

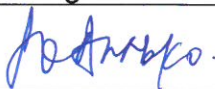

Environmental Protection Department

Contract No. HY/2012/06

**Widening of Fanling Highway
- Tai Hang to Wo Hop Shek
Interchange**

**Annual EM&A Report
for November 2013 to October 2014**

[11/2014]

	Name	Signature
Prepared & Checked:	Joanne Ko	
Reviewed & Approved:	Y W Fung	

Version:	Rev. 0	Date: 28 November 2014
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28 November 2014
By Fax (2805 5028) & Post

Dear Sir,

Attn: Mr. James Penny

Environmental Monitoring and Audit (EM&A) for Widening of Tolo Highway/Fanling Highway between Island House Interchange and Fanling Stage 2 (between Tai Hang to Wo Hop Shek Interchange) Environmental Permit No. EP-324/2008/B Annual EM&A Report for November 2013 to October 2014 for the portion of Stage 2 works under Contract No. HY/2012/06

We refer to the Annual EM&A Report for November 2013 to October 2014 for the Project received on 24 and 28 November 2014 submitted by ET via email. We confirm we have no comment.

Yours faithfully
for MOTT MACDONALD HONG KONG LIMITED

A handwritten signature in blue ink, appearing to read "Terence Kong".

Terence Kong
Independent Environmental Checker

c.c. HyD – Mr. Chung Lok Chin / Mr. Tang Man Kai (Fax: 2714 5198)
AECOM – Mr. Y W Fung (Fax:2891 0305)

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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). An Environmental Impact Assessment (EIA) Report (the approved EIA Report) together with an Environmental Monitoring and Audit (EM&A) Manual (the approved EM&A Manual) were completed and approved under the EIAO on 14 July 2000 (Register Number: EIA-043/2000).

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.

The Project is a designated project and governed by an Environmental Permit (EP-324/2008) issued by the EPD on 23 December 2008. Subsequently, the EPD issued a Variation of Environmental Permit (EP-324/2008/A) (VEP) on 31 January 2012. The VEP (EP-324/2008/B) was subsequently granted on 17 March 2014 which superseded the previous EP (EP-324/2008/A).

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). Stage 2 would be implemented under two works contracts. Contract No. HY2012/06 “Widening of Fanling Highway – Tai Hang to Wo Hop Shek Interchange” and the entrusted portion to CEDD under Contract No. CV/2012/09 “Liantang/Heung Yuen Wai Boundary Control Point Site Formation and Infrastructure Works – Contract 3”. This report focuses on Contract No. HY2012/06 “Widening of Fanling Highway – Tai Hang to Wo Hop Shek Interchange” in Stage 2 of the Project only.

Pursuant to the EP (EP-324/2008/B) Condition 2.7, the Capture Survey Trip Report for Ma Wat River Northern Meander (Version 2) for the Project was submitted on 24 December 2013 by the Environmental Team (ET) and verified by the Independent Environmental Checker (IEC) on 6 January 2014.

The construction phase of the Contract under the EP and the Environmental Monitoring and Audit (EM&A) programme of the contract commenced on 21 November 2013. 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 November 2013 and 31 October 2014. As informed by the Contractor, construction activities in the reporting period were:-

- Site clearance;
- Ground investigation;
- Construction of site accommodation;
- Tree felling and transplanted;
- Piling works;
- Pipe laying;
- Retaining wall construction;
- Excavation;
- Backfilling;
- Drainage;
- Temporary bridge construction;
- Noise barrier construction;
- Houses demolition; and
- Bridge demolition.

Reporting Change

There was no reporting change required in the reporting period.

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 period.

Breaches of Action and Limit Levels for Noise

No Action Level exceedance of construction noise was recorded in the reporting period since no noise complaints related to 0700 – 1900 hours on normal weekdays were received.

Two (2) Limit Level exceedances were recorded on 12 and 18 June 2014 respectively for noise monitoring at M3 in the reporting period. The exceedances were considered non-project-related. The details of exceedance are given in Appendix M of the Monthly EM&A Report of June 2014.

1 INTRODUCTION

1.1 Project Organization and Contacts of Key Management

1.1.1 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 (Hyder-Arup-Black & Veatch Joint Venture)	Chief Resident Engineer	Edwin Chung	6115 0818	2638 0950
IEC (Mott MacDonald Hong Kong Limited)	Independent Environmental Checker	Terence Kong	2828 5919	2827 1823
Contractor (China State Construction Engineering (Hong Kong) Limited)	Environmental Officer	Michael Tsang	9277 4956	2672 2501
		C C Chow	9679 6315	2672 2501
ET (AECOM Asia Company Limited)	ET Leader	Y W Fung	3922 9393	3922 9797

1.2 Programme

1.2.1 The Construction Programme is shown in Appendix B.

1.3 Summary of Construction Works

1.3.1 Details of the construction works carried out by the Contractor in this reporting period are listed below:-

- Site clearance;
- Ground investigation;
- Construction of site accommodation;
- Tree felling and transplanted;
- Piling works;
- Pipe laying;
- Retaining wall construction;
- Excavation;
- Backfilling;
- Drainage;
- Temporary bridge construction;
- Noise barrier construction;
- Houses demolition; and
- Bridge demolition.

- 1.3.2 The general layout plan of the Project site showing the contract areas is shown in Figure 1.1.
- 1.3.3 The environmental mitigation measures implementation schedule are presented in Appendix C.

2 ENVIRONMENTAL MONITORING AND AUDIT REQUIREMENTS

2.1 Monitoring Parameters

- 2.1.1 The updated EM&A Manual has designated 1 air quality monitoring station and 2 noise monitoring stations to monitor environmental impacts on air quality and noise due to Stage 2 of the Project.
- 2.1.2 The updated EM&A Manual also requires environmental site inspections for air quality, noise, water quality, chemical, waste management, ecology and landscape and visual impacts.

2.2 Monitoring Locations

- 2.2.1 For air quality monitoring, the monitoring station was set up at Fanling Government Secondary School, in accordance with updated EM&A Manual. The location is shown in Figure 1.2a.
- 2.2.2 For noise monitoring, the monitoring stations M2 and M3 were set up at West Tai Wo and Fanling Government Secondary School respectively in accordance with updated EM&A Manual. Figure 1.2a-b shows the locations of the monitoring stations.

2.3 Environmental Quality Performance Limits (Action/Limit Levels)

- 2.3.1 The environmental quality performance limits (i.e. Action/Limit Levels) of air quality monitoring were derived from the baseline air quality monitoring results at the monitoring station (AM2); while the environmental quality performance limits of noise monitoring were defined in the EM&A Manual.
- 2.3.2 The environmental quality performance limits are given in Appendix D.

2.4 Environmental Mitigation Measures

- 2.4.1 Relevant environmental mitigation measures were stipulated in the Particular Specification and EP for the Contractor to adopt. A list of environmental mitigation measures and their implementation statuses are given in Appendix C.

2.5 Environmental Impact Hypotheses Tested

- 2.5.1 The EIA Report concluded that with proper mitigation measures implemented, fugitive dust emission during the construction phase would be controlled and will not exceed the acceptable criteria.
- 2.5.2 For construction noise, exceedances were predicted only at 2 schools (SR41 Wong Shiu Chi Middle School and SR45 HK Teacher's Association Secondary School) but they are out of the scope of this EM&A Programme. Hence, the EIA did not anticipate any noise exceedances during the construction phase within the scope of this EM&A Programme.
- 2.5.3 The above criteria have been tested under this EM&A Programme during the reporting period.

3 AIR QUALITY MONITORING

- 3.1.1 In accordance with the updated EM&A Manual, baseline 1-hour and 24-hour TSP levels at one air quality monitoring station was 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.
- 3.1.2 The weather was mostly sunny, with several fine, cloudy and rainy days in the reporting period. Weather information including the wind speed and wind direction is annexed in Appendix F. The information was obtained from the Hong Kong Observatory Tai Po and Tai Mei Tuk Automatic Weather Stations.
- 3.1.3 The monitoring results for 1-hour TSP and 24-hour TSP monitoring are summarized in Tables 3.1 and 3.2 respectively. Detailed impact air quality monitoring results are presented in Appendix E.

Table 3.1 Summary of 1-hour TSP Monitoring Results in the Reporting Period

Location	Average ($\mu\text{g}/\text{m}^3$)	Range ($\mu\text{g}/\text{m}^3$)	Action Level ($\mu\text{g}/\text{m}^3$)	Limit Level ($\mu\text{g}/\text{m}^3$)
AM2 (Fanling Government Secondary School)	76.9	61.7 – 89.6	317.8	500

Table 3.2 Summary of 24-hour TSP Monitoring Results in the Reporting Period

Location	Average ($\mu\text{g}/\text{m}^3$)	Range ($\mu\text{g}/\text{m}^3$)	Action Level ($\mu\text{g}/\text{m}^3$)	Limit Level ($\mu\text{g}/\text{m}^3$)
AM2 (Fanling Government Secondary School)	45.6	0.2 – 176.1	200.7	260

- 3.1.4 The major dust sources in the reporting period included construction activities from Stage 2 of the Project, as well as nearby traffic emissions.
- 3.1.5 All 1-hour and 24-hour TSP results were below the Action and Limit Level in the reporting period.
- 3.1.6 Detailed impact air quality monitoring results are presented in Appendix E.

4 NOISE MONITORING

- 4.1.1 In accordance with the EM&A Manual, impact noise monitoring was conducted for at least once per week during the construction phase of the Contract.
- 4.1.2 The monitoring results for construction noise are summarized in Table 4.1 and the monitoring data are provided in Appendix G.

Table 4.1 Summary of Construction Noise Monitoring Results in the Reporting Period

	Average (dB(A))	Range (dB(A))	Limit Level (dB(A))
	$L_{\text{eq}} (30 \text{ mins})$	$L_{\text{eq}} (30 \text{ mins})$	$L_{\text{eq}} (30 \text{ mins})$
M2*	68.0	64.9 – 72.9	75
M3 [#]	64.6	60.1 – 69.7	65/70

*+3dB(A) Façade correction included

Limit Level of 70dB(A) applies to education institutes while 65dB(A) applies during school examination period.

- 4.1.3 The major noise sources during the noise monitoring included nearby road traffic noise.
- 4.1.4 There was no noise complaint related to 0700 – 1900 hours on normal weekdays was received and followed up by Environmental Team in the reporting period. Hence, no Action Level exceedance was recorded.
- 4.1.5 Two (2) Limit Level exceedances were recorded on 12 and 18 June 2014 respectively for noise monitoring at M3 in the reporting period. The exceedances were considered non-project-related. The details of exceedance are given in Appendix M of the Monthly EM&A Report of June 2014.
- 4.1.6 The graphical plots of the trends of the monitoring results are provided in Appendix G.

5 ADVICE ON THE SOLID AND LIQUID WASTE MANAGEMENT STATUS

- 5.1.1 As advised by the Contractor, 10,986 m³ of inert C&D material was disposed of as public fill to Tuen Mun 38 (of which 0m³ was broken concrete), while 965 m³ of general refuse was disposed of at NENT landfill. 507 kg of paper/cardboard packaging, 0 kg of plastics and 28 kg of metals were collected by recycling contractors in the reporting period. 3,560 m³, 708 m³, and 6,566 m³ of inert C&D materials were reused on site, in other projects and in NENT for backfilling purpose respectively. 0kg of chemical wastes was collected by licensed contractors in the reporting period.
- 5.1.2 The actual amounts of different types of waste generated by the activities of the Project in the reporting period are summarized in Table 5.1.

Table 5.1 Summary of Waste Flow Table

Waste Type	Actual Amount	Disposal/Reuse Locations
Inert C&D materials	10,986 m ³ (of which 0m ³ was broken concrete)	Tuen Mun 38
General refuse	965 m ³	NENT Landfill
Paper/cardboard packaging	507 kg	Recycling Contractors
Plastics	0 kg	Recycling Contractors
Metals	28 kg	Recycling Contractors
C&D materials reused on site	3,560 m ³	Site Area
C&D materials reused in other projects	708 m ³	Other projects
C&D materials reused in NENT for backfilling	6,566 m ³	NENT Landfill
Chemical wastes	0kg	Licensed Contractors

6 SUMMARY OF EXCEEDANCES OF THE ENVIRONMENTAL QUALITY PERFORMANCE LIMIT

- 6.1.1 All 1-hour and 24-hour TSP monitoring results complied with the Action / Limit Levels in the reporting period.
- 6.1.2 For construction noise, no Action Level exceedance was recorded. Two (2) Limit Level exceedances were recorded on 12 and 18 June 2014 respectively for noise monitoring at M3 in the reporting period.

7 SUMMARY OF COMPLAINTS, NOTIFICATIONS OF SUMMONS AND SUCCESSFUL PROSECUTIONS

- 7.1.1 One (1) noise-and-odour-related complaint was received on 19 December 2013 and followed up by the Environmental Team in the reporting period. The full complaint investigation report is annexed in Appendix M of the Monthly EM&A Report for December 2013.
- 7.1.2 One (1) air-and-odour-related complaint was received on 24 February 2014 and followed up by the Environmental Team in the reporting period. The full complaint investigation report is annexed in Appendix M of the Monthly EM&A Report for February 2014.
- 7.1.3 One (1) air-related complaint was received on 23 October 2014 and followed up by the Environmental Team in the reporting period. The full complaint investigation report is annexed in Appendix M of the Monthly EM&A Report for October 2014.
- 7.1.4 No notification of summons and successful prosecution was received in the reporting period.
- 7.1.5 The statistics on complaints, notifications of summons and successful prosecutions are summarized in Appendix H.
- 7.1.6 A 24-hour complaint hotline at 6628 8366 has been established for the Project. The hotline number is displayed at the site entrances, fencings and project signboards, as well as printed on publications such as newsletters for the public.

8 REVIEW OF THE VALIDITY OF THE EIA/ERR PREDICTIONS

- 8.1.1 All the air quality monitoring results in the reporting period were below the Action and Limit Levels. The result was in line with the Environmental Impact Assessment (EIA) and Environmental Review Report (ERR) prediction that dust generation would be controlled and would not exceed the acceptable criteria, with proper implementation of the recommended dust mitigation measures.
- 8.1.2 Two (2) Limit Level exceedances were recorded on 12 and 18 June 2014 respectively for noise monitoring at M3 in the reporting period. The exceedances were considered non-project-related. As a result, this is generally in line with the EIA and ERR prediction that with the implementation of noise mitigation measures, the construction noise from the Project works will meet the stipulated criterion at the residential NSRs and at a majority of the education institutions.

9 REVIEW OF THE EFFECTIVENESS AND EFFICIENCY OF MITIGATION MEASURES

- 9.1.1 The impact air quality and noise monitoring programme ensured that any environmental impacts to the receivers would be readily detected and timely actions could be taken to rectify any non-compliance. The environmental monitoring results indicated that the construction activities in general were in compliance with the relevant environmental requirements and were environmentally acceptable. The weekly site inspections ensured that all the environmental mitigation measures recommended in the EIA/ERR were effectively implemented. Despite the minor deficiencies found during site audits, the Contractor has taken appropriate actions to rectify deficiencies within a reasonable timeframe. Therefore, the effectiveness and efficiency of the mitigation measures were considered high in most of the time.
- 9.1.2 For all the parameters under monitoring as mentioned in Section 8, the measured levels were in line with the EIA and ERR predictions generally. This indicates that the mitigation measures were effectively and efficiently implemented.

10 REVIEW OF SUCCESS OF EM&A PROGRAMME

- 10.1.1 The environmental monitoring methodology was considered well established as the monitoring results were found in line with the EIA predictions.
- 10.1.2 As effective follow-up actions were promptly taken once exceedances were recorded, no further exceedance occurred. The EM&A programme was considered successfully and adequately conducted during the course of the reporting period.

11 COMMENTS, RECOMMENDATIONS AND CONCLUSIONS

11.1 Comments

- 11.1.1 According to the environmental site inspections performed in the reporting period, the following comments are made to the Contractor for precautionary and rectification purposes:

Air Quality Impact

- 11.1.2 The Contractor should maintain effective wheel washing facilities and clear the mud trails left on public road.
- 11.1.3 The Contractor should spray the stockpiles with water or cover them entirely by tarpaulin sheets for dust suppression.
- 11.1.4 The Contractor was reminded to spray water on main haul roads to maintain the surfaces wet and suppress dust. (Reminder)

Construction Noise Impact

- 11.1.5 The Contractor should re-position the generator and air compressors to reduce the noise generated to the house nearby.
- 11.1.6 The Contractor should further wrap the upper part of the breaker with absorptive materials to minimize noise generation.

Water Quality Impact

- 11.1.7 The Contractor should review measures to prevent silt and debris from depositing in drainage systems and clear the muddy water in the U-channel and public road.
- 11.1.8 The Contractor was reminded to divert muddy water to desilting facilities prior to discharge. (Reminder)
- 11.1.9 The Contractor should clear the muddy water and add sand bundings near the site boundary to prevent the discharge of muddy water when necessary.

Chemical and Waste Management

- 11.1.10 The Contractor should label the chemical containers properly.
- 11.1.11 The Contractor should close all the gaps between the drip tray and the generator.
- 11.1.12 The Contractor should educate workers to recycle wastes properly and clear the refuse in the recycle bins regularly.
- 11.1.13 The Contractor was reminded to use absorptive materials to soak leaked oil, if any, when maintaining the power pack. (Reminder)
- 11.1.14 The Contractor should clear oil stains on the ground and prevent oil leakage to air, soil and water bodies.
- 11.1.15 The Contractor should provide drip trays to chemicals and generator to prevent any oil leakage.
- 11.1.16 The Contractor should clear the general refuse regularly to maintain site hygiene.

Landscape and Visual Impact

- 11.1.17 No adverse observation was identified in the reporting month.

Miscellaneous

- 11.1.18 The Contractor should clear the stagnant water to prevent mosquito breeding.

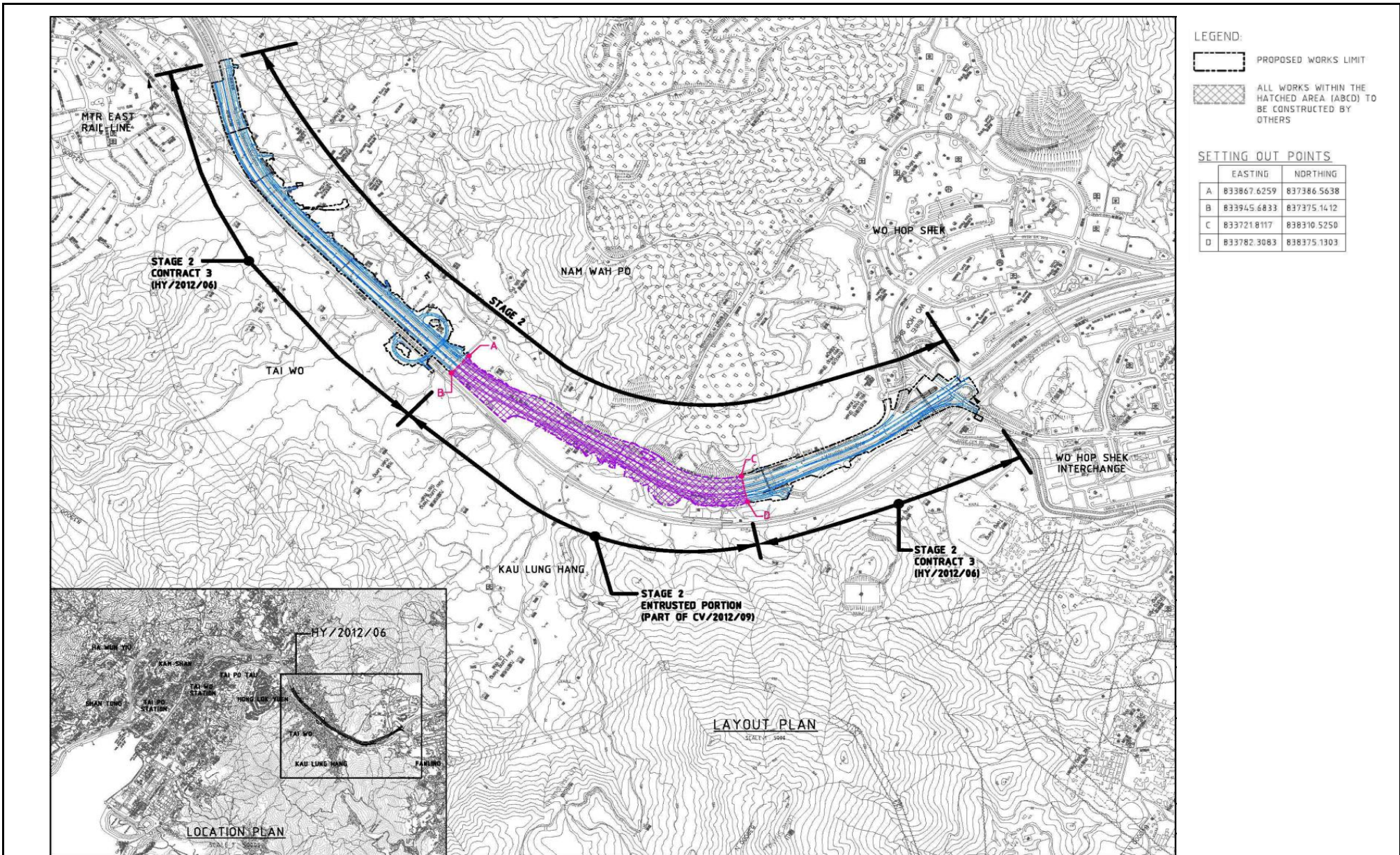
11.2 Recommendations

- 11.2.1 The impact air quality and noise monitoring programme ensures that any deterioration in environmental condition is readily detected and timely actions are taken to rectify any non-compliances. Assessment and analysis of monitoring results collected demonstrated the environmental acceptability of the Project. The weekly environmental site inspections ensure that all the environmental mitigation measures recommended in the ERR are effectively implemented.
- 11.2.2 The EM&A programme effectively monitored the environmental impacts from the construction activities and no particular recommendations were advised for the improvement of the programme.

11.3 Conclusions

- 11.3.1 All 1-hour and 24-hour TSP monitoring results complied with the Action / Limit Levels in the reporting period.
- 11.3.2 For construction noise, no Action Level exceedance was recorded. Two (2) Limit Level exceedances were recorded on 12 and 18 June 2014 respectively for noise monitoring at M3 in the reporting period.
- 11.3.3 One (1) noise-and-odour-related complaint was received on 19 December 2013 and followed up by the Environmental Team in the reporting period. The full complaint investigation report is annexed in Appendix M of the Monthly EM&A Report for December 2013.
- 11.3.4 One (1) air-and-odour-related complaint was received on 24 February 2014 and followed up by the Environmental Team in the reporting period. The full complaint investigation report is annexed in Appendix M of the Monthly EM&A Report for February 2014.
- 11.3.5 One (1) air-related complaint was received on 23 October 2014 and followed up by the Environmental Team in the reporting period. The full complaint investigation report is annexed in Appendix M of the Monthly EM&A Report for October 2014.
- 11.3.6 No notification of summons and successful prosecution was received in the reporting period.

FIGURES



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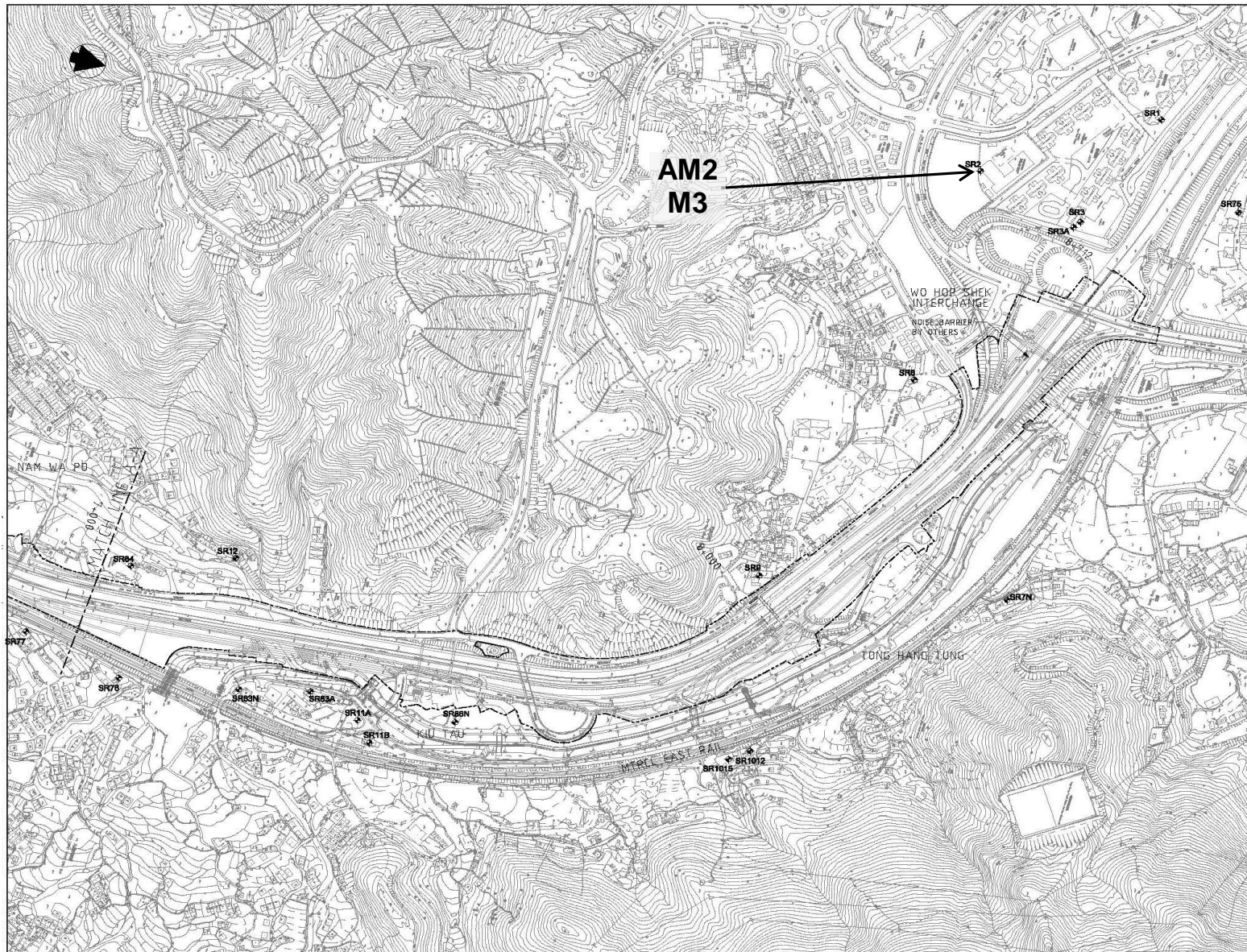
CONTRACT NO. HY/2012/06
 WIDENING OF FANLING HIGHWAY
 - TAI HANG TO WO HOP SHEK INTERCHANGE



Layout Plan

Date: Dec 2013

Figure 1.1



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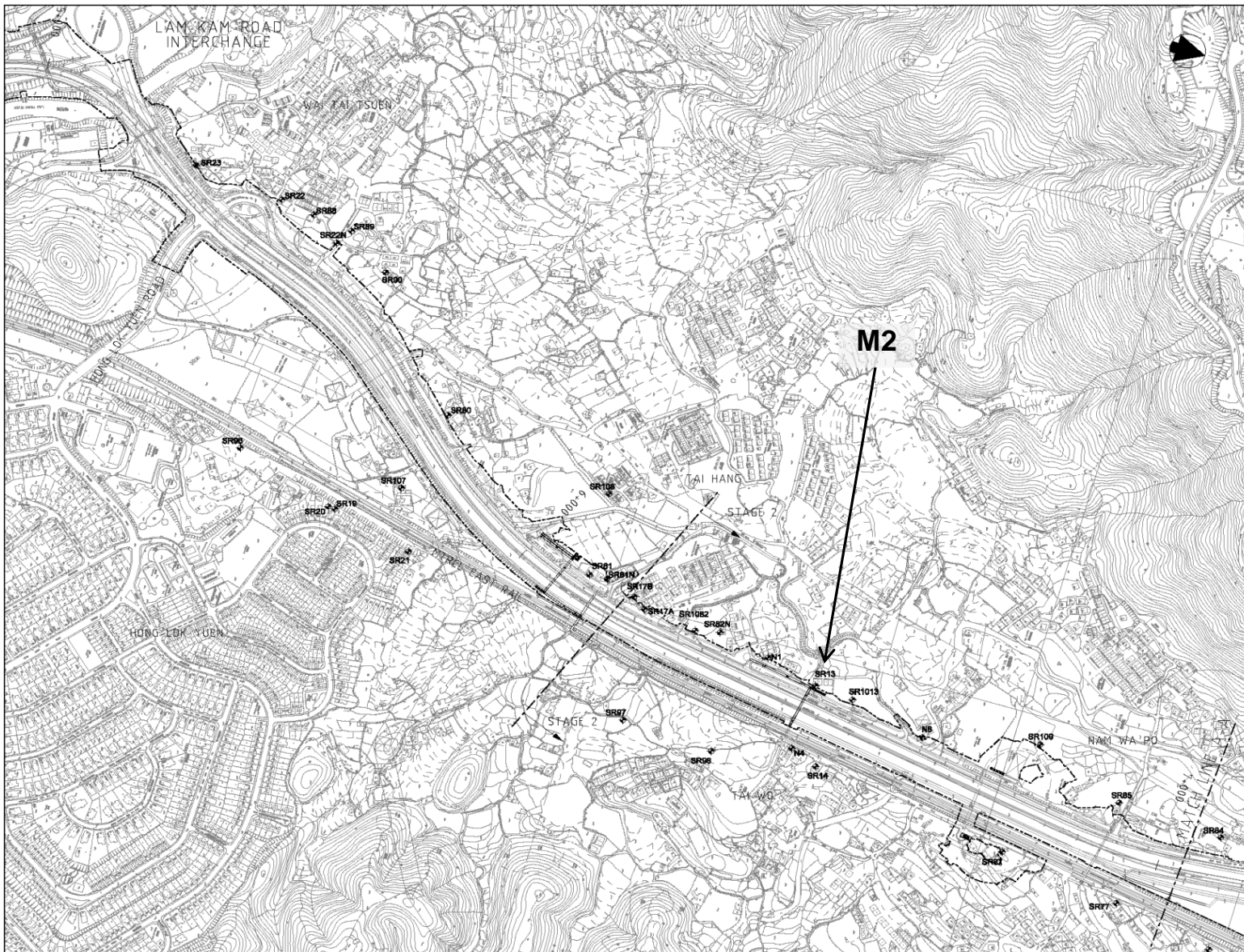
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Locations of Monitoring Station

Date: Dec 2013

Figure 1.2a



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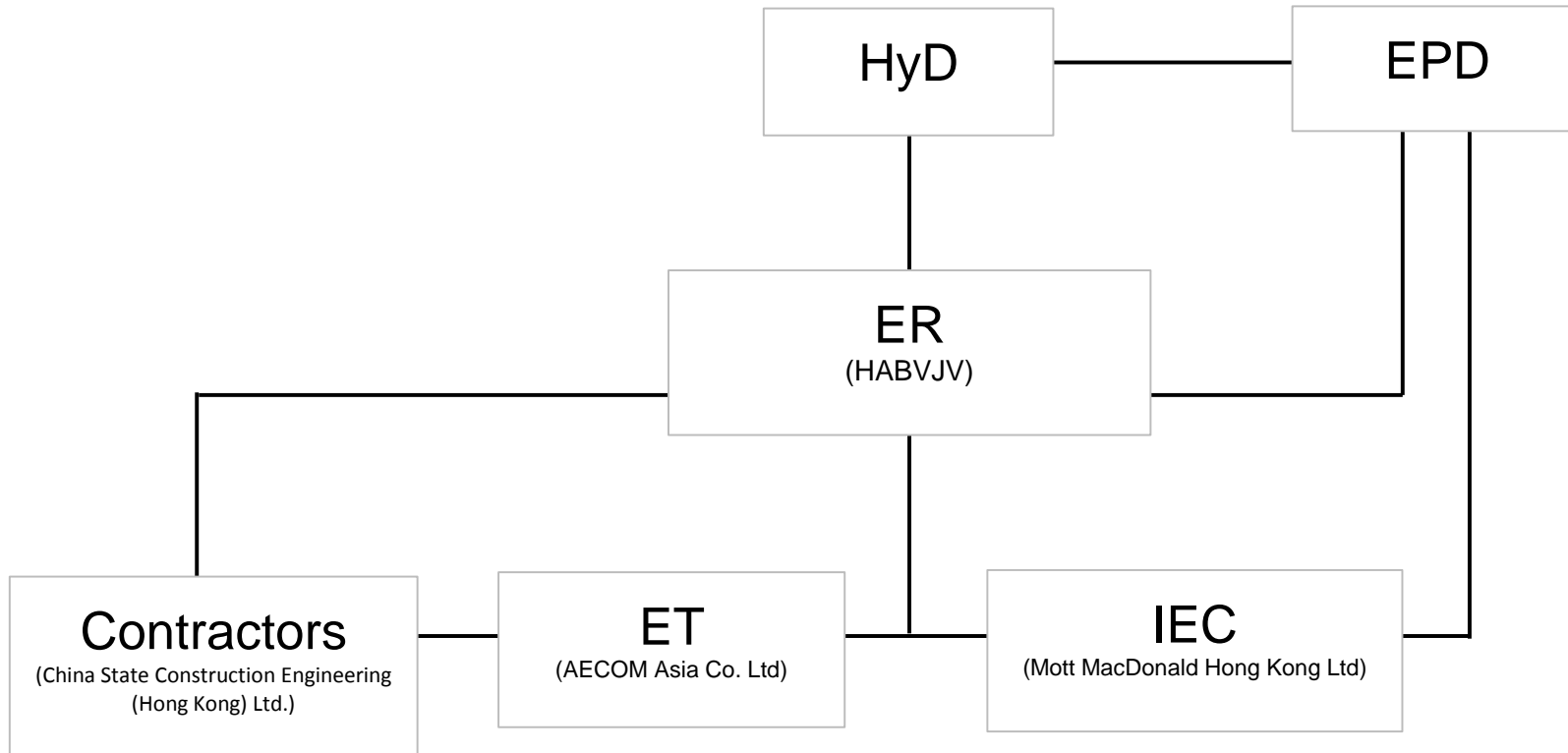


Locations of Monitoring Station

Date: Dec 2013

Figure 1.2b

**APPENDIX A
PROJECT ORGANIZATION STRUCTURE**



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CONTRACT NO. HY/2012/06
 WIDENING OF FANLING HIGHWAY
 - TAI HANG TO WO HOP SHEK INTERCHANGE



Project Organization Structure

**APPENDIX B
CONSTRUCTION PROGRAMMES**

Activity ID	Activity Name	Original Duration	Start	Finish	Late Start	Late Finish	Total Float	2014-2019																											
								2014		2015				2016				2017				2018				2019									
								Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
Contract Condition																																			
General																																			
Contract Condition																																			
COM.100	Date of Commencement of the Works	0	18-Jul-13*		18-Jul-13		0	◆ Date of Commencement of the Works																											
COM.110	Date of Completion of the Works	0		16-Dec-19		16-Dec-19	0																												◆
KD01	KD-1(1948d)- Section Subject to Excision comprises all works(excl. landscape Softwork & Establishment Works in Zone 1	0		16-Nov-18*		16-Nov-18	0																												◆
KD02	KD-2(1948d)- Comprise all Works (excluding Lanscape works) in Zone 2 excluding SA322A, SA323A, SA323B & SA324A	0		16-Nov-18*		16-Nov-18	0																												◆
KD03a	KD-3a (270d) - Comprises all works in SA322A (Area: Resite Houses)	0		13-Apr-14*		13-Apr-14	0	◆ KD-3a (270d)- Comprises all works in SA322A (Area: Resite Houses)																											
KD03b	KD-3b (630d) - Section Subject to Excision comprises all Works in SA323A & SA323B (New MCLT Location)	0		08-Apr-15*		08-Apr-15	0	◆ KD-3b (630d)- Section Subject to Excision comprises all Works in SA323A & SA323B (New MCLT Location)																											
KD03c	KD-3c (165d) - Comprises all works in SA324A	0		29-Dec-13*		29-Dec-13	0	◆ KD-3c (165d) - Comprises all works in SA324A																											
KD04	KD-4(1948d) - Comprises the remainder of the Works (All works except Works included in other sections)	0		16-Nov-18*		16-Nov-18	0																												◆
KD05	KD-5 (1978d) - Section Subject to Excision comprise Landscape Softworks in Zone 1	0		16-Dec-18*		16-Dec-18	0																												◆
KD06	KD-6 (1978d) - Comprises Landscapes Softworks in Zone 2 excluding SA322A, SA323A, SA323B & SA324A	0		16-Dec-18*		16-Dec-18	0																												◆
KD07	KD-7 (1978d) - Comprises remainder of Landscaping Softworks	0		16-Dec-18*		16-Dec-18	0																												◆
KD08	KD-8 (2343d) - Section Subject to Excision comprises Establishment Works in Zone 1	0		16-Dec-19*		16-Dec-19	0																												◆
KD09	KD-9 (2343d) - Comprises Establishment works in Zone 2 excluding SA322A, SA323A, SA323B & SA324A	0		16-Dec-19*		16-Dec-19	0																												◆
KD10	KD-10 (2343d) - Comprises remainder of Establishment works	0		16-Dec-19*		16-Dec-19	0																												◆
KD11	KD-11(1061d) - S1: Achievement: Kau Lung Hang Veh. Bridge & Enable demolish Kiu Tai Bridge & Nam Wah Po Footbridge	0		12-Jun-16*		12-Jun-16	0	◆ KD-11(1061d) - S1: Achievement: Kau Lung Hang Veh. Bridge & Enable demolish Kiu Tai Br																											
KD12	KD-12 (1239d) - S2: Achievement Demolition of Nam Wa Po Footbridge	0		07-Dec-16*		07-Dec-16	0	◆ KD-12 (1239d) - S2: Achievement Demolition of Nam Wa Po Footbridge																											
KD13	KD-13 (1309d) - S3: Connection of realigned Tai Wo Service Road West at interface between Zone 2 & 3	0		15-Feb-17*		15-Feb-17	0	◆ KD-13 (1309d) - S3: Connection of realigned Tai Wo Service Road West at																											
KD14	KD-14 1523d) - S4: Achievement: Rd widening & re-const Fanling Highway @ SBZ1 (expt. final pavement and central divider)	0		17-Sep-17*		17-Sep-17	0	◆ KD-14 1523d) - S4: Achievement: Rd widening & re-const																											
KD15	KD-15 (707d) - N1: Achievement: Demolition of Ho Ka Yuen Footbridge	0		24-Jun-15*		24-Jun-15	0	◆ KD-15(707d) - N1: Achievement: Demolition of Ho Ka Yuen Footbridge																											
KD16	KD-16 (883d) - N2: Connection of realigned Tai Wo Service Road East at interface between Zone 3 & 4	0		17-Dec-15*		17-Dec-15	0	◆ KD-16(883d) - N2: Connection of realigned Tai Wo Service Road East at interface between Zone 3 & 4																											
KD17	KD-17 (1097d) - N3: Comission of Slip Road Y (Section bet. Fanling Highway to Mini- roundabout	0		18-Jul-16*		18-Jul-16	0	◆ KD-17 (1097d) - N3: Comission of Slip Road Y (Section bet. Fanling Highway to Mini- rou																											
KD18	KD-18(1380d) - N4: Achieve: Eastern Rd widening works at Fanling Highway @NBZ2(expt. final pavement and central divider)	0		27-Apr-17*		27-Apr-17	0	◆ KD-18(1380d) - N4: Achieve: Eastern Rd widening works at Fanling H																											
KD19	KD-19 (1734d) - N5: Achieve: Rd widening & recons t of Fanling Highway@NBZ2 for comission Link Rd 2 & 4 by CV/2012/09	0		16-Apr-18*		16-Apr-18	0	◆ KD-19(1734d) - N5: Achieve: Rd widening																											
KD20	KD-20 (1064d)- Stage 1: Achievement Whole length of Southern Trunk Sewer(STS) at Tai Wo Service Road West	0		15-Jun-16*		15-Jun-16	0	◆ KD-20(1064d)- Stage 1: Achievement Whole length of Southern Trunk Sewer(STS) at Tai																											
POSSA301	Site Area SA301 (0d)	0	18-Jul-13*		12-Dec-13		147	◆ Site Area SA301 (0d)																											
POSSA302	Site Area SA302 (0d)	0	18-Jul-13*		18-Jul-13		0	◆ Site Area SA302 (0d)																											
POSSA310	Site Area SA310 (395d)	0	17-Aug-14*		17-Aug-14		0	◆ Site Area SA310 (395d)																											
POSSA320	Site Area SA320 (0d)	0	18-Jul-13*		18-Jul-13		0	◆ Site Area SA320 (0d)																											

Remaining Level of Effort
 Actual Level of Effort
 Remaining Work
 Critical Remaining Work
 Milestone
 Crit. Milestone

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								2014				2015				2016				2017				2018				2019							
								Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
POSSA320A	Site Area SA320A (120d)	0	15-Nov-13*		22-Apr-14		159	◆		◆																									
POSSA320B	Site Area SA320B (0d)	0	18-Jul-13*		01-Nov-13		106	◆																											
POSSA321	Site Area SA321 (120d)	0	15-Nov-13*		29-Nov-13		14	◆																											
POSSA322	Site Area SA322 (120d)	0	15-Nov-13*		22-Mar-14		127	◆																											
POSSA322A	Site Area SA322A (180d)	0	14-Jan-14*		18-Jan-14		4	◆																											
POSSA322B	Site Area SA322B (180d)	0	14-Jan-14*		18-Jan-14		4	◆																											
POSSA323	Site Area SA323 (360d)	0	13-Jul-14*		21-Aug-14		40			◆																									
POSSA323A	Site Area SA323A (360d)	0	13-Jul-14*		13-Jul-14		0			◆																									
POSSA323B	Site Area SA323B (360d)	0	13-Jul-14*		13-Jul-14		0			◆																									
POSSA324	Site Area SA324 (180d)	0	14-Jan-14*		07-Mar-14		52			◆																									
POSSA324A	Site Area SA324A (30d)	0	17-Aug-13*		25-Sep-13		39	◆																											
POSSA325	Site Area SA325 (180d)	0	14-Jan-14*		17-Jan-14		3			◆																									
POSSA326	Site Area SA326 (180d)	0	14-Jan-14*		11-Feb-14		28			◆																									
POSSA327	Site Area SA327 (180d)	0	14-Jan-14*		15-Jan-14		1			◆																									
POSSA327A	Site Area SA327A (730d)	0	18-Jul-15*		18-Jul-15		0																												
POSSA328	Site Area SA328 (90d)	0	16-Oct-13*		21-Oct-13		5			◆																									
POSSA329	Site Area SA329 (90d)	0	16-Oct-13*		04-Nov-13		19			◆																									
POSSA340	Site Area SA340 (0d)	0	18-Jul-13*		12-Aug-13		25	◆																											
POSSA340A	Site Area SA340A (0d)	0	18-Jul-13*		29-Oct-13		103	◆																											
POSSA341	Site Area SA341 (90d)	0	16-Oct-13*		08-Jan-14		85			◆																									
POSSA342	Site Area SA342 (90d)	0	16-Oct-13*		15-Jan-14		92			◆																									
POSSA342A	Site Area SA342A (90d)	0	16-Oct-13*		15-Jan-14		92			◆																									
POSSA343	Site Area SA343 (180d)	0	14-Jan-14*		03-Mar-14		49			◆																									
POSSA343A	Site Area SA343A (180d)	0	14-Jan-14*		03-Mar-14		49			◆																									
POSSA344	Site Area SA344 (240d)	0	15-Mar-14*		28-Nov-16		989			◆																									
POSSA345	Site Area SA345 (0d)	0	18-Jul-13*		31-Mar-15		622	◆																											
POSSA345A	Site Area SA345A (0d)	0	18-Jul-13*		18-Jul-13		0			◆																									
POSSA346	Site Area SA346 (0d)	0	18-Jul-13*		20-Jul-13		2			◆																									
Z1.1000	Instruction by The Engineer to Commence Work (Section Subject to Excision-424d)(SA310)	0		14-Sep-14*		14-Sep-14	0			◆																									

Partial Possession Status

Contract Condition

Contract Condition

- Remaining Level of Effort
- Actual Level of Effort
- Remaining Work
- Critical Remaining Work
- Milestone
- Crit. Milestone

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								3	2014				2015				2016				2017				2018				2019							
								Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
POSSA320-100	SA320B/321	0	18-Jul-13		29-Nov-13		112	◆																												
POSSA320-110	SA320B/ID-1	0	18-Jul-13*		01-Nov-13		88	◆																												
POSSA320-120	SA320B/322	0	18-Jul-13*		22-Mar-14		198	◆																												
POSSA320-130	SA320B/322A	0	18-Jul-13*		13-Jan-14		148	◆																												
POSSA320-140	SA320/323	0	18-Jul-13		15-Aug-14		315	◆																												
POSSA320-150	SA320/324	0	18-Jul-13*		08-Jan-14		144	◆																												
POSSA320-160	SA320/ID-2	0	18-Jul-13*		01-Nov-13		88	◆																												
POSSA320-170	SA320/325	0	18-Jul-13*		17-Jan-14		151	◆																												
POSSA320-180	SA320/326	0	18-Jul-13		11-Feb-14		164	◆																												
POSSA320-190	SA320/327	0	18-Jul-13*		17-Dec-13		128	◆																												
POSSA320-200	SA320/328	0	18-Jul-13*		21-Oct-13		78	◆																												
POSSA320-210	SA320/South bound	0	18-Jul-13*		18-Jul-13		0	◆																												

Site Office

General

Preliminary

General

PR.1030	Mobilization	42	10-Jul-13	20-Aug-13	15-Oct-16	26-Nov-16	1194	■																												
PR.1040	Principal Office for the Engineer	86	18-Jul-13	29-Oct-13	18-Jun-16	28-Sep-16	851	■																												
PR.1050	Secondary Office for the Engineer	14	18-Jul-13	31-Jul-13	15-Sep-16	28-Sep-16	1155	■																												
PR.1060	Erect Contractor's Office Compound	86	18-Jul-13	29-Oct-13	16-Aug-16	26-Nov-16	900	■																												
PR.1070	Provision of Contract Computer Facilities for Engineer	60	30-Oct-13	28-Dec-13	29-Sep-16	27-Nov-16	1065	■																												

ZONE 1 (Ch. 5640 to 5880)

Noise Barrier Along TWSR-West and Laying New Utilities

Site Clearance & Demolition of Existing Structure

General

ADVZ10100	Site clearance	30	18-Aug-14	22-Sep-14	24-Sep-14	30-Oct-14	31	■																												
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DSD Southern Trunk Sewer, Water Main, Fire Main Works

DSD Southern Trunk Sewer, Water Main Fire Main Works

DSD0090	All backfill along TWSR-W complete	0	30-Oct-15		04-Nov-15		4	◆	All backfill along TWSR-W complete																											
DSD0100	DSD Trunk Sewer Laying - overall testing (Zone 1 & Zone 2)	45	03-Nov-15	24-Dec-15	04-Nov-15	28-Dec-15	1	■																												
DSD0110	DSD Trunk Sewer Laying - overall inspection	40	28-Dec-15	22-Feb-16	29-Dec-15	23-Feb-16	1	■																												
DSD0120	DSD Trunk Sewer Laying - overall redification	90	23-Feb-16	14-Jun-16	24-Feb-16	15-Jun-16	1	■																												

NB42 (Ch.5640-5740)-TWSR West Side

Noise Barrier Works

NB00110	NB42 (Ch5640-5740) - Footing & Wall Structure	45	17-Dec-14	10-Feb-15	11-Apr-15	04-Jun-15	86	■																												
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- Remaining Level of Effort
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Activity ID	Activity Name	Original Duration	Start	Finish	Late Start	Late Finish	Total Float	Gantt Chart																							
								2014		2015				2016				2017				2018				2019					
								Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
RDZ10100	Z1: New Tai Wo Service Road West - Drainage & Road works (2 lanes)	90	04-Aug-16	19-Nov-16	01-Aug-18	16-Nov-18	586	[Gantt bars for RDZ10100]																							
Noise Barrier Along Fanling Highway S/B																															
NB44 (Ch.5700-5760)-FH S/B Side																															
Noise Barrier Works																															
NB01360	NB44 - Sheet piling & Excavation	18	19-Mar-15	11-Apr-15	29-Jul-17	18-Aug-17	690	[Gantt bars for NB01360]																							
NB01370	NB44 - Footing & Wall Structure	60	13-Apr-15	24-Jun-15	19-Aug-17	31-Oct-17	690	[Gantt bars for NB01370]																							
NB01380	NB44 - backfilling	50	25-Jun-15	22-Aug-15	01-Nov-17	30-Dec-17	690	[Gantt bars for NB01380]																							
NB01390	NB44 - NB production	45	25-Jun-15	08-Aug-15	28-Sep-18	11-Nov-18	1191	[Gantt bars for NB01390]																							
NB01400	NB44 - NB post & panel installation	5	24-Aug-15	28-Aug-15	12-Nov-18	16-Nov-18	946	[Gantt bars for NB01400]																							
NB45 (Ch.5760-5820)-FH S/B Side																															
Noise Barrier Works																															
NB01410	NB45 - Sheet piling & Excavation	18	24-Aug-15	12-Sep-15	02-Jan-18	22-Jan-18	690	[Gantt bars for NB01410]																							
NB01420	NB45 - Footing & Wall Structure	60	14-Sep-15	25-Nov-15	23-Jan-18	09-Apr-18	690	[Gantt bars for NB01420]																							
NB01430	NB45 - backfilling	50	26-Nov-15	26-Jan-16	10-Apr-18	08-Jun-18	690	[Gantt bars for NB01430]																							
NB01440	NB45 - NB production	45	26-Nov-15	09-Jan-16	28-Sep-18	11-Nov-18	1037	[Gantt bars for NB01440]																							
NB01450	NB45 - NB post & panel installation	5	27-Jan-16	01-Feb-16	12-Nov-18	16-Nov-18	818	[Gantt bars for NB01450]																							
NB46 (Ch.5820-5880)-FH S/B Side																															
Noise Barrier Works																															
NB01460	NB46 - Sheet piling & Excavation	18	27-Jan-16	25-Feb-16	09-Jun-18	30-Jun-18	690	[Gantt bars for NB01460]																							
NB01470	NB46 - Footing & Wall Structure	60	26-Feb-16	11-May-16	03-Jul-18	10-Sep-18	690	[Gantt bars for NB01470]																							
NB01480	NB46 - backfilling	50	12-May-16	12-Jul-16	11-Sep-18	10-Nov-18	690	[Gantt bars for NB01480]																							
NB01490	NB46 - NB production	45	12-May-16	25-Jun-16	28-Sep-18	11-Nov-18	869	[Gantt bars for NB01490]																							
NB01500	NB46 - NB post & panel installation	5	13-Jul-16	18-Jul-16	12-Nov-18	16-Nov-18	690	[Gantt bars for NB01500]																							
Fanling Highway Construction																															
Drainage & Road Works																															
Ch 5640-5880																															
RDZ11000	Z1 (Ch5640-5880) : Fanling Highway Road works Start	0	03-Jan-17		03-Jan-17		0	[Gantt bars for RDZ11000]																							
RDZ11010	Z1 (Ch5640-5880): Fanling Highway N/B - D&R works (lane 1)	20	03-Jan-17	25-Jan-17	03-Jan-17	25-Jan-17	0	[Gantt bars for RDZ11010]																							
RDZ11020	Z1 (Ch5640-5880) : Fanling Highway N/B - D&R works (lane 2)	20	11-Apr-17	09-May-17	11-Apr-17	09-May-17	0	[Gantt bars for RDZ11020]																							
RDZ11030	Z1 (Ch5640-5880) : Fanling Highway N/B - D&R works (lane 3)	20	17-Jul-17	08-Aug-17	17-Jul-17	08-Aug-17	0	[Gantt bars for RDZ11030]																							
RDZ11040	Z1 (Ch5640-5880) : Fanling Highway N/B - D&R works (lane 4)	20	16-Oct-17	08-Nov-17	16-Oct-17	08-Nov-17	0	[Gantt bars for RDZ11040]																							
RDZ11050	Z1 (Ch5640-5880) : Fanling Highway S/B - D&R works (lane 1)	20	17-Jan-18	08-Feb-18	17-Jan-18	08-Feb-18	0	[Gantt bars for RDZ11050]																							
RDZ11060	Z1 (Ch5640-5880) : Fanling Highway S/B - D&R works (lane 2)	20	23-Apr-18	16-May-18	23-Apr-18	16-May-18	0	[Gantt bars for RDZ11060]																							
RDZ11070	Z1 (Ch5640-5880) : Fanling Highway S/B - D&R works (lane 3)	20	25-Jul-18	16-Aug-18	25-Jul-18	16-Aug-18	0	[Gantt bars for RDZ11070]																							

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 Remaining Work
 Critical Remaining Work
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								Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
RDZ11080	Z1 (Ch5640-5880) : Fanling Highway S/B - D&R works (lane 4)	20	25-Oct-18	16-Nov-18	25-Oct-18	16-Nov-18	0																										
RDZ11090	Z1 (Ch5640-5880) : Fanling Highway Road works (8 lanes) complete	0		16-Nov-18		16-Nov-18	0																										
Other Works																																	
Landscape Softwork																																	
Landscape Works																																	
Z1.LW.1000	Landscape soft work Zone1	150	04-Jun-18	30-Nov-18	16-Jun-18	13-Dec-18	11																										
Establishment Works																																	
Establishment Works																																	
Z1.EW.1000	Establishment work Zone1	300	01-Dec-18	03-Dec-19	14-Dec-18	16-Dec-19	11																										
ZONE 2 (Ch. 5880 to 6930)																																	
Noise Barrier Along TWSR-West and Laying New Utilities																																	
Site Clearance & Demolition of Existing Structure																																	
Demolition Work																																	
Z2.P2N.1240	Liaison with relevant parties for re-provision of SHRINE	90	18-Jul-13	02-Nov-13	16-Jan-14	16-May-14	150																										
Z2.P2N.1245	Method statement submission/ approval	60	18-Jul-13	26-Sep-13	01-Mar-14	16-May-14	180																										
Z2.P2N.1250	Construction of proposed SHRINE	165	14-Jan-14	12-Aug-14	02-May-18	16-Nov-18	1253																										
Z2.P2N.1260	Demolition of existing SHRINE	30	14-Jan-14	26-Feb-14	17-May-14	21-Jun-14	92																										
Z2.P2N.1270	Condition survey	5	08-Jul-14	14-Jul-14	13-Jan-15	17-Jan-15	156																										
Z2.P2N.1290	Demolition of Man Ching Lung Tong	30	12-Jan-15	14-Feb-15	19-Jan-15	02-Mar-15	6																										
Z2.P2N.1300	Condition survey	6	07-Jul-14	14-Jul-14	15-Aug-14	21-Aug-14	34																										
Z2.P2N.1310	Existing trees felling	25	14-Jul-14	11-Aug-14	22-Aug-14	20-Sep-14	34																										
Z2.P2N.1320	Demolition of village houses	26	14-Jul-14	12-Aug-14	22-Aug-14	22-Sep-14	34																										
NB47 (Ch.5880-5930)-TWSR West Side																																	
Noise Barrier Works																																	
NB00270	NB47 (Ch5880-5930)- Footing & Wall Structure	30	18-Jan-14	03-Mar-14	11-Feb-14	17-Mar-14	12																										
NB00275	NB47 (Ch5880-5930)- backfilling	40	01-Apr-14	23-May-14	16-Apr-14	07-Jun-14	12																										
NB00280	NB47 (Ch5880-5930)- NB production	45	04-Mar-14	17-Apr-14	28-Sep-18	11-Nov-18	1669																										
NB00290	NB47 (Ch5880-5930)- NB post & panel installation	5	24-May-14	29-May-14	12-Nov-18	16-Nov-18	1315																										
DSD Southern Trunk Sewer, Water Main Fire Main Works																																	
TSZ10250	Sheet Piling & Excavation(-6m below ground) (along NB47)	18	15-Nov-13	05-Dec-13	29-Nov-13	19-Dec-13	12																										
TSZ10260	DSD Trunk Sewer laying(along NB47)	18	06-Dec-13	28-Dec-13	20-Dec-13	13-Jan-14	12																										
TSZ10270	Backfill up to NB47 footing level	16	30-Dec-13	17-Jan-14	14-Jan-14	10-Feb-14	12																										
TSZ10280	Watermain installation (along NB47)	26	18-Jan-14	26-Feb-14	13-Feb-14	14-Mar-14	14																										
TSZ10290	Firemain installation (along NB47)	26	27-Feb-14	28-Mar-14	15-Mar-14	15-Apr-14	14																										
Underground Utility Works																																	

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	Crit. Milestone

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21-Jan-14	IWP Rev.4		
26-Feb-14	IWP Rev.5		
13-May-14	WP Rev.1		
30-Jun-14	WP Rev.1A		

Activity ID	Activity Name	Original Duration	Start	Finish	Late Start	Late Finish	Total Float	Gantt Chart																											
								3		2014				2015				2016				2017				2018				2019					
								Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
NB00450	NB48 (Ch6060-6120) - backfilling	34	06-Jun-15	17-Jul-15	19-Sep-15	31-Oct-15	88																												
NB00460	NB48 (Ch6060-6120) - NB production	45	08-May-15	21-Jun-15	28-Sep-18	11-Nov-18	1239																												
NB00470	NB48 (Ch6060-6120) - NB post & panel installation	5	18-Jul-15	23-Jul-15	12-Nov-18	16-Nov-18	977																												
DSD Southern Trunk Sewer, Water Main Fire Main Works																																			
TSZ10400	Sheet Piling & Excavation(-5m below ground) (along NB48, 0-60m)	21	12-May-14	05-Jun-14	25-Aug-14	18-Sep-14	88																												
TSZ10410	DSD Trunk Sewer laying (along NB48, 0-60m)	18	06-Jun-14	26-Jun-14	19-Sep-14	11-Oct-14	88																												
TSZ10420	Backfill up to NB48, 0-60m footing level	32	27-Jun-14	04-Aug-14	13-Oct-14	18-Nov-14	88																												
TSZ10430	Watermain installation (along NB48, 0-60m)	30	05-Aug-14	08-Sep-14	01-Dec-14	07-Jan-15	98																												
TSZ10440	Firemain installation (along NB48, 0-60m)	30	10-Sep-14	16-Oct-14	08-Jan-15	11-Feb-15	98																												
TSZ10450	Sheet Piling & Excavation(-5m below ground) (along NB48, 60-110m)	26	08-Dec-14	09-Jan-15	01-Apr-15	05-May-15	88																												
TSZ10460	DSD Trunk Sewer laying (along NB48, 60-110m)	18	10-Jan-15	30-Jan-15	06-May-15	27-May-15	88																												
TSZ10470	Backfill up to NB48, 60-110m footing level	32	31-Jan-15	17-Mar-15	28-May-15	06-Jul-15	88																												
TSZ10480	Watermain installation (along NB48, 60-110m)	26	18-Mar-15	20-Apr-15	21-Jul-15	19-Aug-15	100																												
TSZ10490	Firemain installation (along NB48, 60-110m)	26	21-Apr-15	21-May-15	20-Aug-15	18-Sep-15	100																												
Underground Utility Works																																			
UUZ20120	Utility cable laying by Utility companies (Along NB48, 0-60m)	30	22-Sep-14	28-Oct-14	08-Jan-15	11-Feb-15	88																												
UUZ20130	Utility cable laying by Utility companies (Along NB48, 60-110m)	24	08-May-15	05-Jun-15	22-Aug-15	18-Sep-15	88																												
NB49 (Ch.6145-6215)-TWSR West Side																																			
Noise Barrier Works																																			
NB00485	NB49 - Pre-drilling	50	13-Aug-14	13-Oct-14	23-Sep-14	21-Nov-14	34																												
NB00490	NB49 piling (0.19m -96no)	96	15-Nov-14	18-Mar-15	22-Nov-14	25-Mar-15	6																												
NB00510	NB49 - Footing & Wall Structure	52	09-May-15	11-Jul-15	16-May-15	18-Jul-15	6																												
NB00520	NB49 - backfilling	51	24-Aug-15	24-Oct-15	31-Aug-15	31-Oct-15	6																												
NB00530	NB49 - NB production	45	11-Jul-15	25-Aug-15	28-Sep-18	11-Nov-18	1174																												
NB00540	NB49 - NB post & panel installation	5	26-Oct-15	30-Oct-15	12-Nov-18	16-Nov-18	895																												
DSD Southern Trunk Sewer, Water Main Fire Main Works																																			
TSZ10500	Sheet Piling & Excavation(-7m below ground) (along NB49)	14	19-Mar-15	07-Apr-15	26-Mar-15	14-Apr-15	6																												
TSZ10510	DSD Trunk Sewer laying (along NB49)	12	08-Apr-15	21-Apr-15	15-Apr-15	28-Apr-15	6																												
TSZ10520	Backfill up to NB49 footing level	14	22-Apr-15	08-May-15	29-Apr-15	15-May-15	6																												
TSZ10530	Watermain installation (along NB49)	20	09-May-15	02-Jun-15	01-Jun-15	24-Jun-15	18																												
TSZ10540	Firemain installation (along NB49)	20	03-Jun-15	26-Jun-15	25-Jun-15	18-Jul-15	18																												
Underground Utility Works																																			
UUZ20140	Utility cable laying by Utility companies (Along NB49, 0-70m)	36	13-Jul-15	22-Aug-15	20-Jul-15	29-Aug-15	6																												
NB49B (Ch.6215-6235)-TWSR West Side																																			


Remaining Level of Effort
 Actual Level of Effort
 Remaining Work
 Critical Remaining Work
 Milestone
 Crit. Milestone

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Activity ID	Activity Name	Original Duration	Start	Finish	Late Start	Late Finish	Total Float	2014				2015				2016				2017				2018				2019			
								Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
Noise Barrier Works																															
NB00545	NB49B - Pre-drilling	22	14-Jan-14	17-Feb-14	07-Mar-14	01-Apr-14	37			■																					
NB00550	NB49B piling (0.19m -22no)	33	18-Feb-14	27-Mar-14	02-Apr-14	16-May-14	37			■																					
NB00560	NB49B- Sheet piling & Excavation	12	25-Oct-14	07-Nov-14	28-Oct-14	10-Nov-14	2					■																			
NB00570	NB49B - Footing & Wall Structure	21	08-Nov-14	02-Dec-14	11-Nov-14	04-Dec-14	2					■																			
NB00580	NB49B - backfilling	54	17-Dec-14	28-Feb-15	19-Dec-14	03-Mar-15	2					■																			
NB00590	NB49B - NB production	45	03-Dec-14	16-Jan-15	28-Sep-18	11-Nov-18	1395					■																			
NB00600	NB49B - NB post & panel installation	5	02-Mar-15	06-Mar-15	12-Nov-18	16-Nov-18	1089																								
DSD Southern Trunk Sewer, Water Main Fire Main Works																															
TSZ10550	Sheet Piling & Excavation(-5m below ground) (along NB49B)	21	29-Sep-14	24-Oct-14	03-Oct-14	27-Oct-14	2					■																			
TSZ10580	Watermain installation (along NB49B)	20	25-Oct-14	17-Nov-14	03-Nov-14	25-Nov-14	7					■																			
TSZ10590	Firemain installation (along NB49B)	20	18-Nov-14	10-Dec-14	26-Nov-14	18-Dec-14	7					■																			
DSD Southern Trunk Sewer - Trenchless Construction																															
TSZ11030	Construct Pipe jacking pits	60	25-Oct-14	06-Jan-15	06-Jan-15	24-Mar-15	59					■																			
TSZ11040	DSD Trunk Sewer laying (along NB49B to NB54 - D2-1)-Trenchless	120	07-Jan-15	09-Jun-15	25-Mar-15	19-Aug-15	59					■																			
TSZ11050	1st end manholes construction & trench sewer connection	30	10-Jun-15	16-Jul-15	20-Aug-15	23-Sep-15	59						■																		
TSZ11060	Backfilling of jacking pits	32	17-Jul-15	22-Aug-15	24-Sep-15	03-Nov-15	59						■																		
Underground Utility Works																															
UUZ20150	Utility cable laying by Utility companies (Along NB49B, 0-16m)	12	03-Dec-14	16-Dec-14	05-Dec-14	18-Dec-14	2					■																			
NB54 (Ch.6240-6280)-TWSR West Side																															
Noise Barrier Works																															
NB00605	NB54 - ID2-1 Pre-drilling	18	18-Feb-14	10-Mar-14	24-Apr-14	16-May-14	52			■																					
NB00610	NB54 - ID2-1 piling (0.19m -18no)-1 rigs	54	01-Apr-14	10-Jun-14	17-May-14	21-Jul-14	34			■																					
NB00620	NB54 - ID2-1 Sheet piling & excavation (-3m)	18	11-Jun-14	02-Jul-14	07-Feb-15	07-Mar-15	200			■																					
NB00630	NB54 - ID2-1 Footing & Wall Structure	60	03-Jul-14	11-Sep-14	09-Mar-15	21-May-15	200			■																					
NB00640	NB54 - ID2-1 backfilling	28	30-Jun-15	01-Aug-15	26-Sep-15	31-Oct-15	75						■																		
NB00650	NB54 - ID2-1 NB production	45	12-Sep-14	26-Oct-14	28-Sep-18	11-Nov-18	1477					■																			
NB00660	NB54 - ID2-1 NB post & panel installation	5	03-Aug-15	07-Aug-15	12-Nov-18	16-Nov-18	964																								
NB00665	NB54 -Pre-drilling	24	11-Mar-14	08-Apr-14	23-Jun-14	21-Jul-14	82			■																					
NB00670	NB54 piling (0.19m -24no)-1 rigs	72	11-Jun-14	03-Sep-14	22-Jul-14	16-Oct-14	34			■																					
NB00690	NB54 - Footing & Wall Structure	60	17-Mar-15	30-May-15	22-May-15	03-Aug-15	53					■																			
NB00700	NB54 - backfilling	50	30-Jun-15	27-Aug-15	01-Sep-15	31-Oct-15	53						■																		
NB00710	NB54 - NB production	45	30-May-15	14-Jul-15	28-Sep-18	11-Nov-18	1216					■																			

- Remaining Level of Effort
- Actual Level of Effort
- Remaining Work
- Critical Remaining Work
- ◆ Milestone
- ◆ Crit. Milestone

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Activity ID	Activity Name	Original Duration	Start	Finish	Late Start	Late Finish	Total Float	2013-2019 Quarterly Gantt																											
								2014				2015				2016				2017				2018				2019							
								Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
NB00720	NB54 - NB post & panel installation	5	28-Aug-15	02-Sep-15	12-Nov-18	16-Nov-18	942																												
DSD Southern Trunk Sewer, Water Main Fire Main Works																																			
TSZ10600	Sheet Piling & Excavation(-5m below ground) (along NB54)	14	13-Dec-14	31-Dec-14	15-Dec-14	02-Jan-15	1																												
TSZ10610	DSD Trunk Sewer laying (along NB54 except D 2-1 section)	21	02-Jan-15	26-Jan-15	13-Mar-15	09-Apr-15	53																												
TSZ10620	Backfill up to NB54 footing level	35	27-Jan-15	16-Mar-15	10-Apr-15	21-May-15	53																												
TSZ10630	Watermain installation (along NB54)	30	17-Mar-15	23-Apr-15	22-Jun-15	27-Jul-15	77																												
TSZ10640	Firemain installation (along NB54)	30	24-Apr-15	30-May-15	28-Jul-15	31-Aug-15	77																												
DSD Southern Trunk Sewer - Trenchless Construction																																			
TSZ10990	Construct Pipe jacking pits	60	02-Jan-15	20-Mar-15	03-Jan-15	21-Mar-15	1																												
TSZ11000	DSD Trunk Sewer laying (along NB54 - ID 2-1) - Trenchless	120	21-Mar-15	15-Aug-15	23-Mar-15	17-Aug-15	1																												
TSZ11010	2nd end manhole construction & trench sewer connection	30	17-Aug-15	19-Sep-15	18-Aug-15	21-Sep-15	1																												
TSZ11020	Backfilling of jacking pits	34	21-Sep-15	02-Nov-15	22-Sep-15	03-Nov-15	1																												
Underground Utility Works																																			
UUZ20160	Utility cable laying by Utility companies (Along NB54, 0-40m)	24	01-Jun-15	29-Jun-15	04-Aug-15	31-Aug-15	53																												
NB54A (Ch.6290-6350)-TWSR West Side																																			
Noise Barrier Works																																			
NB00730	NB54A Pre-drilling	36	09-Apr-14	26-May-14	02-Sep-14	16-Oct-14	118																												
NB00740	NB54A piling (0.19m -72no)	108	04-Sep-14	14-Jan-15	17-Oct-14	03-Mar-15	34																												
NB00760	NB54A - Footing & Wall Structure	40	04-Jun-15	22-Jul-15	06-Jun-15	24-Jul-15	2																												
NB00770	NB54A - backfilling	52	27-Aug-15	29-Oct-15	29-Aug-15	31-Oct-15	2																												
NB00780	NB54A - NB production	45	23-Jul-15	05-Sep-15	28-Sep-18	11-Nov-18	1163																												
NB00790	NB54A - NB post & panel installation	5	30-Oct-15	04-Nov-15	12-Nov-18	16-Nov-18	891																												
DSD Southern Trunk Sewer, Water Main Fire Main Works																																			
TSZ10650	Sheet Piling & Excavation(-5m below ground) (along NB54A)	26	02-Mar-15	31-Mar-15	04-Mar-15	02-Apr-15	2																												
TSZ10660	DSD Trunk Sewer laying (along NB54A)	18	01-Apr-15	24-Apr-15	07-Apr-15	27-Apr-15	2																												
TSZ10670	Backfill up to NB54A footing level	32	25-Apr-15	03-Jun-15	28-Apr-15	05-Jun-15	2																												
TSZ10680	Watermain installation (along NB54A)	30	04-Jun-15	10-Jul-15	18-Jun-15	24-Jul-15	12																												
TSZ10690	Firemain installation (along NB54A)	30	11-Jul-15	14-Aug-15	25-Jul-15	28-Aug-15	12																												
Underground Utility Works																																			
UUZ20170	Utility cable laying by Utility companies (Along NB54A, 0-60m)	30	23-Jul-15	26-Aug-15	25-Jul-15	28-Aug-15	2																												
NB57 (Ch.6365-6445)-TWSR West Side																																			
Noise Barrier Works																																			
NB00800	NB57 -Pre-drilling	40	14-Jan-14	10-Mar-14	17-Jan-14	13-Mar-14	3																												
NB00810	NB57 piling (0.19m -82no)	123	11-Mar-14	09-Aug-14	14-Mar-14	13-Aug-14	3																												

- Remaining Level of Effort
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Activity ID	Activity Name	Original Duration	Start	Finish	Late Start	Late Finish	Total Float	2014-2019																											
								2014				2015				2016				2017				2018				2019							
								Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
Box Culvert Extension ID2																																			
Structure Works																																			
ID2-0100	Box Culvert Extension ID2 structure	118	01-Nov-13	31-Mar-14	01-Nov-13	31-Mar-14	0	[Gantt bar: Nov 2013 - Mar 2014]																											
Noise Barrier Along Fanling Highway N/B																																			
Site Clearance & Demolition of Existing Structure																																			
General																																			
ADVZ20130	Existing Utility cable disconnected & ready to be removed (Z1 & Z2 cable complete installation & connection)	0	02-Nov-15		02-Nov-15		0	[Milestone: Nov 2015] Existing Utility cable disconnected & ready to be removed (Z1 & Z2 cable complete installation & connection)																											
ADVZ20140	Site Clearance (for NB Along FH N/B)	30	24-Sep-15	31-Oct-15	24-Sep-15	31-Oct-15	0	[Gantt bar: Sep 2015 - Oct 2015]																											
ADVZ20160	Temp Road construction for TTA for NB works	60	20-Aug-15	31-Oct-15	20-Aug-15	31-Oct-15	0	[Gantt bar: Aug 2015 - Oct 2015]																											
ADVZ20170	Zone 2 - Noise Barrier at FH N/B complete	0		29-Sep-16		29-Sep-16	0	[Milestone: Sep 2016] Zone 2 - Noise Barrier at FH N/B complete																											
NB43A (Ch.5880-6060)-FH N/B Side																																			
Noise Barrier Works																																			
NB001070	NB43A - D 1-2 Pre-drilling	6	02-Nov-15	07-Nov-15	16-Nov-15	21-Nov-15	12	[Gantt bar: Nov 2015]																											
NB001080	NB43A- ID1-2 piling (0.19m -18no)-1 rigs	27	09-Nov-15	09-Dec-15	23-Nov-15	23-Dec-15	12	[Gantt bar: Nov 2015 - Dec 2015]																											
NB001090	NB43A - D 1-2 Sheet piling & Excavation	10	10-Dec-15	21-Dec-15	07-Jan-16	18-Jan-16	21	[Gantt bar: Dec 2015 - Jan 2016]																											
NB001100	NB43A - D 1-2 Footing & Wall Structure	40	22-Dec-15	18-Feb-16	19-Jan-16	14-Mar-16	21	[Gantt bar: Dec 2015 - Mar 2016]																											
NB001110	NB43A - D 1-2 backfilling	50	19-Feb-16	21-Apr-16	15-Mar-16	18-May-16	21	[Gantt bar: Feb 2016 - May 2016]																											
NB001120	NB43A - D 1-2 NB production	45	19-Feb-16	03-Apr-16	28-Sep-18	11-Nov-18	952	[Gantt bar: Feb 2016 - Nov 2018]																											
NB001130	NB43A - D 1-2 NB post & panel installation	5	22-Apr-16	27-Apr-16	12-Nov-18	16-Nov-18	756	[Gantt bar: Apr 2016 - Nov 2018]																											
NB01510	NB43A-1 (0-61.5m) - Sheet piling & Excavation	18	22-Apr-16	13-May-16	19-May-16	08-Jun-16	21	[Gantt bar: Apr 2016 - Jun 2016]																											
NB01520	NB43A-1 - Footing & Wall Structure	60	16-May-16	26-Jul-16	10-Jun-16	19-Aug-16	21	[Gantt bar: May 2016 - Aug 2016]																											
NB01530	NB43A-1 - backfilling	34	27-Jul-16	03-Sep-16	20-Aug-16	29-Sep-16	21	[Gantt bar: Jul 2016 - Sep 2016]																											
NB01540	NB43A-1 - NB production	45	27-Jul-16	09-Sep-16	28-Sep-18	11-Nov-18	793	[Gantt bar: Jul 2016 - Nov 2018]																											
NB01550	NB43A-1 - NB post & panel installation	5	10-Sep-16	15-Sep-16	12-Nov-18	16-Nov-18	639	[Gantt bar: Sep 2016 - Nov 2018]																											
NB01560	NB43A-2 (86.8-166.7m) - Sheet piling & Excavation	18	02-Nov-15	21-Nov-15	13-Nov-15	03-Dec-15	10	[Gantt bar: Nov 2015]																											
NB01570	NB43A-2 - Footing & Wall Structure	60	23-Nov-15	03-Feb-16	04-Dec-15	24-Feb-16	10	[Gantt bar: Nov 2015 - Feb 2016]																											
NB01580	NB43A-2 - backfilling	50	04-Feb-16	15-Apr-16	25-Feb-16	27-Apr-16	10	[Gantt bar: Feb 2016 - Apr 2016]																											
NB01590	NB43A-2 - NB production	45	04-Feb-16	19-Mar-16	28-Sep-18	11-Nov-18	967	[Gantt bar: Feb 2016 - Nov 2018]																											
NB01600	NB43A-2 - NB post & panel installation	5	16-Apr-16	21-Apr-16	12-Nov-18	16-Nov-18	761	[Gantt bar: Apr 2016 - Nov 2018]																											
NB50 (Ch.6060-6130)-FH N/B Side																																			
Noise Barrier Works																																			
NB001140	NB50 -Pre-drilling	16	09-Nov-15	26-Nov-15	05-Dec-15	23-Dec-15	23	[Gantt bar: Nov 2015]																											
NB001150	NB50 -piling (0.19m -48no)	72	10-Dec-15	15-Mar-16	24-Dec-15	01-Apr-16	12	[Gantt bar: Dec 2015 - Apr 2016]																											
NB001160	NB50 -Sheet piling & Excavation	18	16-Apr-16	07-May-16	28-Apr-16	20-May-16	10	[Gantt bar: Apr 2016]																											

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								Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
								Gantt Chart Area																											
THBF0640	Finishes Work	30	23-Jan-15	06-Mar-15	08-Jan-18	10-Feb-18	863	[Gantt Chart for THBF0640]																											
THBF0645	Bridge Structure complete (THFB-TWSR-E side)	0		28-May-15		10-Feb-18	797	28-May-15 ◆ Bridge Structure complete (THFB-TWSR-E side)																											
THBF0700	THP3 - Predrilling	6	19-May-14	24-May-14	06-May-17	12-May-17	866	[Gantt Chart for THBF0700]																											
THBF0710	THP3 - Pre-bored H pile (4 nos)	16	06-Sep-14	25-Sep-14	13-May-17	01-Jun-17	779	[Gantt Chart for THBF0710]																											
THBF0720	THP3 - Pile Test	28	26-Sep-14	23-Oct-14	17-Aug-17	13-Sep-17	1056	[Gantt Chart for THBF0720]																											
THBF0730	THP3 - Pile cap, Pier and Pier Head	45	10-Oct-14	01-Dec-14	31-Aug-17	24-Oct-17	845	[Gantt Chart for THBF0730]																											
THBF0740	THP4 - Predrilling	6	26-May-14	31-May-14	25-May-17	01-Jun-17	876	[Gantt Chart for THBF0740]																											
THBF0750	THP4 - Pre-bored H pile (4 nos)	16	26-Sep-14	16-Oct-14	02-Jun-17	20-Jun-17	779	[Gantt Chart for THBF0750]																											
THBF0760	THP4 - Pile Test	28	17-Oct-14	13-Nov-14	13-Jul-17	09-Aug-17	1000	[Gantt Chart for THBF0760]																											
THBF0770	THP4 - Pile cap, Pier and Pier Head	45	31-Oct-14	22-Dec-14	27-Jul-17	16-Sep-17	797	[Gantt Chart for THBF0770]																											
THBF0780	Modified existing column head of existing footbridge	30	23-Dec-14	29-Jan-15	18-Sep-17	24-Oct-17	797	[Gantt Chart for THBF0780]																											
THBF0790	Erect steel bridge from THP2 to THP4	60	30-Jan-15	21-Apr-15	25-Oct-17	06-Jan-18	797	[Gantt Chart for THBF0790]																											
THBF0800	ABWF work	30	22-Apr-15	28-May-15	08-Jan-18	10-Feb-18	797	[Gantt Chart for THBF0800]																											
Demolition of Existing Tai Hang Footbridge																																			
TWSR-West/ FL Highway N/B Side Section																																			
Z2.THF.1040	Temporary steel ramp construction	40	24-Jun-15	10-Aug-15	16-Jan-17	10-Mar-17	461	[Gantt Chart for Z2.THF.1040]																											
Z2.THF.1050	Modification of existing entrance of Tai Hang Footbridge	25	11-Aug-15	08-Sep-15	11-Mar-17	10-Apr-17	461	[Gantt Chart for Z2.THF.1050]																											
Z2.THF.1060	Diversion of existing pedestrian to temporary steel ramp	8	09-Sep-15	17-Sep-15	11-Apr-17	22-Apr-17	461	[Gantt Chart for Z2.THF.1060]																											
Z2.THF.1070	Temporary support installation to removal portions of Tai Hang Footbridge	25	20-Aug-15	17-Sep-15	21-Mar-17	22-Apr-17	461	[Gantt Chart for Z2.THF.1070]																											
Z2.THF.1080	Removal of portion of Tai Hang Footbridge for THP1 works	35	18-Sep-15	31-Oct-15	24-Apr-17	06-Jun-17	461	[Gantt Chart for Z2.THF.1080]																											
Z2.THF.1120	Demolish existing Tai Hang footbridge (TWSR-W side)	90	23-Jul-16	08-Nov-16	01-Aug-18	16-Nov-18	596	[Gantt Chart for Z2.THF.1120]																											
Crossing Fanling Highway Section																																			
Z2.THF.1090	Erect Temp platform for bridge demolition	60	23-Jul-16	03-Oct-16	13-Feb-18	30-Apr-18	461	[Gantt Chart for Z2.THF.1090]																											
Z2.THF.1100	Demolish existing Tai Hang Footbridge	45	04-Oct-16	25-Nov-16	02-May-18	25-Jun-18	461	[Gantt Chart for Z2.THF.1100]																											
Z2.THF.1110	Removal of temporary platform	30	26-Nov-16	03-Jan-17	26-Jun-18	31-Jul-18	461	[Gantt Chart for Z2.THF.1110]																											
Z2.THF.1130	Demolish remaining column	60	04-Jan-17	22-Mar-17	01-Aug-18	11-Oct-18	461	[Gantt Chart for Z2.THF.1130]																											
Z2.THF.1140	Backfilling & road work	30	23-Mar-17	02-May-17	12-Oct-18	16-Nov-18	461	[Gantt Chart for Z2.THF.1140]																											
New Tai Wo Footbridge																																			
General																																			
TWFB1000	Existing Utility cable disconnected & ready to be removed (Z1 & Z2 cable complete installation & connection)	0	02-Nov-15		02-Mar-18		682	◆ Existing Utility cable disconnected & ready to be removed (Z1 & Z2 cable complete installation & connection)																											
TWFB1010	Site Clearance	30	14-Jan-14	26-Feb-14	23-Apr-14	29-May-14	73	[Gantt Chart for TWFB1010]																											
TWFB1020	Structure steel Shop drawing submission (TWFB)	90	18-Jul-13	02-Nov-13	11-Jul-17	25-Oct-17	1161	[Gantt Chart for TWFB1020]																											
TWFB1030	Structure steel Shop drawing approval (TWFB)	30	17-Oct-13	20-Nov-13	09-Oct-17	13-Nov-17	1161	[Gantt Chart for TWFB1030]																											

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								Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4						
TWFB1040	Structure steel procurement (TWFB)	150	21-Nov-13	19-Apr-14	14-Nov-17	12-Apr-18	1454	[Gantt bars for 2014]																																			
TWFB1050	Steel Staircase & Ramp prefabrication (TWFB-TWSR-W side)	60	22-Apr-14	04-Jul-14	19-May-18	31-Jul-18	1196	[Gantt bars for 2014]																																			
TWFB1060	Steel Staircase & Ramp available on site (TWFB-TWSR-W side)	0	05-Jul-14		01-Aug-18		1196	[Gantt bars for 2014]																																			
TWFB1090	Steel Bridge prefabrication (TWFB)	60	22-Apr-14	04-Jul-14	13-Apr-18	25-Jun-18	1166	[Gantt bars for 2014]																																			
TWFB1100	Steel Bridge available on site (TWFB)	0	05-Jul-14		26-Jun-18		1166	[Gantt bars for 2014]																																			
TWFB1110	Tai Wo Footbridge Complete	0		18-Jan-17		16-Nov-18	538	[Gantt bars for 2014]																				18-Jan-17				◆ Tai Wo Footbridge Complete											
TWSR-West/ FL Highway N/B Side Section																																											
TWFB1130	TWP1 - Predrilling	12	19-May-14	31-May-14	01-Apr-15	17-Apr-15	257	[Gantt bars for 2014]																																			
TWFB1140	TWP1 - Pre-bored H pile (8 nos)	24	13-Aug-14	10-Sep-14	18-Apr-15	16-May-15	197	[Gantt bars for 2014]																																			
TWFB1150	TWP1 - Pile Test	28	11-Sep-14	08-Oct-14	18-May-15	14-Jun-15	249	[Gantt bars for 2014]																																			
TWFB1160	TWP1 - Pile cap, Pier and Pier Head	45	25-Sep-14	18-Nov-14	01-Jun-15	24-Jul-15	196	[Gantt bars for 2014]																																			
TWFB1210	TWAB2 - Predrilling	12	03-May-14	17-May-14	18-Mar-15	31-Mar-15	257	[Gantt bars for 2014]																																			
TWFB1220	TWAB2 - Pre-bored H pile (4 nos)	12	30-Jul-14	12-Aug-14	01-Apr-15	17-Apr-15	197	[Gantt bars for 2014]																																			
TWFB1230	TWAB2 - Pile Test	28	13-Aug-14	09-Sep-14	04-May-15	31-May-15	264	[Gantt bars for 2014]																																			
TWFB1240	TWAB2 - pile cap & abutment wall	30	27-Aug-14	03-Oct-14	18-May-15	23-Jun-15	209	[Gantt bars for 2014]																																			
TWFB1250	TWAB2 - Backfilling (~4m)	27	04-Oct-14	04-Nov-14	29-Jun-18	31-Jul-18	1094	[Gantt bars for 2014]																																			
TWFB1260	Steel Staircase ready for erection (TWFB-TWSR-W side)	0		18-Nov-14		31-Jul-18	1082	[Gantt bars for 2014]																																			
TWFB1270	TWP4, TWP5 - Predrilling	24	31-Mar-14	02-May-14	27-Aug-14	24-Sep-14	120	[Gantt bars for 2014]																																			
TWFB1280	TWP4, TWP5 - Pre-bored H pile (14 nos)	42	10-Jun-14	29-Jul-14	25-Sep-14	14-Nov-14	90	[Gantt bars for 2014]																																			
TWFB1290	TWP4, TWP5 - Pile Test	28	30-Jul-14	26-Aug-14	15-Nov-14	12-Dec-14	108	[Gantt bars for 2014]																																			
TWFB1300	TWP4, TWP5 - Pile cap, Pier and Pier Head	30	13-Aug-14	17-Sep-14	29-Nov-14	06-Jan-15	90	[Gantt bars for 2014]																																			
TWFB1310	TWAB1 - Predrilling	27	27-Feb-14	29-Mar-14	30-May-14	02-Jul-14	73	[Gantt bars for 2014]																																			
TWFB1320	TWAB1 - Pre-bored H pile (18 nos)	54	31-Mar-14	09-Jun-14	03-Jul-14	03-Sep-14	73	[Gantt bars for 2014]																																			
TWFB1330	TWAB1 - Pile Test	28	10-Jun-14	07-Jul-14	04-Sep-14	01-Oct-14	86	[Gantt bars for 2014]																																			
TWFB1340	TWAB1 - pile cap & abutment wall	30	24-Jun-14	29-Jul-14	18-Sep-14	24-Oct-14	72	[Gantt bars for 2014]																																			
TWFB1350	TWAB1 - Backfilling (~3m)	20	30-Jul-14	21-Aug-14	09-Jul-18	31-Jul-18	1155	[Gantt bars for 2014]																																			
TWFB1360	Steel Ramp ready for erection (TWFB-TWSR-W side)	0		17-Sep-14		31-Jul-18	1133	[Gantt bars for 2014]																																			
TWFB1370	Erect Staircase (TWFB-TWSR-W side)	60	19-Nov-14	30-Jan-15	01-Aug-18	11-Oct-18	1082	[Gantt bars for 2014]																																			
TWFB1380	Erect Ramp	60	18-Sep-14	28-Nov-14	01-Aug-18	11-Oct-18	1133	[Gantt bars for 2014]																																			
TWFB1390	Finishes Work	30	31-Jan-15	14-Mar-15	12-Oct-18	16-Nov-18	1082	[Gantt bars for 2014]																																			
TWFB1400	Bridge Structure complete (TWFB-TWSR-W side)	0		14-Mar-15		16-Nov-18	1082	[Gantt bars for 2014]																																			
Crossing Fanling Highway Section																																											

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								3	2014				2015				2016				2017				2018				2019						
								Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
TWFB1410	TWP2 - Pre-drilling	18	06-May-16	27-May-16	02-Mar-18	22-Mar-18	538																												
TWFB1420	TWP2 - Pre-bored H pile (6 nos)	18	28-May-16	18-Jun-16	23-Mar-18	17-Apr-18	538																												
TWFB1430	TWP2 - Pile Test	28	18-Jun-16	16-Jul-16	18-Apr-18	15-May-18	668																												
TWFB1440	TWP2 - Pile cap, Pier and Pier Head	45	04-Jul-16	24-Aug-16	02-May-18	25-Jun-18	538																												
TWFB1450	Erect TWFB across fanling highway	90	25-Aug-16	10-Dec-16	26-Jun-18	11-Oct-18	538																												
TWFB1460	Finishes Work	30	12-Dec-16	18-Jan-17	12-Oct-18	16-Nov-18	538																												
TWFB1470	Bridge Structure complete (TWFB-Cross fanling highway)	0		18-Jan-17		16-Nov-18	538																												
TWSR-East FL Highway S/B Side Section																																			
TWFB1480	Precautionary work for MTRC I&P area	45	09-Mar-16	05-May-16	13-Jan-18	08-Mar-18	544																												
TWFB1540	TWP3 - Pre-drilling	12	06-May-16	20-May-16	09-Mar-18	22-Mar-18	544																												
TWFB1550	TWP3 - Pre-bored H pile (6 nos)	18	21-May-16	11-Jun-16	23-Mar-18	17-Apr-18	544																												
TWFB1560	TWP3- Pile Test	28	11-Jun-16	09-Jul-16	18-Apr-18	15-May-18	675																												
TWFB1570	TWP3 - Pile cap, Pier and Pier Head	45	27-Jun-16	18-Aug-16	02-May-18	25-Jun-18	543																												
Temporary Tai Wo Footbridge																																			
Design Works																																			
TWFB-T1000	Procurement of Temporary bridge Design consultant	52	18-Jul-13	16-Sep-13	26-May-15	27-Jul-15	540																												
TWFB-T1010	Design preparation	90	17-Sep-13	06-Jan-14	28-Jul-15	12-Nov-15	540																												
TWFB-T1020	Engineer Comment	26	07-Jan-14	14-Feb-14	13-Nov-15	12-Dec-15	540																												
TWFB-T1030	Design amendment	26	15-Feb-14	17-Mar-14	14-Dec-15	15-Jan-16	540																												
TWFB-T1040	Design Available	0		17-Mar-14		15-Jan-16	540																												
Construction Works																																			
TWFB-T1045	Sub-contractor procurement	52	18-Mar-14	23-May-14	16-Jan-16	29-Mar-16	540																												
TWFB-T1050	Piling & Pile cap & Pier	100	24-May-14	20-Sep-14	10-May-16	06-Sep-16	573																												
TWFB-T1055	Structure Steel Procurement	90	24-May-14	21-Aug-14	30-Mar-16	27-Jun-16	676																												
TWFB-T1057	Structure Steel prefabrication	60	22-Aug-14	03-Nov-14	28-Jun-16	06-Sep-16	538																												
TWFB-T1060	Temp. Bridge Structure erection	45	04-Nov-14	27-Dec-14	07-Sep-16	01-Nov-16	538																												
TWFB-T1070	Temp. Ramp & Staircase erection	45	29-Dec-14	27-Feb-15	02-Nov-16	23-Dec-16	538																												
TWFB-T1080	Temp Tai Wo Footbridge available & pedestrian diversion	0		27-Feb-15		23-Dec-16	538																												
Demolition of Existing Tai Wo Footbridge																																			
TWSR-West/ FL Highway N/B Side Section																																			
TWFB-DE0900	Site Clearance	30	18-Jul-13	21-Aug-13	19-Nov-16	23-Dec-16	979																												
TWFB-DE0910	Method Statement Submission & Approval of Demolition work	60	09-Dec-14	27-Feb-15	15-Oct-16	23-Dec-16	538																												
TWFB-DE1000	Erect Temp platform for Ramp & Staircase demolition	60	28-Feb-15	13-May-15	24-Dec-16	15-Mar-17	538																												

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Activity ID	Activity Name	Original Duration	Start	Finish	Late Start	Late Finish	Total Float	3	2014-2019																							
									2014				2015				2016				2017				2018				2019			
									Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
TWFB-DE1020	Demolish existing Ramp & Staircase	40	14-May-15	02-Jul-15	23-Nov-17	11-Jan-18	743																									
TWFB-DE1030	Erect Temp platform for Bridge across TWSR-W demolition	60	14-May-15	25-Jul-15	16-Mar-17	01-Jun-17	538																									
TWFB-DE1040	Demolish existing Bridge across TWSR-W	40	27-Jul-15	10-Sep-15	12-Jan-18	01-Mar-18	723																									
TWFB-DE1050	Demolish existing Tai Wo footbridge (TWSR-W side) complete	0		10-Sep-15		01-Mar-18	723																									
Crossing Fanling Highway Section																																
TWFB-DE1060	Erect Temp platform for bridge demolition	60	27-Jul-15	06-Oct-15	02-Jun-17	11-Aug-17	538																									
TWFB-DE1070	Demolish existing Tai Wo Footbridge	45	07-Oct-15	28-Nov-15	12-Aug-17	04-Oct-17	538																									
TWFB-DE1080	Removal of temporary platform	30	30-Nov-15	06-Jan-16	06-Oct-17	10-Nov-17	538																									
TWFB-DE1090	Demolish remaining columns	60	07-Jan-16	29-Mar-16	11-Nov-17	23-Jan-18	538																									
TWFB-DE1100	Backfilling & road work	30	30-Mar-16	05-May-16	24-Jan-18	01-Mar-18	538																									
TWFB-DE1110	Demolish existing Tai Wo Footbridge complete (across FH)	0		05-May-16		01-Mar-18	538																									
TWSR-West Construction																																
Drainage & Road Works																																
General																																
HW.1025	Processing time allowance for Gazetting Express Way Changes FHW/NB at Zone 2	182	01-Apr-16	29-Sep-16	01-Apr-16	29-Sep-16	0																									
Ch 5880-6125																																
RDZ20090	Z2 (CH5880-6930) : New TWSR - West Road works (2 lanes) Start	0	28-Sep-16		30-Sep-16		2																									
RDZ20150	Z2 : New TWSR-West Temp Road Works (1 lane) for TTA of FH N/B	20	30-Sep-16	25-Oct-16	30-Sep-16	25-Oct-16	0																									
RDZ20160	Z2 : New TWSR-West D&R Works (lane 1)	180	26-Oct-16	12-Jun-17	01-Sep-17	12-Apr-18	248																									
RDZ20170	Z2 : New TWSR-West D&R Works (lane 2)	180	13-Jun-17	16-Jan-18	13-Apr-18	16-Nov-18	248																									
Ch 6400-6740																																
RDZ20140	Z2 (CH5880-6930) : New TWSR - West Road works (2 lanes) complete	0		16-Jan-18		16-Nov-18	248																									
Noise Barrier Along Fanling Highway S/B																																
NB46A (Ch.5880-5935)-FH S/B Side																																
Noise Barrier Works																																
NB02200	NB46A - Sheet piling & Excavation	21	06-Oct-14	29-Oct-14	17-Feb-17	13-Mar-17	690																									
NB02210	NB46A - Footing & Wall Structure	60	30-Oct-14	10-Jan-15	14-Mar-17	29-May-17	690																									
NB02220	NB46A- backfilling	50	12-Jan-15	18-Mar-15	31-May-17	28-Jul-17	690																									
NB02230	NB46A - NB production	45	10-Jan-15	24-Feb-15	28-Sep-18	11-Nov-18	1356																									
NB02240	NB46A - NB post & panel installation	5	19-Mar-15	24-Mar-15	12-Nov-18	16-Nov-18	1074																									
NB51 (Ch.5935-6055)-FH S/B Side																																
Noise Barrier Works																																
NB02250	NB51 ID1-3 (0-25m), 18nos Predrilling	10	18-Jul-13	29-Jul-13	23-Nov-15	03-Dec-15	690																									
NB02260	NB51 ID1-3 (0-25m) 18nos Piling- 1 rigs	27	30-Jul-13	29-Aug-13	04-Dec-15	07-Jan-16	690																									
NB02270	NB51 ID1-3 (0-25m) - Sheet piling & Excavation	21	30-Aug-13	24-Sep-13	08-Jan-16	01-Feb-16	690																									

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								Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
NB02280	NB51 ID1-3 (0-25m) - Footing & Wall Structure	90	25-Sep-13	13-Jan-14	02-Feb-16	01-Jun-16	690	[Gantt bars for 2013-2019]																											
NB02290	NB51 ID1-3 (0-25m) - backfilling	50	14-Jan-14	21-Mar-14	02-Jun-16	01-Aug-16	690	[Gantt bars for 2013-2019]																											
NB02300	NB51 ID1-3 (0-25m) - NB production	45	14-Jan-14	27-Feb-14	28-Sep-18	11-Nov-18	1718	[Gantt bars for 2013-2019]																											
NB02310	NB51 ID1-3 (0-25m) - NB post & panel installation	5	22-Mar-14	27-Mar-14	12-Nov-18	16-Nov-18	1363	[Gantt bars for 2013-2019]																											
NB02320	NB51(25-118m) - Sheet piling & Excavation	18	22-Mar-14	12-Apr-14	02-Aug-16	22-Aug-16	690	[Gantt bars for 2013-2019]																											
NB02330	NB51(25-118m) - Footing & Wall Structure	90	14-Apr-14	04-Aug-14	23-Aug-16	08-Dec-16	690	[Gantt bars for 2013-2019]																											
NB02340	NB51(25-118m)- backfilling	50	05-Aug-14	04-Oct-14	09-Dec-16	16-Feb-17	690	[Gantt bars for 2013-2019]																											
NB02350	NB51(25-118m) - NB production	45	05-Aug-14	18-Sep-14	28-Sep-18	11-Nov-18	1515	[Gantt bars for 2013-2019]																											
NB02360	NB51(25-118m) - NB post & panel installation	5	06-Oct-14	10-Oct-14	12-Nov-18	16-Nov-18	1205	[Gantt bars for 2013-2019]																											
NB52 (Ch.6055-6125) -FH S/B Side (MTRC I&P Area)																																			
Noise Barrier Works																																			
NB02362	Coordinate with MTRC for Precautionary Measure	60	24-Feb-18	10-May-18	24-Feb-18	10-May-18	0	[Gantt bars for 2013-2019]																											
NB02364	Precautionary Measure installation	26	11-May-18	11-Jun-18	11-May-18	11-Jun-18	0	[Gantt bars for 2013-2019]																											
NB02370	NB52 - Sheet piling & Excavation	26	12-Jun-18	13-Jul-18	12-Jun-18	13-Jul-18	0	[Gantt bars for 2013-2019]																											
NB02380	NB52 - Footing & Wall Structure	50	14-Jul-18	10-Sep-18	14-Jul-18	10-Sep-18	0	[Gantt bars for 2013-2019]																											
NB02390	NB52- backfilling	50	11-Sep-18	10-Nov-18	11-Sep-18	10-Nov-18	0	[Gantt bars for 2013-2019]																											
NB02400	NB52 - NB production	45	11-Sep-18	25-Oct-18	28-Sep-18	11-Nov-18	17	[Gantt bars for 2013-2019]																											
NB02410	NB52 - NB post & panel installation	5	12-Nov-18	16-Nov-18	12-Nov-18	16-Nov-18	0	[Gantt bars for 2013-2019]																											
NB53 (Ch.6125-6300) -FH S/B Side (MTRC I&P Area)																																			
Noise Barrier Works																																			
NB02420	Coordinate with MTRC for Precautionary Measure	60	05-Sep-16	16-Nov-16	05-Sep-16	16-Nov-16	0	[Gantt bars for 2013-2019]																											
NB02430	Precautionary Measure installation	26	17-Nov-16	16-Dec-16	17-Nov-16	16-Dec-16	0	[Gantt bars for 2013-2019]																											
NB02440	NB53 (0-100m) - Sheet piling & Excavation	26	22-Dec-17	24-Jan-18	22-Dec-17	24-Jan-18	0	[Gantt bars for 2013-2019]																											
NB02450	NB53 (0-100m) - Footing & Wall Structure	60	25-Jan-18	11-Apr-18	25-Jan-18	11-Apr-18	0	[Gantt bars for 2013-2019]																											
NB02460	NB53 (0-100m)- backfilling	50	12-Apr-18	11-Jun-18	12-Apr-18	11-Jun-18	0	[Gantt bars for 2013-2019]																											
NB02470	NB53 (0-100m) - NB production	45	12-Apr-18	26-May-18	28-Sep-18	11-Nov-18	169	[Gantt bars for 2013-2019]																											
NB02480	NB53 (0-100m) - NB post & panel installation	5	28-May-18	01-Jun-18	12-Nov-18	16-Nov-18	139	[Gantt bars for 2013-2019]																											
NB02490	NB53 ID2-3 (100-125m), 18nos Predrilling	10	17-Dec-16	30-Dec-16	17-Dec-16	30-Dec-16	0	[Gantt bars for 2013-2019]																											
NB02500	NB53 ID2-3 (100-125m) 18nos Piling- 1 rigs	27	31-Dec-16	09-Feb-17	31-Dec-16	09-Feb-17	0	[Gantt bars for 2013-2019]																											
NB02510	NB53 ID2-3 (100-125m) - Sheet piling & Excavation	21	10-Feb-17	06-Mar-17	10-Feb-17	06-Mar-17	0	[Gantt bars for 2013-2019]																											
NB02520	NB53 ID2-3 (100-125m) - Footing & Wall Structure	60	07-Mar-17	22-May-17	07-Mar-17	22-May-17	0	[Gantt bars for 2013-2019]																											
NB02530	NB53 ID2-3 (100-125m) - backfilling	50	23-May-17	21-Jul-17	23-May-17	21-Jul-17	0	[Gantt bars for 2013-2019]																											
NB02540	NB53 ID2-3 (100-125m) - NB production	45	23-May-17	06-Jul-17	28-Sep-18	11-Nov-18	493	[Gantt bars for 2013-2019]																											

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Activity ID	Activity Name	Original Duration	Start	Finish	Late Start	Late Finish	Total Float	Gantt Chart																											
								2014		2015				2016				2017				2018				2019									
								Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
Z2.P2N.1100	Handover inspection	1	08-Apr-14	08-Apr-14	12-Apr-14	12-Apr-14	4																												
Structure Works																																			
BW1000	Reprovided boundary wall	300	26-Oct-16	03-Nov-17	14-Nov-17	16-Nov-18	308	[Gantt bars for BW1000]																											
TCSS Works																																			
AADS1																																			
TCSS1400	Slow lane footing - AAD S1 (NB43A)	0		21-Apr-16		11-Oct-18	731	21-Apr-16 ◆ Slow lane footing - AAD S1 (NB43A)																											
TCSS1410	Fast lane footing - AADS1 (CH5880, N/B)	30	09-Aug-17	12-Sep-17	05-Sep-18	11-Oct-18	320	[Gantt bars for TCSS1410]																											
TCSS1660	TTA application & Approval - AADS1	90	29-May-17	12-Sep-17	26-Jun-18	11-Oct-18	320	[Gantt bars for TCSS1660]																											
TCSS1670	Sign Gantry Erection - AADS1	30	13-Sep-17	19-Oct-17	12-Oct-18	16-Nov-18	320	[Gantt bars for TCSS1670]																											
FVMS1																																			
TCSS1420	Slow lane footing - FVMS1 (NB50A)	0		29-Sep-16		11-Oct-18	598	29-Sep-16 ◆ Slow lane footing - FVMS1 (NB50A)																											
TCSS1430	Predrilling (6no, 0.19m mini pile)	12	06-Sep-17	19-Sep-17	11-Jul-18	24-Jul-18	248	[Gantt bars for TCSS1430]																											
TCSS1432	Piling (6nos, 0.19m mini pile)	18	06-Oct-17	26-Oct-17	25-Jul-18	14-Aug-18	236	[Gantt bars for TCSS1432]																											
TCSS1434	Sheeting & excavation (4m)	12	27-Oct-17	10-Nov-17	15-Aug-18	28-Aug-18	236	[Gantt bars for TCSS1434]																											
TCSS1436	Fast lane footing - FVMS1 (CH6280, N/B)	18	11-Nov-17	01-Dec-17	29-Aug-18	18-Sep-18	236	[Gantt bars for TCSS1436]																											
TCSS1438	Back filling & reinstatement road work (2m)	18	02-Dec-17	22-Dec-17	19-Sep-18	11-Oct-18	236	[Gantt bars for TCSS1438]																											
TCSS1680	TTA application & Approval - FVMS1	90	06-Sep-17	22-Dec-17	26-Jun-18	11-Oct-18	236	[Gantt bars for TCSS1680]																											
TCSS1690	Sign Gantry Erection - FVMS1	30	23-Dec-17	30-Jan-18	12-Oct-18	16-Nov-18	236	[Gantt bars for TCSS1690]																											
ADS1																																			
TCSS1440	Slow lane footing - ADS1 (NB50A)	0		24-Aug-16		11-Oct-18	628	24-Aug-16 ◆ Slow lane footing - ADS1 (NB50A)																											
TCSS1930	Predrilling (6no, 0.19m mini pile)	12	23-Aug-17	05-Sep-17	19-Jun-18	03-Jul-18	242	[Gantt bars for TCSS1930]																											
TCSS1940	Piling (6nos, 0.19m mini pile)	18	13-Sep-17	04-Oct-17	04-Jul-18	24-Jul-18	236	[Gantt bars for TCSS1940]																											
TCSS1950	Sheeting & excavation (4m)	12	06-Oct-17	19-Oct-17	15-Aug-18	28-Aug-18	254	[Gantt bars for TCSS1950]																											
TCSS1960	Fast lane footing - ADS1 (CH6400, N/B)	18	20-Oct-17	10-Nov-17	29-Aug-18	18-Sep-18	254	[Gantt bars for TCSS1960]																											
TCSS1970	Back filling & reinstatement road work (2m)	18	11-Nov-17	01-Dec-17	19-Sep-18	11-Oct-18	254	[Gantt bars for TCSS1970]																											
TCSS1980	TTA application & Approval - ADS1	90	16-Aug-17	01-Dec-17	26-Jun-18	11-Oct-18	254	[Gantt bars for TCSS1980]																											
TCSS1990	Sign Gantry Erection - ADS1	30	02-Dec-17	09-Jan-18	12-Oct-18	16-Nov-18	254	[Gantt bars for TCSS1990]																											
FADS1																																			
TCSS1460	Slow lane footing - FADS1 (NB60)	0		27-Sep-16		11-Oct-18	600	27-Sep-16 ◆ Slow lane footing - FADS1 (NB60)																											
TCSS2000	Predrilling (6no, 0.19m mini pile)	12	17-Jul-17	29-Jul-17	05-May-18	18-May-18	238	[Gantt bars for TCSS2000]																											
TCSS2010	Piling (6nos, 0.19m mini pile)	18	31-Jul-17	19-Aug-17	19-May-18	09-Jun-18	238	[Gantt bars for TCSS2010]																											
TCSS2020	Sheeting & excavation (4m)	12	21-Aug-17	02-Sep-17	15-Aug-18	28-Aug-18	292	[Gantt bars for TCSS2020]																											
TCSS2030	Fast lane footing - FADS1 (CH6830, N/B)	18	04-Sep-17	23-Sep-17	29-Aug-18	18-Sep-18	292	[Gantt bars for TCSS2030]																											

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								3		2014				2015				2016				2017				2018				2019					
								Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
NB01080	NB63A-1 - backfilling	32	11-Aug-15	16-Sep-15	15-Aug-15	21-Sep-15	4																												
NB01090	NB63A-1 - NB production	45	12-Feb-15	28-Mar-15	27-Dec-16	09-Feb-17	684																												
NB01100	NB63A-1 - NB post & panel installation	5	17-Sep-15	22-Sep-15	10-Feb-17	15-Feb-17	404																												
NB01120	NB63A-2 - Footing & Wall Structure (ch10.7-24.2)	30	12-Feb-15	26-Mar-15	17-Feb-15	31-Mar-15	4																												
NB01130	NB63A-2 - backfilling	32	17-Sep-15	27-Oct-15	22-Sep-15	31-Oct-15	4																												
NB01140	NB63A-2 - NB production	45	27-Mar-15	10-May-15	27-Dec-16	09-Feb-17	641																												
NB01150	NB63A-2 - NB post & panel installation	5	28-Oct-15	02-Nov-15	10-Feb-17	15-Feb-17	372																												
NB01170	NB63A-3 - Footing & Wall Structure (ch24.2-86.9)	50	27-Mar-15	29-May-15	01-Apr-15	03-Jun-15	4																												
NB01180	NB63A-3 - backfilling	54	11-Aug-15	14-Oct-15	27-Aug-15	31-Oct-15	14																												
NB01190	NB63A-3 - NB production	45	30-May-15	13-Jul-15	27-Dec-16	09-Feb-17	577																												
NB01200	NB63A-3 - NB post & panel installation	5	15-Oct-15	20-Oct-15	10-Feb-17	15-Feb-17	382																												
DSD Southern Trunk Sewer, Water Main Fire Main Works																																			
TSZ10850	Sheet Piling & Excavation(-6m below ground) (along NB63A)	26	15-Oct-14	13-Nov-14	20-Oct-14	18-Nov-14	4																												
TSZ10860	DSD Trunk Sewer laying (along NB63A)	26	14-Nov-14	13-Dec-14	19-Nov-14	18-Dec-14	4																												
TSZ10870	Backfill up to NB63A footing level	18	15-Dec-14	07-Jan-15	19-Dec-14	12-Jan-15	4																												
TSZ10880	Watermain installation (along NB63A)	30	08-Jan-15	11-Feb-15	04-Jun-15	10-Jul-15	114																												
TSZ10890	Firemain installation (along NB63A)	30	12-Feb-15	26-Mar-15	11-Jul-15	14-Aug-15	114																												
Underground Utility Works																																			
UUZ20210	Utility cable laying by Utility companies (Along NB63A, 125m)	60	30-May-15	10-Aug-15	04-Jun-15	14-Aug-15	4																												
NB64 & NB64A (Ch.6860-6920)-TWSR West Side																																			
Noise Barrier Works																																			
NB001000	NB64 & NB64A - Pre-drilling	35	16-Oct-13	25-Nov-13	21-Oct-13	29-Nov-13	4																												
NB001010	NB64 & NB64A - piling (0.19m - 78no)	90	26-Nov-13	22-Mar-14	30-Nov-13	27-Mar-14	4																												
NB001030	NB64 & NB64A - Footing & Wall Structure	30	23-Jun-14	28-Jul-14	27-Jun-14	01-Aug-14	4																												
NB001040	NB64 & NB64A - back filling	34	02-Sep-14	14-Oct-14	06-Sep-14	18-Oct-14	4																												
NB001050	NB64 & NB64A - NB production	45	29-Jul-14	11-Sep-14	27-Dec-16	09-Feb-17	882																												
NB001060	NB64 & NB64A - NB post & panel installation	5	15-Oct-14	20-Oct-14	10-Feb-17	15-Feb-17	676																												
DSD Southern Trunk Sewer, Water Main Fire Main Works																																			
TSZ10900	Sheet Piling & Excavation(-5m below ground) (along NB64)	21	24-Mar-14	17-Apr-14	28-Mar-14	25-Apr-14	4																												
TSZ10910	DSD Trunk Sewer laying (along NB64)	18	22-Apr-14	14-May-14	26-Apr-14	19-May-14	4																												
TSZ10920	Backfill up to NB64 footing level	32	15-May-14	21-Jun-14	20-May-14	26-Jun-14	4																												
TSZ10930	Watermain installation (along NB64)	30	23-Jun-14	28-Jul-14	27-Jun-14	01-Aug-14	4																												
TSZ10940	Firemain installation (along NB64)	30	29-Jul-14	01-Sep-14	02-Aug-14	05-Sep-14	4																												

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								2014				2015				2016				2017				2018				2019							
								Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
General																																			
RDZ20130	Z2: S3: Connection of realigned TWSR-W at interface Zone 2 & 3	60	28-Sep-16	08-Dec-16	19-Oct-16	29-Dec-16	16																												
Noise Barrier Along Fanling Highway S/B																																			
NB62 (Ch.6745-6910)-FH S/B Side (MTRC I&P Area)																																			
Noise Barrier Works																																			
NB03060	Coordinate with MTRC for Precautionary Measure	60	27-Aug-16	08-Nov-16	15-Sep-16	26-Nov-16	16																												
NB03070	Precautionary Measure installation	26	09-Nov-16	08-Dec-16	28-Nov-16	29-Dec-16	16																												
NB03080	NB62 (0-80m) - Sheet piling & Excavation	18	09-Dec-16	31-Dec-16	30-Dec-16	20-Jan-17	16																												
NB03090	NB62 (0-80m) - Footing & Wall Structure	60	03-Jan-17	21-Mar-17	21-Jan-17	10-Apr-17	16																												
NB03100	NB62 (0-80m) - backfilling	50	22-Mar-17	25-May-17	11-Apr-17	14-Jun-17	16																												
NB03110	NB62 (0-80m) - NB production	45	22-Mar-17	05-May-17	29-Jul-17	11-Sep-17	129																												
NB03120	NB62 (0-80m) - NB post & panel installation	5	26-May-17	01-Jun-17	12-Sep-17	16-Sep-17	91																												
NB03130	NB62 (80-110m) Under bridge - Sheet piling & Excavation	12	26-May-17	09-Jun-17	15-Jun-17	28-Jun-17	16																												
NB03140	NB62 (80-110m) Under bridge - Footing & Wall Structure	25	10-Jun-17	10-Jul-17	29-Jun-17	28-Jul-17	16																												
NB03150	NB62 (80-110m) Under bridge - backfilling	14	11-Jul-17	26-Jul-17	26-Aug-17	11-Sep-17	40																												
NB03160	NB62 (80-110m) Under bridge - NB production	45	11-Jul-17	24-Aug-17	29-Jul-17	11-Sep-17	18																												
NB03170	NB62 (80-110m) Under bridge - NB post & panel installation	5	25-Aug-17	30-Aug-17	12-Sep-17	16-Sep-17	15																												
NB03180	NB62 (110-170m) - Sheet piling & Excavation	18	11-Mar-17	31-Mar-17	07-Apr-17	02-May-17	22																												
NB03190	NB62 (110-170m) - Footing & Wall Structure	60	01-Apr-17	17-Jun-17	04-May-17	14-Jul-17	22																												
NB03200	NB62 (110-170m) - backfilling	50	19-Jun-17	16-Aug-17	15-Jul-17	11-Sep-17	22																												
NB03210	NB62 (110-170m) - NB production	45	17-Jun-17	01-Aug-17	29-Jul-17	11-Sep-17	41																												
NB03220	NB62 (110-170m) - NB post & panel installation	5	17-Aug-17	22-Aug-17	12-Sep-17	16-Sep-17	22																												
NB70 (Ch.6910-6930)-FH S/B Side																																			
Noise Barrier Works																																			
NB03230	Coordinate with MTRC for Precautionary Measure	60	27-Aug-16	08-Nov-16	23-Sep-16	03-Dec-16	22																												
NB03240	Precautionary Measure installation	26	09-Nov-16	08-Dec-16	05-Dec-16	06-Jan-17	22																												
NB03250	NB70 - Sheet piling & Excavation	18	09-Dec-16	31-Dec-16	07-Jan-17	27-Jan-17	22																												
NB03260	NB70 - Footing & Wall Structure	26	03-Jan-17	09-Feb-17	06-Feb-17	07-Mar-17	22																												
NB03270	NB70- backfilling	25	10-Feb-17	10-Mar-17	08-Mar-17	06-Apr-17	22																												
No AC-05 Detail Element																																			
NB03280	NB70 - NB production	45	10-Feb-17	26-Mar-17	29-Jul-17	11-Sep-17	169																												
NB03290	NB70- NB post & panel installation	5	27-Mar-17	31-Mar-17	12-Sep-17	16-Sep-17	137																												
Fanling Highway Construction																																			
Drainage & Road Works																																			

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								2014		2015				2016				2017				2018				2019			
								Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Ch 6740-6930																													
RDZ20430	Z2 (CH6740-6930) : Fanling Highway Road works Start	0	26-Oct-16		02-Nov-16		6	◆ Z2 (CH6740-6930): Fanling Highway Road works Start																					
RDZ20440	Z2 (CH6740-6930) : Fanling Highway N/B - D&R works (lane 1)	32	26-Oct-16	01-Dec-16	02-Nov-16	08-Dec-16	6	■																					
RDZ20450	Z2 (CH6740-6930) : Fanling Highway N/B - D&R works (lane 2)	32	02-Dec-16	11-Jan-17	09-Dec-16	18-Jan-17	6	■																					
RDZ20460	Z2 (CH6740-6930) : Fanling Highway N/B - D&R works (lane 3)	32	12-Jan-17	25-Feb-17	19-Jan-17	04-Mar-17	6	■																					
RDZ20470	Z2 (CH6740-6930) : Fanling Highway N/B - D&R works (lane 4)	32	27-Feb-17	04-Apr-17	06-Mar-17	12-Apr-17	6	■																					
RDZ20490	Z2 (CH6740-6930) : Fanling Highway S/B - D&R works (lane 1)	32	06-Apr-17	18-May-17	13-Apr-17	25-May-17	6	■																					
RDZ20500	Z2 (CH6740-6930) : Fanling Highway S/B - D&R works (lane 2)	32	19-May-17	26-Jun-17	26-May-17	04-Jul-17	6	■																					
RDZ20510	Z2 (CH6740-6930) : Fanling Highway S/B - D&R works (lane 3)	32	27-Jun-17	03-Aug-17	05-Jul-17	10-Aug-17	6	■																					
RDZ20520	Z2 (CH6740-6930) : Fanling Highway S/B - D&R works (lane 4)	32	04-Aug-17	09-Sep-17	11-Aug-17	16-Sep-17	6	■																					
RDZ20530	Z2 (CH6740-6930) : Fanling Highway Road works (8 lanes) complete	0		09-Sep-17		16-Sep-17	6	09-Sep-17 ◆ Z2 (CH6740-6930): Fanling Highway Road works (8 lanes)																					
North Buffer Zone 2 (NBZ2) (within Zone 4) (Ch. 7925 to 8100)																													
Site Formation																													
Site Formation Works																													
Site Formation Work																													
Z4SF1000	Tree felling plan and permit from Engineer	0	18-Jul-13		20-Jul-13		2	◆ Tree felling plan and permit from Engineer																					
Z4SF1010	Tree felling	30	18-Jul-13	21-Aug-13	20-Jul-13	23-Aug-13	2	■																					
Z4SF1020	Install temp filter dam at existing box culvert	6	22-Aug-13	28-Aug-13	24-Aug-13	30-Aug-13	2	■																					
Z4SF1030	Laying temp drainage pipe for drainage diversion	12	29-Aug-13	11-Sep-13	31-Aug-13	13-Sep-13	2	■																					
Z4SF1040	Construct earth bund	12	12-Sep-13	26-Sep-13	14-Sep-13	28-Sep-13	2	■																					
Z4SF1050	Remove existing unsuitable material	12	27-Sep-13	11-Oct-13	30-Sep-13	15-Oct-13	2	■																					
Z4SF1060	Backfilling up to formation level for Drainage work	30	12-Oct-13	16-Nov-13	16-Oct-13	19-Nov-13	2	■																					
Z4SF1065	Drainage Work	30	18-Nov-13	21-Dec-13	20-Nov-13	24-Dec-13	2	■																					
Z4SF1070	Backfilling (~2000m3)	180	23-Dec-13	11-Aug-14	27-Dec-13	13-Aug-14	2	■																					
Retaining Wall W76																													
Structure Works																													
RW761080	Base slab - W76 (~7m high)	12	12-Oct-13	26-Oct-13	25-Oct-13	07-Nov-13	10	■																					
RW761085	Wall construction - W76 (~7m high)	40	28-Oct-13	12-Dec-13	08-Nov-13	24-Dec-13	10	■																					
Z4SF1090	Watermains installation	21	12-Aug-14	04-Sep-14	14-Aug-14	06-Sep-14	2	■																					
Z4SF1100	Firemain installation	21	12-Aug-14	04-Sep-14	14-Aug-14	06-Sep-14	2	■																					
Z4SF1110	Backfilling up to road finishes level	30	05-Sep-14	13-Oct-14	08-Sep-14	15-Oct-14	2	■																					
Bridge Construction																													
New Ho Ka Yuen Footbridge																													
General																													

Remaining Level of Effort
 Actual Level of Effort
 Remaining Work
 Critical Remaining Work
 Milestone
 Crit. Milestone

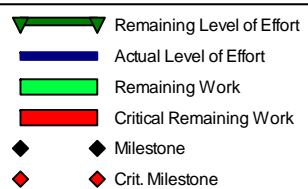
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13-May-14	WP Rev.1		
30-Jun-14	WP Rev.1A		

Activity ID	Activity Name	Original Duration	Start	Finish	Late Start	Late Finish	Total Float	Gantt Chart																											
								3	2014	2015	2016	2017	2018	2019																					
HKY1020	Site Clearance (TWSR-W side)	30	18-Jul-13	21-Aug-13	12-Aug-13	14-Sep-13	21	[Gantt]																											
HKY1025	Site Clearance (TWSR-E side)(SA346)	30	18-Jul-13	21-Aug-13	27-Dec-13	10-Feb-14	134	[Gantt]																											
HKY1030	Structure steel Shop drawing submission (HKYB)	60	18-Jul-13	26-Sep-13	29-Jan-14	22-Apr-14	161	[Gantt]																											
HKY1040	Structure steel Shop drawing approval (HKYB)	30	09-Sep-13	16-Oct-13	01-Apr-14	12-May-14	161	[Gantt]																											
HKY1050	Structure steel procurement (HKYB)	150	17-Oct-13	15-Mar-14	13-May-14	09-Oct-14	208	[Gantt]																											
HKY1060	Steel Staircase & Ramp prefabrication (HKYB-TWSR-W side)	30	17-Mar-14	24-Apr-14	13-Dec-14	20-Jan-15	222	[Gantt]																											
HKY1070	Steel Staircase & Ramp available on site (HKYB-TWSR-W side)	0	25-Apr-14		21-Jan-15		222	◆ Steel Staircase & Ramp available on site (HKYB-TWSR-W side)																											
HKY1080	Steel Staircase & Ramp prefabrication (HKYB-TWSR-E side)	40	17-Mar-14	08-May-14	10-Oct-14	25-Nov-14	167	[Gantt]																											
HKY1090	Steel Staircase & Ramp available on site (HKYB-TWSR-E side)	0	09-May-14		26-Nov-14		167	◆ Steel Staircase & Ramp available on site (HKYB-TWSR-E side)																											
HKY1100	Steel Bridge prefabrication (HKYB)	50	17-Mar-14	20-May-14	09-Feb-15	18-Apr-15	268	[Gantt]																											
HKY1110	Steel Bridge available on site (HKYB)	0	21-May-14		20-Apr-15		268	◆ Steel Bridge available on site (HKYB)																											
HKY1180	Ho Ka Yuen Footbridge Complete	0		15-May-15		18-May-15	2	15-May-15 ◆ Ho Ka Yuen Footbridge Complete																											
HKY1190	Existing Ho Ka Yuen Footbridge Demolished	0		22-Jun-15		24-Jun-15	2	22-Jun-15 ◆ Existing Ho Ka Yuen Footbridge Demolished																											
TWSR-West/ FL Highway N/B Side Section																																			
HKY1140	HKYP6 - Predrilling	24	22-Aug-13	18-Sep-13	16-Sep-13	16-Oct-13	21	[Gantt]																											
HKY1150	HKYP6 - Pre-bored H pile (8 nos)	24	19-Sep-13	19-Oct-13	17-Oct-13	13-Nov-13	21	[Gantt]																											
HKY1160	HKYP6 - Pile Test	28	19-Oct-13	16-Nov-13	06-Dec-14	02-Jan-15	412	[Gantt]																											
HKY1170	HKYP6 - Pile cap, Pier and Pier Head	45	04-Nov-13	27-Dec-13	20-Dec-14	13-Feb-15	331	[Gantt]																											
HKY1172	HKYP1 - Predrilling	12	19-Sep-13	04-Oct-13	03-Dec-14	16-Dec-14	352	[Gantt]																											
HKY1174	HKYP1 - Pre-bored H pile (4 nos)	12	21-Oct-13	02-Nov-13	03-Jan-15	16-Jan-15	352	[Gantt]																											
HKY1176	HKYP1 - Pile Test	28	02-Nov-13	30-Nov-13	31-Jan-15	27-Feb-15	454	[Gantt]																											
HKY1178	HKYP1 - Pile cap, Pier and Pier Head	45	28-Dec-13	28-Feb-14	14-Feb-15	18-Apr-15	331	[Gantt]																											
HKY1220	HKYAB3 - Predrilling	12	19-Sep-13	04-Oct-13	31-Oct-13	13-Nov-13	33	[Gantt]																											
HKY1230	HKYAB3 - Pre-bored H pile (4 nos)	12	21-Oct-13	02-Nov-13	14-Nov-13	27-Nov-13	21	[Gantt]																											
HKY1240	HKYAB3 - Pile Test	28	02-Nov-13	30-Nov-13	28-Nov-13	25-Dec-13	25	[Gantt]																											
HKY1250	HKYAB3 - pile cap & abutment wall	30	18-Nov-13	21-Dec-13	12-Dec-13	18-Jan-14	21	[Gantt]																											
HKY1260	HKYAB3 - Backfilling (~4m)	27	23-Dec-13	25-Jan-14	20-Jan-14	28-Feb-14	21	[Gantt]																											
HKY1270	Steel Staircase ready for erection (THFB-TWSR-W side)	0		25-Jan-14		11-Apr-15	346	25-Jan-14 ◆ Steel Staircase ready for erection (THFB-TWSR-W side)																											
HKY1273	Erect Staircase (HKY-TWSR-W side)	30	25-Apr-14	31-May-14	13-Apr-15	18-May-15	282	[Gantt]																											
HKY1275	Existing HKY bridge structure removed (TWSR-W)	0		16-Jul-14		09-Aug-14	21	16-Jul-14 ◆ Existing HKY bridge structure removed (TWSR-W)																											
HKY1280	HKYP7 - Predrilling	18	14-Aug-14	03-Sep-14	18-Oct-14	07-Nov-14	53	[Gantt]																											
HKY1290	HKYP7 - Pre-bored H pile (6 nos)	18	13-Oct-14	01-Nov-14	08-Nov-14	28-Nov-14	23	[Gantt]																											



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30-Jun-14	WP Rev.1A		

Activity ID, Activity Name, Original Duration, Start, Finish, Late Start, Late Finish, Total Float, 2013, 2014, 2015, 2016, 2017, 2018, 2019. Includes activities like HKY1600, HKY1610, HKY1730, etc.

Legend for Gantt chart (Remaining Level of Effort, Actual Level of Effort, Remaining Work, Critical Remaining Work, Milestone, Crit. Milestone). Contract No. HY/2012/06. Widening of Fanling Highway - Tai Hang to Wo Hop Shek Interchange. Works Programme Rev. 1A. Date: 10-Jul-13. Page 39 of 49.

Table with columns: Activity ID, Activity Name, Original Duration, Start, Finish, Late Start, Late Finish, Total Float, and quarterly work bars for 2013-2019. Includes sections like 'TWSR-East Construction', 'Drainage & Road Works', and 'Noise Barrier Along TWSR-West and Laying New Utilities'.

Legend for Remaining Level of Effort, Actual Level of Effort, Remaining Work, Critical Remaining Work, Milestone, and Crit. Milestone.

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Table with columns: Date, Revision, Ch..., Appro... containing revision history entries like '21-Jan-14 IWP Rev.4'.

Activity ID	Activity Name	Original Duration	Start	Finish	Late Start	Late Finish	Total Float	2013-2019 Quarterly Schedule																											
								2013				2014				2015				2016				2017				2018				2019			
								Q3	Q4	Q1	Q2	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
NB4470	NB77 -Pre-drilling (Ch8390-8450)	51	15-Sep-15	16-Nov-15	15-Dec-15	24-Feb-16	75	[Gantt bars for 2015 Q4]																											
NB4480	NB77 - piling (NB77/26-30, 0.19m -34no)	51	20-Nov-15	21-Jan-16	18-Jan-16	29-Mar-16	47	[Gantt bars for 2015 Q4]																											
NB4490	NB77 - Footing & Wall Structure (Ch8390-8450)	52	17-Mar-16	23-May-16	30-Mar-16	01-Jun-16	8	[Gantt bars for 2016 Q1]																											
NB4500	NB77 - backfilling (Ch8390-8450)	40	24-May-16	11-Jul-16	02-Jun-16	20-Jul-16	8	[Gantt bars for 2016 Q1]																											
NB4510	NB77 - NB production (Ch8390-8450)	45	24-May-16	07-Jul-16	28-Sep-18	11-Nov-18	857	[Gantt bars for 2016 Q1]																											
NB4520	NB77 - NB post & panel installation (Ch8390-8450)	5	12-Jul-16	16-Jul-16	12-Nov-18	16-Nov-18	691	[Gantt bars for 2016 Q1]																											
NB4530	NB77 complete	0		27-Jul-16		16-Nov-18	682	[Milestone: 27-Jul-16 NB77 complete]																											
NB4570	NB77 backfilling complete	0		11-Jul-16		08-Oct-16	75	[Milestone: 11-Jul-16 NB77 backfilling complete]																											
Underground Utility Works																																			
DN450 DI Watermain "A" (Ch 1989-2529)																																			
DI0100	DN450 DI watermain laying (0-50m)	40	13-Aug-16	29-Sep-16	11-Oct-16	25-Nov-16	47	[Gantt bars for 2016 Q3]																											
DI0110	DN450 DI watermain laying (50-100m)	40	30-Sep-16	17-Nov-16	26-Nov-16	14-Jan-17	47	[Gantt bars for 2016 Q4]																											
DI0120	DN450 DI watermain laying (100-150m)	40	18-Nov-16	06-Jan-17	16-Jan-17	10-Mar-17	47	[Gantt bars for 2017 Q1]																											
DI0130	DN450 DI watermain laying (150-200m)	40	07-Jan-17	02-Mar-17	11-Mar-17	02-May-17	47	[Gantt bars for 2017 Q1]																											
DI0140	DN450 DI watermain laying (200-250m)	40	03-Mar-17	22-Apr-17	04-May-17	20-Jun-17	47	[Gantt bars for 2017 Q1]																											
DI0150	DN450 DI watermain laying (250-300m)	40	24-Apr-17	12-Jun-17	21-Jun-17	07-Aug-17	47	[Gantt bars for 2017 Q2]																											
DI0160	DN450 DI watermain laying (300-350m)	40	13-Jun-17	29-Jul-17	08-Aug-17	22-Sep-17	47	[Gantt bars for 2017 Q2]																											
DI0170	DN450 DI watermain laying (350-400m)	40	31-Jul-17	14-Sep-17	23-Sep-17	11-Nov-17	47	[Gantt bars for 2017 Q3]																											
DI0180	DN450 DI watermain laying (400-450m)	40	15-Sep-17	03-Nov-17	13-Nov-17	30-Dec-17	47	[Gantt bars for 2017 Q3]																											
DI0190	DN450 DI watermain laying (450-500m)	40	04-Nov-17	20-Dec-17	02-Jan-18	19-Feb-18	47	[Gantt bars for 2018 Q1]																											
DI0200	DN450 DI watermain laying (500-540m)	40	21-Dec-17	08-Feb-18	20-Feb-18	11-Apr-18	47	[Gantt bars for 2018 Q1]																											
Bridge Construction																																			
New Wo Hop Shek Pedstrian & Cycle Bridge																																			
General																																			
WHS1000	Site Clearance (Main bridge area SA344)	30	15-Mar-14	23-Apr-14	28-Nov-16	04-Jan-17	794	[Gantt bars for 2014 Q1]																											
WHS1010	Site Clearance & Temp Platform erection (SA340)	45	18-Jul-13	07-Sep-13	28-Jul-15	17-Sep-15	592	[Gantt bars for 2013 Q4]																											
WHS1020	Structure steel Shop drawing submission (WHSB)	60	18-Jul-13	26-Sep-13	21-Aug-15	02-Nov-15	613	[Gantt bars for 2013 Q4]																											
WHS1030	Structure steel Shop drawing approval (WHSB)	30	09-Sep-13	16-Oct-13	15-Oct-15	19-Nov-15	613	[Gantt bars for 2013 Q4]																											
WHS1040	Structure steel procurement (WHSB)	150	17-Oct-13	15-Mar-14	20-Nov-15	17-Apr-16	764	[Gantt bars for 2013 Q4]																											
WHS1050	Steel Ramp prefabrication (WHSB)	50	17-Mar-14	20-May-14	18-Apr-16	17-Jun-16	608	[Gantt bars for 2014 Q1]																											
WHS1060	Steel Ramp available on site (WHSB)	0	21-May-14		18-Jun-16		608	[Milestone: Steel Ramp available on site (WHSB)]																											
WHS1070	Steel Staircase prefabrication (WHSB)	40	17-Mar-14	08-May-14	31-Oct-19	16-Dec-19	1656	[Gantt bars for 2013 Q4]																											
WHS1080	Steel Staircase available on site (WHSB)	0	09-May-14		16-Dec-19		1656	[Milestone: Steel Staircase available on site (WHSB)]																											

■ Remaining Level of Effort
■ Actual Level of Effort
■ Remaining Work
■ Critical Remaining Work
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Activity ID	Activity Name	Original Duration	Start	Finish	Late Start	Late Finish	Total Float	Gantt Chart																											
								3																											
								2014				2015				2016				2017				2018				2019							
Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4						
WHS1105	W77A & W 77B & backfilling work complete	0		05-Nov-14		03-Nov-17	875	05-Nov-14 ◆ W77A & W 77B & backfilling work complete																											
WHS1110	Wo Hop Shek Bridge Complete	0		23-Oct-15		03-Nov-17	593	23-Oct-15 ◆ Wo Hop Shek Bridge Complete																											
WHS1120	Diversion of existing pedestrian from existing to proposed footbridge	1	24-Oct-15	24-Oct-15	04-Nov-17	04-Nov-17	593																												
WHS1140	Existing Wo Hop Shek Bridge Demolished	0		22-Apr-16		27-Apr-18	593	22-Apr-16 ◆ Existing Wo Hop Shek Bridge Demolished																											
TWSR-West/ FL Highway N/B Side Section																																			
WHS1150	WHSP2 - Predrilling	24	24-Sep-13	23-Oct-13	05-Oct-15	02-Nov-15	592	[Gantt bar]																											
WHS1160	WHSP2 - Pre-bored H pile (8 nos)	24	24-Oct-13	20-Nov-13	11-Nov-15	08-Dec-15	599	[Gantt bar]																											
WHS1170	WHSP2 - Pile Test	28	21-Nov-13	18-Dec-13	09-Dec-15	05-Jan-16	748	[Gantt bar]																											
WHS1180	WHSP2 - Pile cap, Pier and Pier Head	45	05-Dec-13	29-Jan-14	23-Dec-15	25-Feb-16	599	[Gantt bar]																											
WHS1190	WHSP6 - Predrilling	18	24-Oct-13	13-Nov-13	03-Nov-15	23-Nov-15	592	[Gantt bar]																											
WHS1200	WHSP6 - Pre-bored H pile (6 nos)	18	21-Nov-13	11-Dec-13	18-Jan-16	06-Feb-16	630	[Gantt bar]																											
WHS1210	WHSP6 - Pile Test	28	12-Dec-13	08-Jan-14	12-Feb-16	10-Mar-16	792	[Gantt bar]																											
WHS1220	WHSP6 - Pile cap, Pier and Pier Head	45	30-Jan-14	01-Apr-14	26-Feb-16	22-Apr-16	599	[Gantt bar]																											
WHS1222	WHSP7 - Predrilling	18	14-Nov-13	04-Dec-13	24-Nov-15	14-Dec-15	592	[Gantt bar]																											
WHS1224	WHSP7 - Pre-bored H pile (6 nos)	18	12-Dec-13	04-Jan-14	15-Mar-16	08-Apr-16	653	[Gantt bar]																											
WHS1226	WHSP7 - Pile Test	28	04-Jan-14	01-Feb-14	09-Apr-16	06-May-16	825	[Gantt bar]																											
WHS1228	WHSP7 - Pile cap, Pier and Pier Head	45	02-Apr-14	30-May-14	23-Apr-16	17-Jun-16	599	[Gantt bar]																											
WHS1230	WHSAB1 - Predrilling	12	09-Sep-13	23-Sep-13	18-Sep-15	03-Oct-15	592	[Gantt bar]																											
WHS1240	WHSAB1 - Pre-bored H pile (4 nos)	12	24-Sep-13	08-Oct-13	28-Oct-15	10-Nov-15	611	[Gantt bar]																											
WHS1250	WHSAB1 - Pile Test	28	09-Oct-13	05-Nov-13	08-Jul-17	04-Aug-17	1368	[Gantt bar]																											
WHS1260	WHSAB1 - pile cap & abutment wall	30	23-Oct-13	26-Nov-13	22-Jul-17	25-Aug-17	1091	[Gantt bar]																											
WHS1270	WHSAB1 - Backfilling (~4m)	27	27-Nov-13	30-Dec-13	26-Aug-17	26-Sep-17	1091	[Gantt bar]																											
WHS1280	Steel Staircase ready for erection (WHS-TWSR-W side)	0		30-May-14		26-Sep-17	976	30-May-14 ◆ Steel Staircase ready for erection (WHS-TWSR-W side)																											
WHS1290	Erect Staircase (WHS-TWSR-W side)	30	23-Dec-14	29-Jan-15	27-Sep-17	03-Nov-17	805	[Gantt bar]																											
WHS1300	Existing WHS bridge structure removed	0		23-Dec-14		04-Jan-17	592	23-Dec-14 ◆ Existing WHS bridge structure removed																											
WHS1350	WHSAB2 - Predrilling	24	24-Dec-14	23-Jan-15	05-Jan-17	09-Feb-17	592	[Gantt bar]																											
WHS1360	WHSAB2 - Pre-bored H pile (22 nos)	66	24-Jan-15	22-Apr-15	10-Feb-17	04-May-17	592	[Gantt bar]																											
WHS1370	WHSAB2 - Pile Test	28	23-Apr-15	20-May-15	05-May-17	01-Jun-17	743	[Gantt bar]																											
WHS1380	WHSAB2 - pile cap & abutment wall	30	07-May-15	11-Jun-15	19-May-17	23-Jun-17	593	[Gantt bar]																											
WHS1390	WHSAB2 - Backfilling (~3m)	20	12-Jun-15	07-Jul-15	24-Jun-17	18-Jul-17	593	[Gantt bar]																											
WHS1400	2nd half Steel Ramp ready for erection (WHS-TWSR-W side)	0		07-Jul-15		18-Jul-17	593	07-Jul-15 ◆ 2nd half Steel Ramp ready for erection (WHS-TWSR-W side)																											
WHS1410	Erect 2nd half Ramp	60	08-Jul-15	15-Sep-15	19-Jul-17	26-Sep-17	593	[Gantt bar]																											

Remaining Level of Effort
 Actual Level of Effort
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Activity ID	Activity Name	Original Duration	Start	Finish	Late Start	Late Finish	Total Float	2013-2019																											
								2013				2014				2015				2016				2017				2018				2019			
								Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
WHS2070	North Abu ment Wall (AW1) - Pile Test	28	13-Nov-13	10-Dec-13	18-Oct-16	14-Nov-16	1070																												
WHS2075	North Abu ment Wall (AW1) - Temp Shoring	45	13-Nov-13	07-Jan-14	15-Oct-15	07-Dec-15	560																												
WHS2080	North Abu ment Wall (AW1) -pile cap & abutment wall	60	08-Jan-14	27-Mar-14	01-Nov-16	12-Jan-17	820																												
WHS2090	North Abu ment Wall (AW1) - Backfilling (~6m)	60	28-Mar-14	13-Jun-14	13-Jan-17	31-Mar-17	820																												
Demolition of Existing Wo Hop Shek Pedstrian & Cycle Bridge																																			
TWSR-West/ FL Highway N/B Side Section																																			
WHS1870	Install Temp support to remove existing ramp	25	15-Oct-14	12-Nov-14	24-Oct-16	21-Nov-16	592																												
WHS1880	Remove existing ramp for 2nd half new ramp construction	35	13-Nov-14	23-Dec-14	22-Nov-16	04-Jan-17	592																												
WHS1890	Demolish existing WHS footbridge (TWSR-W side)	30	26-Oct-15	28-Nov-15	10-Feb-18	19-Mar-18	673																												
WHS2030	Remove temp filled platform	30	30-Nov-15	06-Jan-16	20-Mar-18	27-Apr-18	673																												
Crossing Fanling Highway Section																																			
WHS1790	Erect Temp platform for bridge demolition	60	13-Aug-15	24-Oct-15	24-Aug-17	04-Nov-17	593																												
WHS1800	Demolish existing WHS Footbridge	60	26-Oct-15	06-Jan-16	06-Nov-17	17-Jan-18	593																												
WHS1810	Removal of temporary platform	30	07-Jan-16	19-Feb-16	18-Jan-18	23-Feb-18	593																												
WHS1820	Remove existing column	30	20-Feb-16	29-Mar-16	24-Feb-18	03-Apr-18	593																												
WHS1830	Reinstate road work	20	30-Mar-16	22-Apr-16	04-Apr-18	27-Apr-18	593																												
TWSR-West Construction																																			
Drainage & Road Works																																			
TWSR-West/ FL Highway N/B Side Section																																			
RDZ41180	TWSR -W Road Works	180	09-Feb-18	18-Sep-18	12-Apr-18	15-Nov-18	47																												
Slip Road Y Construction																																			
Drainage & Road Works																																			
TWSR-East FL Highway S/B Side Section																																			
RDZ41000	Construct Slip Rd Y (Ch8250-8370)(SA340) (Z4 TTA-Stage 1)	95	27-Dec-13	02-May-14	11-Jan-14	17-May-14	12																												
RDZ41010	Construct Slip Rd Y (Ch8100-8250)(SA342) (Z4 TTA-Stage 2)	95	03-May-14	25-Aug-14	19-May-14	08-Sep-14	12																												
RDZ41020	Construct Slip Rd Y @ existing TWSR-E junction (Ch8050-8100)(SA341) (Z4 TTA-Stage 3)	70	07-Nov-14	30-Jan-15	10-Nov-14	02-Feb-15	2																												
RDZ41060	Construct Slip Rd Y - Half Lane (Ch8370-8650)(SA340) (Z4 TTA-Stage 4)	160	05-May-15	13-Nov-15	01-Apr-17	16-Oct-17	560																												
RDZ41070	Traffic diversion onto slip rd Y - half lane (Z4 TTA-Stage 4)	6	14-Nov-15	20-Nov-15	17-Oct-17	23-Oct-17	560																												
RDZ41080	Construct Slip Rd Y- remaining half lane (Ch8370-8650)(SA340) (Z4 TTA-Stage 5)	150	21-Nov-15	02-Jun-16	24-Oct-17	27-Apr-18	560																												
RDZ41085	Construct Slip Rd Y (Ch7925-8050)(SA346)	150	23-Jun-15	18-Dec-15	07-Jan-16	18-Jul-16	163																												
RDZ41088	Gazettal period for Slip Road Y commissioning	183	03-Dec-15	02-Jun-16	27-Oct-17	27-Apr-18	694																												
RDZ41089	Slip Road Y (Ch7925-8650) complete	0		02-Jun-16		27-Apr-18	560																												
Underground Utility Works																																			
DN600 and DN900 Watermain																																			
DN1000	DN600 & DN900 watermain laying (Ch8250-8370)(SA340) (near Z4 TTA-Stage 1)	70	27-Dec-13	28-Mar-14	30-May-14	21-Aug-14	117																												

Remaining Level of Effort
 Actual Level of Effort
 Remaining Work
 Critical Remaining Work
 Milestone
 Crit. Milestone

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30-Jun-14	WP Rev.1A		

Activity ID	Activity Name	Original Duration	Start	Finish	Late Start	Late Finish	Total Float	2013-2019																											
								2013				2014				2015				2016				2017				2018				2019			
								Q3	Q4	Q1	Q2	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
DN1010	DN600 & DN900 watermain laying (Ch8100-8250)(SA342) (near Z4 TTA-Stage 2)	75	03-May-14	01-Aug-14	22-Aug-14	20-Nov-14	92																												
DN1020	DN600 & DN900 watermain laying (Ch8050-8100)(SA341) (near Z4 TTA-Stage 3)	60	07-Nov-14	19-Jan-15	21-Nov-14	02-Feb-15	12																												
DN1030	DN600 & DN900 watermain laying (Ch7925-8050)(SA346)	120	12-Aug-14	05-Jan-15	10-Sep-14	02-Feb-15	24																												
DN1040	DN600 & DN900 watermain laying(Ch8370-8650)(SA340) (near Z4 TTA-Stage 4)	120	05-May-15	24-Sep-15	02-Jun-17	23-Oct-17	606																												
DN1050	DN600 & DN900 Watermain laying complete	0		24-Sep-15		16-Dec-19	1246																												
Fanling Highway Construction																																			
Drainage & Road Works																																			
TWSR-East FL Highway S/B Side Section																																			
HKY1412	Construct temp road for TWSR-East & FH S/B diversion	21	14-Oct-14	06-Nov-14	16-Oct-14	08-Nov-14	2																												
RDZ41002	TTA approval period	90	18-Jul-13	15-Oct-13	20-Jul-13	17-Oct-13	2																												
RDZ41004	Site Clearance & Tree Felling	60	16-Oct-13	24-Dec-13	18-Oct-13	28-Dec-13	2																												
RDZ41005	Construct FH S/B Lane 1,2 (Ch8250-8370)(SA340) (Z4 TTA-Stage 1)	100	27-Dec-13	09-May-14	30-Dec-13	12-May-14	2																												
RDZ41015	Construct FH S/B Lane 1,2 (Ch8100-8250)(SA342) (Z4 TTA-Stage 2)	100	10-May-14	05-Sep-14	13-May-14	08-Sep-14	2																												
RDZ41025	Construct FH S/B Lane 1,2 @ existing TWSR-E junction (Ch8050-8100)(SA341) (Z4 TTA-Stage 3)	60	07-Nov-14	19-Jan-15	21-Nov-14	02-Feb-15	12																												
RDZ41030	Realign Temp Road from TWSR-E to Petrol station (Z4 TTA-Stage 3)	45	06-Sep-14	31-Oct-14	10-Sep-14	03-Nov-14	2																												
RDZ41040	Construct FH S/B Lane 1,2 (Ch8000-8050)(SA340)(Z4 TTA-Stage 3)	75	01-Nov-14	30-Jan-15	04-Nov-14	02-Feb-15	2																												
RDZ41050	Traffic Diversion for FH S/B road construction (Z4 TTA-Stage 4)	6	31-Jan-15	06-Feb-15	03-Feb-15	09-Feb-15	2																												
RDZ41086	Construct FH S/B Lane 1 & 2 (Ch7925-8000)(SA346) (after HKY bridge demolition)	150	23-Jun-15	18-Dec-15	19-Oct-16	27-Apr-17	389																												
RDZ41090	Remove FH central barrier	60	07-Feb-15	29-Apr-15	17-Feb-15	09-May-15	8																												
RDZ41100	TTA for FH N/B Lane 1, 2, 3 construction (Ch7925-8600)(SA340) (Z4 TTA-Stage 6)	6	30-Apr-15	07-May-15	11-May-15	16-May-15	8																												
RDZ41110	Construct FH N/B Lane 1 (Ch7925-8600)	70	16-Apr-16	11-Jul-16	26-Apr-16	20-Jul-16	8																												
RDZ41112	Construct FH N/B Lane 2 (Ch7925-8600)	70	01-Aug-15	24-Oct-15	26-Apr-16	20-Jul-16	212																												
RDZ41114	Construct FH N/B Lane 3 (Ch7925-8600)	70	08-May-15	31-Jul-15	21-Jan-16	25-Apr-16	212																												
RDZ41120	TTA for FH N/B lane 4, S/B Lane 3 & 4 (Z4 TTA-Stage 7)	6	12-Jul-16	18-Jul-16	21-Jul-16	27-Jul-16	8																												
RDZ41130	Construct FH N/B lane 4	65	19-Jul-16	04-Oct-16	28-Jul-16	14-Oct-16	8																												
RDZ41132	Construct FH S/B Lane 3	65	05-Oct-16	20-Dec-16	15-Oct-16	31-Dec-16	8																												
RDZ41134	Construct FHS/B Lane 4	65	21-Dec-16	17-Mar-17	03-Jan-17	27-Mar-17	8																												
RDZ41140	Fanling Highway road work complete (except final pavement and central divider)	0		10-May-17		19-May-17	8																												
RDZ41150	Central Divider construction	150	11-May-17	07-Nov-17	20-May-17	16-Nov-17	8																												
RDZ41160	Final pavement & final road marking	120	08-Nov-17	06-Apr-18	17-Nov-17	16-Apr-18	8																												
RDZ41170	Complete Slip road V and associated slope work	175	07-Apr-18	05-Nov-18	18-Apr-18	15-Nov-18	9																												
RDZ41290	Construct FH N/B Lane 1 (Ch7925-8600) (besides NB75)	40	18-Mar-17	10-May-17	28-Mar-17	19-May-17	8																												

Other Works

- █ Remaining Level of Effort
- █ Actual Level of Effort
- █ Remaining Work
- █ Critical Remaining Work
- ◆ Milestone
- ◆ Crit. Milestone

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								3	2014				2015				2016				2017				2018				2019						
								Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
Retaining Wall W77A																																			
TWSR-East FL Highway S/B Side Section																																			
RWZ4.1050	Site Clearance	30	18-Jul-13	21-Aug-13	15-Oct-15	19-Nov-15	658	█																											
RWZ4.1060	Base slab & Wall (0-3m high)- RW77A (Ch.50-130)	60	22-Aug-13	02-Nov-13	20-Nov-15	01-Feb-16	658		█																										
RWZ4.1070	Backfilling (0-3m) - RW77A(Ch.50-130)	30	04-Nov-13	07-Dec-13	17-Dec-16	24-Jan-17	913			█																									
RWZ4.1075	Temp Shoring & Excavation	45	08-Jan-14	10-Mar-14	08-Dec-15	01-Feb-16	560				█																								
RWZ4.1080	Base slab & Wall (3-7m high)- RW77A (Ch.0-50)	90	11-Mar-14	02-Jul-14	02-Feb-16	01-Jun-16	560				█																								
RWZ4.1090	Backfilling (3-7m high) - RW77A(Ch.0-50)	50	03-Jul-14	29-Aug-14	25-Jan-17	31-Mar-17	755					█																							
Retaining Wall W77B																																			
TWSR-East FL Highway S/B Side Section																																			
RWZ4.1092	Site Clearance	30	22-Aug-13	26-Sep-13	08-Apr-16	13-May-16	763	█																											
RWZ4.1100	Base slab & Wall (0-3m high)- RW77B (Ch.0-40)	60	04-Nov-13	15-Jan-14	16-May-16	26-Jul-16	733		█																										
RWZ4.1110	Backfilling (0-3m) - RW77B (Ch.0-40)	30	16-Jan-14	28-Feb-14	07-Jan-17	18-Feb-17	868			█																									
RWZ4.1115	Temp Shoring & Excavation	45	03-Jul-14	23-Aug-14	02-Jun-16	26-Jul-16	560					█																							
RWZ4.1120	Base slab & Wall (3-4m high)- RW77B (Ch.0-75)	60	25-Aug-14	05-Nov-14	30-Nov-16	18-Feb-17	665					█																							
RWZ4.1130	Backfilling (3-4m high) - RW77B (Ch.0-75)	35	06-Nov-14	16-Dec-14	20-Feb-17	31-Mar-17	665						█																						
Retaining Wall W78																																			
TWSR-East FL Highway S/B Side Section																																			
RWZ4.0900	Site Clearance	30	27-Sep-13	02-Nov-13	21-Jun-16	26-Jul-16	793	█																											
RWZ4.1010	Base slab & Wall (6-11m high)- RW78 (Ch.0-50)	90	25-Aug-14	10-Dec-14	27-Jul-16	11-Nov-16	560					█																							
RWZ4.1020	Backfilling (6-11m high) - RW78 (Ch.0-50)	75	11-Dec-14	19-Mar-15	12-Nov-16	18-Feb-17	560						█																						
RWZ4.1030	Base slab & Wall (0-6m high)- RW78 (Ch.50-101)	60	11-Dec-14	02-Mar-15	30-Nov-16	18-Feb-17	575							█																					
RWZ4.1040	Backfilling (0-6m high) - RW78 (Ch.50-101)	35	20-Mar-15	04-May-15	20-Feb-17	31-Mar-17	560								█																				
Slope Works																																			
TWSR-East FL Highway S/B Side Section																																			
S1010	Slope S51A-Fill -2m	40	03-Jun-16	21-Jul-16	28-Apr-18	15-Jun-18	560																												
S1020	Slope S52-Fill -2m	40	03-Jun-16	21-Jul-16	28-Apr-18	15-Jun-18	560																												
S1030	Slope S53-Fill -2m	40	23-Apr-16	11-Jun-16	28-Apr-18	15-Jun-18	593																												
S1040	Slope S54A-Cut -4m	40	30-Aug-14	18-Oct-14	28-Apr-18	15-Jun-18	1071					█																							
S1050	Slope S54B-Cut -5m	40	17-Dec-14	04-Feb-15	28-Apr-18	15-Jun-18	981						█																						
S1060	Slope S55-Fill -5m	40	05-May-15	22-Jun-15	28-Apr-18	15-Jun-18	876									█																			
TCSS Works																																			
TCSS Pre-Construction Works																																			
TCSS0100	Acquire Design Criteria from Drawing & procurement	180	18-Jul-13	28-Feb-14	18-Feb-16	24-Sep-16	754	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█		

Remaining Level of Effort
 Actual Level of Effort
 Remaining Work
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**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												
			Nov 13	Dec 13	Jan 14	Feb 14	Mar 14	Apr 14	May 14	Jun 14	Jul 14	Aug 14	Sep 14	Oct 14	
Air Quality during Construction	Restricting heights from which materials are dropped, as far as practicable to minimize the fugitive dust arising from unloading/loading.	During construction	#	#	V	V	V	V	V	V	V	V	V	V	
	All stockpiles of excavated materials or spoil of more than 50m ³ shall be enclosed, covered or dampened during dry or windy conditions.		#	#	V	V	V	@	@	V	V	V	V	@	
	Effective water sprays shall be used to control potential dust emission sources such as unpaved haul roads and active construction areas.		#	@	V	V	V	@	@	V	V	V	V	V	+
	All spraying of materials and surfaces shall avoid excessive water usage.		#	V	V	V	V	V	V	V	V	V	V	V	V
	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.		#	V	V	V	V	V	V	V	V	V	V	V	V
	Materials shall be dampened, if necessary, before transportation.		#	V	V	V	V	V	V	V	V	V	V	V	V
	Travelling speeds shall be controlled to reduce traffic induced dust dispersion and re-suspension within the site from the operating haul trucks.		#	V	V	V	V	V	V	V	V	V	V	V	V
	Vehicle washing facilities shall be provided to minimize the quantity of material deposited on public roads.		#	V	V	V	V	@	V	V	V	V	@	V	V

Noise - Schedule of Recommended Mitigation Measures

Impact	Mitigation Measures	Timing	Implementation Status												
			Nov 13	Dec 13	Jan 14	Feb 14	Mar 14	Apr 14	May 14	Jun 14	Jul 14	Aug 14	Sep 14	Oct 14	
Noise during Construction	Use of silenced plant or plant equipped with mufflers or dampers in substitute of ordinary plant.	During construction	#	#	#	#	#	V	V	V	V	@	V	V	
	Reduce the number of equipment and their percentage on-time.		#	#	#	#	#	V	V	V	V	V	V	V	
	3.5 m and 5.5 m high temporary noise barrier at culvert construction work area (Figure 2a of the Environmental Permit).		#	#	#	#	#	#	#	#	#	#	#	#	#
	3 m high temporary noise barrier along the northern edge of Bridge 12 at ground level (Figure 2b of the Environmental Permit).		#	#	#	#	#	#	#	#	#	#	#	#	#
	2 m high temporary noise barrier along the northern edge of Bridge 12 at bridge level (Figure 2b of the Environmental Permit).		#	#	#	#	#	#	#	#	#	#	#	#	#
	2.5 m high temporary noise barrier along Tai Wo Service Road West (Figure 2c of the Environmental Permit).		#	#	#	#	#	#	#	#	#	#	#	#	#
	3.5m and 7m high temporary noise barrier along Tai Wo Services Road West near Tai Hang (Figure 2c of the Environmental Permit).		#	#	#	#	#	#	#	#	#	#	#	#	#
	7 m high temporary noise barrier along Tai Wo Service Road West near Tai Wo Footbridge work area (Figure 2d of the Environmental Permit).		#	#	#	#	#	#	#	#	#	#	#	#	#
7 m high temporary noise barrier near Kiu Tau Footbridge work area (Figure 2d of the Environmental Permit).	#	#	#	#	#	#	#	#	#	#	#	#	#		

2.5 m high temporary noise barrier near river diversion work area (Figure 2e of the Environmental Permit).	#	#	#	#	#	#	#	#	#	#	#	#	#	#
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Water Quality - Schedule of Recommended Mitigation Measures

Impact	Mitigation Measures	Timing	Implementation Status												
			Nov 13	Dec 13	Jan 14	Feb 14	Mar 14	Apr 14	May 14	Jun 14	Jul 14	Aug 14	Sep 14	Oct 14	
Water quality during Construction	Demolition and reconstruction of bridges <ul style="list-style-type: none"> - Prevent off-site migration through use of sheet piles. - Minimise duration of works as far as practical. - All sewer and drainage connections should be sealed to prevent debris, soil, sand, etc, from entering public sewers/drains. - Site surface runoff should be settled to remove sand/silt before it is discharged into the existing storm drains. 	During construction	#	#	#	#	#	#	#	#	#	#	#	#	V
	Road Widening Works, Earthworks and Culvert Extension Works <ul style="list-style-type: none"> - Wastewater generated from any concrete batching washdown of equipment or similar activities should be discharged into foul sewers, after the removal of settleable 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. - Sand traps, oil interceptors and other pollution prevention installations should be provided, properly cleaned and maintained. - 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. - Regular inspections of stilling basins and/or silt traps is required to ensure that sediment is not conveyed into the existing drainage system. - Open stockpiles should be covered with a tarpaulin cover. - During the wet season, any exposed top soils should be covered with a tarpaulin, shotcreted or hydroseeded. - Sand and silt from wash-water from vehicle washing should be settled out before discharging into storm drains. - Fuels should be stored in bunded areas such that spillage can be easily collected. 		#	#	V	V	V	V	@	V	V	V	+	@	

Waste - Schedule of Recommended Mitigation Measures

Impact	Mitigation Measures	Timing	Implementation Status												
			Nov 13	Dec 13	Jan 14	Feb 14	Mar 14	Apr 14	May 14	Jun 14	Jul 14	Aug 14	Sep 14	Oct 14	
Waste Management during Construction	General Waste <ul style="list-style-type: none"> - Transport of wastes off site as soon as possible. - Maintenance of accurate waste records. - Minimisation of waste generation for disposal (via reduction/recycling/re-use). - No on-site burning will be permitted. - Use of re-useable metal hoardings/signboards. 	During construction	V	@	V	V	V	V	V	V	@	V	V	V	@
	Vegetation from site clearance <ul style="list-style-type: none"> - Segregation of materials to facilitate disposal. - Mulching to reduce bulk and where possible review opportunities for the possible beneficial use within landscaping areas. 		V	V	V	V	V	V	V	V	V	V	V	V	
	Demolition Wastes <ul style="list-style-type: none"> - Segregation of materials to facilitate disposal. - Appropriate stockpile management. 		#	V	V	V	V	V	V	V	V	V	V	V	
	Excavated Materials <ul style="list-style-type: none"> - 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 		#	V	V	V	V	V	V	V	V	V	V	V	

excavated.													
Construction Wastes	#	V	V	V	V	V	V	V	V	V	V	V	V
<ul style="list-style-type: none"> - Segregation of materials to facilitate recycling/reuse (within designated area in appropriate containers/stockpiles). - 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	#	#	#	#	#	#	#	#	#	#	#	#	#
<ul style="list-style-type: none"> - Bentonite slurries should be reused as far as possible. - Disposal in accordance with Practice Note For Professional Persons ProPECC PN 1/94. 													
Chemical Wastes	#	@	@	@	@	@	@	@	@	@	+	@	@
<ul style="list-style-type: none"> - Storage within locked, covered and bunded area. - The storage area shall not be located adjacent to sensitive receivers e.g. drains. - Minimise 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	#	V	V	V	V	V	V	V	V	V	V	V	V
<ul style="list-style-type: none"> - 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											
			Nov 13	Dec 13	Jan 14	Feb 14	Mar 14	Apr 14	May 14	Jun 14	Jul 14	Aug 14	Sep 14	Oct 14
	Accurate Delineation of Works Area		#	#	V	V	V	V	V	V	V	V	V	V
	<ul style="list-style-type: none"> - Boundaries of proposed works areas shall be clearly identified and separated from external areas by a physical barrier to prevent encroachment of adjacent habitats. - Individual trees which fall within the works areas but which work plans do not require removal are to be retained and fenced off to maximize protection. 													
	Vegetation Clearance		#	V	V	V	V	V	V	V	V	V	V	V
	<ul style="list-style-type: none"> - No fires shall be lit within the works area for the purpose of burning cleared vegetation. - The Contractor shall give consideration to mulching the cleared vegetation for recycling within the works area / adjacent land. 													
	Dust generation		#	@	V	V	V	V	V	V	V	V	V	V
	<p>There are a number of measures which shall be taken as specified in the Air Pollution Control (Construction Dust) Regulation on 'Dust Control Requirements, including the following key measures to be applied during construction:</p> <ul style="list-style-type: none"> - Vehicle washing facilities to be provided at every discernible or designated vehicle exit point; - All temporary site access roads shall be sprayed with water to suppress dust as necessary; - All dusty materials should be sprayed with water immediately prior to any handling; and - All debris should be covered entirely by impervious sheeting or stored in a sheltered debris collection area. 													
	Surface Run-off		#	#	V	V	V	V	V	V	V	V	V	V
	In general, mitigation measures shall be in accordance with ProPECC PN1/94 on 'Construction													

Site Drainage'. Key measures include: <ul style="list-style-type: none"> - Bund and cover stock piles to avoid run-off; - Channel any run-off through a system of oil, grease and sediment / silt traps and reuse water on site where ever practical; - All vehicle maintenance to be undertaken within a bunded area; and - Maximise vegetation retention on-site to maximise absorption (minimise transport). 														
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Landscape and Visual Impact - Schedule of Recommended Mitigation Measures

Impact	Mitigation Measures	Timing	Implementation Status											
			Nov 13	Dec 13	Jan 14	Feb 14	Mar 14	Apr 14	May 14	Jun 14	Jul 14	Aug 14	Sep 14	Oct 14
Landscape and Visual during Construction	Preservation of Existing Vegetation <ul style="list-style-type: none"> - Trees identified for retention within the project limit would be protected during the works; - The tree transplanting and planting works shall be implemented by approved Landscape Contractors. 	During construction	#	V	V	V	V	V	V	V	V	V	V	V
	Temporary Works Areas <ul style="list-style-type: none"> - 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. 		#	#	V	V	V	V	V	V	V	V	V	
	Hoarding <ul style="list-style-type: none"> - A hoarding would be erected where practicable in the most visually sensitive locations to screen the temporary construction works from the local VSRs. 		#	#	V	V	V	V	V	V	V	V	V	V
	Top Soils <ul style="list-style-type: none"> - 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. 		#	#	#	#	#	#	#	#	#	#	#	#
	Protection of Important Landscape Features <ul style="list-style-type: none"> - Important features such as temples, Island House and kilns within the study area, although remote from the proposed works retained and adequately protected. 		#	#	#	#	#	#	#	#	#	#	#	#

Legend:

V = implemented;

x = not implemented;

@ = partially implemented;

+ = recommended and immediately implemented during the site inspection by the Contractor;

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

= to be implemented.

**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
AM2	317.8 µg/m ³	500 µg/m ³

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

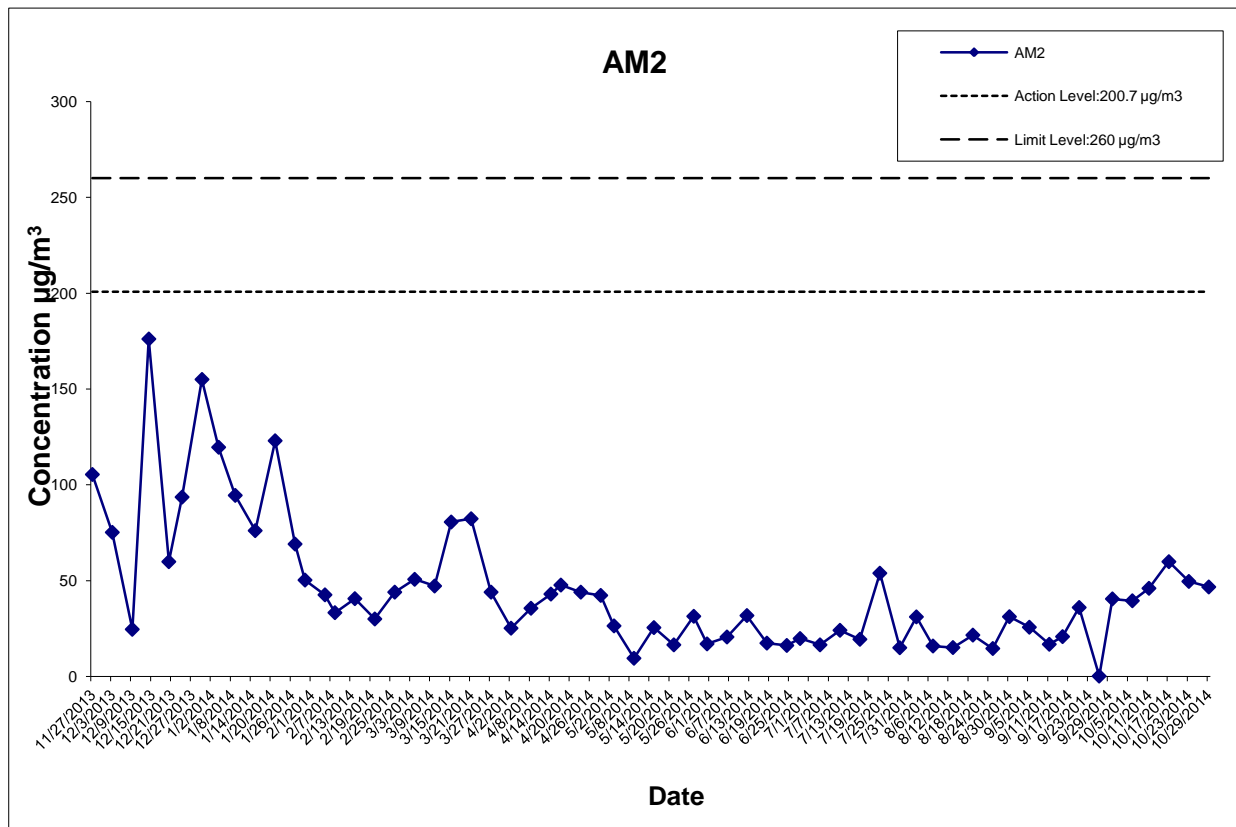
Location	Action Level	Limit Level
AM2	200.7 µg/m ³	260 µg/m ³

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

Location	Action Level	Limit Level
M2	When one documented complaint, related to 0700 – 1900 hours on normal weekdays, is received from any one of the sensitive receivers	75 dB(A)
M3*		65/70 dB(A)

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

**APPENDIX E
IMPACT AIR QUALITY MONITORING
RESULTS AND THEIR GRAPHICAL
PRESENTATION**



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CONTRACT NO. HY/2012/06
 WIDENING OF FANLING HIGHWAY
 - TAI HANG TO WO HOP SHEK INTERCHANGE



Graphical Presentation of Impact 24-hour TSP Monitoring Results

Project No.: 60307376

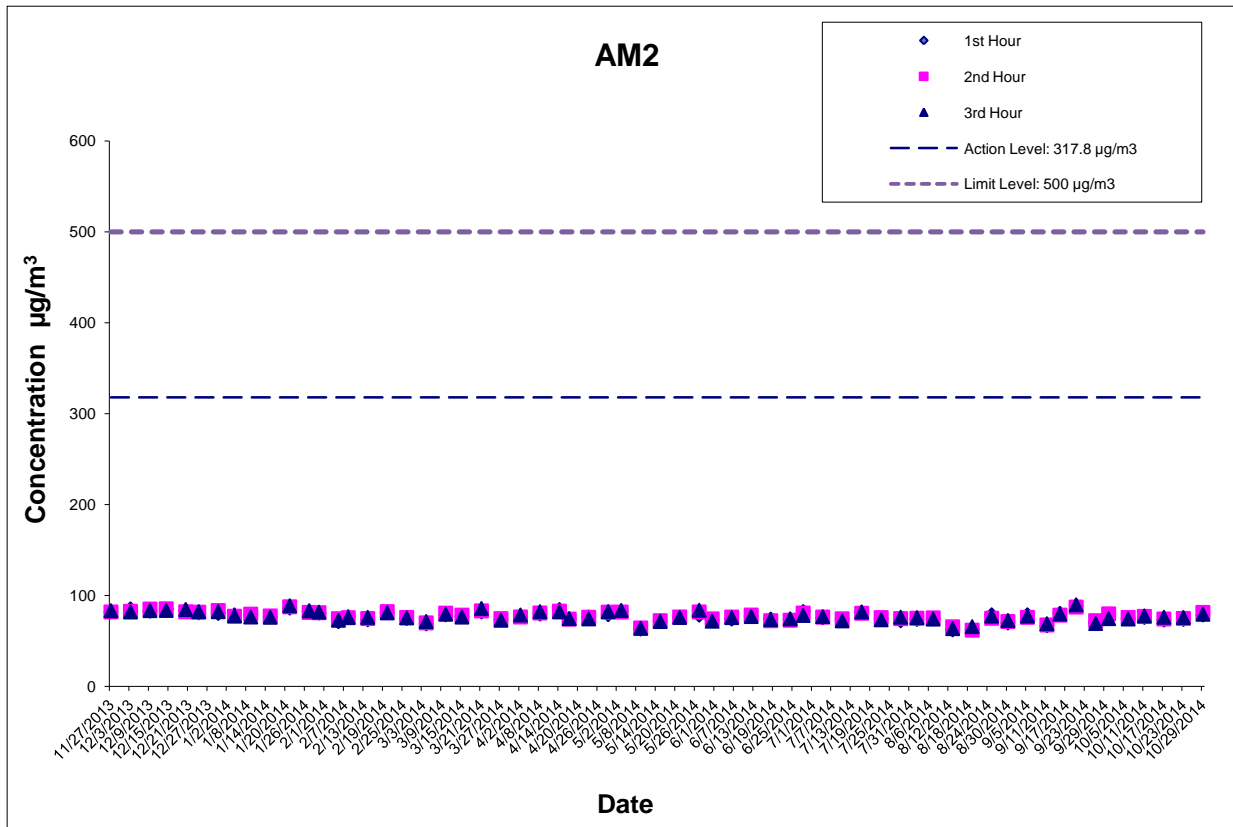
Date: Nov-14

Appendix E

Impact Air Quality Monitoring Results

1-hour TSP Monitoring Results at Station AM2 (Fanning Government Secondary School)

Date	Start Time (hh:mm)	1st Hour Conc. ($\mu\text{g}/\text{m}^3$)	2nd Hour Conc. ($\mu\text{g}/\text{m}^3$)	3rd Hour Conc. ($\mu\text{g}/\text{m}^3$)
27-Nov-13	11:07	82.0	81.7	83.1
3-Dec-13	14:00	85.1	82.4	81.7
9-Dec-13	14:00	82.6	84.9	83.2
14-Dec-13	11:45	84.7	85.2	83.4
20-Dec-13	13:30	83.8	81.9	84.4
24-Dec-13	9:10	80.7	81.5	82.1
30-Dec-13	10:10	80.1	83.3	82.0
4-Jan-14	13:05	78.5	77.0	77.5
9-Jan-14	14:08	78.6	79.3	76.2
15-Jan-14	13:49	76.2	77.3	75.9
21-Jan-14	9:45	85.9	87.4	88.6
27-Jan-14	15:20	82.6	81.2	83.0
30-Jan-14	11:00	80.5	80.9	81.6
5-Feb-14	10:00	71.0	74.3	72.6
8-Feb-14	13:05	76.6	75.4	75.7
14-Feb-14	13:40	73.1	74.5	75.8
20-Feb-14	15:05	81.4	82.1	80.7
26-Feb-14	13:10	74.6	75.7	75.2
4-Mar-14	13:45	68.6	69.7	71.2
10-Mar-14	11:45	78.6	80.4	79.2
15-Mar-14	10:50	77.1	78.2	76.1
21-Mar-14	13:00	81.7	82.9	85.5
27-Mar-14	13:30	73.1	74.4	72.6
2-Apr-14	13:31	77.2	76.2	78.4
8-Apr-14	11:30	79.4	80.6	82.1
14-Apr-14	12:15	84.4	82.6	81.8
17-Apr-14	12:16	74.1	73.8	74.4
23-Apr-14	12:20	76.2	75.9	74.1
29-Apr-14	13:35	78.7	81.5	82.2
3-May-14	13:33	82.2	81.6	83.5
9-May-14	13:30	62.9	64.1	63.7
15-May-14	14:07	71.7	72.1	71.2
21-May-14	14:00	75.8	76.2	75.7
27-May-14	14:00	78.2	81.7	83.6
31-May-14	10:10	72.7	74.1	71.6
6-Jun-14	10:21	73.9	76.1	75.5
12-Jun-14	10:05	77.2	78.3	76.7
18-Jun-14	13:20	73.9	72.1	73.4
24-Jun-14	10:20	73.7	72.6	74.2
28-Jun-14	10:09	82.2	80.5	77.9
4-Jul-14	10:47	75.4	76.1	76.6
10-Jul-14	10:18	73.5	74.2	71.9
16-Jul-14	9:49	81.4	80.3	81.7
22-Jul-14	10:13	74.2	75.5	73.1
28-Jul-14	10:00	72.0	74.4	76.0
2-Aug-14	13:02	73.5	74.8	75.5
7-Aug-14	11:09	74.1	75.2	73.9
13-Aug-14	11:45	62.0	65.4	63.4
19-Aug-14	14:05	62.4	61.7	65.6
25-Aug-14	12:00	78.6	74.8	77.2
30-Aug-14	10:10	69.6	71.2	72.4
5-Sep-14	12:00	78.6	75.8	77.2
11-Sep-14	14:00	66.6	67.4	68.8
15-Sep-14	12:45	80.2	78.2	79.5
20-Sep-14	10:50	88.8	87.1	89.6
26-Sep-14	13:05	69.9	72.1	69.0
30-Sep-14	11:40	78.8	79.6	74.4
6-Oct-14	14:12	74.4	75.7	74.0
11-Oct-14	14:10	75.7	76.8	77.4
17-Oct-14	13:30	72.8	74.0	75.9
23-Oct-14	16:00	73.5	74.6	75.7
29-Oct-14	12:00	78.4	81.2	79.2
Average for the reporting period (Nov 13 to Oct 14)				76.9
Minimum for the reporting quarter (Nov 13 to Oct 14)				61.7
Maximum for the reporting quarter (Nov 13 to Oct 14)				89.6



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CONTRACT NO. HY/2012/06
 WIDENING OF FANLING HIGHWAY
 - TAI HANG TO WO HOP SHEK INTERCHANGE



Graphical Presentation of Impact 1-hour TSP Monitoring Results

Project No.: 60307376

Date: Nov-14

Appendix E

**APPENDIX F
METEROLOGICAL DATA**

Appendix F Meteorological Data

November 2013

Mainly attributed by Severe Typhoon Krosa and Super Typhoon Haiyan, the weather of November 2013 was wetter than usual. The total rainfall of the month was 83.1 millimetres, more than double of the normal figure of 37.6 millimetres. The accumulated rainfall since 1 January was 2759.0 millimetres, about 16 percent above the normal figure of 2371.6 millimetres for the same period. It was also gloomier than usual with 133.4 hours bright sunshine, about 26 percent below normal. The monthly mean temperature of 21.7 degrees was slightly below the normal figure of 21.8 degrees.

December 2013

Under the influence of cold spells brought by the winter monsoon during the second half of the month, the weather of December 2013 was significantly colder than usual. The monthly mean temperature of 16.1 degrees was 1.8 degrees below the normal figure of 17.9 degrees, the lowest for December since 1975. The active winter monsoon also maintained generally dry conditions for most parts of the month, and yet the month turned out to be much wetter than usual in terms of rainfall due to the rainy episode between 14 and 17 December. The total rainfall of the month was 88.3 millimetres, more than three times the normal figure of 26.8 millimetres and the tenth highest for December on record. The annual total rainfall of 2013 was 2847.3 millimetres, about 19 percent above the normal figure of 2398.5 millimetres.

January 2014

Under the dominance of a dry northeast monsoon for most part of the month, the weather in January 2014 was sunnier and drier than usual. The mean amount of cloud for the month was 32 percent, tied with 1986 as the fourth lowest record for January. With less cloud cover, the total duration of bright sunshine in the month was 238.8 hours, tying with 1902 as the sixth highest record for January. Only traces of rainfall were recorded in the month, making it one of the second driest Januarys on record. The monthly mean temperature of 16.3 degrees was on par with the normal.

February 2014

With several rounds of transition between warm and cold air masses along the coast of Guangdong, the weather of Hong Kong in February 2014 was marked by fluctuating temperatures. The mild episodes in the first and last weeks of the month contrasted sharply against the chilly weather that prevailed in mid-February. On the whole, February 2014 was cooler than usual with a monthly mean temperature of 15.5 degrees, 1.3 degrees below the normal figure of 16.8 degrees. February 2014 was also drier than normal. The monthly rainfall of 39.5 millimetres was about 27 percent below the normal figure of 54.4 millimetres. Without any measurable rainfall in January 2014, the accumulated rainfall of 39.5 millimetres in the first two months of the year was only about half of the normal figure of 78.9 millimetres for the same period.

March 2014

March 2014 was characterized by gloomy weather during the first-half of the month and heavy rain episodes towards the end of the month. While the monthly total duration of bright sunshine of 86.0 hours was slightly below normal by 5 percent, there were only 5.0 hours of bright sunshine from 1 to 15 March.

The month was also cooler and wetter than usual. The monthly mean temperature of 18.7 degrees was 0.4 degree below the normal figure of 19.1 degrees. The total rainfall of the month was 207.6 millimetres, more than double of the normal figure of 82.2 millimetres. About 99 percent of the monthly rainfall fell between 29 and 31 March. The accumulated rainfall of 247.1 millimetres since 1 January was about 53 percent above the normal figure of 161.3 millimetres for the same period.

April 2014

The weather of April 2014 was drier and sunnier than usual. The total rainfall of the month was 132.4 millimetres, about 24 percent below the normal figure of 174.7 millimetres. However, the accumulated rainfall since 1 January of 379.5 millimetres was about 13 percent above the normal figure of 336.1 millimetres for the

same period. The total duration of bright sunshine of the month was 119.4 hours, about 17 percent above the normal figure of 101.7 hours. The mean temperature of 22.6 degrees for the month was on par with normal.

May 2014

May 2014 was characterized by gloomy and rainy conditions during the first part of the month and persistent hot weather in the latter part. The total rainfall of 687.3 millimetres was more than double the normal amount for May and the seventh highest May rainfall on record. The accumulated rainfall since 1 January of 1066.8 millimetres was about 67 percent above the normal figure of 640.7 millimetres for the same period. With about three quarters of the sunshine occurring in the second half of the month, the total duration of bright sunshine of the month was 107.8 hours, about 23 percent below the normal figure of 140.4 hours. Sunny and hot weather in the last week of the month also brought the average temperature for the month up to 26.4 degrees, half a degree above the normal figure of 25.9 degrees.

June 2014

With the monthly mean temperature reaching 29.0 degrees, June 2014 was the hottest June in Hong Kong since records began in 1884. The monthly mean minimum temperature of 27.0 degrees and maximum temperature of 31.5 degrees were respectively one of the second and the third highest for June. Such high temperatures were attained despite the facts that sunshine duration and rainfall for the month were not far from normal. The total rainfall of the month was 436.6 millimetres, about 4 percent below the normal figures of 456.1 millimetres. The accumulated rainfall since 1 January of 1503.4 millimetres was about 37 percent above the normal figure of 1096.9 millimetres for the same period.

July 2014

Under the dominance of a subtropical ridge over southern China for most part of the month, and with episodes of continental air flow brought by passages of tropical cyclones over the East China Sea, July 2014 emerged as the hottest July in Hong Kong with a record-breaking monthly mean temperature of 29.8 degrees. The monthly mean minimum temperature of 27.6 degrees equalled the July record, while the monthly mean maximum temperature of 32.6 degrees also ranked as one of the second highest for July. The month was relatively sunny and drier than usual with a monthly rainfall amount of 260.5 millimetres, about 31 percent below the July normal of 376.5 millimetres. The accumulated rainfall since 1 January was 1763.9 millimetres, about 20 percent above the normal of 1473.3 millimetres for the same period.

August 2014

The weather of August 2014 was hotter than usual due to prolonged spells of fine and sunny weather during the month. The monthly mean temperature of 29.0 degrees was 0.4 degree higher than the normal figure of 28.6 degrees, while the monthly duration of bright sunshine of 212.0 hours was about 12 percent above the normal figure of 188.9 hours. With two heavy rain episodes around mid-August, the month was also wetter than usual with a monthly rainfall amount of 548.2 millimetres, about 27 percent above the August normal of 432.2 millimetres. The accumulated rainfall since 1 January was 2312.1 millimetres, about 21 percent above the normal of 1905.5 millimetres for the same period.

September 2014

Under the dominance of the subtropical ridge over southern China, September 2014 was the hottest September on record. The monthly mean minimum temperature of 27.0 degrees and mean temperature of 29.0 degrees were respectively the highest and one of the highest for September since record began in 1884. The month was also drier than usual with a monthly total rainfall amount of 140.6 millimetres, only about 43 percent of the September normal of 327.6 millimetres. The accumulated rainfall since 1 January was 2452.7 millimetres, about 10 percent above the normal of 2233.1 millimetres for the same period.

October 2014

Under the dominance of a relatively dry northeast monsoon, October 2014 was much warmer and sunnier than usual. The mean temperature for the month was 26.2 degrees, 0.7 degrees above the normal figure of 25.5 degrees and also the one of the fifth highest for October since record began in 1884. The monthly total duration of sunshine was 222.9 hours, about 15 percent above the normal figure of 193.9 hours.

The monthly total rainfall of 109.8 millimetres was slightly above the normal figure of 100.9 millimetres. The accumulated rainfall since 1 January was 2562.5 millimetres, about 10 percent above the normal of 2334.0 millimetres for the same period.

**APPENDIX G
IMPACT DAYTIME CONSTRUCTION NOISE
MONITORING RESULTS AND THEIR
GRAPHICAL PRESENTATION**

Location : M2 (West Tai Wo - Free Field)

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

Date	Measured Noise Level for 30-min, dB(A)				Limit Level, dB(A)	Exceedance (Y/N)
	Start Time	Leq*	L10*	L90*		
27-Nov-13	14:52	66.0	68.3	61.1	75	N
3-Dec-13	15:00	69.1	71.7	65.0	75	N
9-Dec-13	14:30	69.2	72.4	66.8	75	N
20-Dec-13	13:30	72.9	75.8	70.6	75	N
24-Dec-13	14:55	67.3	68.1	64.7	75	N
30-Dec-13	11:00	68.2	70.5	64.0	75	N
9-Jan-14	15:07	66.4	68.7	64.1	75	N
15-Jan-14	14:20	68.1	70.1	65.7	75	N
21-Jan-14	10:15	70.1	72.2	68.0	75	N
27-Jan-14	15:45	71.3	73.0	69.0	75	N
5-Feb-14	13:30	69.8	71.5	65.0	75	N
14-Feb-14	14:30	67.9	69.0	64.3	75	N
20-Feb-14	15:50	67.9	69.6	65.5	75	N
26-Feb-14	13:21	67.9	70.1	64.5	75	N
4-Mar-14	14:30	68.7	70.0	66.6	75	N
10-Mar-14	14:50	64.9	68.3	61.2	75	N
21-Mar-14	14:00	67.9	69.6	64.3	75	N
27-Mar-14	14:30	67.2	69.6	64.5	75	N
2-Apr-14	14:01	66.8	69.5	62.2	75	N
8-Apr-14	10:40	69.6	71.9	66.8	75	N
14-Apr-14	13:15	68.8	71.2	66.9	75	N
17-Apr-14	15:27	68.7	70.3	66.2	75	N
23-Apr-14	15:37	69.3	71.6	67.2	75	N
29-Apr-14	14:22	68.1	69.8	65.8	75	N
9-May-14	15:00	67.1	68.5	65.0	75	N
15-May-14	15:08	67.8	69.3	65.4	75	N
21-Mar-14	14:00	67.9	69.6	64.3	75	N
27-Mar-14	14:30	67.2	69.6	64.5	75	N
6-Jun-14	11:20	71.8	73.3	68.5	75	N
12-Jun-14	11:04	69.2	70.8	66.3	75	N
18-Jun-14	13:40	68.5	69.7	66.7	75	N
24-Jun-14	11:25	67.3	69.0	65.1	75	N
4-Jul-14	10:25	65.5	67.6	61.8	75	N
10-Jul-14	11:12	66.9	68.5	63.5	75	N
16-Jul-14	10:38	67.1	70.0	62.5	75	N
22-Jul-14	13:00	67.2	69.0	65.0	75	N
28-Jul-14	10:50	66.9	68.5	65.0	75	N
7-Aug-14	11:20	69.7	72.1	67.3	75	N
13-Aug-14	14:30	67.1	68.0	65.9	75	N
19-Aug-14	15:00	66.8	68.0	64.4	75	N
25-Aug-14	13:05	72.6	76.2	70.4	75	N
5-Sep-14	15:30	72.1	75.6	70.0	75	N
11-Sep-14	14:25	68.8	70.7	66.6	75	N
15-Sep-14	13:50	69.2	72.1	66.5	75	N
26-Sep-14	13:20	67.7	68.0	65.5	75	N
30-Sep-14	11:00	72.1	74.8	70.2	75	N
6-Oct-14	15:15	68.4	70.3	65.2	75	N
17-Oct-14	14:15	67.0	68.6	64.7	75	N
23-Oct-14	14:13	68.2	70.1	65.5	75	N
29-Oct-14	13:05	70.2	73.1	68.0	75	N
Minimum for Nov 13 to Oct 14		64.9	67.6	61.1		
Maximum for Nov 13 to Oct 14		72.9	76.2	70.6		
Average for Nov 13 to Oct 14		68.0	69.7	65.2		

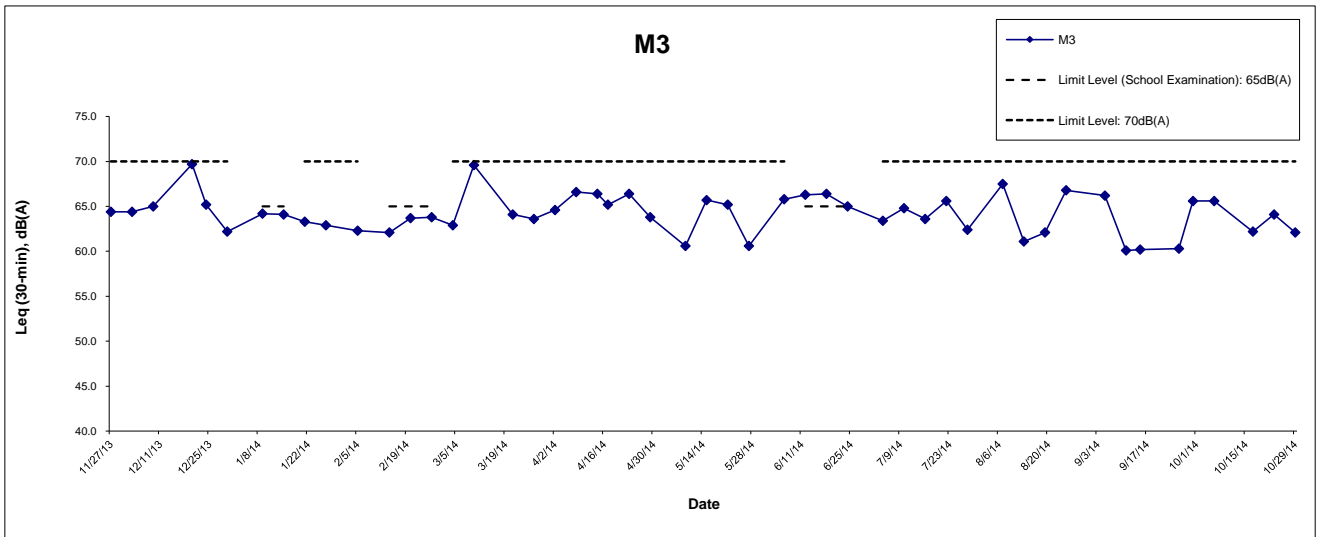
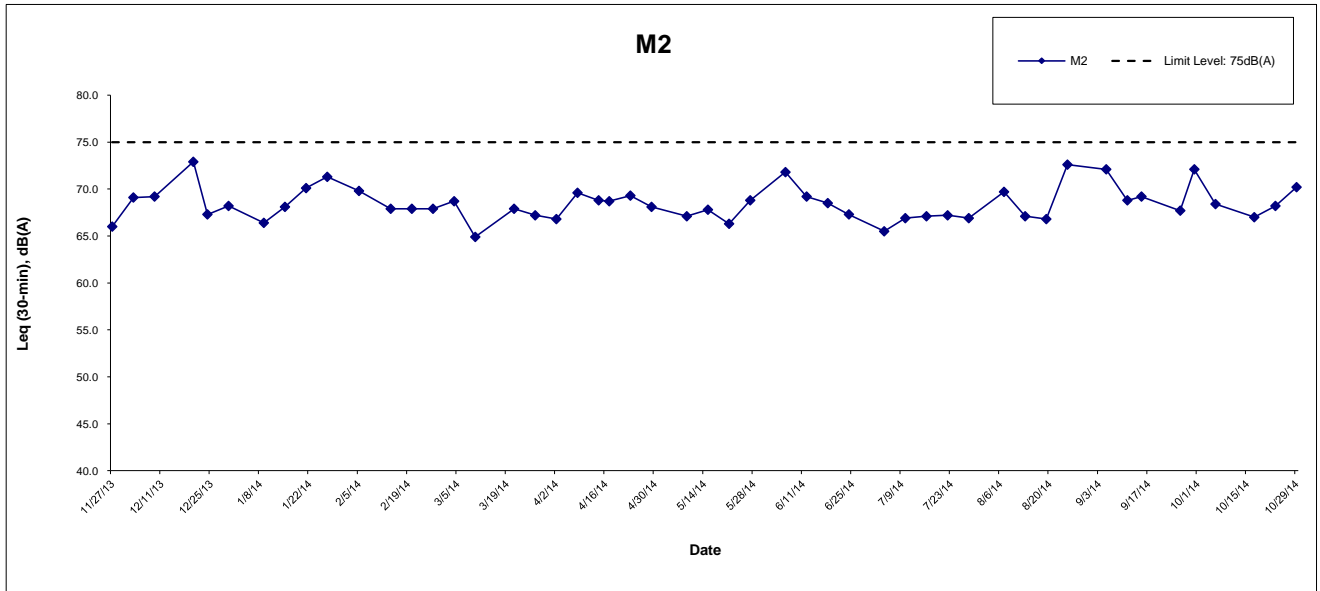
Location : M3 (Fanling Government Secondary School- Façade)

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

Date	Measured Noise Level for 30-min, dB(A)				Limit Level, dB(A)^	Exceedance (Y/N)
	Start Time	Leq	L10	L90		
27-Nov-13	15:44	64.4	66.4	61.0	70	N
3-Dec-13	14:05	64.4	66.2	62.1	70	N
9-Dec-13	14:00	65.0	68.3	61.2	70	N
20-Dec-13	14:30	69.7	73.6	67.4	70	N
24-Dec-13	15:10	65.2	67.0	63.0	70	N
30-Dec-13	10:05	62.2	63.8	60.0	70	N
9-Jan-14	14:12	64.2	65.9	62.3	65	N
15-Jan-14	13:52	64.1	66.4	61.2	65	N
21-Jan-14	9:50	63.3	64.8	60.1	70	N
27-Jan-14	15:25	62.9	64.0	59.5	70	N
5-Feb-14	14:30	62.3	64.0	59.5	70	N
14-Feb-14	13:45	62.1	63.6	60.2	65	N
20-Feb-14	15:10	63.7	65.3	60.9	65	N
26-Feb-14	13:02	63.8	65.1	61.1	65	N
4-Mar-14	13:40	62.9	64.0	59.0	70	N
10-Mar-14	14:00	69.6	72.4	66.5	70	N
21-Mar-14	13:05	64.1	66.0	60.0	70	N
27-Mar-14	13:35	63.6	64.9	60.0	70	N
2-Apr-14	14:01	66.8	69.5	62.2	75	N
8-Apr-14	10:40	69.6	71.9	66.8	75	N
14-Apr-14	13:15	68.8	71.2	66.9	75	N
17-Apr-14	15:27	68.7	70.3	66.2	75	N
23-Apr-14	15:37	69.3	71.6	67.2	75	N
29-Apr-14	14:22	68.1	69.8	65.8	75	N
9-May-14	14:15	60.6	62.0	57.5	70	N
15-May-14	14:12	65.7	67.8	62.4	70	N
21-May-14	14:10	65.2	66.9	63.7	70	N
27-May-14	14:00	60.6	62.0	57.5	70	N
6-Jun-14	10:26	65.8	67.3	63.3	70	N
12-Jun-14	10:11	66.3	67.9	64.1	65	Y
18-Jun-14	14:09	66.4	68.1	65.2	65	Y
24-Jun-14	10:18	65.0	66.5	62.4	65	N
4-Jul-14	10:45	63.4	65.4	61.3	70	N
10-Jul-14	10:20	64.8	66.5	62.5	70	N
16-Jul-14	9:52	63.6	65.0	58.5	70	N
22-Jul-14	13:46	65.6	67.2	63.1	70	N
28-Jul-14	10:00	62.4	63.0	59.9	70	N
7-Aug-14	13:31	67.5	69.1	65.4	70	N
13-Aug-14	15:15	61.1	62.5	57.0	70	N
19-Aug-14	14:00	62.1	63.5	59.0	70	N
25-Aug-14	13:52	66.8	69.4	62.6	70	N
5-Sep-14	13:31	66.2	69.8	62.4	70	N
11-Sep-14	14:05	60.1	61.5	59.0	70	N
15-Sep-14	13:00	60.2	63.4	58.2	70	N
26-Sep-14	13:05	60.3	61.2	57.0	70	N
30-Sep-14	11:40	65.6	69.2	61.2	70	N
6-Oct-14	16:10	65.6	67.7	62.8	70	N
17-Oct-14	13:35	62.2	63.5	59.5	70	N
23-Oct-14	13:05	64.1	65.8	62.0	70	N
29-Oct-14	13:05	62.1	64.8	59.3	70	N
Minimum for Nov 13 to Oct 14		60.1	61.2	57.0		
Maximum for Nov 13 to Oct 14		69.7	73.6	67.4		
Average for Nov 13 to Oct 14		64.6	66.3	62.2		

* +3dB(A) Façade effect correction included

^ Limit Level of 70dB(A) applies to education institutes while 65dB(A) applies during school examination period.



Remark:
 ^ Limit Level of 70dB(A) applies to education institutes while 65dB(A) applies during school examination period.

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 WIDENING OF FANLING HIGHWAY
 - TAI HANG TO WO HOP SHEK INTERCHANGE



Graphical Presentation of Impact Daytime Construction Noise Monitoring Results

Project No.: 60307376

Date:

Nov-14

Appendix G

**APPENDIX H
STATISTICS ON COMPLAINTS,
NOTIFICATION OF SUMMONS AND
SUCCESSFUL PROSECUTIONS**

Appendix H

Statistics on Complaints, Notifications of Summons and Successful Prosecutions

	Date Received	Subject	Status	Total no. followed up by the ET from Nov 13 to Oct 14	Total no. followed up by the ET since project commencement
Environmental complaints	19 December 2013	EPD referred a complaint from Lot no. 116 of Fui Sha Wai at Tai Hang of Tai Po which is concerned about the construction noise and diesel-like smell generated from construction activities nearby which caused nuisance and health problems on 19 December 2013 morning.	Closed	1	3
	24 February 2014	EPD referred an air-and-odour complaint on 24 February 2014. The complainant complained about the construction site located near the bus stop in Fui Sha Wai, Tai Hang, Tai Wo Service Road West. When construction works were carried out, odour, white smoke and dust were generated. The complainant asked for follow-up actions.	Closed		

	Date Received	Subject	Status	Total no. followed up by the ET from Nov 13 to Oct 14	Total no. followed up by the ET since project commencement
	23 October 2014	<p>EPD referred an air complaint on 24 October 2014.</p> <p>A resident complained against the excavation works of Tai Wo Service Road West between Nam Wah Po & Tai Hang Tsuen, which have piled up high stockpiles, causing serious dust nuisance to his house.</p> <p>The resident also complained that the stockpiles have not been covered and watered properly. He now requires the EPD to follow up.</p> <p>The location of complaint is near Lamppost Location EB5717.</p>	Closed		
Notification of summons	-	-	-	0	0
Successful Prosecutions	-	-	-	0	0