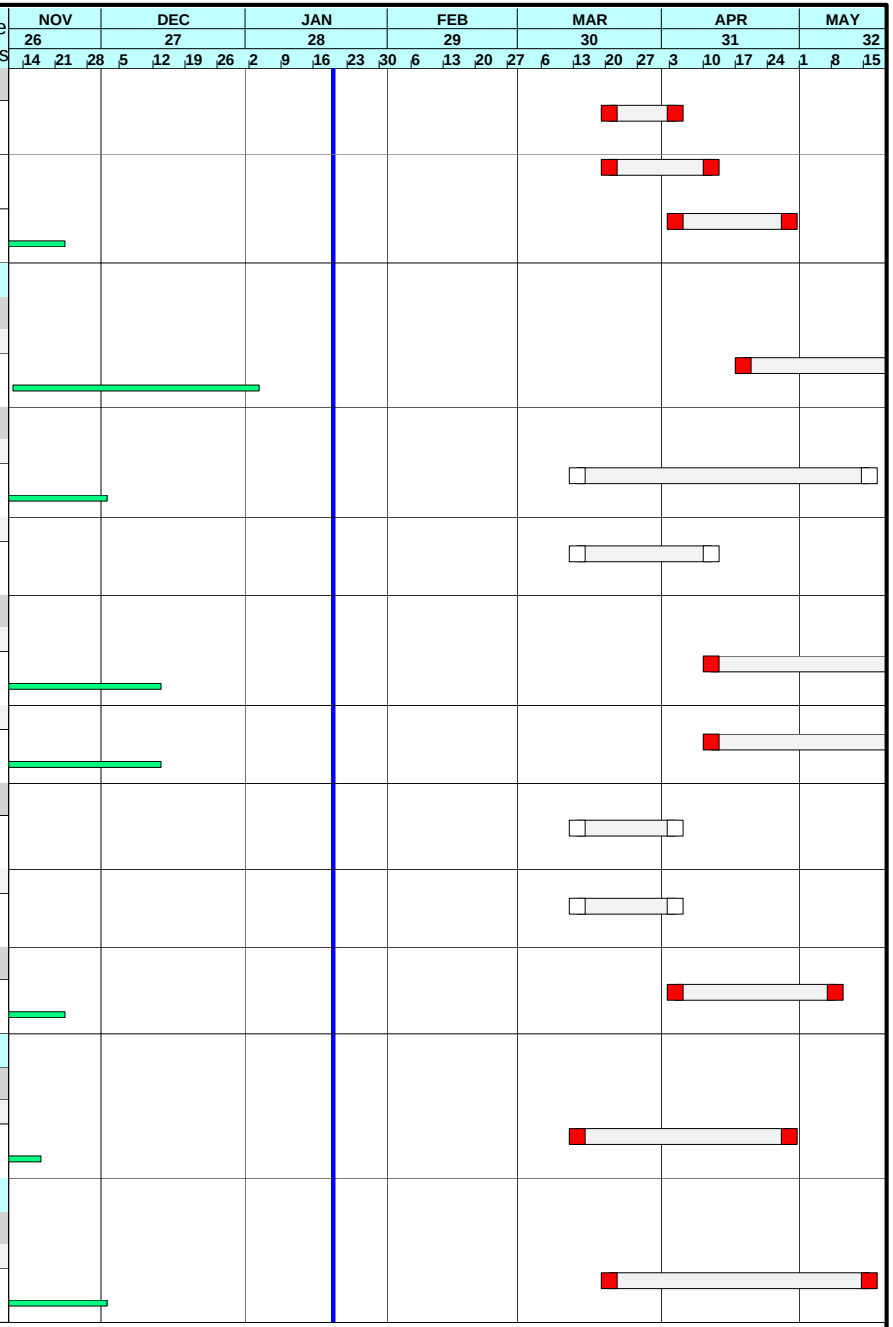
Act. ID	Activity Description	Orig Dur	Early Start	Early Finish	% Compl.	DWP % Compl.	Rem Dur	Total Float	Variance arly Finis
ABWF WORKS									
2018	SP.Bldg. - Initial deliver fall arrest system	0	27APR06		0		0	-13	0
2019	SP.Bldg. - Initial deliver slate cladding	0	27APR06		0		0	-67	0
2029	SP.Bldg. - Initial deliver aluminium cladding	0	27APR06		0		0	-67	0
E&M ACCESS DATES									
SOUTH PORTAL BUILDING									
1817	Int M/S - ENT SPB - E&M access - G/F	0		13MAR06	0		0	-33	-125
6023	EntSpBldg-E&M access to G/F	0	14MAR06*		0		0	-33	-125
1838	Int M/S - ENT SPB - E&M access - 1/F	0		20MAR06	0		0	-45	-125
6025	EntSpBldg-E&M access to 1/F	0	21MAR06*		0		0	-45	-125
1839	Int M/S - ENT SPB - E&M access - 2/F (partial)	0		11APR06	0		0	-105	-127
4001	Int M/S - ENT SPB - E&M access - 2/F (full)	0		11APR06*	0		0	610	-93
6021	EntSpBldg-E&M access to 2/F (partial access)	0	12APR06*		0		0	-105	-127
1840	Int M/S - ENT SPB - E&M access - 3/F (partial)	0		18APR06	0		0	-102	-121
4002	Int M/S - ENT SPB - E&M access - 3/F (full)	0		18APR06*	0		0	607	-73
6015	EntSpBldg-E&M access to 3/F (partial access)	0	19APR06		0		0	-102	-121
CONSTRUCTION									
SUPERSTRUCTURE									
RC WORKS									
NB CARRIAGEWAY & CENTRAL RESERVE									
1191	SP.Bldg. - RC S/Slab 1FL.+72.50mPD GL.H-S/10-12	18	12DEC05A	05JAN06A	100	100	0		-145
1196	SP.Bldg - RC Trans Slab 2FL.+80.45mPD GL.H-S/2-7	20	12DEC05A	26JAN06	0	100	6	-102	-123
1192	SP.Bldg. - RC Cols.& Walls to 2FL.GL.H-S/10-12	18	30DEC05A	21JAN06	70	100	2	-98	-145
1193	SP.Bldg. - RC S/Slab LPL.+75.80mPD GL.H-S/10-12	12	10JAN06A	17JAN06A	100	100	0		-135
1197	SP.Bldg. - RC Cols.& Walls to 3.FL.GL.H-T/7-3	18	27JAN06	24FEB06	0	100	18	-102	-125
1198	SP.Bldg. - RC S/Slab U2 FL.+81.15mPD GL.H-T/7-3	12	23FEB06	08MAR06	0	100	12	-102	-123



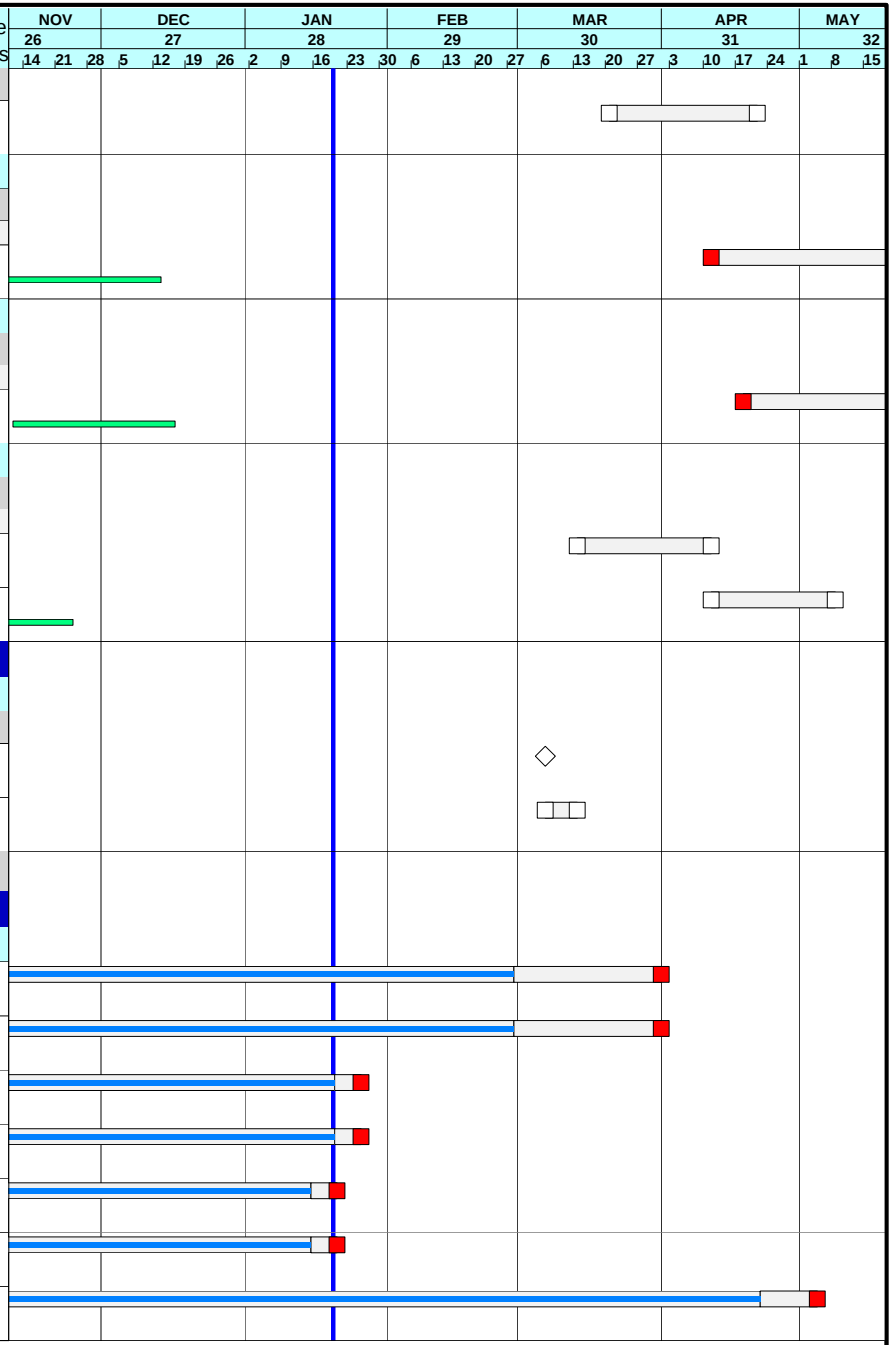
Act. ID	Activity Description	Orig Dur	Early Start	Early Finish	% Compl.	DWP % Compl.	Rem Dur	Total Float	Variance arly Finis
	NB CARRIAGEWAY & CENTRAL RESERVE								
1199	SP.Bldg. - RC S/Slab 3FL.+87.40mPD GL.H-T/7-3	18	07MAR06	27MAR06	0	100	18	-102	-121
1200	SP.Bldg. - RC Cols. & Walls to 4FL.GL.H-T/7-3	18	18MAR06	08APR06	0	100	18	-65	-119
1201	SP.Bldg. - RC S/Slab 4FL.+95.30mPD GL.H-T/7-3	18	30MAR06	24APR06	0		18	-65	-117
1202	SP.Bldg. - RC Cols. & Walls to 5FL.GL.H-T/7-3	18	18APR06	10MAY06	0		18	-59	-117
	SB CARRIAGEWAY								
1207	SP.Bldg. - Sth Bound C/Way RC Ret Wall W2	29	20OCT05A	09JAN06A	100	100	0		-170
1208	SP.Bldg - RC Trans Slab 2FL.+80.45mPD GL.H-S/1-2	15	30DEC05A	06FEB06	0	100	8	-105	-130
1209	SP.Bldg. - RC Cols.& Walls to 3FL.GL.H-T/1-3	18	07FEB06	27FEB06	0	100	18	-105	-133
1210	SP.Bldg. - RC S/Slab U2FL.+81.15mPD GL.H-T/1-3	12	28FEB06	13MAR06	0	100	12	-105	-133
1211	SP.Bldg. - RC S/Slab 3FL.+87.40mPD GL.H-T/1-3	12	07MAR06	20MAR06	0	100	12	-96	-133
1212	SP.Bldg. - RC Cols.& Walls to 4FL.GL.H-T/1-3	18	14MAR06	03APR06	0	100	18	-57	-133
1213	SP.Bldg. - RC S/Slab 4FL.+95.30mPD GL.H-T/1-3	12	28MAR06	11APR06	0		12	-57	-133
1214	SP.Bldg. - RC Cols.& Walls to 5FL.GL.H-T/1-3	18	04APR06	28APR06	0		18	-57	-133
1215	SP.Bldg. - RC S/Slab 5FL +102.35mPD GL.H-T/1-3	9	26APR06	08MAY06	0		9	-54	-133
	STRUCTURAL STEELWORKS								
1218	SP.Bldg. - Crane beams to underside of U2F	12	04APR06	21APR06	0		12	15	-127
1223	SP.Bldg. - Crane beams to underside of 3FL	12	12APR06	28APR06	0		12	9	-121
	ARCHITECTURAL & BUILDER'S WORKS								
	ROOFING & EXTERNAL FACADE								
1260	SP.Bldg.Ext Louvre & cladding 2FL to 3FL	30	27APR06	03JUN06	0		30	-67	-119
	BUILDER'S WORK								
1219	SP.Bldg.W/Proof Tank/Pits & Test GF GL.H-S/10-12	18	07FEB06	27FEB06	0	100	18	-87	-125
1220	SP.Bldg.Plinths GL.	12	07FEB06	20FEB06	0	100	12	-87	-125
1526	SP.Bldg. Wet Trades GL	18	21FEB06	13MAR06	0	100	18	-71	-125
1264	SP.Bldg. Wet Trades 1FL	18	28FEB06	20MAR06	0	100	18	-77	-125



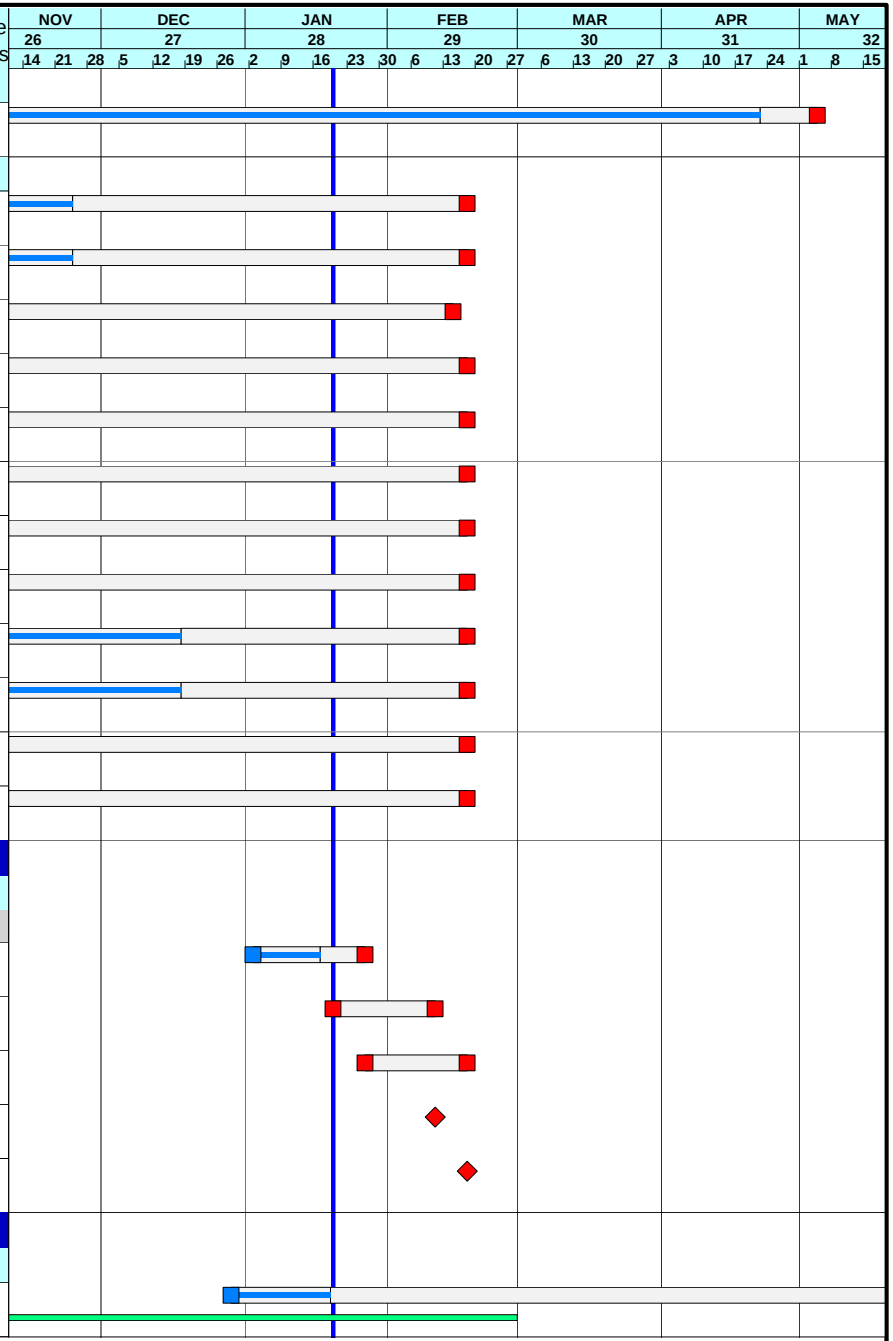
Act. ID	Activity Description	Orig Dur	Early Start	Early Finish	% Compl.	DWP % Compl.	Rem Dur	Total Float	Variance arly Finis
BUILDER'S WORK									
1221	SP.Bldg.Plinths 2FL.	12	21MAR06	03APR06	0	100	12	-99	-127
1265	SP.Bldg. Wet Trades 2FL	18	21MAR06	11APR06	0	100	18	-105	-127
1266	SP.Bldg. Wet Trades 3FL	18	04APR06	28APR06	0		18	-102	-121
E&M - GENERAL									
MVAC WORKS									
MCC, POWER & CONTROL									
6745	EntSpBldg-MCC, power & control 1st fix	42	19APR06	09JUN06	0		42	-42	-121
FS WORKS									
FS MAJOR EQUIPMENT									
6028	EntSpBldg-Hydrant Pump & Tank set 1st fix	48	14MAR06	15MAY06	0		48	21	-125
TUNNEL HYDRANT + HOSE REEL									
6777	EntSpBldg-ENT Tunnel (Hyd/HR) pumps set 1st fix	24	14MAR06	11APR06	0		24	75	-125
ELECTRICAL WORKS									
HV POWER DISTRIBUTION MAJOR EQPT.									
6027	EntSpBldg-HV power dist. sys 1st fix	36	12APR06	29MAY06	0		36	-99	-127
EARTHING & LIGHTNING PROTECTION									
6014	EntSpBldg-Earth'g & lightn'g - Earth Mat & Rods	30	12APR06	22MAY06	0		30	-69	-121
PLUMBING & DRAINAGE WORKS									
6029	EntSpBldg-Cleansing Water Pumps & Tanks 1st fix	18	14MAR06	03APR06	0		18	69	-125
IRRIGATION SYSTEM									
6030	EntSpBldg-irrig. Water Pumps & Tanks 1st fix	18	14MAR06	03APR06	0		18	69	-125
TCSS CONTAINMENT									
8480	EntSpBldg - TCSS Contain't for KD5	24	04APR06	08MAY06	0		24	-95	-127
E&M G/F									
MVAC WORKS									
MECH.VENT./AIR CONDITIONING									
6024	EntSpBldg G/F-AC(1st Fix) mech.vent.	36	14MAR06	28APR06	0		36	-33	-125
E&M 1/F									
MVAC WORKS									
MECH.VENT./AIR CONDITIONING									
6026	EntSpBldg 1F-AC(1st Fix) mech.vent.	42	21MAR06	15MAY06	0		42	-45	-125



Act. ID	Activity Description	Orig Dur	Early Start	Early Finish	% Compl.	DWP % Compl.	Rem Dur	Total Float	Variance arly Finis
TUNNEL VENTILATION SYSTEM									
6753	EntSpBldg 1F-TVF pneumatic 1st fix	24	21MAR06	21APR06	0		24	81	-125
E&M 2/F									
MVAC WORKS									
MECH.VENT./AIR CONDITIONING									
6022	EntSpBldg 2F-AC(1st Fix) mech.vent.	36	12APR06	29MAY06	0		36	-105	-127
E&M ROOF									
MVAC WORKS									
MECH.VENT./AIR CONDITIONING									
6016	EntSpBldg 3F-AC(1st Fix) mech.vent.	30	19APR06	25MAY06	0		30	-102	-121
EXTERNAL AREAS									
PLUMBING & DRAINAGE									
IRRIGATION SYSTEM									
7587	EntSpBldg Ext-PD(1st Fix) irrig. sys	24	14MAR06	11APR06	0		24	87	-125
7588	EntSpBldg Ext-PD(2nd Fix) irrig. sys	18	12APR06	08MAY06	0		18	87	-125
TESTING & COMMISSIONING									
STATUTORY INSPECTION									
WSD WATER SUPPLY									
6086	EntSpBldg-All plumb. design approved by WSD	0	07MAR06		0		0	69	-125
6105	EntSpBldg-Sub. WWO 046 part 1 to 3 to WSD	6	07MAR06	13MAR06	0		6	69	-125
EAGLES NEST TUNNEL									
SUBMITTALS & APPROVALS									
E&M EQPT./ MTRL.DETAIL SUBMITTAL									
8217	EntRtNb-Sub.TVS control sys	54	02JUL04A	31MAR06	95	100	54	-139	-275
8220	EntRtSb&VA-Sub.TVS control sys	54	02JUL04A	31MAR06	95	100	54	-139	-287
8215	EntRtNb-Sub.FS AFA & Linear sys	54	05JUL04A	25JAN06	99	100	5	-211	-442
8219	EntRtSb&VA-Sub.FS AFA & Linear sys	54	05JUL04A	25JAN06	99	100	5	-211	-451
8218	EntRtNb-Sub.TVS in Tunnel	54	07JUL04A	20JAN06	99	100	1	-43	-366
8224	EntRtSb&VA-Sub.TVS in Tunnel	54	07JUL04A	20JAN06	99	100	1	-13	-378
8213	EntRtNb-Sub.CMCS & ELV sys	78	26AUG04A	04MAY06	98	100	78	-169	-371



Act. ID	Activity Description	Orig Dur	Early Start	Early Finish	% Compl.	DWP % Compl.	Rem Dur	Total Float	Variance arly Finis
E&M EQPT./ MTRL.DETAIL SUBMITTAL									
8221	EntRtSb&VA-Sub.CMCS & ELV sys	78	26AUG04A	04MAY06	98	100	78	-169	-377
E&M EQPT./MTRL.APPROVAL BY ENGINEER									
7618	EntRtSb&VA-App. TVS in Tunnel	18	29JUL04A	17FEB06	85	100	18	-13	-377
7621	EntRtNb-App. TVS in Tunnel	18	29JUL04A	17FEB06	85	100	18	-43	-365
6808	EntRtSb&VA-App. Tunnel Lgt sys	18	05AUG04A	14FEB06	80	100	15	-214	-347
6878	EntRtNb-App. Tunnel Lgt sys	18	05AUG04A	17FEB06	80	100	18	-211	-347
6802	EntRtSb&VA-App. LV main & submain dist. sys	18	13AUG04A	17FEB06	80	100	18	-193	-365
6882	EntRtNb-App. LV main & submain dist. sys	18	13AUG04A	17FEB06	80	100	18	-181	-355
6785	EntRtSb&VA-App. FS AFA & Linear sys	18	14SEP04A	17FEB06	70	100	18	-211	-446
6880	EntRtNb-App. FS AFA & Linear sys	18	14SEP04A	17FEB06	70	100	18	-211	-437
6798	EntRtSb&VA-App. CMCS & ELV sys	18	20SEP04A	17FEB06	88	100	18	-169	-299
6877	EntRtNb-App. CMCS & ELV sys	18	20SEP04A	17FEB06	88	100	18	-169	-293
6795	EntRtSb&VA-App. TVS control sys	18	12NOV04A	17FEB06	70	100	18	-139	-233
6884	EntRtNb-App. TVS control sys	18	12NOV04A	17FEB06	70	100	18	-139	-221
DESIGN & ENGINEERING									
PERMANENT WORKS									
TUNNEL									
1657	Design/ICE Check Tunnel Clading	24	03JAN06A	26JAN06	60	100	6	-20	-198
1668	Eng Approve Dsg X-passage/Adit Fire Doors	12	20JAN06	10FEB06	0	100	12	-189	-392
1659	Eng Approve Dsg Tunnel Clading	12	27JAN06	17FEB06	0	100	12	-20	-198
1669	Issue Constr Dwgs X-passage/Adit Fire Doors	0		10FEB06	0	100	0	-189	-385
1658	Issue Constr Dwgs Tunnel Clading	0		17FEB06	0	100	0	-20	-191
PROCUREMENT - MATERIAL									
TUNNEL									
1660	Order/Manufact/Del Tunnel Cladding	200	29DEC05A	31JUL06	10	90	150	-52	-123



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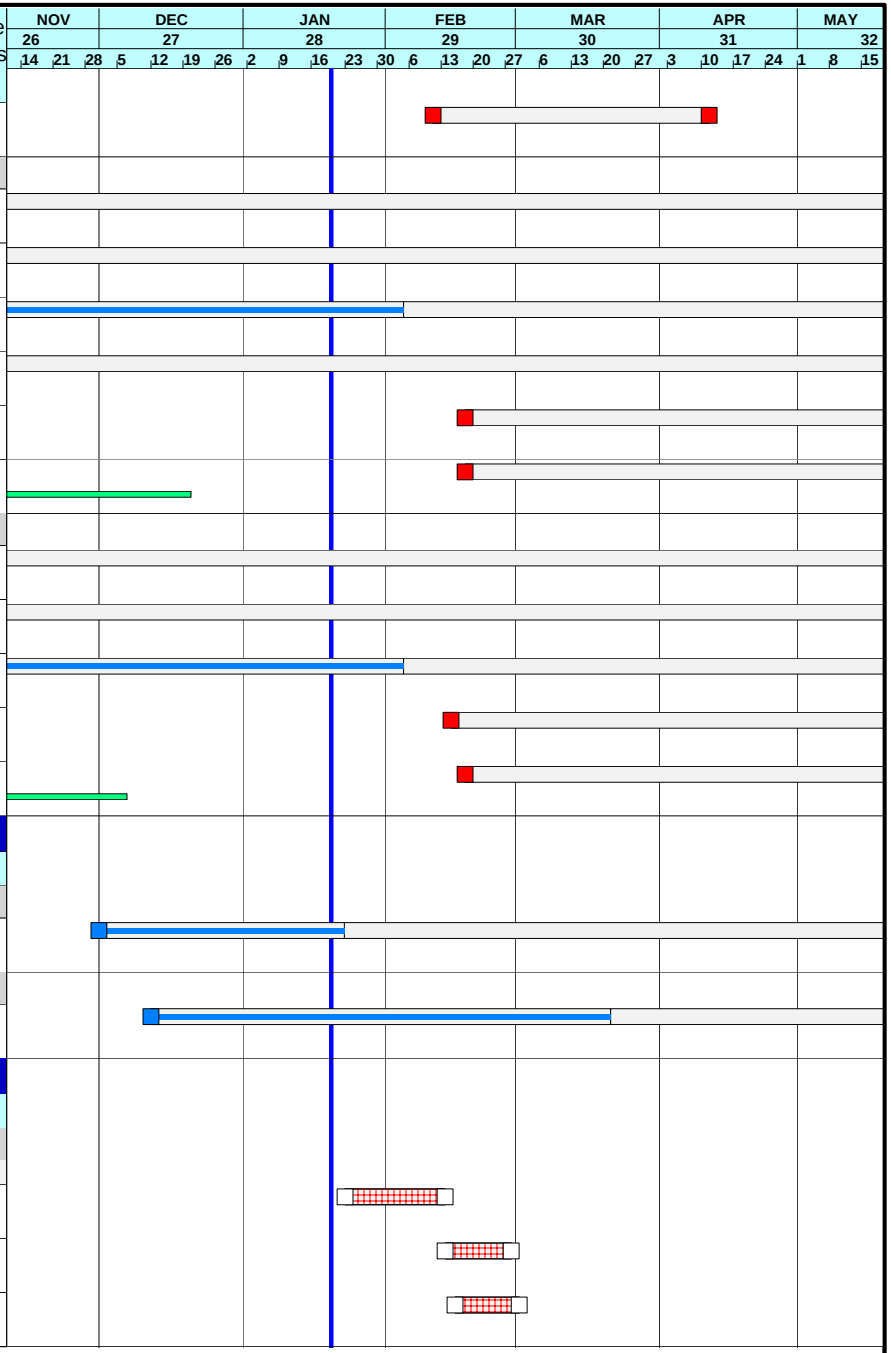
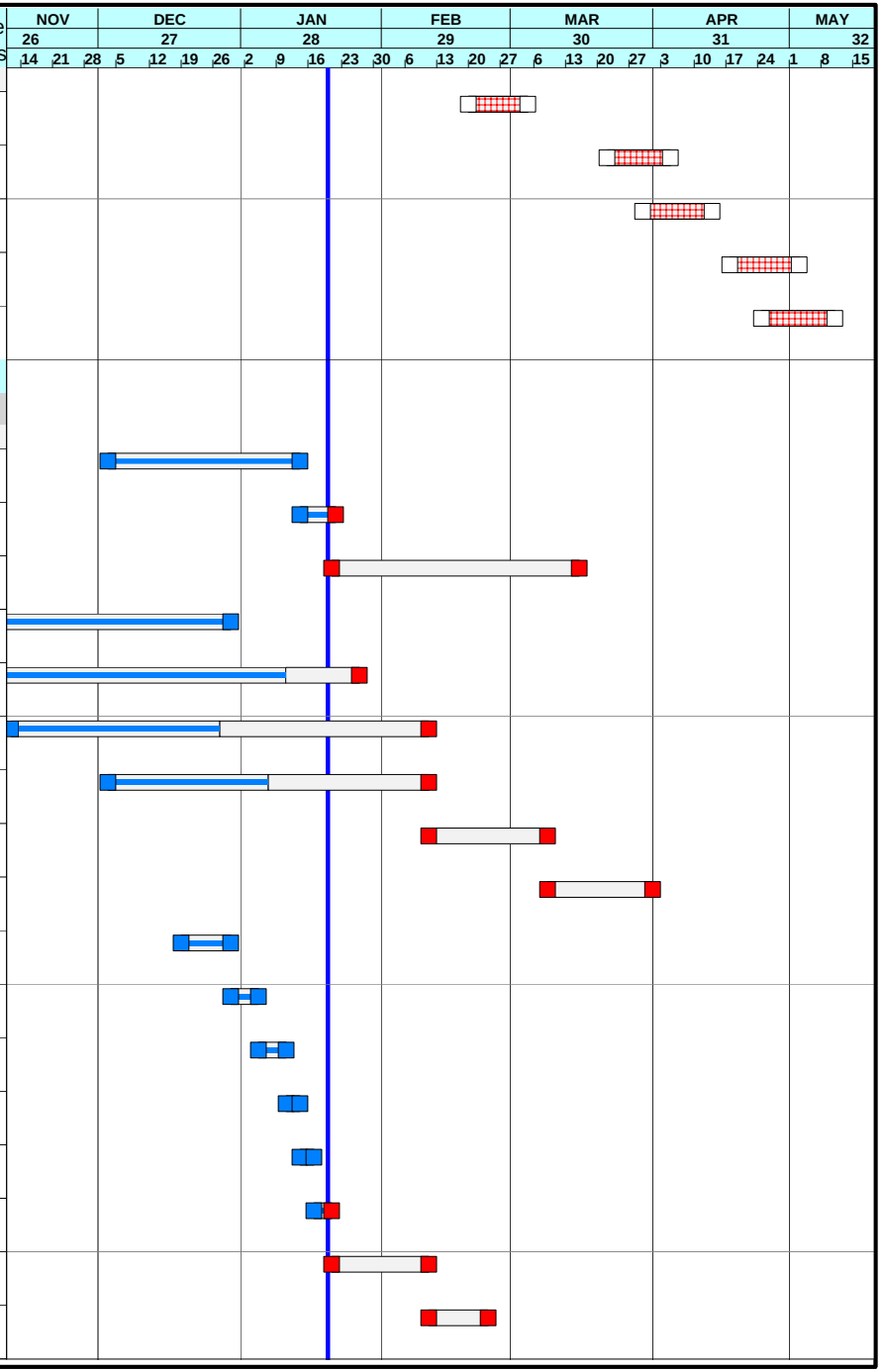
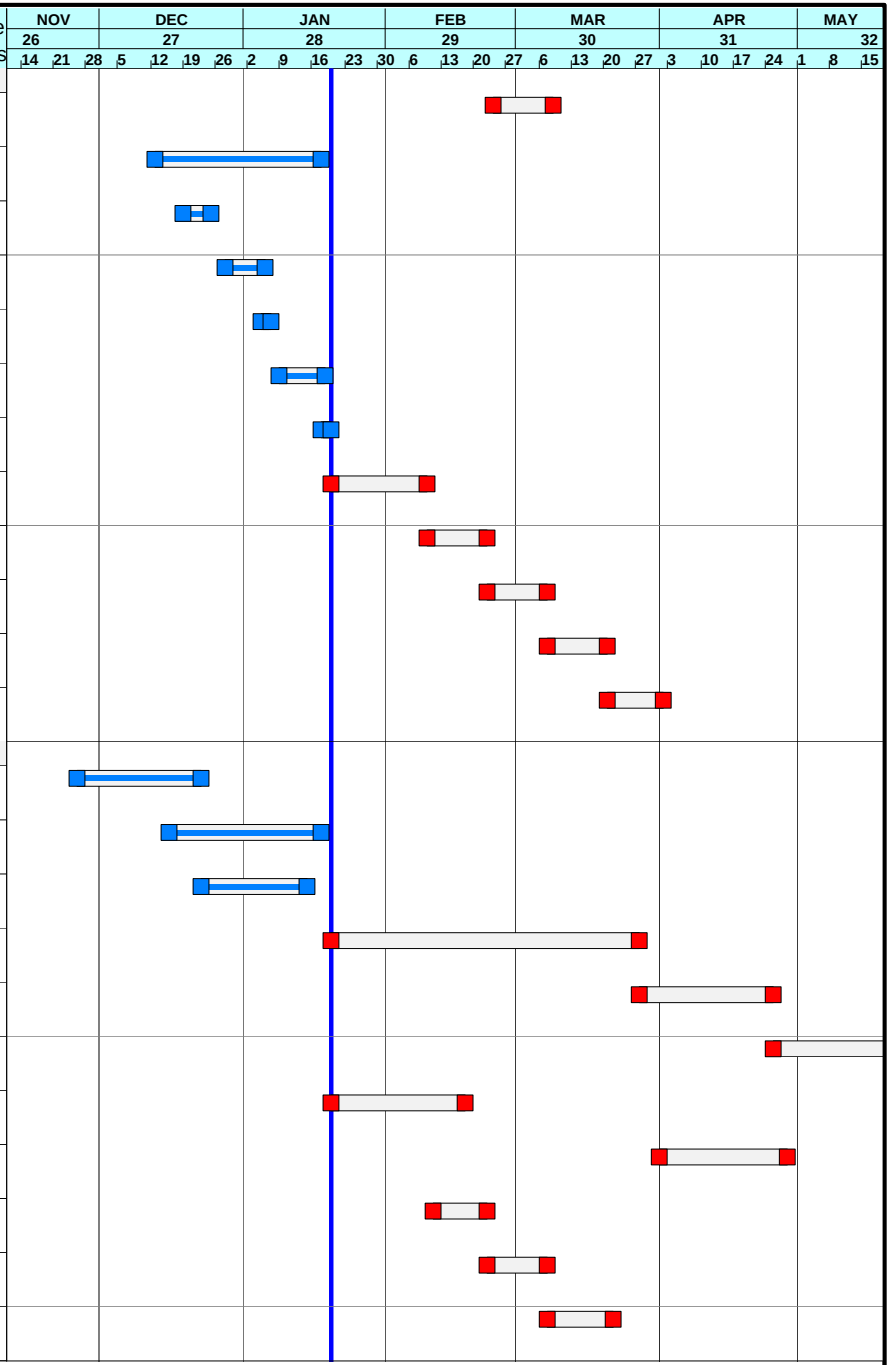
TUNNEL									
1685	Order/Manufact/Del Fire Doors	50	11FEB06	11APR06	0	100	50	-189	-285
NORTHBOUND TUNNEL									
6879	EntRtNb-Proc & Manuf. CMCS & ELV sys	180	25MAR05A	04SEP06	20	100	180	-169	-275
6883	EntRtNb-Proc & Manuf. FS AFA & Linear sys	180	25MAR05A	24JUN06	20	100	120	-211	-359
6885	EntRtNb-Proc & Manuf. ES Cabling	180	20MAY05A	24JUN06	65	100	120	-181	-277
7622	EntRtNb-Proc & Manuf. TVS in Tunnel	180	09JUN05A	26MAY06	35	100	30	-109	-263
6881	EntRtNb-Proc & Manuf. Tunnel Lgt sys	120	18FEB06	17JUL06	0	100	120	-211	-287
6887	EntRtNb-Proc & Manuf. TVS control sys	180	18FEB06	25SEP06	0	100	180	-139	-221
SOUTHBOUND TUNNEL & V.A TUNNEL									
6786	EntRtSb&VA-Proc & Manuf. FS AFA & Linear sys	180	25MAR05A	24JUN06	20	100	120	-211	-368
6799	EntRtSb&VA-Proc & Manuf. CMCS & ELV sys	180	25MAR05A	04SEP06	20	100	180	-169	-281
6803	EntRtSb&VA-Proc & Manuf. ES Cabling	180	20MAY05A	24JUN06	65	100	120	-193	-287
6809	EntRtSb&VA-Proc & Manuf. Tunnel Lgt sys	120	15FEB06	13JUL06	0	100	120	-214	-287
6796	EntRtSb&VA-Proc & Manuf. TVS control sys	180	18FEB06	25SEP06	0	100	180	-139	-233
MAJOR EQUIPMENT DELIVERY									
TUNNEL									
NORTHBOUND TUNNEL									
7623	EntRtNb-Del. TVS in Tunnel	72	01DEC05A	26MAY06	30	100	43	-109	-191
SOUTHBOUND TUNNEL & V.A TUNNEL									
7620	EntRtSb&VA-Del. TVS in Tunnel	72	12DEC05A	26MAY06	60	100	29	-109	-203
CONSTRUCTION WORKS									
TUNNEL PREPARATION WORKS									
TUNNEL LINING									
SOUTH PORTAL									
3321	Demobilise lining form NB (from SP) at VA/CP7	12	23JAN06	13FEB06	0	100	12	646	-118
3323	Demobilise OHVD form NB (from SP) at VA/CP7	12	14FEB06	27FEB06	0	100	12	646	-118
3320	Demobilise lining form NB (from NP) at VA/CP7	12	16FEB06	01MAR06	0	100	12	632	-125



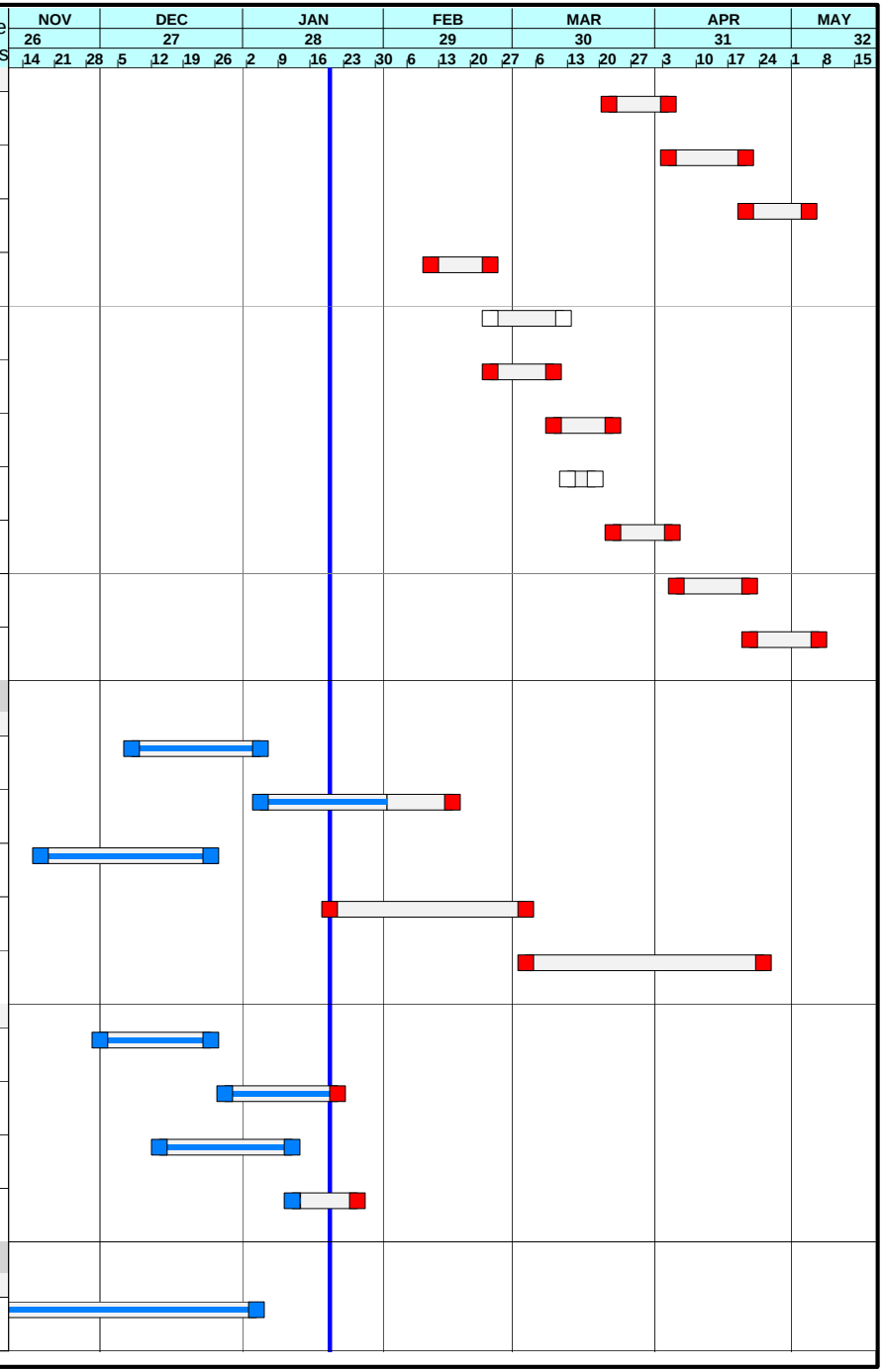
Act. ID	Activity Description	Orig Dur	Early Start	Early Finish	% Compl.	DWP % Compl.	Rem Dur	Total Float	Variance arly Finis
SOUTH PORTAL									
3736	Demobilise lining form SB (from NP) at VA/CP7	12	20FEB06	04MAR06	0	100	12	629	-137
3739	Demobilise OHVD form SB (from NP) at VA/CP7	12	22MAR06	04APR06	0	100	12	615	-147
3735	Demobilise lining form SB (from SP) at VA/CP7	12	30MAR06	13APR06	0	100	12	596	-173
3738	Demobilise OHVD form SB (from SP) at VA/CP7	12	18APR06	02MAY06	0	100	12	596	-173
3322	Demobilise OHVD form NB (from NP) at VA/CP7	12	25APR06	10MAY06	0	100	12	590	-163
NORTHBOUND TUNNEL DRIVE									
TUNNEL INVERT									
NORTH PORTAL									
3186	NB exc.grnd/foul water drain trough 148m(fr.NP)	27	03DEC05A	13JAN06A	100	100	0		-224
3187	NB exc.grnd/foul water drain trough 129m(fr.NP)	24	14JAN06A	21JAN06	92	100	2	-18	-212
3188	NB exc.grnd/foul water drain trough 118m(fr.NP)	39	21JAN06	15MAR06	0	100	39	-18	-215
3193	NB Invert Cleaning (fr.NP 128m)	22	29OCT05A	29DEC05A	100	100	0		-285
3194	NB Invert Cleaning (fr.NP 139m)	23	07NOV05A	26JAN06	80	100	6	-26	-285
3195	NB Invert Cleaning (fr.NP 150m)	24	12NOV05A	10FEB06	50	100	12	-26	-262
3196	NB Invert Cleaning (fr.NP 148m)	24	03DEC05A	10FEB06	50	100	12	-26	-238
3197	NB Invert Cleaning (fr.NP 129m)	22	11FEB06	08MAR06	0	100	22	-26	-238
3198	NB Invert Cleaning (fr.NP 118m)	20	09MAR06	31MAR06	0	100	20	-26	-223
3351	NB Foulwater Gulley ENF-26 to ENF-27 [49m]	11	19DEC05A	29DEC05A	100	100	0		-145
3350	NB Foulwater Gulley ENF-25 to ENF-26 [49m]	11	30DEC05A	04JAN06A	100	100	0		-138
3349	NB Foulwater Gulley ENF-24 to ENF-25 [50m]	11	05JAN06A	10JAN06A	100	100	0		-132
3348	NB Foulwater Gulley ENF-23 to ENF-24 [49m]	11	11JAN06A	13JAN06A	100	100	0		-124
3347	NB Foulwater Gulley ENF-22 to ENF-23 [49m]	11	14JAN06A	16JAN06A	100	100	0		-115
3346	NB Foulwater Gulley ENF-21 to ENF-22 [50m]	11	17JAN06A	20JAN06	80	100	1	-6	-108
3345	NB Foulwater Gulley ENF-20 to ENF-21 [49m]	11	21JAN06	10FEB06	0	100	11	-6	-108
3344	NB Foulwater Gulley ENF-19 to ENF-20 [49m]	11	11FEB06	23FEB06	0	100	11	-6	-108



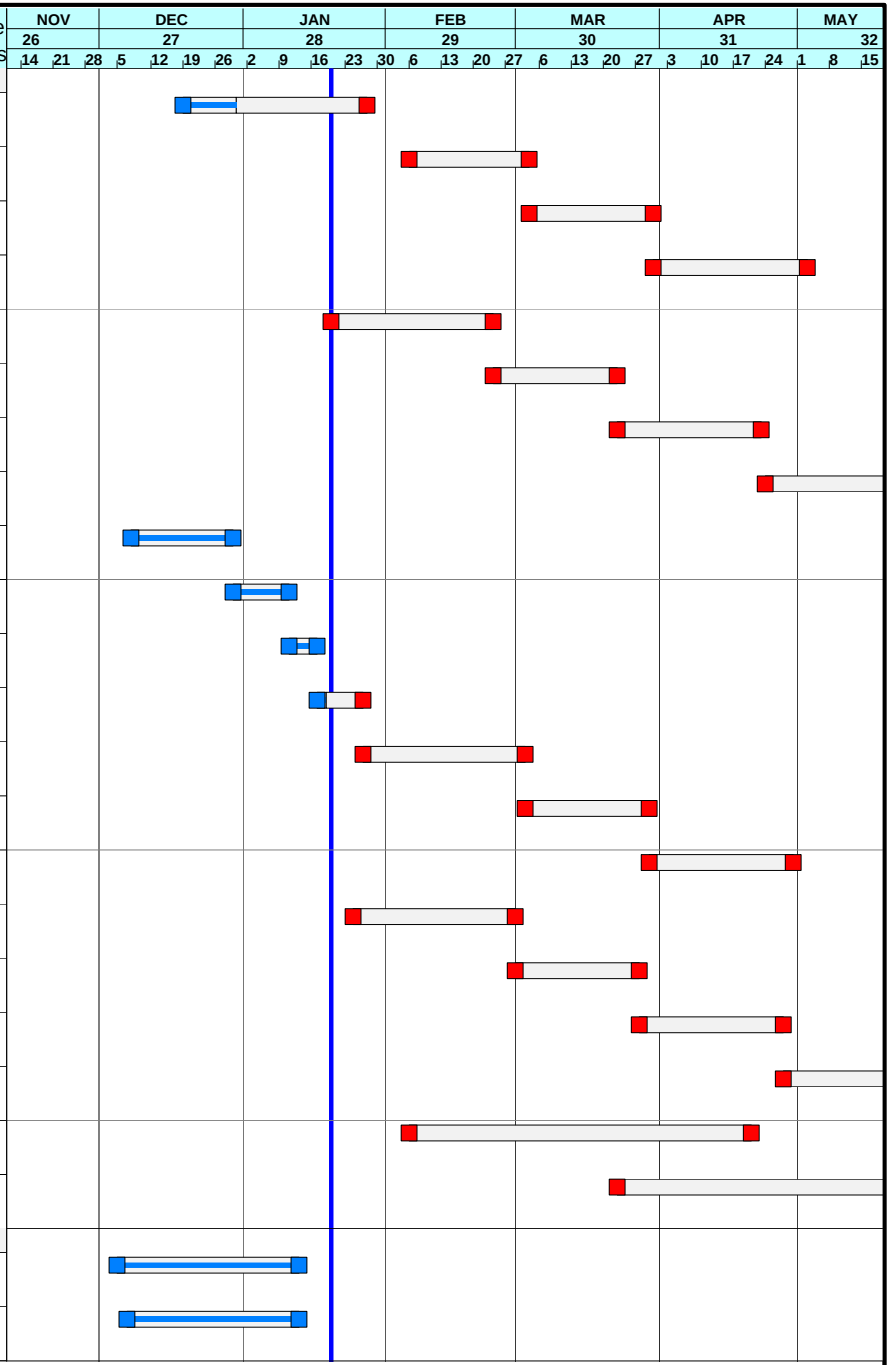
Act. ID	Activity Description	Orig Dur	Early Start	Early Finish	% Compl.	DWP % Compl.	Rem Dur	Total Float	Variance arly Finis
NORTH PORTAL									
3343	NB Foulwater Gulley ENF-18 to ENF-19 [49m]	11	24FEB06	08MAR06	0	100	11	-6	-108
3439	NB Ground water ENG-28 to ENG-29 [49m]	11	13DEC05A	17JAN06A	100	100	0		-185
3438	NB Ground water ENG-27 to ENG-28 [50m]	11	19DEC05A	24DEC05A	100	100	0		-157
3437	NB Ground water ENG-26 to ENG-27 [49m]	11	28DEC05A	05JAN06A	100	100	0		-153
3436	NB Ground water ENG-25 to ENG-26 [49m]	11	05JAN06A	06JAN06A	100	100	0		-143
3435	NB Ground water ENG-24 to ENG-25 [50m]	11	09JAN06A	18JAN06A	100	100	0		-142
3434	NB Ground water ENG-23 to ENG-24 [49m]	11	18JAN06A	19JAN06A	100	100	0		-132
3433	NB Ground water ENG-22 to ENG-23 [49m]	11	20JAN06	09FEB06	0	100	11	-27	-132
3432	NB Ground water ENG-21 to ENG-22 [50m]	11	10FEB06	22FEB06	0	100	11	-27	-132
3431	NB Ground water ENG-20 to ENG-21 [49m]	11	23FEB06	07MAR06	0	100	11	-27	-132
3430	NB Ground water ENG-19 to ENG-20 [49m]	11	08MAR06	20MAR06	0	100	11	-27	-132
3429	NB Ground water ENG-18 to ENG-19 [50m]	11	21MAR06	01APR06	0	100	11	-27	-132
SOUTH PORTAL									
3228	NB Kicker/form part Service Trough (fr.SP) 146m	20	26NOV05A	22DEC05A	100	100	0		-189
3230	NB Kicker/form part Service Trough (fr.SP) 199m	28	16DEC05A	17JAN06A	100	100	0		-155
3229	NB Kicker/form part Service Trough (fr.SP) 100m	14	23DEC05A	14JAN06A	100	100	0		-184
3210	NB exc.grnd/foul water drain trough 253m(fr.SP)	50	20JAN06	27MAR06	0	100	50	-81	-325
3211	NB exc.grnd/foul water drain trough 90m(fr.SP)	21	28MAR06	25APR06	0	100	21	-14	-321
3212	NB exc.grnd/foul water drain trough 146m(fr.SP)	27	26APR06	29MAY06	0	100	27	-14	-317
3216	NB Invert Cleaning [fr.SP] 253m	18	20JAN06	17FEB06	0	100	18	-81	-290
3217	NB Invert Cleaning [fr.SP] 90m	20	01APR06	28APR06	0	100	20	-11	-321
3324	NB Foulwater Gulley ENF-1A to ENF-1 [44m]	10	11FEB06	22FEB06	0	100	10	-81	-242
3325	NB Foulwater Gulley ENF-1 to ENF-2 [50m]	11	23FEB06	07MAR06	0	100	11	-81	-242
3326	NB Foulwater Gulley ENF-2 to ENF-3 [53m]	12	08MAR06	21MAR06	0	100	12	-81	-242



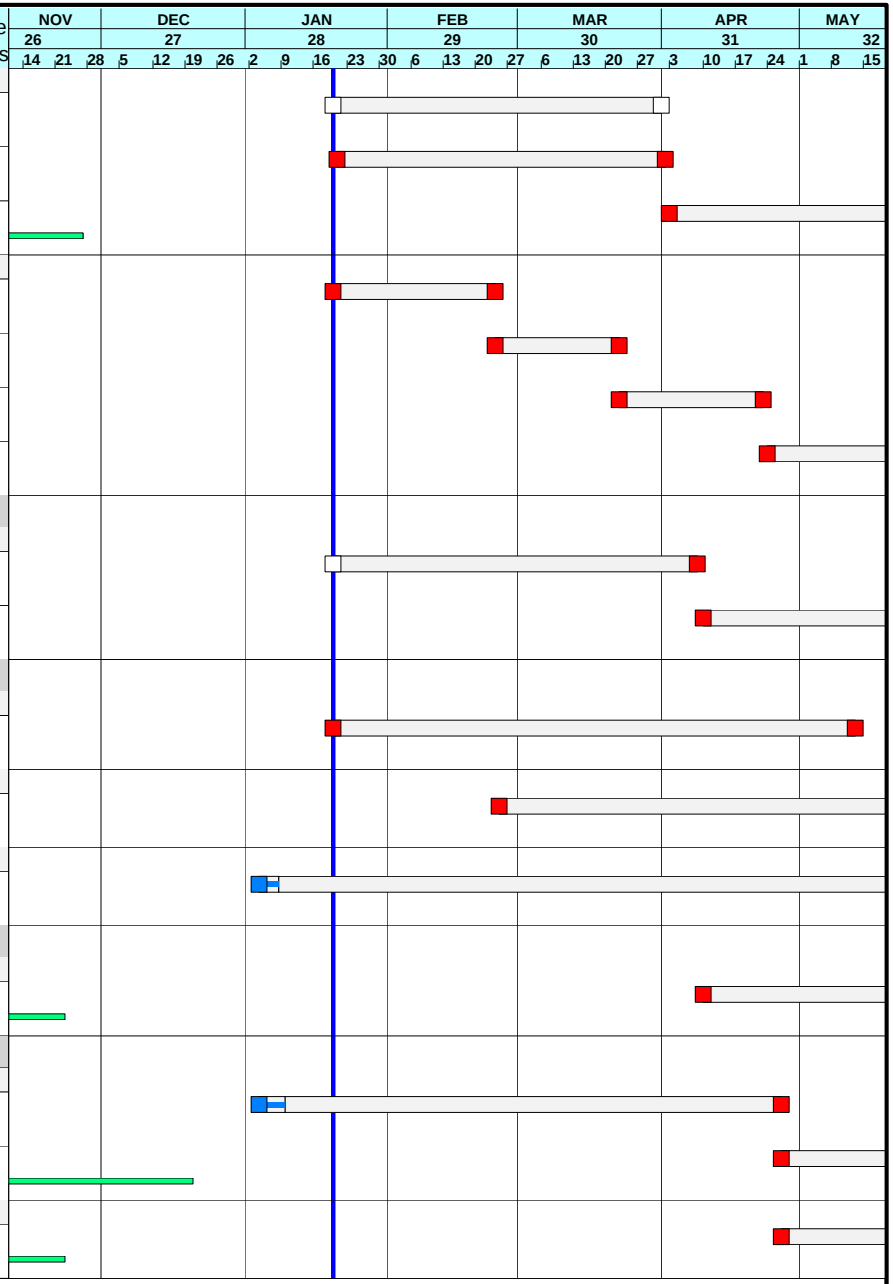
Act. ID	Activity Description	Orig Dur	Early Start	Early Finish	% Compl.	DWP % Compl.	Rem Dur	Total Float	Variance arly Finis
SOUTH PORTAL									
3327	NB Foulwater Gulley ENF-3 to ENF-4 [51m]	11	22MAR06	03APR06	0	100	11	-81	-242
3328	NB Foulwater Gulley ENF-4 to ENF-5 [51m]	11	04APR06	20APR06	0	100	11	-81	-242
3329	NB Foulwater Gulley ENF-5 to ENF-6 [51m]	11	21APR06	04MAY06	0	100	11	-81	-242
3412	NB Ground water ENG-1B to ENG-2 [50m]	11	11FEB06	23FEB06	0	100	11	-72	-242
3410	NB Ground water ENG-1C to ENG-1B [44m]	14	24FEB06	11MAR06	0	100	14	39	-242
3413	NB Ground water ENG-2 to ENG-3 [53m]	12	24FEB06	09MAR06	0	100	12	-72	-242
3414	NB Ground water ENG-3 to ENG-4 [51m]	11	10MAR06	22MAR06	0	100	11	-72	-242
3411	NB Ground water ENG-1A to ENG-1B	6	13MAR06	18MAR06	0	100	6	39	-242
3415	NB Ground water ENG-4 to ENG-5 [51m]	11	23MAR06	04APR06	0	100	11	-72	-242
3416	NB Ground water ENG-5 to ENG-6 [51m]	11	06APR06	21APR06	0	100	11	-72	-242
3417	NB Ground water ENG-6 to ENG-7 [50m]	11	22APR06	06MAY06	0	100	11	-72	-242
TUNNEL LINING									
NORTH PORTAL									
3242	NB NP Arch Lining 150m Tch.1+980 to 1+830	30	08DEC05A	04JAN06A	100	100	0		-132
3243	NB NP Arch Lining 157m Tch.1+830 to 1+673 VA	36	05JAN06A	15FEB06	66	100	16	-113	-125
3251	NB NP OHVD 150m Tch.2+130 to 1+980	30	18NOV05A	24DEC05A	100	100	0		-144
3252	NB NP OHVD 150m Tch.1+980 to 1+830	30	20JAN06	03MAR06	0	100	30	-143	-163
3253	NB NP OHVD 157m Tch.1+830 to 1+673 VA	40	04MAR06	24APR06	0	100	40	-143	-163
SOUTH PORTAL									
3312	NB SP Arch Lining 150m Tch.1+363 to 1+513	42	01DEC05A	24DEC05A	100	100	0		-133
3313	NB SP Arch Lining 130m Tch.1+513 to 1+643	36	28DEC05A	21JAN06	94	100	2	-114	-118
3316	NB NP OHVD 150m Tch.1+363 to 1+513	30	14DEC05A	11JAN06A	100	100	0		-139
3317	NB NP OHVD 130m Tch.1+513 to 1+643	38	12JAN06A	25JAN06	13	100	5	-114	-113
TUNNEL FINISHING WORKS									
SERVICE TROUGH & UTILITIES									
3529	NB service trough 150m Tch.2+730 to 2+580 fr.NP	23	04NOV05A	03JAN06A	100	100	0		-260



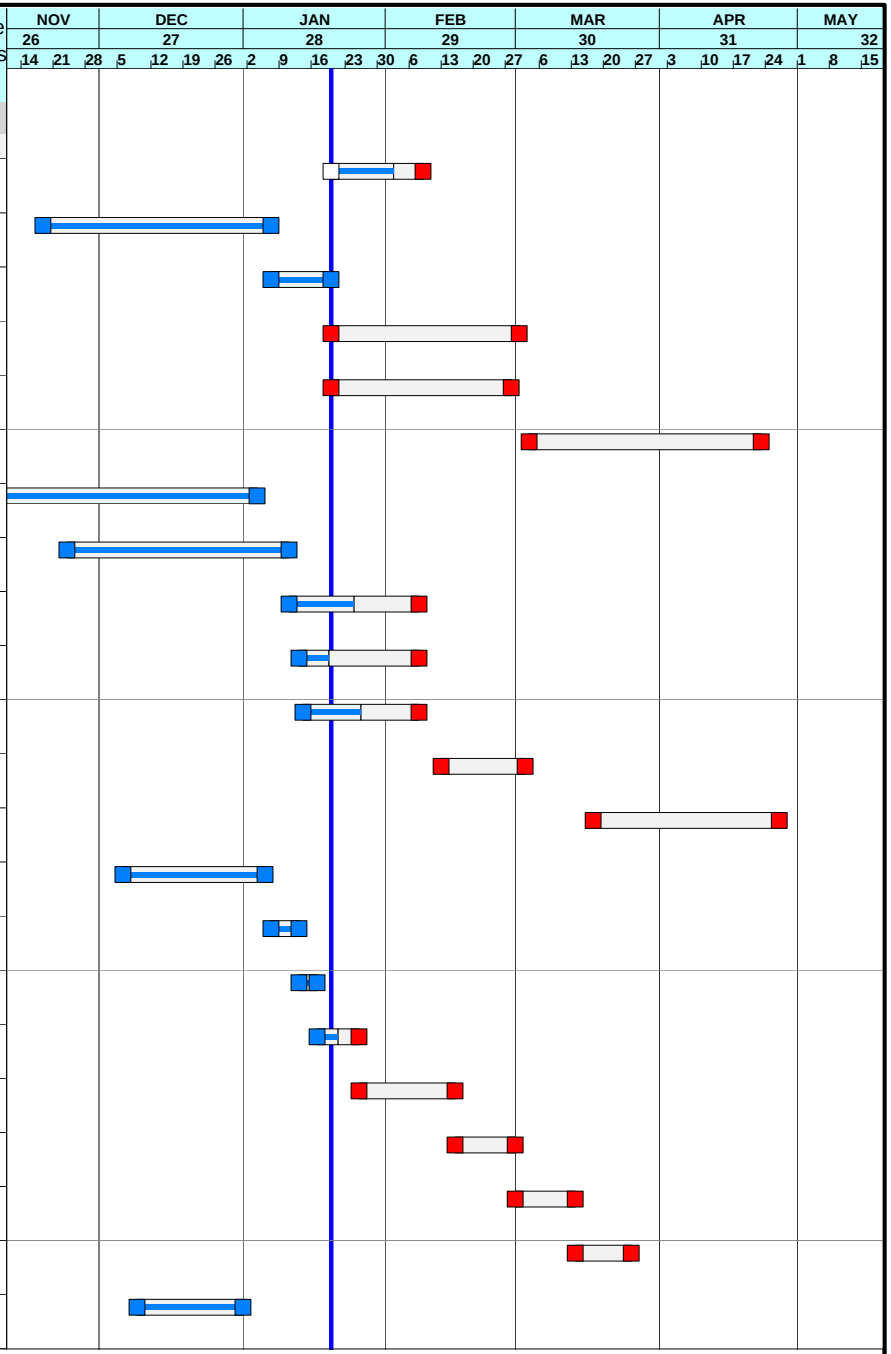
Act. ID	Activity Description	Orig Dur	Early Start	Early Finish	% Compl.	DWP % Compl.	Rem Dur	Total Float	Variance arly Finis
SERVICE TROUGH & UTILITIES									
3531	NB service trough 150m Tch.2+430 to 2+280 fr.NP	23	19DEC05A	27JAN06	29	100	7	-190	-221
3532	NB service trough 150m Tch.2+280 to 2+130 fr.NP	23	06FEB06	03MAR06	0	100	23	-178	-214
3533	NB service trough 150m Tch.2+130 to 1+980 fr.NP	23	04MAR06	30MAR06	0	100	23	-178	-207
3534	NB service trough 150m Tch.1+980 to 1+830 fr.NP	23	31MAR06	02MAY06	0	100	23	-178	-200
3537	NB service trough 150m Tch.1+063 to 1+213 fr.SP	23	20JAN06	23FEB06	0	100	23	-182	-244
3538	NB service trough 150m Tch.1+213 to 1+363 fr.SP	23	24FEB06	22MAR06	0	100	23	-182	-225
3539	NB service trough 150m Tch.1+363 to 1+513 fr.SP	23	23MAR06	22APR06	0	100	23	-182	-206
3540	NB service trough 160m Tch.1+513 to 1+673 fr.SP	24	24APR06	23MAY06	0	100	24	-182	-191
3511	NB NP 200 main 183m Tch.3+063 to 2+880 fr.NP	23	08DEC05A	29DEC05A	100	100	0		-315
3512	NB NP 200 main 150m Tch.2+880 to 2+730 fr.NP	23	30DEC05A	10JAN06A	100	100	0		-300
3513	NB NP 200 main 150m Tch.2+730 to 2+580 fr.NP	23	11JAN06A	16JAN06A	100	100	0		-275
3514	NB NP 200 main 150m Tch.2+580 to 2+430 fr.NP	23	17JAN06A	26JAN06	20	100	6	-196	-254
3515	NB NP 200 main 150m Tch.2+430 to 2+280 fr.NP	23	27JAN06	02MAR06	0	100	23	-196	-247
3516	NB NP 200 main 150m Tch.2+280 to 2+130 fr.NP	23	03MAR06	29MAR06	0	100	23	-196	-240
3517	NB NP 200 main 150m Tch.2+130 to 1+980 fr.NP	23	30MAR06	29APR06	0	100	23	-196	-233
3520	NB SP 200 main 150m Tch.1+063 to 1+213 fr.SP	23	25JAN06	28FEB06	0	100	23	-182	-252
3521	NB SP 200 main 150m Tch.1+213 to 1+363 fr.SP	23	01MAR06	27MAR06	0	100	23	-182	-233
3522	NB SP 200 main 150m Tch.1+363 to 1+513 fr.SP	23	28MAR06	27APR06	0	100	23	-182	-214
3523	NB SP 200 main 160m Tch.1+513 to 1+673 fr.SP	24	28APR06	27MAY06	0	100	24	-182	-199
3640	NB NP - 50% TCSS Containment KD6	60	06FEB06	20APR06	0	100	60	-140	-221
3641	NB NP - Remain 50% TCSS Contain't KD6	63	23MAR06	12JUN06	0	100	63	-182	-199
DRAINAGE & RC SLAB									
3583	NB Invert Drainage & RC.Slab - rightside 650m	54	05DEC05A	12JAN06A	100	100	0		-145
3587	NB Invert Drainage & RC.Slab - leftside 650m	54	07DEC05A	12JAN06A	100	100	0		-127



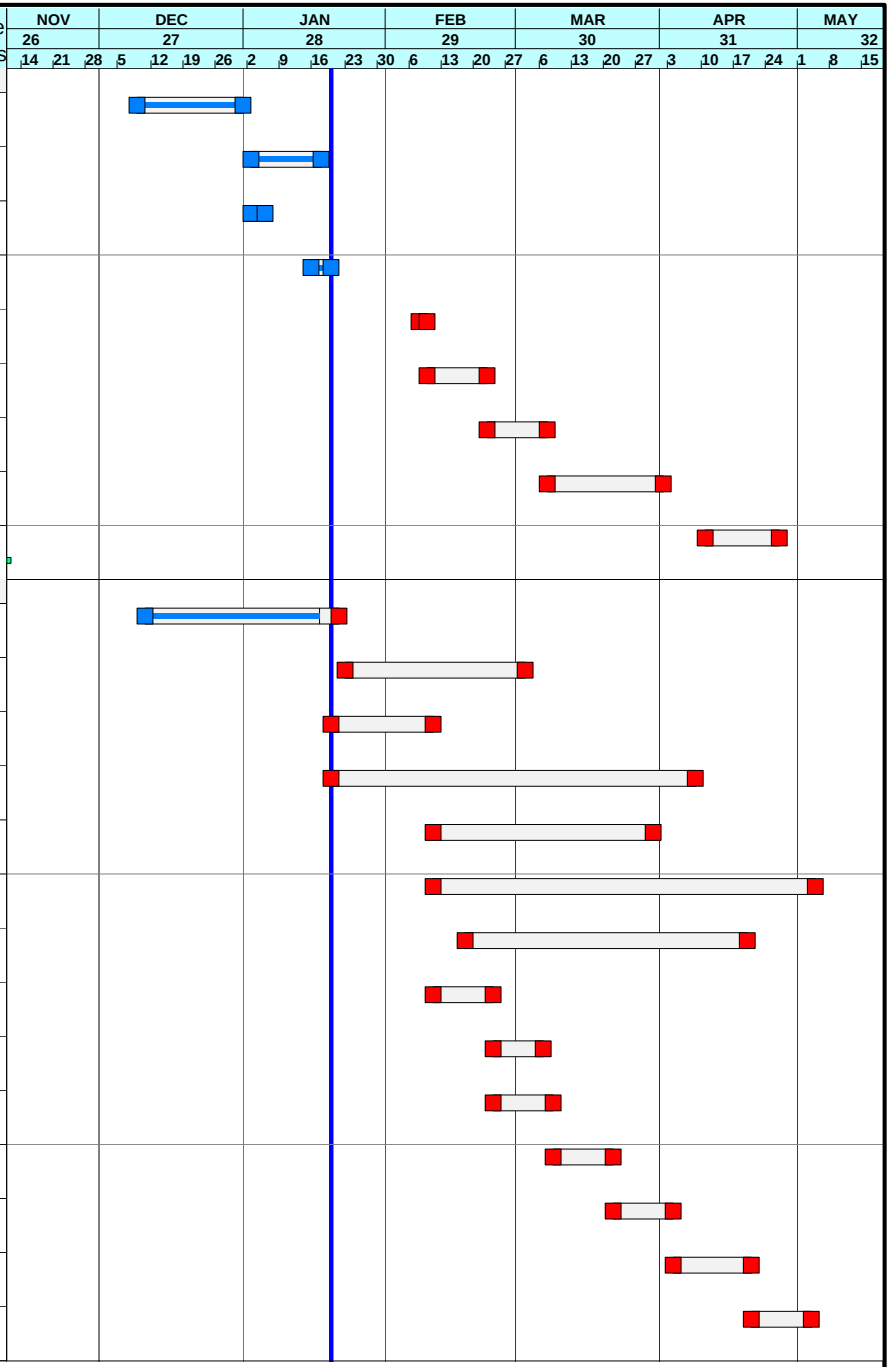
Act. ID	Activity Description	Orig Dur	Early Start	Early Finish	% Compl.	DWP % Compl.	Rem Dur	Total Float	Variance arly Finis
DRAINAGE & RC SLAB									
3588	NB Invert Drainage & RC.Slab - leftside 650m	54	20JAN06	31MAR06	0	100	54	24	-133
3584	NB Invert Drainage & RC.Slab - rightside 650m	54	21JAN06	01APR06	0	100	54	-27	-152
3585	NB Invert Drainage & RC.Slab - rightside 650m	54	03APR06	12JUN06	0	100	54	-27	-152
WALL PANELS									
3606	NB VE Panel Support System - rightside 650m	23	20JAN06	23FEB06	0	100	23	-129	-175
3607	NB VE Panel Support System - rightside 650m	23	24FEB06	22MAR06	0	100	23	-129	-175
3608	NB VE Panel Support System - rightside 650m	23	23MAR06	22APR06	0	100	23	-129	-175
3610	NB VE Panel Support System - leftside 650m	23	24APR06	22MAY06	0	100	23	-129	-175
F.S WORKS									
TUNNEL HYDRANT & HOSE REEL									
6893	EntRtNb-Wet dist. (HR/Hyd) 1st fix	60	20JAN06	08APR06	1	100	60	-91	-197
6899	EntRtNb-Wet dist. (HR/Hyd) 2nd fix	60	10APR06	24JUN06	0	100	60	-61	-197
ELECTRICAL WORKS									
MAIN & SUB-MAIN DISTRIBUTION									
6897	EntRtNb-HV, LV main & submain dist. 1st fix	84	20JAN06	12MAY06	0	100	84	-97	-191
FINAL CIRCUIT									
7576	EntRtNb-Final circuit 1st fix	96	25FEB06	24JUN06	0	100	96	-85	-217
TUNNEL / EXTERNAL LIGHTING									
6894	EntRtNb-Tunnel Lgt sys	96	04JAN06A	26MAY06	3	100	96	-121	-197
ELV WORKS									
ELV MISC. WORKS									
6895	EntRtNb-CMCS&other	90	10APR06	31JUL06	0	100	90	-91	-197
TUNNEL VENTILATION SYSTEM									
TUNNEL VENTILATION									
6896	EntRtNb-TVS Tunnel vent. & SE 1st fix	72	04JAN06A	26APR06	5	100	72	-109	-191
6904	EntRtNb-TVS Tunnel vent. & SE 2nd fix	96	27APR06	21AUG06	0	100	96	-109	-191
PNEUMATIC SYSTEM									
6905	EntRtNb-TVS pneumatic 1st fix	72	27APR06	24JUL06	0	100	72	-55	-191



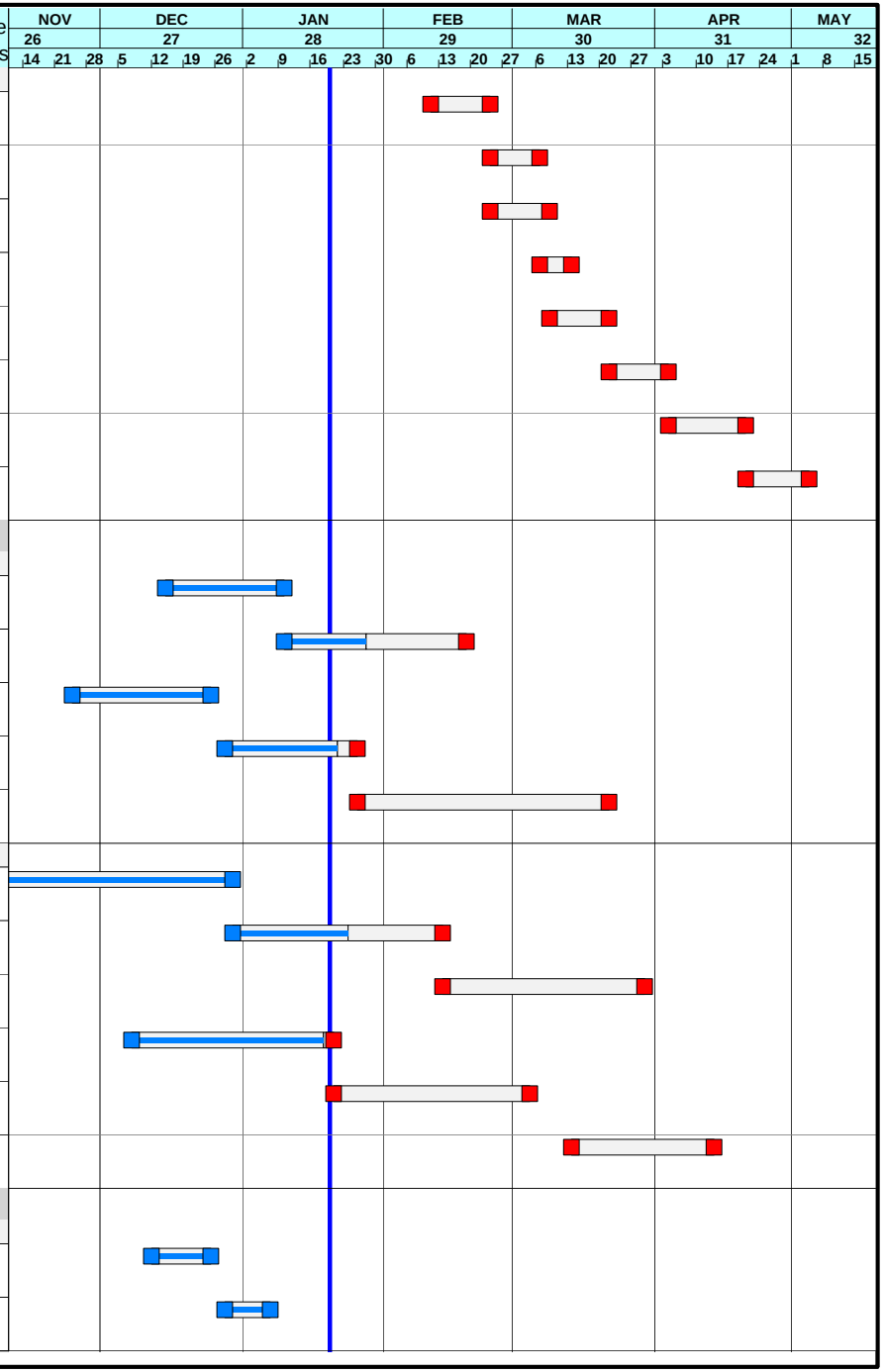
Act. ID	Activity Description	Orig Dur	Early Start	Early Finish	% Compl.	DWP % Compl.	Rem Dur	Total Float	Variance arly Finis
TUNNEL DRIVE SOUTHBOUND									
TUNNEL INVERT									
NORTH PORTAL									
1913	SB Kicker/form part Service Trough (fr.NP) 213m	30	20JAN06	08FEB06	68	100	10	-110	-153
1579	SB exc.grnd/foul water drain trough 151m(fr.NP)	28	19NOV05A	06JAN06A	100	100	0		-257
1580	SB exc.grnd/foul water drain trough 137m(fr.NP)	25	07JAN06A	19JAN06A	100	100	0		-242
1581	SB exc.grnd/foul water drain trough 152m(fr.NP)	28	20JAN06	01MAR06	0	100	28	-16	-246
1582	SB exc.grnd/foul water drain trough 142m(fr.NP)	26	20JAN06	27FEB06	0	100	26	-16	-221
3150	SB exc.grnd/foul water drain trough 213m(fr.NP)	39	04MAR06	22APR06	0	100	39	-16	-221
1595	SB Invert Cleaning (fr.NP) 162m	22	07NOV05A	03JAN06A	100	100	0		-309
1596	SB Invert Cleaning (fr.NP) 152m	18	24NOV05A	10JAN06A	100	100	0		-288
1597	SB Invert Cleaning (fr.NP) 150m	18	11JAN06A	07FEB06	50	100	9	-10	-274
1598	SB Invert Cleaning (fr.NP) 137m	12	13JAN06A	07FEB06	25	100	9	-10	-248
1599	SB Invert Cleaning (fr.NP) 152m	18	14JAN06A	07FEB06	50	100	9	-10	-224
1600	SB Invert Cleaning (fr.NP) 142m	16	13FEB06	02MAR06	0	100	16	-6	-221
1601	SB Invert Cleaning (fr.NP) 213m	30	18MAR06	26APR06	0	100	30	-16	-221
3393	SB Foulwater Gulley ESF-25 to ESF-26 [50m]	11	06DEC05A	05JAN06A	100	100	0		-140
3392	SB Foulwater Gulley ESF-24 to ESF-25 [51m]	11	07JAN06A	12JAN06A	100	100	0		-135
3391	SB Foulwater Gulley ESF-23 to ESF-24 [51m]	11	13JAN06A	16JAN06A	100	100	0		-127
3390	SB Foulwater Gulley ESF-22 to ESF-23 [51m]	11	17JAN06A	25JAN06	50	100	5	7	-124
3389	SB Foulwater Gulley ESF-21 to ESF-22 [50m]	11	26JAN06	15FEB06	0	100	11	7	-124
3388	SB Foulwater Gulley ESF-20 to ESF-21 [51m]	11	16FEB06	28FEB06	0	100	11	7	-124
3387	SB Foulwater Gulley ESF-19 to ESF-20 [51m]	11	01MAR06	13MAR06	0	100	11	7	-124
3386	SB Foulwater Gulley ESF-18 to ESF-19 [50m]	11	14MAR06	25MAR06	0	100	11	7	-124
3480	SB Ground water ESG-25 to ESG-26 [50m]	11	09DEC05A	31DEC05A	100	100	0		-129



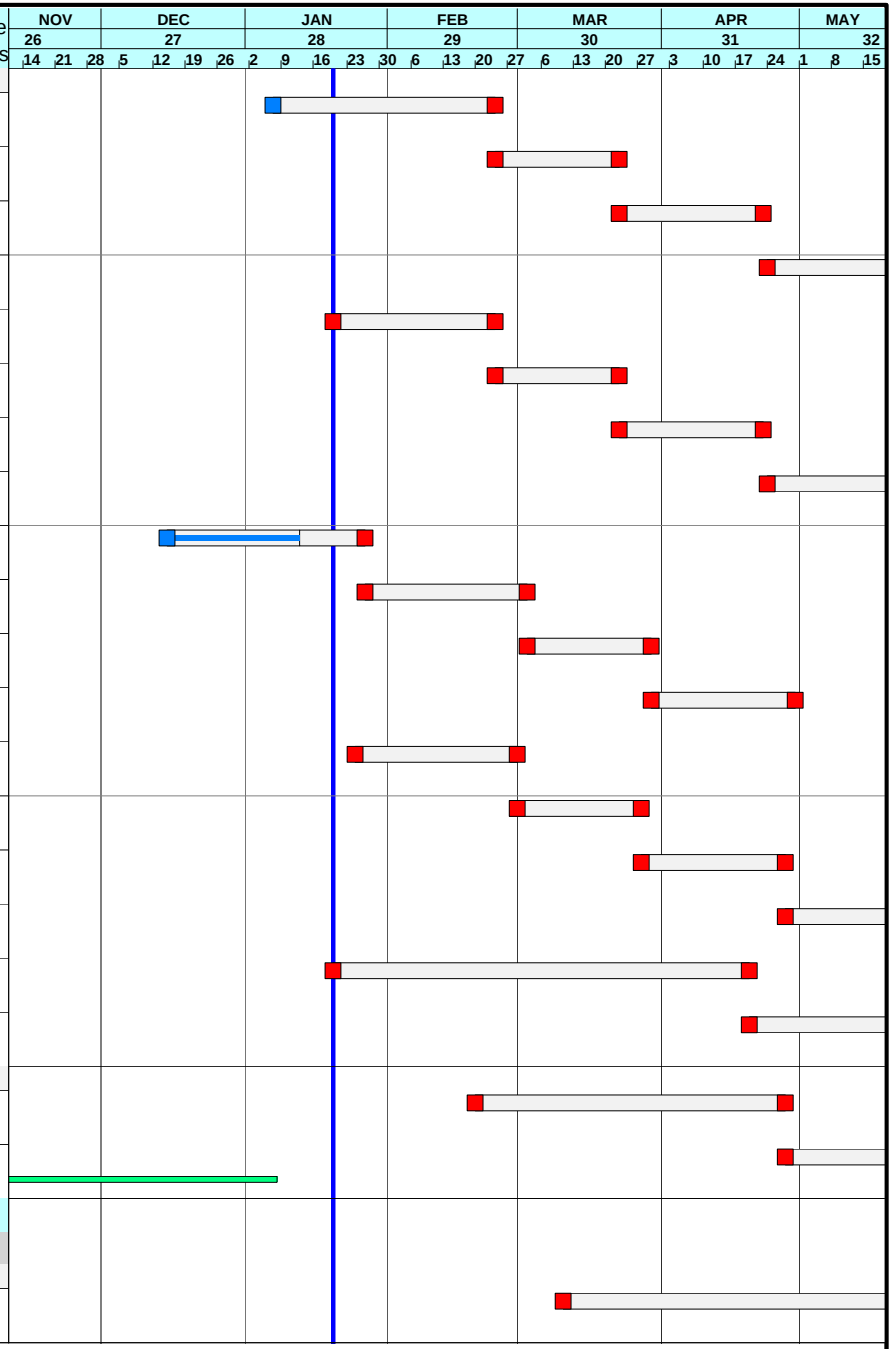
Act. ID	Activity Description	Orig Dur	Early Start	Early Finish	% Compl.	DWP % Compl.	Rem Dur	Total Float	Variance arly Finis
NORTH PORTAL									
3482	SB Ground water ESG-27 to ESG-28 [51m]	11	09DEC05A	31DEC05A	100	100	0		-151
3479	SB Ground water ESG-24 to ESG-25 [51m]	11	03JAN06A	17JAN06A	100	100	0		-131
3481	SB Ground water ESG-26 to ESG-27 [51m]	11	03JAN06A	05JAN06A	100	100	0		-143
3478	SB Ground water ESG-23 to ESG-24 [51m]	11	16JAN06A	19JAN06A	100	100	0		-122
3477	SB Ground water ESG-22 to ESG-23 [51m]	2	08FEB06	09FEB06	0	100	2	-10	-122
3476	SB Ground water ESG-21 to ESG-22 [50m]	11	10FEB06	22FEB06	0	100	11	-10	-122
3475	SB Ground water ESG-20 to ESG-21 [51m]	11	23FEB06	07MAR06	0	100	11	-10	-122
3474	SB Ground water ESG-19 to ESG-20 [102m]	22	08MAR06	01APR06	0	100	22	-10	-122
3473	SB Ground water ESG-18 to ESG-19 [50m]	11	11APR06	26APR06	0	100	11	-16	-128
SOUTH PORTAL									
3743	SB Kicker/form part Service Trough (fr.SP) 150m	22	11DEC05A	21JAN06	90	100	2	-146	-205
3744	SB Kicker/form part Service Trough (fr.SP) 192m	27	23JAN06	02MAR06	0	100	27	-140	-205
1583	SB exc.grnd/foul water drain trough 89m(fr.SP)	12	20JAN06	10FEB06	0	100	12	-125	-310
1586	SB exc.grnd/foul water drain trough 342m	60	20JAN06	08APR06	0	100	60	-72	-291
1584	SB exc.grnd/foul water drain trough 150m(fr.SP)	41	11FEB06	30MAR06	0	100	41	13	-284
1311	SB Invert Cleaning (fr.SP) 239m	66	11FEB06	04MAY06	0	100	66	-6	-303
3166	SB Invert Cleaning (fr.SP 342m)	48	18FEB06	19APR06	0	100	48	-72	-291
3368	SB Foulwater Gulley ESF-1 to ESF-2 [48m]	11	11FEB06	23FEB06	0	100	11	-125	-219
3367	SB Foulwater Gulley ESF-1A to ESF-1 [41m]	9	24FEB06	06MAR06	0	100	9	-108	-219
3369	SB Foulwater Gulley ESF-2 to ESF-3 [50m]	11	24FEB06	08MAR06	0	100	11	-121	-219
3370	SB Foulwater Gulley ESF-3 to ESF-4 [48m]	11	09MAR06	21MAR06	0	100	11	-121	-219
3371	SB Foulwater Gulley ESF-4 to ESF-5 [49m]	11	22MAR06	03APR06	0	100	11	-121	-219
3372	SB Foulwater Gulley ESF-5 to ESF-6 [49m]	11	04APR06	20APR06	0	100	11	-121	-219
3373	SB Foulwater Gulley ESF-6 to ESF-7 [43m]	10	21APR06	03MAY06	0		10	-121	-219



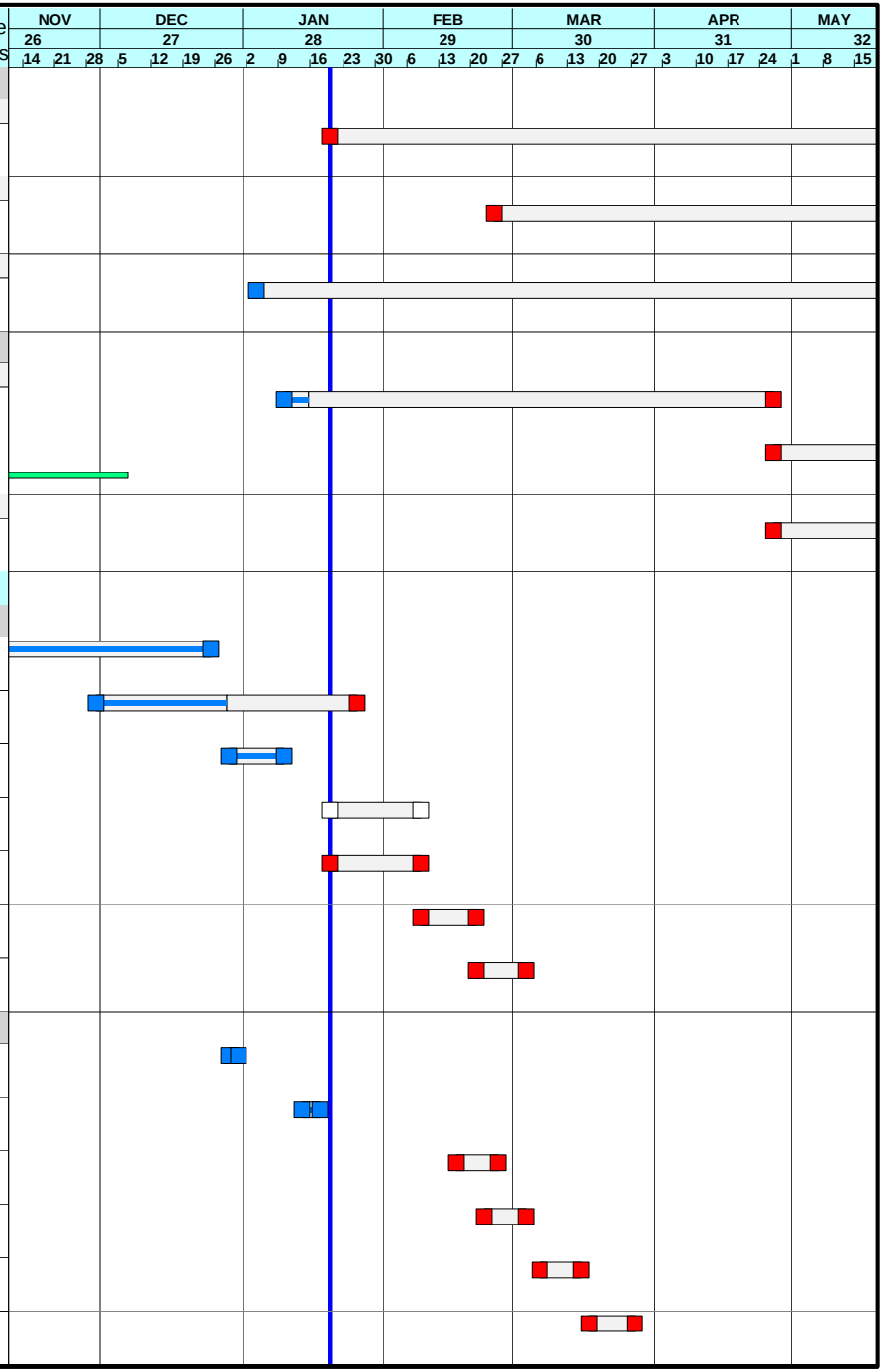
Act. ID	Activity Description	Orig Dur	Early Start	Early Finish	% Compl.	DWP % Compl.	Rem Dur	Total Float	Variance arly Finis
SOUTH PORTAL									
3456	SB Ground water ESG-1B to ESG-2 [49m]	11	11FEB06	23FEB06	0	100	11	-125	-219
3454	SB Ground water ESG-1C to ESG-1B [40m]	9	24FEB06	06MAR06	0	100	9	-107	-219
3457	SB Ground water ESG-2 to ESG-3 [50m]	11	24FEB06	08MAR06	0	100	11	-125	-219
3455	SB Ground water ESG-1A to ESG-1B	6	07MAR06	13MAR06	0	100	6	-107	-219
3458	SB Ground water ESG-3 to ESG-4 [48m]	11	09MAR06	21MAR06	0	100	11	-125	-219
3459	SB Ground water ESG-4 to ESG-5 [49m]	11	22MAR06	03APR06	0	100	11	-125	-219
3460	SB Ground water ESG-5 to ESG-6 [49m]	11	04APR06	20APR06	0	100	11	-125	-219
3461	SB Ground water ESG-6 to ESG-7 [50m]	11	21APR06	04MAY06	0		11	-125	-219
TUNNEL LINING									
NORTH PORTAL									
2193	SB NP Arch Lining 150m Tch.1+985 to 1+835	30	15DEC05A	09JAN06A	100	100	0		-144
2194	SB NP Arch Lining 175m Tch.1+835 to 1+660 VA	35	10JAN06A	18FEB06	45	100	19	-113	-137
3159	SB NP OHVD 150m Tch.2+135 to 1+985	30	25NOV05A	24DEC05A	100	100	0		-153
3160	SB NP OHVD 150m Tch.1+985 to 1+835	30	28DEC05A	25JAN06	85	100	5	-121	-147
3161	SB NP OHVD 175m Tch.1+835 to 1+660 VA	40	26JAN06	21MAR06	0	100	40	-118	-147
SOUTH PORTAL									
3167	SB SP Arch Lining 150m Tch.1+213 to 1+363	30	10OCT05A	29DEC05A	100	100	0		-172
3151	SB SP Arch Lining 150m Tch.1+363 to 1+513	30	30DEC05A	13FEB06	55	100	14	-146	-173
3168	SB SP Arch Lining 130m Tch.1+513 to 1+643	38	14FEB06	29MAR06	0	100	38	-146	-173
3173	SB SP OHVD 150m Tch.1+213 to 1+363	30	08DEC05A	20JAN06	95	100	1	-142	-178
3174	SB SP OHVD 150m Tch.1+363 to 1+513	30	21JAN06	04MAR06	0	100	30	-139	-178
3175	SB SP OHVD 130m Tch.1+513 to 1+643	26	14MAR06	13APR06	0	100	26	-146	-173
TUNNEL FINISHING WORKS									
SERVICE TROUGH & UTILITIES									
3561	SB service trough 150m Tch.2+885 to 2+735 fr.NP	23	12DEC05A	24DEC05A	100	100	0		-294
3562	SB service trough 150m Tch.2+735 to 2+585 fr.NP	23	28DEC05A	06JAN06A	100	100	0		-272



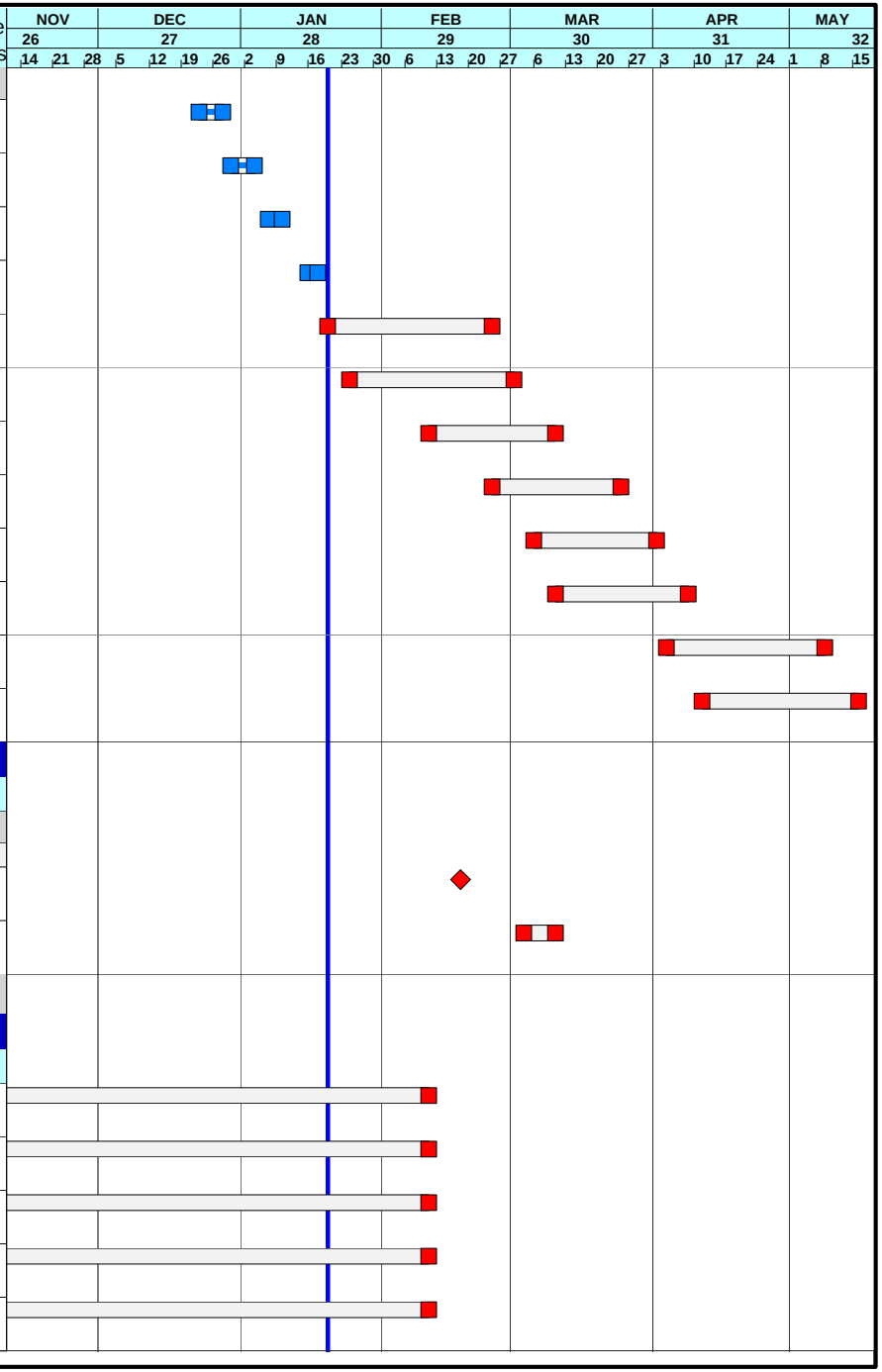
Act. ID	Activity Description	Orig Dur	Early Start	Early Finish	% Compl.	DWP % Compl.	Rem Dur	Total Float	Variance arly Finis
SERVICE TROUGH & UTILITIES									
3563	SB service trough 150m Tch.2+585 to 2+435 fr.NP	23	07JAN06A	23FEB06	0	100	23	-217	-276
3564	SB service trough 150m Tch.2+435 to 2+285 fr.NP	23	24FEB06	22MAR06	0	100	23	-217	-269
3565	SB service trough 150m Tch.2+285 to 2+135 fr.NP	23	23MAR06	22APR06	0	100	23	-217	-262
3566	SB service trough 150m Tch.2+135 to 1+985 fr.NP	23	24APR06	22MAY06	0	100	23	-217	-255
3570	SB service trough 150m Tch.1+063 to 1+213 fr.SP	23	20JAN06	23FEB06	0	100	23	-171	-221
3571	SB service trough 150m Tch.1+213 to 1+363 fr.SP	23	24FEB06	22MAR06	0	100	23	-171	-214
3572	SB service trough 150m Tch.1+363 to 1+513 fr.SP	23	23MAR06	22APR06	0	100	23	-171	-207
3573	SB service trough 150m Tch.1+513 to 1+663 fr.SP	23	24APR06	22MAY06	0	100	23	-171	-188
3545	SB NP 200 main 150m Tch.3+035 to 2+885 fr.NP	23	15DEC05A	26JAN06	67	100	6	-265	-353
3546	SB NP 200 main 150m Tch.2+885 to 2+735 fr.NP	23	27JAN06	02MAR06	0	100	23	-265	-346
3547	SB NP 200 main 150m Tch.2+735 to 2+585 fr.NP	23	03MAR06	29MAR06	0	100	23	-265	-339
3548	SB NP 200 main 150m Tch.2+585 to 2+435 fr.NP	23	30MAR06	29APR06	0	100	23	-265	-332
3555	SB SP 200 main 150m Tch.1+063 to 1+213 fr.SP	23	25JAN06	28FEB06	0	100	23	-169	-229
3556	SB SP 200 main 150m Tch.1+213 to 1+363 fr.SP	23	01MAR06	27MAR06	0	100	23	-169	-222
3557	SB SP 200 main 150m Tch.1+363 to 1+513 fr.SP	23	28MAR06	27APR06	0	100	23	-169	-215
3558	SB SP 200 main 150m Tch.1+513 to 1+663 fr.SP	23	28APR06	26MAY06	0	100	23	-169	-196
3642	SB & VA - 50% TCSS Contain't from NP KD6	66	20JAN06	19APR06	0	100	66	-205	-223
3643	SB & VA - Remain 50% TCSS Contain't NP KD6	66	20APR06	10JUL06	0	100	66	-205	-222
DRAINAGE & RC SLAB									
3574	SB Invert Drainage & RC.Slab - rightside 650m	54	20FEB06	27APR06	0	100	54	-101	-137
3575	SB Invert Drainage & RC.Slab - rightside 650m	54	28APR06	04JUL06	0	100	54	-95	-137
SOUTHBOUND & VENTILATION ADIT TUNNEL									
FS Works									
TUNNEL HYDRANT & HOSE REEL									
6774	EntRtSb&VA-Wet dist. (HR/Hyd) 1st fix	60	11MAR06	26MAY06	0	100	60	-127	-239



Act. ID	Activity Description	Orig Dur	Early Start	Early Finish	% Compl.	DWP % Compl.	Rem Dur	Total Float	Variance arly Finis
ELECTRICAL WORKS									
MAIN & SUB-MAIN DISTRIBUTION									
6805	EntRtSb&VA-HV, LV main & submain dist. 1st fix	96	20JAN06	26MAY06	0	100	96	-109	-203
FINAL CIRCUIT									
7571	EntRtSb&VA-Final circuit 1st fix	96	25FEB06	24JUN06	0	100	96	-109	-226
TUNNEL / EXTERNAL LIGHTING									
6811	EntRtSb&VA-Tunnel Lgt & VA lgt sys 1st fix	96	04JAN06A	26MAY06	1	100	96	-127	-200
TUNNEL VENTILATION SYSTEM									
TUNNEL VENTILATION									
6764	EntRtSb&VA-TVS Tunnel vent. & SE 1st fix	72	10JAN06A	26APR06	5	100	72	-109	-203
6769	EntRtSb&VA-TVS Tunnel vent. & SE 2nd fix	96	27APR06	21AUG06	0	100	96	-109	-203
PNEUMATIC SYSTEM									
6771	EntRtSb&VA-TVS pneumatic 1st fix	72	27APR06	24JUL06	0	100	72	-49	-203
CROSS PASSAGES									
X-PASSAGE LINING									
2604	Invert Clean & Lining to CP.3	10	20OCT05A	24DEC05A	100	100	0		-176
2605	Invert Clean & Lining to CP.4	10	30NOV05A	25JAN06	50	100	5	-148	-170
2601	Invert Clean & Lining to CP.9	10	29DEC05A	09JAN06A	100	100	0		-176
2599	Invert Clean & Lining to CP.11	10	20JAN06	08FEB06	0	100	10	662	-244
2602	Invert Clean & Lining to CP.8	10	20JAN06	08FEB06	0	100	10	-163	-185
2606	Invert Clean & Lining to CP.5	10	09FEB06	20FEB06	0	100	10	-153	-175
2607	Invert Clean & Lining to CP.6	10	21FEB06	03MAR06	0	100	10	-153	-175
X-PASSAGE INVERT									
2620	Invert Lining to CP.10	8	29DEC05A	30DEC05A	100	100	0		-179
2621	Invert Lining to CP.9	8	14JAN06A	17JAN06A	100	100	0		-163
2625	Invert Lining to CP.4	8	17FEB06	25FEB06	0	100	8	-128	-170
2622	Invert Lining to CP.8	8	23FEB06	03MAR06	0	100	8	-163	-185
2626	Invert Lining to CP.5	8	07MAR06	15MAR06	0	100	8	-151	-175
2627	Invert Lining to CP.6	8	18MAR06	27MAR06	0	100	8	-153	-175



Act. ID	Activity Description	Orig Dur	Early Start	Early Finish	% Compl.	DWP % Compl.	Rem Dur	Total Float	Variance arly Finis
X-PASSAGE FINISHING WORKS									
2634	Construct Rooms (incl.ABWF) at CP.16	24	23DEC05A	27DEC05A	100	100	0		-217
2635	Construct Rooms (incl.ABWF) at CP.15	24	30DEC05A	03JAN06A	100	100	0		-210
2636	Construct Rooms (incl.ABWF) at CP.14	24	07JAN06A	09JAN06A	100	100	0		-203
2637	Construct Rooms (incl.ABWF) at CP.13	24	16JAN06A	17JAN06A	100	100	0		-198
2639	Construct Rooms (incl.ABWF) at CP.11	24	20JAN06	24FEB06	0	100	24	-133	-200
2641	Construct Rooms (incl.ABWF) at CP.9	24	25JAN06	01MAR06	0	100	24	-101	-163
2640	Construct Rooms (incl.ABWF) at CP.10	24	11FEB06	10MAR06	0	100	24	-133	-200
2643	Construct Rooms (incl.ABWF) at CP.2	24	25FEB06	24MAR06	0	100	24	-133	-200
2645	Construct Rooms (incl.ABWF) at CP.4	24	06MAR06	01APR06	0	100	24	-128	-170
2644	Construct Rooms (incl.ABWF) at CP.3	24	11MAR06	08APR06	0	100	24	-133	-200
2647	Construct Rooms (incl.ABWF) at CP.6	24	04APR06	08MAY06	0	100	24	-153	-175
2642	Construct Rooms (incl.ABWF) at CP.8	24	12APR06	15MAY06	0	100	24	-189	-211
TESTING & COMMISSIONING									
EAGLE'S NEST TUNNEL									
STATUTORY INSPECTIONS									
FSD INSPECTION									
6917	EntRt-All FS design approved by FSD (MHJV)	0	18FEB06		0	100	0	-127	-239
6918	EntRt-Issue, endorse & submit FSI 314 to FSD	6	04MAR06	10MAR06	0	100	6	-127	-239
VENTILATION ADIT & BUILDING									
SUBMITTALS & APPROVALS									
ABWF & BUILDER'S WORKS									
1973	VA Bldg. - Prep & submit louvre details	90	22NOV04A	10FEB06	50	100	12	-113	-263
1985	VA Bldg. - Prep & sub aluminium cladding	90	22NOV04A	10FEB06	0	100	12	-83	-263
1975	VA Bldg. - Prep & sub balustrade & metal wks	90	24NOV04A	10FEB06	0	100	12	-95	-261
1971	VA Bldg. - Prep & submit door & window detail	90	03FEB05A	10FEB06	40	100	12	-107	-203
1974	VA Bldg. - Approve louvre details	24	07APR05A	10FEB06	50	100	12	-113	-239



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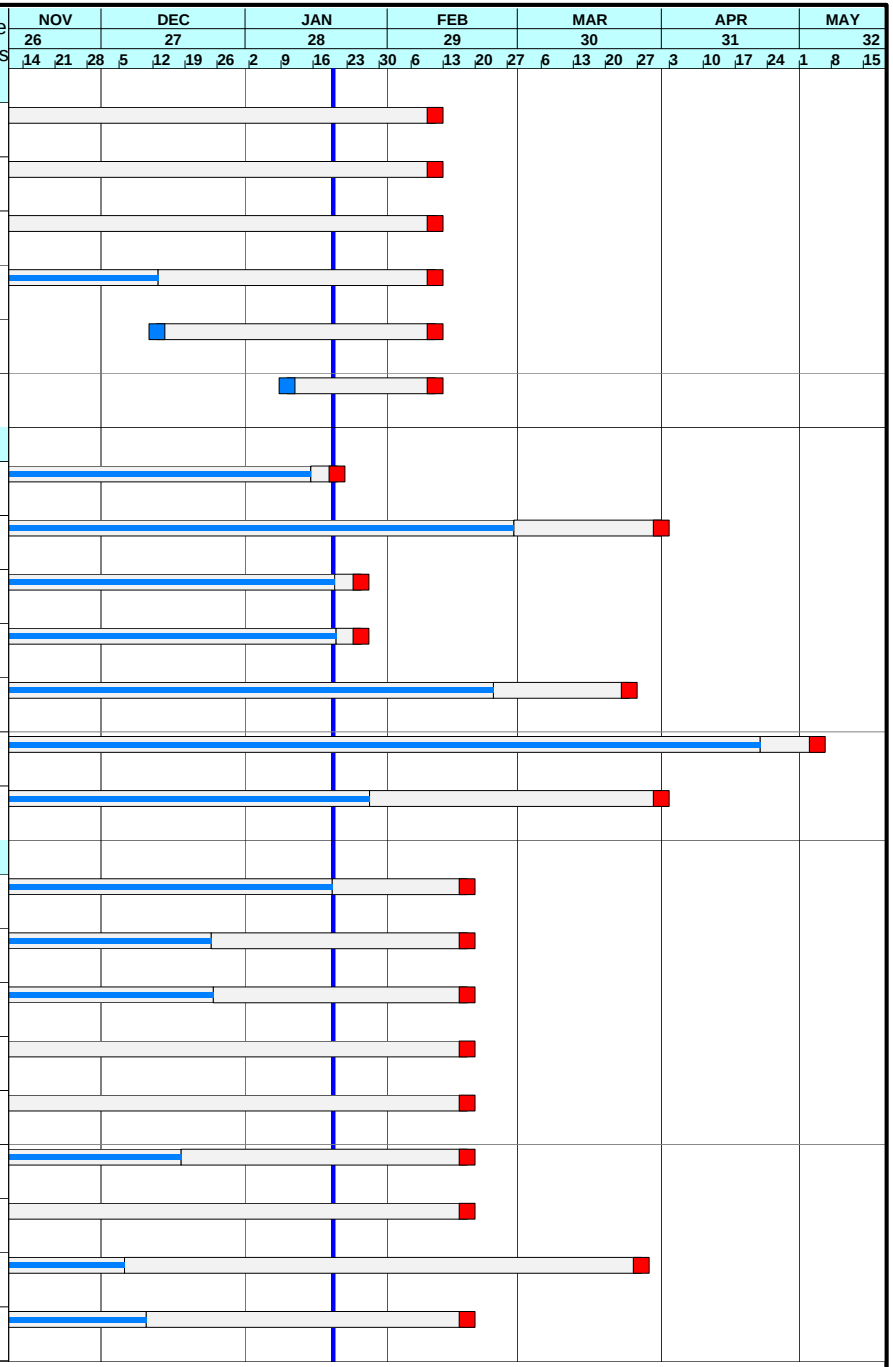
ABWF & BUILDER'S WORKS									
1989	VA Bldg. - Prep & sub fall arrest system	90	19APR05A	10FEB06	50	100	12	-107	-149
1972	VA Bldg. - Approve door & window details	24	07MAY05A	10FEB06	0	100	12	-107	-179
1991	VA Bldg. - Approve slate cladding	24	15JUN05A	10FEB06	50	100	12	-113	-239
1990	VA Bldg. - Approve fall arrest system	24	14OCT05A	10FEB06	50	100	12	-107	-125
1988	VA Bldg. - Approve aluminium cladding	24	13DEC05A	10FEB06	0	100	12	-83	-239
1976	VA Bldg. - Approve balustrade & metal works	24	10JAN06A	10FEB06	0	100	12	-95	-237
E&M EQPT./MTRL.DETAIL SUBMITTAL									
8232	VaBldg-Sub.TVF, Ductworks & Control sys	78	02JUL04A	20JAN06	99	100	1	-88	-171
8234	VaBldg-Sub.MVAC MCC, power & control sys	54	02JUL04A	31MAR06	95	100	54	-140	-304
8231	VaBldg-Sub.FS AFA & FM200 sys	54	05JUL04A	25JAN06	99	100	5	-28	-195
8228	VaBldg-Sub.FS wet sys	54	05AUG04A	25JAN06	99	100	5	-28	-195
8233	VaBldg-Sub.MVAC / TVF pneumatic sys	54	14AUG04A	24MAR06	95	100	48	-82	-160
8230	VaBldg-Sub.CMCS & ELV sys	78	26AUG04A	04MAY06	98	100	78	-136	-286
8235	VaBldg-Sub.PD irrig. sys	54	04FEB05A	31MAR06	85	100	54	-52	-262
E&M EQPT./MTRL.APPROVAL BY ENGINEER									
6578	VaBldg-App. HV power dist. sys	18	14JUL04A	17FEB06	95	100	18	-148	-262
6579	VaBldg-App. LV power dist. sys	18	13AUG04A	17FEB06	90	100	18	-142	-238
8495	VaBldg-App. building related luminaires	18	18AUG04A	17FEB06	90	100	18	-142	-232
6581	VaBldg-App. FS wet sys	18	04SEP04A	17FEB06	80	100	18	-28	-190
6590	VaBldg-App. FS AFA & FM200 sys	18	14SEP04A	17FEB06	70	100	18	-28	-190
6587	VaBldg-App. of CMCS & ELV sys	18	20SEP04A	17FEB06	88	100	18	-136	-208
6582	VaBldg-App. MVAC mech.vent. sys	18	23SEP04A	17FEB06	70	100	18	-178	-238
6580	VaBldg-App. PD all fresh & flush water sys	18	04NOV04A	27MAR06	78	100	50	-96	-234
6850	VaBldg-App. TVF, Ductworks & Control sys	18	12NOV04A	17FEB06	85	100	18	-88	-170



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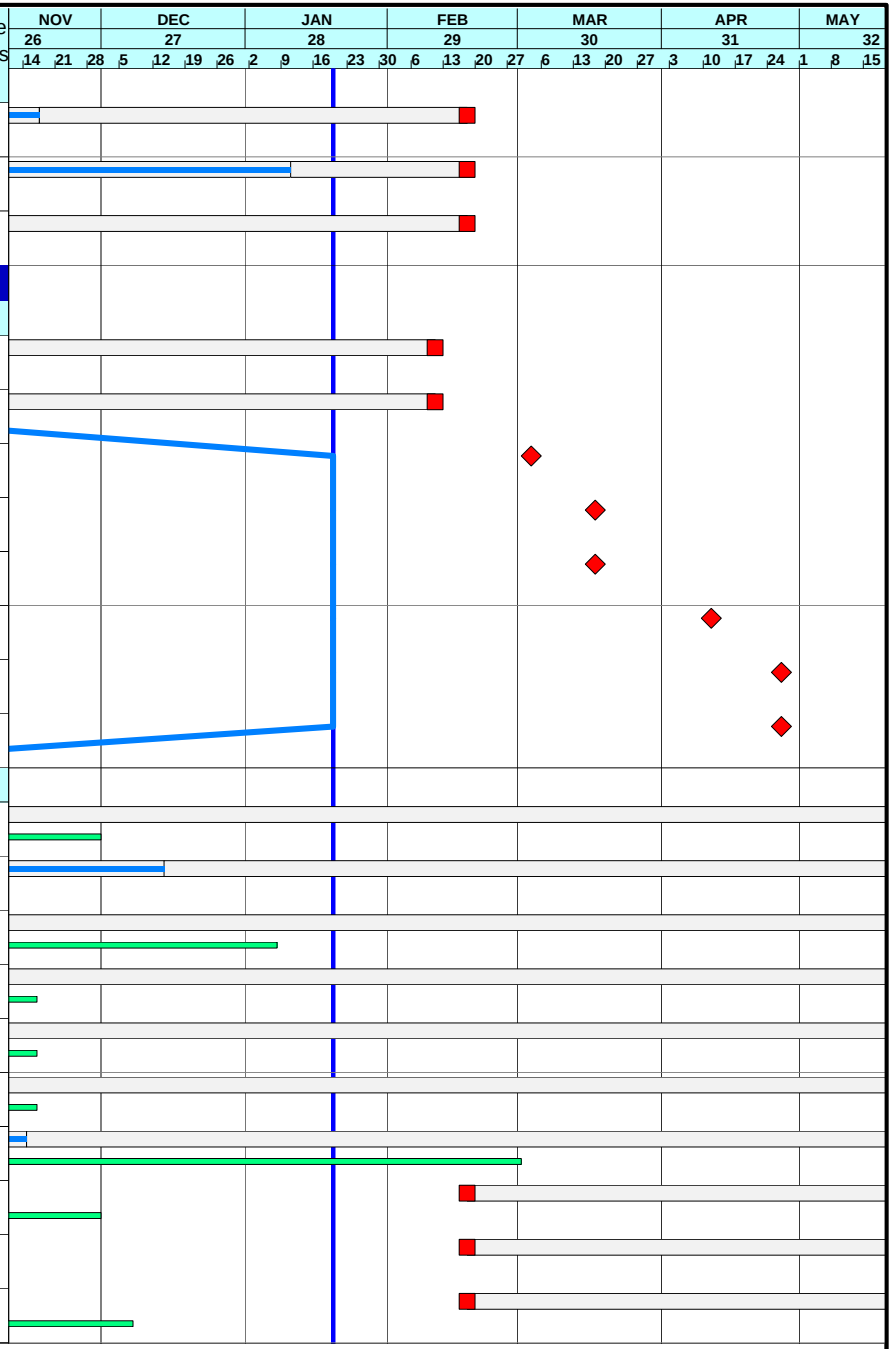
E&M EQPT./MTRL.APPROVAL BY ENGINEER									
6864	V6aBldg-App. MVAC MCC, power & control sys	18	12NOV04A	17FEB06	80	100	18	-140	-250
8515	VaBldg-App. MVAC Package AC Unit sys	18	01FEB05A	17FEB06	90	100	18	-34	-148
7590	VaBldg-App. PD irrig. sys	18	05MAY05A	17FEB06	30	100	18	-52	-208
PROCUREMENT									
ARCHITECTURAL									
1995	VA Bldg. - Procure aluminium cladding	30	19APR05A	10FEB06	0	100	12	-103	-117
1994	VA Bldg. - Procure balustrade & metal works	30	21APR05A	10FEB06	0	100	12	-95	-117
2035	VA Bldg. - Initial delivery balust & metal works	0	04MAR06		0		0	-95	0
2032	VA Bldg. - Initial delivery doors & windows	0	18MAR06		0	100	0	-107	0
2034	VA Bldg. - Initial delivery fall arrest system	0	18MAR06		0	100	0	-107	0
2038	VA Bldg. - Initial delivery aluminium cladding	0	12APR06		0		0	-103	0
2031	VA Bldg. - Initial delivery slate cladding	0	27APR06		0		0	-113	0
2033	VA Bldg. - Initial delivery louvres	0	27APR06		0		0	-113	0
E&M MATERIALS									
6584	VaBldg-Proc & Manuf. LV power dist. equip't	180	20MAR05A	04SEP06	30	100	180	-142	-220
6583	VaBldg-Proc. & Manuf. of HV dist. equip't	180	25MAR05A	04SEP06	50	100	180	-148	-244
6591	VaBldg-Proc. & Manuf. of CMCS & ELV sys	180	25MAR05A	04SEP06	20	100	180	-136	-190
6636	VaBldg-Proc & Manuf. FS AFA & FM200 sys	120	25MAR05A	24JUN06	20	100	120	-28	-172
6865	VaBldg-Proc & Manuf. MCC, power & control sys	180	25MAR05A	04SEP06	20	100	180	-140	-232
6586	VaBldg-Proc & Manuf. FS wet sys	120	06JUN05A	24JUN06	30	100	120	-28	-172
6851	VaBldg-Proc & Manuf. TVF, Ductwks & Cont'l sys	180	09JUN05A	04SEP06	35	80	180	-88	-152
6588	VaBldg-Proc & Manuf. MVAC mech.vent. sys	180	18FEB06	25SEP06	0	100	180	-178	-238
7591	VaBldg-Proc & Manuf. PD irrig. sys	120	18FEB06	17JUL06	0	100	120	-52	-208
8496	VaBldg-Proc & Manf bldg related luminaires	180	18FEB06	25SEP06	0	100	180	-142	-232



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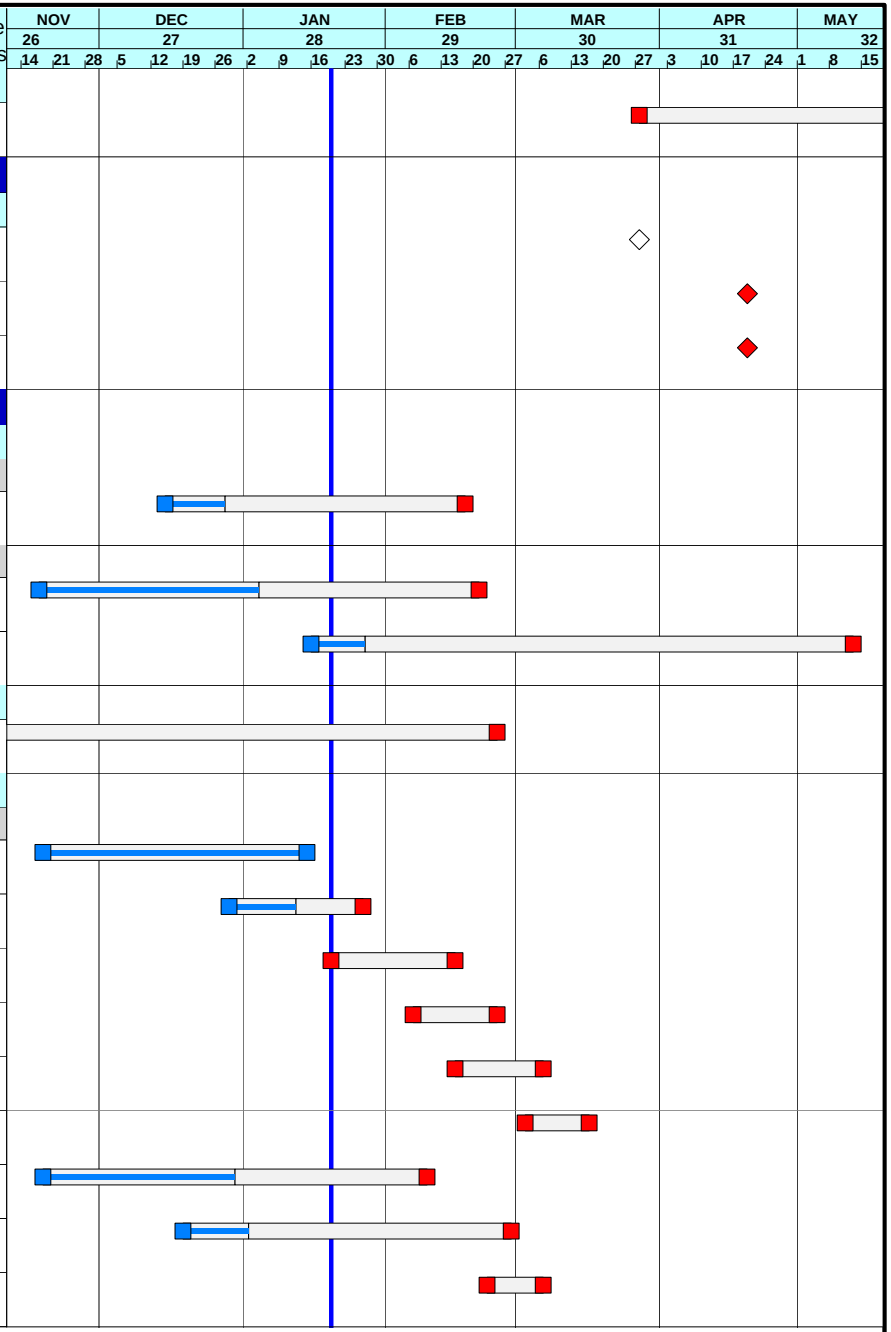
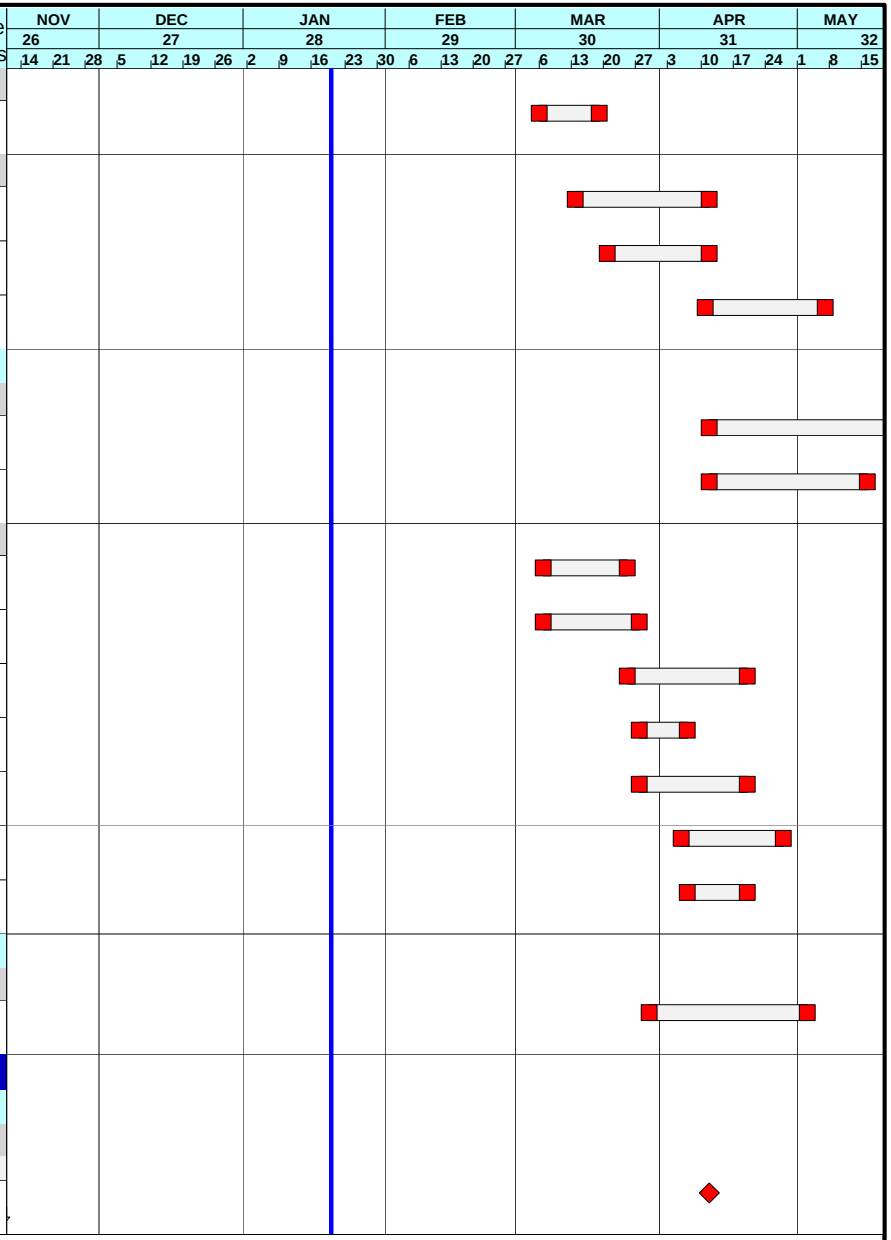
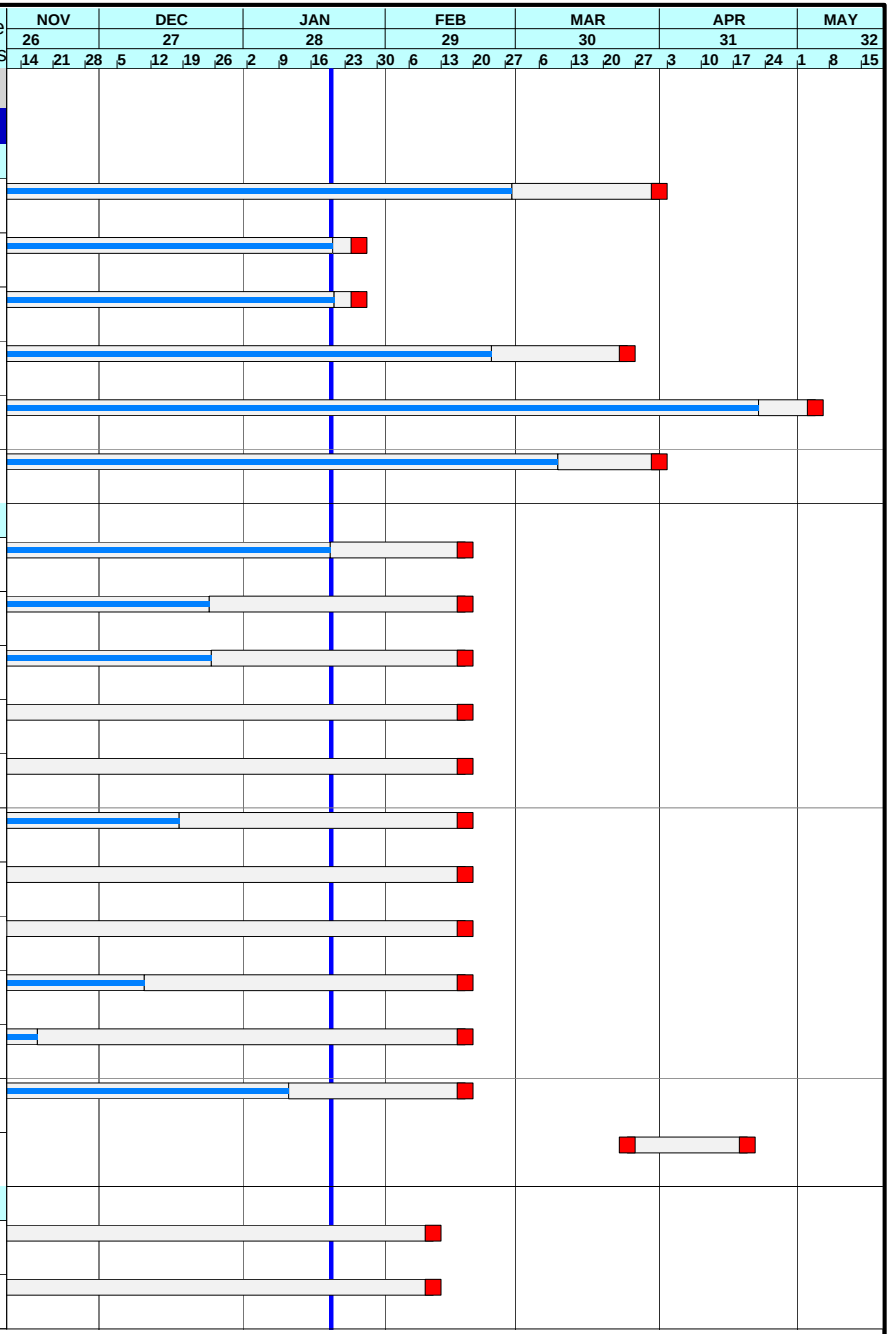
E&M MATERIALS									
6585	VaBldg-Proc & Manuf. PD fresh & flush water sys	120	28MAR06	23AUG06	0	100	120	-96	-234
E&M ACCESS DATES									
VENTILATION BUILDING									
1848	Int M/S - Vent Adit - E&M access to plenum	0		27MAR06	0	100	0	18	-167
1818	Int M/S - Vent Adit - E&M G/F access	0		19APR06	0		0	-46	-166
1844	Int M/S - Vent Adit - E&M 1/F access	0		19APR06	0		0	-46	-144
CONSTRUCTION WORKS									
ADIT TUNNEL									
TUNNEL LINING									
1536	VA Form Portal Transition Structure VA Bldg.	18	15DEC05A	17FEB06	20	100	18	-85	-212
VA TRANSITION STRUCTURE									
1923	VA RC Tnl Interface Lower part	40	18NOV05A	20FEB06	50	100	20	-157	-210
1924	VA RC Tnl Interface upper part	88	16JAN06A	12MAY06	10	100	84	-157	-186
SUBSTRUCTURE									
6589	VaBldg Drainage & Earth mat	48	23APR05A	24FEB06	60	100	24	-149	-242
SUPERSTUCTURE									
RC WORKS									
1540	VA Bldg.RC Walls/Cols to 1FL GL.C-F/1-6	16	19NOV05A	14JAN06A	100	100	0		-163
1541	VA Bldg.RC S/Slab 1FL.GL.C-F/1-6 +116.70mPD	16	29DEC05A	26JAN06	50	100	6	-149	-165
1542	VA Bldg.RC Walls/Cols to 2FL GL.C-F/1-6	16	20JAN06	15FEB06	0	100	16	-149	-167
1543	VA Bldg.RC S/Slab 2FL GL.C-F/1-6 +124.95mPD	16	07FEB06	24FEB06	0	100	16	-149	-167
1544	VA Bldg.RC Walls/Cols to URFL GL.C-F/1-6	16	16FEB06	06MAR06	0	100	16	-149	-167
1545	VA Bldg.RC S/Slab URFL +131.65mPD	12	03MAR06	16MAR06	0	100	12	-133	-167
1548	VA Bldg.RC.Walls/Cols to 1F GL.A-C/1-6	14	19NOV05A	09FEB06	50	100	11	-123	-131
1549	VA Bldg.RC S/Slab 1FL.GL.A-C/1-6 +116.70mPD	10	19DEC05A	27FEB06	20	100	26	-123	-140
1550	VA Bldg.RC Walls/Cols to 2FL GL.A-C/1-6	10	23FEB06	06MAR06	0	100	10	-110	-140



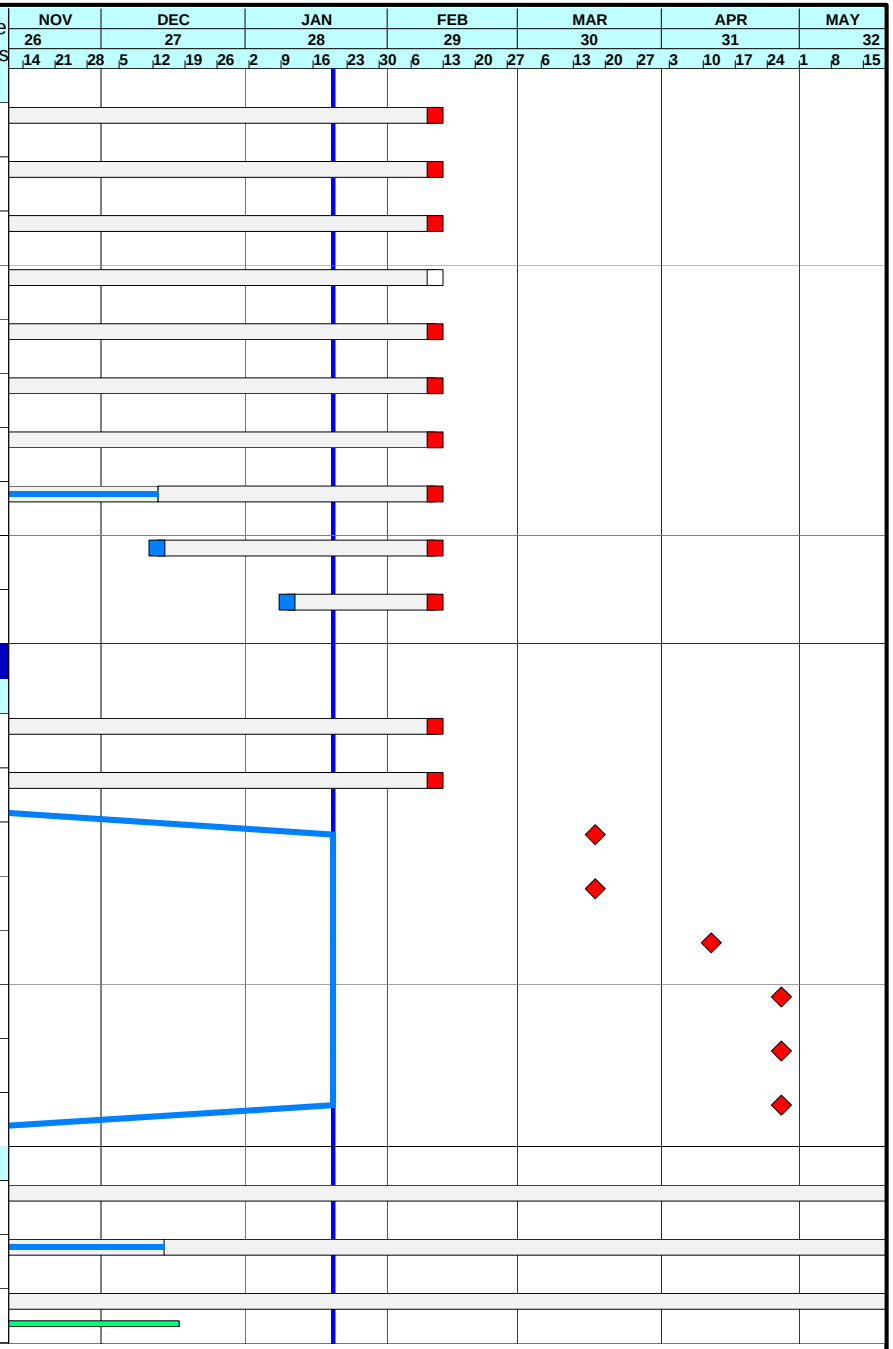
Act. ID	Activity Description	Orig Dur	Early Start	Early Finish	% Compl.	DWP % Compl.	Rem Dur	Total Float	Variance arly Finis
	RC WORKS								
1551	VA Bldg.RC S/Slab 2FL GL.A-C/1-6 +124.95mPD	12	06MAR06	18MAR06	0	100	12	-110	-140
	STRUCTURAL STEELWORKS								
1546	VA Bldg.Struct.Steelworks URFL +131.65mPD	24	14MAR06	11APR06	0	100	24	-133	-167
1561	VA Bldg. - Crane Beam to underside of 1FL & test	18	21MAR06	11APR06	0	100	18	-42	-140
1560	VA Bldg. - Crane Beam to underside of 2FL & test	18	11APR06	06MAY06	0	100	18	-35	-140
	ARCHITECTURAL & BUILDER'S WORKS								
	ROOFING & EXTERNAL FACADE								
1558	VA.Bldg.Roof W/Proofing & Testing	30	12APR06	22MAY06	0		30	-133	-167
1809	VA.Bldg. Ext Doors & Windows	24	12APR06	15MAY06	0		24	-127	-167
	BUILDER'S WORKS								
1553	VA.Bldg.W/Proof Tanks/Pits & Test GL.H-S/10-12	16	07MAR06	24MAR06	0	100	16	-149	-167
1554	VA.Bldg.Plinths LPL.	18	07MAR06	27MAR06	0	100	18	-139	-167
1643	VA.Bldg. Wet Trades GL	18	25MAR06	19APR06	0	100	18	-149	-166
1555	VA.Bldg.Plinths GFL.	8	28MAR06	06APR06	0	100	8	-139	-167
1644	VA.Bldg. Wet Trades 1F/L	16	28MAR06	19APR06	0	100	16	-139	-156
1645	VA.Bldg. Wet Trades 2F/L	16	06APR06	27APR06	0	100	16	-110	-140
1556	VA.Bldg.Plinths 1F/L	8	07APR06	19APR06	0	100	8	-139	-167
	E&M VENT ADIT TUNNEL								
	TCSS CONTAINMENT								
8482	VA.Bldg. - TCSS Contain't for KD6	24	30MAR06	02MAY06	0	100	24	-149	-166
	TESTING & COMMISSIONING								
	VENTILATION BUILDING								
	STATUTORY INSPECTIONS								
	FSD - FS INSPECTION								
6650	VaBldg-All FS design approved by FSD (MHJV)	0	12APR06		0		0	-60	-120



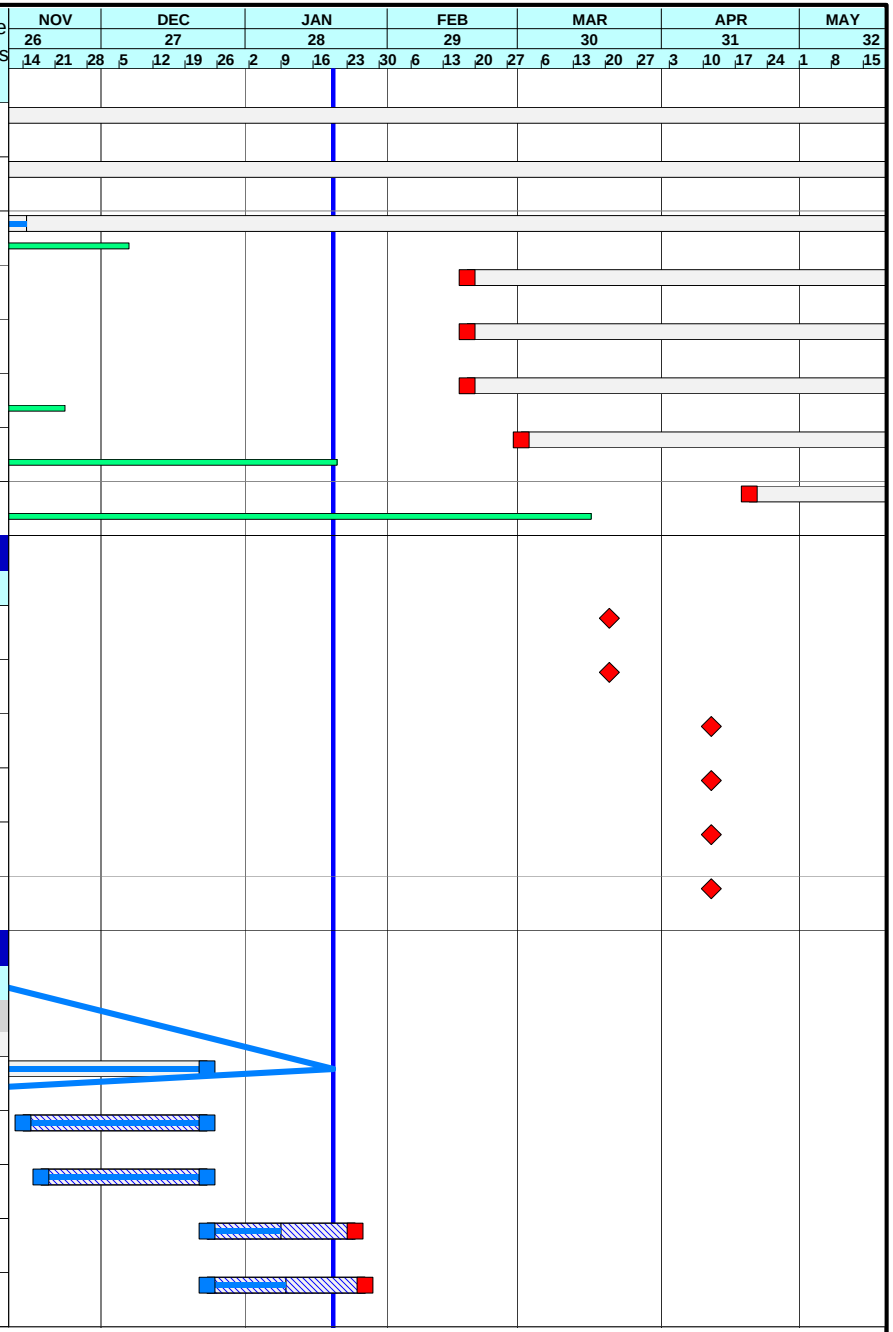
Act. ID	Activity Description	Orig Dur	Early Start	Early Finish	% Compl.	DWP % Compl.	Rem Dur	Total Float	Variance arly Finis
ENT NORTH PORTAL VENTILATION BUILDING									
SUBMITTALS & APPROVALS									
E&M EQPT.& MATERIAL.SUBMITTALS									
8260	EntNpBldg-Sub.MVAC MCC, power & control sys	54	02JUL04A	31MAR06	95	100	54	-187	-343
8257	EntNpBldg-Sub.FS AFA & FM200 sys	54	05JUL04A	25JAN06	99	100	5	-49	-142
8253	EntNpBldg-Sub.FS wet sys	54	05AUG04A	25JAN06	99	100	5	-37	-226
8259	EntNpBldg-Sub.MVAC / TVF pneumatic sys	54	14AUG04A	24MAR06	95	100	48	-85	-145
8255	EntNpBldg-Sub.CMCS & ELV sys	78	28AUG04A	04MAY06	98	100	78	-139	-301
8256	EntNpBldg-Sub.MVAC Package AC Units	54	17JAN05A	31MAR06	95	100	54	-37	-145
E&M EQPT.& MATERIAL APPROVALS									
6196	EntNpBldg-App. HV power dist. sys	18	14JUL04A	17FEB06	95	100	18	-187	-295
6197	EntNpBldg-App. LV power dist. sys	18	13AUG04A	17FEB06	90	100	18	-193	-259
8499	EntNpBldg-App. building related luminaires	18	18AUG04A	17FEB06	90	100	18	-133	-245
6199	EntNpBldg-App. FS wet sys	18	04SEP04A	17FEB06	80	100	18	-37	-221
6210	EntNpBldg-App. FS AFA & FM200 sys	18	14SEP04A	17FEB06	70	100	18	-49	-137
6203	EntNpBldg-App. CMCS & ELV sys	18	20SEP04A	17FEB06	88	100	18	-139	-223
6200	EntNpBldg-App. MVAC mech.vent. sys	18	23SEP04A	17FEB06	70	100	18	-211	-301
6198	EntNpBldg-App. PD cleans. & flush water sys	18	04NOV04A	17FEB06	78	100	18	-55	-239
6823	EntNpBldg-App. TVF, Ductworks & Control sys	18	12NOV04A	17FEB06	85	100	18	-139	-233
6837	EntNpBldg-App. MVAC MCC, power & control sys	18	12NOV04A	17FEB06	80	100	18	-187	-289
6207	EntNpBldg-App. MVAC Package AC Unit sys	18	01FEB05A	17FEB06	90	100	18	-37	-91
6830	EntNpBldg-App. MVAC / TVF pneumatic sys	18	25MAR06	19APR06	0	100	18	-85	-145
ABWF WORKS									
1955	NP.Bldg. - Prep & submit louvre details	24	19NOV04A	10FEB06	50	100	12	-64	-331
1959	NP.Bldg. - Prep & sub aluminium cladding	24	19NOV04A	10FEB06	50	100	12	-66	-331



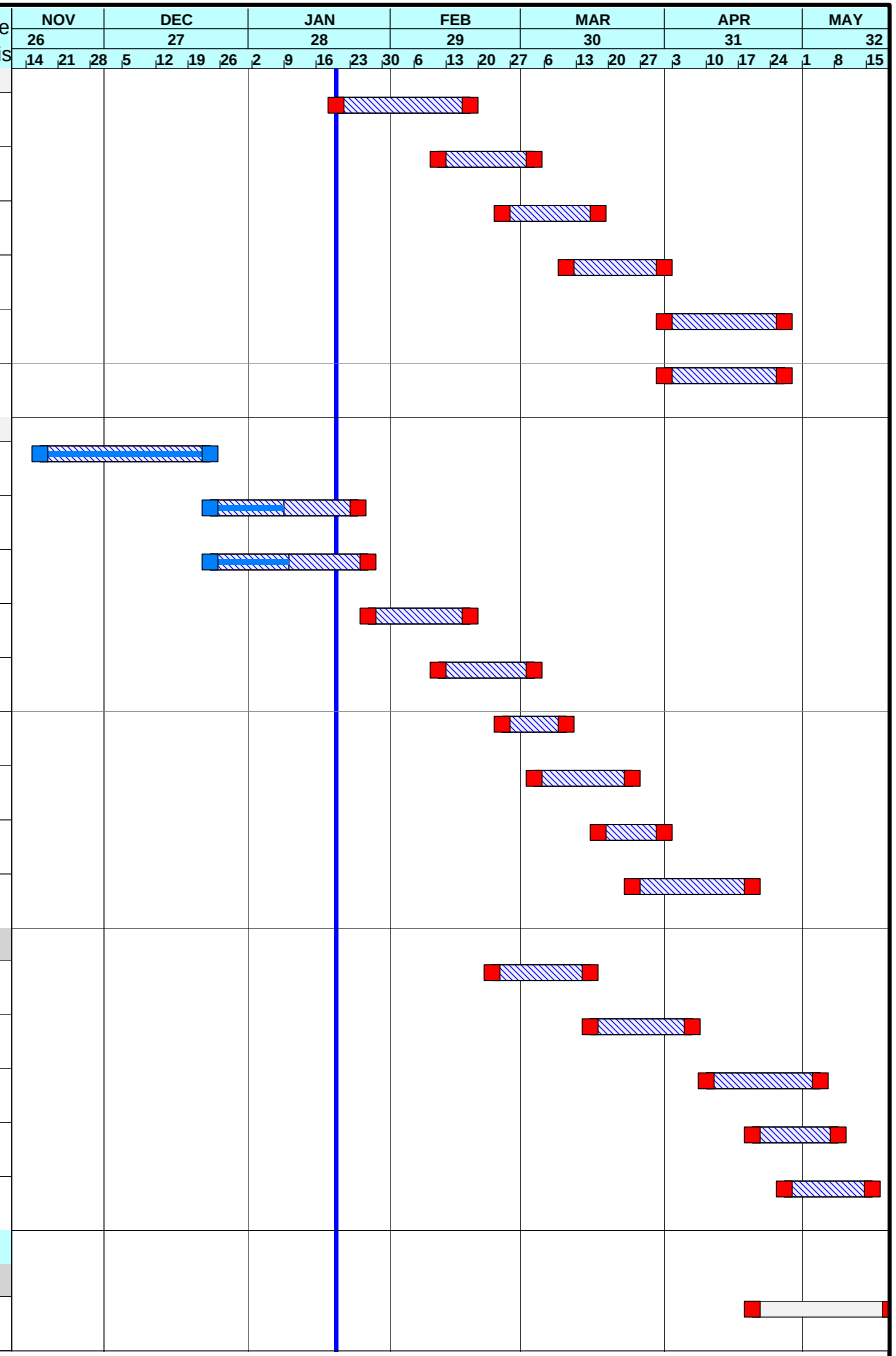
Act. ID	Activity Description	Orig Dur	Early Start	Early Finish	% Compl.	DWP % Compl.	Rem Dur	Total Float	Variance arly Finis
ABWF WORKS									
1970	NP.Bldg. - Prep & submit slate cladding	24	19NOV04A	10FEB06	50	100	12	-94	-331
1957	NP.Bldg. - Prep & sub balustrade & metal wks	24	20JAN05A	10FEB06	50	100	12	-34	-281
1961	NP.Bldg. - Prep & sub fall arrest system	24	01FEB05A	10FEB06	50	100	12	-40	-271
1946	NP.Bldg. - Prep & submit door & window detail	24	17FEB05A	10FEB06	50	100	12	660	-263
1954	NP.Bldg. - Approve door & window details	24	06APR05A	10FEB06	50	100	12	-34	-239
1956	NP.Bldg. - Approve louvre details	24	08APR05A	10FEB06	50	100	12	-64	-307
1963	NP.Bldg. - Approve slate cladding	24	15JUN05A	10FEB06	50	100	12	-94	-307
1962	NP.Bldg. - Approve fall arrest system	24	14OCT05A	10FEB06	50	100	12	-40	-247
1960	NP.Bldg. - Approve aluminium cladding	24	13DEC05A	10FEB06	0	100	12	-66	-307
1958	NP.Bldg. - Approve balustrade & metal works	24	10JAN06A	10FEB06	0	100	12	-34	-257
PROCUREMENT - MATERIAL									
ABWF WORKS									
1967	NP.Bldg. - Procure aluminium cladding	180	18JAN05A	10FEB06	50	100	12	-66	-127
1966	NP.Bldg. - Procure balustrade & metal works	120	24MAR05A	10FEB06	50	100	12	-116	-137
2039	NP.Bldg. - Initial delivery doors & windows	0	18MAR06		0		0	-34	0
2049	NP.Bldg. - Initial delivery louvre	0	18MAR06		0		0	-64	0
2050	NP.Bldg. - Initial delivery aluminium cladding	0	12APR06		0		0	-66	0
2051	NP.Bldg. - Initial delivery slate cladding	0	27APR06		0		0	-94	0
2052	NP.Bldg. - Initial delivery balust & metal works	0	27APR06		0		0	-58	0
2053	NP.Bldg. - Initial delivery fall arrest system	0	27APR06		0		0	-40	0
E&M WORKS									
6202	EntNpBldg-Proc & Manuf. LV power dist. equip't	180	20MAR05A	04SEP06	30	100	180	-193	-241
6201	EntNpBldg-Proc. & Manuf. of HV dist. equip't	180	25MAR05A	04SEP06	50	100	180	-187	-277
6208	EntNpBldg-Proc. & Manuf. of CMCS & ELV sys	180	25MAR05A	04SEP06	20	100	180	-139	-205



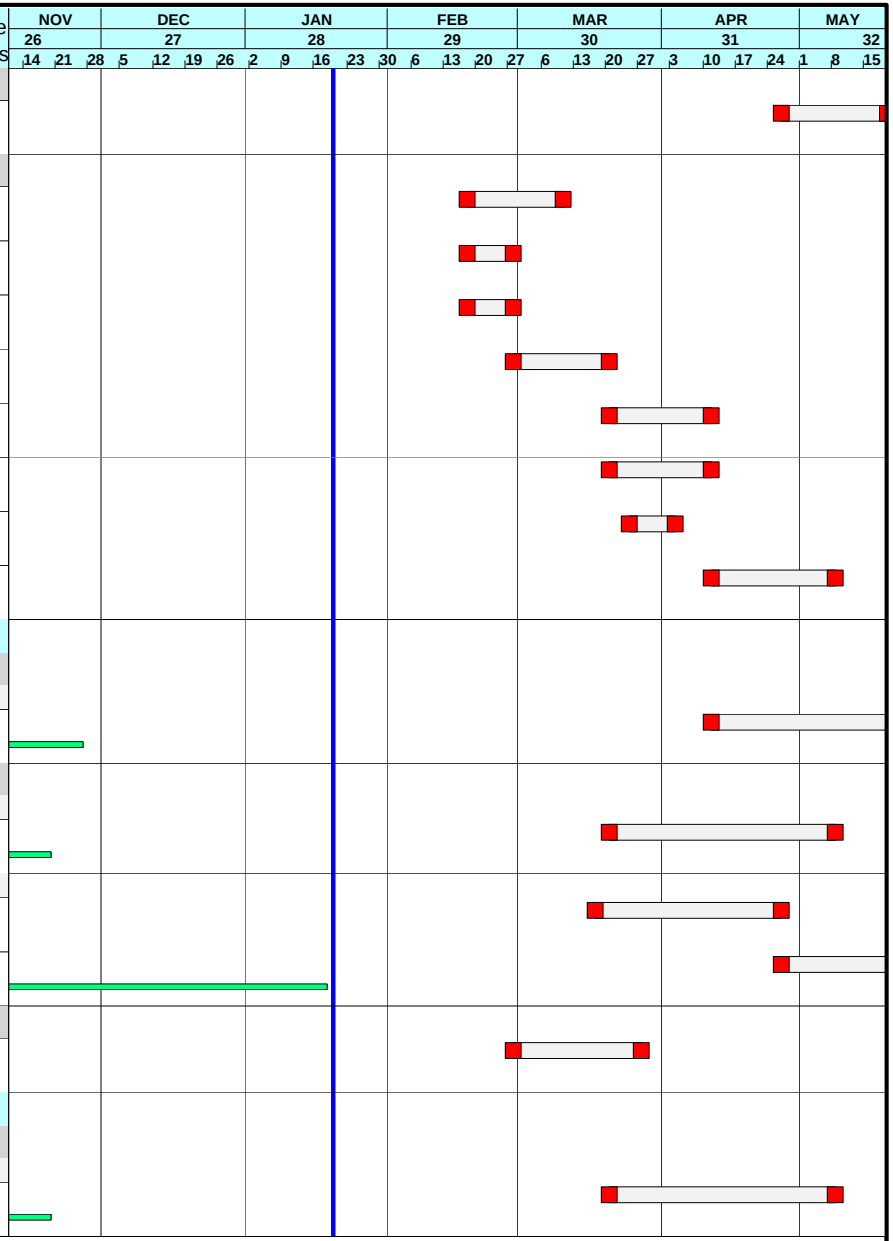
Act. ID	Activity Description	Orig Dur	Early Start	Early Finish	% Compl.	DWP % Compl.	Rem Dur	Total Float	Variance arly Finis
E&M WORKS									
6838	EntNpBldg-Proc & Manuf. MCC, power & control sys	180	25MAR05A	04SEP06	20	100	180	-187	-271
6205	EntNpBldg-Proc & Manuf. FS wet sys	120	06JUN05A	24JUN06	30	100	120	-37	-203
6824	EntNpBldg-Proc & Manuf. TVF, Ductwks&Cont'l sys	180	09JUN05A	04SEP06	35	100	180	-139	-215
6204	EntNpBldg-Proc & Manuf. Cleans & flush water sys	120	18FEB06	17JUL06	0	100	120	-55	-239
6206	EntNpBldg-Proc & Manuf. MVAC mech.vent. sys	180	18FEB06	25SEP06	0	100	180	-211	-301
8500	EntNpBldg-Proc & Manf bldg related luminaires	180	18FEB06	25SEP06	0	100	180	-133	-245
6269	EntNpBldg-Proc & Manuf. FS AFA & FM200 sys	120	02MAR06	28JUL06	0	100	120	-59	-147
6831	EntNpBldg-Proc & Manuf. MVAC / TVF pneumatic sys	120	20APR06	11SEP06	0		120	-85	-145
INTERFACE MILESTONES									
NORTH PORTAL BUILDING									
1833	Int M/S - ENT NPB - E&M 2/F access	0		20MAR06	0	100	0	-87	-147
6219	EntNpBldg-E&M access to 2/F	0	21MAR06*		0	100	0	-87	-129
1834	Int M/S - ENT NPB - E&M 3/F access	0		11APR06	0		0	-81	-147
1837	Int M/S - ENT NPB - E&M Ext.Elev access	0		11APR06	0		0	-21	-151
6213	EntNpBldg-E&M access to 3/F	0	12APR06*		0		0	-81	-147
6218	EntNpBldg-E&M access to External Elevation	0	12APR06*		0		0	-21	-123
CONSTRUCTION									
SUPERSTRUCTURE									
RC WORKS									
NB CARRIAGEWAY & CENTRAL RESERVE									
1427	NP.Bldg - RC Trans Slab - Nth Bound [New Act]	36	18OCT05A	23DEC05A	100	100	0		0
1390	NP.Bldg. - RC Cols.& Walls to 2FL.GL.A-K/2-6	18	14NOV05A	23DEC05A	100	100	0		-179
1393	NP.Bldg - RC Trans Slab 2FL.~+78.5mPD GL.A-K/2-7	20	18NOV05A	23DEC05A	100	100	0		-147
1394	NP.Bldg - RC S/Slab U2FL.+78.40.65mPD GL.E-H/3-7	12	24DEC05A	24JAN06	50	100	4	-130	-159
1395	NP.Bldg. - RC Cols.& Walls to 3FL.GL.A-J/3-6	18	24DEC05A	26JAN06	50	100	6	-130	-157



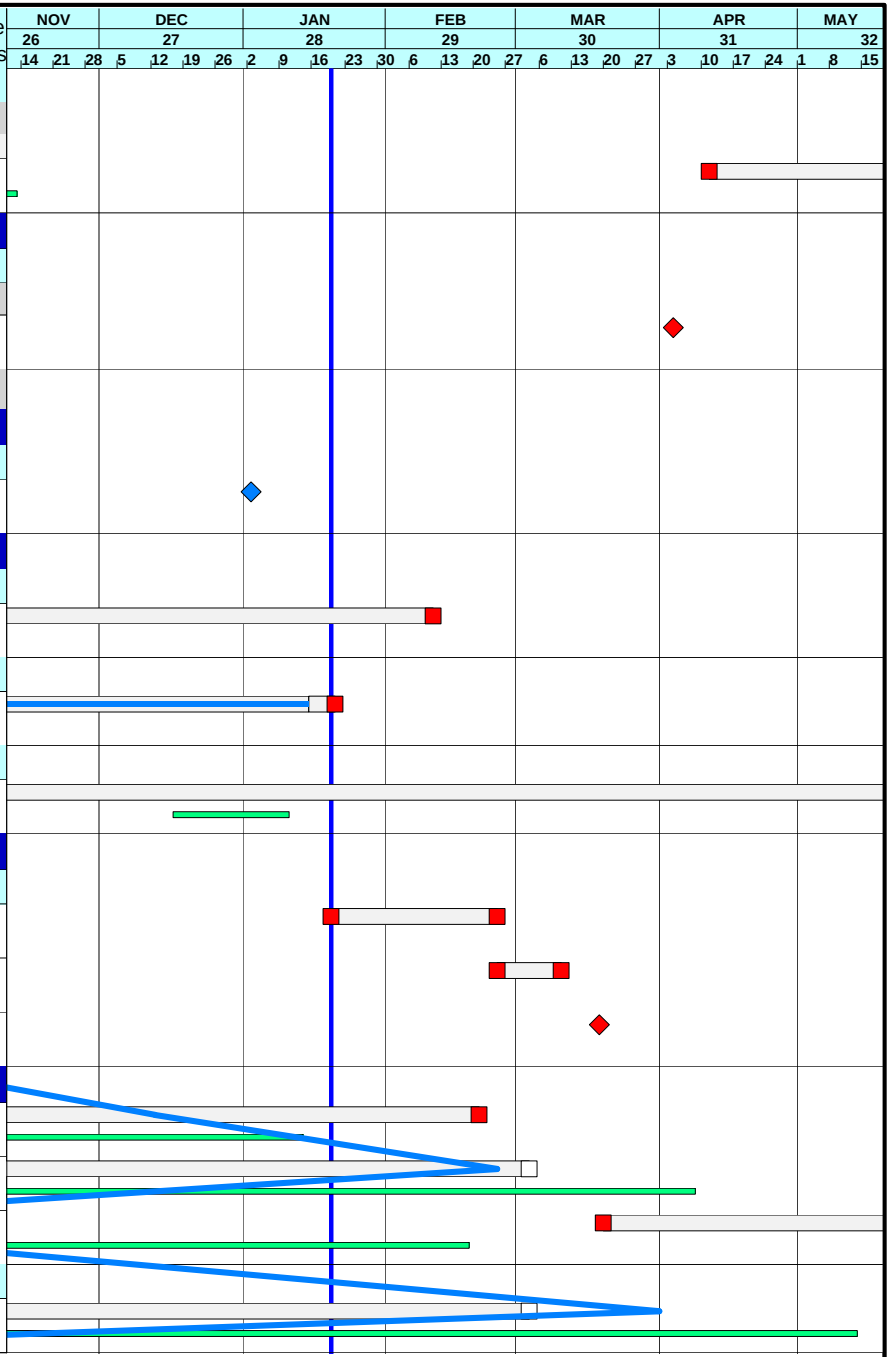
Act. ID	Activity Description	Orig Dur	Early Start	Early Finish	% Compl.	DWP % Compl.	Rem Dur	Total Float	Variance arly Finis
	NB CARRIAGEWAY & CENTRAL RESERVE								
1396	NP.Bldg. - RC S/Slab 3FL.+85.98mPD GL.A-J/3-7	18	20JAN06	17FEB06	0	100	18	-130	-155
1397	NP.Bldg. - RC Cols.& Walls to 4FL.GL.A-J/3-7	18	11FEB06	03MAR06	0	100	18	-76	-155
1398	NP.Bldg. - RC S/Slab 4FL.+93.83mPD GL.A-H/3-7	18	25FEB06	17MAR06	0	100	18	-76	-155
1399	NP.Bldg. - RC Cols.& Walls to 5FL.GL.A-H/3-7	18	11MAR06	31MAR06	0	100	18	-76	-155
1400	NP.Bldg. - RC S/Slab 5FL.+100.88mPD GL.A-H/3-7	18	01APR06	26APR06	0	100	18	-76	-155
1401	NP.Bldg. - RC Stairs GL.A-H/5-7	18	01APR06	26APR06	0	100	18	-45	-143
	SB CARRIAGEWAY								
1406	NP.Bldg. - RC Trans Slab 2FL.~78.5mPD GL.A-K/1-2	15	17NOV05A	23DEC05A	100	100	0		-146
1407	NP.Bldg. - RC S/Slab U2FL.~78.5mPD GL.E-H/1-3	12	24DEC05A	24JAN06	50	100	4	-124	-143
1408	NP.Bldg. - RC Cols.& Walls to 3FL.GL.A-J/1-3	18	24DEC05A	26JAN06	50	100	6	-130	-157
1409	NP.Bldg. - RC S/Slab 3FL.+85.98mPD GL.A-J/1-3	12	27JAN06	17FEB06	0	100	12	-130	-151
1410	NP.Bldg. - RC Cols.& Walls to 4FL.GL.A-J/1-3	18	11FEB06	03MAR06	0	100	18	-58	-151
1411	NP.Bldg. - RC S/Slab 4FL.+93.83mPD GL.A-H/1-3	12	25FEB06	10MAR06	0	100	12	-58	-151
1412	NP.Bldg. - RC Cols.& Walls to 5FL.GL.A-H/1-3	18	04MAR06	24MAR06	0	100	18	-58	-151
1413	NP.Bldg. - RC S/Slab 5FL.+100.88mPD GL.A-H/1-3	9	18MAR06	31MAR06	0	100	12	-58	-151
1414	NP.Bldg. - RC Stairs GL.A-H/5-7	18	25MAR06	19APR06	0	100	18	-52	-151
	STRUCTURAL STEELWORKS								
1232	NP.Bldg.- Crane beams to underside of U2F & test	18	23FEB06	15MAR06	0	100	18	-83	-143
1233	NP.Bldg.- Crane beams to underside of 3FL & test	18	16MAR06	06APR06	0	100	18	-77	-143
1234	NP.Bldg.- Crane beams to underside of 4FL & test	18	10APR06	04MAY06	0		18	-37	-145
1415	NP.Bldg.Struct.Steel Works GL.A-E/2	14	20APR06	08MAY06	0		14	-39	-151
1402	NP.Bldg.Struct.Steel Works GL.A-E/6	14	27APR06	15MAY06	0		14	-45	-143
	ARCHITECTURAL & BUILDER'S WORKS								
	ROOFING & EXTERNAL FACADE								
1423	NP.Bldg.Roof W/Proofing & Testing	24	20APR06	19MAY06	0		24	-49	-147



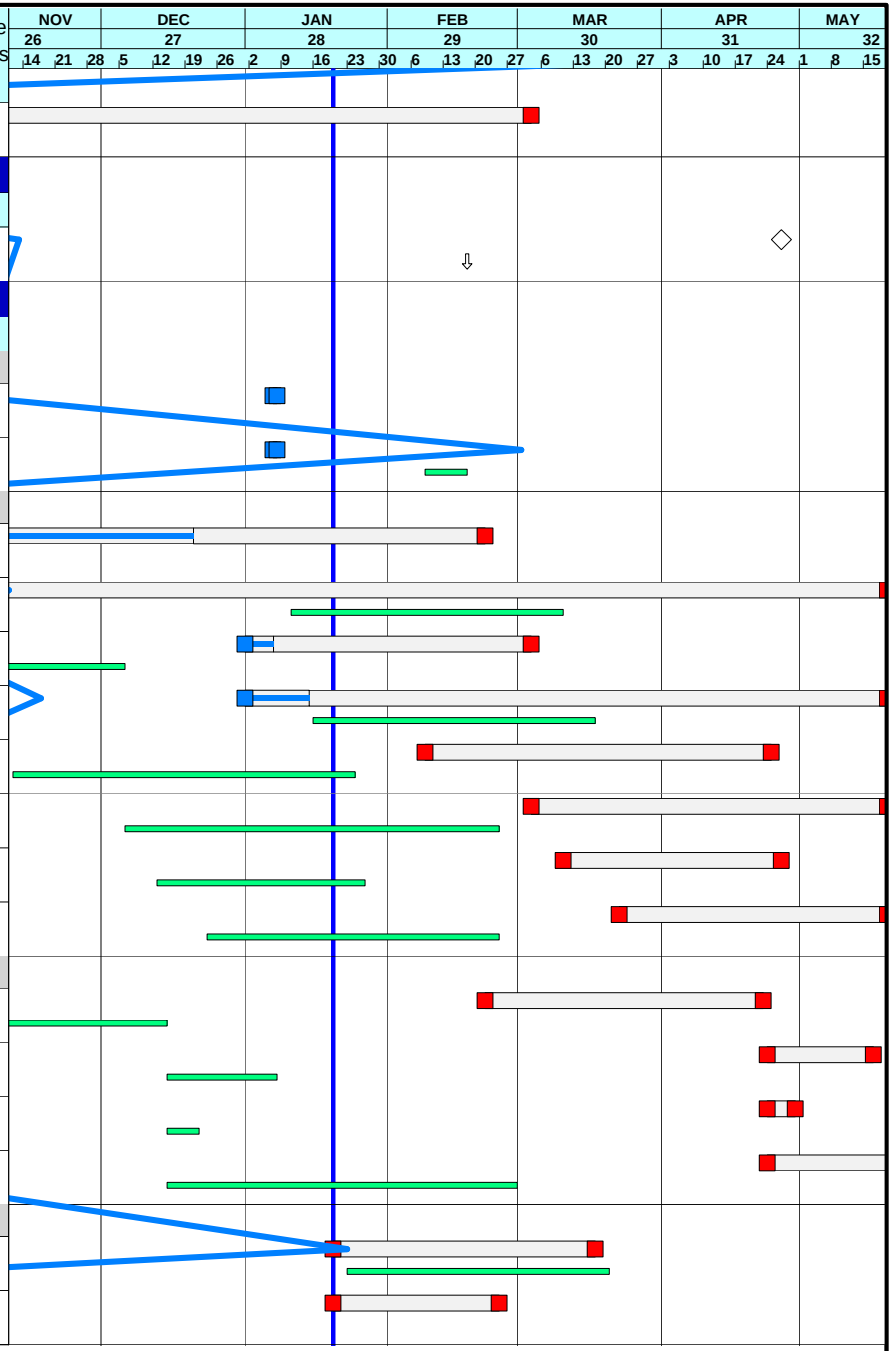
Act. ID	Activity Description	Orig Dur	Early Start	Early Finish	% Compl.	DWP % Compl.	Rem Dur	Total Float	Variance arly Finis
ROOFING & EXTERNAL FACADE									
1630	NP.Bldg.Ext Louvre & cladding 2FL to 3FL	18	27APR06	19MAY06	0		18	-94	-187
BUILDER'S WORK									
1418	NP.Bldg. -W/Proof Tanks/Pits & Test GL.H-S/10-12	18	18FEB06	10MAR06	0	100	18	-63	-155
1419	NP.Bldg. - Plinths GL.	8	18FEB06	27FEB06	0	100	8	-63	-151
1420	NP.Bldg. - Plinths 2FL.	8	18FEB06	27FEB06	0	100	8	-130	-151
1626	NP.Bldg.Wet Trades 2FL	18	28FEB06	20MAR06	0	100	18	-130	-151
1627	NP.Bldg.Wet Trades 3FL	18	21MAR06	11APR06	0	100	18	-99	-151
1810	NP.Bldg. - Ext. Doors & Windows (frame)	18	21MAR06	11APR06	0		18	-36	-151
1421	NP.Bldg. - Plinths 4FL.	8	25MAR06	03APR06	0	100	8	-33	-155
1527	NP.Bldg.Wet Trades GL	18	12APR06	08MAY06	0		18	-99	-151
E&M - GENERAL									
MVAC WORKS									
MCC, POWER & CONTROL									
6840	EntNpBldg-MCC, power & control 1st fix	42	12APR06	06JUN06	0		42	-63	-147
ELECTRICAL WORKS									
HV POWER DISTRIBUTION MAJOR EQPT.									
6225	EntNpBldg-HV power dist. sys 1st fix	36	21MAR06	08MAY06	0	100	36	-81	-129
EARTHING & LIGHTNING PROTECTION									
6209	EntNpBldg-Earth'g & lightn'g - Earth Mat & Rods	30	18MAR06	26APR06	0	100	30	-31	-155
6228	EntNpBldg-Earth'g & lightn'g protection 1st fix	60	27APR06	10JUL06	0		60	-31	-133
TCSS CONTAINMENT									
8481	EntNpBldg - TCSS Contain't for KD7	24	28FEB06	27MAR06	0	100	24	-130	-151
E&M 2/F									
MVAC WORKS									
MECH.VENT./AIR CONDITIONING									
6220	EntNpBldg 2F-AC(1st Fix) mech.vent.	36	21MAR06	08MAY06	0	100	36	-87	-129



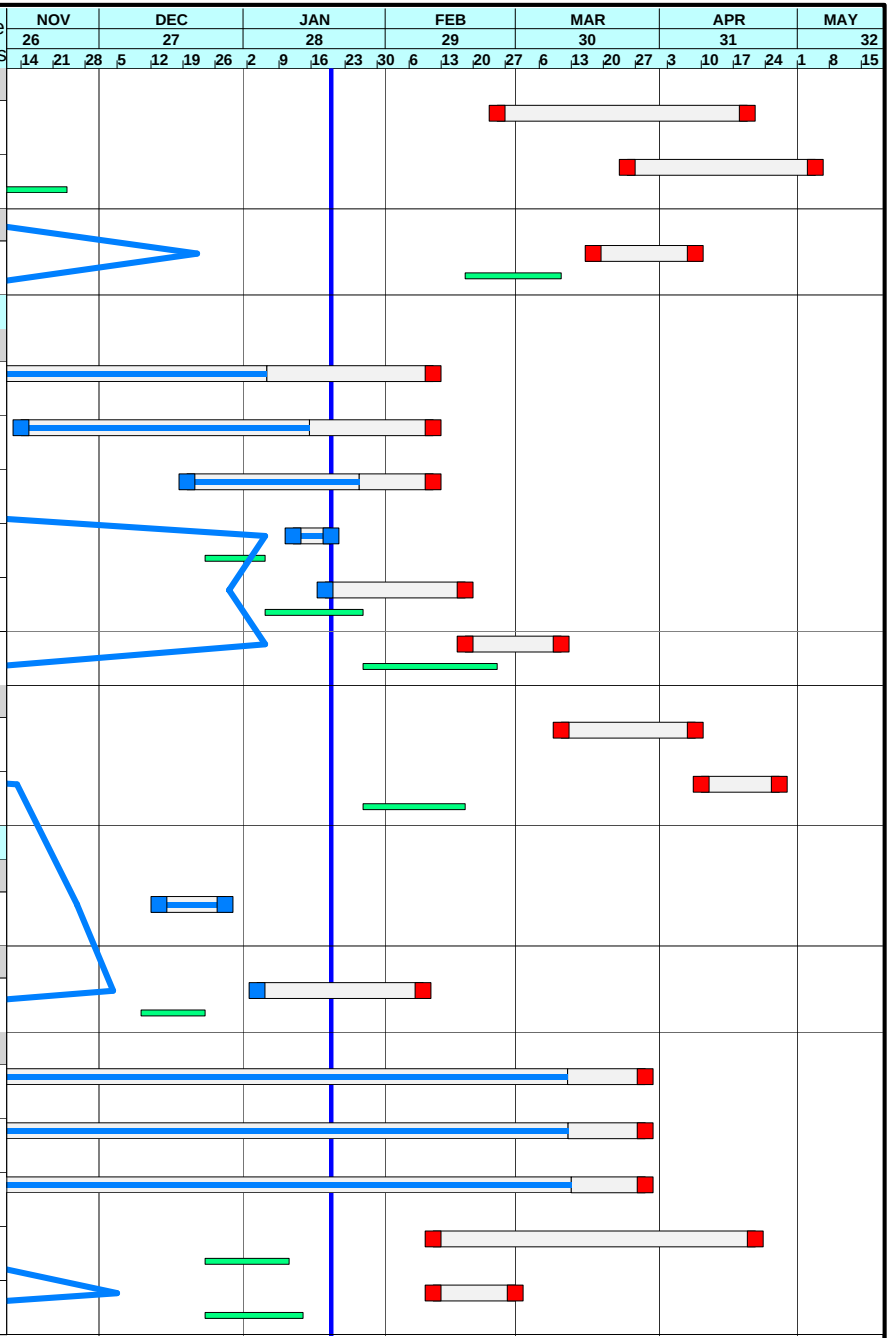
Act. ID	Activity Description	Orig Dur	Early Start	Early Finish	% Compl.	DWP % Compl.	Rem Dur	Total Float	Variance arly Finis
E&M 3/F									
MVAC WORKS									
MECH.VENT./AIR CONDITIONING									
6214	EntNpBldg 3F-AC(1st Fix) mech.vent.	30	12APR06	22MAY06	0		30	-81	-147
TESTING & COMMISSIONING									
STATUTORY INSPECTION									
FSD INSPECTION									
6298	EntNpBldg-All FS design approved by FSD (MHJV)	0	04APR06		0		0	-33	-151
TOLL PLAZA & ANCILLIARY STRUCTURES									
CONTRACT DEFINED DATES & SECTIONS									
AREA ACCESS & VACATION DATES									
ACS_D5	Access to Portion - D5	0	03JAN06A		100	100	0		-85
SUBMITTALS & APPROVALS									
ABWF & BUILDER'S WORKS									
1522	TP/FB - Approve footbridge details	24	28JUL05A	10FEB06	0	100	12	-48	-366
E&M EQPT. / MTRL. SUBMITTALS									
8258	EntNpBldg-Sub.TVF	78	02JUL04A	20JAN06	99	100	1	-139	-234
E&M EQPT. / MTRL. APPROVALS									
7547	TP-App. MVAC Package AC Unit sys	18	01FEB05A	05JUN06	30	100	18	-59	-111
DESIGN & ENGINEERING									
PERMANENT WORKS									
1244	Design/ICE Check Tool Booth Canopy	24	20JAN06	24FEB06	0	100	24	-83	-114
1341	Eng Approve Dsg Tool Booth Canopy	12	25FEB06	10MAR06	0	100	12	-83	-114
1358	Issue Constr Dwgs Tool Booth Canopy	0		18MAR06	0	100	0	-83	-114
PROCUREMENT - MAJOR MATERIAL									
2184	Order/Fabricate/Deliver FBridge Structural Steel	120	01APR05A	20FEB06	0	100	20	6	-25
1518	Admin Bldg - Procure & maunfacture lift	270	01JUN05A	03MAR06	0	80	30	101	30
2185	Order/Fabricate/Deliver Tool Booth Canopy	90	20MAR06	11JUL06	0	80	90	-83	-114
TOLL PLAZA									
1512	TP/FB - Procure & maunfacture lifts (x2)	270	15JUL05A	03MAR06	0	80	30	122	55



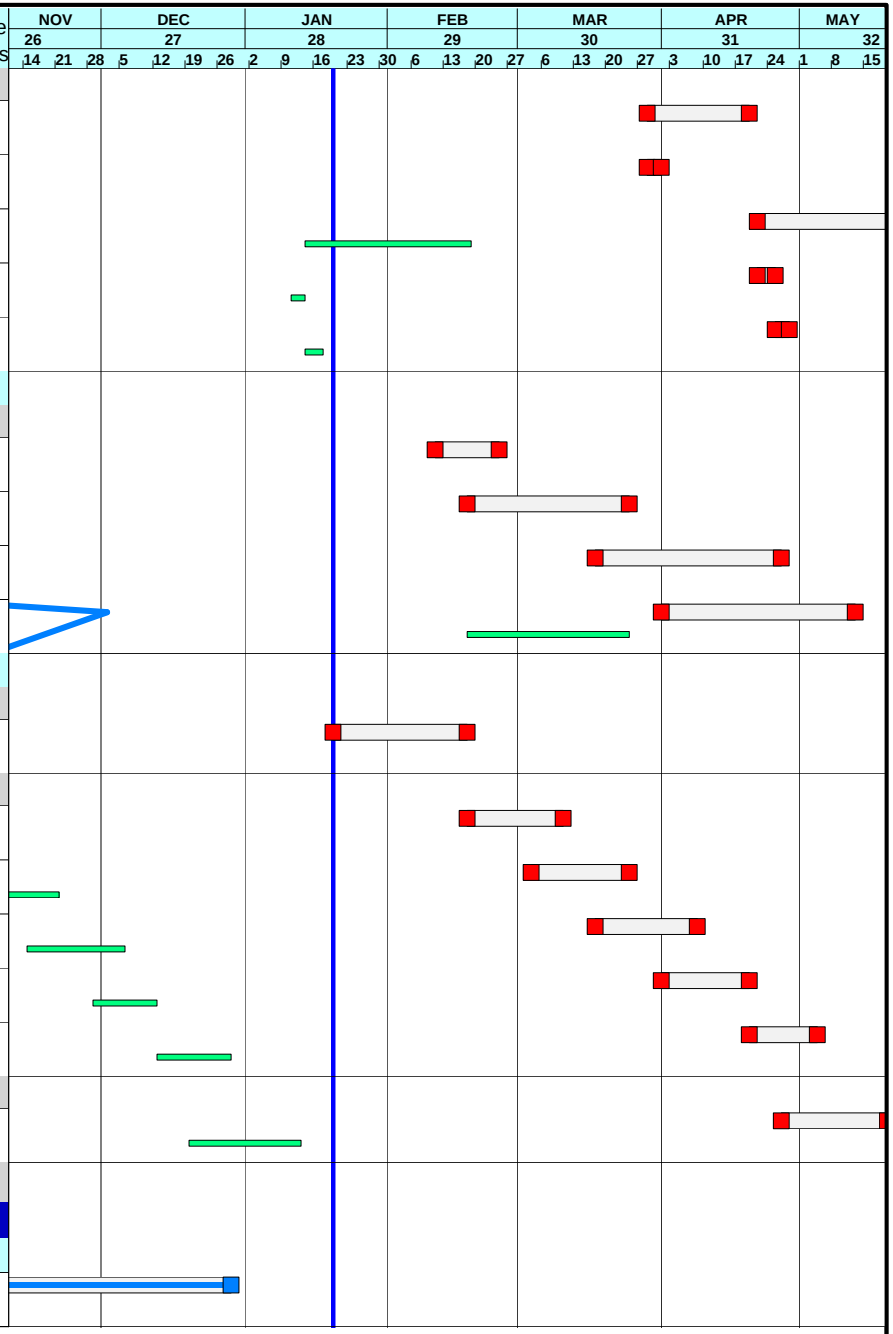
Act. ID	Activity Description	Orig Dur	Early Start	Early Finish	% Compl.	DWP % Compl.	Rem Dur	Total Float	Variance arly Finis
TOLL PLAZA									
1521	TP/FB - Procure & fabricate footbridge	110	15JUL05A	03MAR06	0	100	30	-19	-204
INTERFACE MILESTONES									
TOLL PLAZA COLLECTOR'S SUBWAY									
1492	Int M/S - TP/CS - E&M access	0		26APR06	0		0	74	-54
CONSTRUCTION WORKS									
TOLL PLAZA ROADWORKS									
SURVEY									
1737	TP - Land Survey & report - Portion D5	8	07JAN06A	07JAN06A	100	100	0		-66
1738	TP - Land Survey & report - Portion D8	8	07JAN06A	07JAN06A	100	0	0		28
ROADS - FORMATION									
1770	TP/Rd - Perm materials storage area; Ptn D2 & D3	175	01JUN04A	21FEB06	90	100	21	-89	-194
1497	TP/Rd - Drainage ch.4+520 to 4+680	44	01AUG05A	19MAY06	20	20	90	-45	-54
1744	TP/Rd - Drainage ch.4+320 to 4+460	40	01JAN06A	03MAR06	10	100	30	-55	-66
1745	TP/Rd - Drainage ch.4+460 to 4+520	46	01JAN06A	19MAY06	10	0	30	-33	-48
1877	TP/Rd - Water main	60	09FEB06	24APR06	0	90	60	-55	-66
1878	TP/Rd - HV & LV Cable ducting	60	04MAR06	19MAY06	0	60	60	-55	-66
1825	TP/Rd - Drain Testing - ch.4+320 to 4+460	36	11MAR06	26APR06	0	90	36	-21	-66
1775	TP/Rd - Telecom ducts	44	23MAR06	19MAY06	0	0	44	-55	-66
ROADS - EVA									
1743	TP/Rd - Drainage - EVA loop road - SW area	48	22FEB06	22APR06	0	100	48	-89	-97
1751	TP/Rd - Drain Testing - EVA loop road - SW area	18	24APR06	16MAY06	0	100	18	-60	-97
1752	TP/Rd - Sub-base - EVA loop road - SW area	6	24APR06	29APR06	0	100	6	-48	-97
1756	TP/Rd - Drainage - EVA loop rd - E & NE area	55	24APR06	29JUN06	0	60	55	-89	-97
ROADS - FINISHES									
1500	TP/Rd - TCSS Ducts SB&NB C'Way ch.4+520 to 4+680	42	20JAN06	17MAR06	0	0	42	-12	2
1824	TP/Rd - Ptn D4 TCSS Ducts S&NB ch.4+460 to 4+520	24	20JAN06	24FEB06	0	100	24	-164	-174



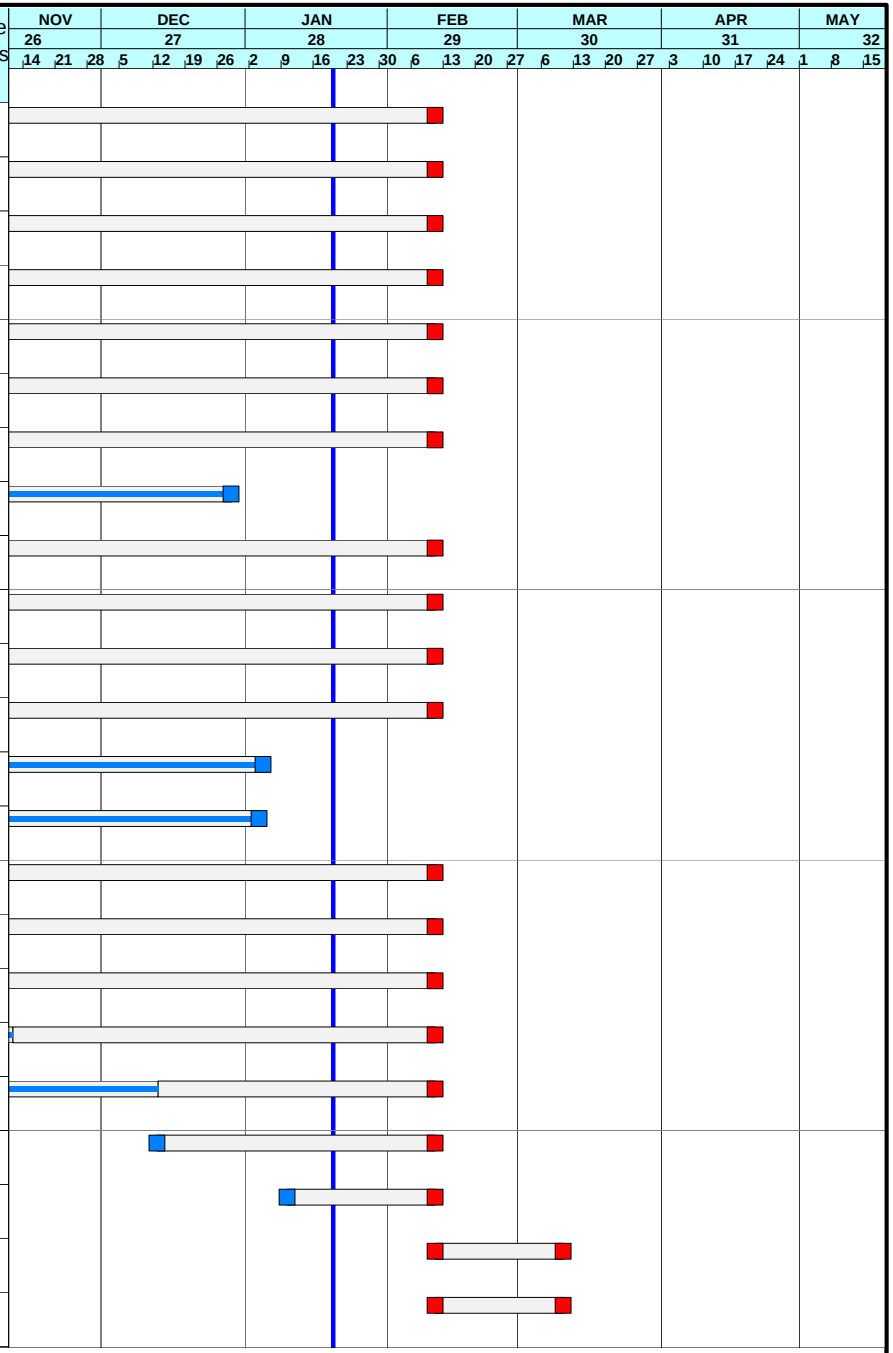
Act. ID	Activity Description	Orig Dur	Early Start	Early Finish	% Compl.	DWP % Compl.	Rem Dur	Total Float	Variance arly Finis
ROADS - FINISHES									
1736	TP/Rd - Ptn D2&D3TCSS Dct S&NB ch.4+320 to 4+460	42	25FEB06	19APR06	0	100	42	-164	-174
1747	TP/Rd - Ptn D5 - TCSS Dct S&NB ch.4+320 to 4+460	30	25MAR06	04MAY06	0	100	30	-102	-124
STRUCTURAL STEEL									
1849	TP/Rd - TCSS Sign ch.4+520 to 4+680	18	18MAR06	08APR06	0	0	18	-12	-24
TOLL PLAZA COLLECTOR'S SUBWAY									
STRUCTURE									
1719	TP/CS - Waterproof & backfill - Ptn B	18	14OCT05A	10FEB06	70	100	12	-146	-170
1718	TP/CS - Waterproof & backfill - Ptn A	18	14NOV05A	10FEB06	70	100	12	-152	-188
1720	TP/CS - Waterproof & backfill - Ptn C	18	20DEC05A	10FEB06	70	100	12	-122	-152
1470	TP/CS - Excavation - Ptn D	8	12JAN06A	19JAN06A	100	100	0		-12
1717	TP/CS - Substructure construction - Ptn D	18	19JAN06A	17FEB06	0	80	18	-24	-12
1721	TP/CS - Waterproof & backfill - Ptn D	18	18FEB06	10MAR06	0	0	18	-24	-12
ABWF									
1471	TP/CS - Internal Finishes Ptn A, B & C	24	11MAR06	08APR06	0	100	24	-24	-194
1472	TP/CS - Internal Finishes Ptn D	12	10APR06	26APR06	0		12	-24	-54
TOLL PLAZA FOOTBRIDGE									
BORED PILES									
1490	TP/FB - Site Investigation & Report - Cap FT1	12	14DEC05A	27DEC05A	100	100	0		-45
FOUNDATIONS									
1495	TP/FB - Pile Cap - Cap FT1	12	04JAN06A	08FEB06	0	100	10	-46	-30
RC SUPERSTRUCTURE									
1694	TP/FB - Column & bearings C2	12	27APR05A	28MAR06	95	100	51	-40	-225
1707	TP/FB - Column & bearings C1	12	29APR05A	28MAR06	95	100	51	-31	-224
1494	TP/FB - Column & bearings W2 (FT4)	12	13MAY05A	28MAR06	95	100	51	-40	-252
1506	TP/FB - Column & bearings W1 (FT1)	56	11FEB06	21APR06	0	100	56	-48	-76
1507	TP/FB - Lift Machine room walls & stair (FT1)	15	11FEB06	28FEB06	0	100	15	-1	-32



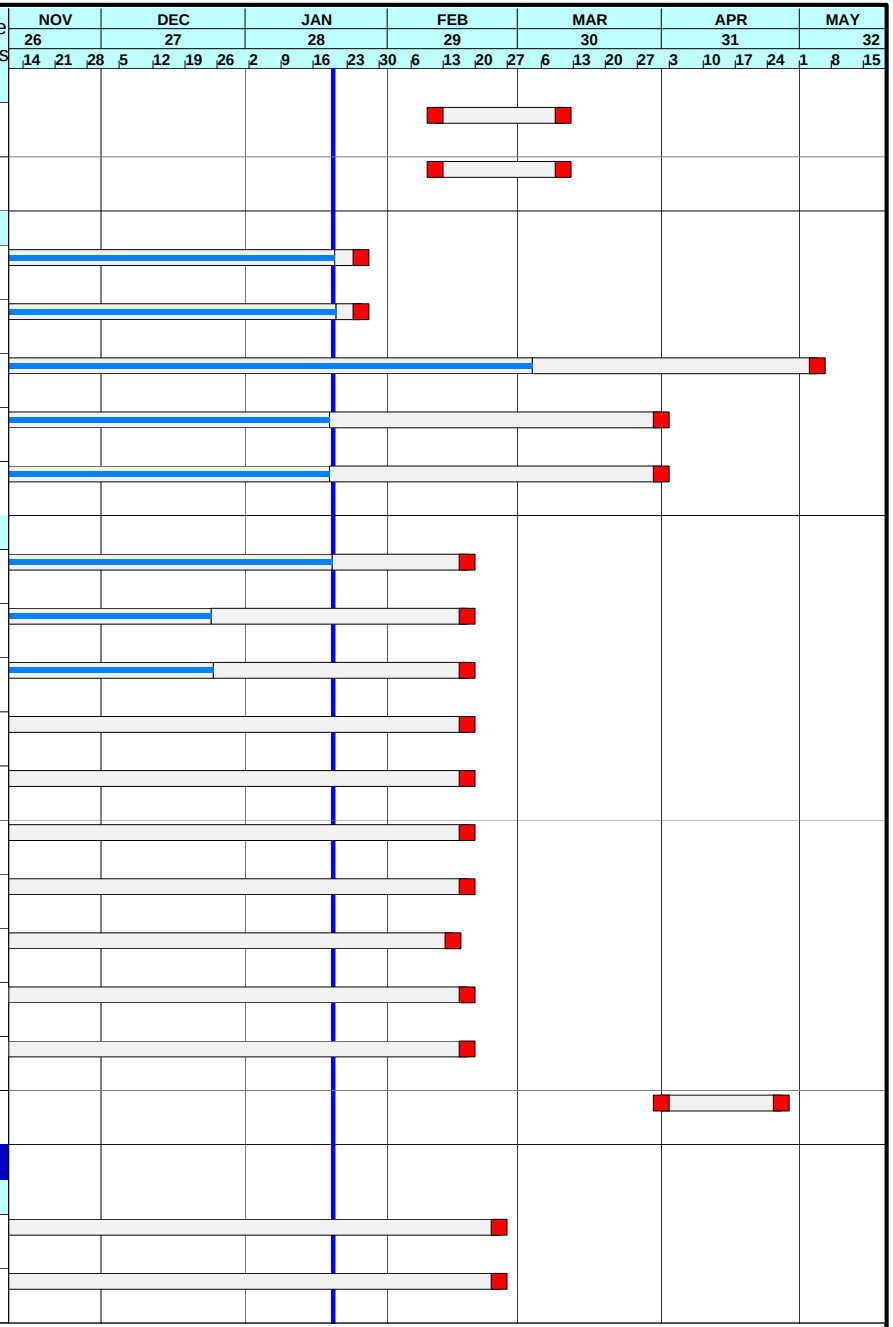
Act. ID	Activity Description	Orig Dur	Early Start	Early Finish	% Compl.	DWP % Compl.	Rem Dur	Total Float	Variance arly Finis
	STRUCTURAL STEELWORKS								
1502	TP/FB - Stair (FT4)	15	29MAR06	19APR06	0	100	15	-40	-252
1710	TP/FB - Erect & install frame A2	3	29MAR06	31MAR06	0	100	3	-31	-225
1496	TP/FB - Px Lift (x2) Structural Steelwork Inst.	24	22APR06	22MAY06	0		24	-42	-73
1709	TP/FB - Erect & install frame A1	3	22APR06	25APR06	0		3	-48	-76
1711	TP/FB - Erect & install frame B	3	26APR06	28APR06	0		3	-48	-76
	TOLL PLAZA BOOTHS								
	STRUCTURE								
1510	TP/B - Construct toll islands - Portion A - 1 no	12	11FEB06	24FEB06	0	100	12	-152	-188
1713	TP/B - Construct toll islands - Portion B - 5 no	30	18FEB06	24MAR06	0	100	30	-152	-176
1722	TP/B - Construct toll islands - Portion C - 5 no	30	18MAR06	26APR06	0	100	30	-152	-176
1723	TP/B - Construct toll islands - Portion D - 6 no	30	01APR06	12MAY06	0		30	-6	-36
	ADMIN.BLDG. - WORKSHOP								
	FOUNDATIONS								
1750	Admin.Bldg. Wk Shop - Raft footing	18	20JAN06	17FEB06	0	100	18	-78	-96
	STRUCTURE								
1749	Admin.Bldg. Wk Shop - GF Slab	18	18FEB06	10MAR06	0	100	18	-78	-96
1768	Admin.Bldg. Wk Shop - Columns & walls GF to Roof	18	04MAR06	24MAR06	0	100	18	-78	-96
1777	Admin.Bldg. Wk Shop - Roof Slab	18	18MAR06	08APR06	0	100	18	-78	-96
1779	Admin. Wk Shop - Col & walls Roof to Upper Roof	12	01APR06	19APR06	0	100	12	-78	-96
1780	Admin.Bldg. Wk Shop - Upper Roof slab	12	20APR06	04MAY06	0		12	-78	-96
	ABWF								
1783	Admin.Bldg. Wk Shop - Ext. Doors & Windows GF	18	27APR06	19MAY06	0		18	-60	-96
	ADMINISTRATION BUILDING								
	SUBMITTALS & APPROVALS								
	ABWF & BUILDER'S WORKS								
1879	Admin.Bldg. - Prep & submit glass canopy details	24	25AUG04A	28DEC05A	100	100	0		-372



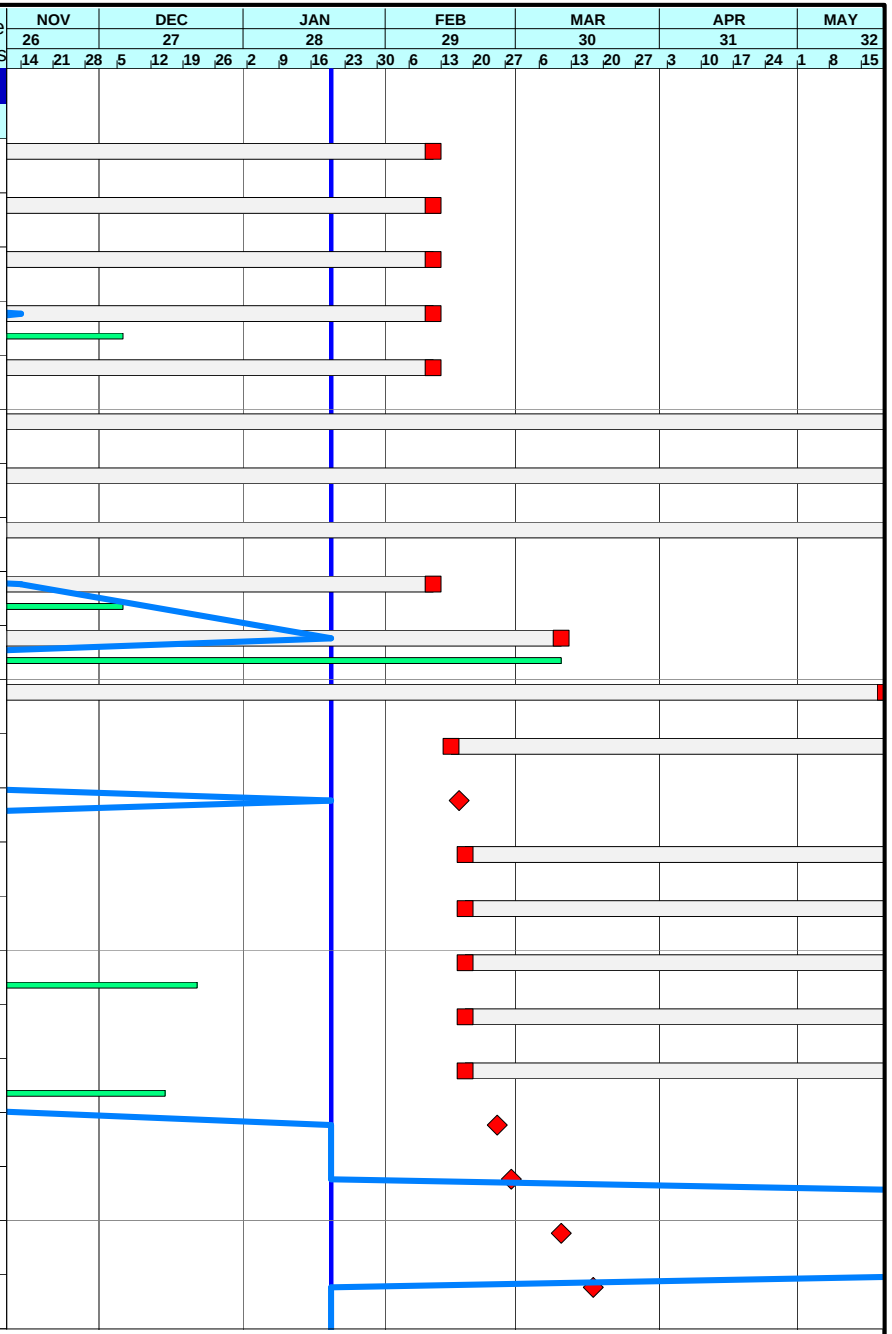
Act. ID	Activity Description	Orig Dur	Early Start	Early Finish	% Compl.	DWP % Compl.	Rem Dur	Total Float	Variance arly Finis
ABWF & BUILDER'S WORKS									
1893	Admin.Bldg. - Prep & submit louvre details	24	25AUG04A	10FEB06	50	100	12	-7	-402
1897	Admin.Bldg. - Prep & sub aluminium cladding	24	25AUG04A	10FEB06	50	100	12	-37	-402
1889	Admin.Bldg. - Prep & submit curtain wall details	24	30SEP04A	10FEB06	50	100	12	-166	-372
1883	Admin.Bldg. - Prep & sub sheet decking details	24	13NOV04A	10FEB06	12	100	12	-176	-336
1891	Admin.Bldg. - Prep & submit door & window detail	24	13NOV04A	10FEB06	10	100	12	-170	-336
1885	Admin.Bldg. - Prep & submit wood ceiling details	24	20NOV04A	10FEB06	50	100	12	-190	-330
1899	Admin.Bldg. - Prep & sub fall arrest system	24	18DEC04A	10FEB06	50	100	12	-7	-306
1517	Admin Bldg - Engineering & Submit lift details	78	28DEC04A	28DEC05A	100	100	0		-216
1895	Admin.Bldg. - Prep & sub balustrade & metal wks	24	05JAN05A	10FEB06	50	100	12	-158	-294
1881	Admin.Bldg. - Prep & sub GRP water tank details	24	12JAN05A	10FEB06	50	100	12	-182	-288
1892	Admin.Bldg. - Approve door & window details	24	06APR05A	10FEB06	50	100	12	-170	-312
1894	Admin.Bldg. - Approve louvre details	24	07APR05A	10FEB06	50	100	12	-7	-378
1880	Admin.Bldg. - Approve glass canopy details	24	07MAY05A	04JAN06A	100	100	0		-353
1516	Admin Bldg - Approve lifts details	24	01JUN05A	03JAN06A	100	100	0		-196
1819	Admin.Bldg. - Approve stone cladding design	24	15JUN05A	10FEB06	50	100	12	-37	-228
1820	Admin.Bldg. - Approve slate cladding design	24	15JUN05A	10FEB06	50	100	12	-37	-228
1890	Admin.Bldg. - Approve curtain wall details	24	22JUN05A	10FEB06	50	100	12	-166	-348
1887	Admin.Bldg. - Prep & sub suspend ceiling details	24	12AUG05A	10FEB06	50	100	12	-5	-120
1900	Admin.Bldg. - Approve fall arrest system	24	14OCT05A	10FEB06	50	100	12	-7	-282
1898	Admin.Bldg. - Approve aluminium cladding	24	13DEC05A	10FEB06	0	100	12	-37	-378
1896	Admin.Bldg. - Approve balustrade & metal works	24	10JAN06A	10FEB06	0	100	12	-158	-270
1882	Admin.Bldg. - Approve GRP water tank details	24	11FEB06	10MAR06	0	100	24	-182	-288
1884	Admin.Bldg. - Approve sheet decking details	24	11FEB06	10MAR06	0	100	24	-176	-336



Act. ID	Activity Description	Orig Dur	Early Start	Early Finish	% Compl.	DWP % Compl.	Rem Dur	Total Float	Variance arly Finis
ABWF & BUILDER'S WORKS									
1886	Admin.Bldg. - Approve wood ceiling details	24	11FEB06	10MAR06	0	100	24	-190	-330
1888	Admin.Bldg. - Approve suspended ceiling details	24	11FEB06	10MAR06	0	100	24	-5	-120
E&M EQPT. / MTRL. SUBMITTALS									
8244	AdmBldg-Sub.FS AFA & FM200 sys	54	05JUL04A	25JAN06	99	100	5	-67	-165
8240	AdmBldg-Sub.FS wet sys	54	05AUG04A	25JAN06	99	100	5	-43	-309
8242	AdmBldg-Sub.CMCS, TCS & ELV sys	78	26AUG04A	04MAY06	90	100	78	-197	-348
8247	AdmBldg-Design LPG sys	54	07APR05A	31MAR06	80	100	54	-112	-234
8249	AdmBldg-Sub.LPG sys	54	07APR05A	31MAR06	80	100	54	-112	-180
E&M EQPT. / MTRL. APPROVALS									
6385	AdmBldg-App. HV power dist. sys	18	14JUL04A	17FEB06	95	100	18	-163	-376
6386	AdmBldg-App. LV power dist. sys	18	13AUG04A	17FEB06	90	100	18	-163	-340
8503	AdmBldg-App. building related luminaires	18	18AUG04A	17FEB06	90	100	18	-151	-226
6388	AdmBldg-App. FS wet sys	18	04SEP04A	17FEB06	80	100	18	-43	-304
6399	AdmBldg-App. FS AFA & FM200 sys	18	14SEP04A	17FEB06	70	100	18	-67	-160
6392	AdmBldg-App. of CMCS, TCS & ELV sys	18	20SEP04A	17FEB06	80	100	18	-197	-270
6389	AdmBldg-App. MVAC mech.vent. sys	18	23SEP04A	17FEB06	70	100	18	-187	-316
6396	AdmBldg-App. FCUs & PAUs	18	23SEP04A	14FEB06	70	100	15	-184	-373
6387	AdmBldg-App. PD all fresh & flush water sys	18	04NOV04A	17FEB06	78	100	18	-61	-328
6478	AdmBldg-App. Chiller & Pumps	18	17JAN05A	17FEB06	30	100	18	-127	-334
7586	AdmBldg-App. LPG sys	18	01APR06	26APR06	0	100	18	-112	-180
DESIGN & ENGINEERING									
ABWF WORKS									
1802	Admin.Bldg. - Design stone cladding	36	04APR05A	24FEB06	50	100	24	-37	-264
1803	Admin.Bldg. - Design slate cladding	36	04APR05A	24FEB06	50	100	24	-37	-264



Act. ID	Activity Description	Orig Dur	Early Start	Early Finish	% Compl.	DWP % Compl.	Rem Dur	Total Float	Variance arly Finis
PROCUREMENT - MATERIAL									
ABWF WORKS									
1904	Admin.Bldg. - Procure wood ceiling	90	19JAN05A	10FEB06	0	100	12	-166	-126
1909	Admin.Bldg. - Procure balustrade & metal works	90	09MAR05A	10FEB06	0	100	12	-158	-180
1910	Admin.Bldg. - Procure aluminium cladding	90	09MAR05A	10FEB06	0	100	12	-67	-198
1916	Admin.Bldg. - Procure slate cladding	90	14MAR05A	10FEB06	50	100	12	-67	-48
1902	Admin.Bldg. - Procure GRP water tank	90	16MAR05A	10FEB06	0	100	12	-158	-144
6391	AdmBldg-Proc & Manuf. LV power dist. equip't	120	20MAR05A	24JUN06	30	100	120	-163	-262
6390	AdmBldg-Proc & Manuf. of HV dist. equip't	120	25MAR05A	24JUN06	50	100	120	-163	-298
6397	AdmBldg-Proc & Manuf. of CMCS, ELV & TCS sys	180	25MAR05A	04SEP06	15	100	180	-197	-252
1917	Admin.Bldg. - Procure stone cladding	90	03MAY05A	10FEB06	50	100	12	-67	-48
1905	Admin.Bldg. - Procure suspended ceiling	120	09MAY05A	10MAR06	0	80	36	-35	0
6394	AdmBldg-Proc & Manuf. FS wet sys	90	06JUN05A	19MAY06	30	100	90	-43	-256
6415	AdmBldg-Proc & Manuf. FCUs & PAUs	90	15FEB06	07JUN06	0	100	90	-184	-283
1938	Admin.Bldg. - Initial delivey glass canopy	0	17FEB06		0	0	0	-175	0
6393	AdmBldg-Proc & Manuf. PD fresh & flush water sys	90	18FEB06	10JUN06	0	100	90	-61	-298
6395	AdmBldg-Proc & Manuf. MVAC mech.vent. sys	90	18FEB06	10JUN06	0	100	90	-187	-286
6444	AdmBldg-Proc & Manuf. FS AFA & FM200 sys	120	18FEB06	17JUL06	0	100	120	-67	-160
6479	AdmBldg-Proc & Manuf. Chiller & Pumps	90	18FEB06	10JUN06	0	100	90	-127	-244
8504	AdmBldg-Proc & Manf bldg related luminaires	180	18FEB06	25SEP06	0	100	180	-151	-226
2060	Admin.Bldg. - Initial delivery balust & mtl wks	0	25FEB06		0	0	0	-158	0
2055	Admin.Bldg. - Initial delivery curtain wall	0	28FEB06		0	0	0	-166	0
2057	Admin.Bldg. - Initial delivery doors & windows	0	11MAR06		0	0	0	-170	503
2054	Admin.Bldg. - Initial delivery louvres	0	18MAR06		0	0	0	-7	0



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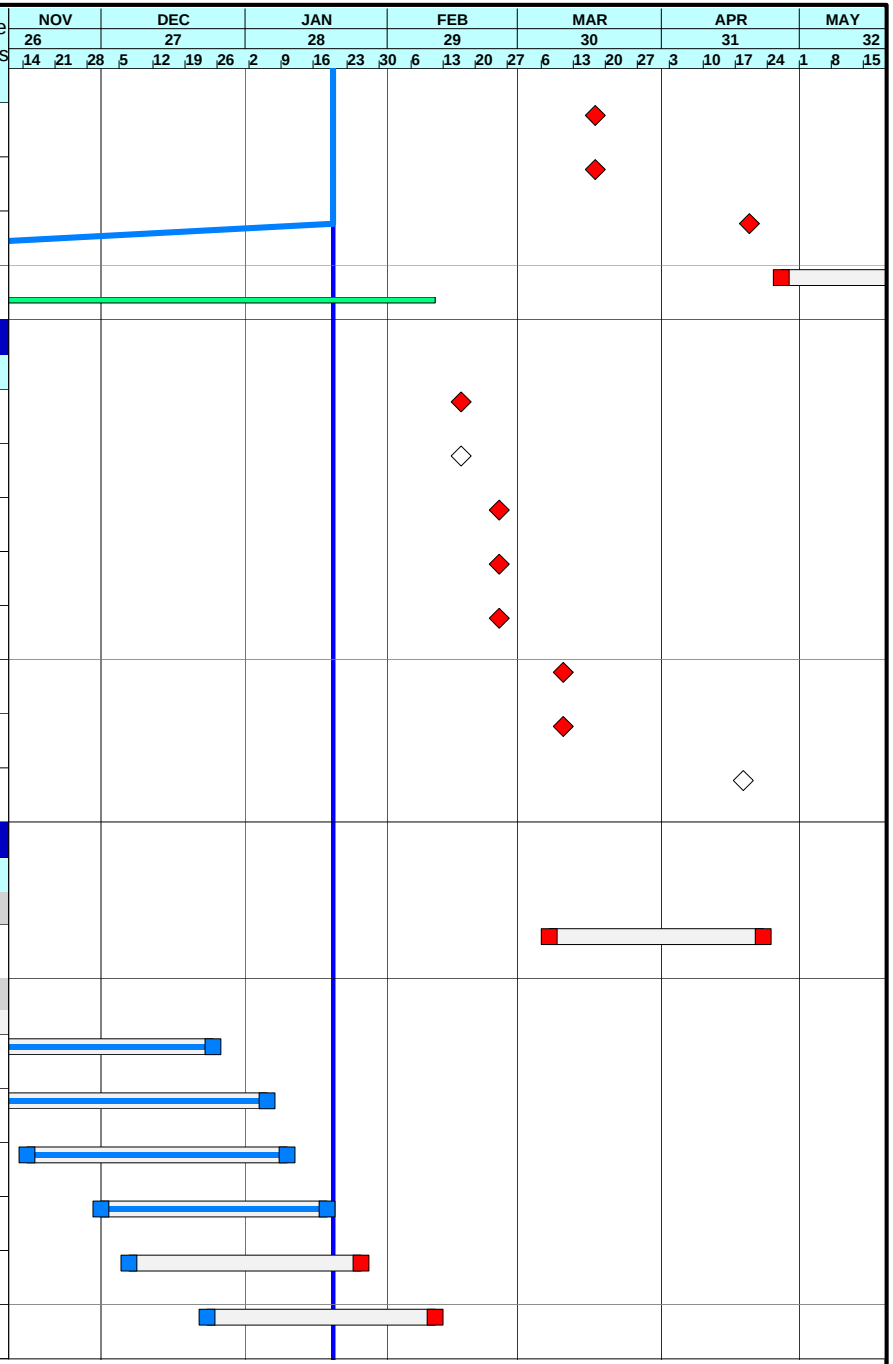
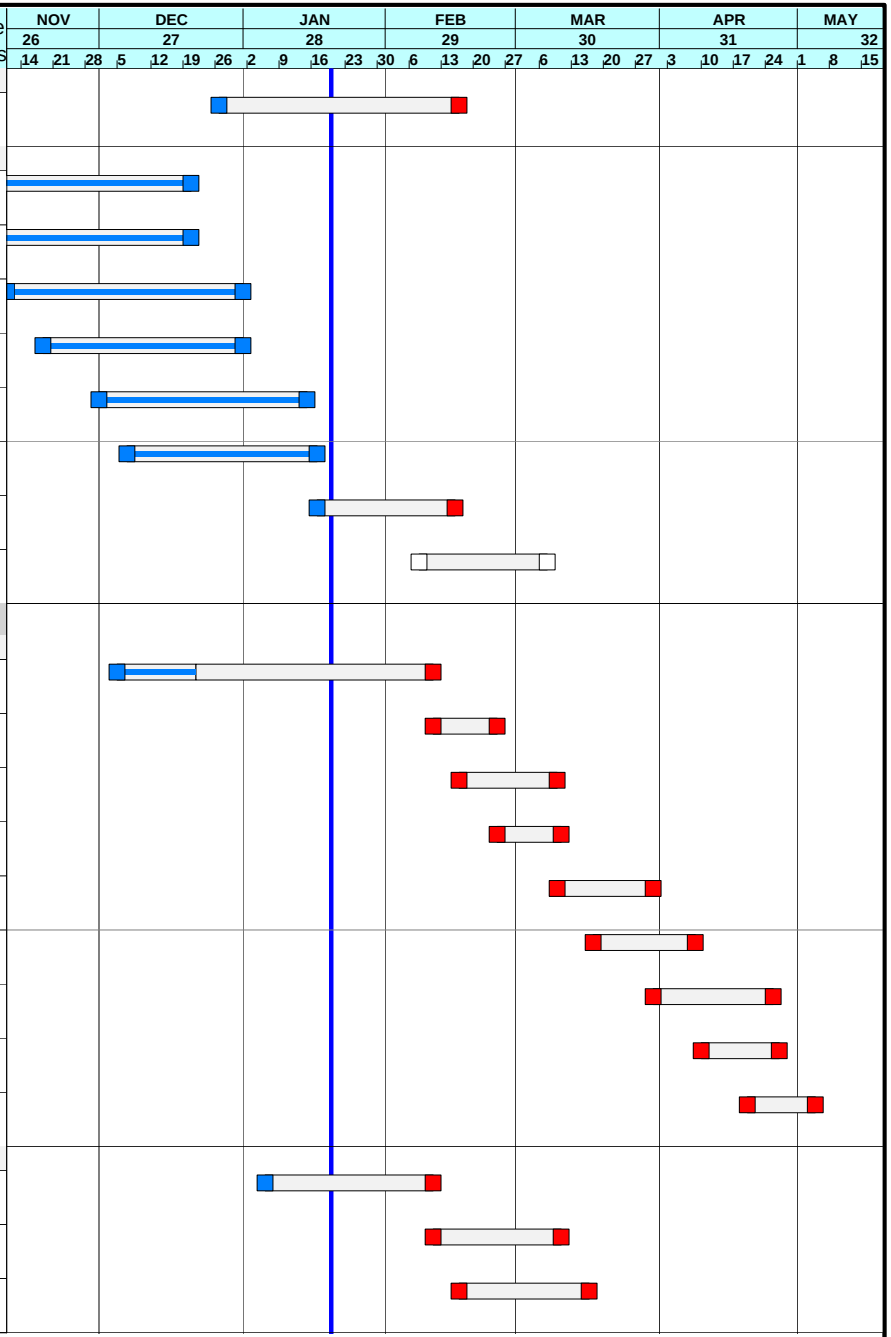
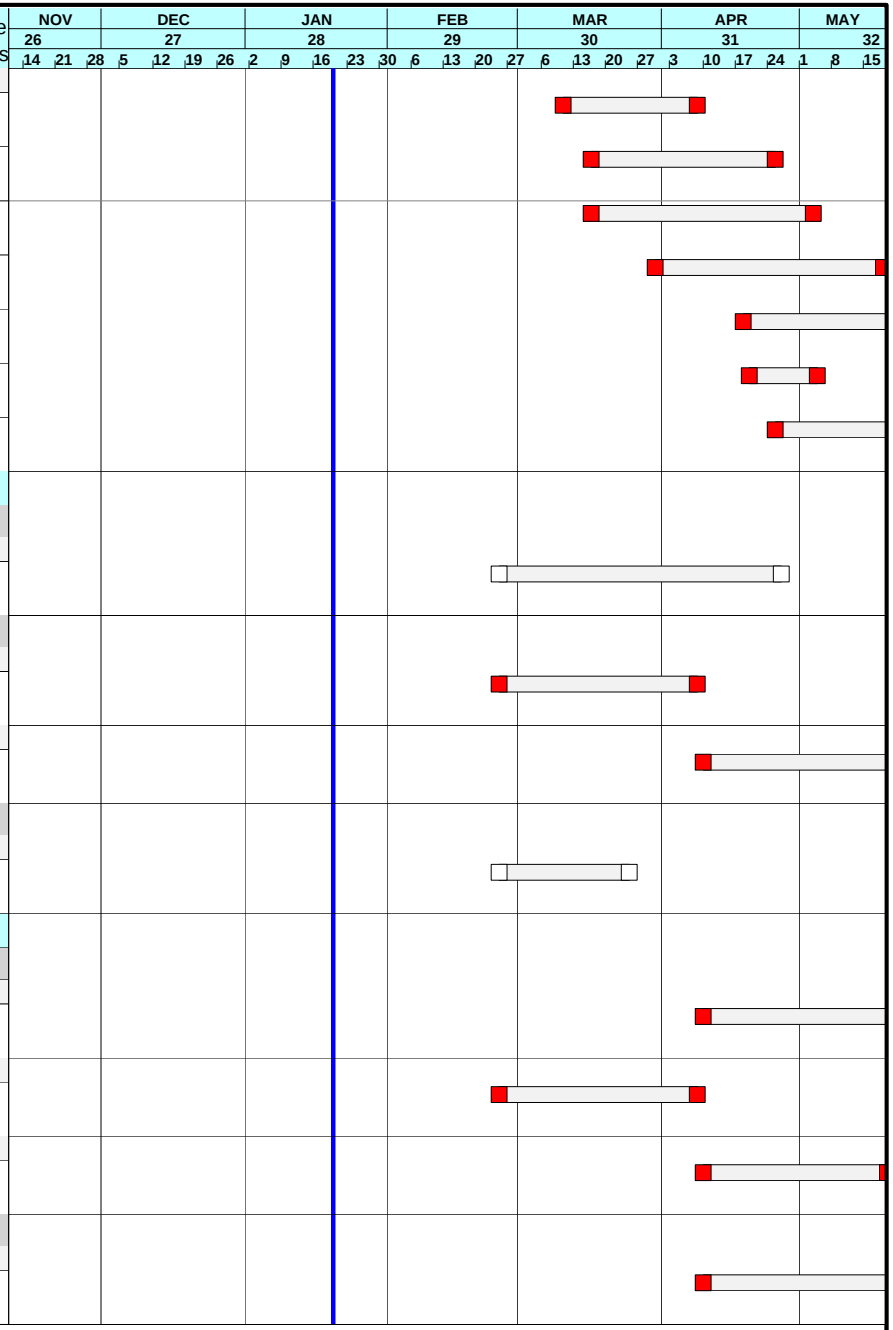
ABWF WORKS									
2056	Admin.Bldg. - Initial delivery sheet decking	0	18MAR06		0	0	0	-176	0
2059	Admin.Bldg. - Initial delivery fall arrest syst	0	18MAR06		0	0	0	-7	0
2063	Admin.Bldg. - Initial delivery GRP water tank	0	20APR06		0		0	-182	0
7582	AdmBldg-Proc & Manuf. LPG sys	120	27APR06	18SEP06	0	90	120	-112	-180
INTERFACE DATES									
ADMINISTRATION BUILDING									
1729	Int. MS - Admin.Bldg. - E&M G/F access (partial)	0		16FEB06	0	100	0	-108	-185
4003	Int. MS - Admin.Bldg. - E&M G/F access (full)	0		16FEB06	0	100	0	655	-167
1827	Int. MS - Admin.Bldg. - E&M 1/F access (partial)	0		24FEB06	0	100	0	-107	-180
6404	AdmBldg-E&M access to G/F (partial)	0	25FEB06*		0	100	0	-115	-190
6406	AdmBldg-E&M access to 1/F (partial)	0	25FEB06		0	100	0	-107	-180
1828	Int. MS - Admin.Bldg. - E&M 2/F access (partial)	0		10MAR06	0	100	0	-115	-168
6402	AdmBldg-E&M access to 2/F (partial)	0	11MAR06		0	100	0	-115	-168
4004	Int. MS - Admin.Bldg. - E&M 1/F access (full)	0		18APR06	0		0	607	-167
CONSTRUCTION									
CIVIL & ABWF WORKS									
SUBSTRUCTURE									
6398	Admin.Bldg. - Earth Mat & Rods - All in ptn D4	36	08MAR06	22APR06	0	100	36	-89	-357
RC SUPERSTRUCTURE									
NORTH [GL.1-11]									
1648	Admin.Bldg Nth - 1F Slab	24	21OCT05A	24DEC05A	100	100	0		-185
1649	Admin.Bldg Nth - Columns & walls 1F to 2F	24	29OCT05A	05JAN06A	100	100	0		-180
1661	Admin.Bldg Nth - 2F Slab	24	15NOV05A	09JAN06A	100	100	0		-171
1665	Admin.Bldg Nth - Columns & walls 2F to 3F	24	01DEC05A	18JAN06A	100	100	0		-167
1666	Admin.Bldg Nth - Roof Slab	24	07DEC05A	25JAN06	0	100	4	-151	-161
1672	Admin.Bldg Nth - Columns & walls 3F to Upp Roof	24	24DEC05A	10FEB06	0	100	11	-116	-156



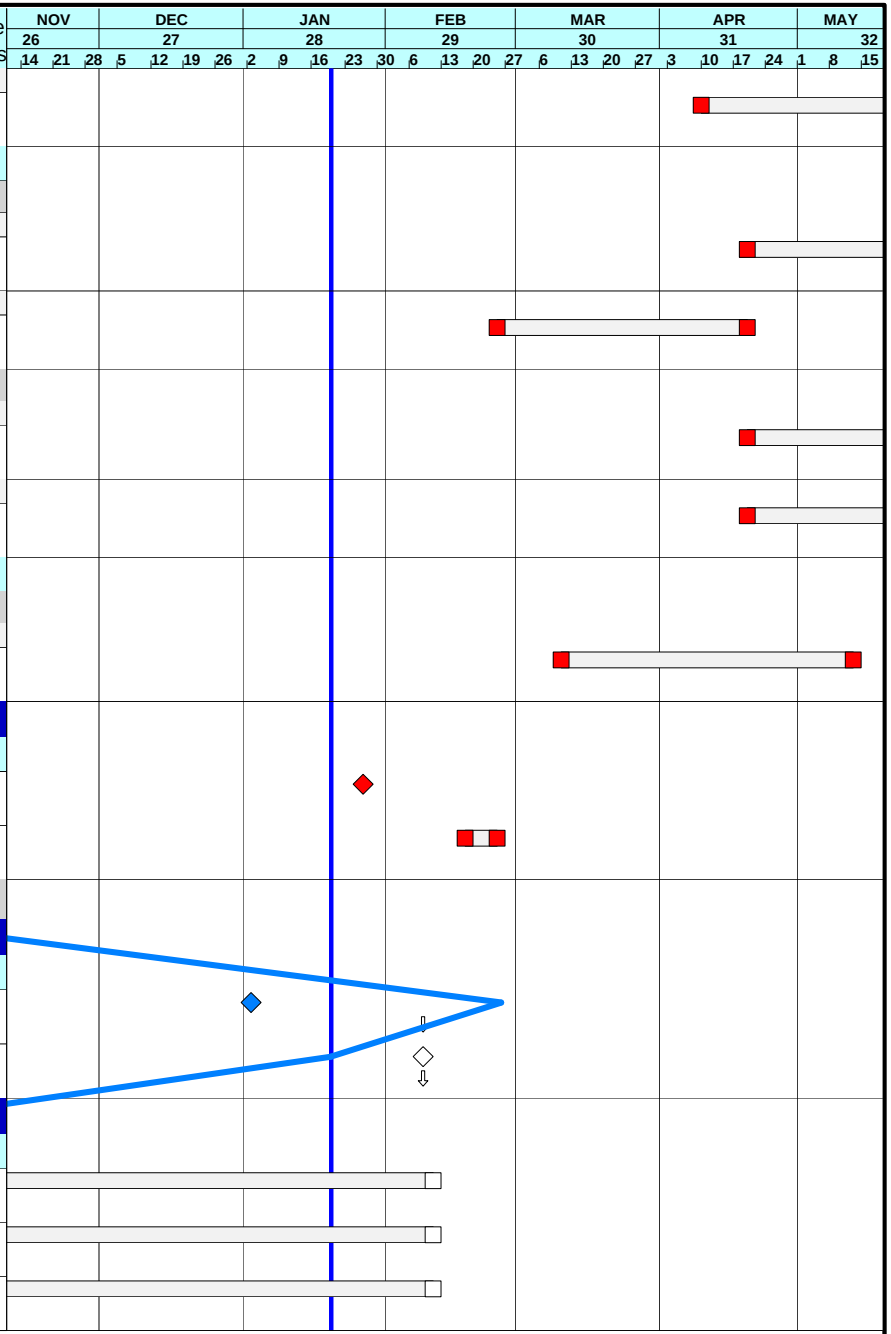
Act. ID	Activity Description	Orig Dur	Early Start	Early Finish	% Compl.	DWP % Compl.	Rem Dur	Total Float	Variance arly Finis
NORTH [GL.1-11]									
1673	Admin.Bldg Nth - Upper Roof Slab	24	27DEC05A	16FEB06	0	100	16	-97	-149
SOUTH [GL.11-21]									
1784	Admin.Bldg Sth - Columns & walls GF to 1F	24	27OCT05A	20DEC05A	100	100	0		-181
1785	Admin.Bldg Sth - 1F Slab	24	05NOV05A	20DEC05A	100	100	0		-169
1786	Admin.Bldg Sth - Columns & walls 1F to 2F	24	11NOV05A	31DEC05A	100	100	0		-165
1787	Admin.Bldg Sth - 2F Slab	24	19NOV05A	31DEC05A	100	100	0		-153
1788	Admin.Bldg Sth - Columns & walls 2F to 3F	24	01DEC05A	14JAN06A	100	100	0		-152
1789	Admin.Bldg Sth - Roof Slab	24	07DEC05A	16JAN06A	100	100	0		-141
1791	Admin.Bldg Sth - Columns & walls 3F to Upp Roof	24	17JAN06A	15FEB06	0	100	16	-53	-148
1790	Admin.Bldg Sth - Upper Roof Slab	24	08FEB06	07MAR06	0	100	24	32	-153
ABWF									
CRITICAL ROOMS									
1730	Admin.Bldg Crit Rm - Int. Blockwork GF	12	05DEC05A	10FEB06	25	100	12	-164	-180
1731	Admin.Bldg Crit Rm - Int. Blockwork 1F	12	11FEB06	24FEB06	0	100	12	-164	-180
1804	Admin.Bldg Crit Rm - Ext. Doors & Glazing GF	18	17FEB06	09MAR06	0	100	18	-175	-203
1734	Admin.Bldg Crit Rm - Int. Blockwork 2F	12	25FEB06	10MAR06	0	100	12	-158	-168
1733	Admin.Bldg Crit Rm - Ext. Glazing 1F	18	10MAR06	30MAR06	0	100	18	-175	-191
1366	Admin.Bldg Crit Rm - Int. Finishes GF	18	18MAR06	08APR06	0	100	18	-176	-210
1380	Admin.Bldg Crit Rm - Ext. Glazing 2F	18	31MAR06	25APR06	0		18	-175	-185
1422	Admin.Bldg Crit Rm - Int. Finishes 1F	12	10APR06	26APR06	0		12	-176	-210
1748	Admin.Bldg Crit Rm - Int. Blockwork - 3F to Roof	12	20APR06	04MAY06	0		12	-182	-198
REMAINING ROOMS									
1792	Admin.Bldg Oth Rm - Int. Blockwork GF	24	06JAN06A	10FEB06	0	100	12	-115	-162
1793	Admin.Bldg Oth Rm - Int. Blockwork 1F	24	11FEB06	10MAR06	0	100	24	-115	-162
1805	Admin.Bldg Oth Rm - Ext. Doors & Windows GF	24	17FEB06	16MAR06	0	100	24	-120	-167



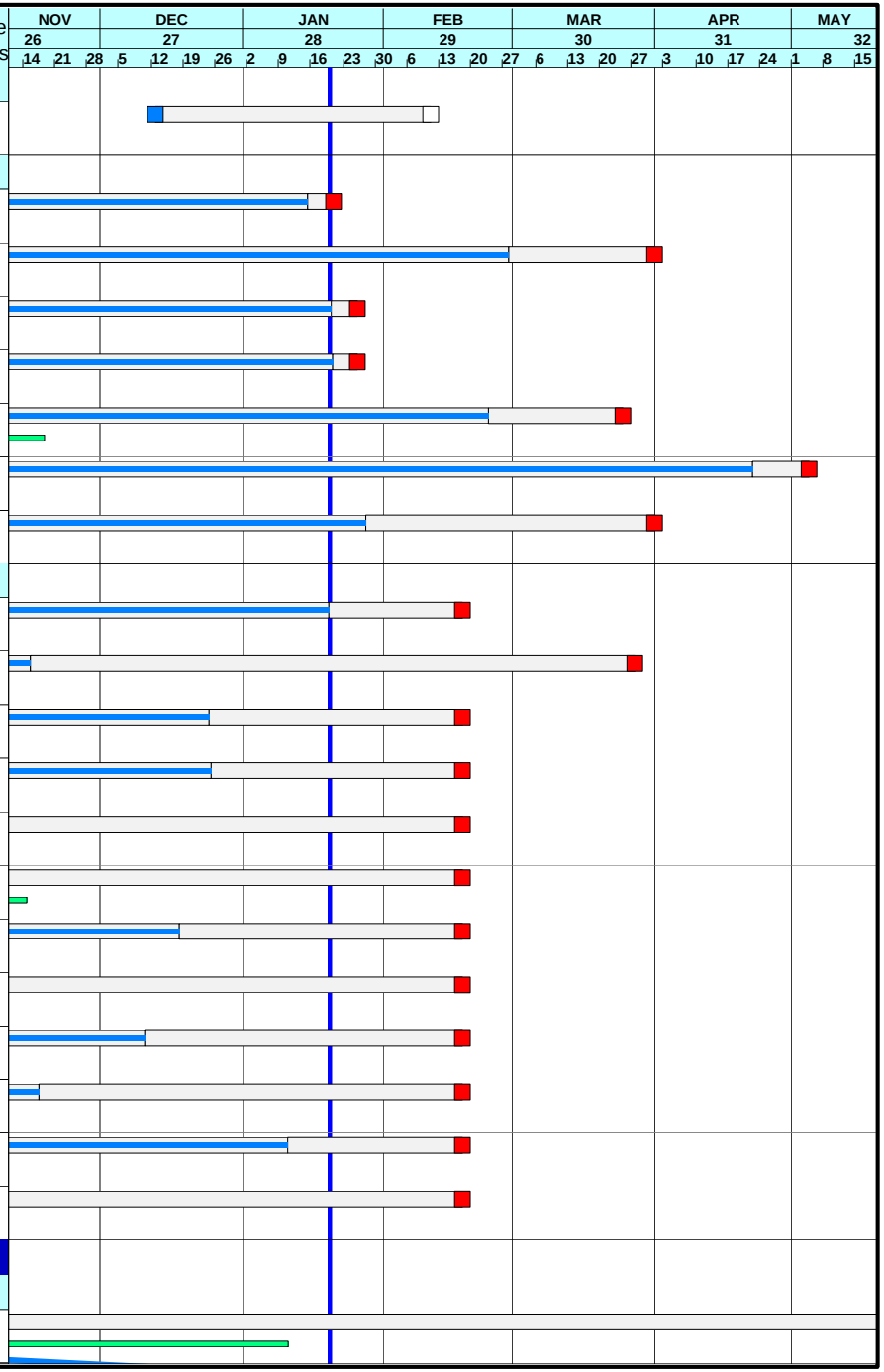
Act. ID	Activity Description	Orig Dur	Early Start	Early Finish	% Compl.	DWP % Compl.	Rem Dur	Total Float	Variance arly Finis
REMAINING ROOMS									
1794	Admin.Bldg Oth Rm - Int. Blockwork 2F	24	11MAR06	08APR06	0		24	-97	-162
1796	Admin.Bldg Oth Rm - Ext. Glazing 1F	30	17MAR06	25APR06	0		30	-120	-167
1798	Admin.Bldg Oth Rm - Int. Finishes GF	36	17MAR06	03MAY06	0		36	-102	-167
1799	Admin.Bldg Oth Rm - Int. Finishes 1F	36	31MAR06	18MAY06	0		36	-102	-167
1800	Admin.Bldg Oth Rm - Int. Finishes 2F	36	19APR06	02JUN06	0		36	-102	-167
1806	Admin.Bldg Oth Rm - Int. Blockwork - 3F to Roof	12	20APR06	04MAY06	0		12	-97	-168
1440	Admin.Bldg Oth Rm - Ext. Glazing 2F	30	26APR06	02JUN06	0		30	-120	-167
E&M WORKS - GENERAL									
FS WORKS									
FS MAJOR EQUIPMENT									
6411	AdmBldg-Hydrant Pump & Tank set 1st fix	48	25FEB06	26APR06	0	100	48	23	-190
ELECTRICAL WORKS									
HV POWER DISTRIBUTION MAJOR EQPT.									
6408	AdmBldg-HV power dist. sys 1st fix	36	25FEB06	08APR06	0	100	36	-91	-190
LV POWER DISTRIBUTION MAJOR EQPT.									
6418	AdmBldg-LV power dist. sys 1st fix	36	10APR06	26MAY06	0		36	-91	-190
P&D WORKS									
P&D MAJOR EQUIPMENT									
6412	AdmBldg-Water Pumps & Tanks 1st fix	24	25FEB06	24MAR06	0	100	24	47	-190
ADMINISTRATION BLDG. - G/F									
MVAC WORKS									
CHILLED WATER SYSTEM									
6452	AdmBldg G/F -AC(1st Fix) Chilled water sys	42	10APR06	03JUN06	0		42	-97	-190
MECH.VENT / AIR CONDITIONING									
6405	AdmBldg G/F -AC(1st Fix) mech.vent.	36	25FEB06	08APR06	0	100	36	-115	-190
KITCHEN EXHAUST									
6484	AdmBldg G/F -AC(1st Fix) Kitchen Exhaust	30	10APR06	19MAY06	0		30	-85	-190
ELECTRICAL WORKS									
MAIN & SUBMAIN DISTRIBUTION									
6421	AdmBldg G/F -ES(1st Fix) Main & Sub-main dist.	60	10APR06	24JUN06	0		60	-115	-190



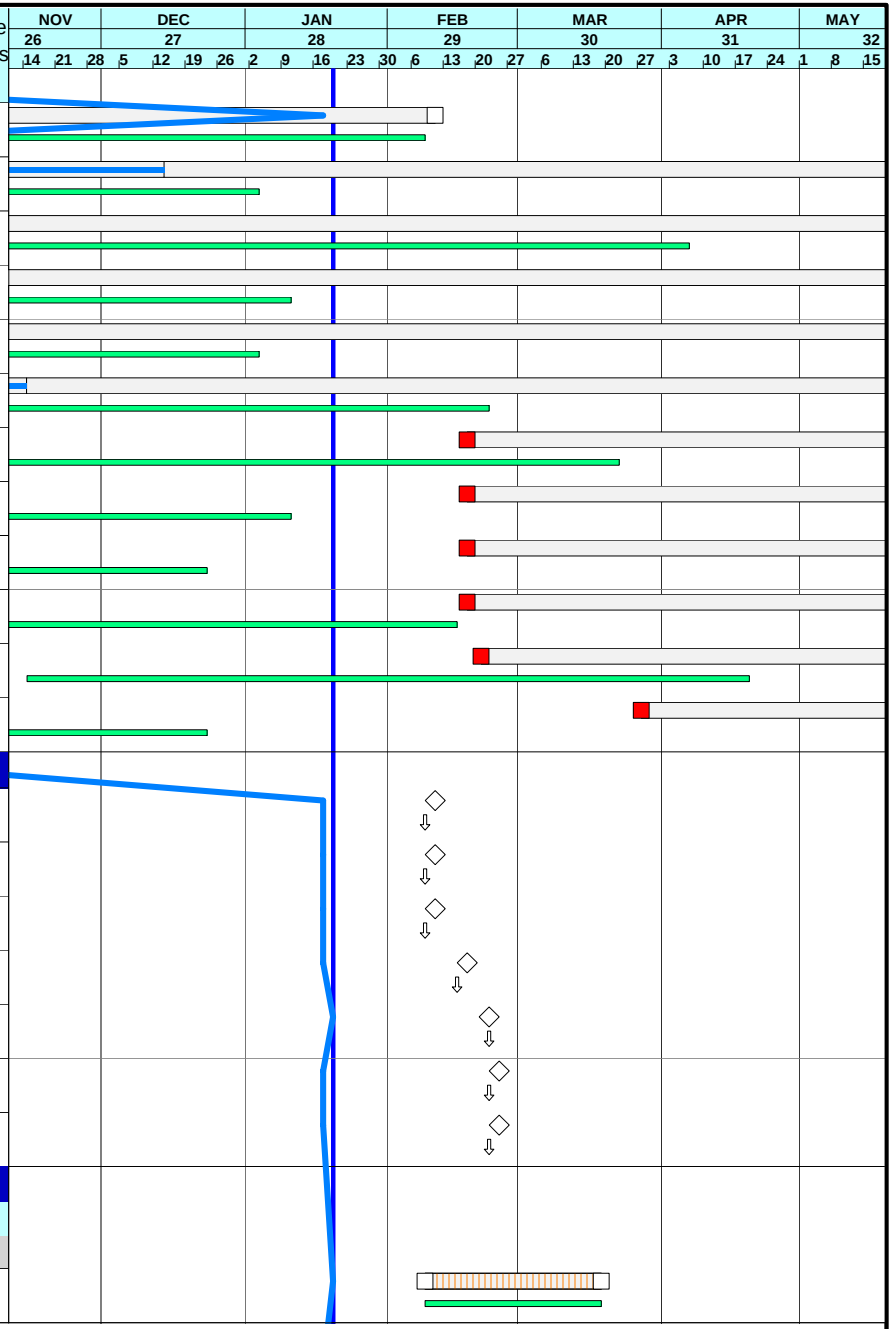
Act. ID	Activity Description	Orig Dur	Early Start	Early Finish	% Compl.	DWP % Compl.	Rem Dur	Total Float	Variance arly Finis
	FINAL CIRCUIT								
6422	AdmBldg G/F -ES(1st Fix) Final Circuit dist.	60	10APR06	24JUN06	0		60	-115	-190
	ADMINISTRATION BLDG. - 1/F								
	MVAC WORKS								
	CHILLED WATER SYSTEM								
6464	AdmBldg 1F-AC(1st Fix) Chilled water sys	48	20APR06	17JUN06	0		48	-107	-180
	MECH.VENT / AIR CONDITIONING								
6407	5AdmBldg 1F-AC(1st Fix) mech.vent.	42	25FEB06	19APR06	0	100	42	-107	-180
	ELECTRICAL WORKS								
	MAIN & SUBMAIN DISTRIBUTION								
6437	AdmBldg 1F-ES(1st Fix) Main & Sub-main dist.	42	20APR06	10JUN06	0		42	-95	-180
	FINAL CIRCUIT								
6438	AdmBldg 1F-ES(1st Fix) Final Circuit dist.	36	20APR06	03JUN06	0		36	-95	-180
	ADMINISTRATION BLDG. - 2/F								
	MVAC WORKS								
	MECH.VENT / AIR CONDITIONING								
6403	AdmBldg 2F-AC(1st Fix) mech.vent.	48	11MAR06	12MAY06	0	100	48	-115	-168
	STATUTORY INSPECTIONS								
	FSD INSPECTIONS								
6468	AdmBldg-All FS design approved by FSD (MHJV)	0	27JAN06		0	100	0	-19	-190
6493	AdmBldg-Issue, endorse & submit FSI 314 to FSD	6	18FEB06	24FEB06	0	100	6	-19	-190
	SHATIN HEIGHTS SOUTH PORTAL BUILDING								
	CONTRACT DEFINED DATES & SECTIONS								
	AREA ACCESS & VACATION DATES								
ACS_D8	Access to Portion - D8	0	03JAN06A		100	0	0		37
ACS_J2	Access to - J2 (T.Plate & above) SH-S.Vent.Bldg.	0	09FEB06		0	0	0	22	0
	SUBMITTALS & APPROVALS								
	ABWF & BUILDER'S WORKS								
1998	SHT SPB - Prep & submit door & window detail	24	13NOV04A	10FEB06	50	100	12	47	-146
2000	SHT SPB - Approve door & window details	24	03JUN05A	10FEB06	0	100	12	47	-122
2006	SHT SPB - Prep & sub balustrade & metal wks	24	13JUL05A	10FEB06	50	100	12	17	-146



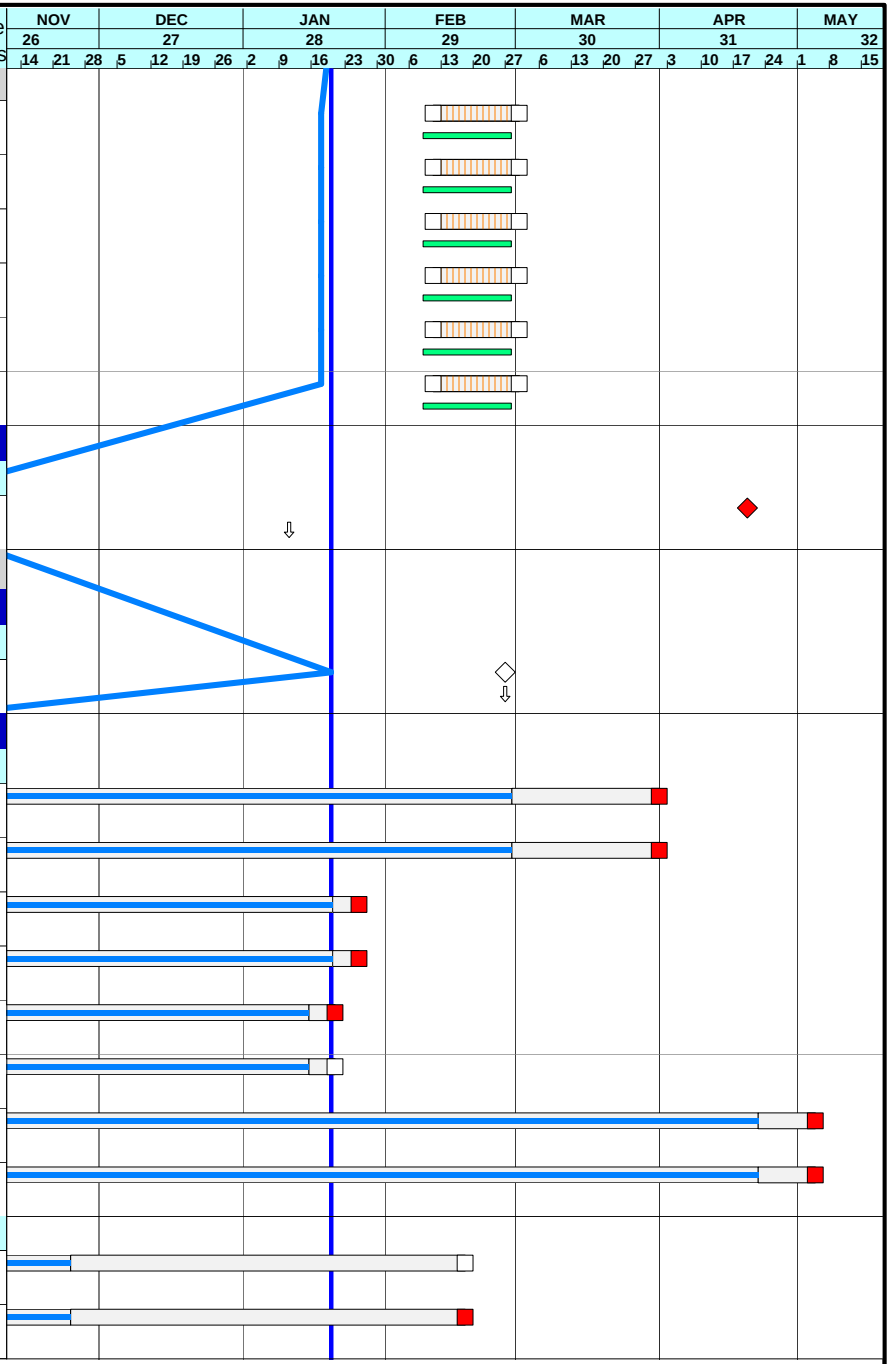
Act. ID	Activity Description	Orig Dur	Early Start	Early Finish	% Compl.	DWP % Compl.	Rem Dur	Total Float	Variance arly Finis
ABWF & BUILDER'S WORKS									
2007	SHT SPB - Approve balustrade & metal works	24	13DEC05A	10FEB06	0	100	12	17	-122
E&M EQPT. / MTRL. SUBMITTALS									
8266	ShtSpBldg-Sub.TVF, Ductworks & Control sys	78	02JUL04A	20JAN06	99	100	1	-139	-177
8268	ShtSpBldg-Sub.MVAC MCC, power & control sys	54	02JUL04A	31MAR06	95	100	54	-169	-260
8270	ShtSpBldg-Sub.FS AFA & FM200 sys	54	05JUL04A	25JAN06	99	100	5	-25	-77
8269	ShtSpBldg-Sub.FS wet sys	54	05AUG04A	25JAN06	99	100	5	-65	-157
8267	ShtSpBldg-Sub.MVAC / TVF pneumatic sys	54	14AUG04A	24MAR06	95	100	48	-79	-98
8263	ShtSpBldg-Sub.CMCS & ELV sys	78	26AUG04A	04MAY06	98	100	78	-97	-218
8272	ShtSpBldg-Sub.PD irrig. sys	54	04FEB05A	31MAR06	85	100	54	-65	-212
E&M EQPT. / MTRL. APPROVALS									
7040	ShtSpBldg-App. HV power dist. sys	18	14JUL04A	17FEB06	95	100	18	-133	-212
7209	ShtSpBldg-App. PD cleans. & flush water sys	18	04AUG04A	27MAR06	78	100	50	-103	-190
7046	ShtSpBldg-App. LV power dist. sys	18	13AUG04A	17FEB06	90	100	18	-145	-206
8507	ShtSpBldg-App. building related luminaires	18	18AUG04A	17FEB06	90	100	18	-127	-182
7155	ShtSpBldg-App. FS wet sys	18	04SEP04A	17FEB06	80	100	18	-65	-152
7205	ShtSpBldg-App. FS AFA & FM200 sys	18	14SEP04A	17FEB06	70	100	18	-25	-72
7085	ShtSpBldg-App. of CMCS & ELV sys	18	20SEP04A	17FEB06	88	100	18	-97	-140
7116	ShtSpBldg-App. MVAC mech.vent. sys	18	23SEP04A	17FEB06	70	100	18	-125	-146
7133	ShtSpBldg-App. TVF, Ductworks & Control sys	18	12NOV04A	17FEB06	85	100	18	-139	-176
7147	ShtSpBldg-App. MVAC MCC, power & control sys	18	12NOV04A	17FEB06	80	100	18	-169	-206
7101	ShtSpBldg-App. MVAC Package AC Unit sys	18	01FEB05A	17FEB06	90	100	18	-49	-92
7229	ShtSpBldg-App. PD irrig. sys	18	05MAY05A	17FEB06	30	100	18	-65	-158
PROCUREMENT - MATERIAL									
E & M WORKS									
7047	ShtSpBldg-Proc & Manuf. LV power dist. equip't	180	20MAR05A	04SEP06	30	100	180	-145	-188



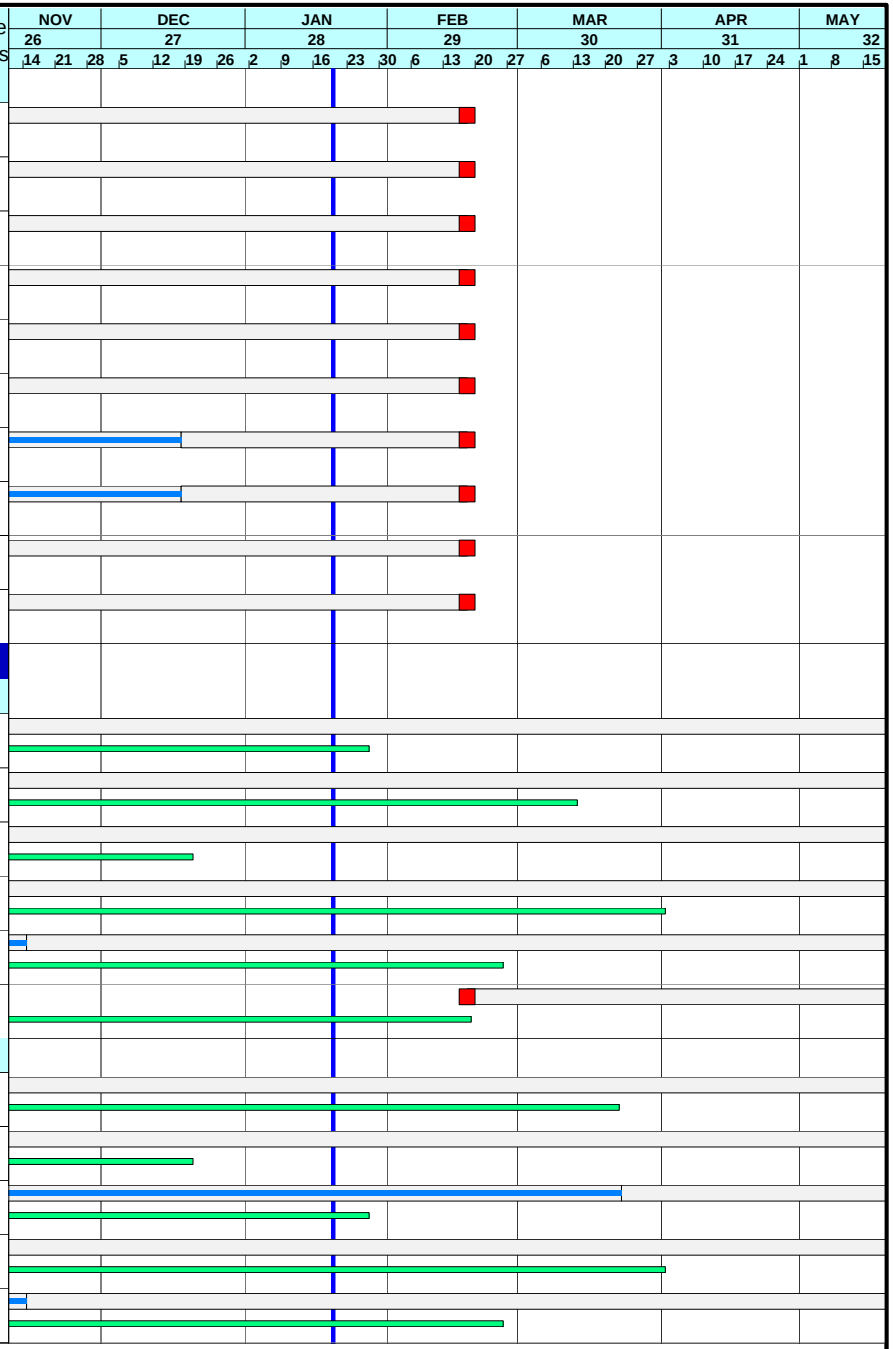
Act. ID	Activity Description	Orig Dur	Early Start	Early Finish	% Compl.	DWP % Compl.	Rem Dur	Total Float	Variance arly Finis
E & M WORKS									
2024	SHT SPB - Procure balustrade & metal works	120	24MAR05A	10FEB06	50	90	12	17	-2
7041	ShtSpBldg-Proc. & Manuf. of HV dist. equip't	180	25MAR05A	04SEP06	50	100	180	-133	-194
7086	ShtSpBldg-Proc. & Manuf. of CMCS & ELV sys	180	25MAR05A	04SEP06	20	80	180	-97	-122
7148	ShtSpBldg-Proc & Manuf. MCC, power & control sys	180	25MAR05A	04SEP06	10	100	180	-169	-188
7156	ShtSpBldg-Proc & Manuf. FS wet sys	120	06JUN05A	24JUN06	30	100	120	-65	-134
7134	ShtSpBldg-Proc & Manuf. TVF,Ductwks & Cont'l sys	180	09JUN05A	04SEP06	35	90	180	-139	-158
7102	ShtSpBldg-Proc & Manuf. MVAC Package AC Units	120	18FEB06	17JUL06	0	60	120	-49	-92
7117	ShtSpBldg-Proc & Manuf. MVAC mech.vent. sys	120	18FEB06	17JUL06	0	100	120	-125	-146
7230	ShtSpBldg-Proc & Manuf. PD irrig. sys	120	18FEB06	17JUL06	0	100	120	-65	-158
8508	ShtSpBldg-Proc & Manf bldg related luminaires	180	18FEB06	25SEP06	0	90	180	-127	-182
7206	ShtSpBldg-Proc & Manuf. FS AFA & FM200 sys	120	21FEB06	19JUL06	0	40	120	-27	-74
7210	ShtSpBldg-Proc & Manuf. Cleans & flush water sys	120	28MAR06	23AUG06	0	100	120	-103	-190
INTERFACE DATES									
1854	Int M/S - SHT S Ptal Bldg - E&M access 3/F	0		10FEB06	0	0	0	17	-2
1855	Int M/S - SHT S Ptal Bldg - E&M access G/F	0		10FEB06	0	0	0	17	-2
1859	Int M/S - SHT S Ptal Bldg - E&M access 2/F	0		10FEB06	0	0	0	17	-2
1856	Int M/S - SHT S Ptal Bldg - E&M access 1/F	0		17FEB06	0	0	0	23	-2
1853	Int M/S - SHT Sth Ptal Bldg-E&M access Ext.Elev	0		22FEB06	0	0	0	37	0
1857	Int M/S - SHT S Ptal Bldg - E&M access Plenum	0		24FEB06	0	0	0	17	-2
1858	Int M/S - SHT S Ptal Bldg - E&M access Roof	0		24FEB06	0	0	0	29	-2
CONSTRUCTION									
ARCHITECTURAL & BUILDER'S WORKS									
ROOFING & EXTERNAL FACADE									
1811	SHT Sth PBldg - Ext. Doors & Windows	33	09FEB06	18MAR06	0	0	33	37	0



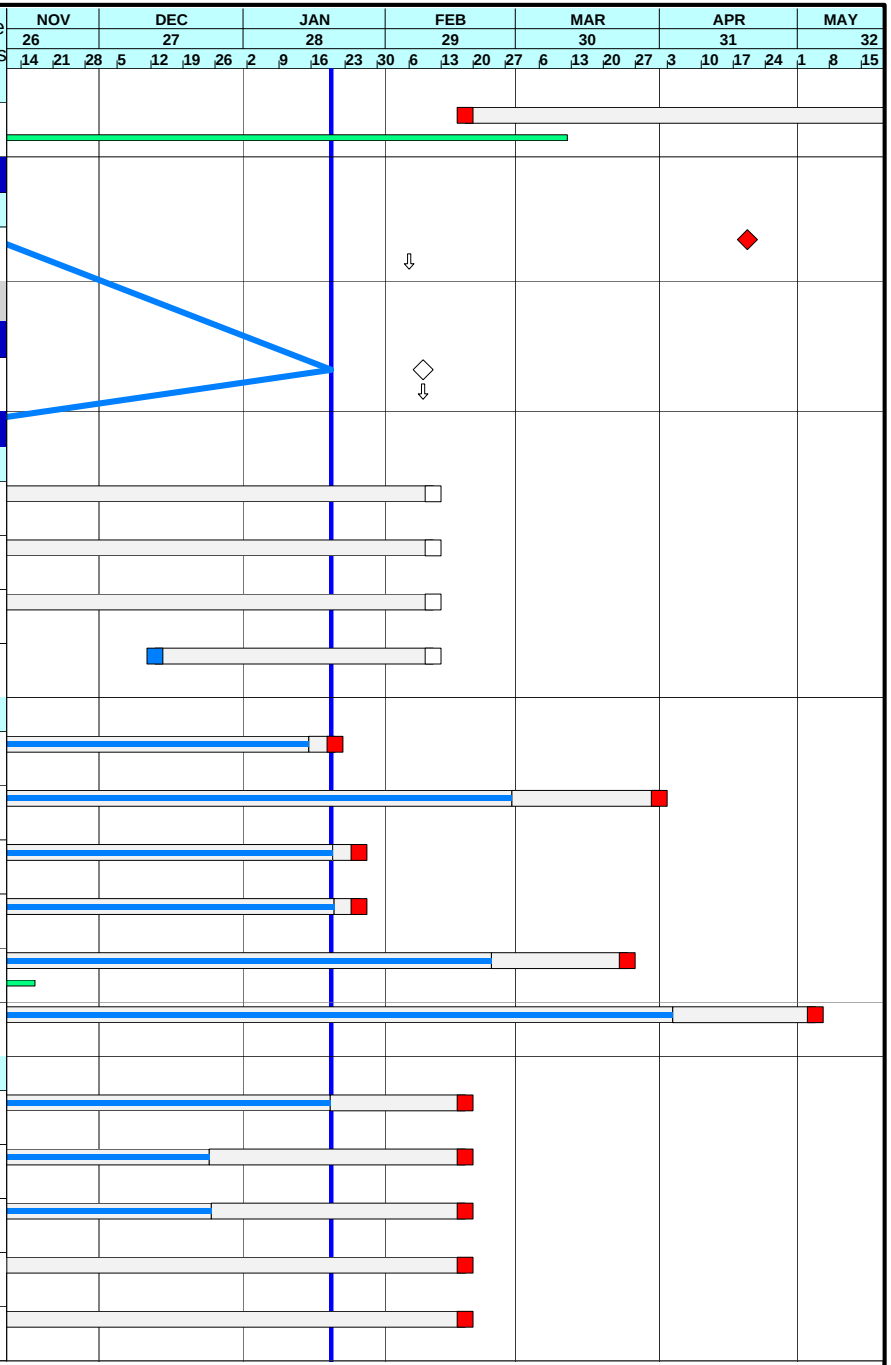
Act. ID	Activity Description	Orig Dur	Early Start	Early Finish	% Compl.	DWP % Compl.	Rem Dur	Total Float	Variance arly Finis
BUILDER'S WORK									
1808	SHT Sth PBldg - Wet Trades 1FL	16	11FEB06	01MAR06	0	0	16	23	-2
1815	SHT Sth PBldg - Wet Trades GL	16	11FEB06	01MAR06	0	0	16	17	-2
1851	SHT Sth PBldg - Wet Trades 2FL	16	11FEB06	01MAR06	0	0	16	17	-2
1852	SHT Sth PBldg - Wet Trades 4FL	16	11FEB06	01MAR06	0	0	16	17	-2
1860	SHT Sth PBldg - Wet Trades 3FL	16	11FEB06	01MAR06	0	0	16	17	-2
1861	SHT Sth PBldg - Wet Trades 5FL	16	11FEB06	01MAR06	0	0	16	29	-2
STATUTORY INSPECTIONS									
FSD INSPECTIONS									
7239	ShtSpBldg-All FS design approved by FSD (MHJV)	0	20APR06		0	100	0	-29	-74
SHT TUNNEL									
CONTRACT DEFINED DATES & SECTIONS									
AREA ACCESS & VACATION DATES									
ACS_J1	Access to Portion - J1 (SH Tunnels)	0	27FEB06		0	0	0	22	0
SUBMITTALS & APPROVALS									
E&M EQPT. / MTRL. SUBMITTALS									
8281	ShtRtNb-Sub.TVS control sys	54	02JUL04A	31MAR06	95	100	54	-87	-197
8287	ShtRtSb-Sub.TVS control sys	54	02JUL04A	31MAR06	95	100	54	-87	-197
8282	ShtRtNb-Sub.FS AFA & Linear sys	54	05JUL04A	25JAN06	99	100	5	-153	-226
8288	ShtRtSb-Sub.FS AFA & Linear sys	54	05JUL04A	25JAN06	99	100	5	-153	-226
8283	ShtRtNb-Sub. TVS in Tunnel	54	07JUL04A	20JAN06	99	100	1	-117	-174
8289	ShtRtSb-Sub. TVS in Tunnel	54	07JUL04A	20JAN06	99	100	1	45	-174
8280	ShtRtNb-Sub.CMCS & ELV sys	78	26AUG04A	04MAY06	98	100	78	-123	-238
8286	ShtRtSb-Sub.CMCS & ELV sys	78	26AUG04A	04MAY06	98	100	78	-115	-230
E&M EQPT. / MTRL. APPROVALS									
7624	ShtRtSb-App. TVS in Tunnel	18	29JUL04A	17FEB06	85	100	18	45	-173
7627	ShtRtNb-App. TVS in Tunnel	18	29JUL04A	17FEB06	85	100	18	-117	-173



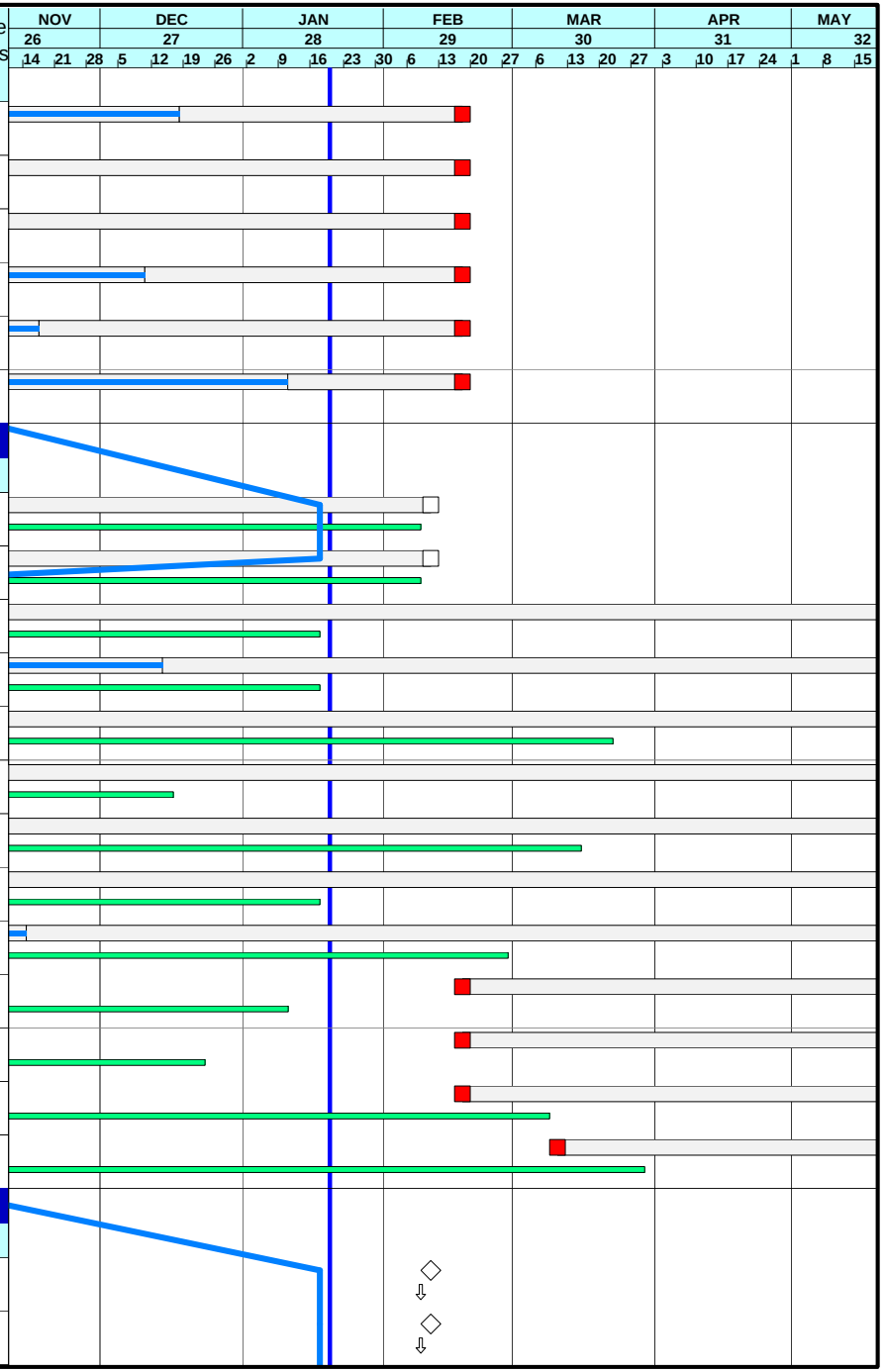
Act. ID	Activity Description	Orig Dur	Early Start	Early Finish	% Compl.	DWP % Compl.	Rem Dur	Total Float	Variance arly Finis
E&M EQPT. / MTRL. APPROVALS									
6938	ShtRtSb-App. Tunnel Lgt sys	18	05AUG04A	17FEB06	80	100	18	-139	-161
6991	ShtRtNb-App. Tunnel Lgt sys	18	05AUG04A	17FEB06	80	100	18	-160	-179
6932	ShtRtSb-App. HV/LV main & submain dist. sys	18	13AUG04A	17FEB06	80	100	18	-145	-191
6985	ShtRtNb-App. HV/LV main & submain dist. sys	18	13AUG04A	17FEB06	80	100	18	-145	-191
6969	ShtRtSb-App. FS AFA & Linear sys	18	14SEP04A	17FEB06	70	100	18	-153	-221
7022	ShtRtNb-App. FS AFA & Linear sys	18	14SEP04A	17FEB06	70	100	18	-153	-221
6945	ShtRtSb-App. CMCS & TCS & ELV sys	18	20SEP04A	17FEB06	88	100	18	-115	-152
6998	ShtRtNb-App. CMCS & ELV sys	18	20SEP04A	17FEB06	88	100	18	-123	-160
6957	ShtRtSb-App. TVS control sys	18	12NOV04A	17FEB06	70	100	18	-87	-143
7010	ShtRtNb-App. TVS control sys	18	12NOV04A	17FEB06	70	100	18	-87	-143
PROCUREMENT - MATERIAL									
SHT TUNNEL NORTHBOUND									
6986	ShtRtNb-Proc & Manuf. ES Main & submain dist.	180	20MAR05A	04SEP06	30	90	180	-145	-173
6999	ShtRtNb-Proc & Manuf. CMCS & ELV sys	180	25MAR05A	04SEP06	20	80	180	-123	-142
7023	ShtRtNb-Proc & Manuf. FS AFA & Linear sys	180	25MAR05A	04SEP06	20	100	180	-153	-203
7011	ShtRtNb-Proc & Manuf. TVS control sys	180	25MAY05A	11OCT06	10	80	180	-117	-155
7628	ShtRtNb-Proc & Manuf. TVS in Tunnel	180	09JUN05A	04SEP06	35	90	180	-117	-155
6992	ShtRtNb-Proc & Manuf. Tunnel Lgt sys	180	18FEB06	25SEP06	0	90	180	-160	-179
SHT TUNNEL SOUTHBOUND									
6946	ShtRtSb-Proc & Manuf. CMCS & ELV sys	180	25MAR05A	04SEP06	20	70	180	-115	-134
6970	ShtRtSb-Proc & Manuf. FS AFA & Linear sys	180	25MAR05A	04SEP06	20	100	180	-153	-203
6933	ShtRtSb-Proc & Manuf. ES Main & submain dist.	180	20MAY05A	04SEP06	65	95	180	-145	-173
6958	ShtRtSb-Proc & Manuf. TVS control sys	180	25MAY05A	11OCT06	10	70	180	-117	-155
7625	ShtRtSb-Proc & Manuf. TVS in Tunnel	180	09JUN05A	04SEP06	35	90	180	-117	-155



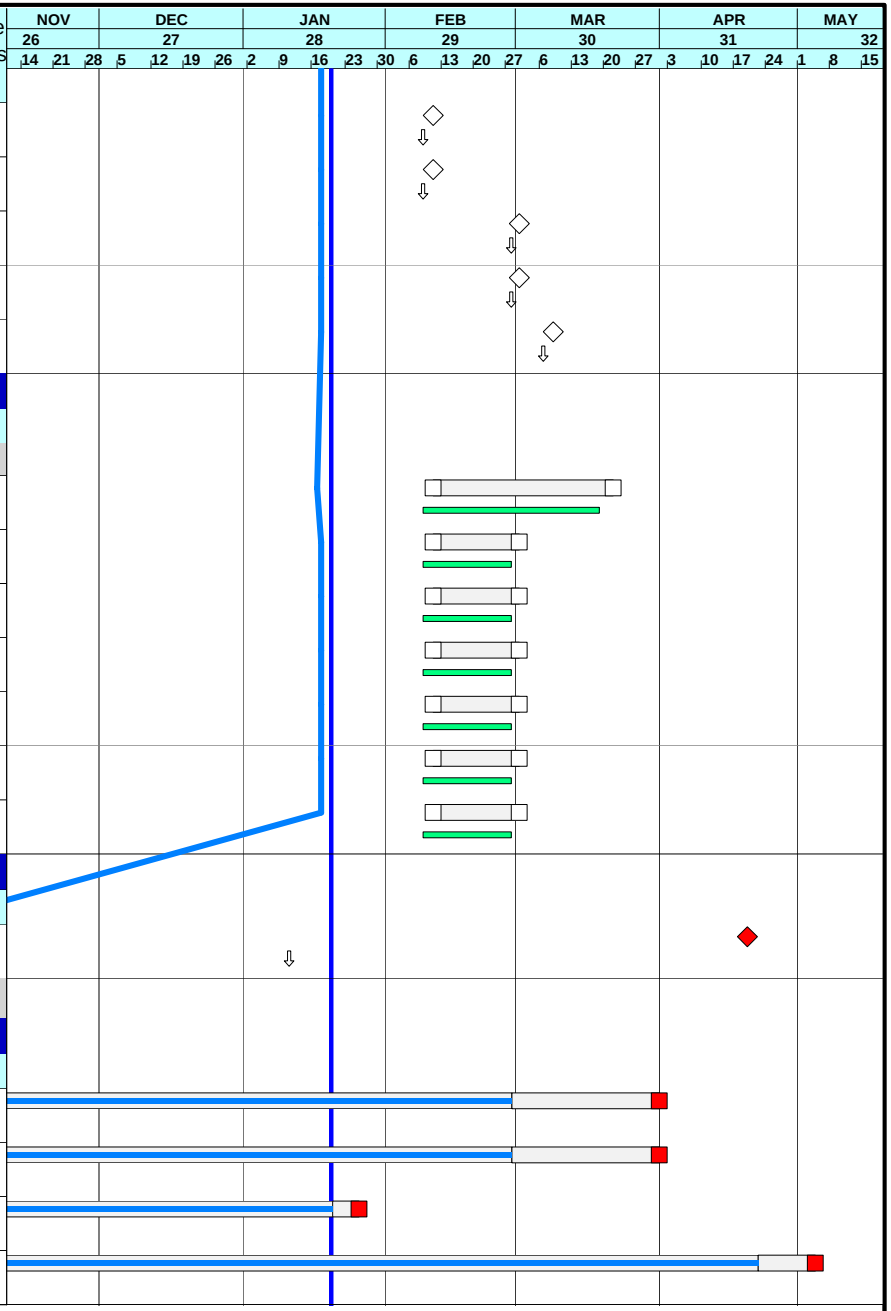
Act. ID	Activity Description	Orig Dur	Early Start	Early Finish	% Compl.	DWP % Compl.	Rem Dur	Total Float	Variance arly Finis
SHT TUNNEL SOUTHBOUND									
6939	ShtRtSb-Proc & Manuf. Tunnel Lgt sys	180	18FEB06	25SEP06	0	90	180	-139	-161
STATUTORY INSPECTIONS									
FSD INSPECTIONS									
6973	ShtRt-All FS design approved by FSD (MHJV)	0	20APR06		0	0	0	-40	-59
SHT NORTH PORTAL BUILDING									
CONTRACT DEFINED DATES, STAGES & SECTIONS									
ACS_J3	Access to Portion - J3 (T/Plate & above) SH-N.VB	0	09FEB06		0	0	0	22	0
SUBMITTALS & APPROVALS									
ABWF & BUILDER'S WORKS									
1999	SHT NPB - Prep & submit door & window detail	24	13NOV04A	10FEB06	50	100	12	29	-146
2001	SHT NPB - Approve door & window details	24	03JUN05A	10FEB06	0	100	12	29	-122
2008	SHT NPB - Prep & sub balustrade & metal wks	24	13JUL05A	10FEB06	50	100	12	17	-146
2009	SHT NPB - Approve balustrade & metal works	24	13DEC05A	10FEB06	0	100	12	17	-122
E&M EQPT. / MTRL. SUBMITTALS									
8295	ShtNpBldg-Sub.TVF, Ductworks & Control sys	78	02JUL04A	20JAN06	99	100	1	-135	-173
8297	ShtNpBldg-Sub.MVAC MCC, power & control sys	54	02JUL04A	31MAR06	95	100	54	-187	-278
8299	ShtNpBldg-Sub.FS AFA & FM200 sys	54	05JUL04A	25JAN06	99	100	5	-37	-103
8298	ShtNpBldg-Sub.FS wet sys	54	05AUG04A	25JAN06	99	100	5	-43	-145
8296	ShtNpBldg-Sub.MVAC / TVF pneumatic sys	54	14AUG04A	24MAR06	95	100	48	-81	-100
8292	ShtNpBldg-Sub.of CMCS & ELV sys	78	26AUG04A	04MAY06	95	100	78	-111	-230
E&M EQPT. / MTRL. APPROVALS									
7262	ShtNpBldg-App. HV power dist. sys	18	14JUL04A	17FEB06	95	100	18	-159	-200
7268	ShtNpBldg-App. LV power dist. sys	18	13AUG04A	17FEB06	90	100	18	-163	-200
8511	ShtSpBldg-App. building related luminaires	18	18AUG04A	17FEB06	90	100	18	-123	-164
7377	ShtNpBldg-App. FS wet sys	18	02SEP04A	17FEB06	80	100	18	-43	-140
7427	ShtNpBldg-App. FS AFA & FM200 sys	18	14SEP04A	17FEB06	70	100	18	-37	-98



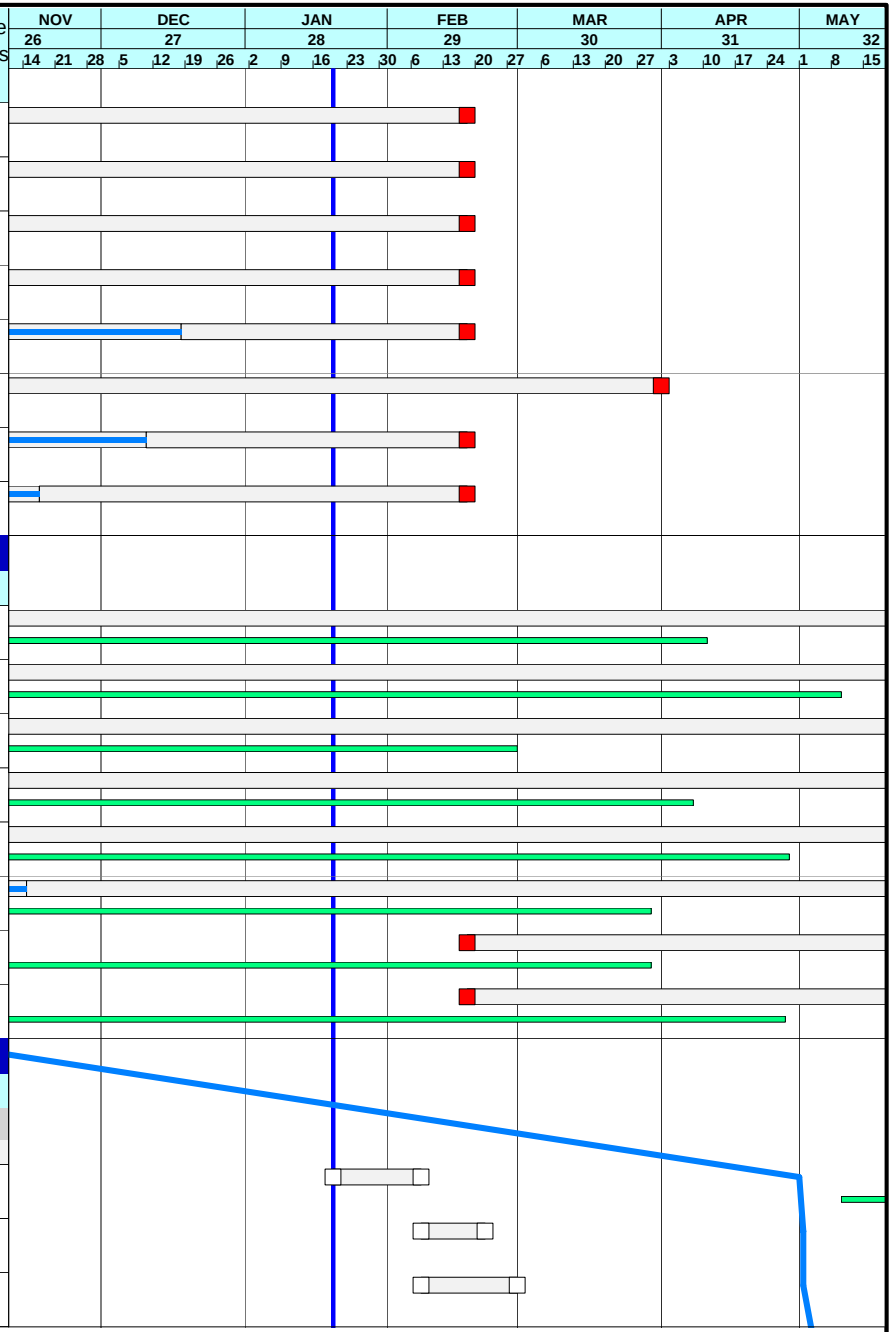
Act. ID	Activity Description	Orig Dur	Early Start	Early Finish	% Compl.	DWP % Compl.	Rem Dur	Total Float	Variance arly Finis
E&M EQPT. / MTRL. APPROVALS									
7307	ShtNpBldg-App. of CMCS & ELV sys	18	20SEP04A	17FEB06	88	100	18	-111	-152
7338	ShtNpBldg-App. MVAC mech.vent. sys	18	23SEP04A	17FEB06	70	100	18	-124	-146
7431	ShtNpBldg-App. PD cleans. & flush water sys	18	04NOV04A	17FEB06	78	100	18	-73	-158
7355	ShtNpBldg-App. TVF, Ductworks & Control sys	18	12NOV04A	17FEB06	85	100	18	-135	-172
7369	ShtNpBldg-App. MVAC MCC, power & control sys	18	12NOV04A	17FEB06	80	100	18	-187	-224
7323	ShtNpBldg-App. MVAC Package AC Unit sys	18	01FEB05A	17FEB06	90	100	18	-33	-86
PROCUREMENT - MATERIAL									
ABWF WORKS									
2016	SHT NPB - Procure doors & windows	120	12JAN05A	10FEB06	50	90	12	29	-2
2028	SHT NPB - Procure balustrade & metal works	120	09MAR05A	10FEB06	50	90	12	17	-2
7269	ShtNpBldg-Proc & Manuf. LV power dist. equip't	180	20MAR05A	04SEP06	30	100	180	-163	-182
7263	ShtNpBldg-Proc. & Manuf. of HV dist. equip't	180	25MAR05A	04SEP06	50	100	180	-159	-182
7308	ShtNpBldg-Proc. & Manuf. of CMCS & ELV sys	180	25MAR05A	04SEP06	20	80	180	-111	-134
7370	ShtNpBldg-Proc & Manuf. MCC, power & control sys	180	25MAR05A	04SEP06	10	100	180	-187	-206
7428	ShtNpBldg-Proc & Manuf. FS AFA & FM200 sys	120	25MAR05A	24JUN06	20	70	120	-37	-80
7378	ShtNpBldg-Proc & Manuf. FS wet sys	120	06JUN05A	24JUN06	30	100	120	-43	-122
7356	ShtNpBldg-Proc & Manuf. TVF,Ductwks&Cont'l sys	180	09JUN05A	04SEP06	35	90	180	-135	-154
7339	ShtNpBldg-Proc & Manuf. MVAC mech.vent. sys	120	18FEB06	17JUL06	0	100	120	-124	-146
7432	ShtNpBldg-Proc & Manuf. Cleans & flush water sys	120	18FEB06	17JUL06	0	100	120	-73	-158
8512	ShtSpBldg-Proc & Manf bldg related luminaires	180	18FEB06	25SEP06	0	80	180	-123	-164
7324	ShtNpBldg-Proc & Manuf. MVAC Package AC Units	120	11MAR06	07AUG06	0	60	120	-51	-104
INTERFACE DATES									
SHT NORTH PORTAL BUILDING									
1863	Int M/S - SHT N Ptal Bldg - E&M access 3/F	0		10FEB06	0	0	0	17	-2
1864	Int M/S - SHT N Ptal Bdng - E&M access G/F	0		10FEB06	0	0	0	23	-2



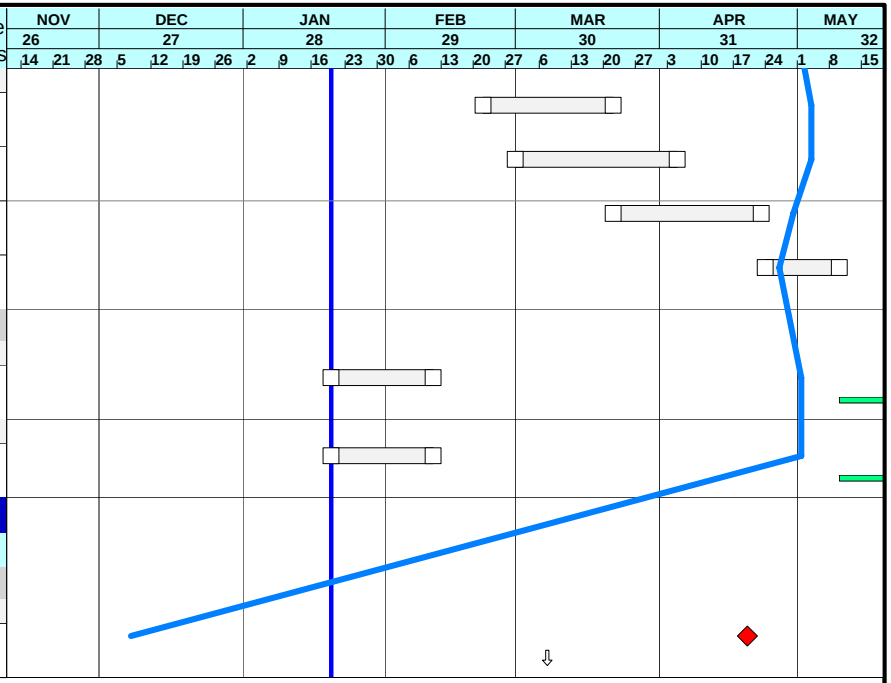
Act. ID	Activity Description	Orig Dur	Early Start	Early Finish	% Compl.	DWP % Compl.	Rem Dur	Total Float	Variance arly Finis
SHT NORTH PORTAL BUILDING									
1865	Int M/S - SHT N Ptal Bldg - E&M access 1/F	0		10FEB06	0	0	0	17	-2
1868	Int M/S - SHT N Ptal Bldg - E&M access 2/F	0		10FEB06	0	0	0	17	-2
1866	Int M/S - SHT N Ptal Bldg - E&M access Plenum	0		01MAR06	0	0	0	17	-2
1867	Int M/S - SHT N Ptal Bdng - E&M access Roof	0		01MAR06	0	0	0	29	-2
1862	Int M/S - SHT Nth Ptal Bldg-E&M access Ext.Elev	0		08MAR06	0	0	0	29	-2
CONSTRUCTION									
ARCHITECTURAL & BUILDER'S WORKS									
BUILDER'S WORK									
1812	SHT Nth PBldg - Ext. Doors & Windows	33	11FEB06	21MAR06	0	0	33	29	-2
1821	SHT Nth PBldg - Wet Trades GL	16	11FEB06	01MAR06	0	0	16	23	-2
1823	SHT Nth PBldg - Wet Trades 1FL	16	11FEB06	01MAR06	0	0	16	17	-2
1869	SHT Nth PBldg - Wet Trades 2FL	16	11FEB06	01MAR06	0	0	16	17	-2
1870	SHT Nth PBldg - Wet Trades 4FL	16	11FEB06	01MAR06	0	0	16	17	-2
1871	SHT Nth PBldg - Wet Trades 3FL	16	11FEB06	01MAR06	0	0	16	17	-2
1872	SHT Nth PBldg - Wet Trades 5FL	16	11FEB06	01MAR06	0	0	16	29	-2
STATUTORY INSPECTIONS									
FSD INSPECTIONS									
7455	ShtNpBldg-All FS design approved by FSD (MHJV)	0	20APR06		0	100	0	5	-74
SHT RC ENCLOSURE & T3 UNDERPASS									
SUBMITTALS & APPROVALS									
E&M EQPT./ MTRL.SUBMITTALS									
8304	Sht-N.R9-Sub.TVS control sys	54	02JUL04A	31MAR06	95	100	54	-87	-178
8309	Sht-N.R9-Sub.MCC, power & control sys	54	02JUL04A	31MAR06	95	100	54	-102	-193
8305	Sht-N.R9-Sub.FS AFA & Linear sys	54	05JUL04A	25JAN06	99	100	5	-58	-116
8303	Sht-N.R9-Sub.CMCS & ELV sys	78	26AUG04A	04MAY06	98	100	78	-80	-195



Act. ID	Activity Description	Orig Dur	Early Start	Early Finish	% Compl.	DWP % Compl.	Rem Dur	Total Float	Variance arly Finis
E&M EQP. / MTRL. APPROVALS									
7487	Sht-N.R9-App. Tunnel Lgt sys	18	05AUG04A	17FEB06	80	100	18	-127	-146
7481	Sht-N.R9-App. HV/LV main & submain dist. sys	18	13AUG04A	17FEB06	80	100	18	-100	-137
7604	Sht-N.R9-App. LCC, power & control sys	18	18AUG04A	17FEB06	80	100	18	-106	-125
7517	Sht-N.R9-App. FS AFA & Linear sys	18	14SEP04A	17FEB06	70	100	18	-58	-111
7494	Sht-N.R9-App. CMCS & ELV sys	18	20SEP04A	17FEB06	88	100	18	-80	-117
7505	Sht-N.R9-App. TVS control sys	18	12NOV04A	31MAR06	70	100	54	-87	-160
7529	Sht-N.R9-App. TVF, Ductworks & Control sys	18	12NOV04A	17FEB06	85	100	18	-109	-146
7612	Sht-N.R9-App. MCC, power & control sys	18	12NOV04A	17FEB06	80	100	18	-102	-139
PROCUREMENT - MATERIAL									
SHT RC FULL ENCLOSURE / T3 UNDERPASS									
7482	Sht-N.R9-Proc & Manuf. ES Main & submain dist.	180	20MAR05A	04SEP06	30	80	180	-100	-119
7495	Sht-N.R9-Proc & Manuf. CMCS & ELV sys	180	25MAR05A	04SEP06	20	70	180	-80	-99
7518	Sht-N.R9-Proc & Manuf. FS AFA & Linear sys	120	25MAR05A	24JUN06	15	80	120	-58	-93
7613	Sht-N.R9-Proc & Manuf. MCC, power & control sys	180	25MAR05A	03OCT06	10	70	180	-126	-145
7506	Sht-N.R9-Proc & Manuf. TVS control sys	180	25MAY05A	04SEP06	10	70	180	-87	-106
7530	Sht-N.R9-Proc & Manuf. TVF, Ductwks & Cont'l sys	180	09JUN05A	04SEP06	35	80	180	-109	-128
7488	Sht-N.R9-Proc & Manuf. Tunnel Lgt sys	180	18FEB06	25SEP06	0	80	180	-127	-146
7605	Sht-N.R9-Proc & Manuf. LCC, power & control sys	180	18FEB06	25SEP06	0	80	180	-106	-125
CONSTRUCTION WORKS									
SHT RC FULL ENCLOSURE / T3 UNDERPASS									
KIOSKS									
KIOSK 1									
2287	Kiosk S1 - Substructure	9	20JAN06	07FEB06	0	0	9	125	81
2289	Kiosk S1 - Steelwork & glazing	12	08FEB06	21FEB06	0	0	12	125	81
2293	Weighbridge S1 - Install	18	08FEB06	28FEB06	0	0	18	209	81



Act. ID	Activity Description	Orig Dur	Early Start	Early Finish	% Compl.	DWP % Compl.	Rem Dur	Total Float	Variance arly Finis
KIOSK 1									
2291	Kiosk S1 - Builders' work	24	22FEB06	21MAR06	0	0	24	125	81
2296	Weighbridge S1 - Test and commission	30	01MAR06	04APR06	0	0	30	209	81
8531	Kiosk S1 - Elect Works	24	22MAR06	22APR06	0	0	24	149	81
8532	Kiosk S1 - MVAC Works	12	24APR06	09MAY06	0	0	12	149	81
SWITCHROOMS									
SOUTH SWITCHROOM									
3720	Sth.Switchroom - Builders Work	12	20JAN06	10FEB06	0	0	12	100	81
NORTH SWITCHROOM									
3730	Nth.Switchroom - Builders Work	12	20JAN06	10FEB06	0	0	12	100	81
T&C and Inspections									
SHT RC Full Enclosure / T3 Underpass									
STATUTORY INSPECTIONS									
FSD INSPECTION									
7521	Sht-N.R9-All FS design approved by FSD (MHJV)	0	20APR06		0	0	0	-14	-33



APPENDIX M
COMPLAINT LOG

Appendix M - 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.	<u>Noise at night time</u> 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. <u>Noise during day-time</u> 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,	<u>Environmental Permits</u> 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. <u>Blasting Works</u> 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 of Concern	Received Date	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. <u>Use of TAR no.l</u> According to Condition 3d of the above-mentioned CNP, there was restriction on the use of site vehicles traveling on TAR no.1. The usage of site vehicles on TAR no.1 in a 2-week period before the date of complaint, i.e. 30th August to 12th September 2004 showed that the only vehicle type using TAR no.1 for the concerned period was concrete truck and the number of vehicle pass was limited to 4 times per hour, which was in compliance with the above CNP's conditions. Regular noise monitoring was undertaken by ET at Garden Villa on 30th August and 6th September 2004 during restricted hours (1900 – 2300 hours). The monitoring results were 58.7 dB(A) and 58.6 dB(A), respectively, which were below the noise limit level of 60 dB(A). However, it should be noted that site vehicles were not used by the Contractor on TAR no.1 during restricted hours on these two monitoring day. Based on the information obtained, the validity for the noise complaint in associated with night-time blasting works could not be concluded under ET's investigation, since no blasting works had been performed by the Contractor during restricted hours at the time of the report preparation. Also, 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. For the use of TAR no.1, the RSS's records showed that the number of vehicle pass in the period between 30th August and 12th September 2004 was complied with the CNP's conditions. It should be noted that only a maximum of 3 concrete trucks	

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 20th 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 23rd 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 29th Oct 04. No significant fugitive dust emission has been found. During ET's site inspections on 27th Oct and 3rd 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 21st Oct and 2nd 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 21st 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 24th November 2004.	According to the ER, the only construction activity at Butterfly Valley undertaken on 21st 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 21st and 28th 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

Log Ref.	Location of Concern	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
				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	*Nighttime & Sunday construction noise* • no exceedance for noise monitoring • restricted hour works were found complied with the CNPs • records of vehicular trips on TAR1 did not show non-compliance of CNP conditions *Noise from tunnel blasting at early morning and nighttime* • no exceedance for noise monitoring • valid blasting permit had been obtained from CEDD • blasting work is not under the jurisdiction of EPD *Dust from construction activities* • dump trucks with uncovered / inadequately covered materials were observed leaving site • no exceedance for TSP monitoring • enhanced dust suppression measures had been implemented by the Contractor <u>Conclusions</u> 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.	Closed
50330	Garden Villa (TAR1)	30-Mar-05 (by EPD & ET Leader)	Environmental Protection Department (EPD) received a public complaint on 30th 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 29th 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_{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_{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 ad-hoc measurement on 1st 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 9th 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 15th 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_{eq}-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 ad-hoc 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 15th 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 19th 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 14th April 2005 and at 4am on 15th 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 11th and 15th 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 (11th to 15th 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.	*Site Observations* 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).	*Site Activity* 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.	*Ad-hoc Noise Measurement* 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.	*Noise Measurement* 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 exceedance was recorded for the ad-hoc noise monitoring. The complaint lodged is therefore considered not justifiable.	Closed
51025	Caldecott Hill (2 Caldecott Road)	25-Oct-05	A public complaint was received by the 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.	*Site Observations* 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.	*Item 1: Noise nuisance due to tunnel 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

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				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.	*Complaint Record* 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.	**A. Construction Noise Impact** 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