

# **Highways Department**

Agreement No. CE 20/2009 (EP)

Environmental Team for the Widening of Tolo Highway / Fanling Highway between Island House Interchange and Fanling

(Stage 1)
Between Island House Interchange and
Tai Hang - Investigation

# Monthly EM&A Report for March 2014

[04/2014]

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> 14 April 2014 By Fax (2805 5028) and Post

Attn.: Mr. James Penny

Dear Sir,

**Widening of Tolo Highway between** Island House Interchange and Tai Hang Environmental Permit (EP) No.: EP-324/2008/B Condition 3.3 – Submission of Monthly EM&A Report for March 2014 (Stage 1)

We refer to the captioned Monthly EM&A Report received on 11 and 14 April 2014 submitted by Environmental Team (ET) via email. Pursuant to EP Condition 3.3, I hereby verify the Monthly EM&A Report for March 2014 (Stage 1) for the Project.

Yours faithfully

for MOTT MACDONALD HONG KONG LIMITED

Terence Kona

Independent Environmental Checker

HyD - Mr. Raymond T W Kong / Mr. Dennis Wong / Mr. William Chiang c.c.

(Fax: 2761 4864)

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## **EXECUTIVE SUMMARY**

The proposed widening of Tolo Highway and Fanling Highway between Island House Interchange and Fanling (the Project) is a Designated Project under the Environmental Impact Assessment Ordinance (Cap. 499) (EIAO) and is governed by an Environmental Permit (EP-324/2008)(EP) issued by EPD on 23 December 2008. Subsequently, EPD issued a Variation of Environmental Permit (EP-324/2008/A) (VEP) on 31 January 2012.

The Project aims to widen Tolo Highway and Fanling Highway to dual 4-lane carriageway in order to alleviate the current traffic congestion problems and to cope with the increasing transport demands to and from the urban areas and also cross boundary traffic.

The construction works for this Project will be delivered in 2 stages i.e. Stage 1 (between Island House Interchange and Tai Hang) and Stage 2 (between Tai Hang and Wo Hop Shek Interchange). The construction works of Stage 1 were commenced on 23 November 2009 and will tentatively be completed in May 2014. This report focuses on Stage 1 of the Project only.

The construction phase of Stage 1 under the EP and the Environmental Monitoring and Audit (EM&A) programme for Stage 1 of the Project commenced on 23 November 2009. The impact environmental monitoring and audit includes air quality and noise monitoring.

This report documents the findings of EM&A works conducted in the period between 1 and 31 March 2014.

As informed by the Contract 1 Contractor (China State Construction Engineering (Hong Kong) Ltd.), construction activities in the reporting period were:-

- Temporary shoring, sheetpiling and excavation
- Retaining wall construction
- Noise barrier footing construction
- Noise barrier installation
- Asphalt laying
- Installation of Drainage Pipes

The construction works carried out by the Contract 2 Contractor (Gammon Construction Ltd.) in the reporting period were:-

- Condition survey of existing structures
- Setting up the temporary traffic arrangement
- Excavation of trial trenches to locate existing utilities
- Spread footing of Noise Barrier / Semi Noise Enclosure
- Slope works, including installation of soil nails
- Noise barrier construction
- Modification of existing bridge structures
- Entrusted watermains works
- Sewer Installation
- Road and drainage works
- Landscaping works

# **Reporting Change**

There was no reporting change required in the reporting month.

#### **Breaches of Action and Limit Levels for Air Quality**

No exceedance of Action and Limit Level was recorded for 1-hour and 24-hour TSP monitoring in the reporting month.

## **Breaches of Action and Limit Levels for Noise**

No Action Level exceedance of construction noise was recorded in the reporting month since no noise complaints related to 0700 – 1900 hours on normal weekdays was received and followed by the Environmental Team in the reporting month.

No Limit Level exceedance of construction noise was recorded in the reporting month.

## Complaint, Notification of Summons and Successful Prosecution

One (1) noise-related complaint was received on 27 February 2014 and followed up by the Environmental Team in February and March 2014. The investigation result is reported in Section 4.6.

One (1) dust-related complaint was received on 25 March 2014 and followed up by the Environmental Team in March 2014. The investigation result is reported in Section 4.6.

No notification of summons and successful prosecution was received in the reporting month.

# **Future Key Issues**

Key issues to be considered in the coming month included:-

- Properly store and label oils and chemicals on site;
- Chemical, chemical waste and waste management;
- Collection of construction waste should be carried out regularly;
- Site runoff should be properly collected and treated prior to discharge;
- Properly maintain all drainage facilities and wheel washing facilities on site:
- Exposed slopes should be covered up properly if no temporary work will be conducted;
- Suppress dust generated from excavation, breaking and drilling activities, haul road traffic and grout mixing;
- Quieter powered mechanical equipment should be used;
- Closely check and replace the sound insulation materials wrapped at the concrete breaker tip regularly;
- Better scheduling of construction works to minimize noise nuisance; and
- Tree protective measures for all retained trees should be well maintained.

## 1 INTRODUCTION

# 1.1 Background

- 1.1.1. Tolo Highway and Fanling Highway are expressways in the North East New Territories connecting Sha Tin, Tai Po and Fanling. These highways form a vital part of the strategic Route 9, which links other major strategic routes to Shenzhen. At present, this section of Route 9 is dual 3-lane carriageway. However, at several major interchanges along this section of Route 9, the highway is only dual-2 lane. Severe congestion is a frequent occurrence during peak periods, particularly in the Kowloon bound direction.
- 1.1.2. The objective of the Project "Widening of Tolo Highway / Fanling Highway between Island House Interchange and Fanling" is to widen Tolo Highway and Fanling Highway to dual 4-lane carriageway in order to alleviate the current traffic congestion problems and to cope with the increasing transport demands to and from the urban areas and also cross boundary traffic.
- 1.1.3. The Project is a designated project and is governed by an Environmental Permit (EP-324/2008)(EP) issued by EPD on 23 December 2008. Subsequently, EPD issued a Variation of Environmental Permit (EP-324/2008/A) (VEP) on 31 January 2012.
- 1.1.4. The scope of the Project comprises mainly:-
  - (i) Widening of a 5.7 km section of Tolo Highway and 3.0 km section of Fanling Highway between Island House Interchange and Wo Hop Shek Interchange from the existing dual 3-lane to dual 4-lane, including construction of new vehicular bridges;
  - (ii) Widening of interchange sections at Island House Interchange, Tai Po North Interchange, and Lam Kam Road Interchange from dual 2-lane to dual 3-lane, except Sha Tin bound carriageway at Tai Po North Interchange, which is widened from 3-lane to 4-lane, including realignment of various slip roads;
  - (iii) Modification and reconstruction of highways, vehicular bridges, underpasses and footbridges.
- 1.1.5. The construction works for this Project will be delivered in 2 stages i.e. Stage 1 (between Island House Interchange and Tai Hang) and Stage 2 (between Tai Hang and Wo Hop Shek Interchange). The construction works of Stage 1 commenced on 23 November 2009 and will tentatively be completed in May 2014; while the construction works of Stage 2 commenced on 21 November 2013. This report focuses on Stage 1 of the Project only.
- 1.1.6. The construction works for Stage 1 of the Project will be implemented under 2 works contracts (Contract 1 and Contract 2). Contract 1 covers the section of Tolo Highway between Island House Interchange and Ma Wo, Contract 2 covers the section of Tolo Highway between Ma Wo and Tai Hang.
- 1.1.7. Hyder-Arup-Black and Veatch Joint Venture (HABVJV) are appointed by Highways Department (HyD) as the consultants for the design and construction assignment for the Tolo project under Agreement No. CE 58/2000 Supplementary Agreement No. 3 (SA3) (i.e. the Engineer for the Contracts).
- 1.1.8. China State Construction Engineering (Hong Kong) Ltd. (CSHK) was commissioned as the Contractor of Contract 1 of Stage 1 of the Project, while Gammon Construction Limited (GCL) was commissioned as the Contractor of Contract 2 of Stage 1 of the Project.
- 1.1.9. AECOM Asia Co. Ltd. was employed by HyD as the Environmental Team (ET) to undertake the Environmental Monitoring and Audit (EM&A) works for Stage 1 of the Project and Mott MacDonald Hong Kong Ltd. acts as the Independent Environmental Checker (IEC) for the Contracts.
- 1.1.10. The construction phase of Stage 1 under the EP commenced on 23 November 2009.
- 1.1.11. According to the updated EM&A Manual of Stage 1 of the Project, there is a need of an EM&A programme including air quality and noise monitoring. The EM&A programme for Stage 1 of the Project commenced on 23 November 2009.



# 1.2 Scope of Report

1.2.1 This is the fifty-third monthly EM&A Report under the Agreement No. CE 20/2009 (EP) - Widening of Tolo Highway between Island House Interchange and Tai Hang – Investigation. This report presents a summary of the environmental monitoring and audit works, list of activities and mitigation measures proposed by the ET for Stage 1 of the Project in March 2014.

# 1.3 Project Organization

1.3.1 The project organization structure is shown in Appendix A. The key personnel contact names and numbers are summarized in Table 1.1.

Table 1.1 Contact Information of Key Personnel

Party Position		Name	Telephone	Fax
ER of Stage 1, Contract 1  (Hyder-Arup-Black & Veatch Joint Venture)	Chief Resident Engineer /TOLO1	James Tsang	9038 8797	26674000
ER of Stage 1, Contract 2 (Hyder-Arup-Black & Veatch Joint Venture)	ER of Stage 1, Contract 2 Chief Resident Engineer /TOLO2		9097 5833	2653 2348
IEC of Stage 1  (Mott MacDonald Hong Kong Limited)	Independent Environmental Checker	Terence Kong	2828 5919	2827 1823
Contractor of Site Agent Stage 1, Contract 1		Eddie Tang	9863 7686	2667 5666
(China State Construction Engineering (Hong Kong) Limited)	Environmental Officer	Michael Tsang	9277 4956	2667 5666
	Environmental Officer	M L Lam	9489 4641	2667 5666
	Site Agent	John Chan	3126 1202	2559 3410
Contractor of		Thomson Chang	9213 6569	2559 3410
Stage 1, Contract 2  (Gammon Construction Limited)		Crispin Ao	9223 8773	2559 3410
	Environmental Officer	Jason Cheng	9837 9323	2559 3410
		Jimmy Tsang	9720 9738	2559 3410

Party	Position	Name	Telephone	Fax
ET of Stage 1  (AECOM Asia Company Limited)	ET Leader	Y T Tang	3922 9393	3922 9797

## 1.4 Summary of Construction Works

- 1.4.1 The construction phase of Stage 1 under the EP commenced on 23 November 2009.
- 1.4.2 Details of the construction works carried out by the Contract 1 Contractor (China State Construction Engineering (Hong Kong) Ltd.) in this reporting period are listed below:-
  - Temporary shoring, sheetpiling and excavation
  - Retaining wall construction
  - Noise barrier footing construction
  - Noise barrier installation
  - Asphalt laying
  - Installation of Drainage Pipes
- 1.4.3 Details of the construction works carried out by the Contract 2 Contractor (Gammon Construction Ltd.) in this reporting period are listed below:-
  - Condition survey of existing structures
  - Setting up the temporary traffic arrangement
  - Excavation of trial trenches to locate existing utilities
  - Spread footing of Noise Barrier / Semi Noise Enclosure
  - Slope works, including installation of soil nails
  - Noise barrier construction
  - Modification of existing bridge structures
  - Entrusted watermains works
  - Sewer Installation
  - Road and drainage works
  - Landscaping works
- 1.4.4 The Construction Programmes are shown in Appendix B.
- 1.4.5 The general layout plan of the Project site showing the contract areas is shown in Figure 1.1.
- 1.4.6 The environmental mitigation measures implementation schedule are presented in Appendix C.

# 1.5 Summary of EM&A Programme Requirements

- 1.5.1 The EM&A programme required environmental monitoring for air quality, noise and environmental site inspections for air quality, water quality, noise, waste management, ecology, and landscape and visual impact. The EM&A requirements for each parameter described in the following sections include:-
  - All monitoring parameters;
  - Monitoring schedules for the reporting month and forthcoming months;
  - Action and Limit levels for all environmental parameters:
  - Event / Action Plan:
  - Environmental mitigation measures, as recommended in the Project EIA study final report; and
  - Environmental requirement in contract documents.

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## 2 AIR QUALITY MONITORING

## 2.1 Monitoring Requirements

2.1.1 In accordance with the updated EM&A Manual, baseline 1-hour and 24-hour TSP levels at 4 air quality monitoring stations were established. Impact 1-hour TSP monitoring was conducted for at least three times every 6 days, while impact 24-hour TSP monitoring was carried out for at least once every 6 days. The Action and Limit level of the air quality monitoring is provided in Appendix D.

## 2.2 Monitoring Equipment

2.2.1 24-hour TSP air quality monitoring was performed using High Volume Sampler (HVS) located at each designated monitoring station. The HVS meets all the requirements of the updated EM&A Manual. Portable direct reading dust meters were used to carry out the 1-hour TSP monitoring. Brand and model of the equipment is given in Table 2.1.

Table 2.1 Air Quality Monitoring Equipment

Equipment	Brand and Model	
Portable direct reading dust meter (1-hour TSP)	Sibata Digital Dust Monitor (Model No. LD-3 and LD-3B)	
High Volume Sampler (24-hour TSP)	Tisch Total Suspended Particulate Mass Flow Controlled High Volume Air Sampler (Model No. TE-5170 & GMW-2310)	

## 2.3 Monitoring Locations

- 2.3.1 Monitoring locations AM2 and AM3 were set up at the proposed locations in accordance with updated EM&A Manual. However, for monitoring locations: Dynasty View and Tai Po Garden, proposed in the updated EM&A Manual, as approval could not be obtained from the owner's corporation of the premises, baseline and impact air quality monitoring was conducted at 13 Ha Wun Yiu (AM1) and Tai Kwong Secondary School (AM4) respectively. The monitoring station at 13 Ha Wun Yiu (AM1) was relocated to Fan Sin Temple, 3 Sheung Wun Yiu (AM1A) in February 2010. Also, the monitoring station at Tai Kwong Secondary School (AM4) was relocated to 168 Shek Kwu Lung Village (AM4A) in September 2011.
- 2.3.2 Figure 2.1 shows the locations of monitoring stations. Table 2.2 describes the details of the monitoring stations.

Table 2.2 Locations of Impact Air Quality Monitoring Stations

Monitoring Station Location		Description	
AM1A	3 Sheung Wun Yiu	Ground floor at the boundary outside Fan Sin Temple	
AM2	12 Shan Tong New Village	Ground floor outside the premises	
AM3	Riverain Bayside	Roof of the switch room	
AM4A 168 Shek Kwu Lung Village		Roof of the switch room	

# 2.4 Monitoring Parameters, Frequency and Duration

2.4.1 Table 2.3 summarizes the monitoring parameters, frequency and duration of impact TSP monitoring.

Table 2.3 Air Quality Monitoring Parameters, Frequency and Duration

Parameter	Frequency and Duration		
1-hour TSP	Three times every 6 days while the highest dust impact was expected		
24-hour TSP	Once every 6 days		

# 2.5 Monitoring Methodology

## 2.5.1 24-hour TSP Monitoring

- (a) The HVS was installed in the vicinity of the air sensitive receivers. The following criteria were considered in the installation of the HVS.
  - (i) A horizontal platform with appropriate support to secure the sampler against gusty wind was provided.
  - (ii) The distance between the HVS and any obstacles, such as buildings, was at least twice the height that the obstacle protrudes above the HVS.
  - (iii) A minimum of 2 meters separation from walls, parapets and penthouse for rooftop sampler.
  - (iv) A minimum of 2 meters separation from any supporting structure, measured horizontally.
  - (v) No furnace or incinerator flues nearby.
  - (vi) Airflow around the sampler was unrestricted.
  - (vii) Permission was obtained to set up the samplers and access to the monitoring stations.
  - (viii) A secured supply of electricity was obtained to operate the samplers.
  - (ix) The sampler was located more than 20 meters from any dripline.
  - (x) Any wire fence and gate, required to protect the sampler, did not obstruct the monitoring process.
  - (xi) Flow control accuracy was kept within ±2.5% deviation over 24-hour sampling period.

## (b) Preparation of Filter Papers

- (i) Glass fibre filters, G810 were labelled and sufficient filters that were clean and without pinholes were selected.
- (ii) All filters were equilibrated in the conditioning environment for 24 hours before weighing. The conditioning environment temperature was around 25 °C and not variable by more than ±3 °C; the relative humidity (RH) was < 50% and not variable by more than ±5%. A convenient working RH was 40%.
- (iii) All filter papers were prepared and analysed by ALS Technichem (HK) Pty Ltd., which is a HOKLAS accredited laboratory and has comprehensive quality assurance and quality control programmes.

## (c) Field Monitoring

- (i) The power supply was checked to ensure the HVS works properly.
- (ii) The filter holder and the area surrounding the filter were cleaned.
- (iii) The filter holder was removed by loosening the four bolts and a new filter, with stamped number upward, on a supporting screen was aligned carefully.
- (iv) The filter was properly aligned on the screen so that the gasket formed an airtight seal on the outer edges of the filter.
- (v) The swing bolts were fastened to hold the filter holder down to the frame. The pressure applied was sufficient to avoid air leakage at the edges.
- (vi) Then the shelter lid was closed and was secured with the aluminum strip.

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- (vii) The HVS was warmed-up for about 5 minutes to establish run-temperature conditions.
- (viii) A new flow rate record sheet was set into the flow recorder.
- On site temperature and atmospheric pressure readings were taken and the flow rate of the HVS was checked and adjusted at around 1.1 m<sup>3</sup>/min, and complied with the range specified in the updated EM&A Manual (i.e. 0.6-1.7 m<sup>3</sup>/min).
- (x) The programmable digital timer was set for a sampling period of 24 hrs, and the starting time, weather condition and the filter number were recorded.
- (xi) The initial elapsed time was recorded.
- (xii) At the end of sampling, on site temperature and atmospheric pressure readings were taken and the final flow rate of the HVS was checked and recorded.
- (xiii) The final elapsed time was recorded.
- (xiv) The sampled filter was removed carefully and folded in half length so that only surfaces with collected particulate matter were in contact.
- (xv) It was then placed in a clean plastic envelope and sealed.
- (xvi) All monitoring information was recorded on a standard data sheet.
- (xvii) Filters were then sent to ALS Technichem (HK) Pty Ltd. for analysis.

# (d) Maintenance and Calibration

- (i) The HVS and its accessories were maintained in good working condition, such as replacing motor brushes routinely and checking electrical wiring to ensure a continuous power supply.
- (ii) 5-point calibration of the HVS was conducted using TE-5025A Calibration Kit prior to the commencement of baseline monitoring. Bi-monthly 5-point calibration of the HVS will be carried out during impact monitoring.
- (iii) Calibration certificate of the HVSs are provided in Appendix E.

## 2.5.2 1-hour TSP Monitoring

## (a) Measuring Procedures

The measuring procedures of the 1-hour dust meter were in accordance with the Manufacturer's Instruction Manual as follows:-

- (i) Turn the power on.
- (ii) Close the air collecting opening cover.
- (iii) Push the "TIME SETTING" switch to [BG].
- (iv) Push "START/STOP" switch to perform background measurement for 6 seconds.
- (v) Turn the knob at SENSI ADJ position to insert the light scattering plate.
- (vi) Leave the equipment for 1 minute upon "SPAN CHECK" is indicated in the display.
- (vii) Push "START/STOP" switch to perform automatic sensitivity adjustment. This measurement takes 1 minute.
- (viii) Pull out the knob and return it to MEASURE position.
- (ix) Push the "TIME SETTING" switch the time set in the display to 3 hours.
- (x) Lower down the air collection opening cover.
- (xi) Push "START/STOP" switch to start measurement.

## (b) Maintenance and Calibration

- (i) The 1-hour TSP meter was calibrated at 1-year intervals against a continuous particulate TEOM Monitor, Series 1400ab. Calibration certificates of the Laser Dust Monitors are provided in Appendix E.
- (ii) 1-hour validation checking of the TSP meter against HVS is carried out yearly at the air quality monitoring locations.

## 2.6 Monitoring Schedule for the Reporting Month

2.6.1 The schedule for environmental monitoring in March 2014 is provided in Appendix F.

## 2.7 Monitoring Results

2.7.1 The baseline condition of air quality in the Project site was reviewed in October and November 2009. A baseline monitoring of air quality, in terms of 1-hour Total Suspended Particulates (TSP) and 24-hour TSP, was carried out from 20 October 2009 to 4 November 2009 for 14 days. The baseline monitoring report was submitted by ETL and approved by the ER and the IEC on 9 November 2009. Action Levels for air quality were established and are summarized in Table 2.4, Table 2.5 and Appendix D.

## 2.8 Results and Observations

2.8.1 The monitoring results for 1-hour TSP and 24-hour TSP are summarized in Table 2.4 and 2.5 respectively. Detailed impact air quality monitoring results are presented in Appendix G.

Table 2.4 Summary of 1-hour TSP Monitoring Results in the Reporting Period

	Average (μg/m³)	Range (μg/m³)	Action Level (μg/m³)	Limit Level (μg/m³)
AM1A	76.9	65.4 – 82.2	302.1	500
AM2	76.5	62.2 – 83.1	301.9	500
AM3	76.1	62.6 – 82.8	301.9	500
AM4A	76.5	61.7 – 83.2	302.3	500

Table 2.5 Summary of 24-hour TSP Monitoring Results in the Reporting Period

	Average (μg/m³)	Range (μg/m³)	Action Level (μg/m³)	Limit Level (μg/m³)
AM1A	36.4	29.3 – 41.5	176.6	260
AM2	41.4	36.7 – 44.6	178.6	260
AM3	37.3	26.8 – 55.3	193.1	260
AM4A	42.3	33.7 – 55.3	198.5	260

- 2.8.2 The major dust source in the reporting period included construction activities from Stage 1 of the Project, as well as nearby traffic emissions.
- 2.8.3 All 1-hour and 24-hour TSP results were below the Action and Limit Level at all monitoring locations in the reporting month.
- 2.8.4 The event action plan is annexed in Appendix J.
- 2.8.5 Weather information including wind speed and wind direction is annexed in Appendix H. The information was obtained from Hong Kong Observatory Sha Tin and Tai Mei Tuk Automatic Weather Station. As some of the weather data in February 2014 from the Tai Mei Tuk Automatic Weather Station were missing, the weather data from Tai Po Automatic Weather Station in March 2014 are included in Appendix H for supplementary purpose.

# 3 NOISE MONITORING

## 3.1 Monitoring Requirements

3.1.1 In accordance with the EM&A Manual, impact noise monitoring was conducted for at least once per week during the construction phase of Stage 1 of the Project. The Action and Limit level of the noise monitoring is provided in Appendix D.

## 3.2 Monitoring Equipment

3.2.1 Noise monitoring was performed using sound level meter at each designated monitoring station. The sound level meters deployed comply with the International Electrotechnical Commission Publications (IEC) 651:1979 (Type 1) and 804:1985 (Type 1) specifications. Acoustic calibrator was deployed to check the sound level meters at a known sound pressure level. Brand and model of the equipment is given in Table 3.1.

Table 3.1 Noise Monitoring Equipment

Equipment	Brand and Model
Integrated Sound Level Meter	Rion NL-31 / B&K 2238 / B&K 2250 / B&K 2250-L
Acoustic Calibrator	Rion NC-73

# 3.3 Monitoring Locations

- 3.3.1 Monitoring stations NM3, NM6 and NM7 were set up at the proposed locations in accordance with updated EM&A Manual. However, for monitoring locations: Tai Po Garden (NM1), Dynasty View (NM2), Hong Kong Teachers' Association Lee Heng Kwei Secondary School (NM4) and Grand Palisades (NM5), proposed in the updated EM&A Manual, impact noise monitoring was conducted at alternative monitoring locations, as approval of access could not be obtained from the owner's corporation of the premises or the principal of the education institutes. The monitoring station at Tai Kwong Secondary School (NM1) was relocated to 168 Shek Kwu Lung Village (NM1A) in September 2011.
- 3.3.2 Figure 2.1 shows the locations of the monitoring stations. Table 3.2 describes the details of the monitoring stations.

Table 3.2 Locations of Impact Noise Monitoring Stations

Monitoring Station	Location	Description
NM1A	168 Shek Kwu Lung Village	1m from the exterior wall of the village house
NM2	38 Ha Wun Yiu	1.2m from the ground floor free-field of the village house
NM3	Wong Shiu Chi Middle School	1m from the exterior of the roof top façade of the New Wing
NM4	Uptown Plaza	1m from the exterior of the roof top façade of Block 4
NM5	The Paragon	1m from the exterior of the roof top façade of the club house
NM6	PLK Tin Ka Ping Primary School	1.2m ground floor free-field near the entrance
NM7	Riverain Bayside	1m from the exterior of the roof façade of the switch room



# 3.4 Monitoring Parameters, Frequency and Duration

3.4.1 Table 3.3 summarizes the monitoring parameters, frequency and duration of impact noise monitoring.

Table 3.3 Noise Monitoring Parameters, Frequency and Duration

Parameter	Frequency and Duration
30-mins measurement at each monitoring station between 0700 and 1900 on normal weekdays. $L_{\rm eq},L_{\rm 10}$ and $L_{\rm 90}$ would be recorded.	At least once per week

## 3.5 Monitoring Methodology

## 3.5.1 Monitoring Procedure

- (a) Façade measurements were made at all monitoring locations, except monitoring stations NM2 and NM6.
- (b) The sound level meter was set on a tripod at a height of 1.2 m above the ground for free-field measurements at NM2 and NM6.
- (c) The battery condition was checked to ensure the correct functioning of the meter.
- (d) Parameters such as frequency weighting, the time weighting and the measurement time were set as follows:-
  - (i) frequency weighting: A
  - (ii) time weighting: Fast
  - (iii) time measurement:  $L_{eq(30\text{-minutes})}$  during non-restricted hours i.e. 07:00-1900 on normal weekdays;  $L_{eq(5\text{-minutes})}$  during restricted hours i.e. 19:00-23:00 and 23:00-07:00 of normal weekdays, whole day of Sundays and Public Holidays
- (e) Prior to and after each noise measurement, the meter was calibrated using the acoustic calibrator for 94dB(A) at 1000 Hz. If the difference in the calibration level before and after measurement was more than 1 dB(A), the measurement would be considered invalid and repeat of noise measurement would be required after re-calibration or repair of the equipment.
- (f) During the monitoring period, the  $L_{eq}$ ,  $L_{10}$  and  $L_{90}$  were recorded. In addition, site conditions and noise sources were recorded on a standard record sheet.
- (g) Noise measurement was paused during periods of high intrusive noise (e.g. dog barking, helicopter noise) if possible. Observations were recorded when intrusive noise was unavoidable.
- (h) Noise monitoring was cancelled in the presence of fog, rain, wind with a steady speed exceeding 5m/s, or wind with gusts exceeding 10m/s.

# 3.5.2 Maintenance and Calibration

- (a) The microphone head of the sound level meter was cleaned with soft cloth at regular intervals.
- (b) The meter and calibrator were sent to the supplier or HOKLAS laboratory to check and calibrate at yearly intervals.
- (c) Calibration certificates of the sound level meters and acoustic calibrators are provided in Appendix E.

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# 3.6 Monitoring Schedule for the Reporting Month

3.6.1 The schedule for environmental monitoring in March 2014 is provided in Appendix F.

## 3.7 Monitoring Results

3.7.1 The monitoring results for construction noise are summarized in Table 3.4 and the monitoring data is provided in Appendix I.

Table 3.4 Summary of Construction Noise Monitoring Results in the Reporting Period

	Average, dB(A),	Range, dB(A),	Limit Level, dB(A),		
	L <sub>eg (30 mins)</sub>	L <sub>eg (30 mins)</sub>	L <sub>eg (30 mins)</sub>		
NM1A	62.5	60.4 - 63.7	75		
NM2	67.2	66.5 – 67.7	75		
NM3	59.1	54.6 – 61.6	70/65#		
NM4	66.0	65.2 – 67.0	75		
NM5	63.7	63.1 – 64.8	75		
NM6	61.7*	59.8 – 62.9*	70#		
NM7	60.0	53.9 – 63.6	75		

<sup>\*+3</sup>dB(A) Façade correction included

- 3.7.2 No noise complaint related to 0700 1900 hours on normal weekdays was received and followed up by the Environmental Team in the reporting period. Hence, no Action Level exceedance was recorded.
- 3.7.3 No noise monitoring result exceeding the Limit Level was recorded at all monitoring stations in the reporting month.
- 3.7.4 Major noise sources during the noise monitoring included construction activities of Stage 1 of the Project and nearby traffic noise and general school activities.
- 3.7.5 The event action plan is annexed in Appendix J.

<sup>#</sup> Limit Level of 70dB(A) applies to education institutes while 65dB(A) applies during school examination period.

## 4 ENVIRONMENTAL SITE INSPECTION AND AUDIT

## 4.1 Site Inspection

- 4.1.1 Site Inspections were carried out on a weekly basis to monitor the implementation of proper environmental pollution control and mitigation measures for Stage 1 of the Project. In the reporting month, 5 site inspections were carried out on 5, 12, 19 and 26 March 2014 for Contract 1 of the Project, and 4 site inspections for Contract 2 of the Project were carried out on 6, 13, 20 and 27 March 2014.
- 4.1.2 The environmental site inspections summaries are provided in Appendix K.
- 4.1.3 Particular observations during the site inspections for Contract 1 are described below:

# Air Quality

4.1.4 No adverse observation was identified in the reporting month.

#### Noise

4.1.5 No adverse observation was identified in the reporting month.

## Water Quality

4.1.6 The Contractor was reminded to clear the oil stain on the ground.

## Chemical and Waste Management

4.1.7 No adverse observation was identified in the reporting month.

# Landscape and Visual Impact

4.1.8 No adverse observation was identified in the reporting month.

# Miscellaneous

- 4.1.9 No adverse observation was identified in the reporting month.
- 4.1.10 Particular observations and reminder during the site inspections for Contract 2 are described below:

## Air Quality

4.1.11 No adverse observation was identified in the reporting month.

## Noise

4.1.12 No adverse observation was identified in the reporting month.

## Water Quality

4.1.13 The Contractor was reminded to clear the deposited soil at road edges of Bridge 18 next to the works areas regularly.

## Chemical and Waste Management

4.1.14 No adverse observation was identified in the reporting month.

# Landscape and Visual Impact

4.1.15 The Contractor was reminded to clear the construction materials next to the trees or fence off the trees for protection.

#### Miscellaneous

4.1.16 No adverse observation was identified in the reporting month.

## 4.2 Advice on the Solid and Liquid Waste Management Status

- 4.2.1 The Contract 1 Contractor (CSHK) and the Contract 2 Contractor (GCL) are registered as chemical waste producers for Stage 1 of the Project. C&D material sorting was carried out on site. Sufficient numbers of receptacles were available for general refuse collection.
- 4.2.2 As advised by the Contract 1 Contractor (CSHK), 355m³ of inert C&D materials was disposed of to the public fill at Tuen Mun 38 (of which 21m³ was broken concrete), while 137m³ of general refuse was disposed of at the NENT landfill. 238kg of paper/cardboard packaging, 4,493kg of plastics and 47,580kg of metals were collected by recycling contractors in the reporting month. 427m³ and 233m³ of inert C&D materials were reused on site and reused in NENT for backfilling purpose respectively. 0kg of chemical waste was collected by the licensed contractor in the reporting period.
- 4.2.3 As advised by the Contract 2 Contractor (GCL), 385m³ of inert C&D materials was disposed of to Tuen Mun 38 and 370m³ of general refuse was disposed of to the NENT landfill in the reporting period. No paper/cardboard packaging, plastics or metals was collected by the recycling contractors in the reporting month. 0m³ and 1,250m³ of inert C&D materials were reused on site and reused in other projects respectively Besides, no chemical waste was collected by the licensed contractor in the reporting period.
- 4.2.4 The Contract 1 Contractor (CSHK) and the Contract 2 Contractor (GCL) are advised to maintain on site waste sorting and recording system and maximize reuse / recycle of C&D wastes.

#### 4.3 Environmental Licenses and Permits

4.3.1 The environmental licenses and permits for Stage 1 of the Project and valid in the reporting month is summarized in Table 4.1.

Table 4.1 Summary of Environmental Licensing and Permit Status

Statutory Reference	License/ Permit	License or	License or Valid Period Permit No.		License/ Permit	Remarks	
Reference		Permit No.	From	То	Holder		
EIAO	Environmental Permit	EP- 324/2008/A	31/01/2012	N/A	HyD	Tolo Highway/Fanling Highway between Island House Interchange and Ma Wo	
	Discharge License (Office)	WT00005096 -2009	03/12/2009	31/12/2014	CSHK	Discharge at Site Office	
WDOO	Discharge License (Site)	WT00005445 -2009	15/12/2009	31/12/2014	CSHK	Discharge of Construction Runoff	
WPCO	Discharge License (Office)	WT00006782 -2010	25/06/2010	30/06/2015	GCL	Discharge at Site Office	
	Discharge License (Site)	WT00007162 -2010	09/08/2010	31/07/2015	GCL	Discharge of Construction Runoff	
WDO	Chemical Waste Producer Registration	5213-727- C3249-46	25/09/2009	N/A	СЅНК	Chemical waste produced in Contract HY/2008/09	
		5213-722- G2347-18	18/05/2010	N/A	GCL	Chemical waste produced in Contract HY/2009/08	
WDO	Billing Account for Disposal of Construction Waste	7009328	08/09/2009	N/A	CSHK	Waste disposal in Contract HY/2008/09	
WBO		7010320	02/03/2010	N/A	GCL	Waste disposal in Contract HY/2009/08	
	Construction Noise Permit	GW- RN0561-13 GW- RN0789-13		02/10/2013	01/04/2014	CSHK	Modification of Sign Gantry_G11, G13, G70, G73, G74, G75 & G76
NCO				02/01/2014	31/03/2014	CSHK	Construction works next to MTRC's tracks protection zone
		GW- RN0812-13	03/01/2014	25/03/2014	CSHK	Sign Gantry at Tolo Highway between Yuen Chau Tsai and Ma Wo	
		GW- RN0031-14	23/01/2014	01/03/2014	CSHK	Road Resurfacing on Tolo Highway between Ma Wo and Tai Po Road (Fanling Bound)	

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Statutory			Valid Period		License/ Permit	Remarks
Reference	ererence Permit	Permit No.	From	То	Holder	
		GW- RN0039-14	27/01/2014	26/07/2014	CSHK	Construction wroks at Island House Interchange
		GW- RN0058-14	29/01/2014	01/03/2014	CSHK	Modification of Sign Gantries_G13-17, 66-68 & 70
		GW- RN0064-14	29/01/2014	01/03/2014	CSHK	Installation of Noise Barrier on Kwong Fuk West Viaduct
		GW- RN0163-14	13/03/2014	30/04/2014	CSHK	Slip Road from Tai Po Road - Yuen Chau Tsai to Tolo Highway near Wang Fuk Court
		GW- RN0170-14	12/03/2014	30/05/2014	CSHK	Road Re-pavement at Tolo Highway Between Yuen Chau Tsai and Ma Wo
		GW- RN0172-14	28/03/2014	17/06/2014	CSHK	Laying of Crossroad Ducts near Ma Lui Shui
		GW- RN0185-14	16/03/2014	01/06/2014	CSHK	Road pavement for Slip Road C
		GW- RN0187-14	25/03/2014	31/05/2014	CSHK	Modification of Sign Gantry_G13, 16, 66, & 70
		GW- RN0188-14	18/03/2014	30/05/2014	СЅНК	Noise Barrier Installation Works on Tolo Highway (Fanling Bound) (Weekday)
		GW- RN0193-14	21/03/2014	31/05/2014	CSHK	Installation of Noise Barrier on Kwong Fuk West Viaduct
		GW- RN0197-14	30/03/2014	01/06/2014	CSHK	Road Paving Works at Slip Road L
		GW- RN0212-14	28/03/2014	31/05/2014	CSHK	Paving and Road Marking for Slip Road A
		GW- RN0695-13	17/11/2013	12/05/2014	GCL	General work and asphalt paving at Tolo Highway near Shek Kwu Lung and Ma Wo (CH18.1 - 19.2)
		GW- RN0786-13	19/12/2013	11/06/2014	GCL	Renewal of GW- RN0484-13 Tolo Highway and Fanling Highway near Tai Po Tai Wo Road, Lam Kam Interchange & Tai Wo Service Road West

Statutory	Statutory License/ Reference Permit			Period	License/ Permit	Remarks
Reference		Permit No.	From	То	Holder	
		GW- RN0022-14	17/01/2014	29/03/2014	GCL	Installation of Sign Gantry G26 at Tolo Highway (Fanling Bound) CH19.55 to CH19.65B
		GW- RN0037-14	28/01/2014	12/04/2014	GCL	Erection of Sign Gantry G29 at Lam Kam Flyover (Fanling Bound) from CH21.0 to CH21.2B
		GW- RN0080-14	07/02/2014	02/08/2014	GCL	(Renewal of GW- RN0530-13) General Works at a section of Tolo Highway near Tai Po Tau Raw Water Pumping Station
		GW- RN0088-14	09/02/2014	27/04/2014	GCL	2 Lane Shifting Works and Modification of Road Marking at Tolo Highway (shatin bound) CH19.8 - 20.4B
		GW- RN0089-14	16/02/2014	20/04/2014	GCL	Lane Shifting Works and Modification of Road Marking at Tolo Highwa South Bound (CH19.2 to 18.6A)
		GW- RN0091-14	16/02/2014	27/04/2014	GCL	Lane Shifting Works and Modification of Road Marking (Sheung Shui Bound) CH20.8 to CH21.3B near Tai Po Tai Wo Road
		GW- RN0092-14	18/02/2014	26/04/2014	GCL	Erection of Sign gantry at a section of Tolo Highway (Fanling Bound) CH18.9 to CH19.1B
		GW- RN0095-14	16/02/2014	27/04/2014	GCL	Lane shifting and modification of road marking at Tolo Highway Fanling Bound (CH18.9 to 19.7B)
		GW- RN0112-14	05/03/2014	26/04/2014	GCL	Installation of sign gantry G56 at Tolo Highway (Shatin Bound) near Lam Kam Interchange from CH21.3 to



Statutory Reference	License/ Permit	License or Permit No.	Valid I	Period	License/ Permit	Remarks
Reference	i <del>C</del> illiit	i emili ido.	From	То	Holder	
						CH21.1A
		GW- RN0115-14	28/02/2014	06/05/2014	GCL	Renewal of GW- RN0758-13 Maintenance works at Tolo Highway near Tai Po Tai Wo Road, Lam Kam Interchange & Tai Wo Service Road West
		GW- RN0116-14	02/03/2014	27/04/2014	GCL	Lane Shifting and modification of road marking at Tolo Higwhay (Shatin Bound) CH21.4 to 20.1A near Lam Kam Flyover
		GW- RN0119-14	02/03/2014	27/04/2014	GCL	Lane Shifting and modification of road marking at Tolo Higwhay (Shatin Bound) CH21.4 to 20.1A near Lam Kam Flyover
		GW- RN0129-14	05/03/2014	17/03/2014	GCL	Renewal of GW- RN0785-13 Stitching construction at a section of Tolo Highway (Shatin Bound) CH19.6 ti CH17.95A
		GW- RN0145-14	09/03/2014	27/04/2014	GCL	Lane shifting works and modification of road marking at Tolo Highway (Shatin Bound) CH19.0 to 18.0 near Ma Wo

# 4.4 Implementation Status of Environmental Mitigation Measures

- 4.4.1 In response to the site audit findings, the Contractors carried out corrective actions.
- 4.4.2 A summary of the Implementation Schedule of Environmental Mitigation Measures (EMIS) is presented in Appendix C. Most of the necessary mitigation measures were implemented properly.



# 4.5 Summary of Exceedances of the Environmental Quality Performance Limit

- 4.5.1 All 1-hour and 24-hour TSP monitoring results complied with the Action / Limit Levels in the reporting period.
- 4.5.2 For construction noise, no Action and Limit Level exceedance was recorded at all monitoring stations in the reporting period.

## 4.6 Summary of Complaints, Notification of Summons and Successful Prosecutions

- 4.6.1 The Environmental Complaint Handling Procedure is annexed in Figure 4.1.
- 4.6.2 One (1) noise-related complaint was received on 27 February 2014 and followed up by the Environmental Team in February and March 2014. The investigation result is reported as follows.
- 4.6.3 EPD referred a follow-up complaint from a resident of Ma Wo on 27 February 2014. The complainant said that the Contractor caused serious noise nuisance at non-restricted hours.
- 4.6.4 According to the information provided by the Contractor (Gammon Construction Limited) and confirmed by the Engineer of the Project, the construction activities on 27 February 2014 included concreting of U-channel at Wall 39, slope reinstatement at Wall 40 and pedestrian path reconstruction at TP9 Upstream.
- 4.6.5 Mitigation measures have been implemented to minimize the noise emission from the Project area. The planned work each day was written on a board to notify Ma Wo residents beforehand. The Contractor was also reminded to shorten the operation time of the machines to minimize the impacts caused to the public.
- 4.6.6 With reference to the noise monitoring results near the day of the complaint at the nearest EM&A monitoring station (NM2 Ha Wun Yiu), the noise levels (Leq, 30mins) on 17 February 2014 and 28 February 2014 were 63.2 dB(A) and 67.9 dB(A) respectively, which were below the limit level of 75dB(A).
- 4.6.7 Upon the receipt of the complaint, compacting work for slope reinstatement will only be scheduled at either 10-11am or 4-5pm every day with 1 hour verbal advanced notification to Ma Wo residents, so as to mitigate the noise produced by the compaction roller.
- 4.6.8 The complaint is considered project-related. The Contractor is advised to implement the mitigation measures as stated in "Recommended Mitigation Measures".
- 4.6.9 Recommended Mitigation Measures:
  - 1) Better scheduling of works to minimize noise nuisance;
  - 2) Instructing the site workers to keep the noise in minimum during construction; and
  - 3) Fostering better public relations with the sensitive receivers nearby.



- 4.6.10 One (1) dust-related complaint was received on 25 March 2014 and followed up by the Environmental Team in March 2014. The investigation result is reported in Section 4.6.
- 4.6.11 EPD referred a follow-up complaint from a resident of Ma Wo Tsuen on 25 March 2014.
- 4.6.12 The complaint is about the dust emission at the construction site of the Tolo Highway widening construction works at Ma Wo. The complainant complained that there was insufficient water spraying, so dust was generated and serious nuisance was caused. He expressed that he has complained for three years and no improvement has been observed.
- 4.6.13 As informed by the Contractor (Gammon Construction Ltd.) and confirmed by the Engineer of the Project, backfilling works were carried out at area W46 on 25 March 2014.
- 4.6.14 The following mitigation measures have been implemented by the Contractor:
  - 1) Full-time manual water spraying on haul roads and exposed slopes;
  - 2) Covering non-working slopes by tarpaulin sheets at a sight distance from the complainant before the complete construction of the permanent footpath;
  - 3) The set up of tarpaulin dust screen of appropriately 1.8 m in height on the top of W45-47 which is along W44 and NB31; and
  - 4) Ensuring the mechanical covering is not opened in case any dump truck passes through W45-47 until they reach the unloading point.
- 4.6.15 The Contractor was reminded to carry out mitigation measures as observed previously when similar complaints were lodged:
- 4.6.16 Keeping the loading and unloading height of general fill materials to a minimum;
- 4.6.17 Carrying out wheel washing at the site entrance; and
- 4.6.18 Spraying water by sprinklers on haul roads and exposed slopes, and manually to the leaves of the trees to minimize the emitted dust from dropping to the complainant's house and Ma Wo Tsuen through the trees.
- 4.6.19 With reference to the monitoring results recorded on the day closest to the day of complaint, i.e. 24 March 2014, at the nearest EM&A monitoring station (AM1A- Sheung Wun Yiu), the 24-hour TSP level was 37.5 ug/m3, which was below the action level of 176.6 ug/m3. Besides, the average 1-hour TSP level was 81.2 ug/m3, which was also below the action level of 302.3 ug/m3.
- 4.6.20 Nevertheless, the complaint was considered project-related.
- 4.6.21 Therefore, the Contractor is reminded to enhance the dust mitigation measures as stated in the "Recommended Mitigation Measures".
- 4.6.22 Recommended Mitigation Measures:
  - Confirm the implementation of dust mitigation measures (erection of tarpaulin dust screens along the work areas W38-48, spraying water manually by workers and sprinkler systems for the haul roads and exposed slopes at work areas W38-48, covering non-working slopes by tarpaulin sheets within the work areas, covering dusty materials carried in dump trucks within work areas W38-48) during all construction and dusty activities to minimize fugitive dust generation;
  - 2) Increase the frequency of watering in the work areas (specially at the entrance of the construction site, and on site haul roads and exposed slopes / areas in the work areas W38-48), so that site haul roads and exposed surfaces are in a wet condition;
  - 3) Cover the backfilling surface after work;

- 4) Keep soil surfaces wet before loading and unloading activities;
- 5) Maintain the frequency of the environmental supervision (by the Contractor) to regularly review the adequacy and effectiveness of dust suppression measures to suit the construction progress;
- 6) Inform the complainant before dusty activities (e.g. rock breaking, excavation, grouting and backfilling) are carried out; and
- 7) Foster better public relations with the sensitive receivers and complainants nearby.
- 4.6.23 No new notification of summons and prosecution was received in the reporting period.
- 4.6.24 Statistics on complaints, notifications of summons and successful prosecutions are summarized in Appendix L.

## 5 FUTURE KEY ISSUES

# 5.1 Construction Programme for the Coming Month

- 5.1.1 The major construction works for Contract 1 in April 2014 will be:-
  - Temporary shoring, sheetpiling and excavation
  - Retaining wall construction
  - Noise barrier footing construction
  - Noise barrier installation
  - Asphalt laying
  - Installation of drainage pipes
- 5.1.2 The major construction works for Contract 2 in April 2014 will be:-
  - Condition survey of existing structures
  - Setting up the temporary traffic arrangement
  - Excavation of trial trenches to locate existing utilities
  - Spread footing of Noise Barrier / Semi Noise Enclosure
  - Slope works, including installation of soil nails
  - Noise barrier construction
  - Modification of existing bridge structures
  - Entrusted watermains works
  - Sewer Installation
  - Road and drainage works
  - Landscaping works

## 5.2 Key Issues for the Coming Month

- 5.2.1 Key issues to be considered in April 2014:-
  - Properly store and label oils and chemicals on site;
  - Chemical, chemical waste and waste management;
  - Collection of construction waste should be carried out regularly;
  - Site runoff should be properly collected and treated prior to discharge;
  - Properly maintain all drainage facilities and wheel washing facilities on site;
  - Exposed slopes should be covered up properly if no temporary work will be conducted;
  - Suppress dust generated from excavation, breaking and drilling activities, haul road traffic and grout mixing process:
  - Quieter powered mechanical equipment should be used;
  - Closely check and replace the sound insulation materials wrapped at the concrete breaker tip regularly;
  - Better scheduling of construction works to minimize noise nuisance; and
  - Tree protective measures for all retained trees should be well maintained.

# 5.3 Monitoring Schedule for the Coming Month

5.3.1 The tentative schedule for environmental monitoring in April 2014 is provided in Appendix F.



## 6 CONCLUSIONS AND RECOMMENDATIONS

#### 6.1 Conclusions

- 6.1.1 The construction phase and EM&A programme of Stage 1 of the project commenced on 23 November 2009.
- 6.1.2 1-hour TSP, 24-hour TSP and noise monitoring were carried out in the reporting period.
- 6.1.3 All 1-hour and 24-hour TSP monitoring results complied with the Action / Limit Levels in the reporting period.
- 6.1.4 No Action and Limit Level exceedance for construction noise was recorded at all monitoring stations in the reporting month.
- 6.1.5 Environmental site inspection was carried out 8 times in March 2014. Recommendations on remedial actions were given to the Contractors for the deficiencies identified during the site audits.
- 6.1.6 One (1) noise-related complaint was received on 27 February 2014 and followed up by the Environmental Team in February and March 2014. The investigation result is reported in Section 4.6.
- 6.1.7 One (1) dust-related complaint was received on 25 March 2014 and followed up by the Environmental Team in March 2014. The investigation result is reported in Section 4.6.
- 6.1.8 No new notification of summons and prosecution was received in the reporting period.

#### 6.2 Recommendations

6.2.1 According to the environmental site inspections performed in the reporting month, the following recommendations were provided:-

#### Air Quality Impact

- The soil stockpiles should be properly covered.
- The grouting station should be properly sheltered as one of the dust control measures

## Construction Noise Impact

- Properly erect the temporary noise barriers in accordance with the Environmental Permit requirement.
- Noisy operations should be oriented to a direction away from sensitive receivers as far as possible.
- Sound insulation materials shall be wrapped at the breaker tip for concrete breaking works.

# Water Quality Impact

- Preventive measures should be implemented to avoid the spread of mud trails on the public road.
- Silty effluent should be treated/desilted before discharged. Untreated effluent should be prevented from entering public drain channel.
- Proper drainage channels/bunds should be provided at the site boundaries to collect/intercept the surface run-off from works areas.
- Stagnant water accumulated within works area should be removed.

# Chemical and Waste Management

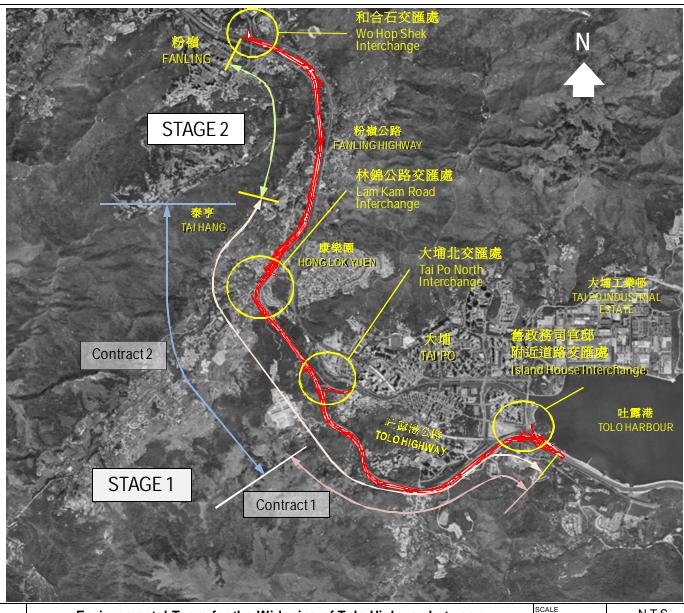
- C&D materials and wastes, general refuse should be sorted properly and removed timely.
- All chemical containers and oil drums should be properly stored.
- All plants and vehicles on site should be properly maintained to prevent oil leakage.
- All drain holes of the drip trays utilized within works areas should be properly plugged to avoid any oil leakage.
- Oil stains on soil surface and empty chemical containers should be cleared and disposed of as chemical waste.
- Drip tray should be provided to prevent oil leakage.
- Only the recycling materials should be dumped into the appropriate recycling bins.

# Landscape and Visual Impact

• All retained trees should be properly fenced off at the works area.



**FIGURES** 



**AECOM** 

Environmental Team for the Widening of Tolo Highway between Island House Interchange and Tai Hang - Investigation

General Project Layout Plan

SCALE

N.T.S.

DATE

Dec-09

CHECK

ENFL

DRAWN

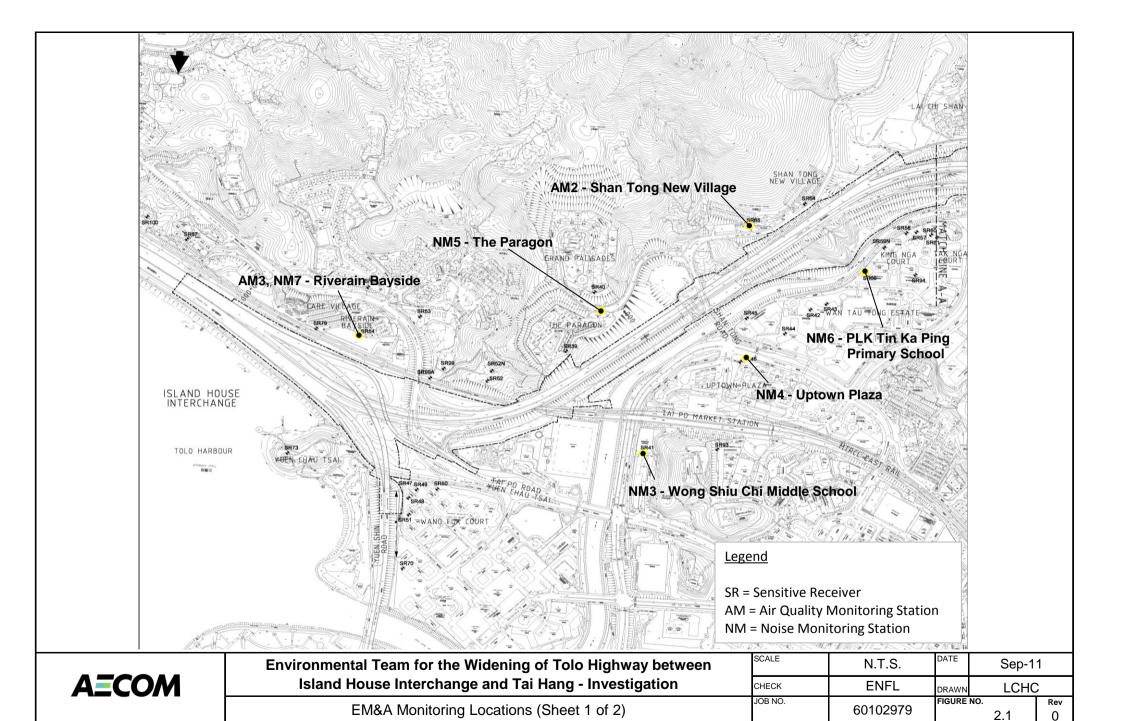
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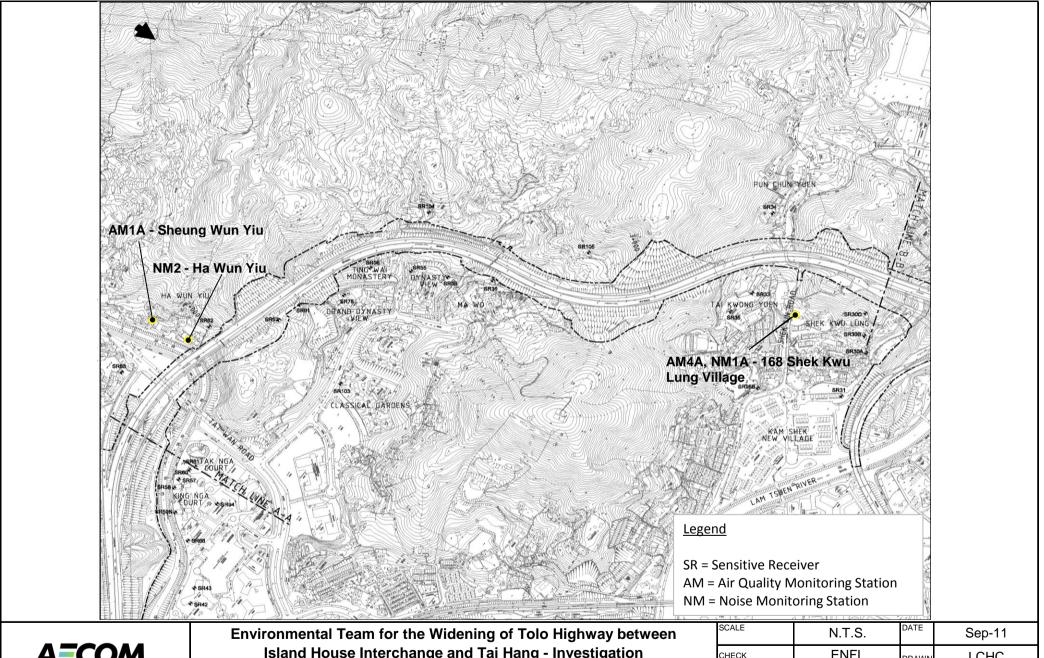
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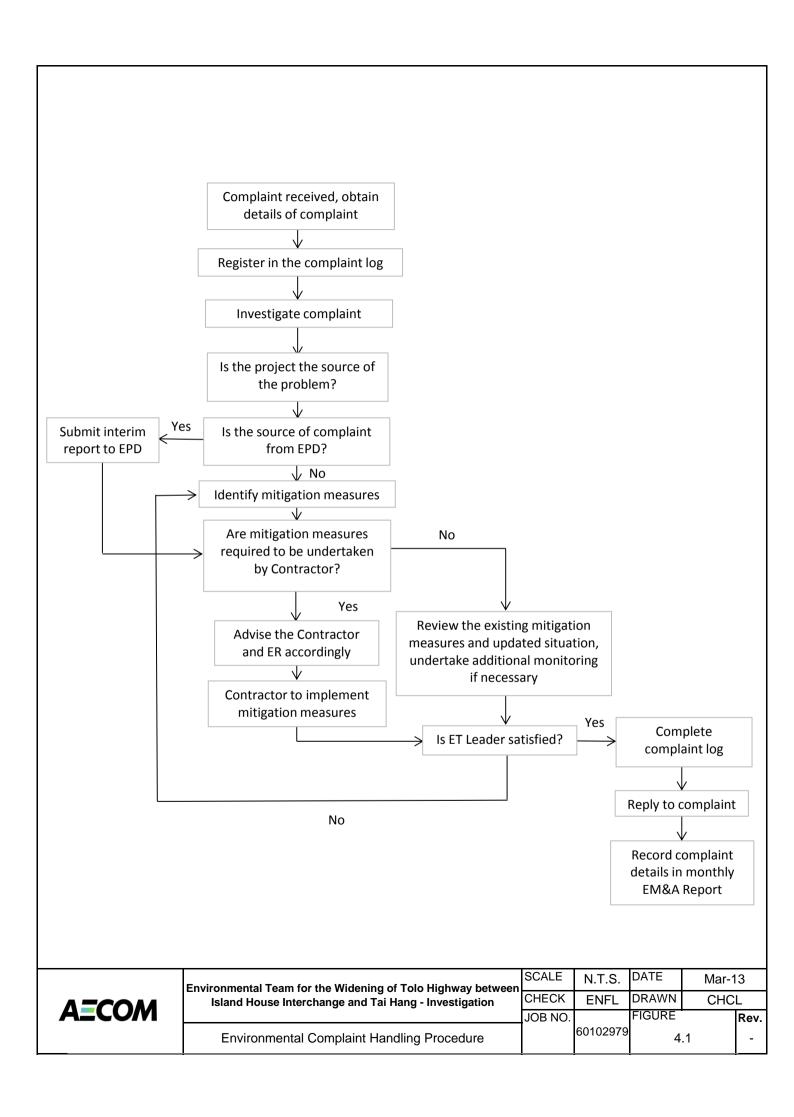
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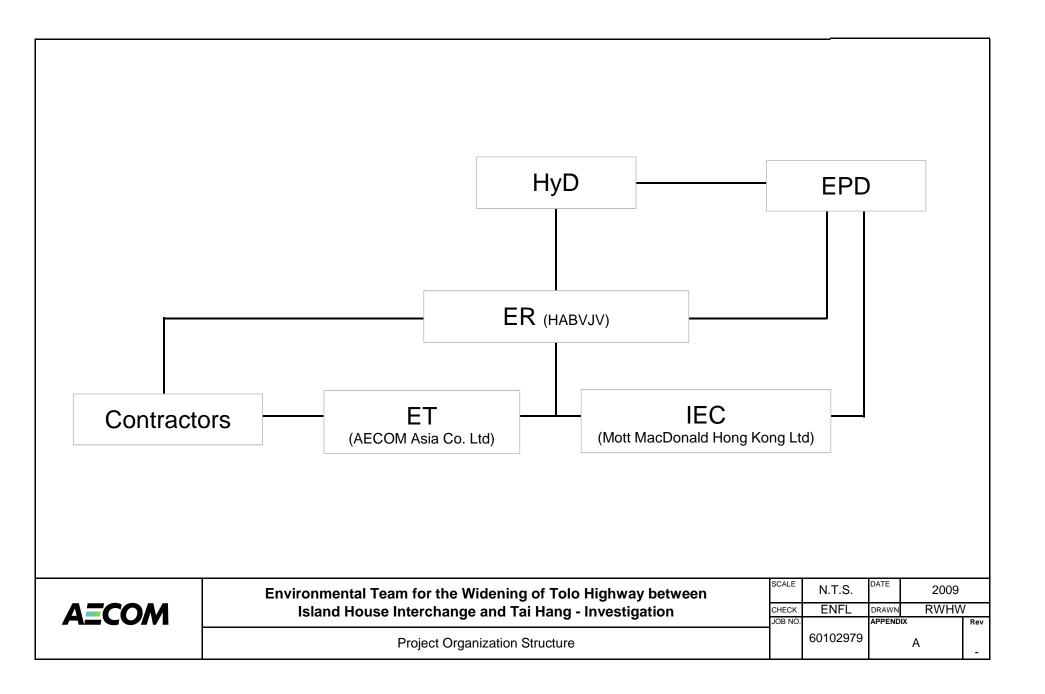


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Island House Interchange and Tai Hang - Investigation **ENFL** CHECK **LCHC** DRAWN JOB NO. FIGURE NO. Rev 60102979 EM&A Monitoring Locations (Sheet 2 of 2) 2.1 0



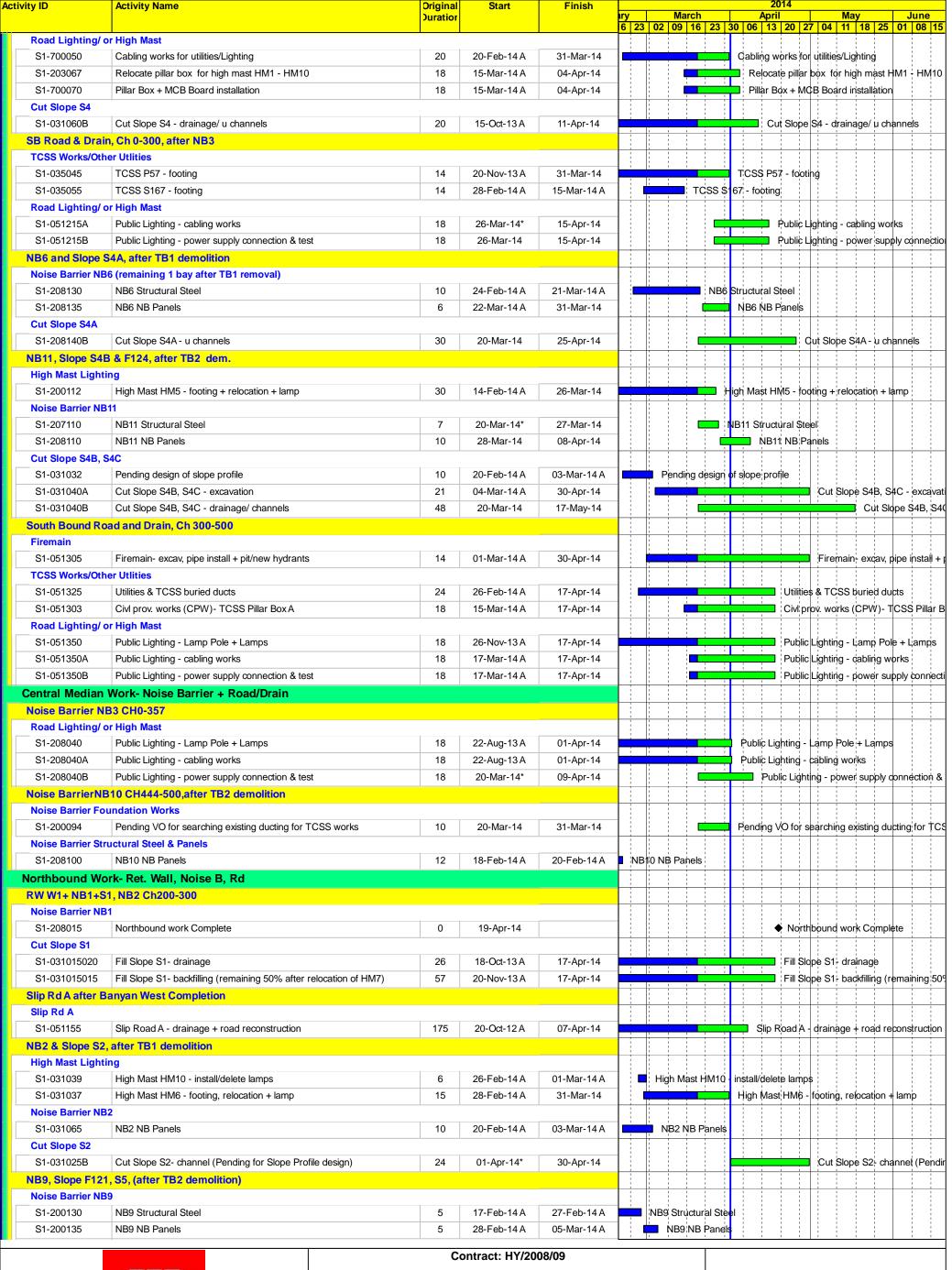
# APPENDIX A PROJECT ORGANIZATION STRUCTURE



# APPENDIX B CONSTRUCTION PROGRAMMES

KD-300200 KD-300600		Original Ouration	Start	Finish	iry	Mar				2014 April			May		June
Section Completic Section Completic Key Date KD-300900 KD-300200 KD-300600					6 23 0	2 09	6 2	3 3	0 06	13 20	0 27	04	11 18	25 0°	1 08
Section Completion Key Date KD-300900 KD-300200 KD-300600							1	- 1						1	-
Key Date  KD-300900  KD-300200  KD-300600							-  -	- 1	-	<u> </u>	$\stackrel{\cdot}{+}$			<u> </u>	-
KD-300900 KD-300200 KD-300600	ni Date				- 1 1	+ +		-	-	1 1		-		1	
KD-300600	KD9 Section 9 Area SA1, 3 to 9A Road Maintenance (1580)	0		23-Mar-14*	-		•	; KD	; Sect	tion 9 Are	ea SA	1, 3 to	o 9A Roa	: ad Maint	; tehanc
	KD2 Section 2 Areas SA8,SA9 + SA9A Work (1052d)	0		30-Apr-14*	1						- 1	1 1	Section	i 1	- 1
KD-300100	KD6 Section 6 Remainder Landscape Softwork (1355d)	0		26-May-14*	1		!				1		. !	♦ KD6	S \$ection
	KD1 Section 1 Area SA1 Work, Except LS + EW (1311d)	0		11-Jun-14*	1								. !		•
KD-300500	KD5 Section 5 Area SA1 Landscape Softwork (1337d)	0		16-Jun-14*	1		1	- }			1				
OFT LANDSC	APE IN SA1: SECT. 5 WORKS			'									. !		
Landscaping Wo	rks								-	+ +					
Landscape Works							-	-	-	1 1	-	+ +			-
					1 1	1 1	1	1	-	1 1		+ +			
S5-212800	Areas SA1 Irrigation + Landscape Soft Works	30	18-May-14	16-Jun-14	1								; 📜	-	+
EMAINDER O	F SOFT LANDSCAPE: SECT. 6 WORKS														
andscaping Wo							-	-	-	+ +		+ + 1	_		-
Landscape Works									-	+ +		+			
					1 1		1	- 1	-	+ +	1	+ +			-
S6-212800	Remainder Irrigation + Landscape Soft Works	30	27-Apr-14	26-May-14	1			-						Ren	nainde
STABLISHME	NT WORKS AT SA1: SECT. 7 WORKS					1 1	1 1 1	-	-	1 1		1 1		!	-
stablishment Wo					1 1			- 1	+	1 1		+ +		1	-
	stablishment Works						-	+	+	+ +	+	+ +			+
and Coupe und La					1 1			-	-	1 1	+	+			
S7-211800	Area SA1 Establishment Works	365	17-Jun-14	16-Jun-15	1		1						. !		1
	F ESTABLISHMENT WORKS: SECT. 8 WORKS								+	1 1		+ +			-
stablishment Wo					1 1	1 1		- 1	-	1 1		1 1		1	-
	stablishment Works					1 1	1	- 1	-	1 1		+ +		1	-
Lanuscape and Es	Stabilistifferit Works				1 1			- 1	<u> </u>	1 1	+	<u>i i</u>		<u> </u>	-
S8-214800	Remainder - Establishment Works	365	27-May-14	26-May-15	-										į
	ITENANCE: SECT. 9 WORKS	303	27-May-14	20 Way 13				- 1	-	+ +		+ +			1
							-	i	÷	+ +		+			-
load Maintenanc							-					-		1	
Routine Maintenai	nce of Road Network				4 ! !	1 1	-	-				1		-	-
00 100000	Dood Maintenance of Dood National	4.404	00 Fab 40 A	00 Man 44*	_ <u>                                     </u>										
	Road Maintenance of Road Network	1401	22-Feb-10 A	23-Mar-14*		1 1	<del>-</del>	Ros	id įviai	intenance	e or R	oad r	vetwork	:	-
	500: SECT. 1 WORKS					1 1	- !	- ;							-
	Kwong Fuk West					1 1				1 1	1				
	Kwong Fuk West Viaduct							i							
Noise Barrier Foun															
	Pier Head (incl. all cast-in item)-PC5A(Tradition formwork)	9	21-Oct-13 A	22-Feb-14 A	Pier I	Head (in	cl. all	cast	in iter	m)-PC5A	1	1 1	1 1	1	
	KFWV structural steel, (bay 1-5)	18	08-Apr-14	30-Apr-14					-	1 1		KFW	/V struct	i 1	1.
	KFWV structural steel, (bay 5-7)	26	08-Apr-14	10-May-14	]				-	1 1		_	: :	structu	- 1
	KFWV Panel Installation, (bay 1-5)	14	01-May-14	17-May-14	1		-					1	KI	FWV Pa	anel Ir
	KFWV Panel Installation, (bay 5-7)	26	12-May-14	11-Jun-14										1	
	Completion of NB Kwong Fuk West Viaduct	0		11-Jun-14			- 1			-					•
TCSS Works/Other					1				i					<u>i</u> 1.	
	Civl prov. works (CPW)- TCSS Pillar Box B	18	28-Mar-14	17-Apr-14	_		-	7	-	C	ivl pro	v. wo	rks (CPV	W)- TCS	SS Pil
CSS Works						1 1		- ;	-	1 1					-
New Sign Gantry (						1 1	1	- 1				- 1			-
G18 (VO205 Slip Ro															
	VO341 - Reconstruct existing drain pipe at G18 LHS footing	20	27-Dec-13 A	15-Mar-14 A	- : :		1	- 1		nstruct ex	1	1 1		1	1
	Design information by Engineer for existing NB modification availabe	0	20-Mar-14		1		◆ D	esign	- 1	rmation b	1 1	- 1	: :	ting NB	modif
	Existing NB modification	14	20-Mar-14	04-Apr-14		1 1	-		<u>■</u> ; Ex	xisting NE	B mod	litcati	on	!	-
Existing Sign Gan					<u> </u>	1 1	-	- 1	<u> </u>			1			-
	try Modification without drawing)	0	05 Man 44 A	40 May 44 A	4       ,								/		
GS2660	Speed Enforcement Cameria installation (footing)	2	05-Mar-14 A	10-Mar-14 A	-        <b>'</b>	- ; ;	i	- 1	- 1	nt Came	1	- 1	i `i	, 0,	
	Carry out Sign Gantry modification (LCS, TCSS etc)-New Gantry	14	06-Mar-14 A	07-Mar-14 A	-	- 1 1		Ť	- 1	ry modific	1 1	1 1	s, ress	etc)-Ne	w Ga
	VSLS and VDS installation (footing)	2	11-Mar-14 A	12-Mar-14 A		U V	SLS a	ind \	/DS ir	nstallation	n (too	ting)			-
GS2670	& Handover				4	1 1	1	- 1	<u> </u>		$\dashv$				
GS2670	T&C - Lighting	00	00 4:- 11	45.44	-		1								41
GS2670 TCSS E&M Works	100 11000000	20	22-Apr-14	15-May-14			1							¢ - Ligh	
GS2670  TCSS E&M Works  S1-700075		20	22-Apr-14	15-May-14	-		-				H			Ç - pow	
GS2670  TCSS E&M Works  S1-700075  S1-700080	T&C - power supply system to TCSS	_		23-May-14	<u> </u>	1 !	1	- ;	-	1 1		+ !		Hand	over t
GS2670  TCSS E&M Works  S1-700075  S1-700080  S1-700090	T&C - power supply system to TCSS Handover to TCSS Contractor	0			1 11		i	- 1	i	i i					i
GS2670  TCSS E&M Works  S1-700075  S1-700080  S1-700090  Southbound Wor	T&C - power supply system to TCSS  Handover to TCSS Contractor  rk- Ret. Wall, Noise B, Rd	0					- :	- ;		+ +	+	+ 1			+
GS2670  TCSS E&M Works  S1-700075  S1-700080  S1-700090  Southbound Wor  NB6, and Slope S4	T&C - power supply system to TCSS  Handover to TCSS Contractor  rk- Ret. Wall, Noise B, Rd	0					1				$\perp$				1
GS2670 TCSS E&M Works S1-700075 S1-700080 S1-700090 Southbound Wor NB6, and Slope S4 High Mast Lighting	T&C - power supply system to TCSS  Handover to TCSS Contractor  rk- Ret. Wall, Noise B, Rd  4		20 M	20.4	- ! !			1		lest his	401-1				NAC -
GS2670 TCSS E&M Works S1-700075 S1-700080 S1-700090 Southbound Wor NB6, and Slope S4 High Mast Lighting S1-203068	T&C - power supply system to TCSS  Handover to TCSS Contractor  rk- Ret. Wall, Noise B, Rd  4  g  Install/delete lamps at high mast HM2 & HM3	18	20-Mar-14	09-Apr-14	- ! !					Install/d	delete	lamp	s at high	mast H	M2 &
GS2670 TCSS E&M Works S1-700075 S1-700080 S1-700090 Southbound Wor NB6, and Slope S4 High Mast Lighting S1-203068 Noise Barrier NB6	T&C - power supply system to TCSS  Handover to TCSS Contractor  Tk- Ret. Wall, Noise B, Rd  4  g  Install/delete lamps at high mast HM2 & HM3	18			- ! !						delete	lamp	s at high	mast H	M2 &
GS2670 TCSS E&M Works S1-700075 S1-700080 S1-700090 Southbound Wor NB6, and Slope S4 High Mast Lighting S1-203068 Noise Barrier NB6 S1-207055	T&C - power supply system to TCSS  Handover to TCSS Contractor  rk- Ret. Wall, Noise B, Rd  4  g  Install/delete lamps at high mast HM2 & HM3  NB production period	18	10-Apr-13 A	15-Mar-14 A		1 1				period		lamp	s at high	mast H	M2 &
GS2670  TCSS E&M Works  S1-700075  S1-700080  S1-700090  Southbound Wor  NB6, and Slope S4  High Mast Lighting  S1-203068  Noise Barrier NB6  S1-207055  S1-207060	T&C - power supply system to TCSS  Handover to TCSS Contractor  rk- Ret. Wall, Noise B, Rd  4  g  Install/delete lamps at high mast HM2 & HM3  NB production period  NB6 Structural Steel	18 10 6	10-Apr-13 A 17-Mar-14 A	15-Mar-14 A 21-Mar-14	-	1 1			Struct	period tural Stee	el	lamp	s at high	mast H	M2 &
GS2670  TCSS E&M Works  S1-700075  S1-700080  S1-700090  Southbound Wor  NB6, and Slope S4  High Mast Lighting  S1-203068  Noise Barrier NB6  S1-207055  S1-207060	T&C - power supply system to TCSS  Handover to TCSS Contractor  rk- Ret. Wall, Noise B, Rd  4  g  Install/delete lamps at high mast HM2 & HM3  NB production period	18	10-Apr-13 A	15-Mar-14 A		1 1			Struct	period	el	lamp	s at high	mast H	M2 &
GS2670  TCSS E&M Works  S1-700075  S1-700080  S1-700090  Southbound Wor  NB6, and Slope S4  High Mast Lighting  S1-203068  Noise Barrier NB6  S1-207055  S1-207060	T&C - power supply system to TCSS  Handover to TCSS Contractor  rk- Ret. Wall, Noise B, Rd  4  g  Install/delete lamps at high mast HM2 & HM3  NB production period  NB6 Structural Steel	18 10 6 8	10-Apr-13 A 17-Mar-14 A	15-Mar-14 A 21-Mar-14 31-Mar-14		1 1			Struct	period tural Stee	el	lamp	s at high	mast H	M2 &
GS2670  TCSS E&M Works  S1-700075  S1-700080  S1-700090  Southbound Wor  NB6, and Slope S4  High Mast Lighting  S1-203068  Noise Barrier NB6  S1-207055  S1-207060	T&C - power supply system to TCSS  Handover to TCSS Contractor  rk- Ret. Wall, Noise B, Rd  4  g Install/delete lamps at high mast HM2 & HM3  NB production period  NB6 Structural Steel  NB6 NB Panels	18 10 6 8 Ccc	10-Apr-13 A 17-Mar-14 A 22-Mar-14 ontract: HY/20	15-Mar-14 A 21-Mar-14 31-Mar-14		1 1			Struct NB6	period tural Stee S NB Pan	el : nels				M2 &
GS2670  TCSS E&M Works  S1-700075  S1-700080  S1-700090  Southbound Wor  NB6, and Slope S4  High Mast Lighting  S1-203068  Noise Barrier NB6  S1-207055  S1-207060	T&C - power supply system to TCSS  Handover to TCSS Contractor  rk- Ret. Wall, Noise B, Rd  4  g Install/delete lamps at high mast HM2 & HM3  NB production period  NB6 Structural Steel  NB6 NB Panels	18 10 6 8 Ccc	10-Apr-13 A 17-Mar-14 A 22-Mar-14 ontract: HY/20	15-Mar-14 A 21-Mar-14 31-Mar-14	ay	1 1			Struct NB6	period tural Stee	el : nels				M2 &
GS2670  TCSS E&M Works  S1-700075  S1-700080  S1-700090  Southbound Wor  NB6, and Slope S4  High Mast Lighting  S1-203068  Noise Barrier NB6  S1-207055  S1-207060	T&C - power supply system to TCSS  Handover to TCSS Contractor  rk- Ret. Wall, Noise B, Rd  g Install/delete lamps at high mast HM2 & HM3  NB production period  NB6 Structural Steel  NB6 NB Panels  Wideni	18 10 6 8 Co	10-Apr-13 A 17-Mar-14 A 22-Mar-14 ontract: HY/20	15-Mar-14 A 21-Mar-14 31-Mar-14		1 1		IB6	Struct NB6	period tural Stee S NB Pan	el nels	Rolling	g Progra	amme	





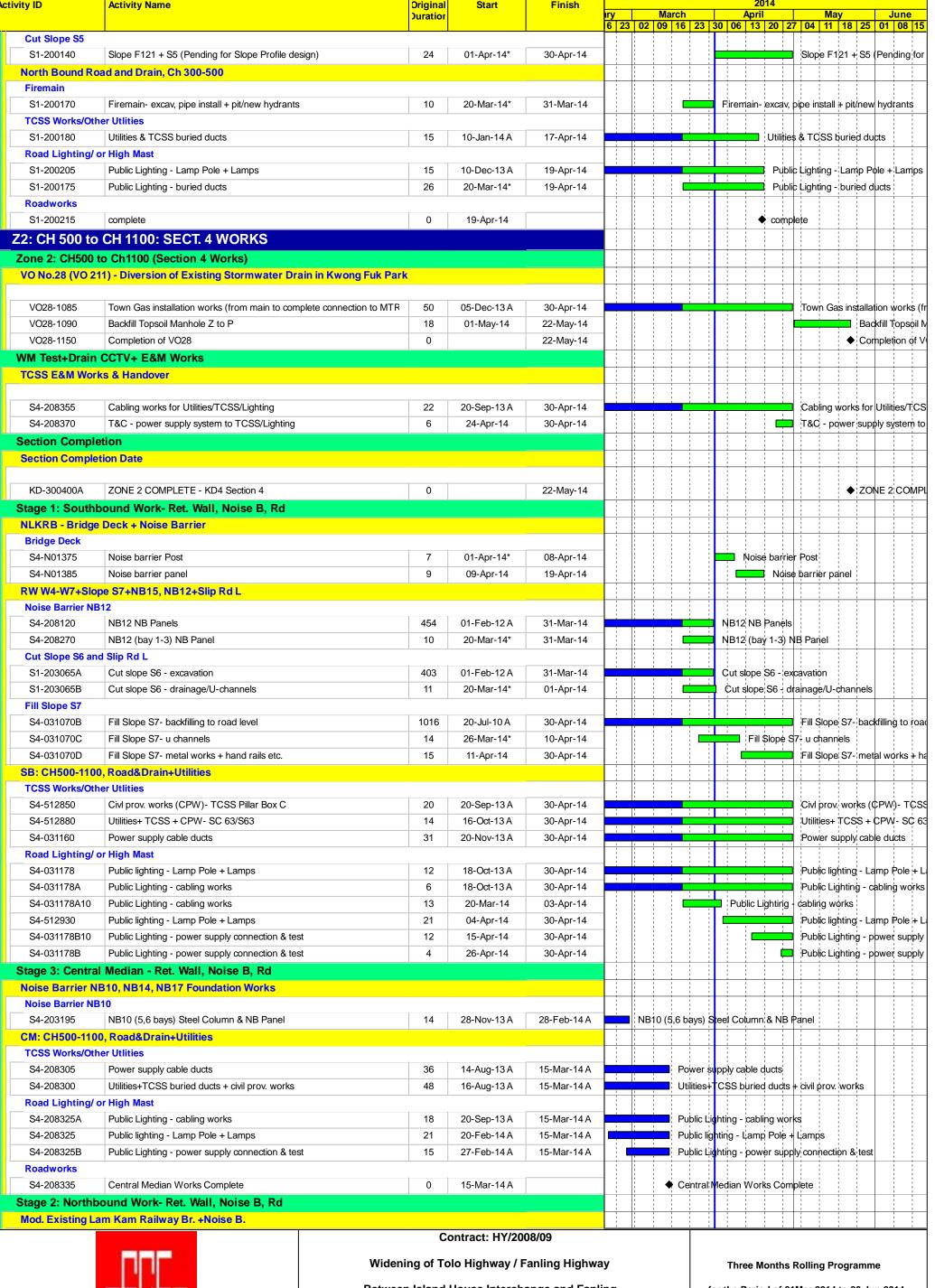


Widening of Tolo Highway / Fanling Highway

Between Island House Interchange and Fanling

(Stage 1 - Between Island House Interchange and Ma Wo)

Three Months Rolling Programme for the Period of 21Mar 2014 to 20 Jun 2014





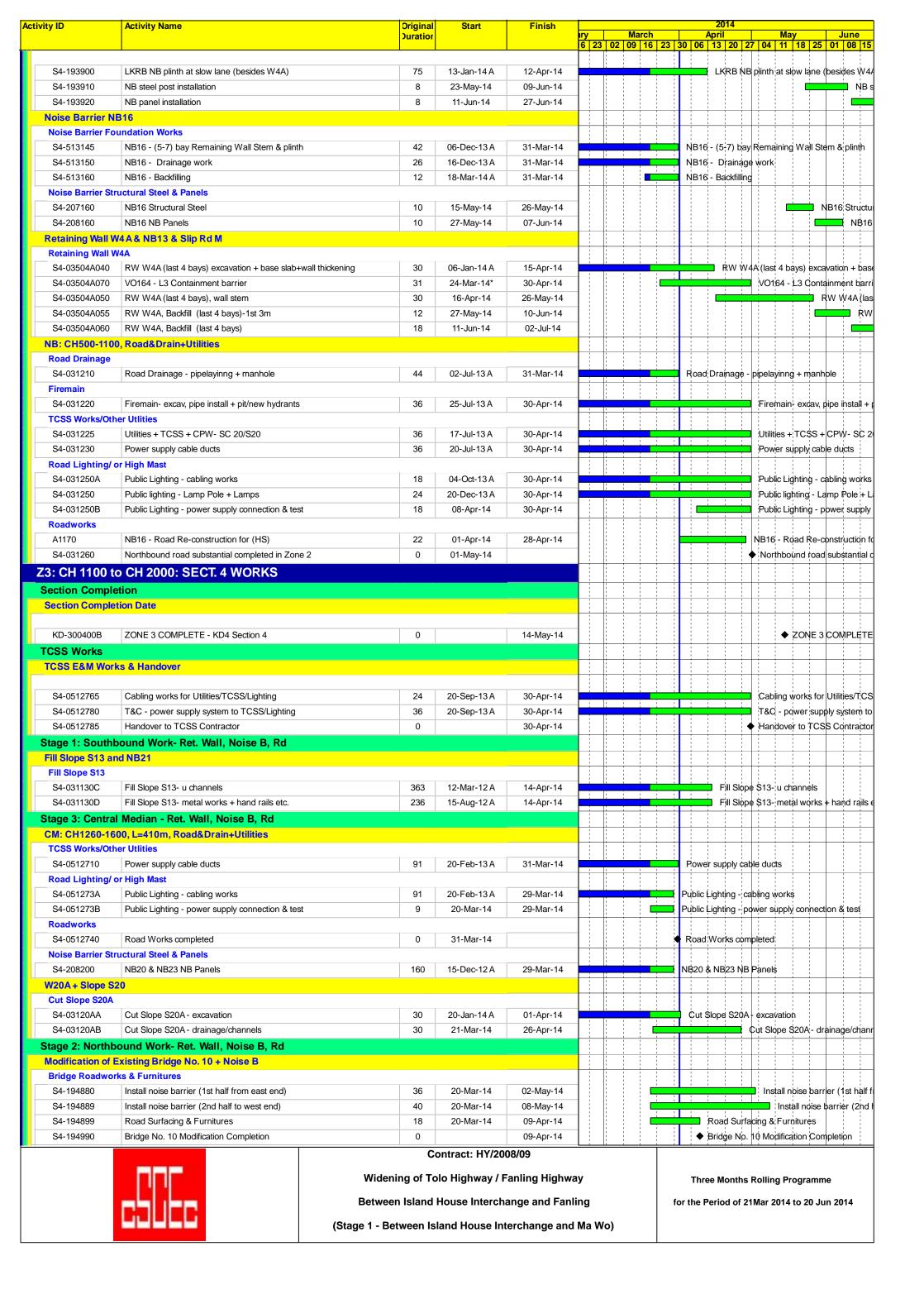
**Activity ID** 

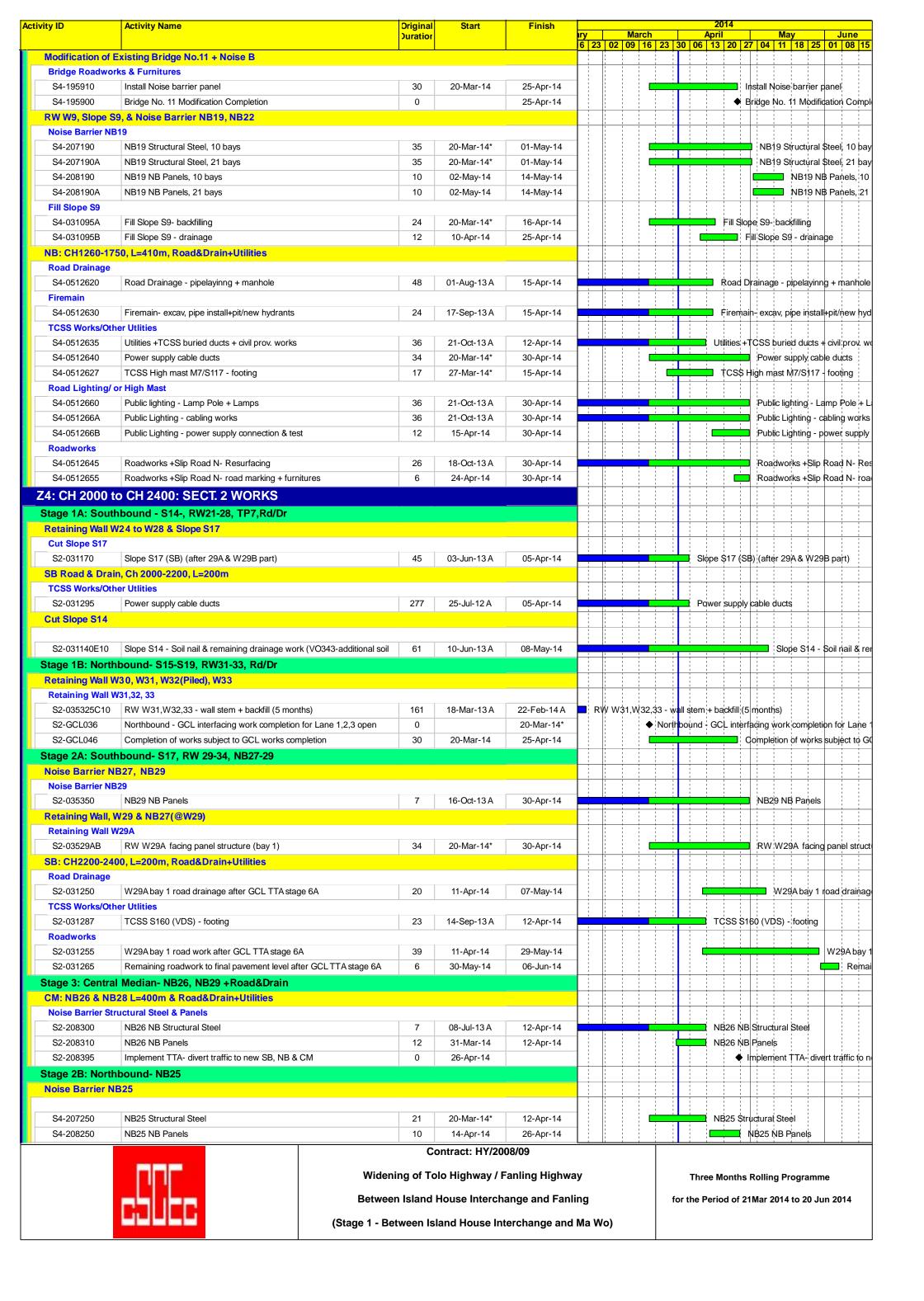
**Activity Name** 

Between Island House Interchange and Fanling

(Stage 1 - Between Island House Interchange and Ma Wo)

for the Period of 21Mar 2014 to 20 Jun 2014





Activity ID	Activity Name	Original  Start   Finish		2014													
·	·	Ouration			ıry		Mar		April   23   30   06   13   20   27   04					May		Jun	
					6 23	02	09	16   23	30	06	13	20 27	04	11	18   25	01   08	<u>3   15</u>
TCSS Works														1			<u>.</u>
TCSS E&M Wor	rks & Handover				Ì	li .	<u> </u>	į				i	<u> </u>				
S2-208420	Lighting & T&C	24	15-Oct-13 A	14-Apr-14					1		Lig	hting	&¦T&C	}			
S2-208450	T&C - power supply system to TCSS	22	20-Mar-14	14-Apr-14					1		T 8	С - р	wer s	upply	system	to TCS	s
S2-208425	Handover to TCSS Contractor	0		14-Apr-14	1 :					}	<b>♦</b> Ңа	ndove	r to T	css	Contrac	tor	-
Z6: TCSS IN	PORTION SA11: SECT. 4 WORKS			'				1				-					
Section Compl	letion											!	1				
Section Comple	etion Date											-					
					-						- 1						
KD-300400C	PORTION SA11 COMPLETE - KD4 Section 4	0		01-Mar-14 A	]   •	PC	RTIO	N SA11	( <mark>c</mark> o	MPLE	TE -	KD4 \$	3ection	4			
TCSS Works																	-
Existing Sign G	Santry Modification																
G75 (Substantia	al Modification Works of Sign Gantries)				-												
GS3290	Carry out Sign Gantry modification (LCS, TCSS etc)	52	26-Nov-13 A	28-Feb-14 A		Ca	rry où	Sign C	antr	moc	lificati	on (LC	2\$, T(	≎SS e	tc)		
G76 (Substantia	al Modification Works of Sign Gantries)			,		1											
GS3370	Carry out Sign Gantry modification (LCS, TCSS etc)	52	26-Nov-13 A	28-Feb-14 A		Ca	rry où	: Sign C	antr	moc	lificati	on (LC	2\$, T(	SS e	tc)		
VO214, 223, 22	7 - Ground Works & Ducts Works for TCSS (Outside Site Boun	dary)		'								-					
VO214 -Outside	e site Boundary- Install UPVC Ducts for TCSS Works-Road Side Wor	rk						1							1		
GS3570	Road Side Works - SK1258 - G66	20	01-May-13 A	20-Feb-14 A	Ro	d Si	de Wo	orks - S	K125	8 - G	66						



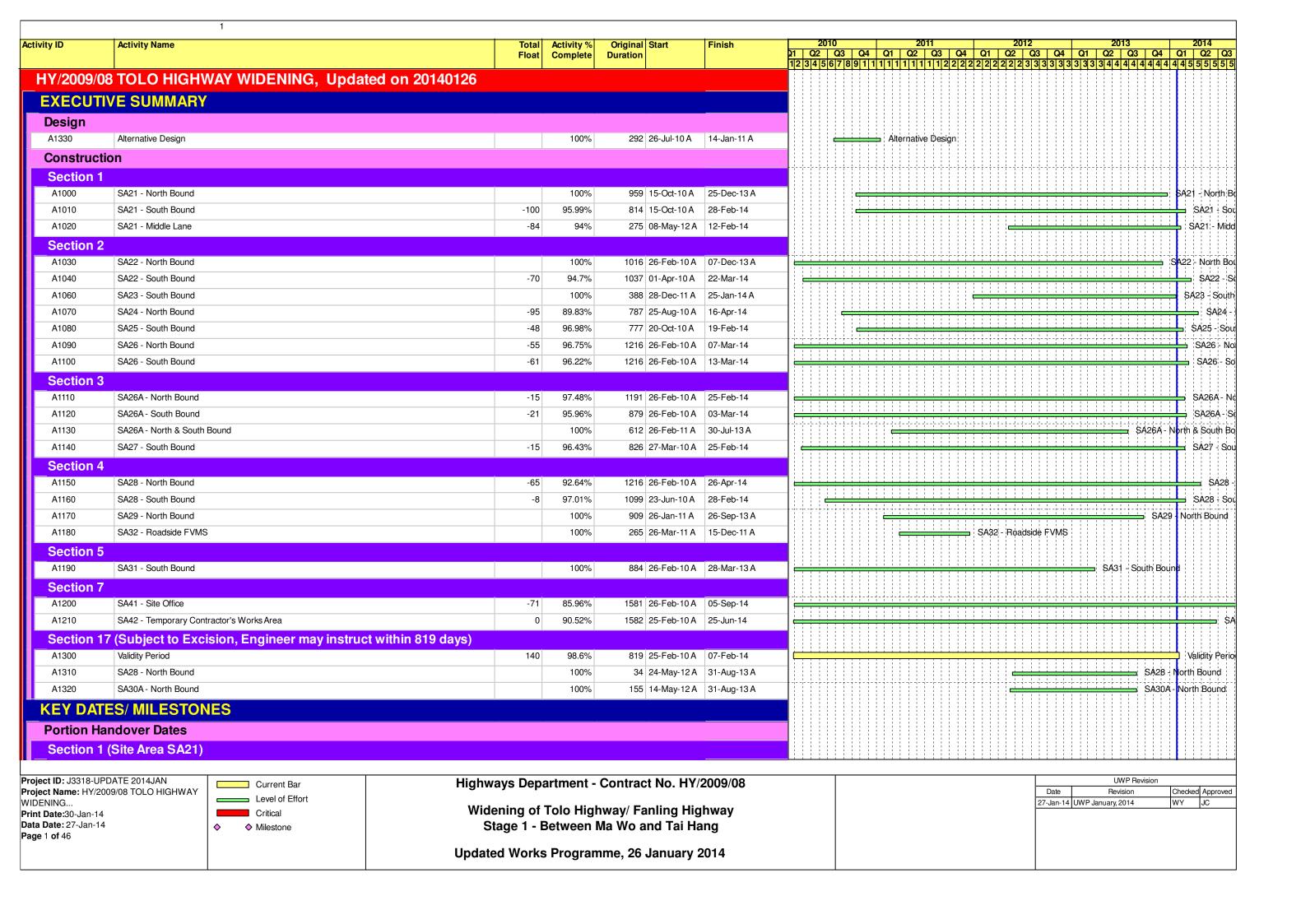
Contract: HY/2008/09

Widening of Tolo Highway / Fanling Highway

Between Island House Interchange and Fanling

(Stage 1 - Between Island House Interchange and Ma Wo)

Three Months Rolling Programme for the Period of 21Mar 2014 to 20 Jun 2014



		2						
Activity ID		Activity Name	Total Float	Activity % Complete	Original Start Duration	Finish	2010 2011 2012 2013 21 Q2 Q3 Q4 Q1 Q2 Q3 Q4 Q1 Q2 Q3 Q4 Q1 Q2 Q3 Q4 Q1	2014   Q2   Q3
			Float				<u>                                      </u>	5 5 5 5 5
PHSA		Possession of SA21 (Day365)		100%	0 16-Jul-10 A		Possession of SA21 (Day365)	
		(Site Area SA26A and SA 27)						
PHSA		Possession of SA26A (Day0)		100%	0 26-Feb-10 A		Possession of SA26A (Day0)	
PHSA	2700	Possession of SA27 (Day 90)		100%	0 26-Mar-10 A		♦ Possession of SA27 (Day 90)	
Sect	ion 2	(Site Area SA22, SA23, SA24, SA25 and SA26)						
PHSA	2200	Possession of SA22 (Day0)		100%	0 26-Feb-10 A		♦ Possession of SA22 (Day0)	
PHSA	2300	Possession of SA23 (Day180)		100%	0 04-May-10 A		♦ Possession of \$A23 (Day180)	
PHSA	2400	Possession of SA24 (Day180)		100%	0 04-May-10 A		♦ Possession of \$A24 (Day180)	
PHSA	2500	Possession of SA25 (Day270)		100%	0 04-May-10 A		♦ Possession of \$A25 (Day270)	
PHSA	2600	Possession of SA26 (Day0)		100%	0 26-Feb-10 A		Possession of \$A26 (Day0)	
Sect	ion 4	(Site Area SA28, SA29 and SA32)						
PHSA	2800	Possession of SA28 (Day0)		100%	0 26-Feb-10 A		♦ Possessipn of SA28 (Day0)	
PHSA	2900	Possession of SA29 (Day270)		100%	0 27-Jul-10 A		Possession of SA29 (Day270)	
PHSA	3200	Possession of SA32 (Day365)		100%	0 25-Feb-11 A		♦ Possession of SA32 (Day365)	
Sect	ion 5	(Site Area SA31)						
PHSA	3100	Possession of SA31 (Day0)		100%	0 26-Feb-10 A		♦ Possession of SA31 (Day0)	
Sect	ion 7	(All Works Except Works Included in Other Sections)		<u>'</u>				
PHSA	4100	Possession of SA41 (Day0)		100%	0 26-Feb-10 A		♦ Possession of SA41 (Day0)	
PHSA	4200	Possession of SA42 (Day0)		100%	0 26-Feb-10 A		♦ Possession of \$A42 (Day0)	
PHSA	4300	Possession of SA43 (Day90)		100%	0 04-May-10 A		♦ Possession of \$A43 (Day90)	
Sect	ion 8	(Estiblishment Works in Site Area SA21)						
PHSA	2110	Possession of SA21 (Day1217)	-214	0%	0 27-Jan-14			ossession o
Secti	on 9	(Estiblishment Works in Site Area SA22, SA23, SA24, SA25 and S	SA26)					
PHSA		Possession of SA22 (Day1217)	-214	0%	0 27-Jan-14		♦ Po	ossession o
PHSA	2310	Possession of SA23 (Day1217)	-214	0%	0 27-Jan-14			ossession o
PHSA	2420	Possession of SA24 (Day1217)	-214	0%	0 27-Jan-14			ossession o
PHSA	2510	Possession of SA25 (Day1217)	-214	0%	0 27-Jan-14		♦ Po	ossession o
PHSA	2610	Possession of SA26 (Day1217)	-214	0%	0 27-Jan-14			ossession o
Secti	on 10	0 (Estiblishment Works in Site Area SA26A and SA27)						
PHSA		Possession of SA26A (Day1217)	-214	0%	0 27-Jan-14		<b>♦</b> Pc	ossession o
PHSA	2710	Possession of SA27 (Day1217)	-214	0%	0 27-Jan-14			ossession o
Sect	on 11	(Estiblishment Works in Site Area SA28 and SA29)						
PHSA		Possession of SA28 (Day1217)	-214	0%	0 27-Jan-14		♦ Pc	ossession o
PHSA	2910	Possession of SA29 (Day1217)	-214	0%	0 27-Jan-14			ossession o
Sect	on 12	2 (Estiblishment Works in Site Area SA30 and SA30A)						
PHSA		Possession of SA30 (Day1217)	-214	0%	0 27-Jan-14		♦ Po	ossession o
PHSA		Possession of SA30A (Day1217)	-214		0 27-Jan-14			ossession o
Sect	on 13	3 (Remainder of Estiblishment Works)						
PHSA		Possession of SA31 (Day1217)	-178	0%	0 27-Jan-14*		♦ Pc	ossession o
PHSA		Possession of SA32 (Day1217)	-178		0 27-Jan-14*			ossession o
PHSA		Possession of SA41 (Day1217)	-178		0 27-Jan-14*		;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;	ossession o
PHSA		Possession of SA42 (Day1217)	-178		0 27-Jan-14*			ossession o
PHSA		Possession of SA43 (Day1217)	-178		0 27-Jan-14*		; : : : : : : : : : : : : : : : : : : :	ossession o
Sect	on 14	4 Comprises Routine Maintenance of Road Network in Site Area	SA21 to S	A31)				
PHSA		Possession of SA21 for Routine Maintenance (Day365)		100%	0 16-Jul-10 A		♦ Possession of SA21 for Routine Maintenance (Day365)	
PHSA		Possession of SA22 for Routine Maintenance (Day0)		100%	0 26-Feb-10 A		♦ Possession of SA22 for Routine Maintenance (Day0)	
	-							

	3					
Activity ID	Activity Name	Total	Activity %	Original Start	Finish	2010 2011 2012 2013 2014 01   Q2   Q3   Q4   Q1   Q3   Q4   Q3   Q
		Float	Complete	Duration		21     Q2     Q3     Q4     Q1     Q2     Q3     <
PHSA2330	Possession of SA23 for Routine Maintenance (Day180)		100%	0 04-May-10 A		♦ Possession of \$A23 for Routine Maintenance (Day180)
PHSA2430	Possession of SA24 for Routine Maintenance (Day180)		100%	0 04-May-10 A		♦ Possession of \$A24 for Routine Maintenance (Day180)
PHSA2530	Possession of SA25 for Routine Maintenance (Day270)		100%	0 04-May-10 A		♦ Possession of SA25 for Routine Maintenance (Day270)
PHSA2630	Possession of SA26 for Routine Maintenance (Day0)		100%	0 26-Feb-10 A		♦ Possession of SA26 for Routine Maintenance (Day0)
PHSA26A3	Possession of SA26A for Routine Maintenance (Day0)		100%	0 26-Feb-10 A		♦ Possession of \$A26A for Routine Maintenance (Day0)
PHSA2730	Possession of SA27 for Routine Maintenance (Day90)		100%	0 26-Mar-10 A		♦ Possession of SA27 for Routine Maintenance (Day90)
PHSA2830	Possession of SA28 for Routine Maintenance (Day0)		100%	0 26-Feb-10 A		Possession of SA28 for Routine Maintenance (Day0)
PHSA2930	Possession of SA29 for Routine Maintenance (Day270)		100%	0 27-Jul-10 A		Possession of SA29 for Routine Maintenance (Day270)
PHSA3060	Possession of SA30 for Routine Maintenance (Day0)		100%	0 26-Feb-10 A		♦ Possession of \$A30 for Routine Maintenance (Day0)
PHSA30A4	Possession of SA30A for Routine Maintenance (Day180)		100%	0 27-Jul-10 A		♦ Possession of \$A30A for Routine Maintenance (Day180)
PHSA3130	Possession of SA31 for Routine Maintenance		100%	0 26-Feb-10 A		Possession of SA31 for Routine Maintenance
Section 17	(Subject to Excision and Instruct by Engineer within 819 days)					
PHSA3030	Earliest Date to Possession of SA30		100%	0 26-Feb-10 A		♦ Earliest Date to Possession of SA30
PHSA30A3	Earliest Date to Possession of SA30A		100%	0 27-Jul-10 A		♦ Earliest Date to Possession of SA30A
Key Dates (	(include EOT GCL submitted and awarded upto Aug 2013)	, 	,			
HDS01000	KD1: Completion of Section 1 - (Day1216) - Overall Completion of Works	-100	0%	0	28-Feb-14*	♦ KD1: Co
HDS01100	KD1: Completion of Section 1 - (Day1216) - Substantial Completion for Road Opening	-71	0%	0	30-Jan-14*	→ KD1: Com
HDS02000	KD2: Completion of Section 2 - (Day1216) - Overall Completion of Works	-95	0%	0	16-Apr-14*	—————————————————————————————————————
HDS02100	KD2: Completion of Section 2 - (Day1216) - Substantial Completion for Road Opening	-70	0%	0	22-Mar-14*	♦ KD2; C
HDS03000	KD3: Completion of Section 3 - (Day1216) - Overall Completion of Works	-59	0%	0	10-Apr-14*	<b>♦</b> KD3:
HDS03100	KD3: Completion of Section 3 - (Day1216) - Substantial Completion for Road Opening	-17	0%	0	28-Feb-14*	→ KD3: Co
HDS04000	KD4: Completion of Section 4 - (Day1216) - Overall Completion of Works	-65	0%	0	26-Apr-14*	—————————————————————————————————————
HDS04100	KD4: Completion of Section 4 - (Day1216) - Substantial Completion for Road Opening	-8	0%	0	28-Feb-14*	♦ KD4: Ço
HDS05000	KD5: Completion of Section 5 - (Day884)		100%	0	28-Mar-13 A	♦ KD5; Completion of Section 5 - (I
HDS07000	KD7: Completion of Section 7 - (Day1581)	0	0%	0	25-Jun-14*	——————————————————————————————————————
HDS08000	KD8: Completion of Section 8 - (Day1581)	0	0%	0	25-Jun-14*	
HDS09000	KD9: Completion of Section 9 - (Day1581)	0	0%	0	25-Jun-14*	
HDS10000	KD10: Completion of Section 10 - (Day1581)	0	0%	0	25-Jun-14*	—— :::::::::::::::::::::::::::::::::::
HDS11000	KD11: Completion of Section 11 - (Day1581)	0	0%	0	25-Jun-14*	——
HDS12000	KD12: Completion of Section 12 - (Day1581)	0	0%	0	25-Jun-14*	—
HDS13000	KD13: Completion of Section 13 - (Day1581)	0	0%	0	25-Jun-14*	-   · · · · · · · · · · · · · · · · · ·
HDS14000	KD14: Completion of Section 14 - (Day1581)	0	0%	0	25-Jun-14*	— ::::::::::::::::::::::::::::::::::::
HDS17000	KD17: Latest Date to Compl of Section 17 - (Day397) Subject to Excision		100%	0	31-Aug-13 A	♦ KD17: Latest Date to
Ш				<u> </u>	or rieg retr	
	BUBMISSION					
Alternative	Design					
Ground In	vestigation & Reporting					
AD000010	Ground Investigation for Alternative Design		100%	54 22-Mar-10 A	29-May-10 A	Ground Investigation for Alternative Design
AD000020	Report of Ground Investigation		100%	56 12-Apr-10 A	18-Jun-10 A	Report of Ground Investigation
Package A	ND1: W56B					
AD000110	AD1 - Design Period		100%	80 29-Mar-10 A	08-Jul-10 A	AD1 - Design Period
AD000120	AD1 - Full Package to ICE for Certification		100%	20 09-Jul-10 A	31-Jul-10 A	□ AD1: - Full Package to ICE for Certification
AD000130	AD1 - Approval by ER/CLIENT/CEDD (GEO)		100%	101 09-Jul-10 A	06-Nov-10 A	AD1 - Approval by ER/CLIENT/CEDD (GEO)
Package A						
AD000210	AD2 - Design Period		100%	72 14-Apr-10 A	10-Jul-10 A	AD2 - Design Period
AD000210	AD2 - Full Package to ICE for Certification		100%	44 12-Jul-10 A	31-Aug-10 A	AD2 - Full Package to ICE for Certification
AD000220	AD2 - Approval by ER/CLIENT/CEDD (GEO)		100%	172 26-Nov-10 A		AD2:- Approval by ER/CLIENT/CEDD (GEO)
7,0000230	THE THE THE TOTAL (ALO)		100 /0	172 20-110V-10 A	20 Αρι- Η Α	τος επιστημιστού (ΔΕΟ)

	4						
Activity ID	Activity Name	Total	Activity %	Original		Finish	2010 2011 2012 2013 2014 21 Q2 Q3 Q4 Q1 Q2 Q3
		Float	Complete	Duration	l e		12 3 4 5 6 7 8 9 1 1 1 1 1 1 1 1 1 1 1 2 2 2 2 2 2 2 2
Package A	D3: W69						
AD000310	AD3 - Design Period		100%	75	03-May-10 A	31-Jul-10 A	АФЗ - Design Period
AD000320	AD3 - Full Package to ICE for Certification		100%	57	02-Aug-10 A	08-Oct-10 A	AD3 - Full Package to ICE for Certification
AD000330	AD3 - Approval by ER/CLIENT/CEDD (GEO)		100%	100	02-Aug-10 A	29-Nov-10 A	AD3 - Approval by ER/CLIENT/CEDD (GEO)
Package A	D4: W38						
AD000410	AD4 - Design Period		100%	78	09-Jun-10 A	09-Sep-10 A	AD4 - Design Period
AD000420	AD4 - Full Package to ICE for Certification		100%		10-Sep-10 A		AD4 - Full Package to ICE for Certification
AD000430	AD4 - Approval by ER/CLIENT/CEDD (GEO)		100%	54	11-Nov-10 A	15-Jan-11 A	AD4 - Approval by ER/CLIENT/CEDD (GEO)
Package A	D5 (Noise Barrier Foundation): NB38, NB39, NB41 & NB43						
AD000510	AD5 - Design Period		100%	98	21-Jul-10 A	22-Oct-10 A	AD5 - Design Period
AD000520	AD5 - Full Package to ICE for Certification		100%	51	23-Oct-10 A	22-Dec-10 A	AD5 - Full Package to ICE for Certification
AD000530	AD5 - Approval by ER/CLIENT/CEDD (GEO)		100%	74	18-Oct-10 A	14-Jan-11 A	AD5 ÷ Approval by ER/CLIENT/CEDD; (GEO)
MATERIAL	LS PROCUREMENT						
Major Mater	rials (Detail shall refer to supplementary information)						
Water Worl	• • • • • • • • • • • • • • • • • • • •						
MA001010	Place Order		100%	0	31-Aug-10 A		♦ Place Order
MA001030	Fabrication, Manufacturing & Delivery		100%	900	31-Aug-10 A	31-Aug-12 A	Fabrication, Manufacturing & Delivery
Vehicular F	Parapet SSD161						
MA001050	Place Order		100%	0	26-May-11 A		♦ Place Order
MA001060	Fabrication, Manufacturing & Delivery		100%		26-May-11 A	24-Aug-12 A	Fabrication, Manufacturing & Delivery
Bearing							
MA001070	Place Order		100%	0	31-Jul-10 A		♦ Place Order
MA001080	Fabrication, Manufacturing & Delivery		100%		31-Jul-10 A	05-Aug-12 A	Fabrication, Manufacturing & Delivery
Movement							
MA001090	Place Order		100%	0	31-Aug-10 A		♦ Place Order
MA001100	Fabrication, Manufacturing & Delivery		100%		31-Aug-10 A	31-Aug-12 A	Fabrication, Manufacturing & Delivery
CONSTRI	JCTION PHASE						
	es & General Requirement						
Preliminari							
	<i>ıbmissions</i>						
PR000000	Commencement of Works		100%		26-Feb-10 A		♦ Commencement of Works
PR001000	Site Establishment		100%		26-Feb-10 A	25-May-10 A	Site Establishment
PR001010	Effect required Insurances		100%		26-Feb-10 A	04 May 10 A	♦ Effect required Insurances
PR001030	Erect Contractor's Office Compound  Submit Site Organization Chart		100%		26-Feb-10 A	04-May-10 A	Erect Contractor's Office Compound
PR001040 PR001050	Submit Site Organization Chart Submit Site Layout Plan		100%		26-Feb-10 A 26-Feb-10 A	10-Mar-10 A 03-Mar-10 A	Submit Site Organization Chart      Submit Site Layout Plan
PR001060	Prepare/Submit Initial Works Programme		100%		26-Feb-10 A	03-Mar-10 A	Prepare/Submit Initial Works Programme
PR001000	Approval on Initial Works Programme		100%		04-Mar-10 A	02-Apr-10 A	□ Approval on Initial Works Programme
PR001080	Prepare/Submit Detailed Works Programme		100%			30-May-10 A	Prepare/Submit Detailed Works Programme
PR001090	Prepare/Submit First 3-month Programme		100%		26-Feb-10 A	10-Mar-10 A	☐ Prepare/Submit First 3-month Programme:
PR001100	Submit initial 12-month Pgr for Rou. Maint. Work		100%		26-Feb-10 A	10-Mar-10 A	Submit initial 12-month Pgr for Rou. Maint. Work
PR001110	Submit Rolling 3month Routine Maint. Program		100%		26-Feb-10 A	10-Mar-10 A	Submit Rolling/3month Routine Maint. Program
PR001170	Prepare/Submit Subcon Management Plan (SMP)		100%		26-Feb-10 A		☐ Prepare/Submit Subcon Management Plan (SMP)
PR001200	Submit Interface Management Plan		100%		26-Feb-10 A	25-Apr-10 A	Şubmit Interface Management Plan
PR001242	Application of Expressway Permit		100%		<sup>7</sup> 26-Feb-10 A	03-Mar-10 A	
PR001244	Approval of Expressway Permit		100%	21	04-Mar-10 A	24-Mar-10 A	☐ Approval of Expressway Permit

Notivity ID	Astivity Name	Taket Assista	y % Original Start	Einich	2010 2011 2012 2013 2014							
Activity ID	Activity Name	Total Activity Float Comple			Finish	01   Q2   Q3   Q4   Q1   Q2   Q3   Q4   Q1   Q2   Q3   Q4   Q1   Q2   Q3   Q4   Q1   Q2   Q3						
PR001246	Issurance of Excavation Permit form Hyd	10	1% 7	26-Feb-10 A	03-Mar-10 A	12 3 4 5 6 7 8 9 1 1 1 1 1 1 1 1 1 1 2 2 2 2 2 2 2 2 2						
PR001256	Complete All General Submission		0% 0	20100107	30-May-10 A	♦ Complete All General Submission						
	Submission	10	776		oo way To A	V Somplete All General Custinission						
PR001250	Submit Draft Traffic Management Contingency	10	)% 45	26-Feb-10 A	10-Apr-10 A	Submit Draft Traffic Management Contingency						
PR001260	Submit Sch of Const Seg/TTA in Prin Agreement			26-Feb-10 A	· ·	Submit Sch of Const Seq/TTA in Prin Agreement						
PR001270	Submit TIA/TTA to ER, TD, HKPF etc for Approval					Submit TIA/TTA to ER, TD, HKPF etc for Approval						
PR001280	Prepare/Submit Sch of Util Arrangement				·	Prépare/Submit Sch of Util Arrangement						
PR001290	Prepare/Submit Conc Mix Design and Trial Test				05-May-10 A	Prepare/Submit Conc Mix Design and Trial Test						
PR001290	Perform Slope / Topographic Survey			26-Feb-10 A	-	Perform Slope / Topographic Survey						
PR001310	Perform Natural Terrain Survey			01-Jan-11 A	19-Jul-11 A	Perform Natural Terrain Survey						
PR001310	·				29-Jun-10 A							
	Perform Tree Survey					Perform Tree Survey						
PR001330	Perform Existing Structural Survey				-	Perform Existing Structural Survey						
PR001340	Install Geotechnical Instrumentation				25-May-10 A	Install Geotechnical Instrumentation						
PR001350	Design for Temporary Noise Barrier			26-Feb-10 A		Design for Temporary Noise Barrier						
PR001360	Approval for Temporary Noise Barrier			26-Jun-10 A		Approval for Temporary Noise Barrier						
PR001370	Design for Irrigation System			26-Feb-10 A		Design for Irrigation System						
PR001380	Approval for Irrigation System			26-Feb-11 A		Approval for Irrigation System						
PR001385	Detail review of the natural terrain hazard assessment by GEO			26-Oct-11 A	23-Jan-12 A	Detail review of the natural terrain hazard assessment by GEO						
PR001390	Design for Permanent Debris Catch Fence	10		26-Oct-11 A	23-Jan-12 A	Design for Permanent Debris Catch Fence						
PR001400	Approval for Debris Catch Fence System Design	10		24-Jan-12 A	22-Feb-12 A	Approval for Debris Catch Fence System Design						
PR001410	Temporary Works Design	10	0% 200	26-Feb-10 A	·	Temporary Works Design						
PR001420	Complete All Technical Submission	10	0%		22-Feb-12 A	♦ Complete All Technical Submission						
Specialist (	Consultants											
PR001220	Nominate/Submit Horticulturist for Approval	10	)% 45	26-Feb-10 A	10-Apr-10 A	Nominate/Submit Horticulturist for Approval						
PR001230	Nominate/Submit IIC (Highway Structures)	10	)% 45	26-Feb-10 A	10-Apr-10 A	☐ Nominate/Submit IIC (Highway Structures)						
PR001240	Nominate/Submit Traffic Consultant for Approval	10	)% 7	26-Feb-10 A	03-Mar-10 A	■ Nominate/Submit Traffic Consultant for Approval						
PR001440	Complete Engagement of Specialist Consultants	10	0%		10-Apr-10 A	♦ Complete Engagement of Specialist Consultants						
QSHE Sub	mission											
PR001120	Prepare/Submit Quality Plan	10	)% 28	26-Feb-10 A	24-Mar-10 A	☐ Prepare/Submit Quality Plan:						
PR001130	Prepare/Submit Draft Health & Safety Plan	10	)% 14	26-Feb-10 A	10-Mar-10 A	Prepare/Submit Draft Health & Safety Plan						
PR001140	Prepare/Submit Final Health & Safety Plan	10	)% 35	26-Feb-10 A	31-Mar-10 A	Prepare/Submit Final Health & Safety Plan						
PR001150	Prepare/Submit Draft Env Management Plan	10	)% 21	26-Feb-10 A	17-Mar-10 A	☐ Prepare/Submit Draft Env Management Plan						
PR001160	Prepare/Submit Final Env Management Plan	10	)% 45	26-Feb-10 A	10-Apr-10 A	Prepare/Submit Final Env Management Plan						
PR001180	Submit Site Management Plan for Trip Ticket Sys	10	)% 45	26-Feb-10 A	10-Apr-10 A	Submit Site Management Plan for Trip Ticket Sys						
PR001430	Complete All QSHE Submission	10	0% 0		10-Apr-10 A	Complete All QSHE Submission						
Variation O	rders				'							
VO000010	VO. 1: Revised layout of Piles, NLKP5	10	0% 0	17-Jun-10 A		♦ VO. 1: Revised layout of Piles, NLKP5						
VO000020	VO. 2: Fencing Detaills Along Site Boundaries of SA29	10	0% 0	20-Aug-10 A		♦ VO. 2: Fencing Detaills Along Site Boundaries of SA29						
VO000030	VO. 3: Existing Bridge 12 Pilecap Concrete Testing (P5/6/8)	10	0% 0	17-Sep-10 A		♦ VO, 3: Existing Bridge 12 Pilecap Concrete Testing (P5/6/8)						
VO000040	VO. 4: Revised Setting Out Plan of Slip Road W in SA28 & SA31	10	0% 0	15-Sep-10 A		♦ VO. 4: Revised Setting Out Plan of Slip Road W in SA28 & SA31						
VO000050	VO. 5: Revised Setting Out Plan of Slip Road W in Site Area SA30	10	0% 0	15-Sep-10 A		♦ VO. 5: Revised Setting Out Plan of Slip Road W in Site Area SA30						
VO000060	VO. 6: Bridge 15A Pilecap Sleeving Details			19-Oct-10 A		♦ VO. 6: Bridge 15A/Pilecap Sleeving Details						
VO000070	VO. 7: Modification of Noise Barrier Footing for NB42 & NB44	10		14-Dec-10 A		♦ VO. 7: Modification of Noise Barrier Footing for NB42 & NB44						
VO000080	VO. 8: Revised Layout of Southen Trunk Sewer			15-Dec-10 A		♦ VO, 8: Revised Layout of Southen Trunk Sewer						
VO000090	VO. 9: Relocation and Deletion of Access Door at Noise Barrier			04-Jan-11 A		♦ VO.9: Relocation and Deletion of Access Door at Noise Barrier						
VO000100	VO. 10: Fencing details along Site Boundaries of Section subject to Excision			04-Jan-11 A		♦ VO.10: Fencing detalls along Site Boundaries of Section subject to Excision						
VO000110	VO. 11: Fencing details along Site Boundaries of Section subject to Excision	10		04-Jan-11 A		♦ VO. 11: Fending details along Site Boundaries of Section subject to Excision						
VO000110	vo. 11. Feriding details along Site Boundaries of Section subject to Excision	10	J70 0	04-Jan-11 A		VVV. II. Feriding details along Site Boundaries of Section subject to Excision						

ctivity ID	Activity Name	Total Activity	6 Original Start	Finish 2010	
		Float Complet		Q1   Q2   Q3   Q	
VO000120	VO. 12: Fencing for Former Lot 1308 S.B in D.D.6	100%		1 2 3 4 5 6 7 8 9 1	1 1 1 1 1 1 1 1 1 1 1 2 2 2 2 2 2 2 2 2
VO000130	VO. 13: Relocation of Existing HKCG HP600mm Gasmains at Slip Road T	100%		<del></del>	VO. 13: Relocation of Existing HKCG HP600mm Gasmains at Slip Road T
VO000140	VO. 14: Revised Layout of Police Observation Platform at CH3700	100%		+	♦ VO. 14: Revised Layout of Police Observation Platform at CH3700
VO000150	VO. 15: Revised Layout of Slope S28	100%		+	♦ VO 15: Revised Layout of Slope S28
VO000160	VO. 16: Additional Packaging Requirement for Mulch Delivered to LCSD	100%	6 0 25-Jan-11 A	+	♦ VQ. 16: Additional Packaging Requirement for Mulch Delivered to LCSD
VO000170	VO. 17: Revised Bridge 12B and Temp Reinstatement at Existing Bridge 12	100%	6 0 30-Apr-11 A	+	♦ VO. 17: Revised Bridge 12B and Temp Reinstatement at Existing Bridge 12
VO000180	VO. 18: Delivered 5 cubic meters of Mulch to EPD	100%	6 0 15-Feb-11 A	<del>                                     </del>	♦ VO. 18: Delivered 5 cubic meters of Mulch to EPD
VO000190	VO. 19: Protection for Existing HKCG HP 600mm Gasmain at Slip Rd T	100%	6 0 07-Mar-11 A		♦ VO.19: Protection for Existing HKCG HP 600mm Gasmain at Slip RdT
VO000200	VO. 20: Revised Fire Mains alignment Plan	100%	6 0 31-Mar-11 A		♦ VQ. 20: Revised Fire Mains alignment Plan
VO000210	VO. 21: Reinforced Earth Walls at Bridge 18AAbutment	100%	6 0 07-Sep-11 A		♦ VO. 21: Reinforced Earth Walls at Bridge 18AAbutment
VO000220	VO. 22: Revised Layout of Proposed Lighting and Meter Box at Ma Wo Subway (TP9)	100%	6 0 15-Apr-11 A	†	VO: 22: Revised Layout of Proposed Lighting and Meter, Box at Ma Wd Subway (TP9)
VO000230	VO. 23: Provision of Drainage at Noise Barriers 41 & 42	1009	6 0 20-Apr-11 A		♦ VO. 23: Provision of Drainage at Noise Barriers 41 & 42
VO000250	VO. 25: Construction of Cross Road Ducts and Traffic Signal Drawpits	100%	6 0 27-Apr-11 A		♦ VO. 25: Construction of Cross Road Ducts and Traffic Signal Drawpits
VO000260	VO. 26: Permanent Diversion of Existing DN80 WSD Watermain at MA Wo Subway (TP9)	1009	6 0 03-May-11 A		♦ VO. 26: Permanent Diversion of Existing DN80 WSD Watermain at MA Wo Subway
VO000270	VO. 27: Temp. Access and Lighting for Inspection on Bridge 13 Deck Interior	100%	6 0 16-May-11 A		♦ VO, 27: Temp, Access and Lighting for Inspection on Bridge 13 Deck Interior
VO000280	VO. 28: Provision of Hoarding at Site Boundary of SA22 and SA25	100%	6 0 11-May-11 A	†	♦ VO. 28: Provision of Hoarding at Site Boundary of SA22; and SA25
VO000300	VO. 30: Removal of dead trees under LKB	100%	6 0 05-Jul-11 A		♦ VO.30: Removal of dead trees under LKB
VO000310	VO. 31: Fencing for Former Lot 1308S.B. in D.D.6	100%	6 0 27-Jul-11 A		♦ VO. 31: Fencing for Former Lot 1308S.B. in D.D.6
VO000330	VO. 33: Drainage Details at W48	100%	6 0 03-Aug-11 A		♦ VQ. 33: Drainage Details at W48
VO000350	VO. 35: Revised Southern Trunk Sewer Manholes Schedule	100%	6 0 14-Oct-11 A		♦ VO; 35: Revised Southern Trunk Sewer Manholes Schedule
VO000360	VO. 36: Slip Road R road drainage details	100%	6 0 17-Oct-11 A		♦ VO. 36: Slip Road R road drainage details
VO000370	VO. 37: Bridge 12A, 13A, LB1, 2, 3 - Pilecaps Sleeving Details	100%	6 0 18-Nov-11 A		♦ VO. 37: Bridge 12A, 13A, LB1, 2, 3 - Pilecaps \$leeving Details
VO000380	VO. 38: Bridge 18A - Reforced earth walls at West Abutment & associated slope works	100%	6 0 03-Dec-11 A		♦ 'VO. 38: Bridge 18A'-Reforced earth walls at West Abutment & associa
VO000390	VO. 39: Bridge 12A - Revised Foundation for North Abutment	100%	0 03-Dec-11 A		♦ VO. 39: Bridge 12A - Revised Foundation for North Abutment
VO000400	VO. 40: New Lam Kam Road Flyover - Revised drainage arrangement for bridge deck	100%	6 0 30-Nov-11 A		💠 VO. 40: New Lam Kam Road Flyover - Revised drainage arrangemen
VO000410	VO. 41: 450mm Diameter U-channel flap valve behind noise barrier NB42	100%	0 01-Dec-11 A		♦ VÓ. 41: 450mm Diameter U-channel flap valve behind noise barrier N
VO000430	VO. 43: 450mm Diameter U-channel flap valve behind noise barrier NB42	100%	6 0 12-Jan-12 A		♦ VO. 43: 450mm Diameter U-channel flap valve behind noise barriel
VO000440	VO. 44: Bridge 15A - Revised drainage arrangement for bridge deck	100%	6 0 12-Jan-12 A		♦ VO. 44: Bridge 15A - Revised drainage arrangement for bridge ded
VO000450	VO. 45: Details of drainage arrangement at Tai Po Tai Wo Road Link Bridge 1 & Bridge B13A	100%	0 31-Jan-12 A		♦ VO. 45: Details of drainage arrangement at Tai Po Tai Wo Road L
VO000460	VO. 46: Modification of noise barrier footing for NB44	100%	0 13-Feb-12 A		♦ VO. 46: Modification of noise parrier footing for NB44
VO000520	VO. 52: Construction of cross road ducts & traffic signal drawpits at proposed crossing point of Tai Wo Service Road Wes	1009	6 0 10-Apr-12 A		♦ VO. 52: Construction of cross road ducts & traffic signal draw
VO000530	VO. 53: Bridge 18A - Concrete Plinths for PCCW cables ducts	100%	6 0 20-Apr-12 A		♦ VQ. 53; Bridge 18A - Concrete Plinths for P¢CW cables due
VO000550	VO. 55: Provision of drainage at retaining wall W71 and Bridge B18A	100%	6 0 18-Apr-12 A		♦ VO. 55: Provision of drainage at retaining wall W71 and Brid
VO000590	VO. 59: Relocation of Existing WSD pumping station (PS106) gate at Hong Lok Yuen Road	100%	6 0 23-Apr-12 A		♦ VO. 59: Relocation of Existing WSD pumping station (PS10)
VO000620	VO. 62: Revised Metal Cover Details for Bridge Deck Soffit Access	100%	6 0 29-May-12 A		♦ VQ. 62: Revised Metal Cover Details for Bridge Deck Sof
VO000650	VO. 65:Details of additional Vehicular Access Gate for Lot 412 at Tai Wo Servise Road west	100%	6 0 09-Jul-12 A		♦ VO. 65:Details of additional Vehicular Access Gate for
VO000660	VO. 66: Revised Foundation Details of Noise Barriers NB36	100%	6 0 19-Jul-12 A		♦ VO. 66; Revised Foundation Details of Noise Barriers
VO000690	VO. 69: Revised Lighting Layout at Ma Wo Subway TP9	100%	6 0 01-Aug-12 A		♦ VO. 69: Revised Lighting Layout at Ma Wo Subway
VO000700	VO. 70: Provision of Digital callipers	100%	6 0 10-Aug-12 A		♦ VO. 70: Provision of Digital callipers
VO000710	VO. 71: Details of Typical Section for Slip Road R Verge at AUE Wall	100%	6 0 20-Aug-12 A		♦ VO. 71. Details of Typical Section for \$lip Road R V
VO000720	VO. 72: New Lam Kam Road Flyover - revised North and South Ramps Retaining Wall	100%	0 06-Sep-12 A		♦ VO. 72: New Lam Kam Road Flyover - revised No
VO000730	VO. 73: Revised Sign Gantry Details of G23A, G24, G25, G26, G27, G28, G29, G56, G57, G58, G59, G60, G60A, G101	1009	0 11-Sep-12 A		♦ VO: 73: Revised Sign Gantry Details of G23A, G2
VO000740	VO. 74: Bridge 12A South Abutment - Slope Reinstatement Works	100%	6 0 18-Sep-12 A		♦ VO. 74: Bridge 12A Şouth Abutment - Slope Rein
VO000750	VO. 75: Modification of Existing Air Valve Chamber at Slip Road W	100%	6 0 14-Sep-12 A		♦ VO, 75: Modification of Existing Air Valve Chambe
VO000760	VO. 76: Conduct Resistograph and Tomography Assessment to the Internal Decay of Important Tree T13076 at LKR Intercharge	1009	0 19-Sep-12 A		♦ VO. 76: Conduct Resistograph and Tomography

Activity ID	Activity Name	Total Activ	tivity % Original Start		Finish	2010 2011 2012 2013 2014								
		Float Com		Duration		Q2	2 Q3	Q4 Q1 Q2 Q3	Q4 Q1 Q	2				
VO000770	VO. 77: Provision of Cable Duct for Power Supply in Site Area SA28 and SA31	1	100%	0 17-Oct-12 A		-   -			<u> - - - - - - - -</u>	♦ VO. 77 Provision of Cable Duct for Power Sup				
VO000780	VO. 78: Bridge 18A Revised CLP Concrete Cable Trough Details	1	100%	0 22-Oct-12 A					;;;;;;;;;;;;;	♦ VO. 78: Bridge 18A Revised CLP Concrete Ca				
VO000790	VO. 79: Bridge 18A East Abutment - Reinforced Concrete Wall (Bay3)	1	100%	0 14-Nov-12 A						VO 79: Bridge 18A East Aburment - Reinford				
VO000800	VO. 80: Removal and Storage of Remaining Parts of Existing Speed Camera No. W05, W06 at NB and W10 at SB	1	100%	0 03-Dec-12 A						♦ VO. 80: Removal and Storage of Remaining				
	and with at SB													
VO000810	VO. 81: Details of Maintenance Access of Noise Barrier NB41 and NB42 along Tai Wo Service Road West	1	100%	0 04-Jan-13 A						♦ VO. 81: Details of Maintenance Access of				
VO000820	VO. 82: Irrigation System Along the Vehicular Access to Wai Tau Tsuen	1	100%	0 04-Feb-13 A						♦ VO. 82: Irrigation System Along the Ve				
VO000830	VO. 83: Stormwater Drainage System MN18.1 to MN18.11 in Front of Retaining Wall W56B	1	100%	0 08-Feb-13 A						♦ VO.83: Stormwater Drainage System				
VO000840	VO. 84: Removal and Storage of Remaining Parts of Existing Speed Enforcement Camera No. TO06 at Tolo Highway Southbound	1	100%	0 08-Feb-13 A						♦ VO. 84: Removal and Storage of Rem				
VO000860	VO. 86: Provision of Verge Tubular Railing Adjacent to Retaining Wall W67	1	100%	0 12-Apr-13 A						VO. 86: Provision of Verge Tubula				
VO000870	VO. 87: Existing Retaining Wall at Tai Po Tai Wo Road - Modification Works	1	100%	0 19-Apr-13 A						♦ VO. 87: Existing Retaining Wall at				
VO000880	VO. 88: Additional Hospital Sign Plate for Existing Directional Signs DSX01A and DSX05B	1	100%	0 10-May-13 A		1 1				♦ VO. 88: Additional Hospital Sign				
VO000890	VO. 89: Change of Material of Southern Trunk Sewer Pipes between manhole	1	100%	0 10-May-13 A				+-		♦ VO. 89: Change of Material of S				
VO000900	VO. 90: Revised Southern Trunk Sewer Details	1	100%	0 10-May-13 A		1 1				♦ VO. 90: Revised Southern Trun				
VO000910	VO. 91: Nosing Details at South Abutment of Bridge 13A - Modification Works	1	100%	0 02-Jul-13 A						♦ VO. 91: Nosing Details at So				
VO000920	VO. 92: Revised Noise Barrier Footing fro NB30 Bay 1	1	100%	0 14-Jun-13 A						♦ VO. 92: Revised Noise Barrie				
VO000930	VO. 93: Irrigation System for the Shrub Planting Area Adjacent to Fanling Highway	1	100%	0 13-Jun-13 A						♦ VO. 93: Irrigation System for t				
VO000940	VO. 94: Irrigation System for the Shrub Planting Area Adjacent to Lam Kam Road Interchange with connection to Firemain	1	100%	0 11-Jun-13 A						♦ VO. 94: Irrigation System for t				
VO000950	VO. 95: Revised Sign Gantry G101 Details	1	100%	0 07-Jun-13 A						♦ VO. 95: Revised Sign Gantry (				
VO000970	VO. 97: Provision of Stormwater Drainage System for the Wai Tau Tsuen Access Raod Behind W74	1	100%	0 13-Jun-13 A						♦ VO. 97: Provision of Stormwa				
VO000980	VO. 98: Revised Sign Gantry G101 Sign Face DS T8(B) Details	1	100%	0 11-Jun-13 A						♦ VO. 98: Revised Sign Gantry				
VO000990	VO. 99: Revised Sign Gantry G59 Details	1	100%	0 11-Jun-13 A						♦ VO. 99: Revised Sign Gantry				
VO001000	VO. 100: Revised Sign Gantry G58 Details	1	100%	0 11-Jun-13 A				<del></del>		♦ VO. 100: Revised Sign Gantry				
VO001010	VO. 101: Existing Bridges 12&13 - Revised Detail of the Strengthening Beam of the Stitching Slab	1	100%	0 02-Jul-13 A						♦ VO. 1011 Existing Bridges 12				
VO001030	VO. 103: Parapet Wall PW1 - Revised Drainage and Miscellaneous Details	1	100%	0 03-Jul-13 A						♦ VO. 103: Parapet Wall PW1				
VO001040	VO. 104: Revised Alignment and Layout of Noise Barrier NB38	1	100%	0 26-Jun-13 A						♦ VO. 104: Revised Alignment				
VO001050	VO. 105: Additional Precast Concrete Cover for Catchpit No. CP1.1	1	100%	0 02-Jul-13 A						♦ VQ. 105 Additional Precast				
VO001060	VO. 106: Revised Details fo Retaining Wall No. W71 and Slope S43 at CH0.00 to CH4.00	1	100%	0 02-Jul-13 A				+-+		♦ VQ. 106; Revised Details fo				
VO001070	VO. 107: Revised Alignment of U-Channel at Interface of Retaining Wall W66 and Slope S38	1	100%	0 02-Jul-13 A						♦ VQ. 107: Revised Alignment				
VO001080	VO. 108: Revision for Proposed Cut Slope S31A	1	100%	0 11-Jul-13 A						♦ VO. 108: Revision for Propo				
VO001090	VO. 109: Revision for Proposed Cut Slope S45	1	100%	0 19-Jul-13 A						♦ VO. 109: Revision for Prop				
VO001100	VO. 110: Revised Base Plate Details of Noise Barrier NB38	1	100%	0 19-Aug-13 A						♦ VO. 110: Revised Base F				
Milestones	of Temporary Traffic Arrangement	, , , , , , , , , , , , , , , , , , ,		<u> </u>				+-+						
TTA000	TTA Stage 0 - Divert the traffic to new Slip Road J & K		100%	0 07-Oct-12 A						♦ TTA Stage 0 - Divert the traffic to new Slip Road				
TTA010	TTA Stage 1 - divert the traffic to new bridge 18a		100%	0 23-Jun-13 A		1 1				♦ TTA Stage 1 divert the traff				
TTA050	TTA Stage 5 - Full enclorsure of Tai Wo Road (CH3350 - CH3540)	1	100%	0 27-Sep-12 A		1 1				♦ TTA Stage 5 - Full enclorsure of Tai Wo Road (0				
TTA060	TTA Stage 6 - Open the new Northbound but reserve one lane & close the existing Northbound	1	100%	0 25-Feb-12 A		1 1			♦ TTA	Stage 6 - Open the new Northbound but reserve one lane				
TTA070	TTA Stage 7 - Close the existing southbound and temporary divert the traffic to the existing Northbound	1	100%	0 25-Feb-12 A				;-	<b>♦ TT</b> A	Stage 7 - Close the existing southbound and temporary div				
TTA090	TTA Stage 9 - NLK Open the new Northbound but reserve one lane & close the existing Northbound	-21	0%	0 27-Jan-14						♦ TTA Stage 9				
TTA110	TTA Stage 11 - Open the new LB2 and link up the LB1 & LB3	-24	0%	0 13-Feb-14		1 1								
	TTA Stage 5A-1 Diversion the traffic to B13A and B15A		100%			1 i	1 1 1 i			♦ TTA Stage 5A-1 Diversion th				

100%

0 06-Feb-12 A 18-Feb-12 A

Backfilling

S21N2130

Backfilling

	9				1	0040
Activity ID	Activity Name	Total Float	Activity % Complete	Original Start Duration	Finish	2010   2011   2012   2013   2014   21   Q2   Q3   Q4   Q1   Q1   Q2   Q3   Q4   Q1   Q1   Q3   Q4   Q1   Q1   Q1   Q1   Q1   Q1   Q1
S21N2140	Backfilling behind W36 and drainage works	-58	95%	70 04-Mar-13 A	30-Jan-14	12 3 4 5 6 7 8 9 1 1 1 1 1 1 1 1 1 1 1 1 1 2 2 2 2 2 2
Retaining V	Vall W38 (AD4)					
S21N2210	Pre-drilling		100%	24 26-Feb-11 A	25-Mar-11 A	☐ Pre-drilling
S21N2220	Prepare Piling Platform for W38		100%	30 26-Feb-11 A	01-Apr-11 A	Prepare Piling Platform for W38
S21N2225	COD: Mobilization of 1 no. rig from W56B to W38 for piling work		100%	60 14-Mar-11 A	27-Jun-11 A	COD: Mobilization of 1; no. rig from W56B to W38 for pilling work
S21N2230	Pile for W38 (2 rig)		100%	141 26-Mar-11 A	22-Jun-11 A	Pile for W38 (2 rig)
S21N2231	Installation of Piles - Stage 1 (CH2470-2545)		100%	69 26-Mar-11 A	22-Jun-11 A	Installation of Piles - Stage 1 (CH2470-2545)
S21N2232	Installation of Piles - Stage 2 (Remain)		100%	72 12-Apr-11 A	22-Jun-11 A	Installation of Piles - Stage 2 (Remain)
S21N2240	Retaining Wall & Drainage W38		100%	230 27-Jun-11 A	24-Dec-12 A	Retaining Wall & Drainage W38
S21N2242	Excavation to +54.5mPD		100%	60 27-Jun-11 A	05-Sep-11 A	Excavation to +54.5mPD
S21N2244	Excavation to formation		100%	60 26-Sep-11 A	06-Dec-11 A	Excavation to formation
S21N2250	Construction of Base & Wall - Stage 1 (CH2470 - 2520)		100%	75 07-Dec-11 A	31-Jan-12 A	Construction of Base & Wall - Stage 1 (CH2470 - 2520)
S21N2252	Backfilling to road formation - Stage 1 (CH2470 - 2520)		100%	50 21-Jan-12 A	18-Feb-12 A	□ Backfilling to road formation - Stage 1 (CH2470 - 2520)
S21N2254	Construction of Base & Wall - Stage 2 (Ch2520 - 2600)		100%	75 20-Feb-12 A	29-Sep-12 A	Construction of Base & Wall - Stage 2 (Ch2520
S21N2256	Backfilling to formation level - Stage 2 (CH2520 - 2600)		100%	30 01-Oct-12 A	24-Dec-12 A	Backfilling to formation level - Stage 2 (C
S21N2266	Backfilling behind W38 and drainage works		100%	70 04-Mar-13 A	14-Dec-13 A	Backfilling; behin
Retaining V	Wall W39 (CDS 3)					
S21N2302	Clearing & Prepare Piling Platform & Pre-drilling for W39		100%	10 27-Jun-11 A	09-Jul-11 A	Clearing & Prepare Piling Platform & Pre-drilling for W39
S21N2304	Piling Works		100%	36 03-Oct-11 A	14-Nov-11 A	Piling Works
S21N2306	Sheet Pile/ Excavate & Construct W39		100%	75 20-Aug-12 A	01-Dec-12 A	Sheet Pile/ Excavate & Construct W39
S21N2307	Opencut Excavation		100%	7 20-Aug-12 A	03-Sep-12 A	□ Opencut; Excavation
S21N2308	Construction of W39 Structure		100%	50 04-Sep-12 A	21-Nov-12 A	Construction of W39 Structure
S21N2309	Backfilling		100%	12 26-Nov-12 A	01-Dec-12 A	■ Backfilling
S21N2319	Backfilling behind W39 and drainage works	-58	95%	70 04-Mar-13 A	30-Jan-14	Backfilling be
Retaining V	Wall W40 (CSD 3)					
	Clearing & Prepare Piling Platform & Pre-drilling for W40		100%	12 03-Oct-11 A	17-Oct-11 A	🗓 Clearing & Prepare Piling Platform & Pre-drilling for W40
S21N2314	Excavation for W40		100%	12 20-Aug-12 A	06-Sep-12 A	Excavation for W40
S21N2316	Construct W40		100%	40 07-Sep-12 A	13-Oct-12 A	. ☐ Construct;W40
S21N2326	Backfilling		100%	11 20-Dec-12 A	29-Dec-12 A	□ Bạckfiling
S21N2336	Backfilling behind W40 and drainage works	-58	95%	70 04-Mar-13 A	30-Jan-14	Backfilling be
Retaining V	Vall W41A					
S21N2400	Sheet Pile/Excavate & Construct W41A		100%	72 26-Sep-11 A	25-Nov-11 A	Sheet Pile/Excavate & Construct W41A
S21N2410	Opencut Excavation		100%	7 26-Sep-11 A	04-Oct-11 A	☐ Opendut Excavation
S21N2420	Construction of W41A Structure		100%	47 05-Oct-11 A	31-Oct-11 A	□ Construction of W41A Structure
S21N2430	Backfilling		100%	18 01-Nov-11 A	25-Nov-11 A	Backfilling   Backfilling
Retaining V	Vall W41B			<u> </u>		
S21N2618	Sheet Pile/Excavate & Construct W41B		100%	71 26-Sep-11 A	25-Nov-11 A	Sheet Pile/Excavate & Construct W41B:
S21N2628	Opencut Excavation		100%	7 26-Sep-11 A	04-Oct-11 A	☐ Opendut Excavation
S21N2648	Construction of W41B Structure		100%	47 05-Oct-11 A	31-Oct-11 A	□ Construction of W41B Structure
S21N2658	Backfilling		100%	17 01-Nov-11 A	25-Nov-11 A	□ Backfilling
Retaining V	Nall W45-48/A			<u> </u>		
S21N2316 S21N2326 S21N2336 Retaining V S21N2400 S21N2410 S21N2420 S21N2430 Retaining V S21N2618 S21N2628 S21N2648 S21N2658 Retaining V S21N2500 S21N2520 S21N2520 S21N2530 S21N2550	Sheet Pile/Excavate & Construct W45-48/A		100%	174 01-Mar-11 A	11-Jan-13 A	Sheet Pile/Excavate & Construct W45-4
S21N2510	Opencut Excavation (W45, W46 & W47)		100%	36 12-Oct-11 A	23-Nov-11 A	Opeńcut Excavation (W45, W46 & W47)
S21N2520	Opencut Excavation (W48, W48A)		100%	18 01-Mar-11 A	31-Mar-11 A	☐ Opencut Excavation (W48, W48A)
S21N2530	Construction of RW Structure (W47)		100%	75 01-Mar-12 A	25-Aug-12 A	Construction of RW Structure (W47)
S21N2540	Construction of RW Structure (W48)		100%	45 13-Apr-12 A	19-Nov-12 A	Construction of RW Structure (W.48)
S21N2550	Construction of RW Structure (W48A)		100%	60 01-Apr-11 A	06-May-11 A	☐ Construction of RW Structure (W48A)
S21N2560	Backfilling W47, W48 & W48A		100%	40 28-Aug-12 A	11-Jan-13 A	Backfilling W47, W48 & W48A
				<u> </u>		

		10							
Activity ID		Activity Name	Total Float		Original Duration		Finish		2010
SO.	1112570	Construction of RW Structure (W45)		100%			04-Jun-12 A	1234	
		<u> </u>							Construction of RW Structure (W45)  Construction of RW Structure (W46)
	1N2580	Construction of RW Structure (W46)		100%			26-May-12 A		
		Backfilling W45 & W46		100%		28-Aug-12 A			Backfilling W45 & W46
		Backfilling behind W45 to W48 and drainage works	-58	95%	70	04-Mar-13 A	30-Jan-14		Backfilling bel
	aining W						1		
	1N2604	Clearing & Prepare Piling Platform & Pre-drilling for W49		100%		20-Nov-10 A			Clearing & Prepare Piling Platform & Pre-drilling for W49
	1N2610	Sheet Pile/Excavate & Construct W49		100%		26-Mar-11 A			Sheet Pile/Excavate;&Construct W49
		Opencut Excavation		100%		26-Mar-11 A	' ' '		☐ Opencut Excavation
	1N2630	Construction of W49 Structure		100%		08-Mar-11 A			Construction of W49 Structure
S2 <sup>-</sup>		Backfilling		100%		22-Aug-11 A			Backfilling
		Backfilling behind W49 and drainage works		100%	70	04-Mar-13 A	25-Nov-13 A		Backfilling behind )
Roa	d Re-Co	nstruction Works, Roadworks & Drainage		,					
S21	N4000	Road works Slow Lane (Ch2400 ~ 2650)		100%	20	14-Dec-12 A	04-Jan-13 A		☐ Road works Slow Lane (Ch2400 ~ 2650)
S21	N4010	Road works Slow Lane (Ch2650 ~ 2840)		100%	20	10-Jan-13 A	11-Apr-13 A		Road works Slow Lane (Ch2650 ~
S21	N4100	Roadworks, Drainages & Utilities (CH 2400 - 2840)	-57	98.65%	133	06-Aug-11 A	28-Jan-14		Roadworks, t
S21	N4110	Removal of existing paving		100%	25	06-Aug-11 A	13-Jul-13 A		Removal of existing paving
S21	N4120	Drainages (incl. VO 33 : Drainage details at W48)		100%	25	06-Aug-12 A	05-Apr-13 A		Drainages (incl. VO 33 : Drainage (
S21	N4130	Utilities (incl. VO 26: Permanent Diversion of existing DN80 WSD Watermain at Ma WO Subway TP9)	-56	95%	25	08-Jul-13 A	28-Jan-14		Utilities (incl. )
S21	N4135	Road Surface (Stage 1: CH2400 - CH2520)		100%	75	26-Dec-11 A	24-Feb-12 A		Road Şurface (Stage 1: CH2400 - CH2520)
S21	N4140	Road Surface (Stage 2 : CH2520 - CH2840)		100%	75	08-Jan-13 A	14-Dec-13 A		Road Surface (S
S21	N4141	Road Construction Works (CH2600 - CH3000) for traffic diversion stage 4B-1		100%	75	10-Jan-13 A	04-May-13 A		Road Construction Works (CH26
S21	N4142	Road Construction Works (Fast Lane) for C1/ C2 Interface stage 6B		100%	40	21-Jan-13 A	11-May-13 A		Road Construction Works (Fast
S21	N4143	Road Construction Works (Mid Lane) for C1/ C2 Interface stage 7B		100%	28	13-May-13 A	09-Jun-13 A		☐ Road Construction Works (Mil
S21	N4144	Road Construction Works (Slow Lane) for C1/ C2 Interface stage 8B		100%	27	10-Jun-13 A	06-Jul-13 A		☐ Rọad Cọnstruction Works (\$
S21	N4145	Road Construction Works for C1/ C2 Interface Final stage	-57	95%	36	08-Jul-13 A	28-Jan-14		Road Constru
S21	N4150	Shift lane for C1/ C2 Interface (Stage 1)		100%	0	27-Feb-12 A			♦ Shift lane for C1/C2 Interface (Stage 1)
S21	N4152	Shift lane for C1/C2 interface (Stage 2: North Bound along W38 to W46)		100%	0	20-Jan-13 A			♦ \$hift lane for C1/ C2 interface (Stage 2:
S21	N4153	Shift lane for (CH2600 - CH3000) stage 4B-1		100%	0	05-May-13 A			♦ Shift lane for (CH2600 - CH3000
S21	N4155	Shift lane for C1/ C2 Interface stage 6B		100%	0	12-May-13 A			Shift lane for C1 C2 Interface st
S21	N4156	Shift lane for C1/ C2 Interface stage 7B		100%	0	09-Jun-13 A			♦ Shift lane for 01/ 02 Interface
S21	N4157	Shift lane for C1/ C2 Interface stage 8B		100%	0	07-Jul-13 A			Shift lane for C1/, C2 Interfac
S21	N4160	Shift lane for C1/ C2 interface Final stage	-57	0%	0	28-Jan-14			Shift lane for
Nois	se Barrie	ers & Road Barriers							
Noi	se Barrie	er NB31							
S2	1N3010	NB31 (CH 0-183.6, W39 - W49)		100%	80	07-Nov-12 A	17-Jan-13 A		NB31 (CH 0-183.6, W39 - W49)
S2	1N3060	NB31 : Excavation and Footing (Bay 1-4)		100%	24	07-Nov-12 A	05-Jan-13 A		NB31: Excavation and Footing (Bay:1-4)
S2	1N3070	NB31 : Excavation and Footing (Bay 5 - 7)		100%	24	01-Dec-12 A	08-Jan-13 A		NB31: Excavation and Footing (Bay 5:-7
S2	1N3080	NB31 : Erecting H-Column		100%	18	02-Jan-13 A	10-Jan-13 A		1 NB31: Erecting H-Column
S2°	1N3090	NB31 (CH 90-183.6) : Installation Panel		100%	18	11-Jan-13 A	17-Jan-13 A		■ NB31 (CH 90-183.6) :Installation Panel
S2°		Remaining NB31 Installation of Panel	-55	98.01%		27-Jun-13 A	27-Jan-14		Remaining N
Traf		rol & Survelance System							
		TCSS (Gantry G23A) (incl. VO73 Revised Sign Gantry Details)		100%	50	10-Jan-13 A	07-Sep-13 A	-	:TC\$S (Gantry G23A) (i
Land	dscapin	<u> </u>					<u> </u>		
	-	Landscaping Works	-73	50%	25	02-Nov-13 A	19-Feb-14		Landscapini
	th Bou								
	liminarie								
		Site Clearance/Access Rd		100%	48	15-Oct-10 A	10-Dec-10 A	-	⇒ Site Clearance/Access Rd
						1			

	11	.1		<b></b>	0040			0044			0040				10		0044
Activity ID	Activity Name Tot	,	Original Start Duration	Finish	2010 21   Q2   Q3 1 2  3  4  5  6  7	3 Q4	Q1 C	2011 02 Q3	Q4	Q1 Q	2012 2 Q3	Q4	Q1	20 Q2	Q3 Q	14 Q	2014 Q1 Q2 Q
S21S0010	Site Clearance	100%	36 15-Oct-10 A	26-Nov-10 A	1234567		Site Clear		2 2 2 2	2 2 2 2 2	2 2 3 3	3 3 3	3 3 3 3	3 4 4	4 4 4 4	1444	455555
S21S0030	Access Road	100%	34 02-Nov-10 A			1 1 1 1	Access F	1 1 1 1									
		10078	04 02 NOV 10 A	10 Bec 10 A			Access	ioau									
Slopewo S21S5000	Slopeworks Fill(S26) 8	0 97.19%	40 25-Mar-13 A	28- lan-14									<u> </u>				Slopeworks
S21S5000	Slopeworks Fill(S26) - Lower +50mPD	100%	15 25-Mar-13 A						<u></u>						lopoworks		26) - Lower
S21S5010	Slopeworks Fill(S26) - Lower +50mPD		23 13-May-13 A	· ·										اد ا	opeworks	1.1	Slopeworks
S21S5100	Slopeworks Fill(S27)	100%	120 09-Jan-13 A														Slopeworks
S21S5100 S21S5110			60 09-Jan-13 A										II Clo	اعاماها	Les E 11/00	1 1	wer +50mPD
	Slopeworks Fill (S27) - Lower +50mPD	100%											1 30	pewori	KS FIII(547	7 1	
S21S5120	Slopeworks Fill(S27) - Lower +55mPD	100%	60 18-Jan-13 A	25-Jan-14 A													Slopeworks
	of Culverts	1000/	00 00 Dec 10 A	00 Fab 40 A													(TD0) D
S21S1100	Extension of Box Culvert (TP9), Downstream	100%	60 20-Dec-12 A									: : : :	1 1 1	1 1 1 1		1 1	(TP9), Dow
S21S5130	Temporary Water Diversion	100%	12 20-Dec-12 A												Water Di	1 1	
S21S5140	· ·	100%	48 29-Dec-12 A	06-Feb-13 A										onstru	ction of Ba	ise Slak	b, Wall & To
	tion of Retaining Wall																
	Wall W50		_														
	Sheet Pile/Excavate & Construct W50 (w/SP)	100%	215 21-May-12 A	·									1 1 1	1 1 1 1		<cayate< td=""><td>e &amp; Construc</td></cayate<>	e & Construc
	Sheet Pile & ELS Works	100%	24 21-May-12 A	<u> </u>							1 1 1	Shee	t Pile &				
	Construction of W50 Structure	100%	75 02-Jan-13 A											1 1 1 1		W50 S	Structure
S21S203	Backfilling	100%	50 20-Mar-13 A	23-Apr-13 A							. ] . ] . ]			□ Ba	ckfilling		
Retaining	Wall W51-56 (CSD 3)																
S21S210	Sheet Pile / Excavate & Construct W51-56 (w/SP)	100%	216 25-Feb-11 A	27-Dec-12 A			-			1111	111		■ Shee	et Pile /	Excavate	. & Con	nstruct W51
S21S2110	Sheet Pile & ELS Works (W51)	100%	24 25-Feb-11 A	11-May-11 A				Sheet F	ile & EL	S Works	(W51)						
S21S212	Construction of W51 Structure	100%	42 19-Apr-11 A	14-Jun-11 A				Cons	truction	of W51	Structur	е					
S21S213	Sheet Pile & ELS Works (W52 & W53)	100%	24 28-Jul-11 A	16-Sep-11 A					Sheet	Pile & El	_\$ Worl	ks (W52	& W53	3)			
S21S214	Construction of W52 & W53 Structure	100%	42 17-Oct-11 A	05-Dec-11 A						Construc	tion of V	V52 & V	V53 Stri	ucture			
S21S215	Backfilling of W51, W52 & W53	100%	24 17-Jan-12 A	27-Dec-12 A							1 1 1		Back	filling c	of W51, W	/52 & V	N53
S21S216	Sheet Pile & ELS Works (W54, 55 & 56)	100%	24 17-Feb-12 A	03-Mar-12 A						□ Sh	eet Pile	& ELS \	Works (	W54, 5	55 & 56)		
S21S217	Construction of W54, 55 & 56 Structure	100%	75 15-Feb-12 A	06-Jul-12 A							<u> </u>	onstruct	tion of V	V54, 5	5 & 56 Str	ucture	
S21S218	Backfilling of W54, 55 & 56	100%	30 02-Aug-12 A	27-Dec-12 A									Back	dilling d	of W54, 55	5 & 56	
S21S219	Backfilling behind W51 to W56 and drainage works	100%	70 04-Mar-13 A	25-Nov-13 A									<u> </u>			<b>」</b> Bacl	kfilling behin
Retaining	Wall W51A(CSD 3)		'	'													
S21S216	Excavate to cut-off level	100%	8 17-Jan-11 A	25-Jan-11 A			I Exca	ate to cut	off leve	4							
S21S216	Capping/Walling for W51A	100%	18 12-Jul-11 A	01-Aug-11 A				□ c	apping/\	Nalling to	or W51 <i>A</i>	<b>i</b>					
S21S216	Backfilling Backfilling	100%	30 28-Dec-11 A	04-Feb-12 A						Back	filling						
Retaining	Wall W35A, (CSD 2)																
S21S221	Construction of W35A (w/MP)	100%	198   13-Apr-12 A	05-Dec-12 A						<del> </del>			Consti	ruction	of W35A	(w/MP)	)
S21S221	Removal of existing concrete structure at W35A	100%	35 13-Apr-12 A	03-Jul-12 A							<mark>—</mark> R	emoval	of existi	ng con	crete stru	cture at	t W35A
S21S221	Mini Piles for W35A (8 nos.)	100%	30 25-Jul-12 A	14-Aug-12 A								Mini Pi	les for V	V35A (	8 nos.)		
S21S223	Excavation and tie back installation	100%	25 15-Aug-12 A	09-Oct-12 A								<u></u> Ex	cavation	and ti	e back ins	stallatio	'n
S21S224	Capping/Walling for W35A	100%	40 10-Oct-12 A	24-Nov-12 A		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	4-4-4-4-4						Cappin	g/Wall	ng for W	35A	
S21S225	Backfilling	100%	6 29-Nov-12 A	05-Dec-12 A									Backfil	lling :			
Road Re-	construction Works, Roadworks & Drainage																
S21S3895	Roadwork (South Bound slow lane along W35A)	100%	6 06-Dec-12 A	09-Dec-12 A								,	Road	work (S	South Bou	ınd slov	w lane along
S21S3896	Roadwork (South Bound slow lane along W50 - W56)	100%	30 01-Feb-13 A										1 1 1	'		1 1	Bound slow
S21S3900	Roadworks, Drainages & Utilities (CH 2400 - 2840)		150 25-Jan-13 A	·													Roadworks
S21S4001	Removal of Existing Paving	100%	40 25-Jan-13 A													1 1	Removal of
\$21\$2176 \$21\$2186 \$21\$2166 \$21\$2166 \$21\$2166 \$21\$2166 \$21\$2216 \$21\$2217 \$21\$2217 \$21\$22217 \$21\$22216	Drainages (incl. VO33: Drainage details at W48)		30 14-Sep-13 A													1 1	Drainages
S21S4003	,	9 90%	30 27-Jul-13 A	04-Feb-14												1 1	Utilities (ind
52101000		- 0070	25 2. 001 1071			<u> </u>	<u> </u>	1111	<u> </u>		111		<u> </u>		1 1 1 1		

1	2	

	12				<b>+</b>	0040	0010
	Activity Name	Total Float	Activity % Complete	Original Start Duration	Finish	2010 2011 21 Q2 Q3 Q4 Q1 Q2 Q3 1 2 3 4 5 6 7 8 9 1 1 1 1 1 1 1 1 1 2 2	2012   2013   2014
S21S4010	Road Surface (CH2400 - CH2840)	-58	90%	65 04-Mar-13 A	06-Feb-14		Road Surfac
S21S4011	Road Construction Works (Fast Lane) for C1/ C2 Interface stage 4A		100%	40 21-Jan-13 A	13-Apr-13 A		Road Construction Works (Fast L
S21S4012	Road Construction Works (Mid Lane) for C1/ C2 Interface stage 5A		100%	27 15-Apr-13 A	25-May-13 A		Road Construction Works (Mid
S21S4013	Road Construction Works (Slow Lane) for C1/ C2 Interface stage 6A		100%	39 27-May-13 A	30-Jun-13 A		☐ Road Construction Works (S
S21S4014	Road Construction Works for C1/ C2 Interface Final stage	-58	93%	45 02-Jul-13 A	30-Jan-14		Road Constr
S21S4030	Shift lane for C1/ C2 interface (South Bound along W35A)		100%	0 09-Dec-12 A			Shift lane for C1/ C2 interface (South Boun
S21S4031	Shift lane for C1/ C2 Interface stage 4A		100%	0 14-Apr-13 A			♦ Shift lane for C1/ C2:Interface state
S21S4032	Shift lane for C1/ C2 Interface stage 5A		100%	0 26-May-13 A			♦ Shift lane for C1/C2 Interface:
S21S4033	Shift lane for C1/ C2 Interface stage 6A		100%	0 30-Jun-13 A			♦ Shift lane for C1/C2 Interfac
S21S4050	Shift lane for C1/ C2 interface (Final stage)	-58	0%	0 30-Jan-14			♦ Shift lane for
Noise Barrie	ers		<u> </u>		J.		
Noise Barrie	er NB29						
S21S3010	NB29A (CH 0-62.3) on W35A (incl. VO 9: Construction of double leaf access door for noise barrier)		100%	20 01-Aug-13 A	07-Dec-13 A		NB29A (CH 0-62
S21S3011	NB29A (CH 0-62.3) on W35A - Erecting H-Column		100%	10 01-Aug-13 A	14-Sep-13 A		□ NB29A(CH:0-62.3) on
S21S3012	NB29A (CH 0-62.3) on W35A - Installing Panel		100%	10 27-Aug-13 A	07-Dec-13 A		NB29A (CH 0-62
Noise barrie	er NB30						
S21S3020	NB30 (CH 0-201.9) (incl. VO 9: Construction of double leaf access door for noise barrier)	-55	99.52%	104 01-Aug-12 A	27-Jan-14		NB30 (CH 0-
S21S3021	NB30 - Excavation and Footing (bay 1 - bay 3)		100%	75 01-Aug-12 A	22-Nov-12 A		NB30 - Excavation and Footing (bay 1 - bay
S21S3026	NB30 - Excavation and Footing (bay 13 - bay 15)		100%	25 02-May-13 A	14-Jun-13 A		NB30 - Excavation and Footin
	NB30 - Excavation and Footing (bay 4 - bay 12)		100%	45 02-Jul-13 A	18-Sep-13 A		NB30 - Excavation and
	NB30 : Erecting H-Column		100%	10 16-Sep-13 A	•		NB80 : Erecting H-
	NB30 : Installing Panel	-55	95%	10 17-Oct-13 A			NB30 : Install
Noise Barrie	-					<del> </del>  ::::::::::::::::::::::::::::::::::	
	NB33 (CH 0-143) (incl. VO 9: Construction of double leaf access door for noise barrier)		100%	102 01-Sep-12 A	09-Nov-13 A	<del></del>  :::::::::::::::::::::::::::::::::::	NB\$3 (CH 0-1/43)
	NB33 : Excavation, construction of Footing & Backfilling (bay 3 - bay 13)		100%	75 01-Sep-12 A		—	NB33: Excavation, construction of Footin
	NB33 : Erecting H-Column (bay 3 - bay 13)		100%	15 14-Jan-13 A		—	I NB33 : Erecting H-Column (bay 3 - bay
	NB33 : Installing Panel (bay 3 - bay 13)		100%	12 25-Jan-13 A			□ NB33 ; Installing Panel (bay 3 - bay 1
	NB33 : Excavation, construction of Footing & Backfilling (bay 1 - bay 2)		100%	15 07-Mar-13 A		—	□ NB33 : Excavation, construction of F
	NB33 : Erecting H-Column (bay 1 - bay 2)		100%	7 26-Apr-13 A		—	NB33 : Erecting H-Column (bay
	NB33 : Installing Panel (bay 1 - bay 2)		100%	7 17-Oct-13 A		—	□ NB33: Installing Pa
			100 /6	7 17-001-13 A	09-N0V-13 A		Li Hybou. Ilistalling i a
	rol & Survelance System  TCSS (Gantry G60A) (incl. VO73 Revised Sign Gantry Details)	-58	90%	30 02-Jul-13 A	20 lan 14		T¢\$S(Gantr
		-36	90 /6	30 02-3ul-13 A	25-Jan-14		1033 (Qanii
Landscaping S21S6000	g Landscaping Works	90	30%	35 26-Nov-13 A	29 Eab 14		Landscapir
		-80	30%	35 26-NOV-13 A	20-Feb-14		Landstapii
Middle Lane							
	nstruction Works	00	00.040/	05 00 54 40 5	10 Feb 14		Banking to
	Roadworks, Drainage & Utilities (CH 2400 - 2840)	-66	82.31%	65 08-May-12 A			Roadworks,
	Removal of Central barrier & Roadmark		100%	25 08-May-12 A			Removal of Central barrier & F
	Removal of Existing Paving		100%	25 18-May-12 A	06-Jun-13 A		Removal of Existing Paving
Noise Barrie							
	er NB32, G23A & G60A			=	05.5 1 15.5		
	Excavate to cut-off level (Stage 1: Bay 1 - Bay 2)		100%	7 31-Jan-13 A			Excavate to cut+off level (Stage 1: Ba
	Construction for NB32 (Stage 1: Bay 1 - Bay 2)		100%	15 25-Feb-13 A			☐ Construction for NB32 (Stage 1: Ba
	Excavate to cut-off level (Stage 2: Bay 3 - Bay 26)		100%	15 18-May-13 A			Excavate to cut-off level (
	Construction for NB32 (Stage 2: Bay 3 - Bay 26 with G23A and G60A)		100%	50 31-May-13 A		;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;	Construction for NB32
	Erecting H-Column, NB32		100%	20 05-Sep-13 A	·		☐ Erecting H-Column, N
S21M394	Installing Panel & Road Barrier, NB32		100%	30 05-Sep-13 A	25-Dec-13 A		nstalling Panel

Activity ID	Activity Name	Total	Activity %	Original Start	Finish	2010 2011 2012 2013 2014
		Float	Complete	Duration		21 Q2 Q3 Q4 Q1 Q4 Q1 Q4
S21M400	Backfilling (Stage 1: Bay 1 - Bay 2)		100%	10 18-Mar-13 A	20-Apr-13 A	Backfilling (Stage 1: Bay 1 + Bay 2
S21M401	Backfilling (Stage 2: Bay 3 - Bay 26)	-66	90%	20 15-Jul-13 A	28-Jan-14	Backfilling (St
S21M403	Road Lighting Works	-66	85%	10 29-Apr-13 A	30-Jan-14	Road Lighting
S21M404	Remaining Roadworks & Road Surfacing	-66	80%	40 03-Oct-13 A	12-Feb-14	Remaining F
Ready For	Pre-Handover Retaining Wall of Section 1					
HRW0010	Ready For Pre-Handover Retaining Wall W35, W36, W38, W39, W40, W44, W45, W46, W47, W48, W49	-62	0%	7 27-Jan-14	06-Feb-14	I Ready For P
HRW0011	Ready For Pre-Handover Retaining Wall W35A, W50, W51, W52, W53, W54, W55, W56	-62	0%	7 27-Jan-14	06-Feb-14	■ Ready For P
Section 2						
Site Area S	SA22					
PHSA2220	Possession of SA22 (Day0)		100%	0 26-Feb-10 A		♦ Possession of SA22 (Day0)
SA220000	Site Area SA22 Works Period (incl. VO 28: Provision of hoarding at site boundry of SA 22)	96	95.48%	1216 26-Feb-10 A	22-Mar-14	Site Area
SA220010	Site Area SA22 Works Completion	96	0%	0	22-Mar-14	♦ Şitê Arêa
SA220020	Temporary Traffic Management (Detail shall refer to supplementary information)	96	94.42%	985 25-Feb-10 A	22-Mar-14	temporar
SA220030	Overall Utilities Diversion (Detail shall refer to supplementary information)	96	94.42%	985 25-Feb-10 A	22-Mar-14	Overall:Ut
North Bou	ınd					
Preliminari						
S22N0000	Site Clearance/Access Rd (W56A&W56B)		100%	90 26-Feb-10 A	18-Jun-10 A	Site Clearance/Access Rd (W56A&W56B)
S22N0001	Site Clearance - Stage 1 (Near W56A)		100%	30 26-Feb-10 A		Site Clearance - Stage 1 (Near W56A)
S22N0002	Access Road - Stage 1 (Near W56A)		100%	30 22-Mar-10 A	29-Apr-10 A	Access Road - Stage 1 (Near W56A)
S22N0003	Site Clearance - Stage 2 (Near W56B)		100%	30 19-Apr-10 A	<u>'</u>	Site Clearance - Stage 2 (Near W56B)
S22N0004	Access Road - Stage 2 (Near W56B)		100%	30 13-May-10 A	•	Access Road - Stage 2 (Near W56B)
S22N0030	Erection of Temp Safety Fence (N/B ch2840-3150)		100%	60 10-May-10 A		Erection of Temp Safety Fence (N/B ch2840-3150)
S22N0040	Erection of Temp Safety Fence (N/B ch2840-3000)		100%	30 10-May-10 A		☐ Erection of Temp \$afety Fence (N/B ch2840-3000)
S22N0050	Erection of Temp Safety Fence (N/B ch3000-3150)		100%	30 15-Jun-10 A		Erection of Temp Safety Fence (NI/B ch3000-3150)
Slopework			10070	30 10 00.11 1071	2. 6067.	
S22N5000	Slopeworks Cut & U-Channel/Berm (S29-sn), C4		100%	421 22-Jul-10 A	17-Dec-11 A	Slopeworks Cut & U-Channel/Berm (\$29-sn), C4
\$22N5010	Slopeworks (S29) & U-channel/Berm - Stage 1 (Cutslope)		100%	12 22-Jul-10 A		□ Slopeworks (S29) & U-channel/Berm - Stage 1 (Cutslope)
S22N5020	Slopeworks (S29) - Stage 1 (Soil Nail Installation : QRS)		100%	12 26-Mar-11 A	-	Slopeworks (S29) - Stage 1 (Soil Nail Installation : QRS);
S22N5040	Slopeworks (S29) & U-Channel/Berm - Stage 2 (Cutslope)		100%	50 19-Aug-10 A	· ·	Slopeworks (\$29) & U+Channel/Berm - Stage 2 (Cutslope)
S22N5050	Slopeworks (S29) - Stage 2 (Soil Nail Installation : MNOP)		100%	21 02-Apr-11 A		Slopeworks (S29) - Stage 2 (Soil Nail Installation : MNOP)
S22N5070	Slopeworks (S29) & U-Channel/Berm - Stage 3 (Cutslope)		100%	28 21-Oct-10 A	13-Nov-10 A	Slopeworks (\$29) & U-Channel/Berm - Stage 3 (Cutslope)
S22N5080	Slopeworks (S29) - Stage 3 (Soil Nail Installation : IJKL)		100%	36 27-Jun-11 A	08-Aug-11 A	Slopeworks (S29) - Stage 3 (Soil Nail Installation : IJKL)
S22N5100	Slopeworks (S29) & U-Channel/Berm - Stage 4 (Cutslope)		100%	36 26-Oct-11 A		Slopeworks (S29) & U-Channel/Berm : Stage 4 (Cutslope)
S22N5110	Slopeworks (S29) - Stage 4 (Soil Nail Installation : EFGH)		100%	36 07-Nov-11 A		Slopeworks (S29) - Stage 4 (Soil Nail Installation ::EFGH)
S22N5130	Slopeworks (S29) & U-Channel/Berm - Stage 5 (Cutslope)		100%	36 03-Jan-13 A		Slopeworks (S29) & U-Channel/Berm -
S22N5140	Slopeworks (S29) - Stage 5 (Soil Nail Installation : ABCD)		100%	36 21-Nov-11 A		Slopeworks (S29) - Stage 5 (Soil Nail Inst
S22N5140	Slopeworks (S29) & U-Channel/Berm - Stage 6 (Cutslope)		100%	36 22-Apr-13 A		Slopeworks (S29) &
Construction			10078	00 22 Apr 10 A	15 001 15 A	Giopowinis (GEV) it is
Potoining V	on of Retaining Wall  Wall W56A, (CSD 1)					
S22NI2154	Excavate to cut-off level (Stage 1, Bay 1 - 5)		100%	60 20-Apr-11 A	06 Jul 11 A	Excavate to cut-off level (Stage 1, Bay 1 - 5)
022IN2104	, , , ,					
522IN2155	Excavate to cut-off level (Stage 2, Bay 5 - 9)		100%	50 26-Sep-11 A		Excavate to cut-off level (Stage 2, Bay 5 - 9)
S22N2160			100%	141 05-Jul-11 A	19-Dec-11 A	Base Slab for W56A
S22N2165	, , ,		100%	50 05-Jul-11 A	17-Sep-11 A	Base Stab for W56A (Stage 1), South
	, 5 h		100%	56 04-Jun-12 A	14-Jul-12 A	Base Slab for W56A (Stage 2), North
			100%	172 11-Aug-11 A		Wall Stem
S22N2171	Wall Stem (Bay 1e & 1f)		100%	25 11-Aug-11 A	23-Sep-11 A	Wall Stem (Bay 1e & 1f)

Activity ID	14	Takel	Antivity of	Original Chart	Einich	2010   2011   2012   2013   2014
Activity ID	Activity Name	Total Float		Original Start Duration	Finish	11 Q2 Q3 Q4 Q1 Q2 Q3
S22N2173	Wall Stem (Bay 1c & 1d, 1a & 1b, 1g)		100%	25 26-Sep-11 A	26-Oct-11 A	12 3 4 5 6 7 8 9 1 1 1 1 1 1 1 1 1 1 2 2 2 2 2 2 2 2 2
	Wall Stem (Bay 2a, 2bnb, 2b)		100%	· ·	13-Oct-12 A	Wall Stem (Bay 2a, 2bhb, 2b)
	Wall Stem (Bay 2c, 2d)		100%	30 06-Aug-12 A		
	Wall Stem (Bay 3)		100%	25 31-Aug-12 A		Wall Stem (Bay 3)
	Backfilling		100%	30 19-Nov-12 A		Backfilling
	Wall W56B (AD 1)		10078	30 13 NOV 12 A	20 0411 1074	The state of the s
	Prepare Piling Platform for W56B		100%	37 02-Oct-10 A	11-Feb-11 A	Prepare Piling Platform for W56B
	Pre-drilling for W56B		100%		15-Nov-10 A	Pre-drilling for W56B
	Pipe Pile for W56B		100%	98 20-Nov-10 A		Pipe Pife for W56B
S22N2241	Pipe Pile for W56B - Stage 1		100%	75 20-Nov-10 A		Pipe Pile for W56B - Stage 1
	Pipe Pile for W56B - Stage 2		100%	75 31-Jan-11 A		Pipe Pile for W56B - Stage 2
S22N2242 S22N2250			100%	276 17-Sep-11 A	<u> </u>	Construction of W56B
S22N2250			100%	75 17-Sep-11 A	·	Excavation (W56B), upper
	Excavation (W56B), upper			60 06-Jan-12 A		
S22N2252	<u>``</u>		100%		•	Excavation (W56B), Middle
S22N2254	· · · · · ·		100%	60 11-May-12 A	·	Excavation (W56B), bottom
S22N2260			100%	25 27-Jul-12 A	10-Sep-12 A	Base Slab (W56B), (Bay 1+3)
S22N2262			100%	60 27-Sep-12 A		Base Slab (W56B), (Bay 4 + 8)
S22N2264	, , , , , , , , , , , , , , , , , , ,		100%	35 27-Jul-12 A	13-Oct-12 A	Base Slab (W56B), (Bay 9, 10 & 12A):
S22N2270			100%	75 01-Nov-12 A	·	Wall Stem (W56B) (Bay 1 - 3, 1
S22N2274	, , , , , , , , , , , , , , , , , , ,		100%	75 12-Nov-12 A		Wall Stem (W56B) (Bay 4 - 8, 1
S22N2276			100%	75 24-Nov-12 A	·	Wall Stem (W56B) (Bay 9 - 10,
S22N2290			100%	15 10-Jan-13 A		□ Backfilling (Bay 1 to Bay 3)
	Backfilling (Bay 4 to Bay 10)		100%	30 14-Jan-13 A	05-Mar-13 A	Backfilling (Bay 4 to Bay 10)
	s & Drainage					
S22N4000	Roadworks, Drainages & Utilities (CH 2840 - 3140)		100%	129 15-Jan-13 A		Hoadworks, DI
S22N4010	Roadworks Stage 1 (CH 2840 - 3000)		100%	30 15-Jan-13 A		Roadworks Stage 1 (CH 2840 -
S22N4030	Drainages Stage 1 (CH2840 - 3000)		100%	30 15-Jan-13 A	05-Mar-13 A	Drainages/Stage/1/(CH2840 - 300
S22N4040	Road Surface Works		100%	30 21-Mar-13 A	23-Apr-13 A	□ Road Surfface Works
S22N4042	Roadworks Stage 2 (CH3000 - 3140)		100%	30 18-Mar-13 A	30-Jul-13 A	Roadworks Stage 2 (CF
S22N4044	Drainages Stage 2 (CH3000 - 3140)		100%	30 20-Feb-13 A	11-Apr-13 A	Drainages Stage 2 (¢H3b0b ÷ 3
S22N4046	Road Surface Works		100%	30 17-May-13 A	18-Aug-13 A	Road Surface Works
S22N4048	Road Construction Works Remain Fast Lane (along CH2840 - 3140)		100%	50 25-Nov-13 A	07-Dec-13 A	☐ Road Construc
Noise Barı	riers					
Noise Bar	rier NB31A					
S22N3020	NB31A (CH 0-21.9) on W56A (incl. VO 9: Construction of double leaf access door for noise barrier)		100%	74 15-Oct-12 A	22-Nov-12 A	NB31A(CH 0-21.9) on W56A (ind. VO 9:
S22N3021	NB31A (CH 0-21.9) on W56A : Erecting H-Column		100%	38 15-Oct-12 A	19-Oct-12 A	■ NB31A(CH 0-21.9) pn W56A Erecting H-C
S22N3022	NB31A (CH 0-21.9) on W56A: Installing Panel		100%	36 22-Oct-12 A	22-Nov-12 A	□ NB31A(CH 0-21.9) on W56A: Installing F
South Bo	und			<u> </u>	<u> </u>	
Preliminar						
S22S0000	Site Clearance/Access Rd		100%	84 01-Apr-10 A	16-Jul-10 A	Site Clearance/Access Rd
S22S0010	Site Clearance		100%	72 01-Apr-10 A	02-Jul-10 A	Site Clearance
S22S0020	Access Road		100%	72 20-Apr-10 A	16-Jul-10 A	Access Road
Slopeworl				<u> </u>		
S22S5000	Slopeworks Cut(S28-sn) (incl. VO15: Revised Layout of Slope S28)		100%	198 21-Oct-10 A	17-Aug-11 A	Slopeworks Cut(S28-sn) (incl. VO15: Revised Layout of Slope S28)
S22S5010	Slopeworks Cut(S28) - Stage 1 (Cutslope)		100%		16-Nov-10 A	☐ Slopeworks Cut(S28) - Stage 1 (Cutstope)
S22S5030	Slopeworks Cut(S28) - Stage 1 (Soil Nail Installation : IJKL)		100%	23 17-Nov-10 A		Slopeworks Cut(S28) - Stage 1 (Soil Nail Installation : IJKL)
S22S5040	Slopeworks Cut(S28) - Stage 2 (Cutslope)		100%	37 11-Dec-10 A		Slopeworks Cut(\$28) - Stage 2 (Cutslope)
52255.0			. 30 /0	3 300 1071		

A - 4 !-	ity ID	Activity Name	<b>T.</b>	Activity of	Original Chart	Cinich	2010   2011   2012   2013   2014
Activ	תו וט	Activity Name	Total Float		Original Start Duration	Finish	11 Q2 Q3 Q4 Q1 Q2 Q3
	S22S5060	Slopeworks Cut(S28) - Stage 2 (Soil Nail Installation : EFGH)		100%	37 08-Feb-11 A	23-Mar-11 Δ	12 3 4 5 6 7 8 9 1 1 1 1 1 1 1 1 1 1 1 1 2 2 2 2 2 2 2
Н	S22S5070	Slopeworks Cut(S28) - Stage 3 (Cutslope)		100%	36 06-Jul-11 A	17-Aug-11 A	Slopewbrks;Cut(S28) - Stage 3 (Cutslope)
1	S22S5070	Slopeworks Cut(S28) - Stage 3 (Soil Nail Installation : ABCD)		100%	36 20-Aug-11 A	04-Oct-11 A	Slopeworks Cut(S28) - Stage 3 (Soil Nail Installation : ABQD)
	S22S5100	Slope Reinstatement Works (Bridge 12B)	-61		25 27-Jan-14	27-Feb-14	Slope Rei
			-01	0 /6	25 27-0411-14	27-1 60-14	Slope ne
Ш		on of Retaining Wall  /all RWB12B				_	
Ш		Pre-drilling for RWB12B		100%	24 16-Jul-10 A	12-Aug-10 A	☐ Pre-drilling for RWB12B
Ш	S22S2110 S22S2120	Piles for RWB12B			116 13-Aug-10 A		
ш		Excavate to cut-off level		100%			Piles for RWB12B
Ш	S22S2130	1 11 11 11 11 11 11 11 11 11 11 11 11 1		100%	60 26-Jan-11 A	09-Apr-11 A	Excavate to cut-off level
Ш	S22S2140	Capping/Walling for Bay 1-2, RWB12B		100%	60 28-Mar-11 A		Capping/Walling for Bay 1-2, RWB12B
Ш		Capping/Walling for Bay 3-6, RWB12B		100%	75 11-May-12 A	·	Capping/Walling for Bay 3-6, RW 12B
Ш	S22S2150	Backfilling		100%	60 04-Sep-12 A	22-Jun-13 A	Backfilling
Ш.		nstruction Works, Roadworks & Drainage					
	S22S4000	Road Re-construction Works (CH 2840 - 3450)	-57		185 06-May-13 A		Road R
	S22S4405	Road and Drainages Works for Fast Lane (CH2840 - 3000)	-56		45 06-May-13 A		Rọad ạnd t
	S22S4410	Road Surface Works for Fast Lane (CH2840 - 3000)	-56		12 26-Nov-13 A	1 11	Road Surfa
	S22S4415	Road Re-Construction Works for Mid 2 Lane (CH2840 - 3000)	-49	70%	24 20-Dec-13 A	11-Feb-14	Road Re-G
Ш	S22S4420	Road and Drainages Works for Fast and Mid Lane (CH3000 - 3450)	-56	20%	18 26-Nov-13 A	19-Feb-14	Road and
Ш	S22S4425	Road Surface Works for Fast Lane and Mid Lane (CH3000 - 3450)	-56	0%	10 19-Feb-14	03-Mar-14	■ Road Su
Ш	S22S4430	Road and Drainages Works for Slow Lane (CH2840 - 3450)	-56	0%	10 03-Mar-14	14-Mar-14	III Road;an
Ш	S22S4435	Road Surface Works for Slow Lane (CH3000 - 3450)	-56	0%	7 14-Mar-14	22-Mar-14	. □ Road S
Ш	S22S4440	Road Construction Works Remaining Works (along CH2840 - 3450)	-57	0%	12 10-Mar-14	22-Mar-14	la Road C
	S22S4500	Roadworks for Realignment of Existing Shek Lin Road	-55	0%	18 28-Feb-14	20-Mar-14	■ Roadwo
	Traffic Cont	rol & Survelance System					
Ш	S22S4820	TCSS - (Gantry 60) (incl. VO73 Revised Sign Gantry Details)	-56	60%	50 16-Sep-13 A	22-Mar-14	toss-
Ш	Modification	n of Existing Bridge 12					
Ш	S22S1300	Demolish Existing Parapet & Stitching Works for bridge 12 & 12B (incl. VO3 & VO29)	-51	44.29%	70 16-Sep-13 A	15-Mar-14	Demolis
Ш	S22S1315	VO 3: Existing Bridge 12 pile cap construction		100%	30 17-Sep-10 A	15-Feb-11 A	VO 3: Existing Bridge 12 pile cap construction
Ш	S22S1322	Removal of Existing Steel Barrier and Surface	-24	85%	8 22-Jul-13 A	28-Jan-14	Removal of
	S22S1323	Stitching Works of Existing Bridge Decks B12 and B12B	-24	80%	20 08-Aug-13 A	05-Feb-14	Stitching W
	S22S1324	Road Surface of B12B for TW Slip Road	-24	0%	7 05-Feb-14	13-Feb-14	I Road Surf
	S22S1326	Removal of existing central barrier along B12 and Erection breaking platform	-57	70%	12 16-Sep-13 A	30-Jan-14	Removal of
	S22S1328	Breaking the existing stitch of B12 and condition survey	-57	50%	18 14-Dec-13 A	08-Feb-14	Breaking th
Ш	S22S1329	Removal M.J and Replacement M.J	-57	50%	8 26-Nov-13 A	13-Feb-14	Removal N
	S22S1331	Stitching Works for B12	-57	0%	20 14-Feb-14	08-Mar-14	Stitching.
Ш	S22S1332	Road Surface Works	-51	0%	6 10-Mar-14	15-Mar-14	.∎ Road Si
Ш	Landscapin	ig	I		<u> </u>		
	S22S6000	Landscaping Works	-61	20%	30 23-Sep-13 A	27-Mar-14	Laindsc
	Site Area S	A23					
	PHSA2320	Possession of SA23 (Day180)		100%	0 04-May-10 A		♦ Possession of \$A23 (Day180)
	SA230000	Site Area SA23 Works Period		100%	586 16-Jul-10 A	25-Jan-14 A	Site Area S/
	SA230010	Site Area SA23 Works Completion	151		0	27-Jan-14	♦ Siţe Area S
	South Bou	· ·					
	Preliminario						
	S23S0000	Site Clearance / Site Access		100%	144 28-Dec-11 A	24-Aug-13 A	Site Clearance / Site Ad
	S23S0000 S23S1000	Site Clearance		100%	72 28-Dec-11 A	-	Site Clearance
	S23S1000	Site Access		100%	72 28-Dec-11 A		
	02002000	OILO MOCOGO		10076	12 20-Dec-12 A	24-7uy-13 A	Site Access:

		<u> </u>				
ctivity ID	Activity Name	Total Float	Activity % Complete	Original Start Duration	Finish	2010 2011 2012 2013 2014 21 Q2 Q3 Q4 Q1 Q2 Q3 1 2 3 4 5 6 7 8 9 1 1 1 1 1 1 1 1 2 2 2 2 2 2 2 2 2 2 2
Slopeworks						
S21N2638	Slopeworks Fill (S27)		100%	99 29-Nov-12 A	24-Jan-13 A	Sløpeworks Fill (\$27)
	Slopeworks Fill (S27) - Stage 1, +45mPD		100%	33 29-Nov-12 A		Slopeworks Fill (\$27) - Stage 1, +45mPD
	Slopeworks Fill (S27) - Stage 2, +50mPD		100%	33 08-Dec-12 A		☐ Slopeworks Fill (S27) - Stage 2, +50mPl
	Slopeworks Fill (S27) - Stage 3, +55mPD		100%	33 04-Jan-13 A		☐ Slopeworks Fill (S27) - \$tage 3, +55m
Landscapin	<u> </u>		10078	00 04 0an 10 A	24 0an 10 A	μ σιφρινοία τη φιαχέ ο, τορτί
	Landscaping Works		100%	50 23-Sep-13 A	25lan-14 A	Landscapino
			10070	20 Ccp 1071	20 0411 1471	
Site Area S						
PHSA2410	Possession of SA24 (Day180)		100%	0 04-May-10 A		♦ Possession of \$A24 (Day180)
SA240000	Site Area SA24 Works Period	-95		788 04-May-10 A	·	Sité Ar
SA240010	Site Area SA24 Works Completion	71	0%	0	16-Apr-14	⇒ Şitê Ar
North Boul	nd					
Preliminarie						
S24N0000	Site Clearance/Access Rd		100%	89 25-Aug-10 A	09-Dec-10 A	Site Clearance/Access Rd
S24N0010	Site Clearance		100%	72 25-Aug-10 A	19-Nov-10 A	Şite Clearance
S24N0020	Access Road		100%	72 07-Sep-10 A	09-Dec-10 A	Access Road
Slopeworks		,		'		
S24N5000	Slopeworks Cut(S31A)		100%	150 01-Jun-11 A	25-Nov-11 A	Slopeworks Cut(S31A)
S24N5010	Slopeworks Cut (S31A) & Soil Nail : Stage 1 (Upper +80mPD)		100%	60 01-Jun-11 A	06-Aug-11 A	Slopeworks Cut (S31A) & Soil Nail : Stage 1 (Upper +80mPD)
S24N5020	Slopeworks Cut (S31A) & Soil Nail : Stage 2 (Lower +72mPD)		100%	60 08-Aug-11 A	22-Oct-11 A	\$lopeworks Cut (\$31A) & Soil Nail ; Stage 2 (Lower +72mPD)
S24N5030	Slopeworks Cut (S31A) : Shortcreting		100%	30 24-Oct-11 A	25-Nov-11 A	Slopeworks Gut (\$31A); Shortcreting
S24N5810	Erect Scaffolding & Soil Nail Installation (Area 4)		100%	60 19-Mar-13 A	08-May-13 A	Erect Scaffolding & Spil, Nail, Ins
S24N5831	Slope Reinstatement Works (Bridge 12ASA incl. VO74)	-77	80%	75 30-Apr-13 A	15-Feb-14	Slope Rein
Constructio	n of Retaining Wall					
	/all W56B-2 (Bay 12) (AD)					
	Prepare Piling Platform for W56B-2		100%	24 02-Oct-10 A	07-Feb-11 A	Prepare Piling Platform for W56B-2
	Pre-drilling for W56B-2		100%	18 28-Oct-10 A	18-Nov-10 A	☐ Pre-drilling for W56B-2
	Retaining Wall W56B-2		100%	255 21-Jan-11 A		Retaining Wall W56B+2:
	Piles for W56B-2 (Stage 2)		100%	75 21-Jan-11 A		Piles for W56B-2 (Stage 2)
S24N2150	Excavation, upper		100%	75 26-Sep-11 A	·	Excavation, upper
			100%	60 26-Sep-11 A		Excavation, Middle
S24N2155	Excavation, Middle  Excavation, Bottom		100%	75 11-May-12 A	-	Excavation, Bottom
	Construction of Base Slab (Bay 12)		100%		25-Aug-12 A	☐ Construction of Base \$lab (Bay 12)
	Retaining Wall Structure (Bay 12B)		100%		23-Nov-12 A	Retaining Wall Structure (Bay 12B)
	Drainage & Backfilling W56B-2			75 27-Feb-13 A		Retaining wai structure (Bay 12B)  Drainage & Backfilling W56B-
			100%	75 27-FED-13 A	ZZ-IVIQY- I 3 A	hiamage, ∞ bagkılılıng i Məbb-
Retaining W			4000/	05 00 5 40 5	47 Aug 40 A	
	Construction of W57A		100%	35 26-Jun-13 A		Construction of W57A
	Construction of Structure W57A (W57B - bay1 to bay2)		100%	20 26-Jun-13 A		Construction of Structure
S24N2203			100%	7 22-Jul-13 A	17-Aug-13 A	□ Ba¢kfilling
	/all W57B (AD 2)					
	Prepare Piling Platform for W57B		100%	18 11-Jan-11 A		□ Prepare Piling Platform for W57B
	Pre-drill for W57B		100%	20 01-Apr-11 A	-	10 Pre-drill for W57B
	Piles for W57B		100%	45 01-Apr-11 A	·	Piles for W57B
S24N2340	Excavate at W57B		100%	75 26-May-11 A	23-Aug-11 A	Excavate at W57B
S24N2360	Retaining Wall W57B		100%	75 19-Apr-12 A	11-Dec-12 A	Retaining Wall W57B
S24N2370	Backfilling & Drainage W57B		100%	60 25-Jan-13 A	17-Aug-13 A	Backfilling & Drainage V
Potaining W	all W57C, (CSD 2)					

rity ID	Activity Name	Total	Activity %	Original Start	Finish	2010   2011   2012   2013   2014
<b>,</b>		Float		Duration		1   Q2   Q3   Q4   Q1   Q3   Q4   Q1   Q2   Q3   Q4   Q1   Q3   Q3
S24N2402	Pre-drilling for W57C		100%	20 26-Mar-11 A	19-Apr-11 A	□ Pre-drilling for W5/7C
S24N2404	Piles for W57C		100%	45 01-Apr-11 A	14-May-11 A	Piles for W57C
S24N2407	Excavate to cut-off level		100%	75 26-May-11 A	23-Aug-11 A	Excavate to cut-off level
S24N2408	Retaining Wall, W57C		100%	75 19-Apr-12 A	13-Dec-12 A	Retaining Wall, W57C
S24N2420	Backfilling & Drainage for W57C		100%	54 25-Jan-13 A	17-Aug-13 A	Backfilling & Draina
Retaining W	all RWB12A	,	·	,	'	
S24N1500	Piling & Construct RWB12A		100%	195 04-Jun-11 A	31-Jan-12 A	Piling & Construct RWB12A
S24N1510	Piling of RWB12A, Stage 1 (28/34 nos)		100%	60 04-Jun-11 A	31-Aug-11 A	Piling of RWB12A, Stage 1 (28/34 hos)
S24N1515	Piling of RWB12A, Stage 2 (6nos)		100%	24 01-Sep-11 A	23-Sep-11 A	□ Piling of RWB12A, Stage 2 (6nos)
S24N1517	Piles Load Test		100%	36 26-Nov-11 A	10-Jan-12 A	Piles Load Test
S24N1520	Construction of Base Slab, RWB12A		100%	60 23-Apr-12 A	17-Apr-13 A	Construction of Base Slab, F
S24N1522	Construction of Wall, RWB12A		100%	40 18-Apr-13 A	07-Jun-13 A	Construction of Wall, RV
S24N1530	Backfilling		100%	20 09-May-13 A	25-Jun-13 A	□ Backfilling
S24N1540	Construction the wing slab of RWB12A		100%	30 16-Sep-13 A	09-Nov-13 A	Construction
Roadworks	, Drainage & Utilities	<u>'</u>		<u> </u>		
S24N4000	Roadworks, Drainages & Utilities (ch3140-3400, exclude B12A)		100%	109 19-Aug-13 A	07-Dec-13 A	Roadworks
S24N4015	Road and Drainage Works		100%	10 19-Aug-13 A	14-Sep-13 A	☐ Road and Draina
S24N4025	Road Surface Works for Mid and Slow Lane		100%	14 27-Aug-13 A	14-Sep-13 A	□ Road Surface W
S24N4026	TTA - Stage 4B-3		100%	0	14-Sep-13 A	♦ TTA - Stage 4B-3
S24N4035	Road Construction Fast Lane and Remaining Works (along CH3140 - 3400)		100%	50 26-Oct-13 A	07-Dec-13 A	—
Landscapin	la di					
	Landscaping Works	-77	0%	50 17-Feb-14	16-Apr-14	
Site Area S	A25					
PHSA2520	Possession of SA25 (Day270)		100%	0 04-May-10 A		♦ Possession of SA25 (Day270)
SA250000	Site Area SA25 Works Period (incl, Provision of hoarding at site boundary of SA25)	118		770 04-May-10 A	01-Mar-14	'Site 'A
SA250010	Site Area SA25 Works Completion	118		0	01-Mar-14	♦ Site A
SA250020	Temporary Traffic Management (Detail shall refer to supplementary information)	95		765 04-May-10 A		Tem;
SA250030	Overall Utility Diversion (Detail shall refer to supplementary information)	95		765 04-May-10 A		Over
		30	30.07 70	700 04 May 1071	OT Wat 14	
South Bou						
S25S0000	Site Clearance/Access Rd (ch3400-3600)		100%	97 20-Oct-10 A	16-Feb-11 A	Site Clearance/Access Rd (ch3400-3600)
	, ,		100%	75 20-Oct-10 A	18-Jan-11 A	Site Clearance (ch3400-3600)
S25S0010	Site Clearance (ch3400-3600)					Access:Road (ch3400-3600)
S25S0020	Access Road (ch3400-3600)		100%	75 15-Nov-10 A	16-Feb-IIA	Access Hoad (ch3400-3600)
Slopeworks			1000/	CO 15 OH 10 A	10 Nov. 10 A	(N. J.
S25S5000	Slopeworks Fill (S30A)		100%	60 15-Oct-12 A	10-Nov-12 A	□ Slopeworks Fiff(S30A)
S25S5010	Slopeworks Fill (S30A) - Stage 1: +53.5mPD		100%	30 15-Oct-12 A	30-Oct-12 A	Slopeworks Fill (\$30A) - Stage 1: +53.5
S25S5020	Slopeworks Fill (S30A) - Stage 2: 55.8mPD		100%	30 31-Oct-12 A	10-Nov-12 A	Slopeworks Fill (S30A). Stage 2: 55.8r
S25S5110	Slope Reinstatement Works (Bridge 13A)	-38		25 26-Sep-13 A		Slope:
S25S5140	Slope Reinstatement Works (Bridge LB1)	-38		25 26-Sep-13 A		Slópé
S25S5150	Slope Reinstatement Works (S30A)	-38	65%	25 28-Sep-13 A	01-Mar-14	Slope
	on of Retaining Wall					
	/all W58B, (CSD 2)				1	
	Site Formation		100%	25 01-Nov-10 A		☐ Site Formation
S25S2030	Excavate to cut-off level		100%	10 01-Nov-10 A		Excavate to cut-off level
	Construction of Structure W58B		100%	75 13-May-11 A		Construction of Structure W58B
S25S2060	Backfilling		100%	45 05-Nov-12 A	08-Feb-13 A	Backfilling

Activity ID	18	Tatal	Activity of	Onicina	I Ctort	Einich	2010 2011	2012	2013	2014
Activity ID	Activity Name	Total Float	•			Finish	Q1 Q2 Q3 Q4 Q1 Q2 (	Q3 Q4 Q1 Q2 Q3	Q4 Q1 Q2 Q3 Q4	Q1 Q2 Q3
S25S4000	Roadworks, Drainages & Utilities (CH 3400 - 3600)	121			27-Feb-13 A	27-Jan-14	123456789111111111	1 2 2 2 2 2 2 2 2 2 3 3	3 3 3 3 3 3 3 4 4 4 4 4 4 4 4 4	445555555 Roadworks, I
S25S4025	Road Works for Mid and Slow Lane	121	100%			03-Jun-13 A	—		Road Works	for Mid and Slow
S25S4030	Drainages Works		100%		0 04-Mar-13 A		— :::::::::::::::::::::::::::::::::::::		Drainages Work	1 1 1 1 1 1 1 1 1
S25S4040	Road Surface for Mid and Slow Lane		100%		31-May-13 A	<u>'</u>	— :::::::::::::::::::::::::::::::::::::			ce for Mid and Slo
S25S4060	Removal of existing central barrier and forming temporary road (CH 3350 - CH 3550)		100%		2 24-Jun-13 A	09-Jul-13 A	—[:::::::::::::::::::::::::::::::::::::			of existing central t
S25S4070	Road Construction and Remaining Works (along CH 3400 - 3600)	-15			27-Jul-13 A	29-Jan-14				Road Constri
S25S4200	Slip Road H	10	100%		27-Aug-13 A		— :::::::::::::::::::::::::::::::::::::			Slip Road H
	riers & Road Barriers		10070		27 Aug 1071	11 200 1071				Gilp 110aci
Noise Bar						_				
\$25\$3000			100%	95	13-Nov-12 A	04-Feb-13 A			Construct Noise Barr	ier & Beam Barrie
S25S3010	·		100%		6 13-Nov-12 A				NB34 : Foundation Wo	4-4-4-4-4-4-4-4-4-4
S25S3020			100%		6 23-Jan-13 A		—[:::::::::::::::::::::::::::::::::::::		NB34: Installation of	: 1 : : : : : : : 1
	ntrol & Survelance System		10076	30	25 0an 15 A	04165167			i i i i i i i i i i i i i i i i i i i	
	TCSS - Stage 1 (Bridge 13A)		100%	30	0 08-Δpr-13 Δ	25-May-13 A			TCSS - Stage	e 1 (Bridge 13A)
			100 /6	30	00-Apr-13 A	25-Way-15 A			i Goo Glage	; (blidge 19A)
Site Area			40001		00 5-1-10		hard the state of			
PHSA2620	Possession of SA26 (Day0)		100%		26-Feb-10 A	40.0444	Possession of \$A26 (Day0)			dula
SA260000	Site Area SA26 Works Period	-61			26-Feb-10 A	13-Mar-14				Site Area
SA260010	Site Area SA26 Works Completion	-61				13-Mar-14				Site Area \$
SA260020	Temporary Traffic Management (Detail shall refer to supplementary information)	-49			26-Feb-10 A	13-Mar-14				Temporari
SA260030	Overall Utility Diversion (Detail shall refer to supplementary information)	-49			26-Feb-10 A	13-Mar-14				Overall Uti
SA260040	Additional work to existing ball valves, HKCG	-64	0%	52	27-Jan-14	31-Mar-14				Additiona
North Bot										
Preliminar						_				
S26N0000	Site Clearance/Access Rd (Tai Wo Road)		100%		26-Feb-10 A		Site Clearance/Access			
S26N0010	Site Clearance (Tai Wo Road)		100%			31-May-10 A	Site Clearance (Tai Wo Roa			
S26N0020	Access Road (Tai Wo Road)		100%	75	01-Jun-10 A	28-Aug-10 A	Access Road (Tai Wo	Road)		
Slopeworl										
S26N5000	Slopeworks Cut(S31A-sn)		100%		01-Jun-11 A			Slopeworks Cut(S		
S26N5010	Slopeworks Cut(S31A-sn) - Stage 1 (Upper +65mPD)		100%			06-Aug-11 A			- Stage 1 (Upper +65mPD)	
S26N5020	Slopeworks Cut(S31A-sn) - Stage 2 (Middle +60mPD)		100%		08-Aug-11 A				A-sn) - \$tage 2 (Middle +60mPD)	Ju <b>J</b> u Ju Ju Ju Ju Ju Ju Ju Ju Ju J
S26N5030	Slopeworks Cut(S31A-sn) - Stage 3 (Lower +55mPD)		100%		24-Oct-11 A	25-Nov-11 A		Slopeworks Cut(S	31A-sn) - Stage 3 (Lower +55mP[	<b>)</b> )
S26N5040	Remaining Works of S31A	-29	70%	40	27-Jul-13 A	19-Feb-14				Remaining \
	ion of Retaining Wall									
Retaining										
	Excavate & Construct W59 (w/SP)		100%			22-Mar-13 A			Excavate & Consti	uct W59 (w/SP)
S26N2002	·		100%		01-Mar-12 A			W5	9: Base Slab of Bay 1-3	
S26N2004			100%		02-Jul-12 A	24-Dec-12 A			W59: Wall of Bay 1-3	
S26N2006	·		100%	56	19-Apr-12 A	12-Jan-13 A			W59: Base Slab & Wal	
S26N2008	·		100%		· .	09-Jul-12 A			/59: Excavation + Soil Nail for Bay	
S26N2012			100%		16-Jul-12 A	24-Dec-12 A			W59: Base Slab of Bay	
S26N2014	•		100%	75	27-Aug-12 A	02-Feb-13 A			W59: Wall of Bay 4-8	
S26N2020	Backfilling		100%	24	23-Apr-12 A	22-Mar-13 A			Backfilling	
Roadwork	s, Drainage & Utilities									
S26N4000	Roadworks, Drainages & Utilities (ch3400-3720)	-23	87.72%	92	29-Jul-13 A	12-Feb-14				Roadworks,
S26N4035	Removal of existing paving	-43	60%	7	29-Jul-13 A	29-Jan-14				Removal of e
S26N4055	Road and Drainage Works for Slow and Mid Lane	-43	90%	25	27-Jul-13 A	05-Feb-14				Road and Dr
S26N4065	Road Surface for Slow and Mid Lane	-43	90%	10	27-Aug-13 A	06-Feb-14				Road Surfac

ctivity ID	Activity Name	Float	Activity % Complete	Origina Duration		Finish	2010 2011 2012 2013 2014 21 Q2 Q3 Q4 Q1 Q2 Q3 Q4 Q1 Q2 Q3 Q4 Q1 Q2 Q3 Q4 Q1 Q2 Q3
000111			-			10.5.1.1.	12345678911111111111222222222223333333333344444444
S26N4075	Road Construction Fast Lane and Remaining Works (along CH3400 - 3720)	-23	90%	50	26-Oct-13 A	12-Feb-14	Road Coris
Traffic Con	ntrol & Survelance System						
S26N4810	TCSS - (15m High mast M9), (SEC Poles SC24/ S24) & (Gantry 24) (incl. VO73 Revised Sign Gantry Details)	-31	65%	40	0 08-Jul-13 A	21-Feb-14	TCSS+(15
Modification	on of Existing Bridge						
Modificatio	on of Existing Bridge 13						
S26N1200	VO 27: Temporary access and lighting for inspection on Bridge Deck interior of Existing Bridge 13		100%	10	02-Jan-12 A	17-Jan-12 A	UO 27: Temporary access and lighting for inspection on Bridge De
S26N1210	Construction of Temporary Pier supports & Installation of Jacks	-44	76.49%	134	4 22-Jul-13 A	07-Mar-14	Construct
S26N1260	Removal of existing central barrier along B13, Erection breaking platform and re-construction of existing parapet		100%	14	4 22-Jul-13 A	25-Sep-13 A	Removal of existing o
S26N1270	Breaking the existing stitch of B13 and conditional survey		100%	25	5 27-Jul-13 A	04-Nov-13 A	Breaking the existing
S26N1330	Removal existing M.J, Bridge Jacking and replacement bearing & M.J		100%	35	5 27-Jul-13 A	23-Nov-13 A	Removal existing
S26N1340	TTA - Stage 4B-4	121	0%	C	)	27-Jan-14	→ TTA- Stage
S26N1350	Stitch Works for B13 (Rebar and Formwork)		100%	35	5 07-Sep-13 A	25-Nov-13 A	Stitch Works for I
S26N1355	· · · · · · · · · · · · · · · · · · ·		100%			11-Jan-14 A	□ Stitch; Works f
	Road Surfacing and Road Diversion	-44	10%		5 13-Jan-14 A		Road Sur
Landscapii							
S26N6040	Landscaping Works (CH3400 - 3720)	-43	50%	50	16-Sep-13 A	07-Mar-14	Landscajo
South Bou		.0	0070		, 10 GGP 1071	or mar r	
<u> </u>							
Preliminari S26S0000	Site Clearance/Access Rd (Tai Wo Road)	1	100%	100	00 Feb 10 A	04-Aug-10 A	Site Clearance/Access Rd (Tai Wo Road)
	· · · · · · · · · · · · · · · · · · ·					-	
S26S10	Site Clearance (Tai Wo Road)		100%		_	05-Jun-10 A	Site Clearance (Tai Wo Road)
S26S20	Access Rd (Tai Wo Road)		100%	80	29-Apr-10 A	04-Aug-10 A	Access Rd (Taj Wo Road)
Slopework		40	F0.000/		4 40 E-1-40 A	40 5-1-44	
S26S5000	Slopeworks Fill(S32)	-49	58.33%		18-Feb-13 A		Slopeworks
S26S5010	Slopeworks Fill (S32) - Stage 1 (Lower +42mPD)		100%			30-May-13 A	Slopeworks Fill (S32) - Stage
S26S5020	Slopeworks Fill (S32) - Stage 2 (Upper +45mPD)	-49	60%		08-Jun-13 A		Slopeworks
S26S5110	Slope Reinstatement Works (besides LB3)	-27	37.5%		1 04-Mar-13 A		Slope Rein
S26S5120	Slope Reinstatement Works (besides LB3) - Lower: below +24mPD	-27	70%		04-Mar-13 A		Slope Reins
S26S5130	Slope Reinstatement Works (besides LB3) - Upper: above +24mPD	-27	55%	20	27-Aug-13 A	15-Feb-14	Slope Rein
<u> </u>	on of Retaining Wall						
Retaining V	Wall RWTW1, (CSD 1)						
S26S1289	Pre-drilling for RWTW1 part 1		100%	11	1 26-May-11 A	08-Jun-11 A	☐ Pre-drilling for RWTW1 part 1
S26S1290	Construct RWTW1N & RWTW1S		100%	325	5 26-Nov-11 A	25-Sep-13 A	Constr <mark>u</mark> ct RWTW1N
S26S1391	Temp. Working Platform		100%	30	26-Nov-11 A	17-Dec-11 A	☐ Temp. Working Platform
S26S1392	Construction of Structure (mini piles)		100%	60	04-Jan-12 A	31-Jan-12 A	☐ Construction of Structure (mini piles)
S26S1394	Construction of Structure (part 1, Half of North & South RW)		100%	50	29-Dec-11 A	17-Feb-12 A	Construction of Structure (part 1, Half of North & South RW)
S26S1395	Backfilling (part 1, Half of North & South RW)		100%	30	18-Feb-12 A	23-Feb-13 A	Backfilling (part 1., Half of North & So
S26S1401	ELS Works, Excavation and Protection Existing Gas Main		100%	20	25-Mar-13 A	21-Jun-13 A	ELS Works, Excavation and
S26S1402	Construction of Structure (part 2, Remaining RW)		100%	35	5 19-Apr-13 A	17-Jul-13 A	Construction of Structure (
S26S1403	Backfilling (part 2, Remaining RW)		100%	15	5 21-Jun-13 A	11-Sep-13 A	Backfilling (part 2, Ren
S26S1404	Roadworks		100%	18	3 15-Aug-13 A	25-Sep-13 A	
Retaining V	Wall RWTW2, (CSD 1)	-					
\$26\$5120 \$26\$5130  Construction  Retaining to the second s	Pre-drilling for RWTW2		100%	12	2 12-Jan-11 A	25-Jan-11 A	□ Pre-drilling for RWTW2
S26S1380	Piling/Excavate & Construct RWTW2		100%	609	9 26-May-11 A	25-Sep-13 A	Piling/Excavate & Cor
S26S1381	Minipile Piling works, Stage 1 (Half Bay 1)		100%			24-Sep-11 A	Minipile Piling works, Stage 1 (Half Bay 1)
S26S1382			100%			04-Jun-12 A	Piling platform for Stage 2 (Bay 2-4)
S26S1383			100%			08-Aug-12 A	Minipile piling works, stage 2 (31 nps.)
32381000	F - 1 F - 100 C - 100 C - ( - 1 - 1 - 1 - 1 )		. 50 /5		5 : 55:: 1 <b>2</b> /(		The state of the Assert Service Servic

		20							
Activity	ID	Activity Name	Total Float		Original Start Duration	Finish	21 (	2010 Q2 Q3 4 5 6 7	2011   2012   2013   2014   3   Q4   Q1   Q2   Q3   Q4   Q1   Q3   Q4   Q1   Q2   Q3   Q4   Q1   Q3   Q3   Q4   Q1   Q3   Q3   Q4   Q1   Q3   Q3   Q4   Q3
	S26S1384	Base slab of RWTW2 (stage 1 & 2: half Bay1 & Bay 2-4)		100%	75 26-Nov-11 A	10-Nov-12 A		1 1 1	Base slab of RWTW2 (stage 1 & 2: half Ba
	S26S1386	Wall of RWTW2 (stage 1 & 2: half Bay1 & Bay 2-4)		100%	48 12-Nov-12 A	22-Jan-13 A			Wall of RWTW2 (stage 1 & 2: half Ba)
	S26S1520	Construction of Remain of RWTW2 (stage 3: Remaining Half Bay 1, Connection to LB2)		100%	50 18-Feb-13 A	04-Jun-13 A	-111		Construction of Remain of R
	S26S1530	Backfilling of RWTW2		100%	20 02-May-13 A	18-Jun-13 A			□ Backfilling of RWTW2
	S26S1540	Roadworks		100%	20 22-Aug-13 A	25-Sep-13 A			. □ Roadworks
1	Retaining W	all RWTW3, (VO)			J.	1			
	S26S1389	Pre-drilling for RWTW3		100%	12 28-Dec-10 A	11-Jan-11 A			☐ Pre-drilling for RWTW3
	S26S1390	Piling/Excavate & Construct RWTW3		100%	708 01-Aug-11 A	25-Sep-13 A			Piling/Excavate & Co
	S26S1591	Piling for RWTW3		100%	24 01-Aug-11 A	23-Sep-11 A			Piling for RWTW3
	S26S1592	ELS Works & Excavation		100%	24 28-Dec-11 A	28-Jan-12 A			☐ EĻS Works & Excavation
	S26S1593	VO 51.1: Modification works of ELS		100%	20 03-Jul-12 A	31-Jul-12 A			□ VO 51.1: Modification works of ELS
	S26S1596	VO 51.1: Construction RWTW Base Slab (Bay2-8)		100%	60 20-Aug-12 A	10-Nov-12 A			VO 51.1: Construction RWTW Base Slab (I
	S26S1598	VO 51.1: Construction RWTW Wall Stem (Bay 2-8)		100%	60 17-Sep-12 A	14-Jan-13 A			VO 51.1: Construction RWTW Wall St
	S26S1600	VO 51.1: Temporary cut to slope toe		100%	25 22-Jan-13 A				VO 51.1: Temporary cut to slope
	S26S1602	VO 51.1: Rockfill Slope (Bay 1 -Bay 7)		100%	40 13-Apr-13 A	· ·			VO 51.1: Rockfill Slope (Ba
	S26S1604	VO 51.1: Construction RWTW3 (Bay 1)		100%	40 12-Nov-12 A				□ VO:51.1: Canstruction RWTW3 (Bay 1)
	S26S1606	VO 51.1: Remaining Rockfill below LB3	119		20 19-Jun-13 A				VO 51:1: R
		VO 51.1: Roadworks	110	100%	30 26-Jun-13 A				VO 51 1∶Roadworks
	Retaining W			10078	30 20-00H-13 A	25-3ер-13 А			w G 311 in Galwon
Ш		Construction of RWTW 3A		100%	168 01-Oct-12 A	25-Sep-13 A			Construction of RW
		ELS works RWTW3A				15-Nov-12 A			ELS works RWTW3A
				100%	32 01-Oct-12 A				
		Excavation works RWTW 3A		100%	25 16-Nov-12 A				□ Excavation works RWTW 3A
		RC wall construction RWTW 3A		100%	70 26-Nov-12 A	· ·			RC wall construction RWTW 3
		Backfill RWTW 3A		100%	20 06-May-13 A				□ Backfill RWT <b>W</b> 3A
		Roadworks		100%	30 26-Jun-13 A	25-Sep-13 A			Roadworks
		all W60 & W61A (CSD 2)	1						
		Pre-drilling for W60 & W61A		100%	7 06-May-11 A		-111		Pre-drilling for W60.& W61A
	S26S2030	Mini Piles for W60 & W61A		100%	30 15-Jun-11 A				Mini Piles for W60 & W61 A
	S26S2040	Excavation		100%	50 19-Apr-12 A				Excavation
	S26S2050	Construct Cap & Wall		100%	52 06-Jun-12 A	31-Aug-12 A			Construct Cap & Wall
	S26S2060	Backfilling		100%	30 04-Sep-12 A	10-Apr-13 A			Backfilling:
	Temporary I	Bridge bet. RWTW2 & RWTW1							
	S26S2520	TTA Stage 5		100%	0 27-Sep-12 A				♦ TTAStage 5
	Road Re-co	nstruction Works, Roadworks, Drainage & Utilities							
	S26S4000	Roadworks, Drainages & Utilities (Landing between B13A & B15A within CH 3600 - 3720)		100%	62 18-Feb-13 A	21-Jun-13 A			Roadworks; Drainages & U
	S26S4002	Removal of existing paving of landing area		100%	12 18-Feb-13 A	09-Apr-13 A			Removal of existing paving of lan
	S26S4005	Road Works		100%	25 10-Apr-13 A	31-May-13 A			Road Works:
Ш	S26S4006	Drainages Works		100%	15 23-Apr-13 A	30-May-13 A			☐ Drainages Works
	S26S4010	Road Surface Works (incl. VO14: Revised Layout of Police Observation Platform at CH3700 )		100%	10 01-Jun-13 A	21-Jun-13 A			☐ Road Surface Works (incl.)
	Noise Barrie	ers & Road Barriers							
	Noise Barrie								
	_	Construct Noise Barrier & Beam Barrier, NB35		100%	60 15-Mar-13 A	18-Jun-13 A			Construct Noise Barrier & B
	S26S3010	Construct Noise Barrier : foundation Works. NB35		100%	30 15-Mar-13 A		-111		Construct Noise Barrier: found
		Construct Noise Barrier : Installation of H-coulmn & Panel NB35		100%	7 17-May-13 A		-		□ Construct Noise Barrier In
		Remaining Works of NB35	-49		10 27-Aug-13 A				Remaining:
		rol & Survelance System		30,0					
	S26S4800	TCSS		100%	57 12-Mar-13 A	10-Aug-13 A			TCSS
	S26S4810	TCSS - Stage 1 (LB1) (VSLS Pole P55)		100%	30 12-Mar-13 A	_			TCS\$ Stage 1 (LB
	0200 <del>4</del> 010	1000 Olage I (LDI) (VOLOT OIE 100)		100%	00 12-181d1-10 A	21-0ep-13 A			Jage I (LD

	1				1		2010			0044			0040		00.	10		0014
ctivity ID	Activity Name	Total Float	Activity % Complete	Original Start Duration	Finish	21 Q2	2010 Q3	Q4	Q1 (	2011 Q2 Q3	Q4	Q1	2012 Q2 Q3	Q4 Q <sup>2</sup> 3 3 3 3 3	20 <sup>-</sup> 1 Q2	Q3 Q4	Q1	2014 Q2 (
S26S4820	TCSS - Stage 1 (LB2)		100%	15 15-Jul-13 A	20-Aug-13 A	112 3 4	3 0 1	19111	<u> </u>	<u> </u>			2233	<u> </u>		TCS:		
S26S4830	TCSS - Stage 1 (LB3), (Gantry G101) (incl. VO73 Revised Sign Gantry Details)		100%	30 10-Jun-13 A	10-Aug-13 A											TC\$5	- Stage	e 1 (LB3)
Landscapir	ng			<u> </u>														
S26S6000	Landscaping Works	-49	38.33%	60 26-Nov-13 A	13-Mar-14													Landsc
S26S6010	Landscaping Works - Stage 1, East of B13A	-49	10%	30 26-Nov-13 A	13-Mar-14			1 - 1 - 1 - 1						!!! <u>-</u>		-		Landsc
S26S6040	Landscaping Works - Stage 2, West of B13A	-49	10%	30 26-Nov-13 A	13-Mar-14													Landsc
Middle Lar	ne																	
	onstruction Works, Roadworks & Drainage																	
S26S4014	Removal of existing paving (CH3400 - CH3720)		100%	25 26-Aug-13 A	13-Sep-13 A											□ Re	moval o	of existing
S26S4019	Road Works and Surface Works (CH3400 - 3720)		100%	30 26-Aug-13 A	13-Sep-13 A									\		□ Ro	ad Worl	rks and Su
Constructi	ion of Bridge 12B																	
S22S1310	Construction of Bridge 12B		100%	367 15-Apr-10 A	20-Jul-13 A											- Constri	uction of	of Bridge 1
			10070	1071011071	20 001 1071											Jongar		Pilago
<b>Preparatol</b> S22S1210	ry and Enabling Works Prepare Piling Platform		100%	38 15-Apr-10 A	31-May-10 A		Prop	ro Dilin	g Platfor	m								
S22S1210 S22S1220	Pre-drilling Works		100%	26 15-Apr-10 A			i . i . i .	lling Wo	-1-1-1-	[11] 								
			100%	20 13-Apr-10 A	13-iviay-10 A		ı ı e-ul	ming vv¢	יי עס									
	ion Works of Bridge 12B		4.000/	00 04 1 40 4	40 Av. 40 A			3.11.11.1		/D40000								
S22S1230	Socketed H-Pile (B12BP8)		100%				1 1 1	1 1 1 1	1 1 1	(B12BP8			toton	ho\				
S22S1250	Modify Pile caps & Additional Foundation (B12BP8)		100%	101 02-Jul-10 A	30-Oct-10 A		1 1 1	i i i i	i i i	i i i i i		Founda	tion (B12B	P8) : : :				
S22S1251	Excavation & ELS Works		100%	36 02-Jul-10 A	12-Aug-10 A		; <mark></mark> ;	=xcavati	on & Է∟ 	S Works		 			<u> </u>			4444
S22S1260	VO 17.1: Modify Pilecap of Bridge 12, Pier 5, 6 & 7 (Deleted)		100%	48 18-May-12 A	-								1 1 1 1 1	1: Modify I	1 1 1 1 1	1 1 1	: : : :	1 1 1 1
S22S1270	VO 17.1: Modify Pilecap of Bridge 12, Pier 8 (Deleted)		100%	48 18-May-12 A										1: Modify I	Pilecap of	Bridge 12	Pier 8	(Deleted)
S22S1280	VO 17.2: Piling for C9		100%	24 26-Jul-11 A	20-Aug-11 A						VO 17.2	1 1 1 7						
S22S1290	VO 17.2: Piling for C10		100%	20 26-Sep-11 A							Ŭ VO	i i i i	ng for C10					
S22S1340	VO 17.2: Pilecap construction of C9		100%	60 06-Mar-12 A						 		; ; ; <del></del>		2. Pilecap				
S22S1350	VO 17.2: Pilecap construction of C10		100%	54 01-Jun-12 A										VO 17.2: P	1 1 1 1 1	1 1 1 1	: 1 : :	
S22S1400	VO 17.2: Backfilling & Site Formation		100%	24 11-May-12 A												ackfilling &		1 1 1 1
S22S1410	VO 17.2: Pier Construction of C9 & C10		100%	94 01-Jun-12 A	20-Sep-12 A									VO 17.2:	1 1 1 1 1	1 1 1 1		210
S22S1420	VO 17.2: Pier Construction of C9		100%	60 01-Jun-12 A	31-Jul-12 A									0 17.2: Pie	1 1 1 1 1	i i i i	i i i	
S22S1430	VO 17.2: Pier Construction of C10		100%	75 28-Aug-12 A	13-Oct-12 A									UO 17.		nstruction	of C10	
S22S1440	Construction of 12B North Abutment		100%	75 26-Aug-11 A	31-Oct-11 A						<u> </u>	onstructi	on of 12B N	orth Abutr	nent			
S22S1450	VO 17.2: Deck Construction (Bearings, Drainage & MJ inculded)		100%	179 20-Dec-12 A	20-Jul-13 A									<del>     </del>	<u>:                                    </u>	■ VO 17.	2: Deck	Construc
S22S1460	VO 17.2: Scaffolding & Falsework		100%	35 20-Dec-12 A	28-Mar-13 A										UO 1	7.2: Scaffo	lding &	Falsewor
S22S1470	VO 17.2: Deck Formwork, Steel Fixing and Concreting - C9 - C10 (Stage 1)		100%	65 14-Mar-13 A	12-Jul-13 A											J VO 17.2	: Þeck	Formwor
S22S1480	VO 17.2: Deck Formwork, Steel Fixing and Concreting - NA to C9 (Stage 2)		100%	65 23-Mar-13 A	12-Jul-13 A											VO 17.2	: Deck	Formwor
S22S1500	Stressing		100%	5 15-Jul-13 A	20-Jul-13 A	7		T-T-3-i					, - , - , - , - , - , - , - , - , - , -		<del>-</del>	Stressi	ng	
S22S1520	Parapet (Steel Barrier)	-51	95%	15 15-Aug-13 A	27-Jan-14												F	Parapet (S
S22S1540	Road surface & road work	-51	0%	14 27-Jan-14	15-Feb-14												•	Road sur
Construct	ion of Bridge 12A																	
S24S1280	Construction of Bridge 12A (incl. VO29 & VO37: revised piling details and pile caps sleeving detaills)		100%	451 25-Aug-10 A	14-Sep-13 A		-		1 1 1							Co	nstructio	on of Brid
																		-1-1-1-1
	ry and Enabling Works									, , , ===="(								
S24N1210	Site Clearance		100%	42 25-Aug-10 A			1 1 1	1 1 1 1	Clearar	icė :								
S24N1220	Haul Road		100%	42 25-Aug-10 A			- i i i	1 1 1 1	ıl Road									
S24N1230	Gas main Diversion, HKCG		100%	55 25-Aug-10 A	· ·		- i i i	1 1 1 1	i i i	Gas ma		sion, HK	CG					
S24N1240	11 KV Cable Diversion		100%	55 25-Aug-10 A	30-Oct-10 A			1.1.1.1.1		le Diversi				. , , , , , , , , , , , , , , , , , , ,				
S24N1250	Telephone Cable Diversion		100%	55 25-Aug-10 A	30-Oct-10 A			Te	lephone	Cable Di	version							
Substructi	ure and Pier Construction						-111	1111	1111									

Activity ID	Activity Name	T-1-1	Anti-it- Of	Original Chart	Einich	2010   2011   2012   2013   2014
Activity ID	Activity Name	Total Float	Activity % Complete	Original Start Duration	Finish	Q1   Q2   Q3   Q4   Q1   Q2   Q3   Q4   Q1   Q2   Q3   Q4   Q1   Q2   Q3   Q4   Q1   Q2   Q3
South Abut	ment					123456789111111111122222222233333333334444444444
S24N1260	Piling-South Abutment		100%	29 15-Oct-10 A	19-Jan-11 A	Piling-South Abutment
S24N1261	Preparing piling platform		100%	18 15-Oct-10 A	05-Nov-10 A	□ Prepairing piling platform
S24N1261	Pre-drilling		100%		05-Nov-10 A	□ Pre-drilling
S24N1262	Piling (21nos)		100%	43 27-Nov-10 A		Piling (21nos)
S24N1310	Excavation & Cap-South Abutment		100%	35 04-May-11 A		Excavation & Cap-South Abutment
S24N1310	Pier & backfill, South Abutment		100%	36 27-Jun-11 A		Pier & backfill, South/Abutment
	riei & Dackiii, Soutii Abutii ent		100%	36 27-Juli-11 A	17-Aug-11 A	Fiel & Dackiii, South Addition
Pier 1 S24N1270	Diling Diay 1 (15nos)		1000/	20 00 May 11 A	07 Apr 11 A	Piling-Pier 1 (15nos)
	Piling-Pier 1 (15nos)		100%	30 02-Mar-11 A	·	
S24N1320	Cap-Pier 1 & Backfill		100%	36 23-May-11 A		Cap-Pier 1 & Backfill
S24N1370	Pier 1 (Pierhead included)		100%	96 26-Sep-11 A	17-Dec-11 A	Pier 1 (Pierhead included)
Pier 2						
S24N1280	Piling-Pier 2 (15nos)		100%	38 02-Aug-10 A	-	Piling-Pier 2 (15hos)
S24N1330	Cap-Pier 2 & Backfill		100%	38 20-Nov-10 A		Çap-Pier 2 & Backfill
S24N1380	Pier 2 (Pierhead included)		100%	96 14-Apr-11 A	12-Aug-11 A	Pier 2 (Pierhead included)
Pier 3						
S24N1290	Piling-Pier 3 (15nos)		100%	38 16-Feb-11 A	27-Apr-11 A	Piling-Pier 3 (15nos)
S24N1340	Cap-Pier 3 & Backfill		100%	32 26-May-11 A	04-Jul-11 A	Cap-Pier 3 & Backfill
S24N1390	Pier 3 (pierhead included)		100%	96 11-Jul-11 A	02-Nov-11 A	Pier 3 (pierhead induded)
North Abuti	ment					
S24N1300	Pre-drilling & Preparation for Piling (incl. VO 39: Revised Foundation for North Abutment)		100%	24 26-May-11 A	23-Jun-11 A	Pre-drilling & Preparation for Piling (incl. VO 39: Revised Foundation for North A
S24N1302	ELS for North abutment		100%	75 19-Jan-12 A	07-Nov-12 A	ELS for North abutment
S24N1350	Cap-North Abutment		100%	25 08-Nov-12 A	20-Nov-12 A	□ Cap-North Abutment
S24N1400	Abutment, Drainage & backfill, North Abutment		100%	75 21-Nov-12 A	25-Jun-13 A	Abutment, Drainage & bac
Decking ar	nd Finishing					
S24N1410	Deck-South Abutment to Pier 1		100%	62 07-Dec-11 A	26-Apr-12 A	Deck-South Abutment to Pier 1
S24N1420	Deck-Pier 1 to Pier 2		100%	75 23-Apr-12 A	30-Aug-12 A	Deck-Pier 1 to Pier 2
S24N1430	Deck-Pier 2 to Pier 3		100%	75 02-Jun-12 A	22-Dec-12 A	Deck-Pier 2 to Pier 3
S24N1434	Erection of Falsework		100%	25 29-Dec-12 A	22-Jan-13 A	☐ Erection of Falsework
S24N1440	Deck-Pier 3 to North Abutment		100%	60 22-Jan-13 A	30-Apr-13 A	Deck-Pier 3 to North Abutment
S24N1444	Dismantling of Falsework		100%	25 14-May-13 A	· ·	.Dismantling of
S24N1450	Parapet (icl, precast concrete skin)		100%	21 18-Feb-13 A		Parapet (id), predast conci
S24N1457	Erecting Railing (Short Column and barrier)		100%	10 13-Aug-13 A		☐ Erecting Railing (Sho
S24N1463	Noise Barrier (Erecting H-Column and Panel)		100%	15 06-Jun-13 A	· ·	Noise Barrier (Erecti
S24N1470	Road Lighting		100%	12 27-Aug-13 A		□ Road;Lighting;
S24N1480	Surfacing		100%	12 30-Jul-13 A	11-Sep-13 A	Surfacirig
S24N1490	Inspection and Handover of Bridge 12A		100%	3 12-Sep-13 A	<u> </u>	I Inspection and Hand
	-		100 /6	3 12 0ep-10 A	17 OCP 10 A	ii iiispettul aliu Haliu
<u> </u>	on of Bridge LB2		1022	044 40 6 44 6	05.0 45.5	Construction of Brid
S26S1200	Construction of Bridge LB2 (incl. VO29 & 37: revised piling details and pile caps sleeving details)		100%	641 16-Apr-11 A	25-Sep-13 A	Construction of Brid
	ry and Enabling Works					
S26S1205	Gas main Diversion at East Abutment (No Connection)		100%	15 24-Jan-13 A		Gas main Diversion at East Abutme
S26S1215	Temporary Traffic Arrangement for Piling Work		100%	75 28-Dec-11 A	04-Jun-12 A	Temporary Traffic Arrangement for Piling Work
Substructi	ure and Pier Construction					
TW4						
S26S1203	Excavation and lateral support		100%	20 05-Mar-12 A	30-Jun-12 A	Excavation and lateral support
S26S1204	Coring and backfill for Piling works		100%	75 02-Jul-12 A	28-Jul-12 A	☐: Coring: and: backfill for: Piling works
S26S1212	Piling-TW4 (20)		100%	49 30-Jul-12 A	17-Oct-12 A	Piling-TW4 ((20)
					'	

	23								
Activity ID	Activity Name	Total Float		Original Start Duration	Finish	01   0	2010 Q2 Q3	2011   2012   Q4   Q1   Q2   Q3   Q4   Q1   Q2   Q3	2013   2014
		Float						89111111111122222222233	3 3 3 3 3 3 3 3 4 4 4 4 4 4 4 4 4 4 5 5 5 5
S26S1217	Pile Load Test (1 Tension & 2 compression)		100%		22-Nov-12 A				☐ Pile Load Test (1 Tension & 2 compression)
S26S1222	Cap-TW4 & Backfill		100%	35 23-Nov-12 A					Cap-TW4 & Backfill
S26S1225	Pier-TW4 Pier		100%	35 06-Feb-13 A	16-Mar-13 A				Pier-TW4 Pier
TW5									
S26S1206	Els, coring and backfill for Piling works		100%	30 19-Jun-12 A					Els, coring and backfill for Piling works
S26S1210	Piling-TW5 (20)		100%	40 09-Nov-12 A					Piling-TW5 (20)
S26S1220	Cap-TW5 & Backfill		100%	24 23-Jan-13 A					☐ Cap-TW5 & Backfill
S26S1227	Pier-TW5 Pier		100%	35 23-Feb-13 A	05-Mar-13 A				Pier-TW5 Pier
East Abutm			1000/	00 10 Am 11 A	00 him 44 A				
S26S1214	Piling-East Abutment, Stage 1		100%	•	30-Jun-11 A			Piling-East Abutment, Stage	
S26S1218	Piling-East Abutment, (stage 2, 6 nos. piles remain)		100%	18 29-Oct-12 A	08-Nov-12 A				Piling-East Abutment, (stage 2, 6 nos. piles re
S26S1219	Pile Load Test (1 compression)		100%		11-Dec-12 A				- 1
S26S1224	Excavation & Pilecap (Delay by gasmain)		100%	28 04-Mar-13 A					Excavation & Piledap (Delay by gas
S26S1234	East Abutment		100%	30 02-Apr-13 A					East Abutment
S26S1254	Backfilling		100%	14 04-Jun-13 A	10-Jun-13 A				<b>I</b> Backfilling
West Abutr			10001	75 00 11 11	00.0 : 15.1				
S26S1202	Els, coring & backfill for Piling works		100%		08-Oct-12 A				Els, coring & backfill for Piling works
S26S1216	Piling-West Abutment (28)		100%		30-Nov-12 A				Piling-West Abutment (28)
S26S1226	Excavation & Pilecap		100%	28 27-Dec-12 A					Excavation & Pilecap
S26S1236	West Abutment		100%	35 02-Feb-13 A					West Abutment
S26S1256	Backfilling		100%	14 29-Apr-13 A	07-Aug-13 A				Backfilling
	and Finishing		1000		0.50				
S26S1238	Bridge Decking (Bearings, Drainage & MJ inculded)		100%	84 18-Mar-13 A	·				Bridge Decking (Beari
S26S1240	Falsework Erection of Deck - West Abutment to TW4		100%	14 18-Mar-13 A	·				Falsework Erection of Deck - We
S26S1241	Bridge Deck - West Abutment to TW4		100%	48 20-Apr-13 A					Bridge Deck - West Abutment
S26S1242	Falsework Dismantling of deck - West Abutment to TW4		100%		24-Aug-13 A	-111			Falsework Dismantling o
S26S1243	Falsework Erection of Deck - TW4 to TW5		100%	14 18-Mar-13 A					Falsework Erection of Deck - TW
S26S1244	Bridge Deck - TW4 to TW5		100%	48 24-Apr-13 A					Bridge Deck - TW4 to TW5
S26S1245	Falsework Dismantling of deck - TW4 to TW5		100%	10 10-Jul-13 A	24-Aug-13 A				Falsework Dismantling o
S26S1246	Falsework Erection of Deck - TW5 to East Abutment		100%	14 08-May-13 A	-				☐ Falsework Erection of Deck - T
S26S1247	Bridge Deck - TW5 to East Abutment		100%	48 15-May-13 A					Bridge Deck - TW5 to East
S26S1248	Falsework Dismantling of deck - TW5 to East Abutment		100%	10 10-Jul-13 A	24-Aug-13 A				Falsework Dismantling o
S26S1260	Parapet (icl, precast concrete skin)		100%		25-Sep-13 A				Parapet (icl, precast c
S26S1265	Road Lighting		100%	5 27-Aug-13 A	·				☐ Road Lighting
S26S1270	Surfacing		100%	10 16-Sep-13 A					□ Surfadng
S26S1310	Handover Inspection of LB2 (TTA Stage 11)		100%	158 18-Mar-13 A	25-Sep-13 A	-!!-			Handover Inspection of
	ion of Bridge LB3								
S26S1280	Construction of Bridge LB3( incl. excavation & backfill) (incl. VO29 & VO37)		100%	267 26-Feb-11 A	02-Oct-13 A				Construction of Bridge
Substruct	ure & Abutment								
S26S1320	Piling for East Abutment		100%	60 26-Feb-11 A	14-May-11 A			Piling for East Abutment	
S26S1330	Piling for West Abutment		100%	60 14-May-11 A				Piling for West Abutment	
S26S1340	ELS & Excavation for East & West Abutment		100%	36 07-Dec-11 A	21-Jan-12 A				tion for East & West Abutment
S26S1350	Construction of East/West Abutment Structure		100%	45 19-Jan-12 A	13-Jul-12 A				onstruction of East/West Abutment Structure
Decking a	nd Finishing								
S26S1370	Bridge Deck (Bearings, Drainage & MJ included)		100%	257 19-Apr-12 A	24-Nov-12 A				Bridge Deck (Bearings, Drainage & MJ inclu
S26S1371	Falsework and Scaffolding		100%	36 19-Apr-12 A	31-Aug-12 A				Falsework and Scaffolding
S26S1372	Construction of Deck		100%	69 05-Sep-12 A	24-Nov-12 A				Construction of Deck
		,							

	24					
ctivity ID Act	tivity Name	Total Activity % Float Complete			Finish	2010 2011 2012 2013 2014 21 Q2 Q3 Q4 Q1 Q2 Q3 Q4 Q1 Q2 Q3 Q4 Q1 Q2 Q3 Q4 Q1 Q2 Q3
						1234567891111111111111222222222233333333333344444444
	Isework dismantling of Deck	100%		4 21-Dec-12 A		Falsework dismantling of Deck
	rapet (icl, precast concrete skin)	100%		26-May-13 A		Parapet (icl. precast cond
	ecting of Short Column	100%		0 19-Jun-13 A		Erecting of Short Colum
	stalling M-Barrier	100%		7 27-Aug-13 A		☐ Installin <mark>g</mark> M-Bartier
S26S1378 Sur	rfacing	100%	8	3 16-Sep-13 A	25-Sep-13 A	
S26S1385 Har	ndover Inspection of LB3	100%	1	1 02-Oct-13 A	02-Oct-13 A	I Handover Inspection
Construction	of Bridge LB1					
S26S1400 Cor	Instruction of Bridge LB1 (incl. VO29 & VO37: revised piling details and pile caps sleeving details)	100%	643	3 03-May-10 A	02-Oct-13 A	Construction of Brid
Preparatory ar	nd Enabling Works					
S26S1405 Site	e Clearance	100%	75	5 03-May-10 A	06-Aug-10 A	Site Clearance
S26S1406 Site	e Clearance - Stage 1 (LB1-North Abutment)	100%	60	0 03-May-10 A	14-Jul-10 A	Site Clearance - Stage 1 (LB1-North Abutment)
S26S1407 Site	e Clearance - Stage 2 (LB1-TW3)	100%	60	27-May-10 A	06-Aug-10 A	Site Clearance - Stage 2 (LB1-TW3)
S26S1410 Acc	cess Road	100%	75	5 03-May-10 A	31-Jul-10 A	Access Road
S26S1411 Acc	cess Road - Stage 1 (LB1-North Abutment )	100%	60	0 03-May-10 A	14-Jul-10 A	Access Road - Stage 1 (LB1-North Abutment )
S26S1412 Acc	cess Road - Stage 2 (LB1-TW3)	100%	60	0 20-May-10 A	31-Jul-10 A	Access Road - Stage 2 (LB1-TW3)
S26S1450 SA2	25-Site Clearance (TW1 & TW2)	100%	53	3 26-Mar-11 A	02-Jun-11 A	SA25-Site Clearance (TW1 & TW2)
S26S1455 SA2	25 - Access Road (TW1 & TW2)	100%	53	3 26-Mar-11 A	02-Jun-11 A	SA25 - Access Road (TW1 & TW2)
	31: Fencing for Former Lot 1308 S.B in D.D.6	100%		0 27-Jun-11 A		U VO 31: Fencing for Former Lot 1308 S.B in D.D.6
	and Pier Construction					
North Abutment						
	ng-North Abutment	100%	51	1 01-Jun-10 A	31- Jul-10 A	Piling-North Abutment
	cavation & Cap-North Abutment	100%		4 11-Nov-10 A		Excavation, & Cap-North Abutment
	er & backfill, North Abutment	100%		6 26-Jan-11 A		Pier & backfill. North Abutment
	a & backilli, North Abutinent	100%	36	20-Jan-11 A	04-Apr-11 A	Fiel & Dackin, NOI th Addition
TW3	TWO	1,000/		4 00 Dag 40 A	Od May dd A	
	ng-TW3	100%		4 28-Dec-10 A		Piling-TW3
· ·	p & Backfill - TW3	100%		5 26-May-11 A		Çap & Backfill - TW3
	er-TW3 (Pierhead included)	100%	/5	5 08-Aug-11 A	17-Dec-11 A	Pier-TW3 (Pierhead included)
TW1						
	ng-TW1	100%		21-Oct-10 A	11-Nov-10 A	□ Piling÷TW1
· ·	p & Backfill - TW1	100%			19-Feb-11 A	☐ Cap & Backfill - TW1
	er-TW1 (Pierhead included)	100%	75	5 23-May-11 A	08-Jul-11 A	Pjer-TW1 (Pierhead included)
TW2						
	ng-TW2	100%			15-Apr-11 A	☐ Piling+TW2
	p & Backfill - TW2	100%	45	5 21-Jun-11 A	15-Jul-11 A	□ Cap & Backfill - TW2
S26S1482 Pier	er-TW2 (Pierhead included)	100%	75	5 26-Jul-11 A	11-Feb-12 A	Pier-TW2 (Pierhead included)
Decking and F	Finishing					
S26S560 Dec B13	cking (Bearings, Drainage & MJ included) (incl. VO 45: Details Drainage Arrangement of LB1 & 3A)	100%	199	9 27-Jul-11 A	12-Jul-12 A	Decking (Bearings; Drainage & MJ included);(incl: V
S26S570 Bala	lanced Cantilever at TW1	100%	63	3 27-Jul-11 A	12-Oct-11 A	Balanced Cantilever at TW1
S26S580 Pre	eparing of Travelling Form	100%	18	8 27-Jul-11 A	17-Aug-11 A	☐ Preparing of Travelling Form
S26S590 Cor	instruction of Cantiliver Deck, TW1	100%	40	0 30-Sep-11 A	17-Dec-11 A	Çonstrucțion of Canțiliver Deck, TW1
S26S610 Sou	uth End Span	100%	40	28-Dec-11 A	16-Feb-12 A	South End Span
	lanced Cantilever at TW2 & Stitching (TW1-TW2)	100%		8 01-Feb-12 A	15-May-12 A	Balanced Cantilever at TW2 & Stitching (TW1-TW2)
	eparing of Travelling Form	100%			29-Feb-12 A	□ Preparing of Travelling Form
	enstruction of Cantiliver Deck, TW2	100%			15-May-12 A	☐ Construction of Cantiliver Deck, TW2
	tching TW1-TW2	100%		8 11-May-12 A	-	Stitching TW1-TW2
	lanced Cantilever at TW3 & Stitching (TW2-TW3)	100%		2 28-Dec-11 A		
3203070 Bala	ianoa cannover at 1990 a chloning (1992-1993)	100%	52	ZU-DEC-II A	19-Api-12A	Balanced Cantilever at TW3 & Striching (TW2-TW3)

tota i ID	Authority Manne	T. 4 - 1	A - 1 - 1 - 0 /	Out with all Ot and	Et. t. t.	2010   2011   2012   2013   20
ivity ID	Activity Name	Total Float		Original Start Duration	Finish	2010 2011 2012 2013 20 21 Q2 Q3 Q4 Q1 Q 12 3 4 5 6 7 8 9 1 1 1 1 1 1 1 1 1 1 1 2 2 2 2 2 2 2 2
S26S680	Preparing of Travelling Form		100%	12 28-Dec-11 A	11-Jan-12 A	☐ Preparing of Travelling:Form
S26S690	Construction of Cantiliver Deck, TW3		100%	40 12-Jan-12 A	19-Apr-12 A	Construction of Cantiliver Deck, TM3
S26S700	Stitching TW2-TW3		100%	22 18-May-12 A	22-Jun-12 A	□ Stitching TW2-TW3
S26S720	North End Span		100%	50 18-May-12 A	12-Jul-12 A	North End Span
S26S740	Parapet (icl, precast concrete skin)		100%	52 05-Nov-12 A	21-Sep-13 A	Parapet (icl, pi
S26S750	Erecting of Precast Parapet		100%	32 05-Nov-12 A	27-Aug-13 A	Erecting of Prec
S26S760	Installing M-Barrier		100%	6 15-Aug-13 A	21-Sep-13 A	
S26S770	Noise Barrier		100%	6 15-Aug-13 A		□ Noise Barrier
S26S780	Surfacing		100%	7 16-Sep-13 A	·	□ Surfacing
S26S790	Road Lighting		100%	7 27-Aug-13 A	-	☐ Road Lighting:
S26S800	Handover Inspection of LB1		100%	1 02-Oct-13 A	· ·	Handover Ins
	· I		100%	1 02-00-13 A	02-OCI-13 A	zii işvunan,
	ion of Bridge 13A					
S26S1300	Construction of Bridge 13A (incl. VO29 & VO37: revised piling details and pile caps sleeving detaills)		100%	744 03-May-10 A	22-Jun-13 A	Construction of Bridg
Preparator	ry and Enabling Works					
S26S1610	Site Clearance		100%	24 03-May-10 A	31-May-10 A	☐ Site Clearance
S26S1611	Access Road		100%	63 03-May-10 A	17-Jul-10 A	Access Road
S26S1620	Gas main Diversion at North/South Abutment, HKCG		100%	37 01-Jun-10 A	15-Jul-10 A	Gas main:Diversion at North/South Abutment, HKCG
S26S1690	SA25-Site Clearance		100%	25 26-Feb-11 A	26-Mar-11 A	SA25-Site Clearance
S26S1700	SA25 Haul Road		100%	25 26-Feb-11 A	26-Mar-11 A	☐ SA25 Ḥaul Road
S26S1710	SA25-Gas Main diversion at South Abutment & P1		100%	25 26-Feb-11 A	26-Mar-11 A	SA25-Gas Main diversion at South Abutment & P1
Substructi	ure and Pier Construction					
North Abuti						
S26S1630	Piling-North Abutment		100%	65 16-Jul-10 A	30-Sep-10 A	├── Piling-North Abutment
S26S1631	Pre-drilling & Preparing of piling platform		100%	20 16-Jul-10 A	07-Aug-10 A	□ Pre-drilling & Preparing of piling platform
S26S1631	Piling		100%	45 09-Aug-10 A		Piting
S26S1650	Excavation & Cap-Nouth Abutment		100%	50 04-Jan-11 A		Excavation & Cap-Nouth Abutment
	·					
S26S1670	Construction of Abutment-Nouth Abutment		100%		17-Dec-11 A	Gonstruction of Abutment-Nouth Abutment
S26S1930	Backfill Stage 1, North Abutment		100%	24 01-Mar-12 A		Backfill Stage 1, North Abutment
S26S1940	Backfill Stage 2, North Abutment		100%	60 15-Oct-12 A	24-Apr-13 A	Backfill Stage 2, North Ab
South Abut						
S26S1720	Piling-South Abutment		100%	90 02-Dec-10 A	23-Mar-11 A	Piling-South Abutment:
S26S1721	Pre-drilling & Preparing of piling platform		100%	30 20-Aug-10 A	20-Sep-10 A	☐ Pre-drilling & Preparing of pilling platform
S26S1722	Piling		100%	60 10-Jan-11 A		Piling
S26S1750	Excavation & Cap-South Abutment		100%	40 26-May-11 A	14-Jul-11 A	Excavation & Cap-South Abutment
S26S1780	Abutment, South Abutment		100%	38 26-Oct-11 A	17-Dec-11 A	Abutment, South Abutment
S26S1950	Backfill Stage 1, South Abutment		100%	24 01-Mar-12 A	04-Jul-12 A	Backfill Stage 1, South Abutment
S26S1960	Backfill Stage 2, South Abutment		100%	43 19-Nov-12 A	25-Feb-13 A	Backfill Stage 2, South Abutm
S26S1970	COD: 13ASA 18 days additional Drainage works (if RFI can be replied before 4-12-2012)		100%	18 01-Apr-13 A	19-Apr-13 A	
P1					<u> </u>	
S26S1730	Piling-P1		100%	20 18-Oct-10 A	30-Nov-10 A	□ Piling-P1
S26S1760	Cap & Backfill - P1		100%	33 26-May-11 A		Cap.&:Backfill -: P1
S26S1790	Pier-P1		100%	75 26-Jul-11 A	24-Oct-11 A	Pier-P1
S26S1820	Pier-P1 Pierhead		100%	48 14-Feb-12 A		Pier-P1 Pierhead
	TIOT T TOTTION		100 /6	TO 14-1 60-12 A	10 Αμι-12 Α	i i i i i i i i i i i i i i i i i i i
P2	Dilina DO		1000/	0E 00 May 44 A	40 Am 44 A	
S26S1740	Piling-P2		100%	35 28-Mar-11 A		□ Piling⊦P2 □ Cap & Backfill - P2:
S26S1770	Cap & Backfill - P2		100%	38 26-May-11 A	. 11 h.l 11 Λ	

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stivity ID	Activity Name	Takal	Activity 0/	Original Ctart	Einich	2010 2011 2012 2013 2014
ctivity ID	Activity Name	Total Float	Activity % Complete	Original Start Duration	Finish	1 Q2 Q3 Q4 Q1 Q1 Q1 Q2 Q3 Q4 Q1 Q1 Q1 Q2 Q3 Q4 Q1
S26S1800	Pier-P2		100%	75 26-Oct-11 A	27-Jan-12 A	12 3 4 5 6 7 8 9 1 1 1 1 1 1 1 1 1 1 1 2 2 2 2 2 2 2 2
S26S1910	Pier-P2 Pierhead		100%	53 01-Aug-12 A		Pier-P2 Pierhead
P3	Tion 12 Findings		10070	00 01 7tag 127t	12 000 1270	
S26S1640	Piling-P3		100%	50 26-Feb-11 A	19-Mar-11 Δ	□ Piling-P3
S26S1660	Cap & Backfill -P3		100%	50 26-May-11 A		Cap & Backfill -P3
S26S1680	Pier-P3		100%	96 26-Sep-11 A		Pier-P3
S26S1000 S26S1920	Pier-P3 Pierhead		100%	48 19-Apr-12 A		Pier-P3 Pierhead
			10078	40 19-Api-12A	31-30F12 A	1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -
S26S1808	nd Finishing  Decking (Bearings, drainage & MJ included) (incl. VO 45: Details of Drainage Arrangement of LB1 & B13A)		100%	110 01-Jun-12 A	01-Mar-13 A	Decking (Bearings, drainage & MJ
	,					
S26S1810	Balanced Cantilever deck at P1		100%	0 01-Jun-12 A		Balanced Cantilever deck at P1:
S26S1811	Preparing of Travelling Form		100%	12 01-Jun-12 A	25-Sep-12 A	Preparing of Travelling Form
S26S1812	Construction of Cantiliver Deck at P1		100%	55 15-Jun-12 A	04-Aug-12 A	Construction of Cantiliver Deck at P1
S26S1816	South End Span (South abutment-P1)		100%	197 13-Aug-12 A	09-Nov-12 A	South End Span (South abutment P1)
S26S1818	South End Span		100%	50 13-Aug-12 A	10-Nov-12 A	South End Span
S26S1830	Balanced Cantilever deck at P2 & Stitching (P1-P2)		100%	78 19-Nov-12 A	14-Jan-13 A	Balanced Cantilever deck at P2 & Stite
S26S1831	Preparing of Travelling Form		100%	12 19-Nov-12 A	08-Dec-12 A	☐ Preparing of Travelling Form
S26S1832	Balanced Cantilever deck at P2		100%	50 10-Dec-12 A	05-Jan-13 A	□ Balanced Cantilever deck at P2
S26S1833	Stitching (P1-P2)		100%	18 11-Jan-13 A	14-Jan-13 A	I Stitching (P1-P2)
S26S1840	Balanced Cantilever deck at P3 & Stitching (P2-P3)		100%	73 20-Aug-12 A	17-Jan-13 A	Balanced Cantilever deck at P3 & Stit
S26S1841	Preparing of Travelling Form		100%	12 20-Aug-12 A	05-Sep-12 A	☐ Preparing of Travelling Form
S26S1842	Balanced Cantilever deck at P3		100%	43 06-Sep-12 A	05-Nov-12 A	Balanced Cantilever deck at P3
S26S1843	Stitching (P2-P3)		100%	18 15-Jan-13 A	17-Jan-13 A	I Stitching (P2-P3)
S26S1850	North End Span & Stitching (Nouth Abutment-P3)		100%	96 29-Oct-12 A	01-Mar-13 A	North End Span & Stitching (Nouth
S26S1851	End Spans for B13A		100%	29 29-Oct-12 A	01-Feb-13 A	End Spans for B13A
S26S1852	Post Tentioning Works		100%	18 18-Feb-13 A	01-Mar-13 A	☐ Post Tentioning Works
S26S1860	Parapet (icl, precast concrete skin)		100%	24 19-Mar-13 A	25-May-13 A	Parapet (icl, precast concret
S26S1863	Erection of Short Column and Barrier		100%	12 03-May-13 A		Erection of Short Column a
S26S1873	Noise Barrier (Erection of H-Column and Panel)		100%	12 03-May-13 A		Noise Barrier (Erection of I
S26S1875	Lighting		100%	12 25-May-13 A		Lighting;
S26S1880	Surfacing		100%	12 25-May-13 A		□ Surfacing
S26S1900	Handover Inspection of Bridge 13A		100%	3 21-Jun-13 A		I Handover Inspection of Br
	· · ·		10078	3 ZI ddii 10 A	ZZ ddii 10 A	I Handove inspection of Br
	People for Pro Handover Retaining Wall WEEA WEEA WEEA WEED WEEC WEE and	10	00/	7 97 lon 14	06-Feb-14	n Doody 50
HRW0020	Ready For Pre-Handover Retaining Wall W56A, W56B, W57A, W57B, W57C, W59 and RWB12A(N)	-19		7 27-Jan-14		■ Ready Fo
HRW0021	Ready For Pre-Handover Retaining Wall W58, W60, W61A, RWTW1, RWTW2, RWTW3, RWTW3a and RWB12B	-19	0%	7 27-Jan-14	06-Feb-14	II Ready Fo
Section 3						
Site Area S	SA26A					
PHSA26A2	Possession of SA26A (Day0)		100%	0 26-Feb-10 A		♦ Possession of SA26A (Day0)
SA26A000	Site Area SA26A Works Period	-9	98.02%	1215 26-Feb-10 A	19-Feb-14	Site Area
SA26A010	Site Area SA26A Works Completion	-9	0%	0	19-Feb-14	♦ Site Area
SA26A020	Temporary Traffic Arrangement (Detail shall refer to supplementary information)	-8	98.17%	983 26-Feb-10 A	19-Feb-14	Tempora
SA26A030	Overall Utilities Diversion (Detail shall refer to supplementary information)	-8	98.17%	983 26-Feb-10 A	19-Feb-14	Overall'L
North Bou	und					
Preliminari						

Antivity ID	Assirity Name	T-1-	A a timite of	Original Otal	Einia!	2010 2011 2012 2013 2014
Activity ID	Activity Name	Total Float		Original Start Duration	Finish	11   Q2   Q3   Q4   Q1   Q2   Q3   Q4   Q1   Q2   Q3   Q4   Q1   Q2   Q3   Q4   Q1   Q2   Q3
S26AN01	0 Site Clearance		100%	60 26-Feb-10 A	12-May-10 A	1234567891111111111122222222222333333333444444444
S26AN02			100%	60 07-Apr-10 A	•	AccessiRd
Slopew			10070	00 07 7tp: 1071	To dan To A	
S26AN50			100%	48 26-Apr-12 A	03lul-12 A	Cut Slope (S37A)
S26AN50			100%	168 19-Jun-10 A	08-Jan-11 A	Qut Slope (\$40-sn; Including removal of existing retaining wall)
S26AN50			100%	11 19-Jun-10 A	16-Jul-10 A	□ Slopeworks;Cut(S40) - Stage 1 (Cut Slope and Erect;Scaffolding)
S26AN51			100%	11 19-Jul-10 A	18-Aug-10 A	Slopeworks Cut(S40) - Stage 1 (Soil Nail Installation : QRST)
S26AN51			100%	14 19-Aug-10 A		Slopeworks Cut(S40) - Stage 2 (Cut Slope and Erect Scaffolding)
S26AN51			100%	14 21-Nov-10 A	·	☐ Slóp'eworks Cut(S40) - Stage 2 (Soil Nail Installation : MNOP)
S26AN51			100%	17 18-Aug-10 A	17-Sep-10 A	Slopeworks Cut(S40) - Stage 3 (Cut Slope and Erect Scaffolding)
S26AN52			100%	17 27-Dec-10 A	01-Feb-11 A	Slopeworks Cut(\$40); - Stage 3 (Spil;Nail;Installation : IJKL)
S26AN52			100%	12 28-Jan-11 A	15-Feb-11 A	Slopewbrks;Cut(S40) - Stage 4;(Cut Slope and Erect;Scaffolding)
S26AN52	Slopeworks Cut(S40) - Stage 4 (Soil Nail Installation : EFGH)		100%	12 02-Feb-11 A	19-Feb-11 A	☐ Slopeworks Cut(S40) - Stage 4 (Soil Nail Installation : EFGH)
S26AN52			100%	15 29-Oct-11 A	16-Nov-11 A	Slopeworks Cut(S40) - Stage 5 (Cut Slope and Erect Scaffolding)
S26AN52	6 Slopeworks Cut(S40) - Stage 5 (Soil Nail Installation : ABCD)		100%	18 16-Nov-11 A	07-Dec-11 A	Slopeworks Cut(\$40) - Stage 5 (Soil Nail Installation : ABCD)
S26AN52	8 Removal of Existing Retaining Wall		100%	30 11-Apr-11 A	20-May-11 A	Removal of Existing Retaining Wall
S26AN53	Cut Slope (S41-sn)		100%	138 19-Jun-10 A	02-Dec-10 A	Cut Slope (S41-sn)
S26AN53	Cut Slope (S41-sn) - Stage 1 (Cut Slope and Erect Scaffolding)		100%	11 19-Jun-10 A	16-Jul-10 A	Cut Slope (\$41-sn) - Stage 1 (Cut \$lope and Erect Scaffolding)
S26AN53	Cut Slope (S41-sn) - Stage 1 (Soil Nail Installation : MNOPQ)		100%	11 19-Jul-10 A	13-Aug-10 A	☐ Cut Slope (\$41-sn) - Stage 1 (Soil Nail Installation : MNOPQ)
S26AN53	Cut Slope (S41-sn) - Stage 2 (Cut Slope and Erect Scaffolding)		100%	26 23-Aug-10 A	17-Sep-10 A	□ Cut Slope (\$41-sn) - Stage 2 (Cut Slope and Erect Scaffolding)
S26AN53	Cut Slope (S41-sn) - Stage 2 (Soil Nail Installation : IJKL)		100%	26 28-Dec-10 A	27-Jan-11 A	Cut Slope (S41-sn) - Stage 2 (Soil Nail Installation:: IJKL)
S26AN53	Cut Slope (S41-sn) - Stage 3 (Cut Slope and Erect Scaffolding)		100%	20 20-Sep-10 A	27-Nov-10 A	Cut Slope (S41-sn) - Stage 3 (Cut Slope and Erect Scaffolding)
S26AN53	6 Cut Slope (S41-sn) - Stage 3 (Soil Nail Installation : EFGH)		100%	19 30-May-11 A	22-Jun-11 A	□ Cut Slope (S41-sn) - Stage 3 (Soil Nail Installation : EFGH)
S26AN53	Cut Slope (S41-sn) - Stage 4 (Cut Slope and Erect Scaffolding)		100%	12 26-Oct-11 A	08-Nov-11 A	Cut Slope (S41-sn) - Stage 4 (Cut Slope and Erect Scatfolding)
S26AN53	Cut Slope (S41-sn) - Stage 4 (Soil Nail Installation : ABCD)		100%	12 03-Dec-12 A	14-Jan-13 A	Cut Slope (\$4:1-sn) - Stage 4 (\$0il Nai
S26AN54	0 Slope 7NW-B/C 349		100%	75 02-Oct-10 A	25-Nov-10 A	Slope 7NW-B/C 349
S26AN54	Erect Scaffolding & Soil Nail Installation (7NW-B/C 349) - Stage 1 (EF) 52nos.		100%	15 02-Oct-10 A	19-Oct-10 A	☐ Erect Scaffolding & Soil Nail Installation (7NW-B/C 349) - Stage 1 (EF) 52nos.
S26AN54	2 Erect Scaffolding & Soil Nail Installation (7NW-B/C 349) - Stage 2 (ABCD) 270nos.		100%	72 20-Oct-10 A	25-Nov-10 A	Erect Scaffolding & Soil Nail Installation (7NW+B/C 349) - Stage 2 (ABCD) 270nos.
S26AN55	Slope 7NW-A/C35-sn		100%	200 01-Sep-10 A	20-Nov-10 A	Slopė 7NW-A/C35-sn
S26AN56	Erect Scaffolding & Soil Nail Installation (7NW-A/C35-sn) - Stage 1 (OP) 25nos.		100%	10 01-Sep-10 A	11-Sep-10 A	D Erect Scaffolding & Soil Nail Installation (7NW-A/C35-sn) - Stage 1 (OP) 25nos.
S26AN57	Erect Scaffolding & Soil Nail Installation (7NW-A/C35-sn) - Stage 2 (KLMN) 285nos.		100%	40 13-Sep-10 A	19-Oct-10 A	Erect Scaffolding & Soil Nail Installation (7NW-A/C35+sn) - Stage 2 (KLMN) 285nos
S26AN58	Erect Scaffolding & Soil Nail Installation (7NW-A/C35-sn) - Stage 3 (GHIJ) 370nos.		100%	57 30-Sep-10 A	19-Oct-10 A	☐ Erect Scaffolding & Soil Nail Installation (7NW-A/C35+sh) + Stage 3 (GHIJ) 370hos.
S26AN59	Erect Scaffolding & Soil Nail Installation (7NW-A/C35-sn) - Stage 4 (CDEF) 407nos.		100%	62 20-Oct-10 A	19-Nov-10 A	Erect Scaffolding & Soil Nail Installation (7NW-A/C35-sn) - Stage 4 (CDEF) 407nos.
S26AN65	Erect Scaffolding & Soil Nail Installation (7NW-A/C35-sn) - Stage 5 (AB) 204nos.		100%	31 01-Nov-10 A	20-Nov-10 A	☐ Erect Scaffolding & Soil Nail Installation (7NW-A/C35-sn) - Stage 5 (AB) 204nos.
S26AN66	Slope 7NW-A/CR39		100%	80 22-Nov-10 A	28-Mar-11 A	Slope 7NW-A/CR39
S26AN67	Erect Scaffolding & Soil Nail Installation (7NW-A/CR39) - Stage 1 (JK) 28nos.		100%	10 22-Nov-10 A	15-Dec-10 A	□ Erect Scaffolding & Soil Nail Installation (7NW-A/CR39) - Stage 1 (JK) 28nos.
S26AN68	Erect Scaffolding & Soil Nail Installation (7NW-A/CR39) - Stage 2 (DEFGHI) 162nos.		100%	40 16-Dec-10 A	25-Feb-11 A	Erect Scaffolding & Sdil Nail Installation (7NW+A/CR39) - Stage 2 (DEFGHI) 162nds.
S26AN69	Erect Scaffolding & Soil Nail Installation (7NW-A/CR39) - Stage 3 (ABC) 109nos.		100%	30 22-Feb-11 A	28-Mar-11 A	Erect Scaffolding & Sdil Nail Installation (7NW-A/CR39) - Stage 3 (ABC) 109nos.
S26AN93	Erect Scaffolding & Soil Nail Installation (Area 6-1)		100%	75 20-Feb-13 A	25-Nov-13 A	Erect Scaffolding
Constru	ction of Retaining Wall					
Retainir	ng Wall W65C (w/SP)					
S26AN1	00 Sheet Pile/Excavate & Construct W65C (w/SP)		100%	150 27-Jun-11 A	25-Jul-11 A	Sheet Pile/Excavate & Construct W65C (w/SP)
	01 Sheet Pile and Excavation		100%	24 27-Jun-11 A	25-Jul-11 A	Sheet Pile and Excavation
	02 Construction of Structure W65C		100%	72 27-Jun-11 A	25-Jul-11 A	☐ Construction of Structure W65C
S26AN1	03 Backfilling		100%	24 27-Jun-11 A	25-Jul-11 A	□ Backfilling
	ng Wall W68					
S26AN1	20 Sheet Pile/Excavate & Construct W68 (w/SP)		100%	99 15-Nov-10 A	16-Jul-12 A	Sheet Pile/Excavate & Construct W68 (w/\$P)
S26AN1	21 Sheet Pile and Excavation		100%	19 15-Nov-10 A	04-Dec-10 A	☐ Sheet Pile and Excavation

	28					
Activity ID	Activity Name	Total Float	Activity %	Original Start	Finish	2010 2011 2012 2013 2014 01   Q2   Q3   Q4   Q1   Q2   Q3   Q4   Q1   Q2   Q3   Q4   Q1   Q2
		Float	Complete	Duration		Q1     Q2     Q3     Q4     Q1     Q2       1 2 3 4 5 6 7 8 9 1 1 1 1 1 1 1 1 1 1 2 2 2 2 2 2 2 2 2
	Construction of Structure W68		100%	75 26-Aug-11 A		Construction of Structure W68
S26AN123			100%	54 01-Jun-12 A	16-Jul-12 A	Backfilling:
	All W69 on Mini-Piles (AD 3)					
	Prepare Piling Platform for W69		100%	24 21-Sep-10 A		☐ Prepare Piling Platform for W69
S26AN144	Pre-drilling for W69		100%	24 10-Sep-10 A		
S26AN146	Pipe Pile for W69		100%	77 20-Oct-10 A		Pipe; Pile;for W69;
S26AN147	Pipe Pile for W69 - Stage 1 (south)		100%	38 20-Oct-10 A	19-Nov-10 A	□ Pipe Pile for W69 - Stage 1 (south):
S26AN148	Pipe Pile for W69 - Stage 2 (north)		100%	26 20-Nov-10 A	19-Dec-10 A	□ Pipe Pile for W69 - Stage 2 (north)
S26AN149	Excavate and Tension Piles W69		100%	110 26-Mar-11 A	11-Aug-11 A	Excavate and Tension Piles W69
S26AN150	Excavation and Installation of Tension Piles - Stage 1 (south)		100%	55 26-Mar-11 A	04-Jun-11 A	Excavation and Installation of Tension Piles - Stage 1 (south)
S26AN151	Excavation and Installation of Tension Piles - Stage 2 (north)		100%	55 13-Jun-11 A	16-Aug-11 A	Excavation and Installation of Tension Piles - Stage 2 (north)
S26AN152	Retaining Wall & Drainage W69		100%	120 26-Aug-11 A	19-Jan-12 A	Retaining Wall & Drainage; W69
S26AN153	Construction of Structure W69		100%	75 26-Aug-11 A	24-Nov-11 A	Construction of Structure W69
S26AN154	Drainage		100%	40 06-Feb-12 A	15-Mar-13 A	Drainage Drainage
S26AN155	Backfilling		100%	75 01-Jun-12 A	16-Jul-12 A	□ Backfilling
Retaining W	all W70					
	Sheet Pile/Excavate & Construct W70 (w/SP)		100%	165 03-Dec-10 A	15-Mar-13 A	Sheet Pile/Excavate & Construct
	Sheet Pile and Excavation		100%	18 03-Dec-10 A	14-Dec-10 A	☐ Sheet Pile and Excavation
S26AN172	Construction of Structure W70 (w/SP)		100%	75 18-Jul-11 A	15-Oct-11 A	Gonstruction of Structure W70 (w/SP)
	Drainage & Backfilling		100%	54 18-Feb-13 A	28-Jun-13 A	Drainage & Backfilling
	Backfilling behind W68 to W70 and drainage works		100%	60 18-Mar-13 A		Backfilling beh
	Erect Scaffolding & Soil Nail Installation		100%	35 04-Oct-13 A		Erject Scaffold
	/all W72A(w/SP)					
	Sheet Pile/Excavate & Construct W72A (w/SP)		100%	92 30-Oct-10 A	21-Nov-11 A	\$heet Pile/Excavate & Construct W72A (w/\$P)
	Sheet Pile and Excavation		100%		31-Jan-11 A	Sheet Pile and Excavation
	Construction of Structure W72A (w/SP)		100%	46 03-Jan-11 A		Construction of Structure W72A (w/SP)
	Draiage & Backfilling		100%	68 01-Jun-11 A		Draiage & Backfilling
	onstruction Works, Roadworks & Drainage		13070	30 01 30H 11 A	2	
S26AN430	Slip Road R (From W72A to W73) Stage 1 (incl. VO 36: Slip Road R & Drainage detail.)		100%	15 30-Jan-12 A	25-Jul-12 A	Slip Road R (From W72A to W73) Stage 1 (incl.
S26AN431	Slip Road R (From W70 to B18A) Stage 1.1 formation		100%	15 26-May-12 A		□ Slip Road R (From W70 to B18A) Stage 1.1 formati
S26AN432	Slip Road R (From W70 to B18A) Stage 1.1 Ionnation  Slip Road R (From W70 to B18A) Stage 1.1 Drainage & utilities		100%		03-Jul-12 A	☐ Slip Road R (From W70 to B18A) Stage 1.1 Drain
S26AN433	Slip Road R (From W70 to B18A) Stage 1.1 pavement & roadworks		100%	15 04-Jul-12 A	26-Jul-12 A	☐ Slip Road R (From W70 to B18A) Stage 1.1 pav
S26AN435	Slip Road R (From W70 to B18A) Stage 2		100%	93 18-May-12 A		Slip Road R (From
S26AN435 S26AN436	Slip Road R (From W70 to B18A) Stage 2 Slip Road R (From W70 to B18A) Stage 2, formation (Remaining)			30 18-May-12 A		Spin Plant Division William
020AN407	, , , , , , , , , , , , , , , , , , , ,		100%	,		
S26AN437	Slip Road R (From W70 to B18A) Stage 2, Drainage & utilities (Remaining)		100%		14-Sep-13 A	Slip Road R (From
S26AN438	Slip Road R (From W70 to B18A) Stage 2, pavement & roadworks (Remaining)	10	100%	50 14-Jul-12 A	14-Sep-13 A	Slip Road R (From
S26AN447	Construction Slip Road J (Under Bridge 15A)	-13		45 27-Aug-13 A		Constru
S26AN448	Construction Slip Road Q (At W65C)	-13		45 27-Dec-13 A		Constru
S26AN451	Road and Drainage Works (CH 3720 - 4550)		100%	168 24-Jun-13 A		Road and D
S26AN452	Removal of existing central barrier and forming temporary road (CH3720-4100)		100%	12 24-Jun-13 A	20-Jul-13 A	□ Removal offexisting cer
S26AN4525	TTA - Stage 4B-2		100%	0	21-Jul-13 A	◇ TTA - Stage 4B-2
S26AN453	Road and Drainage Works for Slow and Mid Lane (CH3720 - 3850)	-13		20 08-Jul-13 A	07-Feb-14	Road;an
S26AN454	Road Surface Works for Slow and Mid Lane (CH3720 - 3850)	-6	0070	10 26-Oct-13 A	12-Feb-14	Road St
S26AN455	Removal of existing central barrier (CH4100-4550)		100%	8 26-Jul-13 A	09-Aug-13 A	☐ Removal of existing of
S26AN456	Road Works for Fast and Mid Lane (CH3850 - CH4550)		100%	20 10-Aug-13 A	25-Nov-13 A	Road Workst
Road Re-Co S26AN430 S26AN431 S26AN432 S26AN433 S26AN435 S26AN436 S26AN437 S26AN438 S26AN447 S26AN448 S26AN451 S26AN452 S26AN452 S26AN453 S26AN453 S26AN454 S26AN455 S26AN456 S26AN457 S26AN458	Road Surface Works for Fast and Mid Lane (CH3850 - 4550)		100%	10 27-Aug-13 A	25-Nov-13 A	Road Surface
S26AN458	Road Works for Fast Lane (CH3720 - 3850)		100%	20 26-Oct-13 A	25-Nov-13 A	□ Road Works f
S26AN459	Road Surface Works for Fast Lane (CH3720 - 3850)		100%	10 26-Oct-13 A	25-Nov-13 A	□ Road Surface

	29				<u>.                                    </u>		
Activity ID A	ctivity Name	Total Float	Activity % Complete	Original Duration		Finish	2010 2011 2012 2013 2014 21 Q2 Q3 Q4 Q1 Q2 Q3 Q4 Q1 Q2 Q3 Q4 Q1 Q2 Q3 Q4 Q1 Q2 Q3
COCANICO	load and Drainage Wayle for Clavel Co. (OUIOCO. 4550)					44 5-5-42	12 3 4 5 6 7 8 9 1 1 1 1 1 1 1 1 1 1 1 2 2 2 2 2 2 2 2
	load and Drainage Works for Slow Lane (CH4250 - 4550)	-13	60%		05-Oct-13 A	14-Feb-14	Road and
	load Surface Works for Slow Lane (CH4250 - 4550)	-8	60%		26-Oct-13 A	19-Feb-14	Road Sur
	load Construction and Remaining Works (along CH 3720 - 4550)		100%		5 05-Oct-13 A	20-Dec-13 A	Road Constru
	load and Drainage Works (CH 4550 - 4720)	-15	71.36%		3 26-Oct-13 A	28-Feb-14	Road an
	load and Drainage Works for Fast Lane (CH 4550 - 4720)		100%		5 26-Oct-13 A	25-Nov-13 A	☐ Road and Drain
	load Surface Works for Fast Lane (CH4550 - 4720)		100%		3 26-Oct-13 A	25-Nov-13 A	□ Road Surface W
	load Construction and Remaining Works (along CH 4550 - 4720)	-15	44%	45	5 05-Oct-13 A	28-Feb-14	Road Co
	I & Survelance System	1					
	CSS (G25, G26, G27, G28 & SEC Poles SC58/S58) (incl. VO73 Revised Sign Gantry Details)	-13	70%	50	15-Jun-13 A	25-Feb-14	T¢ss(G
	of Existing Bridge						
	odification of Existing Bridge 15	-7	83.88%		4 24-Jun-13 A		Modification (Cartier Cartier
S26AN230 D	lemolish of Central Barrier		100%	12	2 24-Jun-13 A	04-Oct-13 A	Demolish of Central
S26AN240 Ra	aising of Concrete Edge for N/B (CH3800 -3900)		100%		5 09-Sep-13 A		Raising of Cond
	lemoval existing M.J and install new M.J for Slow and Mid Lane (S/B)	-7	85%	8	02-Aug-13 A	28-Jan-14	Removale)
S26AN260 Ra	aising of Concrete Edge for S/B (CH3800 - 4020) and N/B (CH3900 - 4020)	-7	50%	25	09-Sep-13 A	14-Feb-14	Rajsing; of
S26AN270 R	temoval existing M.J and install new M.J for Fast Lane (S/B and N/B)		100%	10	04-Oct-13 A	25-Nov-13 A	Removal existin
S26AN280 R	emoval existing M.J and install new M.J for Slow and Mid Lane (N/B)	-7	85%	20	09-Sep-13 A	18-Feb-14	Removal i
Landscaping							
S26AN610 La	andscaping Works	5	85%	29	9 15-Mar-13 A	04-Feb-14	Landscapir
South Bound	1						
Preliminaries							
S26AS000 Si	ite Clearance/Access Rd		100%	164	4 26-Feb-10 A	14-Sep-10 A	Site Clearance/Access Rd
S26AS010 Si	ite Clearance		100%	75	5 26-Feb-10 A	18-Jun-10 A	Şite Çlearance
S26AS020 A	ccess Road		100%	75	5 31-May-10 A	14-Sep-10 A	Access Road
Slopeworks		<u> </u>				<u> </u>	
S26AS510 SI	lope Reinstatement Works (Bridge 15A)	-50	68.42%	95	5 08-Aug-13 A	05-Mar-14	Slope Re
S26AS515 Ba	ackfilling Slope	-50	85%	30	08-Aug-13 A	04-Feb-14	Backfilling \$
S26AS520 Sc	oil Nail Installation	-50	70%	50	27-Aug-13 A	21-Feb-14	Sọii Ņaji I
S26AS540 SI	lope Surface Treatment	-50	30%	15	5 28-Oct-13 A	05-Mar-14	Slope   Su
Landscaping							
S26AS600 La	andscaping	-50	0%	30	06-Mar-14	10-Apr-14	Lands
Road Re-Cons	struction Works, Roadworks, Drainage & Utilities	<u> </u>					
S26AS400 R	loadworks, Drainages & Utilities (CH 4020 - 4500)	-18	93.11%	399	9 14-Feb-12 A	03-Mar-14	Roadwol
S26AS410 R	loadworks, Drainages & Utilities Stage 1 (ch4020-ch4200 & Tai Po Tai Wo Road)		100%		0 14-Feb-12 A		Roadworks, Drainages & Utilities Stage 1
S26AS411 R	demoval of existing paving		100%	25	5 14-Feb-12 A	02-Jul-12 A	Removal of existing paving
S26AS412 Ut	tilities		100%		5 14-Feb-12 A		Utilities
S26AS416 Di	rainages		100%		5 27-Jun-12 A		Drainages
S26AS418 R	load Surface & Roadmark - Stage 1		100%		5 14-Jul-12 A	11-Dec-12 A	Road Surface & Roadmark - Stage 1
S26AS420 R	loadworks, Drainages & Utilities Stage 2(ch4200-ch4500)		100%		7 14-Feb-12 A		Roadworks, Drainages & Utilities Stage 2(ch4
S26AS422 R	demoval of existing paving		100%		0 14-Feb-12 A	-	Removal of existing paving
S26AS424 Ut	Itilities		100%			28-May-12 A	Utilities
S26AS426 D	prainages		100%			11-Aug-12 A	Drainages
	load Surface & Roadmark - Stage 2		100%			28-Sep-12 A	☐ Road Surface & Roadmark - Stage 2
S26AS430 R	loadworks Stage 3 (ch4020-ch4200 & Tai Po Tai Wo Road)		100%		5 28-Jan-13 A	-	Roadworks Stage 3 (ch402
S26AS440 R	load Construction and Remaining Works (along CH4020 - 4500)		100%		5 28-Jan-13 A		Road Construction and F
S27S4090 Hy	lyD/Lighting (Existing Street Light removal by HyD Lightings		100%		2 26-May-11 A		□ HyD/Lighting (Existing:Street:Light removal by:HyD Lightings
\$27\$4090 Fig	lip Road K (utilities & drainage), Stage 1 (excl. WSD connection)				5 14-Feb-12 A		
			100%			·	Slip Road K (utilities & drainage), Stage 1 (ekcl. WSD con
S27S4102 SI	lip Road K (utilities & drainage roadwork), Stage 2 (incl. WSD connection)		100%	50	18-May-12 A	15-OCI-12 A	Slip Road K (utilities & drainage roadwork), S

S26AS483	TCSS - Stage 3 (ch4080 - ch4260), (Gantry G59) (incl. VO73 Revised Sign Gantry Details)		100%	24   22-Jan-13 A	06-Jun-13 A	TCSS:- Stage β (ch4t	80 - ch4
S26AS484	TCSS - Stage 4 (ch4260 - ch4440), (Gantry G58) (incl. VO73 Revised Sign Gantry Details)		100%	24 30-Nov-12 A	21-Dec-12 A	☐ TCSS - Stage 4 (ch4260 - ch4440	), (Gan
S26AS485	TCSS - Stage 5 (ch4440 - ch4620)	17	90%	24 24-Dec-12 A	29-Jan-14	Τ¢S	S - Stag
S26AS486	TCSS - Stage 6 (ch4620 - ch4820), (Gantry G57) (incl. VO73 Revised Sign Gantry Details)		100%	24 07-Jan-13 A	15-Jul-13 A	TCSS - Stage 6 (cf	4620 -
North & So	outh Bound						
Slopworks							
S26ANS50	Slopeworks & Reinforced Earth Wall Bridge 18A		100%	72 26-Feb-11 A	27-May-11 A	Slopeworks & Reinforced Earth Wall Bridge 18A	
Construction	on of Bridge 18A						
S26AN94	COD: DAN 327 DN800/ 400 - Additional pipeline and thrust blocks	-5	80%	75 06-Aug-12 A	15-Feb-14		DAN
S26ANS10	Construct East & West Abutment of Bridge 18A		100%	91 28-Mar-11 A	19-Aug-11 A	Construct East & West Abutment of Bridge 18A	
S26ANS12	Construct East Abutment (RE Wall part 1) & Bearing (Bridge 18A)		100%	36 28-Mar-11 A	14-May-11 A	Construct East Abutment (RE Wall part 1) & Bearing (Bridge 18A)	
S26ANS14	Construction West Abutment (RE Wall part 1) & Bearing (Bridge 18A)		100%	36 08-Jul-11 A	19-Aug-11 A	Construction West Abutment (RE Wall part 1) & Bearing (Bridge 18A	)
S26ANS15	Construction East RE Wall (part 2)		100%	50 19-Aug-11 A	26-Oct-12 A	Construction East RE Wall (part 2)	
S26ANS16	Construction West RE Wall (part 2)		100%	50 19-Aug-11 A	27-Oct-12 A	Construction West RE Wall (part 2)	
S26ANS18	Bridge 18A Decking and Watermain Diversion		100%	162 19-Jul-11 A	24-Jan-12 A	Bridge 18A Decking and Watermain Diversion	
S26ANS60	Erecting Temporary Bridge Support		100%	48 24-Jun-11 A	16-Jul-11 A	□ Erecting Temporary Bridge Support	
S26ANS70	Construction of Deck		100%	60 27-Oct-11 A	07-Jan-12 A	Construction of Deck	
S26ANS80	Construct remaining RE wall (East & West) (incl. VO 21, VO38 and VO79)		100%	40 15-Dec-11 A	29-Apr-13 A	Construct remaining RE	wall (Ea
S26ANS82	Drainage, Utilities & Watermain Installation (incl.VO 53:Concrete Plinths for PCCW Cable Ducts & '		100%	50 28-Dec-12 A	15-Jun-13 A	Drainage, Util <mark>t</mark> ies & V	/aterma
S26ANS90	Road Surfacing		100%	10 07-May-13 A	19-Jun-13 A	Road Surfacing	
S26ANS92	TTA Stage 1		100%	0 22-Jun-13 A		♦ TTA Stage 1	
Roadworks	s, Drainage & Utilities						
S26ANS42	Diversion of water mains at existing bridge 18		100%	25 20-Feb-13 A	30-Jul-13 A	Diversion of water	mains a
Demolition	of Existing Bridge 18						
S26ANS30	Demolition of Existing Bridge 18		100%	30 24-Jun-13 A	30-Jul-13 A	Demolition of Exist	ıng Brid
Site Area S	SA27						
PHSA2720	Possession of SA27		100%	0 26-Mar-10 A		♦ Possession of SA27	
SA270000	Site Area SA27 Works Period	-15	97.51%	1187 26-Mar-10 A	25-Feb-14	Sit	Area S
SA270010	Site Area SA27 Works Completion	-15	0%	0	25-Feb-14	→ Site	e Area S
SA270020	Temporary Traffic Arrangement (Detail shall refer to supplementary information)	-13	97.65%	959 26-Mar-10 A	25-Feb-14	Tel	mporary
SA270030	Overall Utilities Diversion (Detail shall refer to supplementary information)	-13	97.65%	959 26-Mar-10 A	25-Feb-14	Ον	erall Util
South Bou	ınd						
Construction	on of Retaining Wall						
Retaining V	Vall W65A						
S27S1000	Sheet Pile/Excavate & Construct W65A		100%	83 28-Dec-10 A	08-Apr-11 A	Sheet Pile/Excavate & Construct W65A	
1			<u>'</u>				
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ctivity ID	Activity Name To	tal Activity	% Origina	al Start	Finish	2010 2011 2012 2013 2014
	Flo					1   Q2   Q3   Q4   Q1   Q3   Q3   Q4   Q4   Q1   Q3   Q3   Q4   Q4   Q4   Q4   Q4   Q4
S27S1001	Sheet Pile & Excavation	100	% 3	2 28-Dec-10 A	07-Feb-11 A	Sheet Pile & Excavation
S27S1002	Construction of Structure W65A	100	% 5	0 11-Apr-11 A	13-Aug-11 A	Construction of Structure W65A
S27S1012	Backfilling behind W65A and drainage works	41 85	% 4	0 15-Jul-13 A	11-Feb-14	Backfilling
Retaining	Wall W65B, (CSD 1)	,	'		<u>'</u>	
S27S1040	WSD 1220 dia Diversion	100	% 3	6 26-Jul-11 A	17-Dec-12 A	W\$D 1220 dia Diversion
S27S1041	HyD Lighting relocation	100	% 3	6 26-May-11 A	18-Jun-11 A	☐ HyD Lighting relocation
S27S1042	Excavate to cut-off level	100	% 4	2 15-Oct-10 A	03-Dec-10 A	Excavate to cut-off level:
S27S1043	COD: CLP overhead cable	100	% 7	5 15-Jan-11 A	11-Apr-11 A	COD: CLP overhead cable
S27S1044	Relocaltion of Existing Electric Poles, CLP	100	% 2	4 15-Feb-11 A	11-Apr-11 A	Relocaltion of Existing Electric Poles, CLP
S27S1060	Capping/Walling for W65B	100	% 4	2 06-Apr-11 A	20-Aug-11 A	Çapping/Walling for W65B
S27S1070	Backfilling for W65A & B	100	% 7	5 10-Sep-11 A	21-Jul-12 A	Backfilling for W65A&B
S27S1090	COD: DAN 273- revised thrust box detail and additional works for DN1220	100	% 3	0 17-Dec-12 A	24-Jan-13 A	COD: DAN:273+ reviséd thrust box de
S27S1110	Backfilling behind W65B and drainage works -	41 85	% 4	0 15-Jul-13 A	11-Feb-14	Backfilling
Retaining	Wall W66/67 (CSD 2) & W71					
S27S1100	W66 & W67 (CSD 2)	100	% 4	5 02-Oct-10 A	19-Mar-11 A	
S27S1101	Base Slab (W66)	100	% 3	0 02-Oct-10 A	01-Nov-10 A	Base Slab (WG6)
S27S1102	Wall Stem (W66)	100	% 3	0 02-Nov-10 A	26-Dec-10 A	Wall Stem (W66)
S27S1103	Base Slab (W67)	100	% 3	0 08-Nov-10 A	25-Dec-10 A	Base Slab (W67)
S27S1113	Wall Stem (W67)	100	% 2	4 28-Feb-11 A	19-Mar-11 A	□ Wáll Stệm (W67)
S27S1115	Backfill for W66&67	100	% 6	1 27-Jun-11 A	15-Oct-11 A	□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□
S27S1200	Retaining Wall W71 (Bay1 - Bay5)	100	% 11	0 02-Jun-10 A	12-Oct-10 A	Retaining Wall W71 (Bay1 - Bay5)
S27S1210	, , ,	100		5 02-Jun-10 A	06-Aug-10 A	Retairling Wall W71 : Base Slab
S27S1220	Retaining Wall W71: Wall Stem	100	% 5	5 07-Aug-10 A	12-Oct-10 A	Retaihing Wall W71 : Wall Stem
S27S1230	Backfill for W71	100	% 5	0 27-Jun-11 A	24-Aug-11 A	Backfill for W71
Slopeworl					_	
S27S0000	Site Clearance/Access Rd	100	% 13	0 27-Mar-10 A	03-Sep-10 A	Site Clearance/Access Rd
S27S0001	Site Clearance (Stage 1)	100		0 27-Mar-10 A	-	Sitè Clearance (Stage 1)
S27S0002	Site Clearance (Stage 2)	100	% 4	0 19-Jun-10 A	05-Aug-10 A	Site Clearance (Stage 2)
S27S0004	Access Rd (Stage 1)	100	% 4	0 30-Apr-10 A	18-Jun-10 A	Access Rd (Stage 1)
S27S0005	Access Rd (Stage 2)	100		0 20-Jul-10 A	03-Sep-10 A	Access Rd (\$tage 2)
S27S5000	Slopeworks Cut(S34)	100		6 28-Dec-10 A		Slopeworks Cut(S34)
S27S5100	Slopeworks Cut(S42), Fill(S43)	100		5 28-Dec-10 A		Slopeworks Cut(\$42); Fill(\$43)
S27S5101	Slopeworks Cut(S42)	100		0 28-Dec-10 A		Slopeworks Cut(S42)
S27S5102	Slopeworks Fill(S43)	100		0 26-Oct-11 A	06-Jan-12 A	Slopework's Fill(S43)
S27S5110	Slopeworks Cut(S37)	100		0 02-Feb-11 A		ı Slopeworks Cut(\$37)
S27S5111	Slopeworks Cut(S37) - Stage 1, +40mPD	100		2 18-Nov-10 A		Slopeworks Cut(\$37) - Stage 1, +40mPD
S27S5112	Slopeworks Cut(S37) - Stage 2, +33.8mPD	100		2 30-Jan-12 A	19-Apr-12 A	Slapeworks: Cutt(S37) + Stage 2, +33.8mPD
S27S5120	Slopeworks Fill(S38)(Including removal of existing retaining wall)	100		6 13-Apr-12 A	21-Aug-12 A	Slopeworks Fill(S38)(Including removal of existing
S27S5121	Slopeworks Fill(S38): Removal of existing retaining wall	100		4 13-Apr-12 A		Slopeworks Fill(\$38): Removal of existing retaining wall
S27S5122	Slopeworks Fill(S38) - Stage 1, +32mPD	100		4 26-May-12 A		Ū Slopeworks Fill(\$38) - Stage 1, ⊬32mPD
S27S5123	Slopeworks Fill(S38) - Stage 2, +34mPD	100		4 11-Jun-12 A	11-Jul-12 A	Slopeworks Fill(\$38); - Stage 2, +34mPD
S27S5124	Slopeworks Fill(S38) - Stage 3, formation level	100		4 11-Jul-12 A	21-Aug-12 A	Slopeworks Fill(S38) - Stage 3, formation level
S27S5130	Slopeworks Cut(S39)	100		8 19-Jun-10 A	23-Feb-11 A	Slopeworks Cut(S39)
S27S5131	Slopeworks Cut(S39) - Stage 1, +37mPD	100		6 19-Jun-10 A	12-Aug-10 A	Slopeworks Cut(S39) - Stage 1, +37mPD
S27S5132	Slopeworks Cut(S39) - Stage 2, +35mPD	100		6 13-Aug-10 A		Slopeworks Cut(S39) - Stage 2,+35mPD
S27S5133	Slopeworks Cut(S39) - Stage 3, formation level	100		6 28-Dec-10 A		Slopeworks Cut(S39) - Stage 3, formation level
S27S5150		31 97	% 4	0 06-Sep-13 A	28-Jan-14	Slope Reins
Landscapi	ng					

S27S6010   Landscaping   -41   0%   40   11-Feb-14   29-Mar-14	1
S27S6010   Landscaping   -41   0%   40   11-Feb-14   29-Mar-14	Landscar Roadworks  Utilities - Stage 1 (W66 & W67) Road and Drainages Works - Stage 1 Road Surface - Stage 1 Roadmark and Lane Shifting - Stage 1 Removal of existing p
Roadworks, Drainage & Utilities	Roadworks  Utilities - Stage 1 (W66 & W67)  Road and Drainages Works - Stage 1  Road Surface - Stage 1  Roadmark and Lane Shifting - Stage 1  Removal of existing p
S27S4000       Roadworks, Drainages & Utilities - Stage 1 (CH 3900 - 4740)       -13       93.7%       357       13-Apr-12 A       25-Feb-14         S27S4004       Utilities - Stage 1 (W66 & W67)       100%       60       13-Apr-12 A       19-Apr-12 A         S27S4006       Road and Drainages Works - Stage 1       100%       60       11-May-12 A       31-Jul-12 A         S27S4010       Road Surface - Stage 1       100%       50       28-Jul-12 A       11-Dec-12 A	□ Utilities - Stage 1 (W66 & W67)  Road and Drainages Works - Stage 1  Road Surface - Stage 1  Roadmark and Lane Shifting - Stage 1  Removal of existing p
S27S4004       Utilities - Stage 1 (W66 & W67)       100%       60       13-Apr-12 A       19-Apr-12 A         S27S4006       Road and Drainages Works - Stage 1       100%       60       11-May-12 A       31-Jul-12 A         S27S4010       Road Surface - Stage 1       100%       50       28-Jul-12 A       11-Dec-12 A	□ Utilities - Stage 1 (W66 & W67)  Road and Drainages Works - Stage 1  Road Surface - Stage 1  Roadmark and Lane Shifting - Stage 1  Removal of existing p
S27S4006       Road and Drainages Works - Stage 1       100%       60       11-May-12 A       31-Jul-12 A         S27S4010       Road Surface - Stage 1       100%       50       28-Jul-12 A       11-Dec-12 A	Road and Drainages Works - Stage 1 Road Surface - Stage 1 Roadmark and Lane Shifting - Stage 1 Removal of existing p
S27S4010 Road Surface - Stage 1 100% 50 28-Jul-12 A 11-Dec-12 A	Road Surface - Stage 1  Roadmark and Lane Shifting - Stage 1  Removal of existing p
	☐ Roadmark and Lane Shifting - Stage 1 ☐ Removal of existing p
S27S4012 Roadmark and Lane Shifting - Stage 1 100% 30   12-Dec-12 A   27-Dec-12 A	Removal of existing p
S27S4018 Removal of existing paving - Stage 2 (Remaining CH4500 - 4740) 100% 25 27-Aug-13 A 12-Oct-13 A	
S27S4035 Road and Drainage Works for Slow Lane - Stage 2 (incl. VO 55: Provision of drainage at Retaining -18 65% 30 06-Oct-13 A 11-Feb-14	
Wall W71 & Bridge B18A)	
S27S4055 Road Construction and Remaining Works (along CH4500 - 4740) -13 75% 30 27-Aug-13 A 25-Feb-14	Road Cons
Construction of Bridge 15A	
<b>■</b>	
Preparatory and Enabling Works	Site Clearance
S26AS205 Site Clearance 100% 102 01-Jun-10 A 30-Sep-10 A	
S26AS210 Hual Road 100% 102 01-Jun-10 A 30-Sep-10 A	Hual Road
S26AS215 11KV Diversion, CLP 100% 102 01-Jun-10 A 30-Sep-10 A	11KV Diversion, CLP
S26AS225 2 nos. Existing fresh water mains diversion 100% 36 26-Jan-11 A 11-Mar-11 A	2 nos; Existing fresh water mains diversion
S26AS235 Existing tel cable diversion, PCCW 100% 36 26-Jan-11 A 11-Mar-11 A	Existing tel cable diversion, PCCW
S26AS245 HyD/Lighting 100% 60 26-Jan-11 A 09-Apr-11 A	HyD/Lighting
Substructure and Pier Construction	
South Abutment, P1 to P5	
S26AS220 Piling - South Abutmentt, P1 to P5 (incl. VO29: revised piling details) 100% 335 02-Jul-10 A 16-Aug-11 A	Piling: - South Abutmentt, P1 to P5 (incl. VO29: revised piling details)
S26AS230 Excavation & Cap-South Abutment, P1 to P5 (incl. VO6: Bridge 15A cap sleeving details) 100% 173 07-Feb-11 A 05-Sep-11 A	Excavation & Cap-South Abutment, P1 to P5 (incl. VO6: Bridge 15A cap slee
S26AS240 Pier & backfill, South Abutment, P1 to P5 100% 112 13-Jun-11 A 26-Oct-11 A	Pier & backfill, South Abutment, P1 to P5
South Abutment	
S26AS770 Piling - South Abutment 100% 71 02-Jul-10 A 07-Feb-11 A	Piling - South Abutment
S26AS780         Cap & Backfill - South Abutment         100%         37 07-Feb-11 A         22-Mar-11 A	Cap & Backfill;- South Abutment
S26AS790 South Abutment 100% 21 13-Jun-11 A 14-Jul-11 A	South Abutment
S26AS800 COD: 15ASA Wingwall 100% 14 13-Jun-11 A 14-Jul-11 A	COD: 15ASA Wingwall
S26AS610 Piling - P1 100% 66 18-Jan-11 A 09-Apr-11 A	P ling + P1
S26AS620 Cap & Backfill - P1 100% 37 26-May-11 A 09-Jul-11 A	Сар & Backfill - Р1
S26AS630         Pier - P1         100%         36         11-Jul-11 A         22-Sep-11 A	Pier - P1
P2	
S26AS640 Piling - P2 100% 66 26-Apr-11 A 27-May-11 A	🗖 Piling - P2
S26AS650         Cap & Backfill - P2         100%         37 09-Jun-11 A         23-Jul-11 A	Cap & Backfill - P2
S26AS660 Pier - P2 100% 36 26-Aug-11 A 22-Oct-11 A	⊢ Pier + P2
P3	
S26AS670 Piling - P3 100% 66 28-Dec-10 A 01-Feb-11 A	☐ Piling - P3
S26AS680 Cap & Backfill - P3 100% 37 26-Mar-11 A 14-May-11 A	Сар & Backfill - РЗ
S26AS700         Pier - P3         100%         36         09-May-11 A         21-Jun-11 A	. Pier - P3
P4	
S26AS548 Piling - P4 100% 63 09-Feb-11 A 26-Mar-11 A	: □ Piling - P4
S26AS550         Cap & Backfill - P4         100%         46 07-Apr-11 A         16-May-11 A	Cap & Backfill - P4
S26AS560         Pier - P4         100%         36         27-Jun-11 A         08-Aug-11 A	Pieri-P4
P5	
S26AS570 Piling - P5 100% 54 23-May-11 A 23-Jul-11 A	Piling -: P5

March   Marc	Antin	ty ID	Activity Name	Tota	Activity of	Original	Start	Finish	2010 2011 2012 2013 2014			
Section   Sect	ACCIV	ty ID	Activity Indilic			Duration		LINSII	21 Q2 Q3 Q4 Q1 Q2 Q3			
Package   Control   1000   1		S26AS580	Cap & Backfill - P5		100%	36	04-Aug-11 A	16-Sep-11 A				
Compact   Page 1 Page 1 Page 1 Page 1   Compact   Compact   Page 1 Page 1   Compact	Ш	S26AS590	Pier - P5		100%	36	18-Nov-11 A	29-Feb-12 A	Pier:- P5			
March   Marc	Ш	P6										
Secondary   Power	Ш	S26AS222	Piling-P6 Stage 1 (6 no.)		100%	20	26-Nov-11 A	19-Dec-11 A	□ Piling-P6 Stage 1 (6 no.)			
March   Marc	Ш	S26AS226	Piling-P6 Stage 2 (Remain, 9 no.)		100%	30	18-May-12 A	26-May-12 A	D. Piling-P6 Stage 2 (Remain, 9 no.)			
Note	Ш	S26AS232	Cap & Backfill - P6		100%	36	05-Oct-12 A	09-Nov-12 A	☐ Cap & Backfill + P6			
Season	Ш	S26AS242	Pier-P6		100%	12	20-Nov-12 A	13-Dec-12 A	□ Pier-P6			
1995   20   1995	Ш	North Abutr	ment					-1				
Deciding and Finishing   Deciding and Finishing   Deciding and Finishing   Deciding   Deciding and Finishing   Deciding	Ш	S26AS224	Piling-North Abutment, Stage 1 (11no.)		100%	36	07-Oct-11 A	17-Nov-11 A	Pilling-North Abutment, Stage 1 (1 1 no.)			
Exception   100%   20 John Park   20 John Par	Ш	S26AS228	Piling-North Abutment, Stage 2 (Remain, 16 no.)		100%	60	11-May-12 A	16-Jul-12 A	Pilling-North Abutment, Stage 2 (Remain, 16 no.)			
Backbox   Decking and First File File	Ш	S26AS234	Excavation & Cap-North Abutment		100%	30	08-Aug-12 A	18-Dec-12 A	Excavation & Cap:North Abutment			
Declaration	Ш	S26AS236	Abutment		100%	20	24-Dec-12 A	18-Jan-13 A	□ Abutment			
\$59,000.07   Quantification of All Advanced Lincil VO 441 Revised Diversing   100%   514 (84-00-11 A   82-464-11 A   86-660-11 A   85-660-11	Ш	S26AS244	Backfilling		100%	50	22-Jan-13 A	15-May-13 A	Backfilling			
Addressive   Advancement of Grégo Less - Part o a Gual Maument   Dispo Class - Part o a Gual Maument   Dis	П	Decking ar	nd Finishing									
		S26AS250	Bridge Deck (7 spans) (Bearing, Drainage & MJ included) (incl. VO 44: Revised Drainage Arrangement for Bridge 15A Deck)		100%	314	26-Nov-11 A	28-Mar-13 A	Bridge Deck (7 spans) (Bearing, D			
\$20,000.000   \$7	Ш	S26AS251	Bridge Deck - Pier 1 to South Abutment		100%	75	26-Nov-11 A	26-May-12 A	Bridge Deck - Pier 1 to South Abutment			
Falsework demanding of lack- Per 4 to Per 2 to Per 2 to Per 2 to Per 3 to Per 3 to Per 3 to Per 4 to Per 5 to	Ш	S26AS252	Bridge Deck - Pier 2 to Pier 1		100%	75	11-May-12 A	29-Aug-12 A	Bridge Dedk - Pier 2 to Pier 1			
SeeAsSSSS   Protect Piew 4 to Per 3	Ш	S26AS253	Bridge Deck - Pier 3 to Pier 2		100%	75	01-Jun-12 A	06-Nov-12 A	Bridge Deck- Pier 3 to Pier 2			
Schiology Class   Falsework dramarding of dock - Per 4 to Pier 5   100%   15   25-Feb-13A   30-May 13A   15   15   15   15   15   15   15   1	Ш	S26AS254	Falsework dismantling of deck - Pier 3 to Pier 2		100%	18	03-Dec-12 A	22-Feb-13 A	Falsework dismantling of deck - Pier			
S86AS257   Strigge Deck - Pier 5 to Pier 4   100%   75   27-Aug 12A   31-Jan 13A   14   15   15   15   15   15   15   15	Ш	S26AS255	Bridge Deck - Pier 4 to Pier 3		100%	75	11-Aug-12 A	22-Dec-12 A	Bridge Deck - Pier, 4 to Pier 3			
S26AS259   Fabowork Identifying of deck - Per 5 to Pier 4   100%   18   11-Mar-13A   30 May 13 A	Ш	S26AS256	Falsework dismantling of deck - Pier 4 to Pier 3		100%	18	25-Feb-13 A	03-May-13 A	Falseworkidismantling of decki-			
S28AS299   Palework Erection of deck - Per 6 to Pier 5   100%   15   25 - Dec 12 A   25 - Feb - 13 A	Ш	S26AS257	Bridge Deck - Pier 5 to Pier 4		100%	75	27-Aug-12 A	31-Jan-13 A	Bridge Deck - Pier 5 to Pier 4			
S28A3280   Bridge Deck - Pier 6 to Pier 5   100%   75   29 Dec 12A   19 Apr 13 A   19 Apr 13 Apr 1	Ш	S26AS258	Falsework dismantling of deck - Pier 5 to Pier 4		100%	18	11-Mar-13 A	30-May-13 A	Falsework dismantling of deck			
S28AS281   Falsework demanding of deck - Pier 6 to Pier 5   100%   18   0.6May-13A   14-Jun-13A   14-Jun-13A   1.5   0.6May-13A   14-Jun-13A   1.5   0.6May-13A   1.5   0.6   0.5	Ш	S26AS259	Falsework Erection of deck - Pier 6 to Pier 5		100%	18	03-Dec-12 A	23-Feb-13 A	Falsework Erection of deck - Pier 6 to			
S28AS282   Falsework Erection of duck - North Abutment to Pier 6   100%   18 31-Dec 12A   04-Feb-13A   25-Mar-13A   25-M		S26AS260	Bridge Deck - Pier 6 to Pier 5		100%	75	29-Dec-12 A	19-Apr-13 A	Bridge Deck - Pier 6 to Pier 5			
S28AS263   Bridge Deck - North Abutment to Pier 6   100%   50   14-Jan-13A   28-Mar-13A   28-M		S26AS261	Falsework dismantling of deck - Pier 6 to Pier 5		100%	18	06-May-13 A	14-Jun-13 A	☐ Falsework dismantling of dec			
S26AS264   Falsework dismantling off deck - North Abutment to Pier 6   100%   18   13-May-13 A   14-Jun-13 A   1		S26AS262	Falsework Erection of deck - North Abutment to Pier 6		100%	18	31-Dec-12 A	04-Feb-13 A	Falsework Erection of deck - North Abi			
S26AS269   Parapet (icl., precast concrete skin)   100%   50   06 - 0c-12A   08-Jun-13A   12-Jun-13A   12-J	Ш	S26AS263	Bridge Deck - North Abutment to Pier 6		100%	50	14-Jan-13 A	28-Mar-13 A				
S26AS270   Noise Barrier for Bridge 15A   100%   25 27-Mar-13 A   12-Jun-13 A   12-J	Ш		-		100%							
S26AS272   Surfacing	Ш		Parapet (icl, precast concrete skin)		100%	50	06-Dec-12 A	08-Jun-13 A	Parapet (icl, precast concrete			
S26AS275   Lighting	Ш		Noise Barrier for Bridge 15A		100%							
S26AS280   Handover Inspection of Bridge 15A   100%   3   20-Jun-13 A   22-Jun-13 A   1   Handover Inspection of Bridge   15A   100%	Ш				100%		•					
Ready For Pre-Handover Retaining Wall of Section 3         HRW0030       Ready For Pre-Handover Retaining Wall W65c, W68, W69, W70, W72A       3       0%       7       27-Jan-14       06-Feb-14       06-Feb-10       06-Feb-10 <td>Ш</td> <td></td> <td></td> <td></td> <td>100%</td> <td></td> <td>-</td> <td></td> <td>Lighting:</td>	Ш				100%		-		Lighting:			
HRW0030 Ready For Pre-Handover Retaining Wall W65C, W68, W69, W70, W72A 3 0% 7 27-Jan-14 06-Feb-14  HRW0031 Ready For Pre-Handover Retaining Wall W65A, W65B, W66, W67, W71 3 0% 7 27-Jan-14 06-Feb-14  Section 4  Site Area SA28  PHSA2820 Possession of SA28 (Day0) 100% 0 26-Feb-10 A	Ш				100%	3	20-Jun-13 A	22-Jun-13 A	I Handover Inspection of Bridg			
Ready For Pre-Handover Retaining Wall W65A, W65B, W66, W67, W71   3 0% 7 27-Jan-14 06-Feb-14   1 Feady For Fe   Section 4	Ш											
Section 4           Site Area SA28           PHSA2820 Possession of SA28 (Day0)         100% 0 26-Feb-10 A         26-Feb-10 A         Possession of SA28 (Day0)           SA280000 Site Area SA28 Works Period         62 92.64% 1216 26-Feb-10 A         26-Feb-10 A         26-Apr-14           SA280010 Site Area SA28 Works Completion         62 0% 0         26-Apr-14         26-Apr-14           SA280030 Temporary Traffic Arrangement (Detail shall refer to supplementary information)         50 92.73% 983 26-Feb-10 A 26-Apr-14         26-Feb-10 A 26-Apr-14           SA280040 Overall Utilities Diversion (Detail shall refer to supplementary information)         50 92.73% 983 26-Feb-10 A 26-Apr-14         26-Apr-14	Ш			3			27-Jan-14					
Site Area SA28           PHSA2820         Possession of SA28 (Day0)         100%         0         26-Feb-10 A         ◆ Possession of SA28 (Day0)           SA280000         Site Area SA28 Works Period         62         92.64%         1216         26-Feb-10 A         26-Apr-14           SA280010         Site Area SA28 Works Completion         62         0%         0         26-Apr-14           SA280030         Temporary Traffic Arrangement (Detail shall refer to supplementary information)         50         92.73%         983         26-Feb-10 A         26-Apr-14           SA280040         Overall Utilities Diversion (Detail shall refer to supplementary information)         50         92.73%         983         26-Feb-10 A         26-Apr-14	Ш	HRW0031	Ready For Pre-Handover Retaining Wall W65A, W65B, W66, W67, W71	3	0%	7	27-Jan-14	06-Feb-14	D Ready For F			
PHSA2820         Possession of SA28 (Day0)         100%         0 26-Feb-10 A         ◆ Possession of SA28 (Day0)           SA280000         Site Area SA28 Works Period         62 92.64%         1216 26-Feb-10 A         26-Apr-14           SA280010         Site Area SA28 Works Completion         62 0%         0         26-Apr-14           SA280030         Temporary Traffic Arrangement (Detail shall refer to supplementary information)         50 92.73%         983 26-Feb-10 A         26-Apr-14           SA280040         Overall Utilities Diversion (Detail shall refer to supplementary information)         50 92.73%         983 26-Feb-10 A         26-Apr-14    **North Bound**		Section 4										
SA280000         Site Area SA28 Works Period         62         92.64%         1216         26-Feb-10 A         26-Apr-14           SA280010         Site Area SA28 Works Completion         62         0%         0         26-Apr-14           SA280030         Temporary Traffic Arrangement (Detail shall refer to supplementary information)         50         92.73%         983         26-Feb-10 A         26-Apr-14           SA280040         Overall Utilities Diversion (Detail shall refer to supplementary information)         50         92.73%         983         26-Feb-10 A         26-Apr-14    North Bound		Site Area S	SA28									
SA280010 Site Area SA28 Works Completion  SA280030 Temporary Traffic Arrangement (Detail shall refer to supplementary information)  SA280040 Overall Utilities Diversion (Detail shall refer to supplementary information)  North Bound  Site Area SA28 Works Completion  62 0% 0 92.73% 983 26-Feb-10 A 26-Apr-14  Femporary Traffic Arrangement (Detail shall refer to supplementary information)  50 92.73% 983 26-Feb-10 A 26-Apr-14  Overall Villities Diversion (Detail shall refer to supplementary information)  North Bound		PHSA2820	Possession of SA28 (Day0)		100%	C	26-Feb-10 A		♦ Possession of SA28 (Day0)			
SA280030 Temporary Traffic Arrangement (Detail shall refer to supplementary information) 50 92.73% 983 26-Feb-10 A 26-Apr-14  SA280040 Overall Utilities Diversion (Detail shall refer to supplementary information) 50 92.73% 983 26-Feb-10 A 26-Apr-14  North Bound		SA280000	Site Area SA28 Works Period	62	92.64%	1216	26-Feb-10 A	26-Apr-14	Site Ar			
SA280040 Overall Utilities Diversion (Detail shall refer to supplementary information) 50 92.73% 983 26-Feb-10 A 26-Apr-14  North Bound		SA280010	Site Area SA28 Works Completion	62	2 0%	C	)	26-Apr-14	♦ Site Ar			
SA280040 Overall Utilities Diversion (Detail shall refer to supplementary information) 50 92.73% 983 26-Feb-10 A 26-Apr-14  North Bound		SA280030	Temporary Traffic Arrangement (Detail shall refer to supplementary information)	50	92.73%	983	26-Feb-10 A	26-Apr-14				
		SA280040	Overall Utilities Diversion (Detail shall refer to supplementary information)	50	92.73%	983	26-Feb-10 A	26-Apr-14				
Preliminaries Pr		North Bou	nd									
		Preliminario	es									
									•			

	34						
Activity ID	Activity Name	Total Float		Original Duration		Finish	2010 2011 2012 2013 2014 21 Q2 Q3 Q4 Q1 Q2 Q3 Q4 Q1 Q2 Q3 Q4 Q1 Q2 Q3 Q4 Q1 Q2 Q3
\$28N0000	Site Clearance/Access Rd		100%	239	26-Feb-10 A	19-Feh-11 Δ	12 3 4 5 6 7 8 9 1 1 1 1 1 1 1 1 1 1 1 1 2 2 2 2 2 2 2
S28N0010	Site Clearance (ch 4830-5250)		100%		26-Feb-10 A		Site Clearance (ch 4830-5250)
S28N0020	Site Clearance (ch 5250-5700)		100%			23-Jul-10 A	Site Clearance (ch 5250-5700)
S28N0110	Access Rd (ch 4830-5250)		100%		30-Jun-10 A		Access Rd (ch 4830-5250)
S28N0120	Access Rd (ch 5250-5700)		100%		09-Sep-10 A		Access; Rd (ch 5250-5700);
Slopework			10070	70	00 OCP 1071	10 1 00 1171	
S28N5000	Slopeworks Fill S44		100%	36	28-Dec-11 A	11-Feb-12 A	Slopeworks Fill S44
S28N5010	Slopeworks Fill S45	-21			27-Jan-14	17-Mar-14	Slopework
	on of Retaining Wall		0 70		27 0011 14	17 Mai 14	
	Wall W72B (CSD 1)						
	Prepare Piling Platform for W72B		100%	13	14-Sep-10 A	29-Sen-10 A	☐ Prepare Piling Platform for W72B
	Pre-drilling for W72B		100%		14-Sep-10 A		□ Pre-drilling for W72B
S28N2040	-		100%		01-Mar-11 A	'	□ Piling works
S28N2050	-		100%		26-May-11 A		Capping/Walling for W72B
	Pile Cap for W72B		100%		26-May-11 A		Dile Cap for W72B
S28N2051	·		100%		21-Jun-11 A		□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□
	Backfilling		100%		26-Sep-11 A	·	Backfilling:
	Wall W73 (CSD 1)		100 /6	00	20-3ер-11 А	13-Dec-11 A	Dacksining.
	Excavation & ELS		100%	24	14-Sep-10 A	13-Oct-10 A	☐ Exoavation & ELS
	W73 wall Structure (7 bays)		100%		01-Mar-11 A		W73 wall Structure (7 bays)
	Base Slab W73		100%		01-Mar-11 A	·	□ Base Slab W73
S28N2073	Wall Stem & W73		100%		25-Mar-11 A		□ Wall Stem & W73
S28N2080			100%			24-Dec-11 A	Baickfill
	Wall for Accom. Underpass Extn. (CSD 1)		100 /6	73	09-301-11 A	24-Dec-11 A	, Datrilli
S28N230	Pre-drilling for Accommodation Underpass Extension		100%	30	30-Jun-10 A	04-Aug-10 A	☐ Pre-drilling for Accommodation Underpass Extension
S28N240	Prepare Piling Platform for Accom.Underpass Extn		100%			04-Aug-10 A	Prepare Piling Platform for Accom. Underpass Extr
S28N250	Piling works		100%		01-Mar-11 A		□ Piling works
S28N260	Capping/Walling (incl. VO71: Details of typical section for slip road R verge at AUE wall)		100%		26-Mar-11 A		Capping/Walling (incl. VO71: Details of typical section for slip road R verge at AUE)
S28N270	Capping (AUE)		100%		26-Mar-11 A		Capping (AUE)
S28N280	Walling (AUE)		100%		26-May-11 A	•	— Sapping (A⊍E)  Walling (AUE)
S28N290	Backfilling		100%		26-Sep-11 A		Backfilling
Retaining \	-		10076	02	20 OCP 11 A	17 BCC 11 A	
S28N2105			100%	75	26-Feb-10 A	05lun-10 A	Liasion with location resident for slip road diversion
S28N2115	Utilities Diversion		100%		07-Jun-10 A		Utilities Diversion
S28N2120	Temporary road and pedestrian diversion		100%		18-Aug-10 A		Temporary road and pedestrian diversion
S28N2125	<u> </u>		100%			19-Nov-10 A	□ Pre-drilling for Piles
S28N2130	Confirmation of Founding Level		100%		26-Mar-11 A		Confirmation of Founding Level
S28N2134	Falsework removal beteew NLK deck P7 -P8		100%		07-Jan-13 A	·	☐ Falsework removal betteew NLK deck P
S28N2135	Piling work for W74 (Stage 1: Bay1 - 3)		100%		21-Feb-13 A		Piling work for W 74 (Stage 1: Ba)
S28N2140	Temporary Work for Excavation (Stage 1: Bay1 - 3)		100%		27-Jun-12 A	·	Temporary Work for Excavation (Stage 1: Bay1 - 3)
S28N2145	Excavation and Tie Back to Formation Level (Stage 1: Bay1 - 3)		100%		18-Jul-12 A	31-Jul-12 A	Excavation and Tie Back to Formation Level (Stage 1)
S28N2150	Pile Head Trimming and bearing plate (Stage 1: Bay1 - 3)		100%		27-May-13 A		□ Pile Head Trimming and beari
S28N2155	Retaining Wall Construction (Stage 1: Bay1 - 3)		100%		-	07-Oct-13 A	Retaining Wall Consti
S28N2156	Base Slab (W74) (Bay 1- 3)		100%		25-May-13 A		Baise Slab W74) (Bay 1- €
S28N2158	Wall Stem (W74) (Bay 1- 3)		100%		-	07-Oct-13 A	Wall Stem (W74) (Ba
S28N2160	Retaining Wall Construction (Stage 2: Bay 4 - 9)	-18				19-Feb-14	Retaining W
S28N2161	Falsework removal bewteen NLK deck P8 - P9	10	100%			20-Jul-13 A	Falsework removal bewteel
	Piling work for W74 (Stage 2: Bay 4 - 9)		100%		24-Jun-13 A		Piling work for W.74
SZOIVZ 10Z	g		10076				Fining WORNO W/F

BN2164 BN2165 BN2167 BN2168 BN2190 SEE Barrie BN2500 BN2510 BN2520 BN2525 BN2526	Temporary Work for Excavation (Stage 2: Bay 4 - 9)  Excavation and Tie Back to Formation Level (Stage 2: Bay 4 - 9)  Base Slab (W74) (Bay 4 - 9)  Wall Stem (W74) (Bay 4 - 9)  Backfilling  Pr NB43 (AD5)  Utilities Diversion  Temporary Noise Barrier Installation  Noise Barrier Construction Stage 1 (Bay 1 - 3)  Noise Barrier Construction Stage 2 (Bay 4 - 9)  Noise Barrier Construction Stage 3 remaining (Bay 4 - 7) Wall	Total Float	Activity % Complete  100% 100% 100% 30%  100% 100%	Original Duration         Start           18         27-Jun-12 A           19         18-Jul-12 A           25         07-Sep-13 A           30         05-Oct-13 A           25         12-Oct-13 A           127         01-Jun-10 A	31-Jul-12 A	21 (	2010 Q2 Q3 4 5 6 7		2013 2014 Q2 Q3 Q4 Q1 Q2 Q3 3 4 4 4 4 4 4 4 4 4 5 5 5 5 5 <a href="mailto:cross-search-color: blue;">Color: Excavation (Stage 2: Bay; 4 - 9)</a> Tie Back to Formation Level (Stage  Base Slab ()  Wall Stein ()
8N2165 8N2167 8N2168 8N2190 <b>SEE Barrie</b> 8N2500 8N2510 8N2520 8N2525 8N2526	Excavation and Tie Back to Formation Level (Stage 2: Bay 4 - 9)  Base Slab (W74) (Bay 4 - 9)  Wall Stem (W74) (Bay 4 - 9)  Backfilling  Pr NB43 (AD5)  Utilities Diversion  Temporary Noise Barrier Installation  Noise Barrier Construction Stage 1 (Bay 1 - 3)  Noise Barrier Construction Stage 2 (Bay 4 - 9)	-18	100% 100% 100% 30%	19 18-Jul-12 A 25 07-Sep-13 A 30 05-Oct-13 A 25 12-Oct-13 A 127 01-Jun-10 A	31-Jul-12 A 25-Jan-14 A 25-Jan-14 A			☐ Temporary Worl	ofor Excavation (Stage 2: Bay 4 - 9) Tie Back to Formation Level (Stage Base Slab ()
8N2167 8N2168 8N2190 <b>se Barrie</b> 8N2500 8N2510 8N2520 8N2525 8N2526	Base Slab (W74) (Bay 4 - 9)  Wall Stem (W74) (Bay 4 - 9)  Backfilling  Pr NB43 (AD5)  Utilities Diversion  Temporary Noise Barrier Installation  Noise Barrier Construction Stage 1 (Bay 1 - 3)  Noise Barrier Construction Stage 2 (Bay 4 - 9)	-18	100% 100% 30%	25 07-Sep-13 A 30 05-Oct-13 A 25 12-Oct-13 A 127 01-Jun-10 A	25-Jan-14 A 25-Jan-14 A			☐ Excavation and	Base Slab (\
BN2168 BN2190 BE Barrie BN2500 BN2510 BN2520 BN2525 BN2526 BN2530	Wall Stem (W74) (Bay 4 - 9)  Backfilling  Pr NB43 (AD5)  Utilities Diversion  Temporary Noise Barrier Installation  Noise Barrier Construction Stage 1 (Bay 1 - 3)  Noise Barrier Construction Stage 2 (Bay 4 - 9)	-18	100% 30%	30 05-Oct-13 A 25 12-Oct-13 A 127 01-Jun-10 A	25-Jan-14 A				
8N2190 See Barrie 8N2500 8N2510 8N2520 8N2525 8N2526 8N2530	Backfilling  Pr NB43 (AD5)  Utilities Diversion  Temporary Noise Barrier Installation  Noise Barrier Construction Stage 1 (Bay 1 - 3)  Noise Barrier Construction Stage 2 (Bay 4 - 9)	-18	100%	25 12-Oct-13 A 127 01-Jun-10 A					Wall Stem (
See Barrie BN2500 BN2510 BN2520 BN2525 BN2526 BN2530	Utilities Diversion Temporary Noise Barrier Installation Noise Barrier Construction Stage 1 (Bay 1 - 3) Noise Barrier Construction Stage 2 (Bay 4 - 9)	-18	100%	127 01-Jun-10 A	19-Feb-14				
8N2500 8N2510 8N2520 8N2525 8N2526 8N2530	Utilities Diversion  Temporary Noise Barrier Installation  Noise Barrier Construction Stage 1 (Bay 1 - 3)  Noise Barrier Construction Stage 2 (Bay 4 - 9)					1 1 1 1	- 1 1 1 1		Backfilling
BN2510 BN2520 BN2525 BN2526 BN2530	Temporary Noise Barrier Installation  Noise Barrier Construction Stage 1 (Bay 1 - 3)  Noise Barrier Construction Stage 2 (Bay 4 - 9)					1 1 1			
BN2520 BN2525 BN2526 BN2530	Noise Barrier Construction Stage 1 (Bay 1 - 3)  Noise Barrier Construction Stage 2 (Bay 4 - 9)		100%		10-Feb-11 A			Utilities Diversion	
BN2525 BN2526 BN2530	Noise Barrier Construction Stage 2 (Bay 4 - 9)			46 16-Nov-10 A	26-Dec-10 A			☐: Temporary Noise Barrier Installation	
BN2526 BN2530	- · · · ·		100%	72 03-Feb-12 A	14-Aug-12 A			Noise Barrier (	Construction Stage 1 (Bay 1 - 3)
3N2530	Noise Barrier Construction Stage 3 remaining (Bay 4 - 7) Wall		100%	75 09-Jan-13 A	18-Jun-13 A			<u> </u>	Noise Barrier Construction S
			100%	30 28-Oct-13 A	09-Jan-14 A				Noise Barrier
RN2531	Erection of Steel Post & Panel (Bay 1 - 3)		100%	75 29-Dec-12 A	31-Jan-13 A				ection of Steel Post & Panel (Bay 1
	Erection of Steel Post & Panel (Bay 4 - 9)		100%	10 20-Jan-14 A	25-Jan-14 A				■ Erection of S
	nstruction Works, Roadworks, Drainage & Utilities								
			100%	10 27-Apr-11 A	12-Sep-12 A			VO 25: Cons	struction of Cross road Ducts & traff
	Wo Service Road West								
			100%	75 15-Oct-11 A	12-Jun-12 A			CLP & Gasmian Di	version, Tear Drop/Slip Road T(incl.
	· · · · · · · · · · · · · · · · · · ·		1000/	05 04 N 40 A	00.11 40.4			T Dyled	ا با ا ا ا ا ا ا ا ا ا ا ا ا ا ا ا ا ا
	· · · · · · · · · · · · · · · · · · ·								landfill gasmain at NB41-stage 1
									DN400 landfill gasmain at NB41-sta
					,			· · · · · · · · · · · · · · · · · · ·	New Joint Box construction for
									Watermain, traffic light, road drains
			100%	24 16-Dec-11 A	21-Apr-12 A			COD: TTA Case 50 Sta	age 1 & 2 (Epron ordered: 16-12-11
N3970	Pavement at Tear Drop Area, Slip Road T & Traffic diversion		100%	30 18-May-12 A	11-Mar-13 A				Pavement at Tear Drop Area, Slip I
N4002	Roadworks, Drainages & Utilities, TWSRW Road from NB41-bay 6 to NB42-bay12 (incl. VO42 & VO43)		100%	150 18-May-12 A	23-Mar-13 A				Roadworks, Drainages & Utilities,
N4004	Drainage, Utilities & Removal of existing paving (incl.TTA & VO 77 Provision of cable duct for power supply)		100%	75 18-May-12 A	11-Mar-13 A				Drainage, Utilities & Removal of ex
			100%	60 22-Jan-13 A	23-Mar-13 A				Road surfacing, Tal Wo Service F
N4010	Roadworks to NKL Flyover and Ramps		100%	175 30-Jan-13 A	16-Aug-13 A				Roadworks to NKL Flyo
N4012	Roadworks to NKL Flyover and Ramp - South Ramp to SA		100%	50 30-Jan-13 A	24-Jul-13 A				Roadworks to NKL Flyove
	· · · · · · · · · · · · · · · · · · ·		100%	20 13-Jun-13 A	22-Aug-13 A				Roadworks to NKL Flyc
			100%	10 23-Jul-13 A	16-Aug-13 A				☐ Road Marking of New L
NAUSA	Road and Drainage Works (along W74 and NR38)	10	F0/	20 08- lan 14 A	13-Mar-14				Road an
	· · · · · · · · · · · · · · · · · · ·								300d, 120
	· · · · · · · · · · · · · · · · · · ·	-14		-				Coble Detection and Total District assistant	
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	· · · · · · · · · · · · · · · · · · ·								
	,			-					Pipe installation (DN1200 chA9.00-0
	,		100%						Water Pipe installation (DN1200 CF
	· · · · · · · · · · · · · · · · · · ·		100%						Water Pipe installation (DN1200 CF
	·		100%						] Water Pipe installa <mark>tion (DN300 C</mark>
			100%		·				Water Pipe installation (DN300 C
N4240	Water Pipe installation (DN300 CHBB5 - 49)		100%	75 15-Feb-13 A	09-Apr-13 A		<u> </u>	<u>                                      </u>	I Water Pipe installa <mark>ti</mark> on (DN300 C
	3900 3900 3900 3900 3900 3900 3900 3900	Wo Service Road West  CLP & Gasmian Diversion, Tear Drop/Slip Road T (incl. VO 19: Protection for existing HKCG HP600mm Gasmain at Slip Road T)  DN400 landfill gasmain at NB41-stage 1  DN400 landfill gasmain at NB41-stage 2  Road DN400 landfill gasmain at NB41-stage 2  Road New Joint Box construction for CLP 132kV  Watermain, traffic light, road drains & gully, Tear Drop/Slip Road T (incl. VO52)  COD: TTA Case 50 Stage 1 & 2 (Epron ordered: 16-12-11, expected delivery date: 23-1-13, actual delivery date: 12-3-12)  Pavement at Tear Drop Area, Slip Road T & Traffic diversion  Roadworks, Drainages & Utilities, TWSRW Road from NB41-bay 6 to NB42-bay12 (incl. VO42 & VO43)  Drainage, Utilities & Removal of existing paving (incl.TTA & VO 77 Provision of cable duct for power supply)  Road surfacing, Tai Wo Service Road West from NB41-bay 6 to NB42-bay12 (incl. VO 81 maintenance acess for NB41 & NB42)  Roadworks to NKL Flyover and Ramps  Roadworks to NKL Flyover and Ramps - South Ramp to SA  Roadworks to NKL Flyover and Ramp - North Ramp to NA  Road Marking of New Lam Kam Bridge and Final Diversion of South Bound Traffic from NLK Bridge to Modified Lam Kam Bridge and Final Diversion of South Bound Traffic from NLK Bridge to Modified Lam Kam Bridge and Final Diversion of South Bound Traffic from NLK Bridge to Modified Lam Kam Bridge and Final Diversion of South Bound Traffic from NLK Bridge to Modified Lam Kam Bridge and Final Diversion of South Bound Traffic from NLK Bridge to Modified Lam Kam Bridge and Final Diversion of South Bound Traffic from NLK Bridge to Modified Lam Kam Bridge and Final Diversion of South Bound Traffic from NLK Bridge to Modified Lam Kam Bridge and Final Diversion of South Bound Traffic from NLK Bridge to Modified Lam Kam Bridge and Final Diversion of South Bound Traffic from NLK Bridge to Modified Lam Kam Bridge and Final Diversion of South Bound Traffic from NLK Bridge to Modified Lam Kam Bridge and Final Diversion of South Bound Traffic from NLK Bridge to Modified Lam Kam Bridge and Final Div	Wo Service Road West  CLP & Gasmian Diversion, Tear Drop/Slip Road T (incl. VO 19: Protection for existing HKCG HP600mm Gasmain at Slip Road T)  DN400 landfill gasmain at NB41-stage 1  DN400 landfill gasmain at NB41-stage 2  3906 New Joint Box construction for CLP 132kV  3910 Watermain, traffic light, road drains & gully, Tear Drop/Slip Road T (incl. VO52)  COD: TTA Case 50 Stage 1 & 2 (Epron ordered: 16-12-11, expected delivery date: 23-1-13, actual delivery date: 12-3-12)  3970 Pavement at Tear Drop Area, Slip Road T & Traffic diversion  Roadworks, Drainages & Utilities, TWSRW Road from NB41-bay 6 to NB42-bay12 (incl. VO42 & VO43)  4004 Drainage, Utilities & Removal of existing paving (incl.TTA & VO 77 Provision of cable duct for power supply)  4006 Road surfacing, Tai Wo Service Road West from NB41-bay 6 to NB42-bay12 (incl. VO 81 maintenance acess for NB41 & NB42)  4010 Roadworks to NKL Flyover and Ramps  4011 Roadworks to NKL Flyover and Ramp - North Ramp to SA  4020 Roadworks to NKL Flyover and Ramp - North Ramp to NA  4030 Road works to NKL Flyover and Ramp - North Ramp to NA  4040 Roadworks to NKL Flyover and Ramp - North Ramp to NA  4050 Road and Drainage Works (along W74 and NB38)  406 Road and Drainage Works (along W74 and NB38)  407 Road and Drainage Works (along W74 and NB38)  408 Sheet Pile & ELS  409 TBM Boring and Installation of Sleeve Pipe  4004 Water Pipe installation (DN1200 CH70-165 & CH210-530 approx)  4006 Water Pipe installation (DN1200 CH70-165 & CH210-530 approx)  4007 Water Pipe installation (DN1200 CH70-165 & CH210-530 approx)  4008 Water Pipe installation (DN1200 CH70-165 & CH210-530 approx)  4009 Water Pipe installation (DN1200 CH70-165 & CH210-530 approx)  4000 Water Pipe installation (DN1200 CH70-165 & CH210-530 approx)  4001 Water Pipe installation (DN1200 CH70-166)	Wo Service Road West   Wo Service Road T   Service Road Road T   Service Road Road T   Service Road Road Road Road Road Road Road Road	Wo Service Road West  CLP & Gasmian Diverson. Tear Drop/Sip Road T (incl. VO 19: Protection for existing HKCG HP600mm Gasmain at Slip Road T)  DAVID (asmian Diverson. Tear Drop/Sip Road T (incl. VO 19: Protection for existing HKCG HP600mm Gasmain at Slip Road T)  DAVID (asmian Diverson. Tear Drop/Sip Road T (incl. VO 19: Protection for existing HKCG HP600mm Gasmain at Slip Road T)  DAVID (asmian B Slip Road T)  DAVID (asmi	Wo Service Road West  LP8 Commission Diversion, Tear Drop/Slip Road T(ind, VO 19: Protection for existing HKCG  PROSOME Casmain at Slip Road T)  100%  25 15-Oct-11 A 12-Jun-12 A 18-B000 T 100%  26 17-Dec-12 A 28-Nov-12 A 28-Nov-12 A 18-B000 T 100%  27 17-Dec-12 A 18-May-13 A 18-B000 T 100%  28 17-Dec-12 A 18-May-13 A 18-B000 T 100%  28 17-Dec-12 A 18-May-13 A 18-B000 T 100%  28 17-Dec-12 A 18-May-13 A 18-B000 T 100%  29 18-Dec-12 A 18-May-13 A 18-B000 T 100%  29 18-Dec-12 A 18-May-13 A 18-B000 T 100%  20 1	Wo Service Road West	Service Road West  CL & Casman Diversion, Tear Drop/Sig Road T (incl. VO 19: Protection for existing HKCQ HP600mm Casmain at Sigh Road T)  100% 75 15-Oct-11 A 12-Jun-12 A 18-Jun-12 A 18-	100%   100%

tivity ID	Activity Name		Activity %	Original Start	Finish	2010 2011 2012 2013 2014			
civity ib	Activity Name	Total Float		Duration	Tillisii	21 Q2 Q3 Q4 Q1 Q1 Q1 Q2 Q3 Q4 Q1			
S28N4250	Water Pipe installation (DN600 CHB0-84 & CHC0-76 Cross Road)		100%	75 28-Nov-12 A	26-Apr-13 A	Water Pipe installation (DN6			
S28N4260	Remaining Works for Water Pipe installation (DN1200 CH183 - 227 cross road)	-49	45%	75 06-Sep-13 A	19-Mar-14	Rema			
S28N4270	Remaining Works for Water Pipe installation (DN1200 CH280 - 330)		100%	75 14-May-13 A	30-Sep-13 A	Remaining Works			
S28N4280	Remaining Works for Water Pipe installation (DN1200 CH515 - 529)		100%	30 23-Jul-13 A	23-Aug-13 A	. □ Remaining Works fo			
S28N4290	Remaining Works for Water Pipe installation (DN600 CHB2.8 - 30.2(Revised 51))	-14	88%	60 08-Jul-13 A	07-Feb-14	Remaini			
S28N4300	Remaining Works for Water Pipe installation (DN600 CHC10.4 - 28.4(Revised 50))	-14	70%	60 08-Jul-13 A	19-Feb-14	Remair			
S28N4310	Remaining Works for Water Pipe installation (DN300 CH183 - 227 cross road)	-49	30%	75 26-Nov-13 A	01-Apr-14	Rem			
S28N4320	Remaining Works for Water Pipe installation (DN300 CHBB0 - 11(Revised 59))	-38	90%	45 26-Oct-13 A	07-Apr-14	Rer			
	Roadwork, Drainages & Utilities at TWSRW Road from NB38 to NB41-bay6 (TTA case 50 stage 7&8)	-48	0%	0 26-Nov-12 A	10-Mar-14	- Roadi			
S28N4340	CLP Tie-in (Cross road and joint bay)		100%	75 26-Nov-12 A	04-Jun-13 A	CLP Tie-in (Cross road ar			
S28N4350	Removal existing paving, Drainage & Utilities (incl.TTA case 50 stage 7 & 8 and VO.77)	-53	90%	35 27-Aug-13 A	30-Jan-14	Removal			
S28N4360	Road Works and Road surfacing at Tai Wo Service Road West from NB38 to NB41 - bay6	-48	0%	30 30-Jan-14	10-Mar-14	Road			
S28N4370	Road Works and Road Surfacing at Slip Road T (Slow Lane)	-48	0%	30 30-Jan-14	10-Mar-14	■ Road			
	Roadworks, Drainages & Utilities at TWSRW Road from NB38 to NB41- bay6 (TTA case 50 stage 9	-53	0%	68 30-Jan-14	26-Apr-14	Ro			
	& 10)								
S28N4390	Removal existing paving, Drainage & Utilities (incl.TTA case 50 stage 9 & 10 and VO.77)	-53	0%	35 30-Jan-14	15-Mar-14	—————————————————————————————————————			
	Road Works and Road surfacing at Tai Wo Service Road West from NB38 to NB41 - bay6	-53	0%	18 15-Mar-14	07-Apr-14	□ Roa			
	Road Works and Road Surfacing at Slip Road T (Fast Lane)	-53	0%	18 15-Mar-14	07-Apr-14	□ Roa			
	, , ,				26-Apr-14	— nua			
	Remaining Road Works at Slip Road T and TWSRW Road from NB38 to NB41 - bay 6	-53	0%	15 07-Apr-14	<u>'</u>				
	CLP Tie-in (joint bay)		100%			CLP Tie-ini (joint bay)			
	Transition Road Construction Works for TWSRW Road C2/C3 interface		100%	60 10-Jun-13 A	25-Sep-13 A	Transition Road C			
	ers & Road Barriers er NB38, NB39, NB40 & NB41 (AD5)								
	WSD/DSD/HKCG/PCCW/HGC/CATV/NWT/HKBN/TGT/CLP Diversion		100%	124 19-May-10 A	15-Oct-10 A	W\$D/DSD/HKQG/PC¢W/HGC/QATV/NWT/HKBN/TGT/¢LP Diversion			
	Temporary Noise Barrier Installation		100%	-	26-Dec-10 A	Temporary Noise Barrier Installation			
				45 18-Oct-10 A					
	Pre-Drilling for NB39 & NB41		100%	21 26-Jan-11 A		□ Pre-Drilling:for NB39 & NB41			
	Confirmation of Founding Level		100%	14 26-Mar-11 A	· ·	Confirmation of Founding Level			
	Excavation		100%	10 03-Feb-12 A		- D Excavation			
	Noise barrier Construction (NB38 - NB41)	0	100%	937 26-Apr-11 A		Noise ba			
S28N2316	Noise barrier Construction NB38		100%	30 27-Aug-13 A	22-Jan-14 A	Noise bai			
S28N2318	Noise barrier Construction NB39 (base slab)		100%	75 19-Apr-12 A	31-Dec-12 A	Noise barrier Construction NB39 (ba			
S28N2320	Noise barrier Construction NB41 (incl. VO 23: Provision of Drainage of Noise Barrier 41)		100%	50 26-Apr-11 A	25-Jun-11 A	Noise barrier Construction NB41 (incl. VO 23: Provision of Drainage of Noise			
S28N2330	Noise barrier Construction NB39 (Wall)	0	70%	30 27-Feb-13 A	08-Feb-14	Noise b			
S28N2340	Erection of steel and panel (NB41)		100%	24 11-May-12 A	05-Jun-12 A	☐ Erection of steel and panel (NB41):			
S28N2350	Erection of steel and panel (NB39)	0	0%	10 10-Feb-14	20-Feb-14	■ Erectio			
S28N2355	Erection of steel and panel (NB38)		100%	10 20-Jan-14 A	27-Jan-14 A	[] Erjection			
S28N2370	Noise Barrier Construction NB40 (Bay1 to Bay3)		100%	50 27-Aug-13 A	24-Jan-14 A	Noise Ba			
S28N2380	Noise Barrier Construction NB40 (Bay4 to Bay5)		100%	40 25-Mar-13 A	06-Jul-13 A	Noise Barrier Construct			
S28N2385	Erection of steel and panel (NB40)		100%	10 20-Jan-14 A	27-Jan-14 A	[] Erection			
Traffic Contr	ol & Survelance System								
	TCSS (ch4820-ch5640) & (Gantry G29) (incl. VO73 Revised Sign Gantry Details)	7	70%	40 29-Apr-13 A	12-Feb-14	TCSS (i			
Landscaping		•	. 3 / 0						
	Landscaping Works (ch4820 - 5640)	-21	20%	50 27-Apr-13 A	17-Mar-14	Liands			
South Bour	· · ·	-1	2070	55 Z. Api 10A					
Preliminarie									
	Site Clearance/Access Rd (incl. VO4 & VO5: Revised setting out plan of Slip Road W)		100%	0 23-Jun-10 A	01-Feb-11 A	Site Clearance/Access Rd (incl. VO4 & VO5: Revised setting out plan of Slip Road W)			
	Site Clearance		100%	75 23-Jun-10 A		Şite Çlearance			
02000010	One Ordan an ICO		100 /6	7.5 20-Juli-10 A	10 Och-10 M	ું ગાં પાણ વાવાન			

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Activity ID	Activity Name	Total Float	Activity % Complete	Original Start Duration	Finish	2010 2011 2012 2013 2014 21 Q2 Q3 Q4 Q1 Q1 Q1 Q2 Q3 Q4 Q1
S28S0020	Access Rd		100%	75 27-Jul-10 A	01-Feb-11 A	Access Rd
Roadwork	s, Drainage & Utilities		1			
S28S4010	Roadworks, Drainages & Utilities (CH4820 - Ch5700)(incl. VO20: Revised Fire mains alignment plan)	6	97.25%	454 11-May-12 A	13-Feb-14	Roadworks
S28S4012	Removal of existing paving - Stage 1 (CH5300 - 5700 & Slip Road W)		100%	75 11-May-12 A	08-Jun-13 A	Removal of existing paving -
S28S4016	Utilities - Stage 1		100%	75 11-May-12 A	08-Feb-13 A	Utilities - Stage 1
S28S4020	Road and Drainages Works - Stage 1 (incl.VO 75 Modification of existing SAV Chamber)		100%	75 11-May-12 A	25-Jun-13 A	Rdad and Drainages Works
S28S4021	Road Surface and Roadmark - Stage 1 (Slow Lane)		100%	30 18-Mar-13 A	18-Jul-13 A	Road Surface and Roadh
S28S4025	Removal of existing paving - Stage 2 (CH5300 - 5700 & Slip Road W)		100%	30 19-Jul-13 A	02-Aug-13 A	☐ Removal of existing pavir
S28S4027	Utilities - Stage 2 (CH5300 - 5700) (incl. VO 77 Provision of cable duct for power supply)		100%	30 03-Aug-13 A	12-Aug-13 A	1 Utilities - Stage 2 (CH58
S28S4029	Road and Drainages Works - Stage 2		100%	30 03-Aug-13 A	12-Aug-13 A	11 Road and Drainages W
S28S4031	Road Surface and Roadmark - Stage 2 (Fast Lane)	6	85%	30 13-Aug-13 A	04-Feb-14	Road Surfa
S28S4085	Remaining Road Works at Slip Road W	6	80%	40 27-Aug-13 A	13-Feb-14	Remaining
Noise Bar	riers 44 & Road Barriers			<u> </u>	1	
Noise Bar	rier NB44					
S28S2000	Excavation for NB44		100%	219 25-Aug-10 A	24-May-11 A	Excavation for NB44
S28S2010	Excavation for NB44 (Bay1& Bay2)		100%	44 25-Aug-10 A	18-Oct-10 A	Excavation for NB44 (Bay1& Bay2)
S28S2020	Excavation for NB44 (Bay3 & Bay4)		100%	44 19-Oct-10 A	08-Dec-10 A	Excavation for NB44 (Bay3 & Bay4)
S28S2030	Excavation for NB44 (Bay5 & Bay6)		100%	44 26-Apr-11 A	26-May-11 A	□ Excavation for NB44 (Bay5 & Bay6)
S28S2040	Excavation for NB44 (Bay7 & Bay8)		100%	36 26-Aug-11 A	10-Oct-11 A	Excavation for NB44 (Bay7 & Bay8)
S28S2050	Excavation for NB44 (Bay9 & Bay10)		100%	43 14-Oct-11 A	03-Dec-11 A	Excavation for NB44 (Bay9 & Bay10)
S28S2060	Noise Barrier Footing Construction for NB44 (incl. VO 46: Modification of Noise Barrier Footing for NB44)		100%	282 26-Mar-11 A	20-Dec-11 A	Noise Barrier Footing Construction for NB44 (incl. VO 46: Modificat
S28S2070	Noise Barrier Footing Construction for NB44 (Bay 1)		100%	32 26-Mar-11 A	15-Apr-11 A	□ Noise Barrier Footing Construction for NB44 (Bay 1)
S28S2080	Noise Barrier Footing Construction for NB44 (Bay 2)		100%	32 06-Apr-11 A	21-Apr-11 A	□ Noise Barrier Footing Construction for NB44 (Bay 2)
S28S2090	Noise Barrier Footing Construction for NB44 (Bay 3)		100%	32 26-May-11 A	04-Jun-11 A	Noise Barrier Footing Construction for NB44 (Bay 3)
S28S2100	Noise Barrier Footing Construction for NB44 (Bay 4)		100%	30 26-Apr-11 A	26-May-11 A	Noise Barrier Footing Construction for NB44 (Bay 4)
S28S2110	Noise Barrier Footing Construction for NB44 (Bay 5)		100%	24 26-Sep-11 A	25-Oct-11 A	□ Noise Barrier Footing Construction for NB44 (Bay 5)
S28S2120	Noise Barrier Footing Construction for NB44 (Bay 6)		100%	24 26-Oct-11 A	22-Nov-11 A	□ Noise Barrier Footing Construction for NB44 (Bay 6)
S28S2130	Noise Barrier Footing Construction for NB44 (Bay 7)		100%	24 23-Nov-11 A	20-Dec-11 A	□ Noise Barrier Footing Construction for NB44 (Bay 7)
S28S2140	Noise Barrier Footing Construction for NB44 (Bay 8)		100%	24 23-Nov-11 A	20-Dec-11 A	□ Noise Barrier Footing Construction for NB44 (Bay 8)
S28S2150	Noise Barrier Footing Construction for NB44 (Bay 9)		100%	23 23-Nov-11 A	20-Dec-11 A	□ Noise Barrier Footing Construction for NB44 (Bay 9)
S28S2160	Noise Barrier Footing Construction for NB44 (Bay 10)		100%	18 23-Nov-11 A	20-Dec-11 A	□ Noise Barrier Footing Construction for NB44 (Bay 10)
S28S2170	Remaining NB44 installation of panel		100%	7 27-Aug-13 A	26-Sep-13 A	☐ Remaining NB44 inst
Traffic Co	ntrol & Survelance System				1	
S28S4800	TCSS	-5	81.5%	130 28-Feb-13 A	26-Feb-14	T¢ss
S28S4810	TCSS - Stage 1 (ch4820 - ch5520)	-5	80%	24 28-Feb-13 A	04-Feb-14	TC\$S - Sta
S28S4850	TCSS - Stage 5 (ch5520 - ch5640), (Gantry G56) (incl. VO73 Revised Sign Gantry Details)	-5	20%	24 27-Nov-13 A	26-Feb-14	T¢ss-\$
Modificati	on of Existing Bridge				<u> </u>	
S28S1200	Modification of Lam Kam Rd. Flyover	-21	79.23%	119 26-Aug-13 A	27-Feb-14	Modification Modification
S28S1240	Diversion for modification kerb and road reconstruction (N/B)	-21	95%	43 26-Aug-13 A	29-Jan-14	Diversion fo
S28S1250	Removal central barrier and road construction	-21	85%	40 26-Sep-13 A	08-Feb-14	Removal or
S28S1260	Diversion for modification kerb and road reconstruction (S/B)	-21	45%	30 02-Dec-13 A	27-Feb-14	Diversion
Road Con	struction and Road Resufacing				1	
S28S4960	Road Construction and Resurfacing S/B for SA28	6	85%	60 26-Sep-13 A	14-Feb-14	Road Con
Site Area	SA29					
PHSA2920	Possession of SA29 (Day270)		100%	0 27-Jul-10 A		♦ Possession of SA29 (Day270)

	38		·			
ctivity ID	Activity Name	Total Float	Activity % Complete	Original Start Duration	Finish	2010 2011 2012 2013 2014 21 Q2 Q3 Q4 Q1 Q2 Q3 1 2  3  4  5  6  7  8  9  1  1  1  1  1  1  1  2  2  2  2  2  2  2  2  2  3  3  3  3  3  3  3  3  4  4  4  4  4  4  4  4  4  5  5  5  5  5  5  5  6  6  6  6  6  6  6  6  6  6  6  6  6
SA290000	Site Area SA29 Works Period (incl. VO002 & VO0011: Fencing details along site boundaries SA 29)	148	99.63%	946 27-Jul-10 A	30-Jan-14	Site Arrea Si
SA290010	Site Area SA29 Works Completion	148	0%	0	30-Jan-14	♦ Site Area Sr
SA290020	Temporary Traffic Arrangement (Detail shall refer to supplementary information)	118	99.54%	764 27-Jul-10 A	30-Jan-14	Temporary
SA290030	Overall Utilities Diversion (Detail shall refer to supplementary information)	118	99.54%	764 27-Jul-10 A	30-Jan-14	Oyerali Utilit
North Bou	und					
Preliminari	ries					
S29N0000	Site Clearance/Access Rd		100%	60 26-Jan-11 A	09-Apr-11 A	Site Clearance/Access Rd
Roadworks	s, Drainage & Utilities					
S29N4010	Roadworks, Realignment of Tai Wo Service Rd. West (NB42)		100%	58 13-Apr-12 A	21-Jan-13 A	Roadworks, Realignment of Tai Wo Se
S29N4020	Roadworks, Realignment of Tai Wo Service Rd. West (exclude NB42)		100%	38 15-Jan-13 A	28-Mar-13 A	Roadworks, Realigriment of Tai Vi
S29N4100	Gravity Sewer Line (4 sections) (incl. VO 8 & VO 35: Revised layout of Southern Trunk Sewer & Manhole Schedule)		100%	111 03-Jan-11 A	15-Dec-12 A	Gravity Sewer Line (4 sections) (incl. VO
S29N4110	Gravity Sewer Line - Stage 1 (STS10.30-80)		100%	60 03-Jan-11 A	31-Mar-12 A	Gravity Sewer Line - Stage 1 (STS10.30-80)
S29N4120	Gravity Sewer Line - Stage 2 (STS10.10-30)		100%	60 01-Apr-11 A	30-Jul-11 A	Gravity Sewer Line - Stage 2 (STS10.10-30)
S29N4130	Gravity Sewer Line - Stage 2 (STS10.80-105)		100%	63 28-May-11 A	15-Dec-12 A	Gravity Sewer Line - Stage 2 (STS10.80-
Noise Barri	riers & Road Barriers				<u> </u>	
Noise Barr	rier NB42 on Mini-Piles (AD)					
S29N2000	WSD/DSD/HKCG/PCCW/HGC/CATV/NWT/HKBN/TGT/CLP Diversion		100%	72 11-Apr-11 A	11-Jul-11 A	WSD/DSD/HKCG/P¢¢W/HGc/CATV/NWT/HKBN/TGT/¢LP Diversion
S29N2020	Footing for NB42 (Bay1 - Bay9) (incl. VO 7: Construction of modified noise barrier foundation for NB42)		100%	110 06-Dec-10 A	05-Jul-11 A	Footing for NB42 (Bay1 - Bay9) (incl. VO 7: Construction of modified noise barn
S29N2030	Footing for NB42 (Bay1 - Bay5)		100%	60 06-Dec-10 A	05-Jul-11 A	Footing for NB42 (Baly1: - Baly5)
S29N2040			100%	50 06-Dec-10 A	05-Jul-11 A	Footing for NB42 (Baly6 - Baly9)
S29N3000	Construct Noise Barrier & Beam Barrier (incl. VO 23. Provision of Drainage at Noise Barrier 42)		100%	60 26-Sep-11 A	01-Aug-12 A	Construct Noise Barrier & Beam Barrier (incl. VO 2
Landscapii	ing					
S29N6000	Landscaping Works (Near NB43)		100%	50 27-Jun-13 A	26-Sep-13 A	Landscaping Works
Site Area S	SA32					
PHSA3210	Possession of SA32 (Day365)		100%	0 25-Feb-11 A		♦ Passession of SA32 (Day365)
SA320000	Site Area SA32 Works Period		100%		17-Nov-11 A	Site Area SA32 Works Period
SA320010	Site Area SA32 Works Completion	-46		0	07-Apr-14	Site Ar
General	·				<u>'</u>	
S32G0000	Site Clearance/TTM		100%	72 26-Mar-11 A	25-Jun-11 A	Site Clearance/TTM
S32G4005	Application XP for Construct Roadside Fully Variable Message Sign	-38		60 11-Mar-13 A		Application
S32G4015	Construct Roadside Fully Variable Message Sign (RFVMS3)(include duct, footing and column)	-38		30 26-Sep-13 A		Construc
S32G4025	Construct Roadside Fully Variable Message Sign (RFVMS2)(include duct, footing and column)	-38		30 26-Sep-13 A		Construc
S32G4035	Construct Roadside Fully Variable Message Sign (RFVMS1)(include duct, footing and column)	-38		30 26-Sep-13 A		Constr
S32G4045	Construct Roadside Fully Variable Message Sign (TP04)(include duct, footing and column)	-38		30 26-Sep-13 A	· ·	Constr
S32G4060	VO 13: Relocation of existing Directional Signs in the Vicinity of Lam Kam Road Interchange		100%	10 27-Apr-11 A	-	VO:13: Relocation of existing Directional Signs in
	tion of New Lam Kam Road					
	ture and Pier Construction					
South Ram	пр					
S28N1213	Temporary Work for Excavation		100%	15 27-Jul-12 A	13-Aug-12 A	☐ Temporary Work for Excavation
S28N1214	Excavation		100%	20 23-Jul-12 A	08-Aug-12 A	☐ Excavation
S28N1215	Construction of South Ramp (incl. VO72: revised North & South Ramps Retaining Wall)		100%	145 23-Jul-12 A	26-Jan-13 A	Construction of South Ramp (incl. VO
	D. OLL		1000/	60 23-Jul-12 A	19-Oct-12 A	
S28N1216	Base Slab		100%	00 23-301-12 A	13 Oct 12 A	Base Slab
S28N1216 S28N1217	Wing Wall		100%	75 24-Sep-12 A		Base Slab  Wing Wall

Nativity ID	Astivity Name	T. 1 1	Anti-it- o/	Original Otal	Finish	2010 2011 2012 2013 2014
Activity ID	Activity Name	Total Float		Original Start Duration	Finish	11 Q2 Q3 Q4 Q1 Q2 Q3
Pier NLKP1						1234567891111111111222222222223333333333444444444
S28N1200	Gas Main Diversion		100%	45 28-Dec-11 A	28lan-12 A	☐ Gas:Main Diversion
S28N1232	Piling (16shp)		100%	50 13-Apr-12 A		Piling (16shp)
S28N1234	Cap and Pier (incl. VO29: revised piling details)		100%	70 03-Oct-12 A		Cap and Pier (incl. VO29: revised pilling de
S28N1236	Pile Cap		100%		11-Oct-12 A	D Pile Cap
	Pier		100%	45 15-Oct-12 A		Pier
South Abut			10076	40 13 Oct 12 A	20 1101 127	
	Gas Main Diversion		100%	24 28-Dec-11 A	30- lan-12 Δ	Gas Main Diversion
S28N1230	Piling Work (24shp)		100%	60 15-Feb-12 A		Piling Work (24shp)
S28N1240	Cap and Abutment (incl. VO29: revised piling details)		100%	115 15-Oct-12 A		Cap and Abutment (incl. VO29; revise
S28N1250	Pile Cap		100%	40 15-Oct-12 A	10-Nov-12 A	□ Pile;Cap
S28N1260	Abutment		100%	50 12-Nov-12 A		□ Abutment
S28N1270	Backfilling to South Abutment		100%	40 28-Dec-12 A	25-Jan-13 A	☐ Backfilling to South Abut nent
Pier NLKP2			1000/	57 00 Can 40 A	44 Nov. 40 A	
S28N1254	Piling Work (28shp)		100%	57 20-Sep-10 A		Piling Work (2βshp)
S28N1259	Pile Cap Construction (incl. VO29: revised piling details)		100%	46 06-Dec-10 A		Pile Cap Construction (incl. VO29; revised piling details)
S28N1261	Pier Construction		100%	36 11-Feb-11 A	18-Jul-11 A	Pier Construction
Pier NLKP3			1			
S28N1271	Pre-drilling for Piles		100%	11 11-Sep-10 A	· ·	□ Pre-drilling for Piles
S28N1272	Confirmation of Founding Level		100%	21 12-Sep-10 A		☐ Confirmation of Founding Level
S28N1273	Piling Work (24shp)		100%	68 20-Sep-10 A		Piling Work (24shp)
S28N1274	Temporary Shoring System		100%	31 17-Nov-10 A	03-Dec-10 A	☐ Temporary Shoring System
S28N1275	Excavation to Formation Level		100%	10 06-Dec-10 A	18-Dec-10 A	□ Excavațion to Formation Level
S28N1276	Pile Head Trimming and bearing plate		100%	11 20-Dec-10 A	24-Dec-10 A	Մ Pile Head Triṃming and bearing plate
S28N1277	Pile Cap Construction (incl. VO29: revised piling details)		100%	24 20-Dec-10 A	05-Jan-11 A	D Pile Cap Construction (incl. VQ29: revised piling details)
S28N1278	Backfilling		100%	30 26-Feb-11 A	01-Apr-11 A	Backfilling
S28N1279	Pier Construction		100%	61 02-Apr-11 A	11-Jun-11 A	Pier Construction
Pier NLKP4						
S28N1281	Gas main Diversion		100%	120 13-May-10 A	31-Jul-10 A	Gas main Diversión
S28N1282	Pre-drilling for Piles		100%	9 01-Aug-10 A	14-Aug-10 A	□ Pre-drilling for Piles
S28N1283	Confirmation of Founding Level		100%	22 16-Aug-10 A	31-Aug-10 A	Confirmation of Founding Level
S28N1284	Piling Work (16shp)		100%	63 01-Sep-10 A	30-Sep-10 A	□ Piling Work (16shp)
S28N1285	Temporary Shoring System		100%	44 20-Oct-10 A	23-Oct-10 A	II Temporary Shoring System
S28N1286	Excavation to Formation Level		100%	7 25-Oct-10 A	28-Oct-10 A	
S28N1287	Pile Head Trimming and bearing plate		100%	14 29-Oct-10 A	06-Nov-10 A	Pile Head Trimming and bearing plate
S28N1288	Pile Cap Construction (incl. VO29: revised piling details)		100%	21 08-Nov-10 A	19-Nov-10 A	Pile Cap Construction (incl. VO29: revised piling details):
S28N1289	Backfilling		100%	30 20-Dec-10 A	11-Jan-11 A	□ : Backfilling
S28N1290	Pier Construction		100%	71 02-Feb-11 A	26-Mar-11 A	Piệr Cộnstrudtion
Pier NLKP5					1	
S28N1301	Gas main Diversion		100%	120 13-May-10 A	31-Aug-10 A	Gas;main Diversion
S28N1302	Pre-drilling for Piles		100%	7 01-Sep-10 A	11-Sep-10 A	D Pre-drilling for Piles
S28N1303	Confirmation of Founding Level		100%	14 13-Sep-10 A	25-Sep-10 A	D: Confirmation of Founding Level
S28N1304	Piling Work (16shp) (incl. VO001: Revised Layout of Piles at New Lam Kam Road Flyover Pier NLKP5)		100%	62 26-Sep-10 A	·	Piling Work (16shp) (incl. VO001: Revised Layout of Piles at New Lam Kam Road Flyover Pier N
S28N1305	Temporary Shoring System		100%	44 20-Oct-10 A	05-Nov-10 A	☐ Temporary Shoring System
S28N1306	Excavation to Formation Level		100%	7 08-Nov-10 A	12-Nov-10 A	I Excavation to Formation Level
S28N1307	Pile Head Trimming and bearing plate		100%	14 15-Nov-10 A	27-Nov-10 A	D: Pile Head Trimming;and bearing;plate
S28N1308	Pile Cap Construction (incl. VO29: revised piling details)		100%	21 29-Nov-10 A		Pile Cap Construction (incl. VO29: revised piling details)
2_0000	,		. 5576	= 25 .137 1071		

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ctivity ID	Activity Name	Activity % Complete	Original Start Duration	Finish	2010   2011   2012   2013   2014   21   Q2   Q3   Q4   Q1   Q3   Q4   Q3   Q4   Q1   Q3   Q4   Q1   Q3   Q3   Q4   Q1   Q3   Q3   Q4
S28N1309	Backfilling	100%	30 13-Dec-10 A	18-Dec-10 A	I Backfilling
S28N1310	Pier Construction	100%	74 28-Dec-10 A	28-Mar-11 A	Pier Construction
Pier NLKP	6				
S28N1321	Gas main Diversion	100%	150 13-May-10 A	10-Nov-10 A	Gaş main Diversion
S28N1322	Pre-drilling for Piles	100%	14 21-Jul-10 A	23-Feb-11 A	Pre-drilling for Piles
S28N1323	Confirmation of Founding Level	100%	14 21-Jul-10 A	25-Feb-11 A	Confirmation of Founding Level
S28N1324	Piling Work (23shp)	100%	75 28-Feb-11 A	28-Mar-11 A	☐ Piling Work (23shp):
S28N1325	Temporary Shoring System	100%	44 26-May-11 A	18-Jul-11 A	Temporary Shoring System
S28N1326	Excavation to Formation Level	100%	7 05-May-11 A	23-Jun-11 A	Excavațion to Formation Level
S28N1327	Pile Head Trimming and bearing plate	100%	14 29-Jun-11 A	05-Jul-11 A	Pile Head Trimming and bearing plate
S28N1328	Pile Cap Construction (incl. VO29: revised piling details)	100%	23 28-Jul-11 A	24-Aug-11 A	Pile Cap Construction (incl. VO29: revised piling details)
S28N1329	Backfilling	100%	28 26-Sep-11 A	29-Oct-11 A	□ Backfilling
S28N1330	Pier Construction	100%	71 28-Sep-11 A	12-Nov-11 A	Pier Construction
Pier NLKP	7		<u> </u>	<u> </u>	
S28N1341	Realignment of Existing slip road	100%	45 19-May-10 A	13-Jul-10 A	Realignment of Existing slip road
S28N1342	Existing Water main Diversion	100%	45 14-Jul-10 A	03-Sep-10 A	Existing Water:main Diversion:
S28N1343	Pre-drilling for Piles	100%	7 04-Sep-10 A	18-Sep-10 A	☐ Pre-drilling for Piles
S28N1344	Confirmation of Founding Level	100%	14 13-Sep-10 A	25-Sep-10 A	Confirmation of Founding Level
S28N1345	Piling Work (16shp)	100%	62 26-Jan-11 A	·	□ Piling Work (16shp)
S28N1346	Temporary Shoring System	100%	44 08-Mar-11 A	16-Apr-11 A	Temporary Shoring System
S28N1347	Excavation to Formation Level	100%		16-Apr-11 A	Excavation to Formation Level
S28N1348	Pile Head Trimming and bearing plate	100%	14 27-Apr-11 A	·	☐: Pile Head:Trimming and bearing plate:
S28N1349	Pile Cap Construction (incl. VO29: revised piling details)	100%	21 19-May-11 A	-	Pile Cap Construction (incl. VO29: revised piling détails)
S28N1350	Backfilling	100%	30 26-Sep-11 A	,	□ Backfilling
S28N1351	Pier Construction	100%	72 03-Oct-11 A		Pier Construction
Pier NLKP		10070	72 00 00( 1171	2.200	
S28N1361	Realignment of Existing slip road	100%	45 19-May-10 A	13-Jul-10 A	Realignment of Existing slip:road
S28N1363	Existing Water main Diversion	100%	45 14-Jul-10 A	03-Sep-10 A	Existing Water main Diversion
S28N1364	Pre-drilling for Piles	100%	18 04-Sep-10 A	·	☐ Pre-drilling for Piles
S28N1365	Confirmation of Founding Level	100%	14 27-Sep-10 A	·	☐ Confirmation of Founding Level
S28N1366	Piling Work (24shp)	100%	· ·	05-Feb-11 A	□ Piling Work (24shp)
S28N1367	Temporary Shoring System	100%	44 26-Apr-11 A		□: Temporary Shoring System
S28N1368	Excavation to Formation Level	100%	30 26-Sep-11 A	-	Excavation to Formation Level
S28N1369	Pile Head Trimming and bearing plate	100%	·	22-Oct-11 A	D. Pile Head Trimming and bearing plate
S28N1370	Pile Cap Construction (incl. VO29: revised piling details)	100%	24 26-Oct-11 A	02-Nov-11 A	Pile Cap Construction (incl. VO29: revised piling details)
S28N1371	Backfilling	100%	24 26-Nov-11 A		Backfilling
S28N1372	Pier Construction	100%	72 21-Dec-11 A		Pier Construction
Pier NLKP		10070			
S28N1381	Realignment of Existing slip road	100%	45 19-May-10 A	13-Jul-10 A	Realignment of Existing slip road
S28N1382	Existing Water main Diversion	100%	<u> </u>	03-Sep-10 A	Existing Water main Diversion
S28N1383	Pre-drilling for Piles	100%	14 04-Sep-10 A	·	☐ Pre-drilling for Piles
S28N1384	Confirmation of Founding Level	100%	14 21-Sep-10 A	· ·	Confirmation of Founding Level
S28N1385	COD: Drainage (ADN 72, 86, 121, 145, 225), Fire Services Mains (DAN 202) and related UU works	100%	75 21-Sep-10 A		COD: Drainage (ADN 72, 86, 121, 145, 225), Fire Services Mains (DA
020111003	)	100 /0	75 21 06p-10 A	LI SOLIIA	Joseph Dramago (ADIVIZ, 60), IZI, 140, ZZJI, 116 OGI VICES IVIdilis (DAI
S28N1386	Piling Work (24shp)	100%	75 22-Oct-11 A	19-Dec-11 A	Piling Work (24shp)
S28N1387	Temporary Shoring System	100%		19-Apr-12 A	Temporary Shoring System
S28N1387	Excavation to Formation Level	100%	36 19-Apr-12 A	'	Excavation to Formation Level
S28N1389	Pile Head Trimming and bearing plate	100%		11-Jul-12 A	Excavation to Formation Level
320111309	The rieds tritiming and bearing place	100 /6	12 ZI-JUII-12 A	11 0ur 12 A	

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Activity ID	Activity Name	Total Float		Original Start	Finish	01	2010 Q2   C	3 Q4 (	2011 Q1   Q2   Q3	Q4 Q1	2012 Q2 Q3	Q4 Q1	2013 Q2   Q3	Q4 Q1	2014 Q2 Q3
		rioat		Duration					1 1 1 1 1 1 2		222333	3 3 3 3 3 3 3	3 4 4 4 4 4 4	4 4 4 4 4 5	5 5 5 5 5 5
S28N1390	Pile Cap Construction (incl. VO29: revised piling details)		100%	12 12-Jul-12 A	01-Aug-12 A						☐ Pil	e Cap Constru	ction (incl. VC	J29: revis∈	ed piling det
S28N1391	Backfilling		100%	12 28-Jul-12 A	14-Sep-12 A							Backfilling			
S28N1392	Pier Construction		100%	40 15-Sep-12 A	18-Oct-12 A							Pier Constr	uction		
Pier NLKP1	0														
S28N1401	132 kv Cable Diversion		100%	75 26-Oct-11 A	27-Jan-12 A					13	2 kv Cable D	version			
S28N1402	Existing Water main Diversion		100%	50 23-Apr-12 A	16-Aug-12 A							xisting Water ı	nain Diversio	ı'n	
S28N1405	Piling Work (17shp)		100%	60 23-Jul-12 A	19-Sep-12 A							Piling Work (	7shp)		
S28N1409	Pile Cap construction (incl. VO29: revised piling details)		100%	25 03-Oct-12 A	01-Dec-12 A							Pile Cap	construction	(incl. VO2	29: revised p
S28N1411	Pier Construction		100%	25 11-Dec-12 A	29-Dec-12 A							☐ Pier C	onstruction		
North Abutr	ment			-	-1.			+-+-+			- + - + - + - + - + - +				
S28N1422	Existing Water Main Utilities Diversion		100%	30 09-Jul-12 A	30-Aug-12 A							Existing Water	Main Utilities	Diversion	
S28N1426	Piling Work (24shp)		100%	60 20-Sep-12 A	12-Nov-12 A							Piling Wo	rk (24shp)		
S28N1428	Pile Cap Construction (incl. VO29: revised piling details)		100%	30 26-Nov-12 A	02-Jan-13 A							☐ Pile C	ap Construct	ion (incl. V	/O29: revise
S28N1430	Abutment		100%	30 05-Jan-13 A	24-Jan-13 A							☐ Abu	111 1 1 1 1		
S28N1580	Backfilling		100%	20 20-May-13 A									Backfillin	ng	
North Ramp				,											
S28N1434	COD: RFI 399 HP Gas Main Clashing with abutment (incl. trail pit excavation)		100%	50 19-Sep-12 A	31-Dec-12 A							COD:	RFI 399 HP	Gas Main	Clashina wi
S28N1435	Construction of North Ramp (incl. VO72: revised North & South Ramps Retaining Wall)		100%	148 06-Nov-12 A									■ Constructi		1 1 1 1 1
S28N1436	Temporary Work for Excavation		100%	24 06-Nov-12 A	•								porary Work		
S28N1437	Excavation		100%	22 22-Nov-12 A								Exc			
S28N1438	Base Slab		100%	14 31-Dec-12 A									Base Slab		
S28N1439	Wing Wall		100%	48 01-Feb-13 A									☐ :Wing Wal		
S28N1449	Backfilling		100%	20 06-May-13 A	-								Backfillir		
			100%	20 06-Way-13 A	07-Juli-13 A								Dackiniii	lg .	
	nd Finishing  Decline (Begins Decises & M. Induded) (incl. VC 40-NILK, Decised Decises Assessment for		1000/	550 07 him 44 A	14 May 10 A										
S28N1440	Decking (Bearing, Drainage & MJ included) (incl. VO 40: NLK - Revised Drainage Arrangement for Bridge Deck)		100%	559 27-Jun-11 A	14-May-13 A								Decking (	Bearing, D	rainage & i
COON 4 450	NHV Deals D4 D5		1000/	75 07 has 44 A	00 0 - 11 4					NUIZIDANI	D4 IDE				
S28N1450	NLK Deck; P4 - P5		100%	75 27-Jun-11 A	'					NLK Deck;	1 1 1 1 1 1	PA I I I I I			
S28N1460	NLK Deck; P3 - P4		100%	75 26-Oct-11 A						I NI	K Deck; P3 -				
S28N1470	NLK Deck; P2 - P3		100%	72 11-May-12 A	-							LK Deck; P2 -	1 1 1 1 1 1		
S28N1475	Falsework erection of deck: P1 - P2		100%	50 29-Sep-12 A				; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ;	-4-4-4-4-4-4-4-4-4			Falsev			1;- P2 ; ;
S28N1480	NLK Deck; P1 - P2		100%	62 06-Nov-12 A									CDeck; P1 - F		
S28N1484	Falsework dismantling of deck: P1 - P2		100%	18 21-Mar-13 A	·								Falsework		7 1 1 1 1
S28N1485	Falsework erection of deck: South Abutment - P1		100%	25 10-Dec-12 A									sework erection		
S28N1490	NLK Deck; South Abutment - P1		100%	60 03-Jan-13 A									NLK Deck; Sc		
S28N1495	Falsework dismantling of deck: South Abutment - P1		100%	18 15-Apr-13 A	,			+-+-+-			<u></u>		Falsework	र dismantlir	ng of deck: 5
S28N1500	NLK Deck; P5 - P6		100%	75 26-Nov-11 A								eck; P5 - P6			
S28N1510	NLK Deck; P6 - P7		100%	75 16-Jun-12 A	06-Oct-12 A							NLK Deck; I	?6 - P7		
S28N1520	NLK Deck; P7 - P8		100%	75 03-Sep-12 A	22-Dec-12 A								eck; P7 - P8		
S28N1524	Falsework dismantling of deck: P7 - P8		100%	26 07-Jan-13 A	01-Feb-13 A	1 1						☐ Fal	sework disma	intling of d	eck: P7 - P8
S28N1525	Falsework erection of deck: P8 - P9		100%	18 29-Oct-12 A	29-Jan-13 A	1 1						Fals	sework erection	on of deck	: P8 - P9
S28N1530	NLK Deck; P8 - P9		100%	75 20-Dec-12 A	29-Mar-13 A			, - , - , - , - , - , - , - , - , - , -					NLK Deck; P	′8 - P9	
S28N1534	Falsework dismantling of deck: P8 - P9		100%	26 23-Apr-13 A	20-Jul-13 A	1 1							False	ework disn	mantling of d
S28N1535	Falsework erection of deck: P9 - P10		100%	34 10-Dec-12 A	23-Jan-13 A							☐ Fals	ework erectio	n of deck:	P9 - P10
S28N1540	NLK Deck; P9 - P10		100%	65 18-Jan-13 A	25-Apr-13 A								NLK Deck;	P9 - P10	
S28N1544	Falsework dismantling of deck: P9 - P10		100%	18 20-May-13 A	30-Nov-13 A									False	ework disma
S28N1545	Falsework erection of deck: P10 - North Abutment		100%	18 17-Jan-13 A	21-Feb-13 A		;;-;-; 	+-+-+-			- + - + - + - + - + - +	□ Fa	alsework erec	tion of dec	ck: P10 + Nc
S28N1550	NLK Deck; P10 - North Abutment		100%	55 21-Feb-13 A	14-May-13 A								NLK Decl	k; P10 N	orth Abutme
S28N1554	Falsework dismantling of deck: P10 - North Abutment		100%	18 20-May-13 A	08-Jun-13 A								Falsewo	ork dismar	ntling of dec
	<u> </u>			,					11111111			1 1 1 1 1 1		<u> </u>	

12	

	42														
ctivity ID	Activity Name	Total Float	Activity % Complete	Original Duration		Finish	21 Q2	2010 Q3 5 6 7 8	2011 Q4 Q1 Q2 Q3 9 1 1 1 1 1 1 1 1 1 1 1 1	Q4 2 2 2 2 2	20 Q1 Q2 2 2 2 2 2 2	Q3 Q4	20 Q1 Q2 3 3 3 3 4 4	Q3 Q4 (	2014 Q1   Q2   Q3   4 5 5 5 5 5 5
S28N1570	Parapet (P3 - P6)		100%	45	03-Dec-12 A	18-Apr-13 A					<del>+ + + + + + + + + + + + + + + + + + + </del>			apet (P3 - P6)	
S28N1660	Parapet (SA - P3 & P6 - NA )		100%	65	28-Feb-13 A	26-Jun-13 A								Parapet (SA	P3 & P6 - NA
S28N1680	Noise Barriers, Surfacing and Road Lighting		100%	30	10-May-13 A	22-Aug-13 A		F - F - F - F - F - F - F - F - F - F -	· · · · · · · · · · · · · · · · · · ·	- 		-		Noise Bar	rriers, Surfacino
S28N1690	Inspection Handover of NLK Bridge		100%	3	22-Aug-13 A	24-Aug-13 A								I Inspectio	n Handover of I
S28N1700	TTA Stage 9		100%	0	24-Aug-13 A									♦ TTA Stage	e 9
S28N1710	Diversion for modifying kerb and laying asphalt paving road (N/B) reconstruction of 1 lane Stage 1		100%	43	26-Aug-13 A	14-Dec-13 A									iversion for mo
I															
S28N1715	Road Construction Works (N/B) C2/C3 interface	-22	80%	30	26-Aug-13 A	05-Feb-14									Road Consti
S28N1720	Diversion for removing central barriers Stage 2	-22	45%	18	17-Sep-13 A	17-Feb-14									Diversion fo
S28N1730	Diversion for modifying kerb and laying asphalt paving road (S/B) reconstruction of 1 lane Stage 3	-22	0%	10	17-Feb-14	28-Feb-14									Diversion f
S28N1735	Road Construction Works (S/B) C2/C3 interface	-22	0%	10	17-Feb-14	28-Feb-14									Road Cons
Ready Fo	or Pre-Handover Retaining Wall of Section 4														
HRW0040	Ready For Pre-Handover Retaining Wall W72B, W73 and W74	-6	0%	7	19-Feb-14	27-Feb-14									Ready For
Section 5														- +	
	CA24														
Site Area			40001		00 5-1-10 (				( 0 A O 4 / P - O )						
PHSA3120	Possession of SA31 (Day0)		100%		26-Feb-10 A		→ Poss	ession of	f SA31 (Day0)						
SA310000	Site Area SA31 Works Period (incl. VO42, VO52, VO59 & VO65)	142		884	26-Feb-10 A						1 1 1 1 1	1 1 1 1 1		1 1 1 1 1 1	Site Area \$A
SA310010	Site Area SA31 Works Completion	142	0%	0		04-Feb-14									Site Area SA
South Bo	pund														
Prelimina															
S31S0000	Site Clearance/TTM/Access Rd/Utility Diversion (Incl. Liason and Coordination)		100%	252	26-Feb-10 A	31-Dec-10 A			Site Clearance	TTM/Acc	ess Rd/Utility	Diversion (	ncl. Liason an	d Coordination	1
Roadwor	ks, Drainage & Utilities														
Portion 3															
S31S5000	Portion 3 - New Footpath (CH0 to 175)		100%	165	11-Jun-11 A	15-Jan-13 A							➡ Portion 3	New Footpath	(CH0 to 175)
S31S5010	Formation level of footpath		100%	45	04-Jan-12 A	28-Feb-12 A				ָּ ֭֭֭֭֭֭֭֭֓֞֞֞֞֞֞֞֞֞֞֞֞֞֞֞֞֞֞֞֞֞֞֓֓֞	<b>—</b> Forma	tion level of	ootpath		
S31S5020	Preparation for footpath & Cycle Track Diversion		100%	7	11-Jun-11 A	18-Jun-11 A			Pre	paration	for footpath	& Cycle Trac	k Diversion		
S31S5025	Unchartted Towngas DN400 HP		100%	178	29-May-12 A	05-Jan-13 A						1 1 1 1 1	Unchartted	Towngas DN4	100 HP
S31S5030	Additional UU works (CLP 132kV & 11kv)		100%	17	10-Oct-12 A	16-Jan-13 A							Additional	UU works (CL	P 132kV & 11kv
S31S503	Roadworks		100%	215	07-Sep-12 A	16-Mar-13 A							Road	vorks	
S31S5040	Footpath Sub-base, kerb and concrete surface		100%	17	07-Sep-12 A	30-May-13 A								ootpath Sub-b	ase, kerb and
S31S5050	CLP Overhead wooden Pole		100%	12	26-Dec-12 A	07-Jan-13 A							CLP Overl	ead wooden P	ole
S31S5060	New cycle track formation level		100%	15	28-Nov-12 A	06-Apr-13 A							New	cycle track for	mation level
S31S5070	New cycle track (Bitonminous Layer)		100%	10	29-Jan-13 A	25-Apr-13 A							Ne	w cycle track (	Bitonminous La
S31S5080	New Kerb		100%	7	07-Jan-13 A	23-Apr-13 A							Ne	v Kerb	
S31S5090	Public Lighting & TCSS Ductings (incl. VO 77 Provision of cable duct for power supply)		100%	7	06-Oct-12 A	23-Apr-13 A							Pu	olic Lighting &	CSS Ductings
S31S5100	New public lightings poles		100%	15	17-Apr-13 A	20-Apr-13 A							I Ne	v public lighting	s poles
S31S5110			100%			20-Apr-13 A								construction car	
S31S5120	-	116	0%	5	27-Jan-14	04-Feb-14									Traffic Lights
S31S5130	-		100%		21-May-12 A	16-Mar-13 A							Road	vorks (Other ar	rea not affected
S31S5132			100%		26-Dec-12 A								1 1 1 1 1 1 1		rea affected by
Portion 1	, , , , ,														
S31S4620	Portion 1 - CH 0 to CH 50 (From Hong Lok Yuen Junction to WSD Gate)		100%	146	20-Jun-11 A	16-Mar-13 A							—— Portio	n 1 - CH 0 to 0	H 50 (From H
S31S4630	, , ,		100%		20-Jun-11 A				Sit Sit	e Clearar					
S31S4640			100%			25-Aug-11 A			i . i . i . i . i . i . i . i . i .		ion road for	nation level			
S31S4648			100%			10-Aug-12 A				_ paval	1 1 1 1 1	1 1 1 1 1	tted Towngas	/ CLP	
S31S4650	-		100%			04-Feb-12 A					☐ Trial Pit		1 1 1 1 1 1 1		
	THAT I TO TOWNGO DIVEOUTH		100 /0	14	10 0a11-12 M	07 1 60-12 M	1000				- mairil	on inviligas	PINTOU LIF		4 1 1 1 1 1 1 1
S31S4660	Additional Towngas DN400 HP preparation and materials deliverary		100%	EO	06-Feb-12 A	27 Apr 10 A					,	ditional Tab	dade DN 400 I	ID proporciios	and materials o

Antinity ID	43	Total	A a tivitus 0/	Original	Chart	Finish	2010 2011 2012 2013 2014
Activity ID	Activity Name	Total Float	,	Duration		Finish	21 Q2 Q3 Q4 Q1 Q2 Q3
S31S4670	Additional Towngas DN400 HP laying works		100%	12	28-Apr-12 A	26-May-12 A	123456789111111111112222222222233333333333344444444
S31S4675	Uncharted CLP 11kV Existing diversion (Ducting & Cabling, Tie - in and uncharted cables)		100%		30-Jul-12 A	10-Aug-12 A	□ Uncharted CLP 11kV Existing diverson (Ducting & C
S31S4678	UU diversion		100%			18-Dec-12 A	UU diversion
S31S4679	Excavation for UU diversion		100%	20	15-Dec-11 A	10-Jan-12 A	□ Excavation for UU diversion
S31S4680	Additional CLP 11kV Existing Diversion (Ducting & Cabling, Tie-in and uncharted cables)		100%		25-Apr-12 A	10-Aug-12 A	Additional CLP 11kV Existing Diversion (Ducting & C
S31S4690	Additional CLP 132 kV (New Lay)		100%	17	02-Apr-12 A	18-Jun-12 A	Additional CLP 132 kV; (New Lay);
S31S4700	Additional CLP 132kV (Existing)		100%	22	11-Aug-12 A	16-Aug-12 A	II. Addittonal CLP 132kV (Existing)
S31S4710	Additional UU work (HGC, HKBN, TGT & NWT)		100%	35	06-Aug-12 A	18-Dec-12 A	Additional UU work (HGC, HKBN, TGT & I
S31S4720	Excavation and DN 600 FW & DN 300 SW		100%	68	28-Jun-11 A	09-Nov-12 A	Excavation and DN 600 FW & DN 300 SW
S31S4725	Roadwork		100%	0	15-Oct-12 A	29-Jul-13 A	Roadwork
S31S4730	Footpath & Kerb		100%	30	20-Dec-12 A	29-Jul-13 A	Footpath & Kerlo
S31S4740	Roadwork		100%	30	15-Oct-12 A	16-Mar-13 A	Roadwork
Portion 2							
S31S4750	Portion 2 - CH 50 to 80 (From WSD Gate to Hong Lok Yuen)		100%	108	20-Jun-11 A	29-Jul-13 A	Portion 2 - CH 50 to 80 (F
S31S4760	Site clearance		100%	7	20-Jun-11 A	27-Jun-11 A	II, Siţe clearance
S31S4765	UU Diversion		100%	82	28-Mar-12 A	05-Oct-12 A	: UJU ;Diversion
S31S4766	Slopeworks S45A		100%	18	28-Mar-12 A	21-Apr-12 A	□ Slopeworks:S45A
S31S4770	Additional CLP 132kV (New Lay & clashing with existing)		100%	45	25-Apr-12 A	18-Jun-12 A	Additional CLP 132kV (New Lay & clashing with existing
S31S4780	Additional CLP 11kV New Lay (Ducting & Cabling and Tie-in)		100%	46	19-Jun-12 A	27-Jul-12 A	Additional CLP 11kV New Lay (Ducting & Cabling and
S31S4790	UU works (HKBN & New Lay HGC)		100%	12	27-Aug-12 A	05-Oct-12 A	UU works (HKBN & New Lay HG¢)
S31S4800	Footpath & kerb and Diversion of footpath		100%	15	10-Sep-12 A	29-Jul-13 A	Footpath & kerb and Diver
S31S4810	Roadwork		100%	21	25-Oct-12 A	25-Feb-13 A	Roadwork Roadwork
Roadworks	, Drainage & Utilities						
	Eastbound Roadworks		100%	50	07-Jan-13 A	08-Apr-13 A	Eastbound Roadworks
S31S4830	Westbound Roadworks		100%	50	17-Jan-13 A	20-Apr-13 A	Westbound Roadworks
Section 7							
Site Area S	Δ <b>41</b>						
PHSA4110	Possession of SA41 (Day0)		100%	0	26-Feb-10 A		♦ Possession of \$A41 (Day0)
SA410000	Site Area SA41 Works Period	-71			26-Feb-10 A	05-Sep-14	
SA410010	Site Area SA41 Works Completion	-71		0		05-Sep-14	—
	Site Office	, ·	0,0			35 35p	
S41G0000	Site Clearance / TTM		100%	60	26-Feb-10 A	12-May-10 A	Site Clearance / TTM
S41G9000	Construction of ER & Contractor's Office (incl. VO 24: Office Renovation)		100%		26-Feb-10 A	•	Construction of ER & Contractor's Office (incl. VQ 24: Office Renovation)
S41G9100	Temp Warehouse, Fabrication & Equip Yard	-78			13-May-10 A	<u> </u>	Ter
S41G9120	Dismantle of ER & Contractor's Office	-60			17-Jun-14	05-Sep-14	
	A42 (Core Storage & Works Area)		0,0		• • • • • • • • • • • • • • • • • •	ос сор	<mark>—</mark>  ::::::::::::::::::::::::::::::::::::
PHSA4210	Possession of SA42 (Day0)		100%	0	26-Feb-10 A		♦ Possession of SA42 (Day0)
SA410040	Site Area SA42 Works Period	0			26-Feb-10 A	25- lun-14	Site
SA420010	Site Area SA42 Works Completion	0		1361		25-Jun-14*	♦ Site
	·	0	0 /6	0		25 00H-14	· γ φιι
Site Area S	,		4000/		04 May 40 4		A Distributed of CA141 (Distribute)
PHSA4310	Possession of SA43 (Day90)	70	100%		04-May-10 A	0F Cc= 44	♦ Possession of \$A43 (Day90)
SA410020	Site Area SA43 Works Period	-72		1492	04-May-10 A	·	
SA410030	Site Area SA43 Works Completion	-72	0%	0		05-Sep-14*	
	Production Area		40001		07.1410.1	05 A 40 A	
S41G010	Site Clearance (Mulabira Office Area)		100%		27-May-10 A	_	Site Clearance
S41G020	Site Clearance (Mulching Office Area)		100%		27-May-10 A		Site Clearance (Mulching Office Area)
S41G030	Site Clearance (Wood Storage Area)		100%	45	12-Jun-10 A	05-Aug-10 A	Site Clearance (Wood Storage Area)

	44													
Activity ID	Activity Name	Total	Activity %	Original Start	Finish		2010		2011		2012		2013	2014
		Float	Complete	Duration		21 Q 12 3 4	5 6	Q3   Q4   Q1    7 8 9 1 1 1 1 1	Q2   Q3 1 1 1 1 1 1	3   Q4   Q1  2 2 2 2 2 2 2	Q2 Q3 Q 2 2 2 2 3 3 3 3 3	34   Q1   0 33333333	Q2   Q3   Q4  4 4 4 4 4 4	Q1 Q2 Q3 4 4 4 5 5 5 5 5 5
S41G040	Construction of Mulching Production Yard		100%	60 06-Aug-10 A	18-Oct-10 A			Constructi	on of Mulc	hing Production	n Yard			
S41G050	Temp Warehouse, Fabrication & Equip Yard (Site allcated for period till 8 May 2012) : Expected production = 900m3	151	100%	1260 13-Sep-10 A	27-Jan-14									Temp Wareh
S41G060	Mulching Production Phase 1 (45m3)		100%	63 13-Sep-10 A	09-Oct-10 A			□ Mulching P	roduction	Phase 1 (45m	3)			
S41G070	Mulching Production Phase 2 (45m3) (incl. VO16, VO 18)		100%	63 21-Dec-10 A	21-Feb-11 A			i i	∕lulching P	roduction Pha	se 2 (45m3) (incl	VO16, VO 1	8)	
S41G080	Mulching Production Phase 3 (45m3)		100%	63 20-Feb-11 A	24-Apr-11 A				☐ Mulchir	ng Production	Phase 3 (45m3)			
S41G090	Mulching Production Phase 4 (45m3)		100%	63 24-Apr-11 A	26-Jun-11 A				M	ulching Produc	tion Phase 4 (45	m3)		
S41G100	Mulching Production Phase 5 (45m3)		100%	63 27-Jun-11 A	28-Aug-11 A					Mulching Pr	oduction Phase 5	(45m3)		
S41G110	Mulching Production Phase 6 (45m3)		100%	63 29-Aug-11 A	30-Oct-11 A					Mulchir	g Production Pha	ıse 6 (45m3)		
S41G120	Mulching Production Phase 7 (45m3)		100%	63 31-Oct-11 A	01-Jan-12 A					Mı	Iching Production	Phase 7 (4	5m3)	
S41G130	Mulching Production Phase 8 (45m3)		100%	63 02-Jan-12 A	31-Mar-12 A		TT				Mulching Pro	duction Phas	e 8 (45m3)	
S41G140	Mulching Production Phase 9 (45m3)		100%	63 02-Apr-12 A	31-Dec-12 A							Mulchi	ng Production F	Phase 9 (45m3)
S41G260	Dismantle of Mulching Production Yard	-61	0%	68 17-Jun-14	05-Sep-14									
S41G270	Dismantle of Mulching Production Yard : Removing Mulching Office	-61	0%	48 17-Jun-14	13-Aug-14									
S41G280	Dismantle of Mulching Production Yard : Removing Security Fence and Security Device	-61	0%	20 13-Aug-14	05-Sep-14									
Section 8		'					TT							
Establish	ment Works													
S21G8000	SA21 Establishment Works	-214	0%	365 27-Jan-14	26-Jan-15									
Section 9														
	ment Works													
S22G8000	SA22 Establishment Works	-214	0%	365 27-Jan-14	26-Jan-15									
S23G8000	SA23 Establishment Works	-214	0%	365 27-Jan-14	26-Jan-15									
S24G8000	SA24 Establishment Works	-214	0%	365 27-Jan-14	26-Jan-15									
S25G8000	SA25 Establishment Works	-214	0%	365 27-Jan-14	26-Jan-15									
S26G8000	SA26 Establishment Works	-214	0%	365 27-Jan-14	26-Jan-15									
Section 10														
Establish	ment Works													
S26AG800	SA26A Establishment Works	-214	0%	365 27-Jan-14	26-Jan-15									
S27G8000	SA27 Establishment Works	-214	0%	365 27-Jan-14	26-Jan-15									
Section 11														
	ment Works										- + - +			
S28G8000	SA28 Establishment Works	-214	0%	365 27-Jan-14	26-Jan-15									
S29G8000	SA29 Establishment Works	-214	0%	365 27-Jan-14	26-Jan-15									
Section 12														
	ment Works													
S30AG800	SA30A Establishment Works	-214	0%	365 27-Jan-14	26-Jan-15									
S30G8000	SA30 Establishment Works SA30 Establishment Works	-214	0%	365 27-Jan-14	26-Jan-15 26-Jan-15									
-		-214	076	363 27-Jan-14	26-Jan-15									
Section 13														
	ment Works													
S30AG810	Remainder of Establishment Works (Exclude Section 8 to 12)	-214	0%	365 27-Jan-14	26-Jan-15	-111-								
Section 14														
	work Maintenance (Subject to the the Engineer's Instruction)			a   := a										
S21G7000	Tentative Start Date for SA21 Route Maintenance Works		100%	0 17-Sep-10 A				Tentative Sta	1 1 1 1			orks		
S22G7000	Tentative Start Date for SA22 Route Maintenance Works		100%	0 26-Feb-10 A		◆ Ten	1 1	Start Date for SA	1 1 1 1					
S23G7000	Tentative Start Date for SA23 Route Maintenance Works		100%	0 25-Aug-10 A			-1-1-	Tentative Star				-   -   -   -		
S24G7000	Tentative Start Date for SA24 Route Maintenance Works		100%	0 25-Aug-10 A				Tentative Star	t Date for	SA24 Route N	laintenance Wor	(S		

A <del>.</del>	45	-		0.1.1.10	<b> </b>	2010 2011	10 0014
Activity ID	Activity Name	Total Float		Original Start Duration	Finish	2010 2011 2012 20 21 Q2 Q3 Q4 Q1 Q2 Q3 Q4 Q1 Q2 Q3 Q4 Q1 Q2	Q3 Q4 Q1 Q2 Q3
S25G7000	Tentative Start Date for SA25 Route Maintenance Works		100%	0 20-Oct-10 A		12 3 4 5 6 7 8 9 1 1 1 1 1 1 1 1 1 1 1 2 2 2 2 2 2 2 2	4 4 4 4 4 4 4 5 5 5 5 5
S26AG700	Tentative Start Date for SA26A Route Maintenance Works		100%	0 26-Feb-10 A		♦ Tentative Start Date for SA26A Route Maintenance Works	
S26G7000	Tentative Start Date for SA26 Route Maintenance Works		100%	0 26-Feb-10 A		♦ Tentative Start Date for SA26 Route Maintenance Works	
S27G7000	Tentative Start Date for SA27 Route Maintenance Works		100%	0 27-May-10 A		♦ Tentative Start Date for SA27 Route Maintenance Works	
S28G7000	Tentative Start Date for SA28 Route Maintenance Works		100%	0 26-Feb-10 A		♦ Tentative Start Date for SA28 Route Maintenance Works	·
S29G7000	Tentative Start Date for SA29 Route Maintenance Works		100%	0 20-Oct-10 A			
S30AG700	Tentative Start Date for SA30A Route Maintenance Works		100%	0 25-Aug-10 A		♦ Tentative Start Date for SA30A Route Maintenance Works	
S30G7000	Tentative Start Date for SA30 Route Maintenance Works		100%	0 26-Feb-10 A		♦ Tentative Start Date for SA30 Route Maintenance Works	
S31G7000	Tentative Start Date for SA31 Route Maintenance Works		100%	0 26-Feb-10 A		♦ Tentative Start Date for SA31 Route Maintenance Works	
	(Subject to Excision and Instruct by Engineer within 819 days)		10070	0 20 : 00 : 10 : 1			· - <del> </del> -   - <del> </del> -   - <del> </del> -   - <del> </del> -   -   -   -   -   -   -   -   -   -
	(Subject to Excision and instruct by Engineer within 619 days)						
General			1000	010 05 5 1 10 1		<u> </u>	
SC150025	Validity Period		100%	819 25-Feb-10 A	-	_ -	Validity Period
SC150030	Latest Date for the Engineer to Issue El		100%	0	31-Aug-13 A		♦ Latest Date for the Engi
	SA28 & SA30						
PHSA2840	Possession of SA28 & SA30		100%	0 26-Feb-10 A		Possession of SA28 & SA30	
SA280005	Site Area SA28 Works Period		100%	0 24-May-12 A	31-Aug-13 A		Site Area SA28 Works F
SA280020	Site Area SA28 & SA30 Works Completion		100%	0	31-Aug-13 A		Site Area SA28 & SA30
All Area							
Preliminar	ies						
S28N1000	Site Clearance/TTM/Access Rd/Utility Diversion		100%	45 24-May-12 A	26-Sep-13 A		Site Clearance/TTM/A
Site Area S	SA30A						
PHSA30A5	Possession of SA30A		100%	0 27-Jul-10 A		♦ Possession of \$A30A	
SA30A005	Site Area SA30A Works Period		100%	155 23-May-12 A	31-Aug-13 A		Site Area SA30A Works
SA30A020	Site Area SA30A Works Completion		100%	0	31-Aug-13 A		Site Area SA30A Works
North Bou	und						-+
Preliminar	ies						
S30AN100	Site Clearance/TTM/Access Rd/Utility Diversion		100%	75 14-May-12 A	23-May-12 A	☐ Site Clearance/TTM/Acces	s Rd/Utility Diversion
Roadwork	s, Drainage & Utilities			'	<u>'</u>		
S30AN415	Section 17 subject to Excision Works Instruction date (Trunk Sewer Line)		100%	245 23-May-12 A	20-Sep-13 A		Section 17 subject to E
S30AN420	Issung of latest design drawing		100%	75 24-May-12 A	05-Sep-12 A	Issung of latest desi	gḥ drawing
S30AN430	Procurement & delivery of Trunk Sewer pipe (Stage 1)		100%	75 06-Sep-12 A	17-Sep-12 A	D Procurement & del	livery of Trunk Sewer pipe (Sta
S30AN440	Design clarification period		100%	60 06-Sep-12 A	31-Jul-13 A		Design clarification period
S30AN450	Procurement & delivery of Trunk Sewer pipe (Stage 2)		100%	75 01-Nov-12 A	31-Jul-13 A		Procurement & delivery of
S30AN460	Underground Utilities cable detection before ELS works		100%	60 17-Aug-12 A	24-Aug-12 A	I Underground Utilities	s cable detection before ELS v
S30AN470	Gravity Sewer Line STS10_170 to 160 (22m Long)		100%	90 05-Dec-12 A	06-Feb-13 A	Gravity \$	Sewer Line ST\$10_170 to 160
S30AN480	M/H 170 and M/H160 construction (6m depth)		100%	75 05-Dec-12 A	23-Jan-13 A	M/H₁170	and M/H160 construction (6m
S30AN490	Pipe laying and concrete surround works		100%	60 05-Dec-12 A	07-Jan-13 A	Pipe laying	and concrete surround works
S30AN500	Backfilling (2 Layers + Temp fill)		100%	30 08-Jan-13 A	06-Feb-13 A	□ Backfillin	g (2 Layers + Temp fill)
S30AN510	Gravity Sewer Line STS10_160 to 150 (40m Long)		100%	95 27-Feb-13 A	23-Sep-13 A		Gravity Sewer Line \$1
S30AN520	M/H150 construction (5m depth)		100%	40 27-Feb-13 A	16-Mar-13 A		50 construction (5m depth)
S30AN530	Pipe laying and concrete surround works (Stage 1)		100%	25 18-Mar-13 A	30-Apr-13 A		pe laying and concrete surrour
S30AN540	Construction of Temporary Access for Villager		100%	8 30-Apr-13 A	10-May-13 A		onstruction of Temporary Acce
\$30AN415 \$30AN420 \$30AN420 \$30AN430 \$30AN440 \$30AN450 \$30AN460 \$30AN470 \$30AN480 \$30AN500 \$30AN500 \$30AN500 \$30AN520 \$30AN550 \$30AN550 \$30AN550 \$30AN550	Pipe Laying and concrete works (Stage 2)		100%	21 13-May-13 A	14-Sep-13 A		Pipe Laying and concre
S30AN560	Backfilling (15 Layers)		100%	8 27-Jul-13 A	23-Sep-13 A	7::::::::::::::::::::::::::::::::::::::	Backfilling (15 Layers)
S30AN570	Gravity Sewer Line STS10_120 to 130 (41m Long)		100%	120 17-Sep-12 A	03-Jan-13 A	Gravity Sev	wer Line STS10_120 to 130 (4
S30AN580	M/H 120 and M/H130 construction (3.5m & 4m depth)		100%	70 24-Sep-12 A	12-Oct-12 A	□ M/H 1/20 and M/t	H130 construction (3.5m & 4m
S30AN585	Pipe Laying & concrete surround works		100%	30 14-Nov-12 A	20-Nov-12 A	II. Pipe Laying &	concrete surround works
		J					

		<u> </u>				1		0040				0044			- 00	10		_		040			0044
Activity ID	Activity Name	Total	Activity %	Original		Finish		2010	3 0	4 0	1 0	2011	<u>ν</u>	01	20		04	01		013	04		2014   Q2   Q3
		Float	Complete	Duration																			5 5 5 5
S30AN590	Backfilling (15 Layers)		100%	20	21-Nov-12 A	03-Jan-13 A		<del>       </del>	111	111	<del>       </del>	+++		<del>       </del>	+ + 1					(15 Lay			<del>                                     </del>
S30AN600	Gravity Sewer Line STS10_130 to 140 (40m Long)		100%	88	08-Jan-13 A	18-Mar-13 A													Gra	vity Sew	er Line	sTS1	0_130 to
S30AN610	M/H 140 construction (4.5m depth)		100%	40	08-Jan-13 A	19-Jan-13 A	1 1 1			1 1 1			 		- +		-	0   N	I/H 140	) constru	iction (	4.5m d	lepth)
S30AN620	Pipe Laying & concrete Surround works		100%	40	14-Jan-13 A	28-Jan-13 A												0 F	Pipe La	ying & c	oncrete	e Surro	pund work
S30AN630	Backfilling (12 Layers)		100%	25	01-Mar-13 A	18-Mar-13 A													Bac	kfilling (1	2 Laye	ers)	
S30AN640	Gravity Sewer Line STS10_140 to 150 (38m Long)		100%	80	28-Feb-13 A	18-May-13 A													<del>   </del>	Gravity	Sewer	Line \$	STS10_140
S30AN650	Pipe Laying and concrete surround works		100%	50	28-Feb-13 A	18-Mar-13 A													Pipe	Laying	and co	ncrete	surround
S30AN660	Backfilling (15 Layers)		100%	30	22-Mar-13 A	18-May-13 A	-111					-111-	 				- 	-    - 		Backfillir	ng (15	Layers	s)
S30AN670	Gravity Sewer Line STS10_120 to 110 (33m Long)		100%	205	03-Aug-12 A	17-Nov-12 A												Gravit	y Sewe	er Line S	TS10	_120 to	110 (33m
S30AN680	M/H 110 construction (2.7m depth)		100%	30	03-Aug-12 A	15-Sep-12 A											M/H	110 c	onstru	tion (2.7	m dep	oth)	
S30AN690	Pipe laying and concrete surround works		100%	40	06-Oct-12 A	26-Oct-12 A											□ P	ipe lay	ing an	d concre	te surr	round v	works
S30AN700	Backfilling (9 Layers)		100%	20	01-Nov-12 A	17-Nov-12 A												Backfi	lling (9	Layers)			
S30AN710	Gravity Sewer Line STS10_100 to 105a (56.5m Long)		100%	75	03-Aug-12 A	15-Dec-12 A	-111				1 1 1	-   -	 		- +		-	Gra	vity Se	wer Line	STS1	0_100	to 105a (
S30AN720	M/ H 100, M/ H 105 and M/ H 105a construction (2.5m depth)		100%	45	03-Aug-12 A	27-Jun-13 A												1 1 1	1 1 1	□ M/H	100, N	и/H 10	05 and M/
S30AN730	Pipe Laying and concrete surround works		100%	50	17-Sep-12 A	06-Oct-12 A											Pip	e Lay	ing and	l concre	te surr	ound w	vorks
S30AN740	Construction of temporary access for Villager		100%	30	08-Oct-12 A	22-Oct-12 A											ОС	onstru	ction o	f tempor	ary ac	cess fo	or Villager
S30AN750	Backfilling (5 Layers)		100%	25	24-Oct-12 A	15-Dec-12 A												Bac	kfilling	(5 Layer	s)		
S30AN760	Gravity Sewer Line STS10_105a to 110 and STS10_105 to STS10_105a		100%	8	24-Jun-13 A	13-Aug-13 A	1 1 1			1-1-1-	1 1 1		 		- +	1 1	-	-    - 		<b>—</b> G	ravity \$	Sewer	Line ST\$1
S30AN770	Modification of existing DN2200 valve chamber		100%	1	09-Sep-13 A	17-Sep-13 A														0	Modif	ication	of existing
S30AN780	Pipe Laying and concrete surround works (2.5m depth)		100%	26	24-Jun-13 A	05-Aug-13 A														Pi	pe Lay	ing and	d concrete
S30AN790	Backfilling (7 Layers)		100%	7	06-Aug-13 A	13-Aug-13 A														I B	ackfillin	ng (7 La	ayers)

APPENDIX C
IMPLEMENTATION SCHEDULE OF
ENVIRONMENTAL MITIGATION MEASURES
(EMIS)

## Appendix C - Implementation Schedule of Environmental Mitigation Measures (EMIS)

Air Quality - Schedule of Recommended Mitigation Measures

Impact	Mitigation Measures	Timing	Implementation Status
Air Quality during	• Restricting heights from which materials are dropped, as far as practicable to minimize the fugitive dust arising from unloading/loading.	During construction	V
Construction	• All stockpiles of excavated materials or spoil of more than 50m <sup>3</sup> shall be enclosed, covered or dampened during dry or windy conditions.		V
	• Effective water sprays shall be used to control potential dust emission sources such as unpaved haul roads and active construction areas.		V
	All spraying of materials and surfaces shall avoid excessive water usage.		V
	<ul> <li>Vehicles that have the potential to create dust while transporting materials shall be covered, with the cover properly secured and extended over the edges of the side and tail boards.</li> </ul>		V
	Materials shall be dampened, if necessary, before transportation.		V
	• Travelling speeds shall be controlled to reduce traffic induced dust dispersion and resuspension within the site from the operating haul trucks.		V
	Vehicle washing facilities shall be provided to minimize the quantity of material deposited on public roads.		V

## Noise - Schedule of Recommended Mitigation Measures

Impact	Mitigation Measures	Timing	Implementation Status
Noise during	• Use of silenced plant or plant equipped with mufflers or dampers in substitute of ordinary plant.	During	V
Construction	Reduce the number of equipment and their percentage on-time.	construction	V
	• 3.5 m and 5.5 m high temporary noise barrier at culvert construction work area (Figure 2a of the Environmental Permit).		V
	• 3 m high temporary noise barrier along the northern edge of Bridge 12 at ground level (Figure 2b of the Environmental Permit).		V
	• 2 m high temporary noise barrier along the northern edge of Bridge 12 at bridge level (Figure 2b of the Environmental Permit).		In progress
	• 2.5 m high temporary noise barrier along TaiWo Service Road West (Figure 2c of the Environmental Permit).		V
	3.5m high temporary noise barrier along Tai Wo Services Road West near Tai Hang (Figure2c of the Environmental Permit).		In progress

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## Water Quality - Schedule of Recommended Mitigation Measures

Impact	Mitigation Measures	Timing	Implementation Status
Water quality	Demolition and reconstruction of bridges	During	
during	Prevent off-site migration through use of sheet piles.	construction	V
Construction	Minimize duration of works as far as practical.		V
	All sewer and drainage connections should be sealed to prevent debris, soil, sand, etc, from entering public sewers/drains.		V
	• Site surface runoff should be settled to remove sand/silt before it is discharged into the existing storm drains.		V
	River training works		
	Inspection and testing of water quality in the nullah on the Tai Po River.		N/A
	Road Widening Works and Earthworks		
	<ul> <li>Wastewater generated from any concrete batching washdown of equipment or similar activities should be discharged into foul sewers, after the removal of settable solids, and pH adjustment as necessary. All sewage discharges from the study area should meet the TM standards and approval from EPD through the licensing process is required.</li> </ul>		V
	Sand traps, oil interceptors and other pollution prevention installations should be provided, properly cleaned and maintained.		V
	• Runoff from exposed working areas, unfinished slopes and from unlined temporary channels should be directed to stilling basins and/or silt traps before discharging to the drainage outfalls.		V
	• Regular inspections of stilling basins and/or silt traps are required to ensure that sediment is not conveyed into the existing drainage system.		V
	Open stockpiles should be covered with a tarpaulin cover.		V
	• During the wet season, any exposed top soils should be covered with a tarpaulin, shotcreted or hydroseeded.		V
	• Sand and silt from wash-water from vehicle washing should be settled out before discharging into storm drains.		V
	Fuels should be stored in bunded areas such that spillage can be easily collected.		V

Waste - Schedule of Recommended Mitigation Measures

Impact	Mitigation Measures	Timing	Implementation Status
Waste	General Waste	During	
Management	Transport of wastes off site as soon as possible.	construction	V
during	Maintenance of accurate waste records		V
Construction	Minimization of waste generation for disposal (via reduction/recycling/re-use).		V
	No on-site burning will be permitted.		V
	Use of re-useable metal hoardings/signboards.		V
	Vegetation from site clearance		
	Segregation of materials to facilitate disposal.		V
	<ul> <li>Mulching to reduce bulk and where possible review opportunities for the possible beneficial use within landscaping areas.</li> </ul>		V
	Demolition Wastes		
	Segregation of materials to facilitate disposal.		V

Appropriate stockpile management.	\
Excavated Materials	
Segregation of materials to facilitate disposal / reuse.	\
Appropriate stockpile management.	\
Re-use of excavated material on or off site (where possible).	\
Special handling and disposal procedures in the event that contaminated materials are excavated.	N
Construction Wastes	
<ul> <li>Segregation of materials to facilitate recycling/reuse (within designated area in appropriate containers/stockpiles).</li> </ul>	,
Appropriate stockpile management.	,
Planning to reduce over ordering and waste generation.	,
Recycling and re-use of materials where possible (e.g. metal, wood from formwork)	,
• For material which cannot be re-used/recycled, collection should be carried out by an approved waste contractor for landfill disposal.	,
Bentonite Slurries	
Bentonite slurries should be reused as far as possible.	N
Disposal in accordance with Practice Note For Professional Persons ProPECC PN 1/94.	N
Chemical Wastes	
Storage within locked, covered and bunded area.	,
The storage area shall not be located adjacent to sensitive receivers e.g. drains.	,
Minimize waste production and recycle oils/solvents where possible.	,
A spill response procedure shall be in place and absorption material available for minor spillages.	(
Use appropriate and labelled containers.	\
Educate site workers on site cleanliness/waste management procedures.	`
• If chemical wastes are to be generated, the contractor must register with EPD as a Chemical Waste Producer.	,
The chemical wastes shall be collected by a licensed chemical waste collector.	,
Municipal Wastes	
Waste shall be stored within a temporary refuse collection facility, in appropriate containers prior to collection and disposal.	,
Regular, daily collections are required by an approved waste collector.	

Ecology - Schedule of Recommended Mitigation Measures

Impact	Mitigation Measures	Timing	Implementation Status
Ecology	Accurate Delineation of Works Area	During	
during Construction	• Boundaries of proposed works areas shall be clearly identified and separated from external areas by a physical barrier to prevent encroachment of adjacent habitats.	construction	V
	• Individual trees which fall within the works areas but which work plans show do not require removal are to be retained and fenced off to maximize protection.		V
	Vegetation Clearance		
	No fires shall be lit within the works area for the purpose of burning cleared vegetation.		V
	• The Contractor shall give consideration to mulching the cleared vegetation for recycling within the works area /		V

adjacent land.		
Dust generation		
<ul> <li>Vehicle washing facilities to be provided at every discernible or designated vehicle exit point;</li> </ul>		V
<ul> <li>All temporary site access roads shall be sprayed with water to suppress dust as necessary;</li> </ul>		V
All dusty materials should be sprayed with water immediately prior to any handling; and		V
All debris should be covered entirely by impervious sheeting or stored in a sheltered debris collection area.		V
Surface Run-off	T.	
Bund and cover stockpiles to avoid run-off;		V
Channel any run-off through a system of oil, grease and sediment / silt traps and reuse water on site where ever practical;		V
All vehicle maintenance to be undertaken within a bunded area; and		N/A
Maximize vegetation retention on-site to maximize absorption (minimize transport).		V

Landscape and Visual Impact - Schedule of Recommended Mitigation Measures

Impact	Mitigation Measures	Timing	Implementation Status
Landscape	Preservation of Existing Vegetation	During	
and Visual	• Trees identified for retention within the project limit would be protected during the works	construction	@
Impact	• The tree transplanting and planting works shall be implemented by approved Landscape Contractors		V
during	Temporary Works Areas		
Construction	<ul> <li>Where feasible the works areas would be screened using hoarding and existing vegetation would be retained where possible to reduce the landscape and visual impacts arising from the construction activity. The landscape of these works areas would be restored following the completion of the construction phase.</li> </ul>		V
	Hoarding		
	<ul> <li>A hoarding would be erected where practicable in the most visually sensitive locations to screen the temporary construction works from the local VSR's.</li> </ul>		V
	Top Soils		
	<ul> <li>The works will result in disturbance to extensive areas of topsoil. Topsoil worthy of retention should be stockpiled for use following completion of the civil engineering works. It should either be temporarily vegetated with hydroseeded grass or turned over on a regular basis.</li> </ul>		N/A
	Protection of Important Landscape Features		
	• Important features such as temples, Island House and kilns within the study area, although remote from the proposed works retained and adequately protected.		V

Legend: V = implemented;

x = not implemented;

@ = partially implemented;

N/A = not applicable - No such work was undertaken or no such material was used on site.

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## APPENDIX D SUMMARY OF ACTION AND LIMIT LEVELS

## **Appendix D - Summary of Action and Limit Levels**

Table 1 – Action and Limit Levels for 1-hour TSP

Location	Action Level	Limit Level
AM1A	302.1 μg/m3	500 μg/m3
AM2	301.9 μg/m3	500 μg/m3
AM3	301.9 μg/m3	500 μg/m3
AM4A	302.3 μg/m3	500 μg/m3

Table 2 – Action and Limit Levels for 24-hour TSP

Location	Action Level	Limit Level
AM1A	176.6 μg/m3	260 μg/m3
AM2	178.6 μg/m3	260 μg/m3
AM3	193.1 μg/m3	260 μg/m3
AM4A	198.5 μg/m3	260 μg/m3

Table 3 – Action and Limit Levels for Construction Noise (0700-1900 hrs of normal weekdays)

Location	Action Level	Limit Level
NM1A	When one documented	75 dB(A)
NM2	complaint, related to 0700 –	75 dB(A)
NM3	1900 hours on normal	65/70 dB(A)*
NM4	weekdays, is received	75 dB(A)
NM5	from any one of the sensitive	75 dB(A)
NM6		70 dB(A)*
NM7	receivers	75 dB(A)

<sup>\*</sup>Daytime noise Limit Level of 70 dB(A) applies to education institutions, while 65dB(A) applies during school examination period

APPENDIX E
CALIBRATION CERTIFICATES OF
MONITORING EQUIPMENTS

Station	Sheung Wun Yiu	ı (AM1A)		Operator:	Gary	Choi		
Cal. Date:	15-M	ar-14	*1					
Equipment No.:	A-001-53T	Next Due Date:15-Mar-14 Serial No. 10216					1	
99							i.	
				Condition				
Temperatu	re, Ta (K)	289	Pressure, I	Pa (mmHg)		767.0		
			Orifice Transfer S	tandard Information	on			
Seria	l No:	988	Slope, mc	1.94727	Interce	ept, bc	0.02332	
Last Calibra	ation Date:	20-May-13		mc x Qstd + bc	= [DH x (Pa/760) x	(298/Ta)] <sup>1/2</sup>		
Next Calibra	ation Date:	20-May-14			Pa/760) x (298/Ta)]			
				of TSP Sampler	10.4			
Resistance	Orfice			<del>-</del>	HVS Flow Recorder			
Plate No.	DH (orifice), in. of water	[DH x (Pa/76	[DH x (Pa/760) x (298/Ta)] <sup>1/2</sup>		Flow Recorder Reading (CFM)	Continuous Flow Reading IC (CFM		
18	8.9	3.04		1.55	46.0	46.93		
13	6.0		2.50	1.27	37.0	37.74		
10	4.4		2.14	1.09	31.0	31.62		
7	3.6		1.94	0.98	28.0	28.56		
5	2.1		1.48	0.75	22.0	22.44	`	
By Linear Regre Slope , mw = Correlation Coe	30.7427	_	9966	Intercept, bw =	-1.2	068	6	
*If Correlation Co	efficient < 0.990,	check and recalit	orate.	_				
			Set Point	Calculation				
From the TSP Fie	eld Calibration Cu	rve, take Qstd =	1.30m³/min			,		
From the Regress	sion Equation, the	e "Y" value accord	ding to		8 II			
		mw	x Qstd + bw = IC	x [(Pa/760) x (298/	Γa)] <sup>1/2</sup>			
				, , ,	·•			
Therefore, Set Po	oint; IC = ( mw x 0	Qstd + bw ) x [( 76	60 / Pa ) x ( Ta / 29	08 )] <sup>1/2</sup> =	[-	37.99		
	4							
Remarks:								
*		- A15 - 41						
1	1	A		PI		,//	1	
QC Reviewer:	WS CHI	TV_	Signature:	4		Date:	114	

Station	Sheung Wun Yiu	ı (AM1A)		Operator:	Gary	Choi		
Cal. Date: 15-Mar-14 Next Due Date: 14-May-14								
Equipment No.:	A-001-53T	Serial No. 10216					_	
			Ambient	Condition				
Temperatu	re. Ta (K)	289		Pa (mmHg)		767.0		
			,	3/				
			Orifice Transfer S	tandard Informatio	on			
Serial	l No:	988	Slope, mc	1.94727	Interce	ept, bc	0.02332	
Last Calibra	ation Date:	20-May-13		mc x Qstd + bc	= [DH x (Pa/760) x	(298/Ta)] <sup>1/2</sup>		
Next Calibra	ation Date:	20-May-14	and the second second second	Qstd = {[DH x (I	Pa/760) x (298/Ta)]	<sup>1/2</sup> -bc} / mc		
			Calibration	of TSP Sampler				
		0	rfice	or ror oumpier	HV	S Flow Recorder		
Resistance Plate No.	DH (orifice), in. of water		60) x (298/Ta)] <sup>1/2</sup>	Qstd (m³/min) X -	Flow Recorder Continuous Flow Reading (CFM) Reading IC (CFM)			
18	9.0		3.06	1.56	46.0	46.93	3	
13	6.1		2.52	1.28	36.0	36.72	2	
10	4.4		2.14	1.09	31.0	31.6	2	
7	3.5		1.91	0.97	28.0	28.50	 6	
5	2.1		1.48	0.75	22.0	22.4		
Slope , mw = Correlation Coe	-	_	9931 orate.	Intercept, bw =	-0.3	150	-	
			Cat Balat	Calculation				
From the TCD Eig	old Calibration Cu	urve, take Qstd =		Calculation				
		e "Y" value accor						
Tom the regres	Sion Equation, th	c i valac accord	ang to					
		mw	x Qstd + bw = IC	x [(Pa/760) x (298/	Га)] <sup>1/2</sup>			
				1/0				
Therefore, Set Po	oint; IC = ( mw x	Qstd + bw ) x [( 76	60 / Pa ) x ( Ta / 29	98 )]''²=		37.59	-	
Damada								
Remarks:								
· · · · · · · · · · · · · · · · · · ·	91.					- 2	15 11 2	
QC Reviewer: 1	1 Cenna		Signature:			Date: 3 /J	=3-14	

Cal. Date: Equipment No.:         15-Jan-14 A-001-29T         Next Due Date: Serial No.         15-Mar-14 10202           Ambient Condition           Temperature, Ta (K)         289         Pressure, Pa (mmHg)         767.0           Orifice Transfer Standard Information           Serial No: 988 Slope, mc 1.94727 Intercept, bc           Last Calibration Date: 20-May-13 Next Calibration Date: 20-May-14 Qstd = {[DH x (Pa/760) x (298/Ta)]^{1/2} Qstd = {[DH x (Pa/760) x (298/Ta)]^{1/2} -bc} / mc           Calibration of TSP Sampler           Calibration of TSP Sampler           HVS Flow Recorder Reading (CFM)         Flow Recorder Reading (CFM)         Continuous Flow Reading (CFM)           18         10.0         3.23         1.64         46.0         46.93           13         7.5         2.79         1.42         41.0         41.82           10         5.5         2.39         1.22         35.0         35.70           7         3.8         1.99         1.01         28.0         28.56           5         2.5         1.61         0.82         23.0         23.46           Set Point Calculation    From the TSP Field Calibration Curve, take Qstd = 1.30m³/min	Station	Shan Tong New	Village (AM2)		Operator:	Gary	Choi	
Next Calibration Date:   20-May-14   298/Ta)    10   10   10   10   10   10   10	Cal. Date: 15-Jan-14 Next Due Date: 15-Mar-14							
Temperature, Ta (K)   289   Pressure, Pa (mmHg)   767.0	Equipment No.:	A-001-29T	Serial No. 10202					-
Serial No:   988   Slope, mc   1.94727   Intercept, bc				Ambient	Condition			
Serial No:   988   Slope, mc   1.94727   Intercept, bc	Temperatur	re, Ta (K)	289	Pressure,	Pa (mmHg)		767.0	
Serial No:   988   Slope, mc   1.94727   Intercept, bc		6						
Last Calibration Date:   20-May-13			(	Orifice Transfer S	tandard Informatio	on		
Next Calibration Date:   20-May-14   Qstd = {[DH x (Pa/760) x (298/Ta)]^{1/2} -bc} / mc	Serial	No:	988	Slope, mc				0.0233
Calibration of TSP Sampler	Last Calibra	tion Date:	20-May-13		mc x Qstd + bc	= [DH x (Pa/760) x	(298/Ta)] <sup>1/2</sup>	
Calibration of TSP Sampler	Next Calibra	ition Date:	20-May-14		$Qstd = \{[DH x ($	Pa/760) x (298/Ta)]	<sup>1/2</sup> -bc} / mc	
Continuous Flow Reading (CFM)   Continuous Flow Reading (CFM)   Continuous Flow Reading (CFM)   Reading (CFM								
Resistance Plate No.   DH (orifice), in. of water   [DH x (Pa/760) x (298/Ta)] <sup>1/2</sup>   Qstd (m³/min) X axis   Plow Recorder Reading (CFM)   Reading IC (CFM)					of TSP Sampler			
Plate No.   DH (orifice), in. of water   [DH x (Pa/760) x (298/Ta)] <sup>1/2</sup>   Qstd (m³/min) X axis   Reading (CFM)   Reading IC (CFM)	The state of the s		rfice		HVS Flow Recorder			
13 7.5 2.79 1.42 41.0 41.82  10 5.5 2.39 1.22 35.0 35.70  7 3.8 1.99 1.01 28.0 28.56  5 2.5 1.61 0.82 23.0 23.46   By Linear Regression of Y on X  Slope , mw = 29.0506 Intercept, bw = -0.2010  Correlation Coefficient* = 0.9958  *If Correlation Coefficient < 0.990, check and recalibrate.			[DH x (Pa/76	60) x (298/Ta)] <sup>1/2</sup>				
10 5.5 2.39 1.22 35.0 35.70 7 3.8 1.99 1.01 28.0 28.56 5 2.5 1.61 0.82 23.0 23.46  By Linear Regression of Y on X Slope , mw = 29.0506 Intercept, bw = -0.2010  Correlation Coefficient* = 0.9958 *If Correlation Coefficient < 0.990, check and recalibrate.	18	10.0	3.23		1.64	46.0	46.93	3
7 3.8 1.99 1.01 28.0 28.56 5 2.5 1.61 0.82 23.0 23.46   By Linear Regression of Y on X  Slope , mw = 29.0506 Intercept, bw = -0.2010  Correlation Coefficient* = 0.9958  *If Correlation Coefficient < 0.990, check and recalibrate.	13	7.5				41.0	41.82	2
5 2.5 1.61 0.82 23.0 23.46  By Linear Regression of Y on X  Slope , mw = 29.0506 Intercept, bw = -0.2010  Correlation Coefficient* = 0.9958  *If Correlation Coefficient < 0.990, check and recalibrate.	10	5.5		2.39	1.22	35.0	35.70	)
By Linear Regression of Y on X  Slope , mw = 29.0506	7	3.8		+		28.0	28.56	
Slope , mw = 29.0506 Intercept, bw = -0.2010  Correlation Coefficient* = 0.9958  *If Correlation Coefficient < 0.990, check and recalibrate.  Set Point Calculation	5	2.5		1.61	0.82			3 `
Set Point Calculation	Slope , mw = Correlation Coef	29.0506 ficient* =	0.9		Intercept, bw =	-0.2	010	_
	if Correlation Coe	≆πicient < 0.990,	check and recall.	rate.				
From the TSP Field Calibration Curve, take Qstd = 1.30m <sup>3</sup> /min					Calculation			
•	From the TSP Fie	ld Calibration Cu	rve, take Qstd = 1	1.30m³/min		4		
From the Regression Equation, the "Y" value according to	From the Regress	ion Equation, the	e "Y" value accord	ling to				
mw x Qstd + bw = IC x $[(Pa/760) \times (298/Ta)]^{1/2}$			mw	x Qstd + bw = IC	x [(Pa/760) x (298/	Ta)] <sup>1/2</sup>		
					20.11/2			
Therefore, Set Point; IC = ( mw x Qstd + bw ) x [( 760 / Pa ) x ( Ta / 298 )] <sup>1/2</sup> = 36.82	Thoroforo Cot Do	int; IC = ( mw x (	2std + bw ) x [( 76	60 / Pa ) x ( Ta / 29	98 )]"=		36.82	_
	inerelore, set ro						•	

Station	Shan Tong New	Village (AM2)		Operator:	Gary	Choi	
Cal. Date:	15-Mar-14			Next Due Date:	14-M	ay-14	
Equipment No.:	A-001-29T	_		Serial No.	102	202	_
			Ambient	t Condition			
Temperatu	re, Ta (K)	289	Pressure,	Pa (mmHg)		767.0	
				( 0)			
		(	Orifice Transfer S	tandard Information	on		
Serial	No:	988	Slope, mc	1.94727	Interce	ept, bc	0.0233
Last Calibra	ation Date:	20-May-13		mc x Qstd + bc	= [DH x (Pa/760) x	(298/Ta)] <sup>1/2</sup>	
Next Calibra	ation Date:	20-May-14		Qstd = {[DH x (	Pa/760) x (298/Ta)]	<sup>1/2</sup> -bc} / mc	
		•					
				of TSP Sampler			
				S Flow Recorder	corder		
Resistance Plate No. DH (orifice), in. of water		[DH x (Pa/760) x (298/Ta)] <sup>1/2</sup>		Qstd (m³/min) X - axis	Flow Recorder Reading (CFM)	Continuous Florence Reading IC (C	
18	10.0		3.23		48.0	48.9	97
13	7.5		2.79	1.42	42.0	42.	84
10	5.6		2.41	1.23	35.0	35.	70
7	3.7		1.96	1.00	28.0	28.	56
5	2.5		1.61	0.82	24.0	24.4	48
By Linear Regre Slope , mw = Correlation Coef	30.3815	_	958	Intercept, bw =	-0.9	966	
		check and recalib		-			
ii Correlation Co	emcient < 0.990,	Check and recall.	nate.				
			Set Point	Calculation			
From the TSP Fie	eld Calibration Cu	irve, take Qstd = 1	1.30m <sup>3</sup> /min				
From the Regress	sion Equation, the	e "Y" value accord	ling to				
		mw :	x Qstd + bw = IC	x [(Pa/760) x (298/	Га)] <sup>1/2</sup>		
				1/2			
Therefore, Set Po	oint; IC = ( mw x (	Qstd + bw ) x [( 76	60 / Pa ) x ( Ta / 29	98 )]''=		37.74	
Remarks:							
tomains.							
,	XT 1000	7				D. 153-	( 0

D:\HVS Calibration Certificate (Existing)\

Station	Riverain Bayside	e (AM3)		Operator:	Choi W	/ing Ho	
Cal. Date:	18-Feb-14			Next Due Date:	18-May-14		
Equipment No.:	A-001-69T	_	Serial No.	No. 716			
						- Wi	
			Ambient	Condition			
Temperatu	ıre, Ta (K)	290	Pressure, F	Pa (mmHg)		762.4	
			Orifica Transfer S	tandard Information	<b>1</b>		
Seria	ıl No:	988	Slope, mc	1.94727		ept, bc	0.02332
Last Calibra		20-May-13	Olopo, mo		= [DH x (Pa/760) x		0.02002
Next Calibr		20-May-14			Pa/760) x (298/Ta)]		
TYOK! GUIIDI	ation bate.		22	dota (ISHA)	arroof x (200114)]	20,71110	
			Calibration o	of TSP Sampler			
Orfice HVS Flow Recorder							
Resistance Plate No.	DH (orifice), in. of water	[DH x (Pa/7	[DH x (Pa/760) x (298/Ta)] <sup>1/2</sup> Qstd (m <sup>3</sup> /axi		Flow Recorder Reading (CFM)	Continuous Flow Reading IC (CFM	
18	8.9		3.03	1.54	46.0	46.70	
13	7.5		2.78	1.42	43.0	43.66	
10	5.6		2.40	1.22	34.0	34.52	
7	4.0		2.03	1.03	27.0	27.41	
5	3.0		1.76	0.89	21.0	21.32	
Slope , mw = Correlation Coe	assion of Y on X 39.7791  officient* =	0.	.9949 ibrate	Intercept, bw =	-13.8	8329	
n contolation co	,						
				Calculation			
From the TSP Fi	eld Calibration Co	urve, take Qstd =	1.30m <sup>3</sup> /min				
From the Regres	ssion Equation, th	e "Y" value accor	rding to				
,		mw	x Qstd + bw = IC	x [(Pa/760) x (298/	Γa)] <sup>1/2</sup>		
Therefore, Set P	oint; IC = ( mw x	Qstd + bw ) x [( 7	760 / Pa ) x ( Ta / 29	98 )] <sup>1/2</sup> =		37.31	
-	-	1900		a - 1 - 2 - 1			
5							
Remarks:				**			-
,							
QC Reviewer:	T Sun		Signature:	4	g 150	Date: 20 - 2 -	14

tion 1	68 Shek Kwu Lur	ng Village (AM4A	.)	Operator: Next Due Date:	Gary C 15-Mar		
Date:	15-Jan-14			Serial No.	10273		
ipment No.:	A-001-70T			Seliai No			
			Ambient (	Condition		707.0	
Temperature	e Ta (K)	289	Pressure, P	a (mmHg)		767.0	
Temporator	0, 14 (17			,			
			Orifice Transfer St	andard Information	1	ot bc 0.02332	
Serial	No:	988	Slope, mc	1.94727	Interce	01, 00	
Last Calibra		20-May-13		mc x Qstd + bc =	= [DH x (Pa/760) x (	298/1a)]	
Next Calibra		20-May-14		Qstd = {[DH x (F	a/760) x (298/Ta)] <sup>1</sup>	bc} / mc	
- NGAL GAILDIG	duoii Duite						
			Calibration o	f TSP Sampler	N. Carlotte		
			Orfice		HVS	Flow Recorder	
Resistance Plate No.	DH (orifice), in. of water	[DH x (Pa/ī	760) x (298/Ta)] <sup>1/2</sup>	Qstd (m³/min) X -	Flow Recorder Reading (CFM)	Continuous Flow Recorder Reading IC (CFM) Y-axis	
		3.06		1.56	46.0	46.93	
18	9.0	2.78		1.41	42.0	42.84	
13	7.4	-			35.0	35.70	
10	5.0		2.28		27.0	27.54	
7	3.3		1.61	0.94	23.0	23.46	
5							
	( ) ( - m )	v					
	ression of Y on )	^		Intercept, bw =	-2.	0528	
Slope , mw =	31.7150		0.9964				
Correlation Co	pefficient" =						
*If Correlation C	Coefficient < 0.99	U, CHECK and Tec	and ato.				
			Set Poir	nt Calculation			
	Field Calibration	Curve, take Osto	AND REAL PROPERTY AND PROPERTY				
From the 1SP	Field Calibration	the "V" value ac	cording to				
From the Regr	ession Equation,						
		r	nw x Qstd + bw = l	C x [(Pa/760) x (29	8/Ta)] <sup>1/2</sup>		
						. 20.40	
		Oatd I but \ v	( 760 / Pa ) x ( Ta /	298)] <sup>1/2</sup> =		38.40	
Therefore Set	t Point: IC = ( mw	X QSIQ + DW ) X					
Therefore, Set	t Point; IC = ( mw	X QSta + DW ) X					
Therefore, Set	t Point; IC = ( mw	X QStd + bw ) x					
Therefore, Set	t Point; IC = ( mw	X QStd + DW ) X				,	
Therefore, Set						,	
						Date: 16/1/10	

Station	168 Shek Kwu L	ung Village (AM4A	٨)	Operator:	Gary	Gary Choi				
al. Date:	15-Mar-14			Next Due Date:	14-Ma	_				
Equipment No.:	A-001-70T	_		Serial No.	102	273	_			
			Ambient	Condition						
Temperatu	ire. Ta (K)	289.4		Pa (mmHg)		768.3				
				( 0/		000000000000000000000000000000000000000				
		C	Prifice Transfer S	tandard Informatio	on					
Seria	l No:	988	Slope, mc	1.94727	Interce		0.0233			
Last Calibra	ation Date:	20-May-13	May-13 mc x Qstd + bc = [DH x (Pa/760) x (298/Ta)] <sup>1/2</sup>							
Next Calibra	ation Date:	20-May-14		Qstd = {[DH x (I	Pa/760) x (298/Ta)]	<sup>1/2</sup> -bc} / mc				
			Calibration of	of TSP Sampler						
		O	rfice		HVS	S Flow Recorde	r			
Resistance Plate No.  DH (orificing in. of war		[DH x (Pa/76	0) x (298/Ta)] <sup>1/2</sup>	Qstd (m³/min) X - axis	Flow Recorder Reading (CFM)	Continuous Flow Recor Reading IC (CFM) Y-a				
18	8.8		3.03	1.54	46.0	46.93				
13	7.4	3	2.78	1.41	42.0	42.85				
10	5.1	- :	2.30	1.17	36.0	36.73				
7	3.2		1.83	0.93	28.0	28.57				
5	2.5		1.61	0.82	23.0	23.47				
Slope , mw = Correlation Coe		_,	9 <b>922</b> orate.	Intercept, bw =	-1.0	821	_			
			Set Point	Calculation						
rom the TSP Fig	eld Calibration Cu	urve, take Qstd = 1		- aroundiron						
		e "Y" value accord								
Tom the regres	olon Equation, th	5 1 Value accord	9 10							
		mw:	x Qstd + bw = IC	x [(Pa/760) x (298/	Γa)] <sup>1/2</sup>					
			on editation (55,55 1,55,	• ( )						
Therefore, Set P	oint; IC = ( mw x	Qstd + bw ) x [( 76	60 / Pa ) x ( Ta / 29	98 )] <sup>1/2</sup> =		38.88				
					A155					
Remarks:										
	,		-							
1	1- 1									
QC Reviewer: _	9   Clum		Signature:	2		Date: 15-3-0	W.			



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

## AIR POLLUTION MONITORING EQUIPMENT

## ORIFICE TRANSFER STANDARD CERTIFICATION WORKSHEET TE-5025A

Date - M Operator		Rootsmeter Orifice I.I		438320 0988	Ta (K) - Pa (mm) -	297 751.84
PLATE OR Run #	VOLUME START (m3)	VOLUME STOP (m3)	DIFF VOLUME (m3)	DIFF TIME (min)	METER DIFF Hg (mm)	ORFICE DIFF H2O (in.)
1 2 3 4 5	NA NA NA NA NA	NA NA NA NA NA	1.00 1.00 1.00 1.00	1.3900 0.9720 0.8670 0.8270 0.6800	3.2 6.4 7.9 8.7 12.6	2.00 4.00 5.00 5.50 8.00

## DATA TABULATION

Vstd	(x axis) Qstd	(y axis)	Va	(x axis) Qa	(y axis)
0.9884 0.9842 0.9821 0.9811 0.9759	0.7110 1.0125 1.1327 1.1863 1.4352	1.4090 1.9926 2.2278 2.3365 2.8179	0.9957 0.9915 0.9894 0.9884 0.9832	0.7163 1.0201 1.1412 1.1952 1.4459	0.8889 1.2570 1.4054 1.4740 1.7777
Qstd slo intercer coeffici y axis =	ot (b) = ient (r) =	1.94727 0.02332 0.99998 	Qa slop intercep coefficie y axis =	t (b) =	1.21935 0.01471 0.99998

## CALCULATIONS

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

Qstd = Vstd/Time

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

Qa = Va/Time

For subsequent flow rate calculations:

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

Mode Equip Sensi Opera Standa Equip Venue Model Serial	facturer/Brand: I No.: Iment No.: tivity Adjustment ator:  Ind Equipment ment: a: I No.:	Ruj Cyr Ser Cor Ser	pprech	nt & Pa t (Pui \ 00AB 140 120	140AB219899803 1200C143659803 K <sub>o</sub> : 12500					
*Remar	ks: Recommend	ed interva	al for h	ardwar	e calibrat	tion is 1 y	/ear			
Calibra	tion Result					= 17 9				
	ivity Adjustment ivity Adjustment							PM PM		
Hour	Date (dd-mm-yy)	7	Time		Amb Cond Temp (°C)	22/21/21/21/21/2000	Concentration <sup>1</sup> (mg/m <sup>3</sup> ) <b>Y-axis</b>	Total Count <sup>2</sup>	Count/ Minute <sup>3</sup> X-axis	
1	18-05-13	12:30	- 1	3:30	28.1	78	0.04714	1887	31.45	
2	18-05-13	13:30		4:30	28.1	78	0.04932	1970	32.83	
3	18-05-13	14:30		5:30	28.2	77	0.05156	2056	34.27	
4	18-05-13	15:30		6:30	28.1	78	0.05083	2026	33.77	
Slope ( Correla	1. Monitoring d 2. Total Count 3. Count/minute ar Regression of (K-factor): ation coefficient: y of Calibration R s:	was logge e was cal Y or X	0.00 0.99	aser D d by (T 015	Oust Moni otal Cour	tor	shnick TEOM®			
		-71				1, /	/			
QC Re	viewer: YW F	ung	;	Signatu	ure:	y/	Date	e: _20 May	/ 2013	

Operate Standare		Scale Se	etting:		Laser Dust Monitor SIBATA LD-3 A.005.08a 702 CPM						
Standard	or:			-	Mike Shek (MSKM)						
	d Equipment										
Equipm Venue: Model N	No.:	Cy Se	berpoi ries 14	t (Pui 100AB	atashnick Ying Sec	ondary					
Serial No: Control: Sensor: Last Calibration Date*: 18 May 20					0AB2198 00C1436		K <sub>o</sub> : _12	500			
Remark	s: Recommend	ed interv	al for h	nardwa	re calibra	ition is 1	year				
Calibrati	on Result										
	rity Adjustment rity Adjustment						702 702	CPM CPM			
Hour	Date (dd-mm-yy)		Time		Ambient Condition Temp R.H. (°C) (%)		Concentration <sup>1</sup> (mg/m <sup>3</sup> ) <b>Y-axis</b>	Total Count <sup>2</sup>	Count/ Minute <sup>3</sup> <b>X-axis</b>		
1	18-05-13	12:30	- 1.	3:30	28.1	78	0.04714	1764	29.40		
2	18-05-13	13:30		4:30	28.1	78	0.04932	1846	30.77		
3	18-05-13	14:30		5:30	28.2	77	0.05156	1935	32.25		
4 lote:	18-05-13	15:30		6:30	28.1	78	0.05083	1899	31.65		
Slope (k	2. Total Count 3. Count/minut Regression of (-factor): ion coefficient:	was logg e was ca	ged by alculate	Laser	Dust Mon	itor	tashnick TEOM <sup>®</sup>				
Validity	of Calibration F	Record:	_17	May 2	014						
Remarks											

Model No.: Equipment No.: Sensitivity Adjustment Sca		_	Laser Dust Monitor SIBATA								
		2	LD-3								
Sensitivity Adjustment Sca	3. 12	_	A.005.09								
	ale Setting	g: _	Mike Shek (MSKM)								
Operator:		-									
tandard Equipment											
Equipment:	Ruppre	echt & Pa	tashnick i	EOM®							
Venue:	Cybern	ort (Pui `	Ying Seco	ndary S	chool)						
Model No.:	Series	1400AB	DOAB								
Serial No:	Contro	1: 14	0AB21989	9803							
	Sensor	120	00C14365	9803	K <sub>o</sub> : 12500						
Last Calibration Date*:	18 May	2013									
Remarks: Recommended i	nterval fo	r hardwa	re calibrat	ion is 1	year						
alibration Result											
Sensitivity Adjustment Sca Sensitivity Adjustment Sca					797 CP						
Hour Date (dd-mm-yy)	Time		Ambient Condition		Concentration <sup>1</sup> (mg/m <sup>3</sup> )	Total Count <sup>2</sup>	Count/ Minute <sup>3</sup>				
			Temp (°C)	R.H. (%)	Y-axis		X-axis				
1 18-05-13 1.	2:30 -	13:30	28.1	78	0.04714	1885	31.42				
2 18-05-13 1.	3:30 -	14:30	28.1	78	0.04932	1965	32.75				
	4:30 -	15:30	28.2	77	0.05156	2059	34.32				
	5:30 -	16:30	28.1	78	0.05083	2024	33.73				
ote: 1. Monitoring data 2. Total Count was 3. Count/minute w y Linear Regression of Y o Slope (K-factor): Correlation coefficient:	s logged bas calculated as calculated as calculated as a calcu	y Laser I	Dust Moni	tor	ashnick TEOM <sup>®</sup>						
Validity of Calibration Reco	ord:	17 May 2	014	_							

Model	facturer/Brand: I No.:		=	LD-3								
	ment No.: tivity Adjustment	Scale Se	ttina		A.005.10a 753 CPM							
Opera		oodic oo	ung	_	Mike Shek (MSKM)							
Standa	rd Equipment											
Equip	ment:	Rui	ppre	cht & Pa	tashnick	TFOM®						
Venue					t (Pui Ying Secondary School)							
Model	No.:		1400AB	•								
Serial	No:	ntrol:	140	DAB2198	99803							
Last C	Sensor: 18 May 20					59803	K <sub>o</sub> : 12500	)				
	ks: Recommend				re calibra	tion is 1	year					
Calibra	tion Result											
	ivity Adjustment ivity Adjustment						753 CF					
Hour	Date (dd-mm-yy)	Ţ	Time		Ambient Condition Temp R.H. (°C) (%)	Concentration <sup>1</sup> (mg/m <sup>3</sup> )  Y-axis	Total Count <sup>2</sup>	Count/ Minute X-axis				
1	18-05-13	12:30	-	13:30	28.1	78	0.04714	1886	31.43			
2	18-05-13	13:30	(e)	14:30	28.1	78	0.04932	1968	32.80			
3	18-05-13	14:30	-	15:30	28.2	77	0.05156	2061	34.35			
4	18-05-13	15:30	-	16:30	28.1	78	0.05083	2026	33.77			
Slope	1. Monitoring d 2. Total Count 3. Count/minut ar Regression of (K-factor): ation coefficient:	was logge e was cal	ed by culat	Laser [	<b>Dust Mon</b>	itor	ashnick TEOM <sup>®</sup>					
Validity	y of Calibration F	Record:	1	7 May 20	014							
Remarks	s:											
						6						

### **EQUIPMENT CALIBRATION RECORD**

	Type:			Laser Du	ıst Moni	tor		
	acturer/Brand:			SIBATA				
Model				LD-3				
	ment No.: ivity Adjustment	Scale Sett	ina:	A.005.11 799 CPI				
Opera				Mike Shek (MSKM)				
Standaı	rd Equipment							
Equipr		Run	precht & Pa	otochnick	TEOM®			
Venue			erport (Pui			chool)		_
Model			es 1400AB		madi y O	onoon		
Serial		Con		OAB21989	99803			
				200C14365		K <sub>o</sub> : 12500		_
Last C	alibration Date*		May 2013					
*Remark	ks: Recommend	led interval	for hardwa	are calibrat	tion is 1	year		
Calibrat	ion Result							
	vity Adjustment vity Adjustment					799 CP		
Hour	Date (dd-mm-yy)			Amb Cond Temp		Concentration <sup>1</sup> (mg/m <sup>3</sup> ) <b>Y-axis</b>	Total Count <sup>2</sup>	Count Minute X-axis
			72.72	(°C)	(%)			
1	18-05-13	12:15	- 13:15	28.1	78	0.04685	1871	31.18
3	18-05-13	13:15	- 14:15	28.1	78	0.04941	1979	32.98
3	18-05-13	14:15	- 15:15	28.2	77 78	0.05127	2055	34.25
	18-05-13	15:15	- 16:15	28.1		0.05060	2021	33.68
4 Note:	1. Monitoring of	lata was m	easured by		IL CALL CALL	STITION LEGIVI		
4 Note: By Linea Slope (	2. Total Count 3. Count/minu or Regression of (K-factor):	was logge te was calc	d by Laser culated by (*	Dust Moni	itor	STITION TEOW		
4 Note: By Linea Slope ( Correla	2. Total Count 3. Count/minu ar Regression of (K-factor): ation coefficient:	was logge te was calc	d by Laser culated by (  0.0015  0.9976	Dust Moni Total Cour	itor	STITION TEOW		
4 Note: By Linea Slope ( Correla	2. Total Count 3. Count/minu or Regression of (K-factor):	was logge te was calc	d by Laser culated by (*	Dust Moni Total Cour	itor	STITION TEOM		

## **EQUIPMENT CALIBRATION RECORD**

Type: Manufacturer/Brand: Model No.: Equipment No.: Sensitivity Adjustment Scale Setting: Operator:			-	Laser Du SIBATA LD-3B A.005.13 643 CPI Mike She	a M				
Standa	rd Equipment								
Equipo Venue Model Serial	e: No.:	Cyl. Ser Cor Ser	berpoi	rt (Pui \ 400AB 140 120	tashnick Ying Seco DAB21989 DOC14365	ndary So 9803	chool) K <sub>o</sub> : <u>125</u>	500	
	ks: Recommend		20 20 20		e calibrat	ion is 1 y	/ear		
Calibra	tion Result								
	ivity Adjustment ivity Adjustment		0 (			,		CPM CPM	
Hour	Date (dd-mm-yy)	,	Гime		Amb Cond Temp (°C)		Concentration (mg/m³) <b>Y-axis</b>	Total Count <sup>2</sup>	Count/ Minute <sup>3</sup> <b>X-axis</b>
1	18-05-13	12:15	-	13:15	28.1	78	0.04685	1867	31.12
2	18-05-13	13:15		14:15	28.1	78	0.04941	1975	32.92
3	18-05-13	14:15	-	15:15	28.2	77	0.05127	2048	34.13
4	18-05-13	15:15		16:15	28.1	78	0.05060	2017	33.62
Slope Correla	1. Monitoring d 2. Total Count 3. Count/minut ar Regression of (K-factor): ation coefficient:	was logge e was cal Y or X	ed by culate 	Laser [ ed by (T 0015 0986	Oust Moni otal Cour	tor	shnick I EOM®		
Validity	y of Calibration F	(ecord:	_1/	May 20	)14				
Remark	S:		10.5						
QC Re	eviewer: YW F	ung		Signat	ure:	4	D	ate:20 Ma	ny 2013

# **EQUIPMENT CALIBRATION RECORD**

Model				Laser Du SIBATA LD-3B A.005.16		tor		
	ment No.: ivity Adjustment	Scale Settin		521 CPI				
Opera	tor:			Mike She	k (MSKN	Л)		
Standa	rd Equipment							
Equip	mont:	Dunn	echt & Pa	toobniek '	TEOM®			
Equipr Venue			port (Pui \			chool)		
Model			1400AB	ring deco	nuary of	Shoon		
Serial		Contro		DAB21989	99803			
Serial	140.	Senso		00C14365		K <sub>o</sub> : 12500	)	
Last C	alibration Date*:		y 2013	70011000	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			
*Remar	ks: Recommend	ed interval fo	or hardwai	re calibra	tion is 1	year		
Calibra	tion Result							
	ivity Adjustment ivity Adjustment						PM PM	
Hour	Date	Tim	ne	Amb	pient	Concentration <sup>1</sup>	Total	Count/
	(dd-mm-yy)			Cond	dition	(mg/m <sup>3</sup> )	Count <sup>2</sup>	Minute <sup>3</sup>
				Temp	R.H.	Y-axis		X-axis
				(°C)	(%)			
1	27-07-13	11:00 -	12:00	27.3	75	0.04734	1893	31.55
2	27-07-13	12:00 -	13:00	27.3	75	0.04789	1915	31.92
3	27-07-13	13:00 -	200 20000000000000000000000000000000000	27.4	74	0.04953	1976	32.93
4	27-07-13	14:00 -	15:00	27.4	75	0.04867	1949	32.48
	2. Total Count 3. Count/minu ar Regression of (K-factor):	was logged te was calcu	by Laser I	Dust Mon	itor	ashnick TEOM <sup>®</sup>		
	ation coefficient:	-	0.9934					
Validit	y of Calibration F	Record:	26 July 20	014				
Remark	s:			4	-			
							7	
QC Re	eviewer: _YWI	-ung	Signa	ture:	4	Dar	te: _29 Jul	ly 2013



G/F., 9/F., 12/F., 13/F. & 20/F., Leader Centre, 37 Wong Chuk Hang Road, Aberdeen, Hong Kong. 香港黃竹坑道37號利達中心地下,9樓,12樓,13樓及20樓 E-mail: smec@cigismec.com Website: www.cigismec.com

Tel: (852) 2873 6860 Fax: (852) 2555 7533



### CERTIFICATE OF CALIBRATION

Certificate No.:

13CA1107 01-02

Page:

of

2

Item tested

Description:

Acoustical Calibrator (Class 1)

Manufacturer:

Rion Co., Ltd.

Type/Model No .: Serial/Equipment No.: NC-73

10307223 / N.004.08

Adaptors used:

Item submitted by

Curstomer:

AECOM ASIA CO., LTD.

Address of Customer:

Request No .: Date of receipt:

07-Nov-2013

Date of test:

08-Nov-2013

#### Reference equipment used in the calibration

Description: Lab standard microphone Preamplifier	Model: B&K 4180 B&K 2673	Serial No. 2341427 2239857	Expiry Date: 17-Apr-2014 16-Apr-2014	Traceable to: SCL CEPREI
Measuring amplifier	B&K 2610	2346941	24-Apr-2014	CEPREI
Signal generator	DS 360	61227	15-Apr-2014	CEPREI
Digital multi-meter	34401A	US36087050	10-Dec-2013	CEPREI
Audio analyzer	8903B	GB41300350	15-Apr-2014	CEPREI
Universal counter	53132A	MY40003662	15-Apr-2014	CEPREI

#### **Ambient conditions**

Temperature: Relative humidity:

Air pressure:

22 ± 1 °C 60 ± 10 % 1000 ± 10 hPa

### **Test specifications**

- 1, The Sound Calibrator has been calibrated in accordance with the requirements as specified in IEC 60942 1997 Annex B and the lab calibration procedure SMTP004-CA-156.
- 2, The calibrator was tested with its axis vertical facing downwards at the specific frequency using insert voltage technique.
- 3, The results are rounded to the nearest 0.01 dB and 0.1 Hz and have not been corrected for variations from a reference pressure of 1013.25 hectoPascals as the maker's information indicates that the instrument is insensitive to pressure changes.

### Test results

This is to certify that the sound calibrator conforms to the requirements of annex B of IEC 60942: 1997 for the conditions under which the test was performed. This does not imply that the sound calibrator meets IEC 60942 under any other conditions.

Details of the performed measurements are presented on page 2 of this certificate.

Huang Jian Min/Feng Jun Qi

Approved Signatory:

Date:

11-Nov-2013

Company Chop:

Comments: The results reported in this certificate refer to the condition of the instrument on the date of calibration and carry no implication regarding the long-term stability of the instrument.

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Tel: (852) 2873 6860 Fax: (852) 2555 7533



### CERTIFICATE OF CALIBRATION

Certificate No.:

13CA0617 01-01

Page

of

2

Item tested

Description:

Sound Level Meter (Type 1)

Microphone

Manufacturer: Type/Model No.: **B&K** 2238

B&K 4188

Serial/Equipment No.: Adaptors used:

2800927 / N.009.06 2791211

Item submitted by

Customer Name:

AECOM ASIA CO. LTD.

Address of Customer:

Request No .:

Date of receipt:

17-Jun-2013

Date of test:

18-Jun-2013

Reference equipment used in the calibration

Description:

Model: B&K 4226 Serial No.

**Expiry Date:** 

Traceable to: CIGISMEC

Multi function sound calibrator Signal generator Signal generator

DS 360 DS 360

2288444 33873 61227

22-Jun-2013 15-Apr-2014 15-Apr-2014

CEPREI CEPREI

**Ambient conditions** 

Temperature:

22 ± 1 °C 60 ± 10 %

Relative humidity: Air pressure:

1000 ± 10 hPa

### **Test specifications**

The Sound Level Meter has been calibrated in accordance with the requirements as specified in BS 7580: Part 1: 1997 and the lab calibration procedure SMTP004-CA-152.

The electrical tests were performed using an electrical signal substituted for the microphone which was removed and 2, replaced by an equivalent capacitance within a tolerance of ±20%.

3, The acoustic calibration was performed using an B&K 4226 sound calibrator and corrections was applied for the difference between the free-field and pressure responsess of the Sound Level Meter.

### Test results

This is to certify that the Sound Level Meter conforms to BS 7580: Part 1: 1997 for the conditions under which the test was performed.

Details of the performed measurements are presented on page 2 of this certificate.

⊮Feng Jun Qi

Actual Measurement data are documented on worksheets.

Huang Jian M

Approved Signatory:

Date:

18-Jun-2013

Company Chop:

Comments: The results reported in this certificate refer to the condition of the instrument on the date of calibration and carry no implication regarding the long-term stability of the instrument.

Soils & Materials Engineering Co., Ltd



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Tel: (852) 2873 6860 Fax: (852) 2555 7533



### CERTIFICATE OF CALIBRATION

Certificate No.:

13CA1107 01-01

Page

Item tested

Description:

Sound Level Meter (Type 1)

Rion Co., Ltd.

Microphone Rion Co., Ltd.

Manufacturer: Type/Model No.:

**NL-31** 

UC-53A

Serial/Equipment No .: Adaptors used:

90565 00320528 / N.007.03A

Item submitted by

**Customer Name:** Address of Customer: AECOM ASIA CO., LTD.

Request No.:

Date of receipt:

07-Nov-2013

Date of test:

08-Nov-2013

Reference equipment used in the calibration

Description:

Multi function sound calibrator

Signal generator Signal generator

Model:

DS 360

B&K 4226 DS 360

Serial No. 2288444

33873 61227 **Expiry Date:** 

22-Jun-2014 15-Apr-2014 15-Apr-2014

Traceable to:

CIGISMEC CEPREI **CEPREI** 

**Ambient conditions** 

Temperature: Relative humidity: 22 ± 1 °C 60 ± 10 %

Air pressure:

1000 ± 10 hPa

#### Test specifications

The Sound Level Meter has been calibrated in accordance with the requirements as specified in BS 7580: Part 1: 1997 and the lab calibration procedure SMTP004-CA-152.

The electrical tests were performed using an electrical signal substituted for the microphone which was removed and 2, replaced by an equivalent capacitance within a tolerance of +20%.

3, The acoustic calibration was performed using an B&K 4226 sound calibrator and corrections was applied for the difference between the free-field and pressure responsess of the Sound Level Meter.

### Test results

This is to certify that the Sound Level Meter conforms to BS 7580: Part 1: 1997 for the conditions under which the test was performed.

Details of the performed measurements are presented on page 2 of this certificate.

Huang Jian Min/Feng Jun Qi

Actual Measurement data are documented on worksheets.

Approved Signatory:

Date:

11-Nov-2013

Company Chop:

The results reported in this certificate refer to the condition of the instrument on the date of calibration and carry no implication regarding the long-term stability of the instrument.

Soils & Materials Engineering Co., Ltd.



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Tel: (852) 2873 6860 Fax: (852) 2555 7533



## CERTIFICATE OF CALIBRATION

Certificate No.:

13CA0305 01-01

Page

of

2

Item tested

Description: Manufacturer: Sound Level Meter (Type 1)

B & K

Type/Model No.:

B & K 2250-L

4950

Serial/Equipment No.:

2681366 (N. OII.01)

2665582

Microphone

Adaptors used:

-

-

Item submitted by

Customer Name: Address of Customer: AECOM ASIA CO LIMITED

Request No.:

-

Date of receipt:

05-Mar-2013

Date of test:

05-Mar-2013

Reference equipment used in the calibration

Description:

Model:

Serial No.

**Expiry Date:** 

Traceable to:

Multi function sound calibrator Signal generator B&K 4226 DS 360 2288444 33873

23-May-2013 29-May-2013 CIGISMEC

Signal generator

DS 360

61227

29-May-2013

CEPREI CEPREI

Ambient conditions

Temperature:

21 ± 1 °C

Relative humidity:

60 ± 10 % 1000 ± 10 hPa

Air pressure:

1000 ± 10

### Test specifications

- The Sound Level Meter has been calibrated in accordance with the requirements as specified in BS 7580: Part 1: 1997 and the lab calibration procedure SMTP004-CA-152.
- 2, The electrical tests were performed using an electrical signal substituted for the microphone which was removed and replaced by an equivalent capacitance within a tolerance of ±20%.
- The acoustic calibration was performed using an B&K 4226 sound calibrator and corrections was applied for the difference between the free-field and pressure responsess of the Sound Level Meter.

### Test results

This is to certify that the Sound Level Meter conforms to BS 7580: Part 1: 1997 for the conditions under which the test was performed.

Details of the performed measurements are presented on page 2 of this certificate.

n/F

eng Jun Qi

Actual Measurement data are documented on worksheets.

Huang Jian M

Approved Signatory:

Date:

05-Mar-2013

Company Chop:

Comments: The results reported in this certificate refer to the condition of the instrument on the date of calibration and carry no implication regarding the long-term stability of the instrument.

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# CERTIFICATE OF CALIBRATION

Certificate No.:

14CA0305 06-02

Page

of

2

Item tested

Description:

Sound Level Meter (Type 1)

Microphone

Manufacturer:

B & K

B & K

Type/Model No.: Serial/Equipment No.: 2250 2681366 //. 0//. o/ 4950 2665582

Adaptors used:

-

-

Item submitted by

Customer Name:

AECOM ASIA CO. LTD.

Address of Customer:

-

Request No.: Date of receipt:

05-Mar-2014

Date of test:

07-Mar-2014

Reference equipment used in the calibration

Description:

-116 -- 1 --

Model: B&K 4226 Serial No.

Expiry Date: 22-Jun-2014

Traceable to: CIGISMEC

Multi function sound calibrator Signal generator Signal generator

DS 360 DS 360 2288444 33873 61227

15-Apr-2014 15-Apr-2014 CEPREI CEPREI

**Ambient conditions** 

Temperature:

22 ± 1 °C 60 ± 10 %

Relative humidity: Air pressure:

1000 ± 10 hPa

### **Test specifications**

 The Sound Level Meter has been calibrated in accordance with the requirements as specified in BS 7580: Part 1: 1997 and the lab calibration procedure SMTP004-CA-152.

 The electrical tests were performed using an electrical signal substituted for the microphone which was removed and replaced by an equivalent capacitance within a tolerance of ±20%.

 The acoustic calibration was performed using an B&K 4226 sound calibrator and corrections was applied for the difference between the free-field and pressure responsess of the Sound Level Meter.

### Test results

This is to certify that the Sound Level Meter conforms to BS 7580: Part 1: 1997 for the conditions under which the test was performed.

Details of the performed measurements are presented on page 2 of this certificate.

Huang Jian Min/Feng Jun Qi

Actual Measurement data are documented on worksheets.

Approved Signatory:

Date:

12-Mar-2014

Company Chop:

SENGINEEA 線合試驗 SOMP 有限公司 和 有限公司 和

**Comments:** The results reported in this certificate refer to the condition of the instrument on the date of calibration and carry no implication regarding the long-term stability of the instrument.

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# APPENDIX F EM&A MONITORING SCHEDULES

# Widening of Tolo Highway / Fanling Highway (Stage 1) Between Island House Interchange and Tai Hang - Investigation Tentative Impact Monitoring and Audit Schedule for March 2014

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
						1-Mar
2-Mar	3-Mar	4-Mar	5-Mar	6-Mar	7-Mar	8-Mar
				Site inspection		
			Site inspection	(Contract 2)		
			(Contract 1)	24-hour TSP		
				1-hour TSP & Noise		.=
9-Mar	10-Mar	11-Mar	12-Mar	13-Mar	14-Mar	15-Mar
			Site inspection	0'' '		
			(Contract 1)	Site inspection		
			24-hour TSP	(Contract 2)		
16-Mar	17-Mar	18-Mar	1-hour TSP & Noise 19-Mar	20-Mar	21-Mar	22-Mar
10-Mai	17-Mai	10-Mar	19-Mai	ZU-IVIAI	Z1-IVIdI	ZZ-IVIdI
		24-hour TSP	Site inspection	Site inspection		
		1-hour TSP & Noise	(Contract 1)	(Contract 2)		
			(33.33.37)	(		
23-Mar	24-Mar	25-Mar	26-Mar	27-Mar	28-Mar	29-Mar
	24-hour TSP		Site inspection	Site inspection		24-hour TSP
	1-hour TSP		(Contract 1)	(Contract 2)		1-hour TSP
30-Mar	31-Mar					
<b>30</b> ma.	<b>31</b>					

# Widening of Tolo Highway / Fanling Highway (Stage 1) Between Island House Interchange and Tai Hang - Investigation Tentative Impact Monitoring and Audit Schedule for April 2014

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
		1-Apr	2-Apr	3-Apr	4-Apr	5-Apr
			Site inspection (Contract 1)	Site inspection (Contract 2)	24-hour TSP 1-hour TSP & Noise	
6-Apr	7-Apr	8-Apr	9-Apr	10-Apr	11-Apr	12-Apr
			Site inspection (Contract 1)	Site inspection (Contract 2) 24-hour TSP 1-hour TSP & Noise		
13-Apr	14-Apr	15-Apr	16-Apr	17-Apr	18-Apr	19-Apr
			Site inspection (Contract 1) 24-hour TSP 1-hour TSP & Noise	Site inspection (Contract 2)		
20-Apr	21-Apr	22-Apr	23-Apr	24-Apr	25-Apr	26-Apr
		24-hour TSP 1-hour TSP & Noise	Site inspection (Contract 1)	Site inspection (Contract 2)		
27-Apr	28-Apr	29-Apr	30-Apr			
	24-hour TSP 1-hour TSP & Noise		Site inspection (Contract 1)			

The schedule is subject to change due to unforeseeable circumstances (e.g. adverse weather, etc)

APPENDIX G
IMPACT AIR QUALITY MONITORING
RESULTS AND THEIR GRAPHICAL
PRESENTATION

# Appendix G Impact Air Quality Monitoring Results

# 1-hour TSP Monitoring Results at Station AM1A (Fan Sin Temple, 3 Sheung Wun Yiu G/F)

	Start	1st Hour	2nd Hour	3rd Hour
	Time	Conc.	Conc.	Conc.
Date	(hh:mm)	(µg/m³)	(µg/m³)	(µg/m³)
6-Mar-14	10:49	78.2	79.1	78.5
12-Mar-14	10:23	78.4	77.6	78.0
18-Mar-14	10:05	78.8	80.7	80.1
24-Mar-14	10:12	82.2	82.0	79.5
29-Mar-14	13:20	68.6	66.7	65.4
			Average	76.9
			Min	65.4
			Max	82.2

# 1-hour TSP Monitoring Results at Station AM2 (12 Shan Tong New Village G/F)

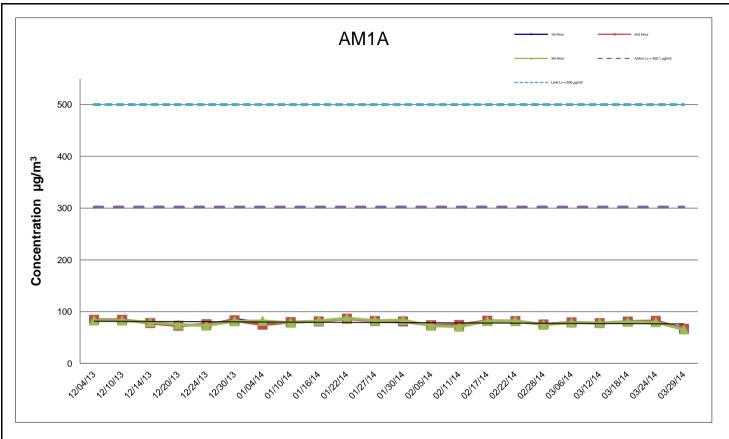
	Start	1st Hour	2nd Hour	3rd Hour
	Time	Conc.	Conc.	Conc.
Date	(hh:mm)	(µg/m³)	(µg/m³)	(µg/m³)
6-Mar-14	9:50	77.3	76.5	77.9
12-Mar-14	10:11	78.8	79.4	78.3
18-Mar-14	9:55	81.4	80.9	79.7
24-Mar-14	10:00	83.1	80.7	82.4
29-Mar-14	13:30	63.7	65.1	62.2
,			Average	76.5
			Min	62.2
			Max	83.1

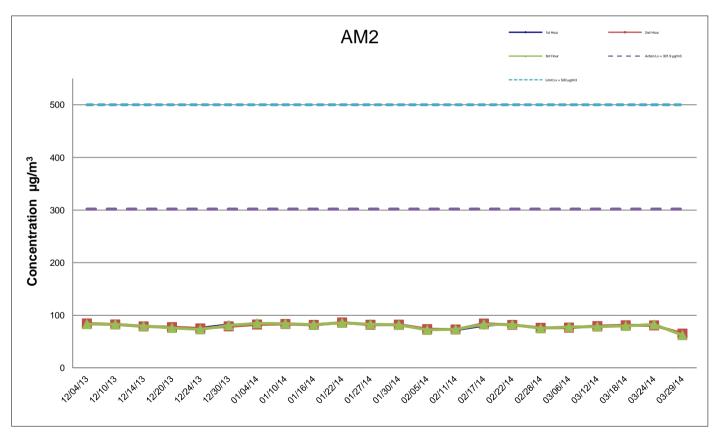
# 1-hour TSP Monitoring Results at Station AM3 (Roof of Switch Room at Riverain Bayside)

	Start	1st Hour	2nd Hour	3rd Hour
	Time	Conc.	Conc.	Conc.
Date	(hh:mm)	(µg/m³)	(µg/m³)	(µg/m³)
6-Mar-14	10:16	75.9	76.4	76.4
12-Mar-14	10:01	78.4	77.6	79.0
18-Mar-14	9:45	78.5	82.1	81.3
24-Mar-14	9:50	81.9	82.8	80.1
29-Mar-14	13:10	62.6	64.0	64.1
			Average	76.1
			Min	62.6
			Max	82.8

# 1-hour TSP Monitoring Results at Station AM4A (Roof of Switch Room at 168 Shek Kwu Lung Village)

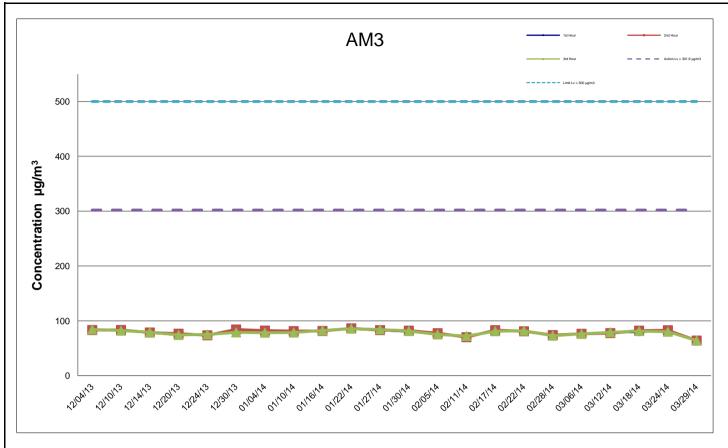
	Start	1st Hour	2nd Hour	3rd Hour
	Time	Conc.	Conc.	Conc.
Date	(hh:mm)	(µg/m³)	(µg/m³)	(µg/m³)
6-Mar-14	10:38	77.4	76.1	78.1
12-Mar-14	10:43	79.6	78.7	79.3
18-Mar-14	10:25	82.4	81.0	79.5
24-Mar-14	10:41	83.2	81.6	81.9
29-Mar-14	13:45	63.1	61.7	64.1
			Average	76.5
			Min	61.7
			Max	83.2

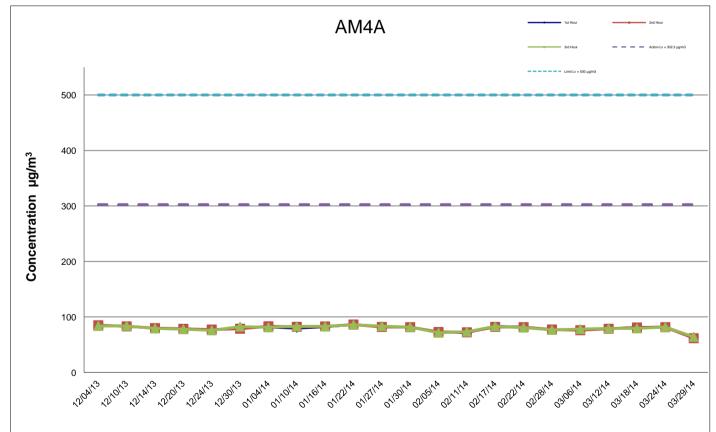




<b>AECOM</b>
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Environmental Team for the Widening of Tolo Highway between Island House Interchange and Tai Hang - Investigation		N.T.S.	DATE	Apr-1	4	ı
		ENFL	DRAWN	JCY	<	ı
Graphical Presentation of Impact 1-hour TSP Monitoring	JOB NO.		APPEND	IX No.	Rev.	İ
Results		60102979	(	Э	-	İ





**Remark:** The monitoring station at Tai Kwong Secondary School (AM4) was relocated to 168 Shek Kwu Lung Village (AM4A) starting from 1 September 2011 due to the mentioned school was closed down.



Environmental Team for the widening of Tolo Highway	SCALE	N.T.S.	DATE	Apr-1	4	l
between Island House Interchange and Tai Hang - Investigation	CHECK	ENFL	DRAWN	JCYI	Κ	l
Graphical Presentation of Impact 1-hour TSP Monitoring Results	JOB NO.	60102979	APPEND	I <b>IX No.</b> G	Rev.	
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#### Impact Air Quality Monitoring Results

### 24-hour TSP Monitoring Results at Station AM1A (Fan Sin Temple, 3 Sheung Wun Yiu G/F)

Date	Weather	Air	Atmospheric	Flow Rate	e (m³/min.)	Av. flow	Total vol.			Particulate	Elapse	e Time	Sampling	Conc.
	Condition	Temp. (°C)	Pressure(hPa)	Initial	Final	(m³/min)	(m <sup>3</sup> )	Initial	Final	weight(g)	Initial	Final	Time(hrs.)	(µg/m³)
6-Mar-14	Fine	15.3	1018.2	1.33	1.33	1.33	1916.6	2.5370	2.5931	0.0561	20643.46	20667.46	24.00	29.3
12-Mar-14	Fine	17.7	1014.7	1.33	1.33	1.33	1916.6	2.7289	2.8065	0.0776	20667.46	20691.46	24.00	40.5
18-Mar-14	Fine	21.9	1016.0	1.33	1.33	1.33	1916.6	2.7224	2.7857	0.0633	20691.46	20715.46	24.00	33.0
24-Mar-14	Sunny	19.5	1019.4	1.33	1.33	1.33	1916.6	2.7400	2.8119	0.0719	20715.46	20739.46	24.00	37.5
29-Mar-14	Rainy	21.8	1011.4	1.33	1.33	1.33	1916.6	2.7158	2.7953	0.0795	20739.46	20763.46	24.00	41.5
													Average	36.4
													Min	29.3
													Max	41.5

#### 24-hour TSP Monitoring Results at Station AM2 (12 Shan Tong New Village G/F)

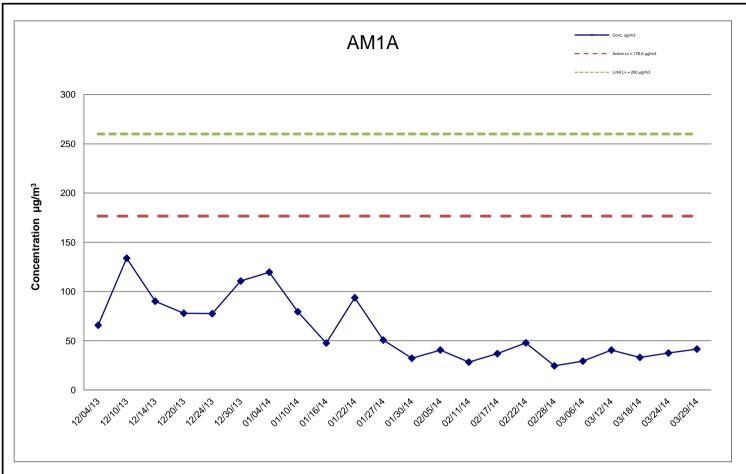
Date	Weather	Air	Atmospheric	Flow Rate	(m³/min.)	Av. flow	Total vol.	Filter W	/eight (g)	Particulate	Elapse	e Time	Sampling	Conc.
	Condition	Temp. (°C)	Pressure(hPa)	Initial	Final	(m³/min)	(m <sup>3</sup> )	Initial	Final	weight(g)	Initial	Final	Time(hrs.)	(µg/m³)
6-Mar-14	Fine	15.3	1018.2	1.34	1.34	1.34	1925.3	2.7118	2.7916	0.0798	17215.12	17239.12	24.00	41.4
12-Mar-14	Fine	17.7	1014.7	1.34	1.34	1.34	1925.3	2.7326	2.8135	0.0809	17239.12	17263.12	24.00	42.0
18-Mar-14	Fine	21.9	1016.0	1.34	1.34	1.34	1925.3	2.7433	2.8245	0.0812	17263.12	17287.12	24.00	42.2
24-Mar-14	Sunny	19.5	1019.4	1.34	1.34	1.34	1925.3	2.7455	2.8162	0.0707	17287.12	17311.12	24.00	36.7
29-Mar-14	Rainy	21.8	1011.4	1.34	1.34	1.34	1925.3	2.7104	2.7963	0.0859	17311.12	17335.12	24.00	44.6
													Average	41.4
													Min	36.7
													Max	44.6

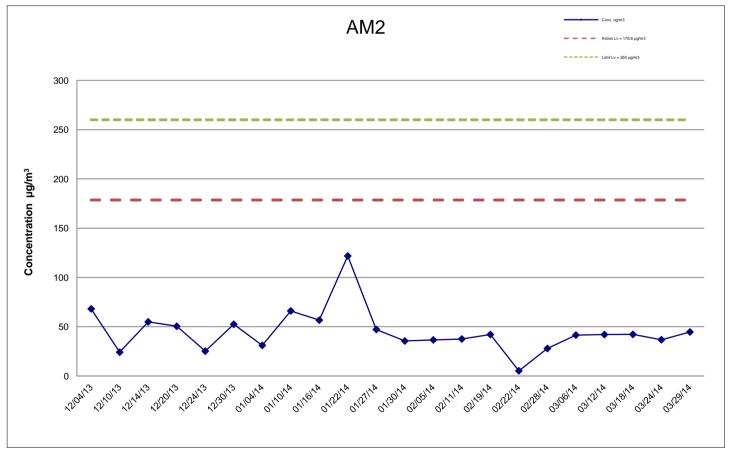
#### 24-hour TSP Monitoring Results at Station AM3 (Roof of Switch Room at Riverain Bayside)

Date	Weather	Air	Atmospheric	Flow Rate	ow Rate (m³/min.) A		Total vol.	Filter V	/eight (g)	Particulate	Elapse	e Time	Sampling	Conc.
	Condition	Temp. (°C)	Pressure(hPa)	Initial	Final	(m³/min)	(m <sup>3</sup> )	Initial	Final	weight(g)	Initial	Final	Time(hrs.)	(µg/m³)
6-Mar-14	Fine	15.3	1018.2	1.33	1.33	1.33	1921.0	2.7377	2.7891	0.0514	20944.59	20968.59	24.00	26.8
12-Mar-14	Fine	17.7	1014.7	1.33	1.33	1.33	1921.0	2.7316	2.8039	0.0723	20968.59	20992.59	24.00	37.6
18-Mar-14	Fine	21.9	1016.0	1.33	1.33	1.33	1921.0	2.7481	2.8203	0.0722	20992.59	21016.59	24.00	37.6
24-Mar-14	Sunny	19.5	1019.4	1.33	1.33	1.33	1921.0	2.7562	2.8118	0.0556	21116.59	21140.59	24.00	28.9
29-Mar-14	Rainy	21.8	1011.4	1.33	1.33	1.33	1921.0	2.7282	2.8345	0.1063	21140.59	21164.59	24.00	55.3
													Average	37.3
													Min	26.8
													Max	55.3

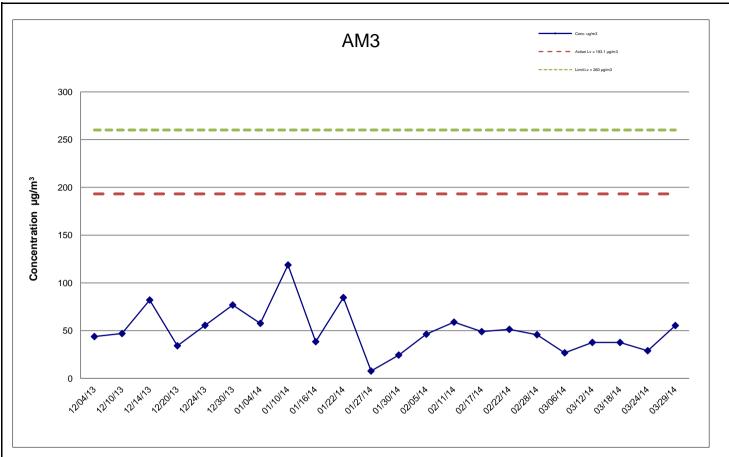
#### 24-hour TSP Monitoring Results at Station AM4A (Roof of Switch Room at 168 Shek Kwu Lung Village)

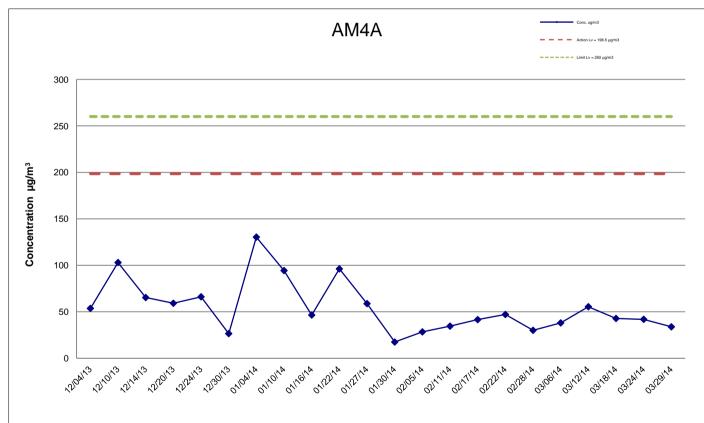
Date	Weather	Air	Atmospheric			Av. flow	Total vol.	Filter Weight (g)		Particulate	Elapse	e Time	Sampling	Conc.
	Condition	Temp. (°C)	Pressure(hPa)	Initial	Final	(m³/min)	(m <sup>3</sup> )	Initial	Final	weight(g)	Initial	Final	Time(hrs.)	(µg/m³)
6-Mar-14	Fine	15.3	1018.2	1.33	1.33	1.33	1918.1	2.7018	2.7745	0.0727	17074.36	17098.36	24.00	37.9
12-Mar-14	Fine	17.7	1014.7	1.33	1.33	1.33	1918.1	2.7311	2.8372	0.1061	17098.36	17122.36	24.00	55.3
18-Mar-14	Fine	21.9	1016.0	1.33	1.33	1.33	1918.1	2.7195	2.8014	0.0819	17122.36	17146.36	24.00	42.7
24-Mar-14	Sunny	19.5	1019.4	1.33	1.33	1.33	1918.1	2.7592	2.8393	0.0801	17146.36	17170.36	24.00	41.8
29-Mar-14	Rainy	21.8	1011.4	1.33	1.33	1.33	1920.5	2.7219	2.7866	0.0647	17170.36	17194.39	24.03	33.7
													Average	42.3
													Min	33.7
													Max	55.3





	Environmental Team for the Widening of Tolo Highway	SCALE	N.T.S.	DATE	Apr-1	4
A=COM	between Island House Interchange and Tai Hang - Investigation	CHECK	ENFL	DRAWN	JCYŁ	<
AECOM	Graphical Presentation of Impact 24-hour TSP Monitoring Results	JOB NO.	60102979	APPEND	IX No. G	Rev.
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**Remark:** The monitoring station at Tai Kwong Secondary School (AM4) was relocated to 168 Shek Kwu Lung Village (AM4A) starting from 1 September 2011 due to the mentioned school was closed down.

**AECOM** 

Environmental realition the widening of rolo riighway	SCALE		DATE	Apr-1	4	ĺ
between Island House Interchange and Tai Hang - Investigation	CHECK	ENFL	DRAWN	JCYI	Κ	ĺ
Graphical Presentation of Impact 24-hour TSP Monitoring	JOB NO.		APPEND	IX No.	Rev.	ĺ
Results		60102979	(	G	-	

APPENDIX H
METEOROLOGICAL DATA FOR THE
REPORTING MONTH

# Extract of Meteorological Observations for Tai Mei Tuk Automatic Weather Station, March 2014

Date	Mean Pressure at M.S.L.	Ai	r Temperatu	ıre	Mean Dew Point Temperature	Rela	ative Humi	dity
	(hPa)	Max.	Mean	Min.	(deg C)	Max.	Mean	Min.
		(deg C)	(deg C)	(deg C)		(%)	(%)	(%)
1-Mar	*****	24.4	20.5	18	***	***	***	***
2-Mar	*****	21.9	18.2	14.7	***	***	***	***
3-Mar	*****	15.7	15.2	14.5	***	***	***	***
4-Mar	*****	18.6	16.7	15.4	***	***	***	***
5-Mar	*****	17.1	16	14.8	***	***	***	***
6-Mar	*****	15.8	15.1	14.6	****	***	***	***
7-Mar	*****	14.8	14.3	13	****	***	***	***
8-Mar	*****	16.2	14.8	13.9	***	***	***	***
9-Mar	*****	15	13.5	11.8	***	***	***	***
10-Mar	*****	15.8	13.7	11.8	***	***	***	***
11-Mar	*****	16	15.1	13.9	***	***	***	***
12-Mar	*****	18.9	17.4	15.2	***	***	***	***
13-Mar	*****	24.7	20.6	18.1	***	***	***	***
14-Mar	*****	20.9	16.9	14.8	***	***	***	***
15-Mar	*****	18.2	15.7	14.7	***	***	***	***
16-Mar	*****	21.9	18.4	15.3	***	***	***	***
17-Mar	*****	25.5	21	18	****	***	***	***
18-Mar	*****	28	22.4	19.4	****	***	***	***
19-Mar	*****	28.7	23.2	19.4	***	***	***	***
20-Mar	*****	28	21.4	16.6	****	***	***	***
21-Mar	*****	17	15.4	14.1	****	***	***	***
22-Mar	*****	22.6	17.1	14.2	****	***	***	***
23-Mar	*****	25	18.7	14.9	****	***	***	***
24-Mar	*****	25.5	20.1	15.3	***	***	***	***
25-Mar	*****	28.7	22.1	18	***	***	***	***
26-Mar	*****	29.8	23.6	19.7	***	***	***	***
27-Mar	*****	30.9	23.9	20	***	***	***	***
28-Mar	*****	24.2	22.3	21	***	***	***	***
29-Mar	*****	23.2	22	21	***	***	***	***
30-Mar	*****	24	21.5	18.5	***	***	***	***
31-Mar	*****	20.1	19.5	18.5	***	***	***	***
Mean	*****	21.8	18.6	16.2	***	***	***	***
Maximum	*****	30.9	23.9	21	***	***	***	***
Minimum	*****	14.8	13.5	11.8	***	***	***	***

# Extract of Meteorological Observations for Tai Mei Tuk Automatic Weather Station, March 2014

Date	Total Rainfall (mm)	Prevailing Wind Direction	Mean Wind (km/h)
1 Man	0.0	(degrees)	6.5
1-Mar	1.0	80	11.6
2-Mar		100	19.8
3-Mar	0.0	110	6.9
4-Mar	0.0	50	12.7
5-Mar	0.0	100	21.7
6-Mar		100	20.1
7-Mar	0.5	90	14.2
8-Mar	0.5	50	12.8
9-Mar	1.5	80	19.5
10-Mar	0.0	100	17.0
11-Mar 12-Mar	0.0	60	5.5
	0.0	40	15.5
13-Mar	0.0	40	18.0
14-Mar	0.0	60	11.9
15-Mar		60	
16-Mar	0.0	80	8.3 6.3
17-Mar	0.0	80	4.8
18-Mar	0.0	70	5.7
19-Mar	0.0	50	
20-Mar		40	10.8
21-Mar	0.0	40	18.8
22-Mar	0.0	90	14.1
23-Mar	0.0	60	11.7
24-Mar		130	7.4
25-Mar	0.0	140	
26-Mar	0.0	140	4.6 7.5
27-Mar	0.0	60	10.5
28-Mar	12.0	60	6.6
29-Mar			
30-Mar	106 114.5	50 70	13.0
31-Mar	114.0	60	10.4
Mean	237		
Total			
Maximum	114.5		21.7
Minimum	0.0		4.6

<sup>\*\*\*</sup> unavailable

Rainfall measured in increment of 0.5 mm. Amount of < 0.5 mm cannot be detected

<sup>#</sup> missing (less than 24 hourly observations a day)

# Extract of Meteorological Observations for Tai Po Automatic Weather Station, March 2014

Date	Mean Pressure at M.S.L.	Air Temperature		ıre	Mean Dew Point Temperature	Rela	ative Humi	dity
	(hPa)	Max. (deg C)	Mean (deg C)	Min. (deg C)	(deg C)	Max. (%)	Mean (%)	Min. (%)
1-Mar	1014.6	21.8	19.6	18.3	17.6	96	88	81
2-Mar	1014.8	20.6	18.1	15.3	16.3	98	90	72
3-Mar	1017.2	16.2	15.6	14.8	13	96	85	77
4-Mar	1017.7	17.3	16.4	15.2	14.8	97	90	84
5-Mar	1018.9	16.9	16	15.1	13	96	83	69
6-Mar	1018.5	16	15.2	14.5	12.2	91	82	67
7-Mar	1020.7	15.1	14.6	14.3	11.9	90	84	78
8-Mar	1019	15.3	14.5	14	13.4	98	93	84
9-Mar	1021.3	14.4	13.4	12.4	11.5	97	88	81
10-Mar	1022.6	14.6	13.9	12.4	10.5	91	80	69
11-Mar	1020.5	15.7	15	14.1	12.2	94	83	76
12-Mar	1014.7	18.4	17	15.4	16.4	98	96	93
13-Mar	1016.4	22.6	20	17.5	14.6	99	73	52
14-Mar	1022.3	18.6	16.6	15.2	8.8	76	60	46
15-Mar	1022.3	16.9	15.7	14.9	8.7	79	64	47
16-Mar	1021.1	18.9	17.5	15.7	12.1	88	71	58
17-Mar	1018.9	21.8	19.4	17.4	17.5	96	89	80
18-Mar	1015.9	23.7	20.9	18.9	19.2	98	90	74
19-Mar	1013.5	24.9	21.9	19.4	19.6	97	87	69
20-Mar	1014.1	28.1	21	17.5	17.7	99	83	58
21-Mar	1020.7	17.5	15.9	15.1	8.9	72	64	57
22-Mar	1021.2	20.9	16.7	14.5	9.9	79	65	41
23-Mar	1022.1	21.2	18.1	15.8	11.1	82	65	45
24-Mar	1019.3	22.3	19.3	15.4	13.2	83	68	54
25-Mar	1015.5	24.6	21.1	17.8	16.5	89	75	59
26-Mar	1013.6	25.9	22.4	19.2	19	92	82	65
27-Mar	1012.5	27.2	22.8	19.2	19.8	95	84	68
28-Mar	1012	23	21.9	20.8	20.6	96	92	86
29-Mar	1011.1	22.8	21.7	20.8	20.7	98	94	82
30-Mar	1010.5	23.9	21.5	19.2	20.3	98	93	81
31-Mar	1009.6	20.3	19.5	18.5	19	99	97	92
Mean	1017.2	20.2	18.2	16.4	14.8	92	82	69
Maximum	1022.6	28.1	22.8	20.8	20.7	99	97	93
Minimum	1009.6	14.4	13.4	12.4	8.7	72	60	41

# Extract of Meteorological Observations for Tai Po Automatic Weather Station, March 2014

	I m . 1	I 5 141	3.6
	Total	Prevailing	Mean
Date	Rainfall	Wind	Wind
Butto	(mm)	Direction	(km/h)
		(degrees)	
1-Mar	****	***	****
2-Mar	****	***	****
3-Mar	****	***	****
4-Mar	****	***	****
5-Mar	****	***	****
6-Mar	****	***	****
7-Mar	****	***	****
8-Mar	****	***	****
9-Mar	****	***	****
10-Mar	****	***	****
11-Mar	****	***	****
12-Mar	****	***	****
13-Mar	****	***	****
14-Mar	****	***	****
15-Mar	****	***	****
16-Mar	****	***	****
17-Mar	****	***	****
18-Mar	****	***	****
19-Mar	****	***	****
20-Mar	****	***	****
21-Mar	****	***	****
22-Mar	****	***	****
23-Mar	****	***	****
24-Mar	****	***	****
25-Mar	****	***	****
26-Mar	****	***	****
27-Mar	****	***	****
28-Mar	****	***	****
29-Mar	****	***	****
30-Mar	****	***	****
31-Mar	****	***	****
Mean		***	****
Total	****		
Maximum	****		****
Minimum	****		****

<sup>\*\*\*</sup> unavailable

# missing (less than 24 hourly observations a day)

Rainfall measured in increment of 0.5 mm. Amount of < 0.5 mm cannot be detected

# Extract of Meteorological Observations for Sha Tin Automatic Weather Station, March 2014

Date	Mean Pressure at M.S.L.	Ai	Air Temperature		Mean Dew Point Temperature	Rela	ative Humi	dity
Duit	(hPa)	Max. (deg C)	Mean (deg C)	Min. (deg C)	(deg C)	Max. (%)	Mean (%)	Min. (%)
1-Mar	1014.5	22.6	20	18.5	17.5	98	86	78
2-Mar	1014.8	20.8	18	15.3	15.9	100	88	67
3-Mar	1017.4	15.6	14.9	14.2	12.5	93	85	74
4-Mar	1017.7	18.3	16.3	14.7	14.6	98	90	83
5-Mar	1018.9	16.8	15.9	14.9	12.3	98	79	66
6-Mar	1018.7	15.5	14.6	13.9	11.8	93	84	69
7-Mar	1020.8	14.6	14	13.5	11.6	94	86	79
8-Mar	1019	16	14.4	13.4	13.2	99	93	85
9-Mar	1021.1	14.9	13.5	12.3	10.6	90	83	77
10-Mar	1022.5	15.3	13.7	12.5	10	91	78	66
11-Mar	1020.4	15.9	14.9	13.5	11.9	93	82	75
12-Mar	1014.5	18.8	17.4	15.5	16.9	100	97	92
13-Mar	1016.3	22	19.9	17.5	13.9	100	71	51
14-Mar	1022.3	18.9	16.5	14.1	7.9	76	57	41
15-Mar	1022.3	16.8	15.6	13.9	7.7	83	61	42
16-Mar	1021.1	20.2	18	15.9	11.4	85	66	48
17-Mar	1018.9	22.5	19.8	17.6	17.6	96	88	77
18-Mar	1015.9	26.5	21.9	18.8	19.2	100	86	61
19-Mar	1013.5	27.8	22.5	18.6	19.2	98	83	59
20-Mar	1014.1	28.2	21.2	16.7	16.8	100	78	56
21-Mar	1020.7	16.7	15.3	14.4	8.3	71	63	57
22-Mar	1021.2	20.4	16.5	14.2	9.0	80	63	41
23-Mar	1022.1	22.1	18	15.2	10.3	82	62	39
24-Mar	1019.4	23.2	19.4	15.5	12.5	79	65	49
25-Mar	1015.5	26.2	21.4	17.4	15.7	92	71	49
26-Mar	1013.7	27.6	22.5	18.6	18.5	94	79	59
27-Mar	1012.6	29.3	23.2	18.6	19.2	97	80	52
28-Mar	1012.1	23.3	21.9	20.6	20.3	94	91	84
29-Mar	1011.2	23.6	21.8	20.5	20.4	98	92	78
30-Mar	1010.4	25.5	22.1	18.8	20.3	99	90	73
31-Mar	1009.7	21.5	19.8	18.4	18.9	99	95	86
Mean	1017.2	20.9	18.2	16	14.4	93	80	65
Maximum	1022.5	29.3	23.2	20.6	20.4	100	97	92
Minimum	1009.7	14.6	13.5	12.3	7.7	71	57	39

# Extract of Meteorological Observations for Sha Tin Automatic Weather Station, March 2014

	Total	Prevailing	Mean
	Rainfall	Wind	Wind
Date	(mm)	Direction	(km/h)
	(11111)	(degrees)	(111111)
1-Mar	0.0	30	5.8
2-Mar	0.0	80	6.3
3-Mar	0.0	90	10.3
4-Mar	0.5	110	7.5
5-Mar	0.0	10	7.8
6-Mar	0.0	90	9.4
7-Mar	0.5	90	7.8
8-Mar	0.5	90	7.4
9-Mar	1.5	10	7.0
10-Mar	2.5	80	7.2
11-Mar	0.5	90	9.1
12-Mar	1.5	50	5.3
13-Mar	0.5	20	7.0
14-Mar	0.0	30	8.4
15-Mar	0.0	110	4.6
16-Mar	0.0	110	5.7
17-Mar	0.0	40	4.9
18-Mar	0.0	60	4.4
19-Mar	0.0	60	4.5
20-Mar	0.0	40	7.7
21-Mar	0.0	30	10.5
22-Mar	0.0	90	8.8
23-Mar	0.0	80	8.3
24-Mar	0.0	110	7.1
25-Mar	0.0	70	5.0
26-Mar	0.0	190	4.2
27-Mar	0.0	60	6.4
28-Mar	0.0	100	6.7
29-Mar	26.0	40	4.5
30-Mar	146.5	40	7.6
31-Mar	110.5	350	6.6
Mean		90	6.9
Total	291		
Maximum	146.5		10.5
Minimum	0.0		4.2

<sup>\*\*\*</sup> unavailable

# missing (less than 24 hourly observations a day)

Rainfall measured in increment of 0.5 mm. Amount of < 0.5 mm cannot be detected

APPENDIX I
IMPACT DAYTIME CONSTRUCTION NOISE
MONITORING RESULTS AND THEIR
GRAPHICAL PRESENTATION

Location : NM1A (168 Shek Kwu Lung Village G/F- Façade)

Day time 07:00-19:00 hrs Normal Weekdays Impact Noise Monitoring Results

	Measured I	Noise Lev	el for 30-r	min, dB(A)	Baseline Noise	Corrected Construction	Limit Level,	Exceedance
Date	Start Time	Leq	L10	L90	Level, dB(A)	Noise Level, dB(A) **	dB(A)	(Y/N)
6-Mar-14	11:27	65.7	68.1	62.3	64.2	60.4	75	N
12-Mar-14	10:15	63.7	65.3	61.6	64.2	63.7	75	N
18-Mar-14	10:30	62.2	63.9	60.0	64.2	62.2	75	N
24-Mar-14	10:43	63.1	65.0	61.2	64.2	63.1	75	N

	Corrected Noise Level dB(A)
Average	62.5
Max	63.7
Min	60.4

Location: NM2 (38 Ha Wun Yiu G/F - Free Field)

Day time 07:00-19:00 hrs Normal Weekdays Impact Noise Monitoring Results

	Measured I	Noise Lev	el for 30-r	min, dB(A)	Baseline Noise	Corrected Construction	Limit Level,	Exceedance
Date	Start Time	Leq*	L10*	L90*	Level, dB(A)*	Noise Level, dB(A) **	dB(A)	(Y/N)
6-Mar-14	10:45	67.5	71.4	64.2	68.1	67.5	75	N
12-Mar-14	14:32	66.8	68.5	63.3	68.1	66.8	75	N
18-Mar-14	10:40	66.5	68.1	63.9	68.1	66.5	75	N
24-Mar-14	13:06	67.7	69.2	65.2	68.1	67.7	75	N

	Corrected
	Noise Level dB(A)
Average	67.2
Max	67.7
Min	66.5

<sup>\* +3</sup>dB(A) Façade effect correction included

<sup>\*\*</sup> Construction noise level is only calculated when Measured noise level (Leq) > Baseline noise level.

If Measured noise level < Baseline noise level, Corrected noise level = Measured noise level

Location: NM3 (Wong Shiu Chi Middle School Rooftop - Façade)

Day time 07:00-19:00 hrs Normal Weekdays Impact Noise Monitoring Results

	Measured I	Noise Lev	el for 30-r	nin, dB(A)	Baseline Noise	Corrected Construction	Limit Level,	Exceedance
Date	Start Time	Leq	L10	L90	Level, dB(A)	Noise Level, dB(A) **	dB(A) <sup>#</sup>	(Y/N)
6-Mar-14	10:38	66.5	69.1	63.7	64.8	61.6	70	N
12-Mar-14	13:48	65.8	67.4	63.1	64.8	58.9	70	N
18-Mar-14	13:00	65.2	67.0	62.0	64.8	54.6	70	N
24-Mar-14	10:54	65.7	67.3	62.2	64.8	58.4	70	N

	Corrected Noise Level dB(A)
Average	59.1
Max	61.6
Min	54.6

Location: NM4 (Uptown Plaza Block 4 Rooftop - Façade)

Day time 07:00-19:00 hrs Normal Weekdays Impact Noise Monitoring Results

	Measured	Noise Lev	el for 30-r	nin, dB(A)	Baseline Noise	Corrected Construction	Limit Level,	Exceedance
Date	Start Time	Leq	L10	L90	Level, dB(A)	Noise Level, dB(A) **	dB(A)	(Y/N)
6-Mar-14	9:49	65.9	68.6	62.6	67.4	65.9	75	N
12-Mar-14	13:06	67.0	68.5	63.9	67.4	67.0	75	N
18-Mar-14	11:25	65.6	67.3	61.9	67.4	65.6	75	N
24-Mar-14	10:06	65.2	66.9	63.2	67.4	65.2	75	N

	Corrected Noise Level dB(A)					
Average	66.0					
Max	67.0					
Min	65.2					

<sup># -</sup> Limit Level of 70dB(A) applies to education institutes while 65dB(A) applies during school examination period.

<sup>\*\*</sup> Construction noise level is only calculated when Measured noise level (Leq) > Baseline noise level.

If Measured noise level < Baseline noise level, Corrected noise level = Measured noise level

Location: NM5 (The Paragon Clubhouse Rooftop - Façade)

Day time 07:00-19:00 hrs Normal Weekdays Impact Noise Monitoring Results

	Measured	Noise Lev	/el for 30-ı	min, dB(A)	Baseline Noise	Corrected Construction	Limit Level,	Exceedance
Date	Start Time	Leq	L10	L90	Level, dB(A)	Noise Level, dB(A) **	dB(A)	(Y/N)
6-Mar-14	13:07	63.5	66.1	61.7	65.2	63.5	75	N
12-Mar-14	11:26	67.3	69.1	65.0	65.2	63.1	75	N
18-Mar-14	13:10	67.3	68.9	65.1	65.2	63.1	75	N
24-Mar-14	14:01	68.0	69.6	65.3	65.2	64.8	75	N

	Corrected Noise Level dB(A)					
Average	63.7					
Max	64.8					
Min	63.1					

Location: NM6 (PLK Tin Ka Ping Primary School near the entrance - Free Field)
Day time 07:00-19:00 hrs Normal Weekdays Impact Noise Monitoring Results

		Measured I	Noise Lev	el for 30-r	nin, dB(A)	Baseline Noise	Corrected Construction	Limit Level,	Exceedance
D	Date	Start Time	Leq*	L10*	L90*	Level, dB(A)*	Noise Level, dB(A) **	dB(A) <sup>#</sup>	(Y/N)
6-M	/lar-14	11:26	62.9	65.1	60.2	64.5	62.9	70	N
12-N	Mar-14	15:14	61.0	63.9	58.2	64.5	61.0	70	N
18-N	Mar-14	9:50	59.8	61.3	56.6	64.5	59.8	70	N
24-N	Mar-14	13:12	62.5	63.8	59.6	64.5	62.5	70	N

	Corrected Noise Level dB(A)
Average	61.7
Max	62.9
Min	59.8

#### Remarks

- \* +3dB(A) Façade effect correction included
- # Limit Level of 70dB(A) applies to education institutes while 65dB(A) applies during school examination period.
- \*\* Construction noise level is only calculated when Measured noise level (Leq) > Baseline noise level.

  If Measured noise level < Baseline noise level, Corrected noise level = Measured noise level

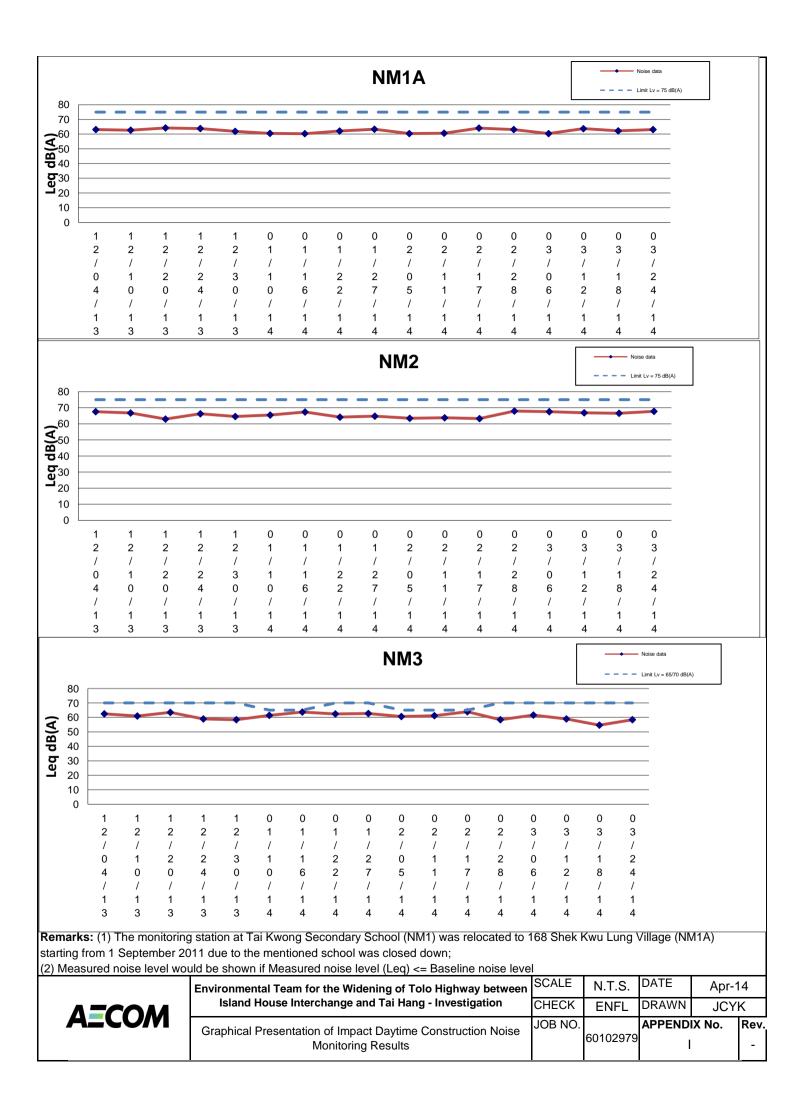
Location: NM7 (Riverain Bayside Switch Room Rooftop - Façade)
Day time 07:00-19:00 hrs Normal Weekdays Impact Noise Monitoring Results

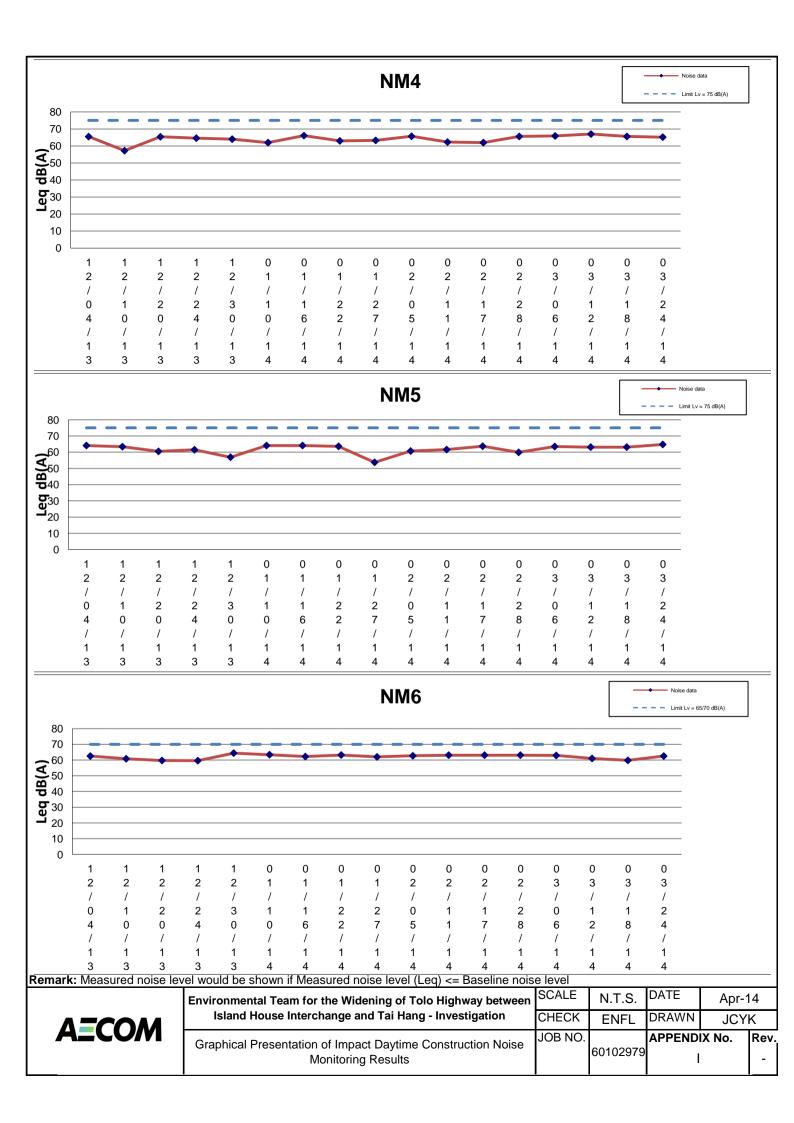
	Measured Noise Level for 30-min, dB(A)			nin, dB(A)	Baseline Noise	Corrected Construction	Limit Level,	Exceedance
Date	Start Time	Leq	L10	L90	Level, dB(A)	Noise Level, dB(A) **	dB(A)	(Y/N)
6-Mar-14	9:56	65.7	68.1	62.7	61.5	63.6	75	N
12-Mar-14	9:55	63.3	62.1	59.2	61.5	58.6	75	N
18-Mar-14	13:40	62.2	63.9	60.0	61.5	53.9	75	N
24-Mar-14	9:53	58.7	60.1	55.6	61.5	58.7	75	N

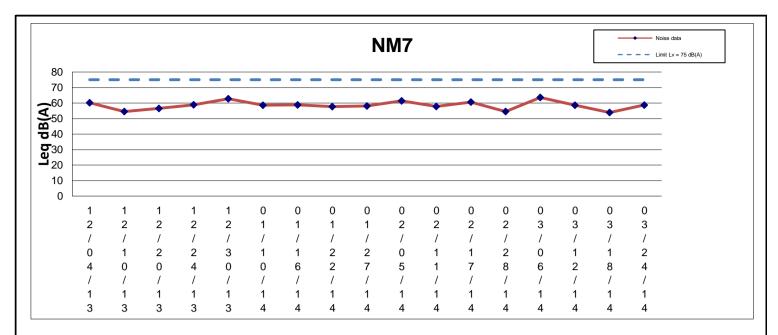
	Corrected Noise Level dB(A)			
Average	60.0			
Max	63.6			
Min	53.9			

#### Remarks

<sup>\*\*</sup> Construction noise level is only calculated when Measured noise level (Leq) > Baseline noise level. If Measured noise level < Baseline noise level, Corrected noise level = Measured noise level







Remark: Measured noise level would be shown if Measured noise level (Leq) <= Baseline noise level



Environmental Team for the Widening of Tolo Highway between	SCALE	N.T.S.	DATE	Apr-1	14	
Island House Interchange and Tai Hang - Investigation	CHECK	ENFL	DRAWN	JCY	K	
Graphical Presentation of Impact Daytime Construction Noise  Monitoring Results		60102979	APPENDI I	X No.	Rev.	

### APPENDIX J EVENT ACTION PLAN

# Appendix J – Event Action Plan

# Event / Action Plan for Air Quality

Event	Action					
	ET Leader	IEC	ER	Contractor		
Action Level						
Exceedance for one sample	Identify source;     Inform IEC and ER;     Repeat measurement to confirm finding;     Increase monitoring frequency to daily.	Check monitoring data submitted by ET;     Check Contractor's working method.	Notify Contractor.	Rectify any unacceptable practice;     Amend working methods if appropriate.		
Exceedance for two or more consecutive samples	<ol> <li>Identify source;</li> <li>Inform IEC and ER;</li> <li>Repeat measurements to confirm findings;</li> <li>Increase monitoring frequency to daily;</li> <li>Discuss with IEC and Contractor on remedial actions required;</li> <li>If exceedance continues, arrange meeting with IEC and ER;</li> <li>If exceedance stops, cease additional monitoring.</li> </ol>	<ol> <li>Check monitoring data submitted by ET;</li> <li>Check Contractor's working method;</li> <li>Discuss with ET and Contractor on possible remedial measures;</li> <li>Advise the ER on the effectiveness of the proposed remedial measures;</li> <li>Supervise Implementation of remedial measures.</li> </ol>	Confirm receipt of notification of failure in writing;     Notify Contractor;     Ensure remedial measures properly implemented.	1. Submit proposals for remedial actions to IEC within 3 working days of notification; 2. Implement the agreed proposals; 3. Amend proposal if appropriate.		

# Event / Action Plan for Air Quality

Event	Action							
Action Level	ET Leader	IEC	ER	Contractor				
Limit Level								
Exceedance for one sample	<ol> <li>Identify source;</li> <li>Inform IEC, ER, Contractor and EPD;</li> <li>Repeat measurement to confirm finding;</li> <li>Increase monitoring frequency to daily;</li> <li>Assess effectiveness of Contractor's remedial actions and keep IEC, EPD and ER informed of the results.</li> </ol>	<ol> <li>Check monitoring data submitted by ET;</li> <li>Check Contractor's working method;</li> <li>Discuss with ET and Contractor on possible remedial measures;</li> <li>Advise ER on the effectiveness of the proposed remedial measures;</li> <li>Supervise implementation of remedial measures.</li> </ol>	<ol> <li>Confirm receipt of notification of exceedance in writing;</li> <li>Notify Contractor;</li> <li>Ensure remedial measures properly implemented.</li> </ol>	<ol> <li>Take immediate action to avoid further exceedance;</li> <li>Submit proposals for remedial actions to IEC within 3 working days of notification;</li> <li>Implement the agreed proposals;</li> <li>Amend proposal if appropriate.</li> </ol>				
Exceedance for two or more consecutive samples	<ol> <li>Notify IEC, ER, Contractor and EPD;</li> <li>Identify source;</li> <li>Repeat measurement to confirm findings;</li> <li>Increase frequency to daily;</li> <li>Analyse Contractor's working procedures to determine possible mitigation to be;</li> <li>Arrange meeting with IEC and ER to discuss the remedial actions to be taken;</li> <li>Assess effectiveness of Contractor's remedial actions and keep IEC, EPD and ER informed of the results;</li> <li>If exceedance stops, cease additional monitoring.</li> </ol>	<ol> <li>Discuss amongst ER, ET, and Contractor on the potential remedial actions;</li> <li>Review Contractor's remedial actions whenever necessary to assure their effectiveness and advise ER accordingly;</li> <li>Supervise the implementation of remedial measures.</li> </ol>	<ol> <li>Confirm receipt of notification of exceedance in writing;</li> <li>Notify Contractor;</li> <li>In consultation with the IEC, agree with the Contractor on the remedial measures to be implemented;</li> <li>Ensure remedial measures properly implemented;</li> <li>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.</li> </ol>	<ol> <li>Take immediate action to avoid further exceedance;</li> <li>Submit proposals for remedial actions to IEC within 3 working days of notification;</li> <li>Implement the agreed proposals;</li> <li>Resubmit proposals if problem still not under control;</li> <li>Stop the relevant portion of works as determined by ER until the exceedance is abated.</li> </ol>				

### Event / Action Plan for Noise Impact

Event	Event Action			
Limit Level	ET Leader	IEC	ER	Contractor
Action Level	<ol> <li>Notify IEC and the Contractor.</li> <li>Carry out investigation.</li> <li>Report the results of investigation to IEC and the Contractor.</li> <li>Discuss with the Contractor and formulate remedial measures.</li> <li>Increase monitoring frequency to check mitigation effectiveness.</li> </ol>	<ol> <li>Review with analysed results submitted by ET.</li> <li>Review the proposed remedial measures by the Contractor and advise ER accordingly.</li> <li>Supervise the implement of remedial measures.</li> </ol>	<ol> <li>Confirm receipt of notification of failure in writing.</li> <li>Notify the Contractor.</li> <li>Require the Contractor to propose remedial measures for the analysed noise problem.</li> <li>Ensure remedial measures are properly implemented.</li> </ol>	Submit noise mitigation proposals to IEC.     Implement noise mitigation proposals.
Limit Level	<ol> <li>Notify, IEC, ER, EPD and the Contractor.</li> <li>Identify the source.</li> <li>Repeat measurement to confirm findings.</li> <li>Increase monitoring frequency.</li> <li>Carry out analysis of Contractor's working procedures to determine possible mitigation to be implemented.</li> <li>Inform IEC, ER, and EPD the causes &amp; actions taken for the exceedances.</li> <li>Assess effectiveness of the Contractor's remedial actions and keep IEC, EPD and ER informed of the results.</li> <li>If exceedance stops, cease additional monitoring.</li> </ol>	<ol> <li>Discuss amongst ER, ET         Leader and the Contractor on         the potential remedial actions.</li> <li>Review the Contractor's         remedial actions whenever         necessary to assure their         effectiveness and advise ER         accordingly.</li> <li>Supervise the implementation         of remedial measures.</li> </ol>	<ol> <li>Confirm receipt of notification of failure in writing.</li> <li>Notify the Contractor.</li> <li>Require the Contractor to propose remedial measures for the analysed noise problem.</li> <li>Ensure remedial measures are properly implemented.</li> <li>If exceedance continues, consider what activity of the work is responsible and instruct the Contractor to stop that activity of work until the exceedance is abated.</li> </ol>	<ol> <li>Take immediate action to avoid further exceedance.</li> <li>Submit proposals for remedial actions to IEC within 3 working days of notification.</li> <li>Implement the agreed proposals.</li> <li>Resubmit proposals if problem still not under control.</li> <li>Stop the relevant activity of works as determined by the ER until the exceedance is abated.</li> </ol>

### APPENDIX K SITE INSPECTION SUMMARIES



### **Site Inspection Summary**

Contract No.	HY/2008/09 (Between Island House Interchange and Ma Wo)
Date:	5 March 2014
Time:	14:00
Inspection No.:	421

Contract No.	111/2000/03 (Between Island House Interenange and Ma Wo)
Date:	5 March 2014
Time:	14:00
Inspection No.:	421
Non-compliance	
Nil	
Observations	
Follow Up Ob	<u>oservations</u>
1. Retained tree	es are fenced off.
New Observa	<u>ations</u>
2. The Contract	or was reminded to clear the oil stain on the ground.
Remarks	
Nii	

INII			

## **EM&A Environmental Inspection Record**



WIDENING OF TOLO HIGHWAY (STAGE 1) BETWEEN ISLAND HOUSE INTERCHANGE AND TAI HANG - INVESTIGATION

Inspection Information HY/2009/08 (Between Ma Wo and Tai Hang) Contract No. Date: 6 March 2014 Time: 09:30 Inspection No.: 422 Non-compliance Nil Observations Follow Up Observations 1. Chemical containers are removed. **New Observations** Nil.

Remarks		
Nil		



	me production and the contraction of the contractio	
Contract No.	HY/2008/09 (Between Island House Interchange and Ma Wo)	
Date:	12 March 2014	
Time:	09:15	
Inspection No.:	423	

	· .	12 11161 21 1	
Tim	e:	09:15	
Insp	ection No.:	423	
	-compliance		
	Nil		
Obs	ervations		
	Follow Up C	<u>bservations</u>	
1.	Soil was use	ed to soak the stained oil on the ground (Closed).	
	New Observ	rations examination of the second of the sec	
	Nil.		
Ren	Remarks		
	Nil		

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## **EM&A Environmental Inspection Record**

Nil



WIDENING OF TOLO HIGHWAY (STAGE 1) BETWEEN ISLAND HOUSE INTERCHANGE AND TAI HANG - INVESTIGATION

Inspection Information

Contract No. HY/2009/08 (Between Ma Wo and Tai Hang)

Date: 13 March 2014

Time: 14:00 Inspection No.: 424 Non-compliance Nil Observations Follow Up Observations Nil. **New Observations** Nil. Remarks

Nil



EM&A Environmental Inspection Record
WIDENING OF TOLO HIGHWAY (STAGE 1)
BETWEEN ISLAND HOUSE INTERCHANGE AND TAI HANG - INVESTIGATION

Inspection Information Contract No. HY/2008/09 (Between Island House Interchange and Ma Wo) 19 March 2014 Date:

09:15 Time: Inspection No.: 425 Non-compliance Nil Observations Follow Up Observations Nil. **New Observations** Nil. Remarks

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Inspection Information

Contract No.	HY/2009/08 (Between Ma Wo and Tai Hang)
Date:	20 March 2014
Time:	14:00
Inspection No.:	426

Date		20 March 2014
Time	):	14:00
	ection No.:	426
Non-	compliance	
11011	compilarios	
	Nil	
	1411	
Obse	ervations	
	Follow Up O	bservations
	-	
	Nil.	
	New Observ	vations
	INCW ODSCIV	<u>ations</u>
1.	The Contract	ctor was reminded to clear the deposited soil at road edges of Bridge 18 next to the works
	areas regula	ırlv.
	an care regule	··· <b>/·</b>
Rem	arks	
	Nil	

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	me production and the contraction of the contractio	
Contract No.	HY/2008/09 (Between Island House Interchange and Ma Wo)	
Date:	26 March 2014	
Time:	09:15	
Inspection No.:	427	

Inspection No.:	427			
mapection No	441			
Non-compliance				
Nil				
Observations				
Follow Up O	bservations			
Nil.				
New Observ	ations			
INCW ODSCIV	ations -			
Nil.				
I VIII.				
Remarks				
Nil				
INII				



Contract No.	HY/2009/08 (Between Ma Wo and Tai Hang)
Date:	27 March 2014
Time:	14:00
Inspection No.:	428

Date:		27 March 2014			
Time	<b>)</b> :	14:00			
	ection No.:	428			
Non-	-compliance				
11011	00111/01101100				
	Nil				
Obse	ervations				
	Follow Up O	<u>bservations</u>			
1.	The deposite	ed soil at road edges of Bridge 18 was cleared (Closed).			
	•				
	New Observ	rations			
	11011 000011	<del>utoro</del>			
2.	The Contract	tor was reminded to clear the construction materials next to the trees or fence off the trees			
	for protection				
-					
Rem	Remarks				
	Nil				

APPENDIX L
STATISTICS ON COMPLAINTS,
NOTIFICATION OF SUMMONS AND
SUCCESSFUL PROSECUTIONS

Appendix L
Statistics on Complaints, Notifications of Summons and Successful Prosecutions

	Date Received	Subject	Status	Total no. followed up by ET this month	Total no. followed up by ET since project commencement
Environmental complaints	27 February 2014 (Follow-up)	EPD referred a follow-up complaint from a resident of Ma Wo on 27 February 2014. The complainant said that the Contractor caused serious noise nuisance at non-restricted hours.	Closed	2	37
	25 March 2014 (Follow-up)	EPD referred a follow-up complaint from a resident of Ma Wo Tsuen on 25 March 2014. The complaint is about the dust emission at the construction site of the Tolo Highway widening construction works at Ma Wo. The complainant complained that there was insufficient water spraying, so dust was generated and serious nuisance was caused. He expressed that he has complained for three years and no improvement has been observed.	Closed		
Notification of summons	-	-	-	0	0

	Date Received	Subject	Status	Total no. followed up by ET this month	Total no. followed up by ET since project commencement
Successful Prosecutions	-	-	-	0	0