AECOM

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 2015 to October 2016

[12/2016]

	Name	Signature
Prepared & Checked:	Sammi Lam	Sammi Lam
Reviewed & Approved:	Y W Fung	

Version:	Rev. 0	Date: 28 December 2016

AECOM Asia Co. Ltd.
15/F, Grand Central Plaza, Tower 1, 138 Shatin Rural Committee Road, Shatin, NT, Hong Kong
Tel: (852) 3922 9000 Fax: (852) 2317 7609 www.aecom.com

MOTT MACDONALD

Hyder-Arup-Black & Veatch Joint Venture
c/o Arcadis
20/F, AXA Tower, Landmark East,
100 How Ming Street,
Kwun Tong, Hong Kong
Attn: Mr. James Penny

Your Reference

Our Reference
JFP/EC/ST/ro/T329380/2
2.05/L-0150

20/F AIA Kowloon Tower
Landmark East
100 How Ming Street
Kwun Tong
Kowloon
Hong Kong

T +852 2828 5757
F +852 2827 1823
mottmac.hk

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/D
Annual EM&A Report for November 2015 to October 2016 for the portion of Stage 2 works under Contract No. HY/2012/06

28 December 2016
By Fax (2805 5028) & Hand

We refer to the revised Annual EM&A Report for November 2015 to October 2016 for the Project received on 22 December 2016 submitted by ET via email. We confirm we have no comment.

Yours faithfully
for MOTT MACDONALD HONG KONG LIMITED

Steven Tang
Independent Environmental Checker

c.c.

HyD	Mr. Chung Lok Chin	By Fax (2714 5198)
AECOM	Mr. Y W Fung	By Fax (2891 0305)

TABLE OF CONTENTS

List of Tables

Figures

List of Appendices

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 Variation of Environmental Permits of EP-324/2008/A, EP-324/2008/B and EP-324/2008/C on 31 January 2012, 17 March 2014 and 27 March 2015 respectively. The current valid VEP was applied on 19 August 2015 and the VEP (EP-324/2008/D) was subsequently granted on 27 August 2015.

The construction works for this Project are 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/D) 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 2015 and 31 October 2016. As informed by the Contractor, construction activities in the reporting period were:

- Backfilling;
- Bridge construcyion;
- Drainage;
- Excavation;
- Footbridge demolition;
- Ground investigation;
- House construction.
- Noise barrier;
- Retaining wall construction;
- Site clearance;
- Temporary bridge construction;
- Piling works;
- Pipe laying;

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

Complaint, Notification of Summons and Successful Prosecution

No complaint, notification of summons or successful prosecution was received in the reporting period.

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	Steven Tang	2828 5920	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:

- Backfilling;
- Bridge construcyion;
- Drainage;
- Excavation;
- Footbridge demolition;
- Ground investigation;
- House construction.
- Noise barrier;
- Retaining wall construction;
- Site clearance;
- Temporary bridge construction;
- Piling works;
- Pipe laying;

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, occasionally 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.

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 ($\mu g/m^3$)	Range ($\mu g/m^3$)	Action Level ($\mu g/m^3$)	Limit Level ($\mu g/m^3$)
AM2 (Fanling Government Secondary School)	73.7	60.3 – 96.1	317.8	500

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

Location	Average ($\mu g/m^3$)	Range ($\mu g/m^3$)	Action Level ($\mu g/m^3$)	Limit Level ($\mu g/m^3$)
AM2 (Fanling Government Secondary School)	37.4	7.4 – 141.5	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)) $L_{eq\ (30\ mins)}$	Range (dB(A)) $L_{eq\ (30\ mins)}$	Limit Level (dB(A)) $L_{eq\ (30\ mins)}$
M2*	69.5	66.8 – 71.8	75
M3#	64.6	60.5 – 69.8	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 No Action or Limit Level exceedance of construction noise was recorded in the reporting period. No noise complaints related to 0700 – 1900 hours on normal weekdays was received and followed by the Environmental Team in the reporting period.

4.1.5 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, 27,116 m^3 of inert C&D material was generated in the reporting month (7,048 m^3 disposed of as public fill to Tuen Mun 38, 12,171 m^3 of inert C&D materials was reused on site, 7,897 m^3 of inert C&D materials was reused in other projects and 0 m^3 was broken concrete). For C&D wastes, 865 m^3 of general refuse was disposed of at NENT landfill, 796 kg of paper/cardboard packaging, 5,045 kg of plastics and 21,346 kg of metals were collected by recycling Contractors, and 0 kg 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 disposed of as public fill	7,048 m^3	Tuen Mun 38
Broken concrete	0 m^3	Tuen Mun 38
C&D wastes disposed as general refuse	865 m^3	NENT Landfill
Paper/cardboard packaging	796 kg	Recycling Contractors
Plastics	5,045 kg	Recycling Contractors
Metals	21,346 kg	Recycling Contractors
C&D materials reused on site	12,171 m^3	Site Area
C&D materials reused in other projects	7,897 m^3	Other projects
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 No Action or Limit Level exceedance of construction noise was recorded in the reporting period. No noise complains related to 0700 – 1900 hours on normal weekdays was received and followed by the Environmental Team in the reporting period.

7 SUMMARY OF COMPLAINTS, NOTIFICATIONS OF SUMMONS AND SUCCESSFUL PROSECUTIONS

7.1.1 No complaint, notification of summons or successful prosecution was received in the reporting period.

7.1.2 The statistics on complaints, notifications of summons and successful prosecutions are summarized in Appendix H.

7.1.3 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 All the noise 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 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 EFFECTIVNESS 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 dampen the road to reduce dust generation.

11.1.3 The Contractor should cover the stockpile with impervious sheeting properly to prevent dust generation.

11.1.4 The Contractor should provide and affix a valid NRMM label for the mentioned roller and excavator properly.

Construction Noise Impact

11.1.5 The Contractor should provide the valid NEL on the air compressor.

11.1.6 The Contractor should provide proper wrapping to the breaker's head as mitigating measure.

11.1.7 The Contractor should replace the NEL in order to show the information clearly.

Water Quality Impact

11.1.8 The Contractor should remove the stagnant water.

11.1.9 The Contractor should provide sufficient mitigation measures to prevent deposited silt and grit from entering public drainage.

11.1.10 The Contractor should provide bunding to avoid waste water to be carried to the public road.

11.1.11 The Contractor should provide waste water treatment and mechanism to avoid waste water from entering the public pedestrian pathway.

11.1.12 The Contractor should clear the accumulated mud in wheel washing basins regularly.

11.1.13 The Contractor should clean the sedimentation tank regularly.

11.1.14 The Contractor should clear the blocked drainage and provide proper mechanism to avoid waste water from entering the public road.

11.1.15 The Contractor should clean the mud trail and adopt effective wheel washing mechanism to prevent any muddy trail from entering the public haul road.

11.1.16 The Contractor should provide sandbags or other equivalent measures to prevent surface runoff from entering public road.

11.1.17 The Contractor should remove sandy materials deposited near the existing drainage system; and implement measures to prevent surface runoff of the site and silt from entering the drainage system.

Chemical and Waste Management

11.1.18 The Contractor should remove the mud stain and oil stain properly.

11.1.19 The Contractor should remove the waste frequently.

11.1.20 The Contractor should provide drip tray to the chemicals to prevent leakage to ground.

11.1.21 The Contractor should review the house-keeping practices and clear the trash in a timely manner.

11.1.22 The Contractor should clear the oil stain and disposed of as chemical waste.

11.1.23 The Contractor should remove stagnant water, oil stains and debris in drip tray properly to prevent overflow.

Landscape and Visual Impact

11.1.24 The Contractor should keep construction materials away from trees and improve housekeeping on site.

Miscellaneous

11.1.25 The Contractor should clean the public road in a timely manner.

11.1.26 The Contractor should clean the pedestrian pathway regularly.

11.1.27 The Contractor should remove the standing water on ground and retained water in drip trays to prevent mosquito breeding.

11.1.28 The Contractor should remove or turn over the panels such that no water can be retained.

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.

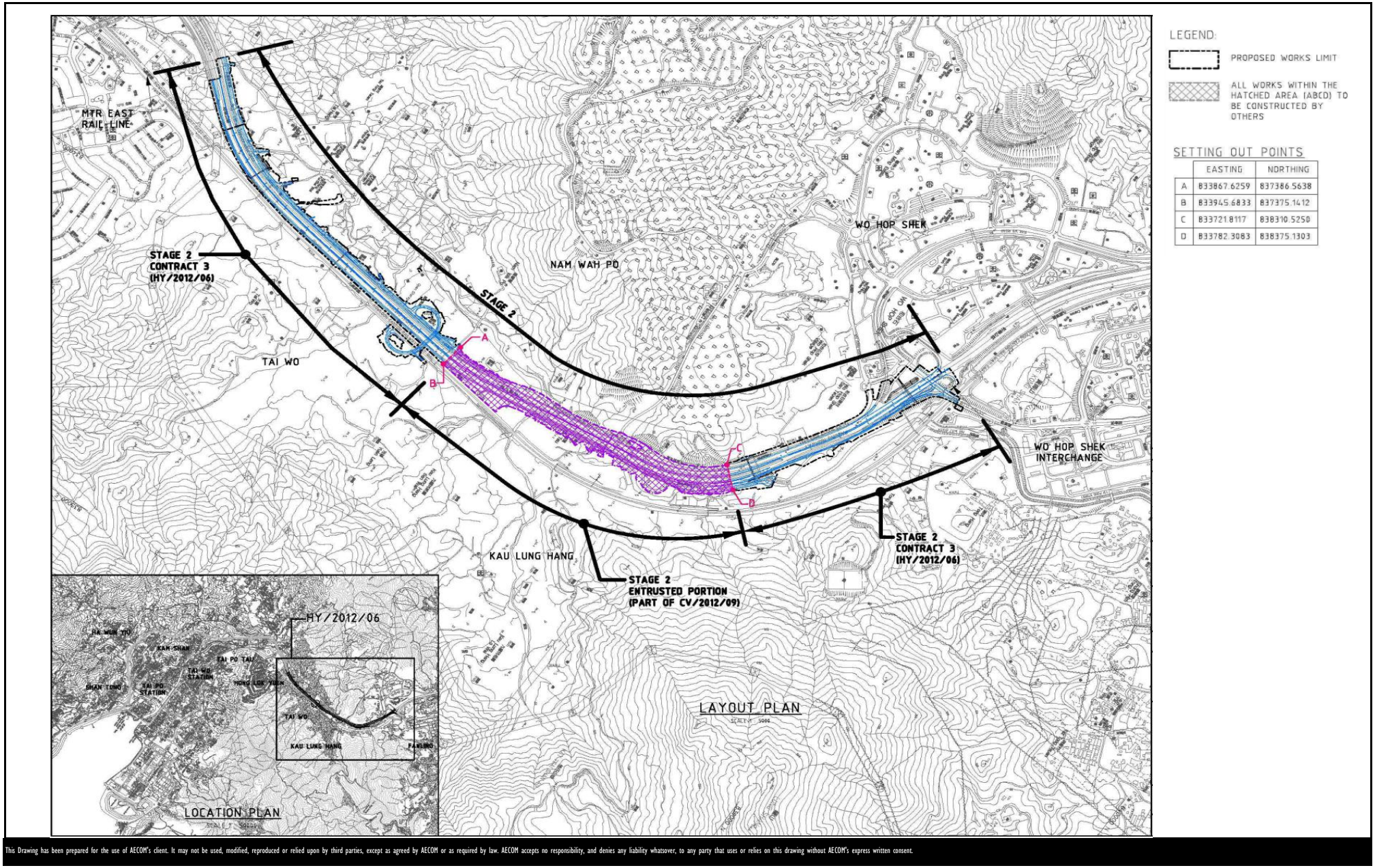
11.3 Conclusions

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

11.3.3 No complaint, notification of summons and successful prosecution was received in the reporting period.

FIGURES



CONTRACT NO. HY/2012/06

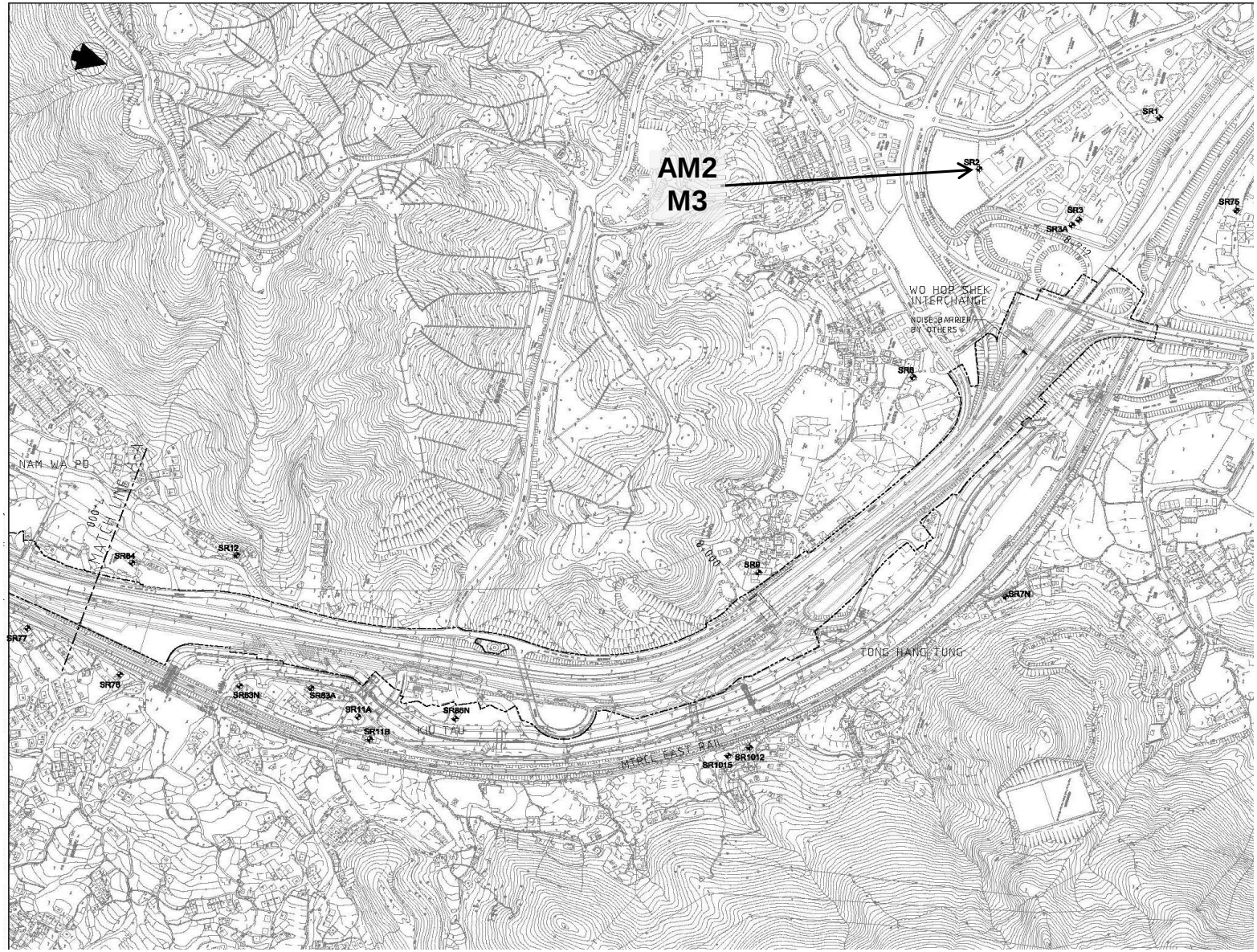
WIDENING OF FANLING HIGHWAY

- TAI HANG TO WO HOP SHEK INTERCHANGE

Layout Plan

Date: Dec 2013

Figure 1.1



CONTRACT NO. HY/2012/06

WIDENING OF FANLING HIGHWAY

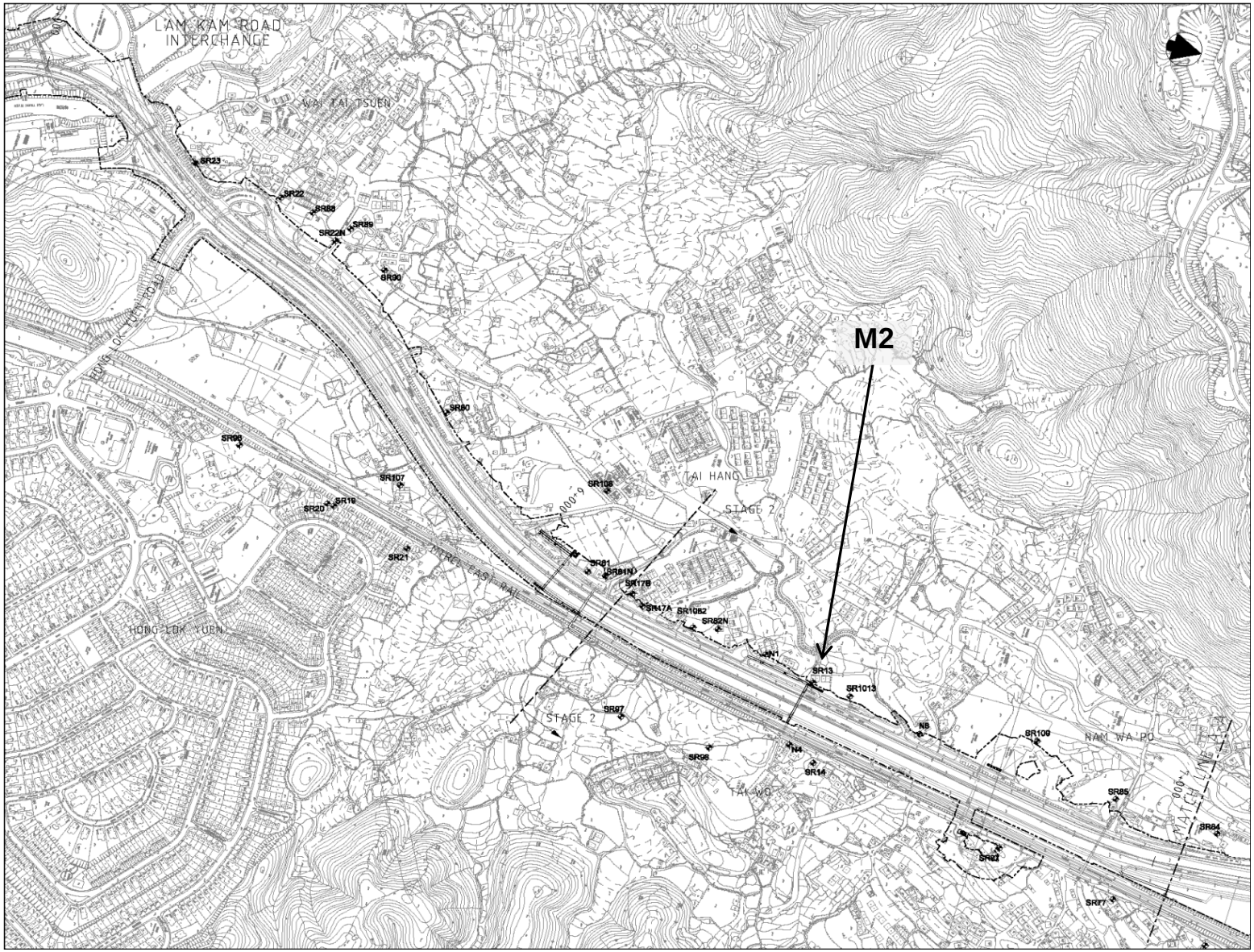
- TAI HANG TO WO HOP SHEK INTERCHANGE

AECOM

Locations of Monitoring Station

Date: Dec 2013

Figure 1.2a



CONTRACT NO. HY/2012/06

WIDENING OF FANLING HIGHWAY

- TAI HANG TO WO HOP SHEK INTERCHANGE

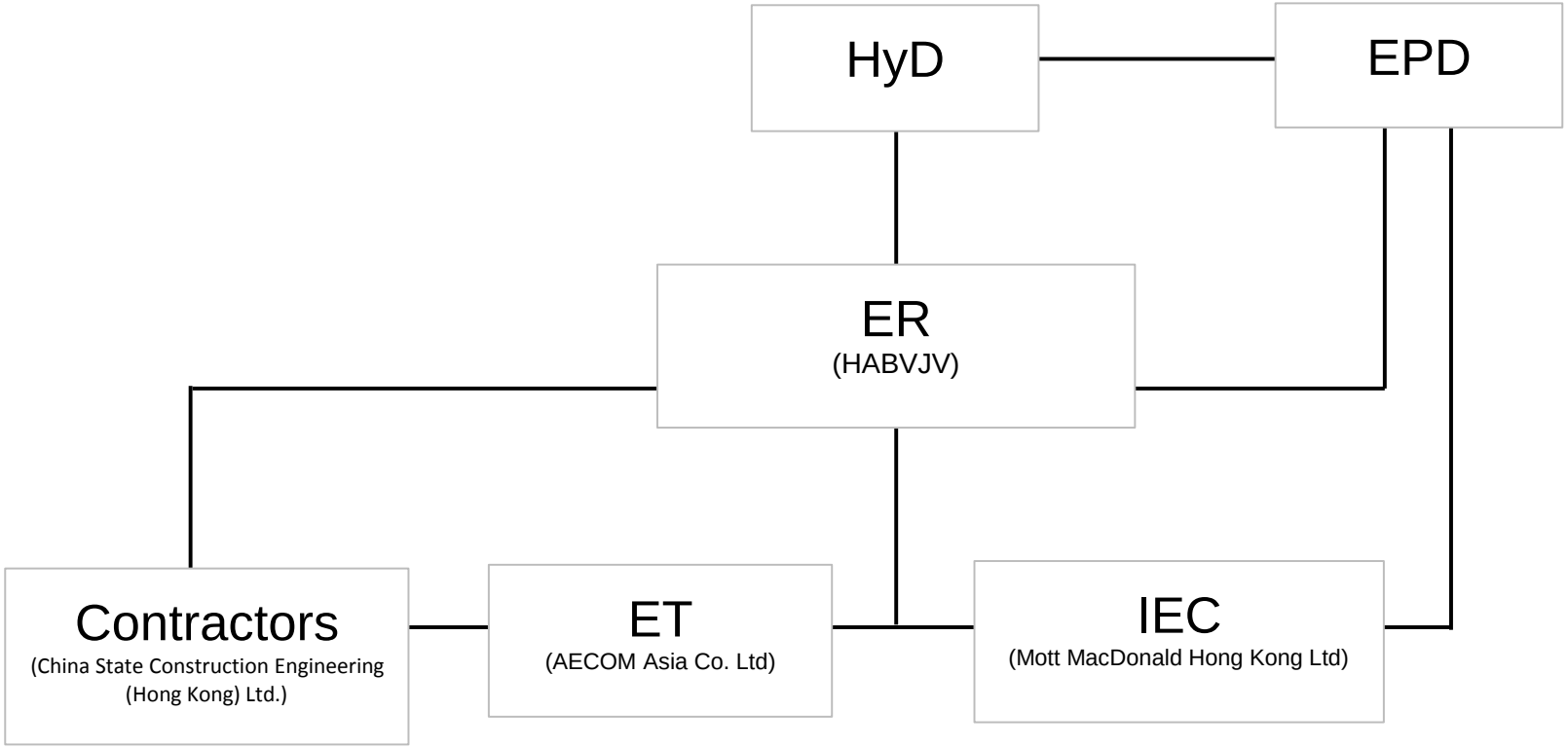
AECOM

Locations of Monitoring Station

Date: Dec 2013

Figure 1.2b

APPENDIX A
PROJECT ORGANIZATION STRUCTURE



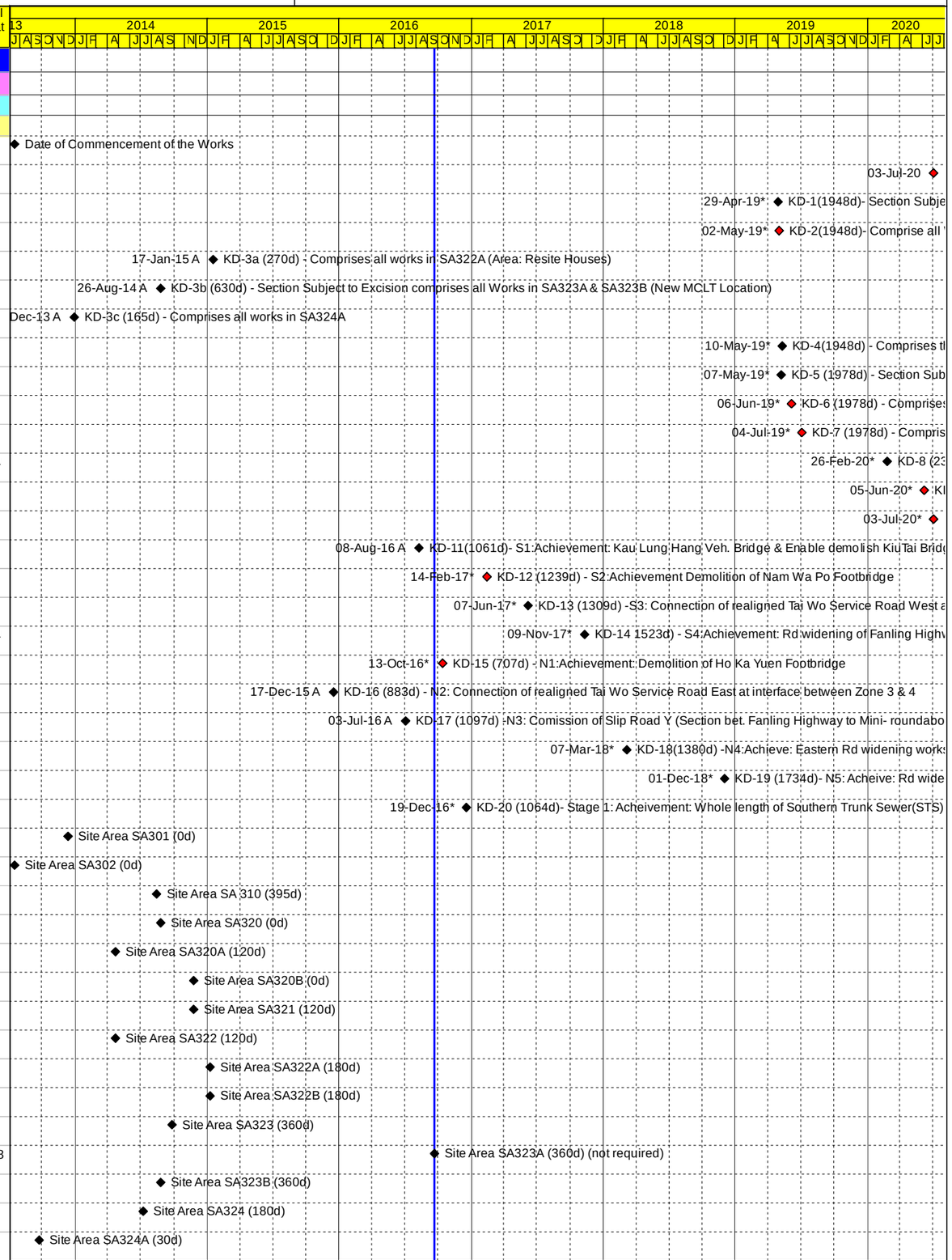
CONTRACT NO. HY/2012/06
WIDENING OF FANLING HIGHWAY
- TAI HANG TO WO HOP SHEK INTERCHANGE

AECOM

Project Organization Structure

APPENDIX B
CONSTRUCTION PROGRAMMES

Activity ID	Activity Name	Original Duration	Start	Finish	Late Start	Late Finish	Total Float
Contract Condition							
General							
Contract Condition							
Contract Condition							
COM.100	Date of Commencement of the Works	0	18-Jul-13 A				
COM.110	Date of Completion of the Works	0		03-Jul-20		08-Jul-20	5
KD01	KD-1(1948d)- Section Subject to Excision comprises all works(excl. landscape Softwork & Establishment Works in Zone 1	0		29-Apr-19*		25-May-19	26
KD02	KD-2(1948d)- Comprise all Works (excluding Lanscape works) in Zone 2 excluding SA322A, SA323A ,SA323B & SA324A	0		02-May-19*		02-May-19	0
KD03a	KD-3a (270d) - Comprises all works in SA322A (Area: Resite Houses)	0		17-Jan-15 A			
KD03b	KD-3b (630d) - Section Subject to Excision comprises all Works in SA323A & SA323B (New MCLT Location)	0		26-Aug-14 A			
KD03c	KD-3c (165d) - Comprises all works in SA324A	0		29-Dec-13 A			
KD04	KD-4(1948d) - Comprises the remainder of the Works (All works except Works included in other sections)	0		10-May-19*		10-Jun-19	31
KD05	KD-5 (1978d) - Section Subject to Excision comprise Landscape Softworks in Zone 1	0		07-May-19*		10-Jun-19	34
KD06	KD-6 (1978d) - Comprises Landscapes Softworks in Zone 2 excluding SA322A, SA323A, SA323B & SA324A	0		06-Jun-19*		06-Jun-19	0
KD07	KD-7 (1978d) - Comprises remainder of Landscaping Softworks	0		04-Jul-19*		09-Jul-19	5
KD08	KD-8 (2343d) - Section Subject to Excision comprises Establishment Works in Zone 1	0		26-Feb-20*		09-Jun-20	104
KD09	KD-9 (2343d) - Comprises Establishment works in Zone 2 excluding SA322A, SA323A, SA323B & SA324A	0		05-Jun-20*		05-Jun-20	0
KD10	KD-10 (2343d) - Comprises remainder of Establishment works	0		03-Jul-20*		08-Jul-20	5
KD11	KD-11(1061d)- S1:Achievement: Kau Lung Hang Veh. Bridge & Enable demolish KiuTai Bridge & Nam Wah Po Footbridge	0		08-Aug-16 A			
KD12	KD-12 (1239d) - S2:Achievement Demolition of Nam Wa Po Footbridge	0		14-Feb-17*		14-Feb-17	0
KD13	KD-13 (1309d) -S3: Connection of realigned Tai Wo Service Road West at interface between Zone 2 & 3	0		07-Jun-17*		04-Sep-17	89
KD14	KD-14 1523d) - S4:Achievement: Rd widening of Fanling Highway @ SBZ1 (expt. final pavement and central divider)	0		09-Nov-17*		11-Jun-18	214
KD15	KD-15 (707d) - N1:Achievement: Demolition of Ho Ka Yuen Footbridge	0		13-Oct-16*		13-Oct-16	0
KD16	KD-16 (883d) - N2: Connection of realigned Tai Wo Service Road East at interface between Zone 3 & 4	0		17-Dec-15 A			
KD17	KD-17 (1097d) -N3: Comission of Slip Road Y (Section bet. Fanling Highway to Mini- roundabout	0		03-Jul-16 A			
KD18	KD-18(1380d) -N4:Achieve: Eastern Rd widening works at Fanling Highway @NBZ2(expt. final pavement and central divider)	0		07-Mar-18*		14-Apr-18	38
KD19	KD-19 (1734d)- N5: Acheive: Rd widening & reconst. of Fanling Highway@NBZ2 for commission Link Rd 2 & 4 by CV/2012/09	0		01-Dec-18*		08-Jan-19	38
KD20	KD-20 (1064d)- Stage 1: Acheivement: Whole length of Southern Trunk Sewer(STS) at Tai Wo Service Road West	0		19-Dec-16*		03-Jan-17	15
POSSA301	Site Area SA301 (0d)	0	12-Dec-13 A				
POSSA302	Site Area SA302 (0d)	0	18-Jul-13 A				
POSSA310	Site Area SA 310 (395d)	0	16-Aug-14 A				
POSSA320	Site Area SA320 (0d)	0	25-Aug-14 A				
POSSA320A	Site Area SA320A (120d)	0	23-Apr-14 A				
POSSA320B	Site Area SA320B (0d)	0	25-Nov-14 A				
POSSA321	Site Area SA321 (120d)	0	25-Nov-14 A				
POSSA322	Site Area SA322 (120d)	0	23-Apr-14 A				
POSSA322A	Site Area SA322A (180d)	0	09-Jan-15 A				
POSSA322B	Site Area SA322B (180d)	0	09-Jan-15 A				
POSSA323	Site Area SA323 (360d)	0	26-Sep-14 A				
POSSA323A	Site Area SA323A (360d) (not required)	0	20-Sep-16		08-Jul-20		1388
POSSA323B	Site Area SA323B (360d)	0	26-Aug-14 A				
POSSA324	Site Area SA324 (180d)	0	09-Jul-14 A				
POSSA324A	Site Area SA324A (30d)	0	25-Sep-13 A				



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

Project File:WP Rev 04

Layout: WP rev 4

Data Date:20-Sep-16

Page 1 of 44

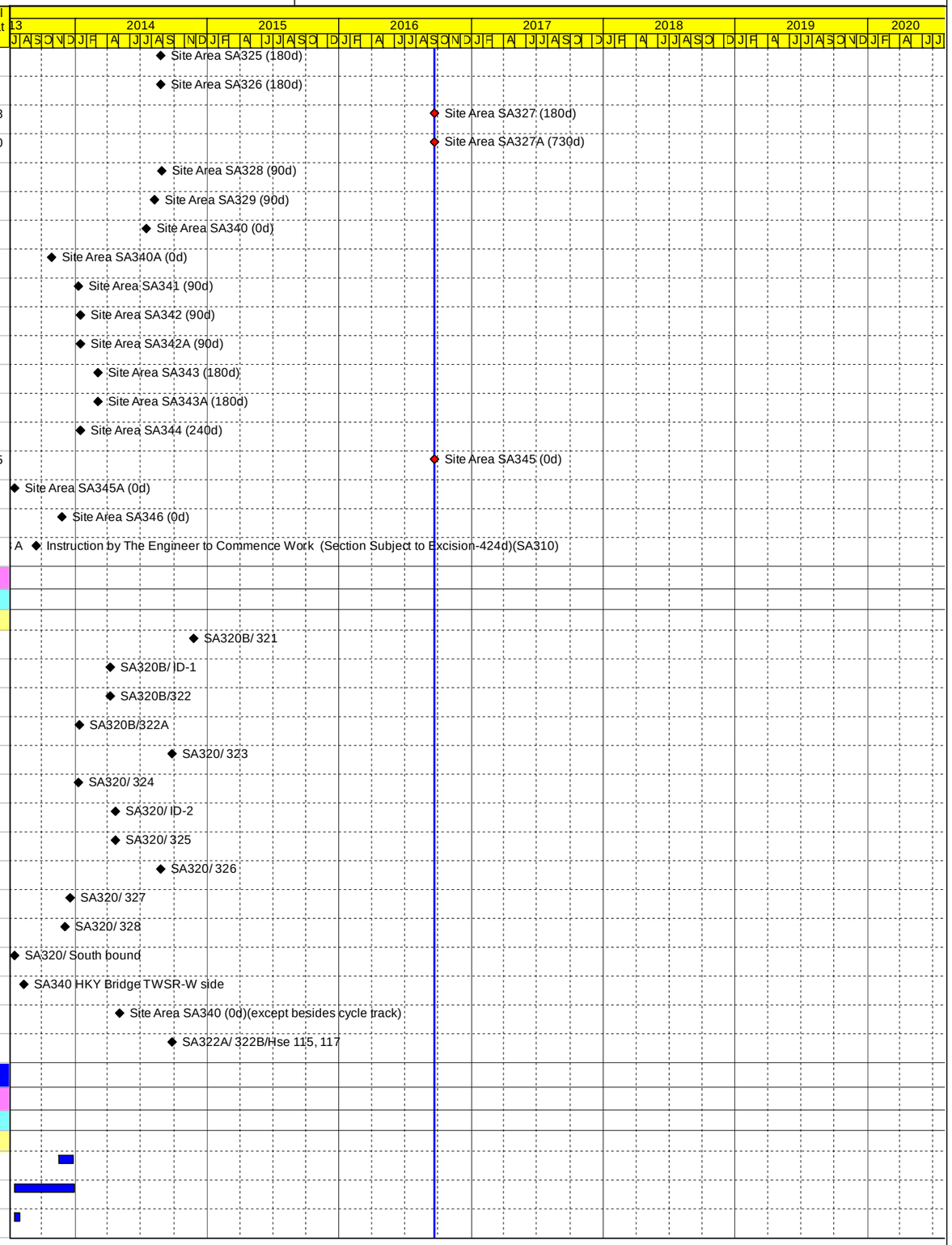
Contract No. HY/2012/06

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

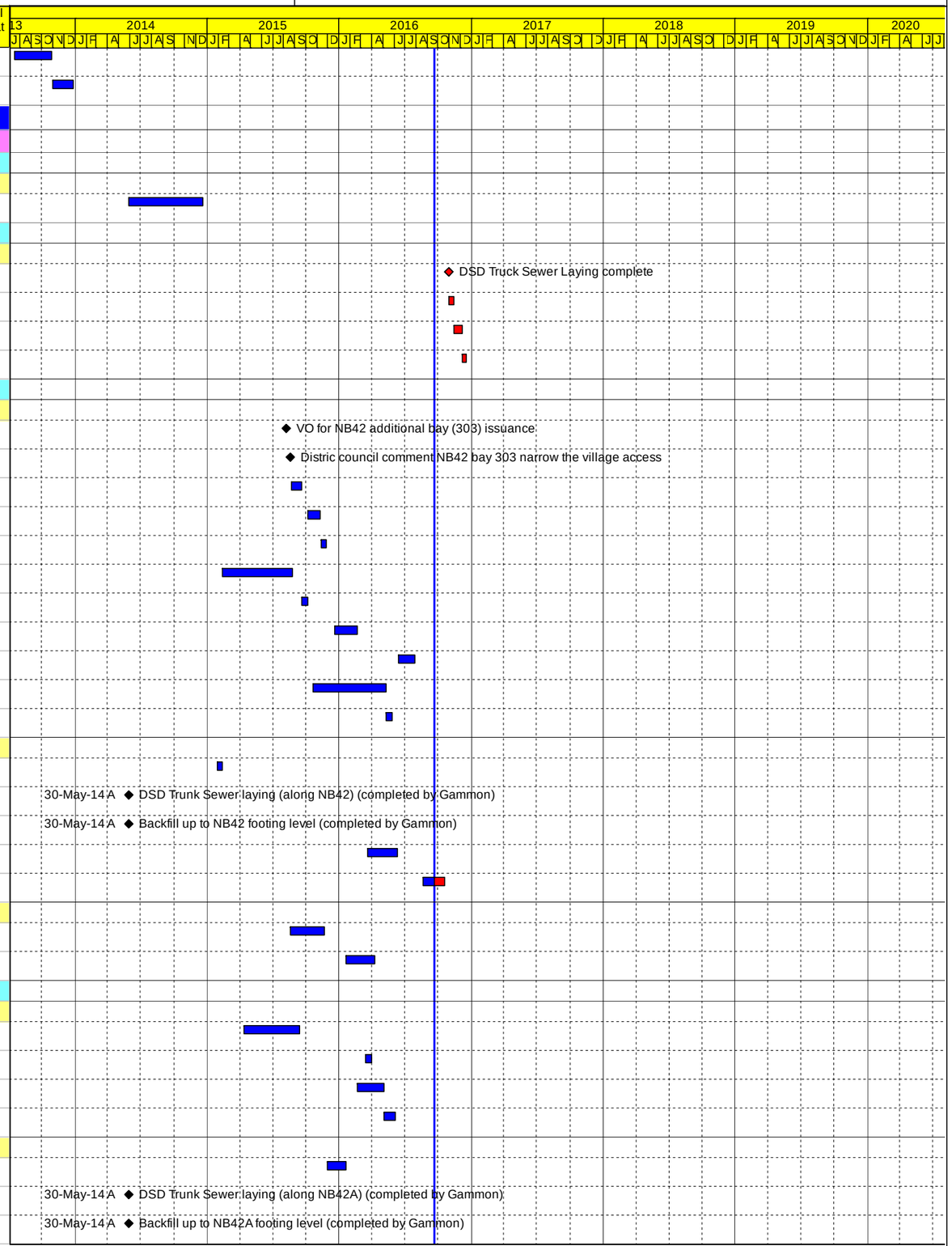
Works Programme - WP Rev. 4

Date	Revision	Checked	Appro...
30-Jun-14	WP Rev 1A		
28-Aug-15	WP Rev 2		
07-Apr-16	WP Rev 3		
17-Oct-16	WP Rev 4		

Activity ID	Activity Name	Original Duration	Start	Finish	Late Start	Late Finish	Total Float
POSSA325	Site Area SA325 (180d)	0	25-Aug-14 A				
POSSA326	Site Area SA326 (180d)	0	25-Aug-14 A				
POSSA327	Site Area SA327 (180d)	0	20-Sep-16*		31-Dec-14		-628
POSSA327A	Site Area SA327A (730d)	0	20-Sep-16*		18-Jul-15		-430
POSSA328	Site Area SA328 (90d)	0	29-Aug-14 A				
POSSA329	Site Area SA329 (90d)	0	08-Aug-14 A				
POSSA340	Site Area SA340 (0d)	0	18-Jul-14 A				
POSSA340A	Site Area SA340A (0d)	0	29-Oct-13 A				
POSSA341	Site Area SA341 (90d)	0	09-Jan-14 A				
POSSA342	Site Area SA342 (90d)	0	16-Jan-14 A				
POSSA342A	Site Area SA342A (90d)	0	16-Jan-14 A				
POSSA343	Site Area SA343 (180d)	0	04-Mar-14 A				
POSSA343A	Site Area SA343A (180d)	0	04-Mar-14 A				
POSSA344	Site Area SA344 (240d)	0	15-Jan-14 A				
POSSA345	Site Area SA345 (0d)	0	20-Sep-16*		30-Nov-15		-295
POSSA345A	Site Area SA345A (0d)	0	18-Jul-13 A				
POSSA346	Site Area SA346 (0d)	0	27-Nov-13 A				
Z1.1000	Instruction by The Engineer to Commence Work (Section Subject to Excision-424d)(SA310)	0		16-Sep-13 A			
Partial Possession Status							
Contract Condition							
Contract Condition							
POSSA320-100	SA320B/ 321	0	25-Nov-14 A				
POSSA320-110	SA320B/ ID-1	0	09-Apr-14 A				
POSSA320-120	SA320B/322	0	09-Apr-14 A				
POSSA320-130	SA320B/322A	0	14-Jan-14 A				
POSSA320-140	SA320/ 323	0	26-Sep-14 A				
POSSA320-150	SA320/ 324	0	09-Jan-14 A				
POSSA320-160	SA320/ ID-2	0	23-Apr-14 A				
POSSA320-170	SA320/ 325	0	23-Apr-14 A				
POSSA320-180	SA320/ 326	0	25-Aug-14 A				
POSSA320-190	SA320/ 327	0	18-Dec-13 A				
POSSA320-200	SA320/ 328	0	04-Dec-13 A				
POSSA320-210	SA320/ South bound	0	18-Jul-13 A				
POSSA340-100	SA340 HKY Bridge TWSR-W side	0	13-Aug-13 A				
POSSA340-110	Site Area SA340 (0d)(except besides cycle track)	0	05-May-14 A				
POSSA340-120	SA322A/ 322B/Hse 115, 117	0	26-Sep-14 A				
Site Office							
General							
Preliminary							
General							
PR.1030	Mobilization	42	17-Nov-13 A	28-Dec-13 A			
PR.1040	Principal Office for the Engineer	138	18-Jul-13 A	31-Dec-13 A			
PR.1050	Secondary Office for the Engineer	14	18-Jul-13 A	31-Jul-13 A			



Activity ID	Activity Name	Original Duration	Start	Finish	Late Start	Late Finish	Total Float
PR.1060	Erect Contractor's Office Compound	86	18-Jul-13 A	29-Oct-13 A			
PR.1070	Provision of Contract Computer Facilities for Engineer	60	30-Oct-13 A	28-Dec-13 A			
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 (Addition Transplant - pending for VO)	171	30-May-14 A	20-Dec-14 A			
DSD Southern Trunk Sewer, Water Main, Fire Main Works							
DSD Southern Trunk Sewer, Water Main Fire Main Works							
DSD0090	DSD Truck Sewer Laying complete	0	01-Nov-16		12-Nov-16		10
DSD0100	DSD Trunk Sewer Laying - overall testing (Zone 1 & Zone 2)	12	01-Nov-16	14-Nov-16	12-Nov-16	25-Nov-16	10
DSD0110	DSD Trunk Sewer Laying - overall inspection	18	15-Nov-16	05-Dec-16	26-Nov-16	16-Dec-16	10
DSD0120	DSD Trunk Sewer Laying - overall rectification	12	06-Dec-16	19-Dec-16	17-Dec-16	03-Jan-17	10
NB42 (Ch.5640-5740)-TWSR West Side							
Noise Barrier Works							
NB00020	VO for NB42 additional bay (303) issuance	0	07-Aug-15 A				
NB00030	Distric council comment NB42 bay 303 narrow the village access	0	21-Aug-15 A				
NB00040	NB42 bay 303 design revised (VO43)	26	22-Aug-15 A	21-Sep-15 A			
NB00050	TTA approval & process	29	08-Oct-15 A	11-Nov-15 A			
NB00060	Trial pit excavation	12	13-Nov-15 A	26-Nov-15 A			
NB00110	NB42 (Ch5640-5740) - Footing & Wall Structure - 8 bays	152	13-Feb-15 A	25-Aug-15 A			
NB00111	TTA application for road closure	14	21-Sep-15 A	08-Oct-15 A			
NB00114	NB42 (bay 303) - Footing & Wall Structure - 1 bays - VO	43	21-Dec-15 A	20-Feb-16 A			
NB00115	NB42 (Ch5640-5740) - Backfilling	12	15-Jun-16 A	30-Jul-16 A			
NB00120	NB42 (Ch5640-5740) - NB production	204	20-Oct-15 A	11-May-16 A			
NB00130	NB42 (Ch5640-5740) - NB post & panel installation	5	11-May-16 A	27-May-16 A			
DSD Southern Trunk Sewer, Water Main Fire Main Works							
TSZ10100	Sheet Piling & Excavation(~5m below ground) (along NB42)	12	30-Jan-15 A	12-Feb-15 A			
TSZ10110	DSD Trunk Sewer laying (along NB42) (completed by Gammon)	0		30-May-14 A			
TSZ10120	Backfill up to NB42 footing level (completed by Gammon)	0		30-May-14 A			
TSZ10130	Watermain installation (along NB42)	40	21-Mar-16 A	10-Jun-16 A			
TSZ10140	Firemain installation (along NB42)	30	20-Aug-16 A	20-Oct-16	30-Sep-16	31-Oct-16	9
Underground Utility Works							
UUZ10100	Utility cable laying by Utility companies (Along NB42)	76	21-Aug-15 A	20-Nov-15 A			
UUZ20250	Utility cable laying (Along NB42 bay 303 VO)	56	21-Jan-16 A	08-Apr-16 A			
NB42A (Ch.5750-5810)-TWSR West Side							
Noise Barrier Works							
NB00190	NB42A (Ch5750-5810) - Footing & Wall Structure - 5 bays	130	13-Apr-15 A	15-Sep-15 A			
NB00195	NB42A (Ch5750-5810) - backfilling	12	15-Mar-16 A	31-Mar-16 A			
NB00200	NB42A (Ch5750-5810) - NB production	76	20-Feb-16 A	05-May-16 A			
NB00210	NB42A (Ch5750-5810) - NB post installation	5	06-May-16 A	06-Jun-16 A			
DSD Southern Trunk Sewer, Water Main Fire Main Works							
TSZ10150	Sheet Piling & Excavation(~5m below ground) (along NB42A)	42	01-Dec-15 A	21-Jan-16 A			
TSZ10160	DSD Trunk Sewer laying (along NB42A) (completed by Gammon)	0		30-May-14 A			
TSZ10170	Backfill up to NB42A footing level (completed by Gammon)	0		30-May-14 A			



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

Project File:WP Rev 04
Layout: WP rev 4
Data Date:20-Sep-16
Page 3 of 44

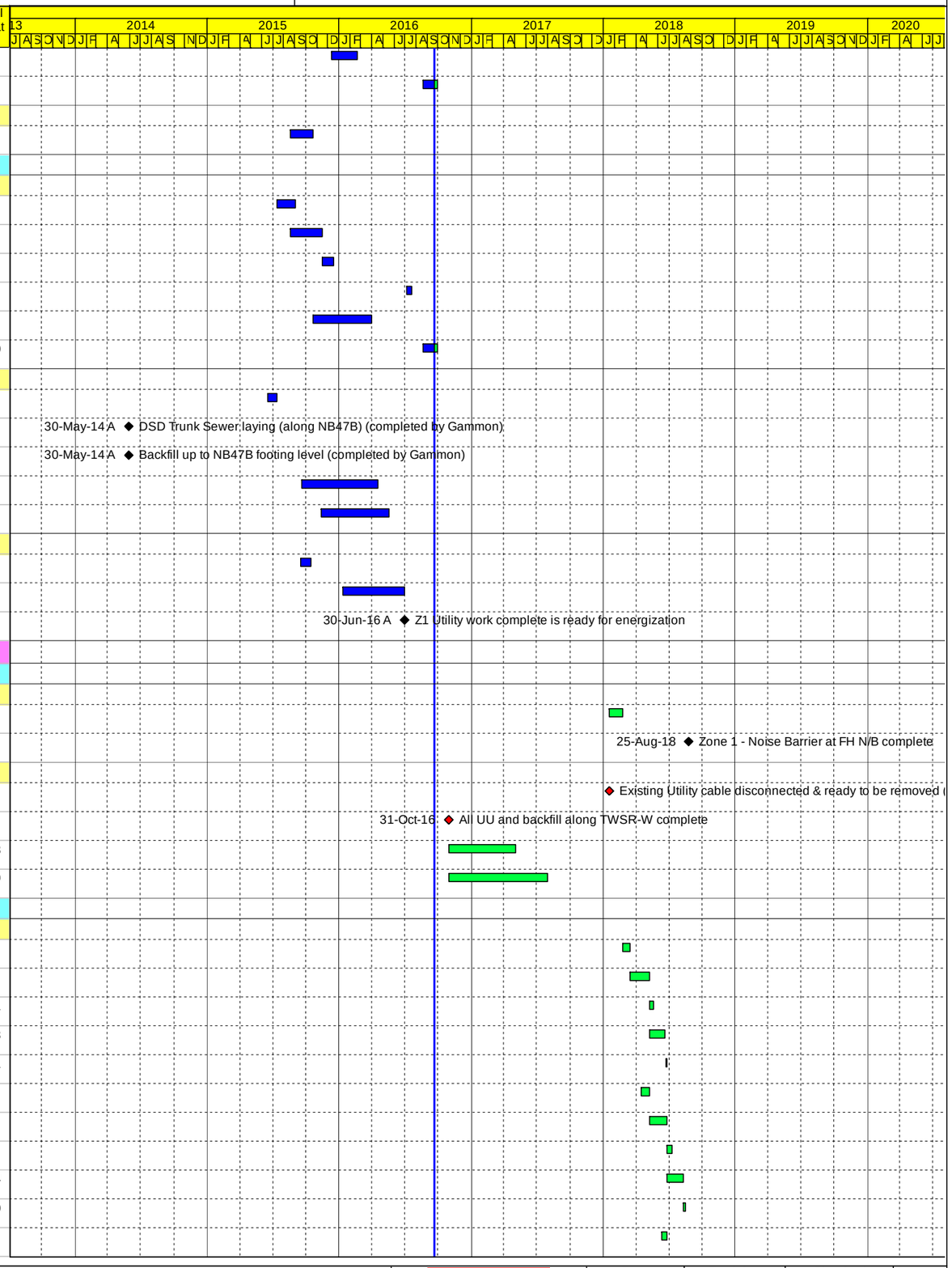
Contract No. HY/2012/06

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

Works Programme - WP Rev. 4

Date	Revision	Checked	Appro...
30-Jun-14	WP Rev 1A		
28-Aug-15	WP Rev 2		
07-Apr-16	WP Rev 3		
17-Oct-16	WP Rev 4		

Activity ID	Activity Name	Original Duration	Start	Finish	Late Start	Late Finish	Total Float
TSZ10180	Watermain installation (along NB42A)	51	11-Dec-15 A	20-Feb-16 A			
TSZ10190	Firemain installation (along NB42A)	20	20-Aug-16 A	30-Sep-16	20-Oct-16	31-Oct-16	24
Underground Utility Works							
UUZ10110	Utility cable laying by Utility companies (Along NB42A)	50	21-Aug-15 A	20-Oct-15 A			
NB47B (Ch.5820-5880)-TWSR West Side							
Noise Barrier Works							
NB00230	NB47B (Ch5820-5880)- Footing & Wall Structure - 4 bays	46	14-Jul-15 A	04-Sep-15 A			
NB00231	Stop works by Landload nearby	72	21-Aug-15 A	16-Nov-15 A			
NB00233	NB47B (bay 311A)- Footing & Wall Structure - VO	28	17-Nov-15 A	18-Dec-15 A			
NB00235	NB47B (Ch5820-5880)- backfilling	12	07-Jul-16 A	20-Jul-16 A			
NB00240	NB47B (Ch5820-5880) - NB production	166	20-Oct-15 A	02-Apr-16 A			
NB00250	NB47B (Ch5820-5880)- NB post installation	5	20-Aug-16 A	30-Sep-16	15-May-19	25-May-19	780
DSD Southern Trunk Sewer, Water Main Fire Main Works							
TSZ10200	Sheet Piling & Excavation(~5m below ground) (along NB47B)	19	19-Jun-15 A	13-Jul-15 A			
TSZ10210	DSD Trunk Sewer laying (along NB47B) (completed by Gammon)	0		30-May-14 A			
TSZ10220	Backfill up to NB47B footing level (completed by Gammon)	0		30-May-14 A			
TSZ10230	Watermain installation (along NB47B)	163	21-Sep-15 A	18-Apr-16 A			
TSZ10240	Firemain installation (along NB47B)	138	13-Nov-15 A	20-May-16 A			
Underground Utility Works							
UUZ10120	Utility cable laying by Utility companies (Along NB47B)	23	17-Sep-15 A	15-Oct-15 A			
UUZ10121	Utility cable laying by Utility companies (along bay 311A)	86	13-Jan-16 A	30-Jun-16 A			
UUZ10130	Z1 Utility work complete is ready for energization	0		30-Jun-16 A			
Noise Barrier Along Fanling Highway N/B							
Site Clearance & Demolition of Existing Structure							
General							
ADVZ10120	Site Clearance (for NB Along FH N/B)	30	17-Jan-18	22-Feb-18	08-Mar-18	16-Apr-18	41
ADVZ10130	Zone 1 - Noise Barrier at FH N/B complete	0		25-Aug-18		04-Dec-18	83
Underground Utility Works							
ADVZ10110	Existing Utility cable disconnected & ready to be removed (Z1 & Z2 cable complete installation & connection)	0	17-Jan-18		17-Jan-18		0
ADVZ20175	All UU and backfill along TWSR-W complete	0		31-Oct-16		31-Oct-16	0
ADVZ20180	Utility cable changeover period (NWT)	184	01-Nov-16	03-May-17	17-Jul-17	16-Jan-18	258
ADVZ20182	Additional Utilitly cable changeover period (PCCW, HCG)	273	01-Nov-16	31-Jul-17	19-Apr-17	16-Jan-18	169
NB43B (Ch.5640-5880)-FH N/B Side							
Noise Barrier Works							
NB01210	NB43B-1 (0-100m) - Sheet piling & Excavation	18	23-Feb-18	15-Mar-18	17-Apr-18	08-May-18	41
NB01220	NB43B-1 - Footing & Wall Structure	40	16-Mar-18	07-May-18	09-May-18	26-Jun-18	41
NB01230	NB43B-1 - backfilling	12	08-May-18	21-May-18	02-Oct-18	15-Oct-18	121
NB01240	NB43B-1 - NB production	45	08-May-18	21-Jun-18	06-Apr-19	20-May-19	333
NB01250	NB43B-1 - NB post & panel installation	5	22-Jun-18	27-Jun-18	21-May-19	25-May-19	271
NB01260	NB43B-2 (100-200m) - Sheet piling & Excavation	18	16-Apr-18	07-May-18	05-Jun-18	26-Jun-18	41
NB01270	NB43B-2 - Footing & Wall Structure	40	08-May-18	25-Jun-18	27-Jun-18	13-Aug-18	41
NB01280	NB43B-2 - backfilling	12	26-Jun-18	10-Jul-18	02-Oct-18	15-Oct-18	81
NB01290	NB43B-2 - NB production	45	26-Jun-18	09-Aug-18	06-Apr-19	20-May-19	284
NB01300	NB43B-2 - NB post & panel installation	5	10-Aug-18	15-Aug-18	21-May-19	25-May-19	230
NB01310	NB43B-3 (200-260m) - Sheet piling & Excavation	12	11-Jun-18	25-Jun-18	31-Jul-18	13-Aug-18	41



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

Project File:WP Rev 04
Layout: WP rev 4
Data Date:20-Sep-16
Page 4 of 44

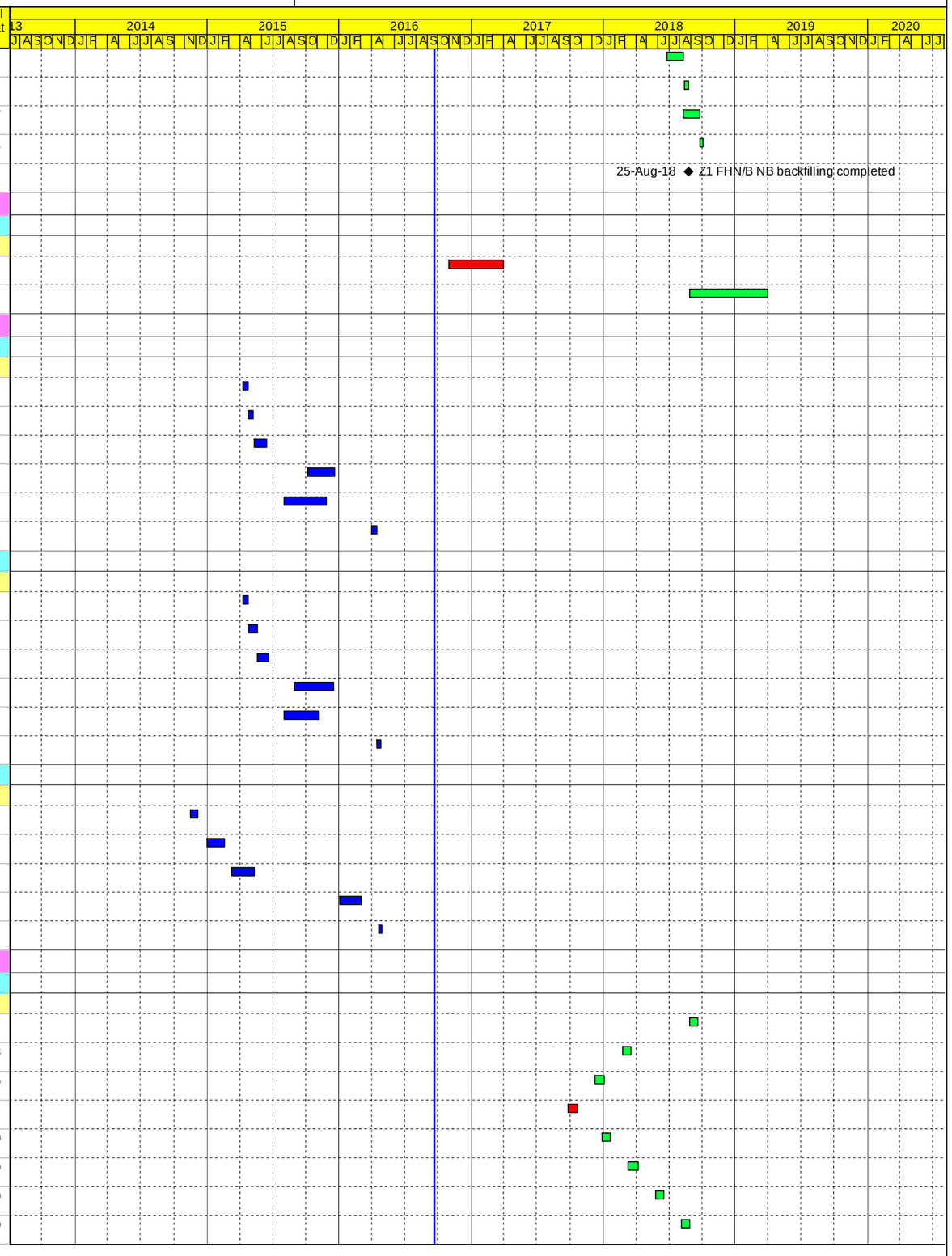
Contract No. HY/2012/06

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

Works Programme - WP Rev. 4

Date	Revision	Checked	Appro...
30-Jun-14	WP Rev 1A		
28-Aug-15	WP Rev 2		
07-Apr-16	WP Rev 3		
17-Oct-16	WP Rev 4		

Activity ID	Activity Name	Original Duration	Start	Finish	Late Start	Late Finish	Total Float
NB01320	NB43B-3 - Footing & Wall Structure	40	26-Jun-18	11-Aug-18	14-Aug-18	29-Sep-18	41
NB01330	NB43B-3 - backfilling	12	13-Aug-18	25-Aug-18	02-Oct-18	15-Oct-18	41
NB01340	NB43B-3 - NB production	45	11-Aug-18	25-Sep-18	06-Apr-19	20-May-19	237
NB01350	NB43B-3 - NB post & panel installation	5	26-Sep-18	02-Oct-18	21-May-19	25-May-19	191
NB03295	Z1 FHN/B NB backfilling completed	0		25-Aug-18		15-Oct-18	41
TWSR-West Construction							
Drainage & Road Works							
Ch 5640-5880							
RDZ10090	Z1: New Tai Wo Service Road West - Drainage & Road works (2 lanes)	120	01-Nov-16	31-Mar-17	01-Nov-16	31-Mar-17	0
RDZ10100	Z1: New Tai Wo Service Road West - Drainage & Road works near N/B noise barrier	180	27-Aug-18	02-Apr-19	16-Oct-18	25-May-19	41
Noise Barrier Along Fanling Highway S/B							
NB44 (Ch.5700-5760)-FH S/B Side							
Noise Barrier Works							
NB01360	NB44 - Sheet piling & Excavation (4 bays)	13	11-Apr-15 A	25-Apr-15 A			
NB01370	NB44 - Footing & Wall Structure (4 bays)	11	26-Apr-15 A	10-May-15 A			
NB01380	NB44 - backfilling	30	11-May-15 A	15-Jun-15 A			
NB01385	NB44 - Excavation & Footing & Wall Structure (1 bays)	64	07-Oct-15 A	21-Dec-15 A			
NB01390	NB44 - NB production	45	03-Aug-15 A	27-Nov-15 A			
NB01400	NB44 - NB post & panel installation	5	01-Apr-16 A	15-Apr-16 A			
NB45 (Ch.5760-5820)-FH S/B Side							
Noise Barrier Works							
NB01410	NB45 - Sheet piling & Excavation	13	11-Apr-15 A	25-Apr-15 A			
NB01420	NB45 - Footing & Wall Structure	21	25-Apr-15 A	20-May-15 A			
NB01430	NB45 - backfilling	25	21-May-15 A	20-Jun-15 A			
NB01435	NB45 - Excavation & Footing & Wall Structure (2 bays)	89	01-Sep-15 A	16-Dec-15 A			
NB01440	NB45 - NB production	45	03-Aug-15 A	07-Nov-15 A			
NB01450	NB45 - NB post & panel installation	5	15-Apr-16 A	25-Apr-16 A			
NB46 (Ch.5820-5880)-FH S/B Side							
Noise Barrier Works							
NB01460	NB46 - Sheet piling & Excavation	18	18-Nov-14 A	08-Dec-14 A			
NB01470	NB46 - Footing & Wall Structure	41	02-Jan-15 A	20-Feb-15 A			
NB01480	NB46 - backfilling	50	10-Mar-15 A	11-May-15 A			
NB01490	NB46 - NB production	45	04-Jan-16 A	02-Mar-16 A			
NB01500	NB46 - NB post & panel installation	5	21-Apr-16 A	28-Apr-16 A			
Fanling Highway Construction							
Drainage & Road Works							
Ch 5640-5880							
RDZ11010	Z1 (Ch5640-5880): Fanling Highway N/B - D&R works (lane 1)(Modify to final road level)	20	27-Aug-18	18-Sep-18	05-Dec-18	29-Dec-18	83
RDZ11020	Z1 (Ch5640-5880) : Fanling Highway N/B - D&R works (lane 2)(Modify to final road level)	20	23-Feb-18	17-Mar-18	12-Nov-18	04-Dec-18	213
RDZ11030	Z1 (Ch5640-5880) : Fanling Highway N/B - D&R works (lane 3)	20	09-Dec-17	04-Jan-18	21-Aug-18	12-Sep-18	205
RDZ11040	Z1 (Ch5640-5880) : Fanling Highway N/B - D&R works (lane 4)	20	27-Sep-17	21-Oct-17	27-Sep-17	21-Oct-17	0
RDZ11050	Z1 (Ch5640-5880) : Fanling Highway S/B - D&R works (lane 4)	20	28-Dec-17	20-Jan-18	24-Sep-18	19-Oct-18	220
RDZ11060	Z1 (Ch5640-5880) : Fanling Highway S/B - D&R works (lane 3)	20	10-Mar-18	06-Apr-18	05-Dec-18	29-Dec-18	220
RDZ11070	Z1 (Ch5640-5880) : Fanling Highway S/B - D&R works (lane 2)	20	25-May-18	16-Jun-18	18-Feb-19	12-Mar-19	220
RDZ11080	Z1 (Ch5640-5880) : Fanling Highway S/B - D&R works (lane 1)	20	04-Aug-18	27-Aug-18	03-May-19	25-May-19	220



Activity ID	Activity Name	Original Duration	Start	Finish	Late Start	Late Finish	Total Float
RDZ11090	Z1 (Ch5640-5880) : Fanling Highway Road works (8 lanes) complete	0		18-Sep-18		25-May-19	201
Other Works							
Landscape Softwork							
Landscape Works							
Z1.LW.1000	Landscape soft work Zone1	150	27-Aug-18	26-Feb-19	05-Dec-18	10-Jun-19	83
Establishment Works							
Establishment Works							
Z1.EW.1000	Establishment work Zone1	365	27-Feb-19	26-Feb-20	11-Jun-19	09-Jun-20	104
ZONE 2 (Ch. 5880 to 6930)							
General							
DRM Proposal							
DRM Proposal							
ADVZ20190	Utility cable duct laying & backfill complete	0		31-Oct-16*		31-Oct-16	0
ADVZ20200	Utility cable changeover period (All Utility Companies)(9 months)	273	01-Nov-16	31-Jul-17	19-Apr-17	16-Jan-18	169
ADVZ20201	Latest Date of Existing Utility cable disconnected & ready to be removed	0		16-Jan-18		07-Mar-18	41
ADVZ20220	New TWSR-W construction period	120	01-Nov-16	31-Mar-17	01-Nov-16	31-Mar-17	0
ADVZ20225	Divert Existing TWSR-W to New TWSR-W	5	01-Apr-17	07-Apr-17	01-Apr-17	07-Apr-17	0
ADVZ20230	Construct Temp Road at NB at North bound (0.5 HS+Lane 1 & 2)	100	08-Apr-17	10-Aug-17	08-Apr-17	10-Aug-17	0
ADVZ20240	Remove Existing Central Barrier at FLHY & Temp Road	75	11-Aug-17	09-Nov-17	02-Jan-18	04-Apr-18	117
ADVZ20250	FLHY N/B Lane 4 ready to Start	0	11-Aug-17		11-Aug-17		0
ADVZ20260	FLHY S/B Lane 4 ready to Start	0	10-Nov-17		06-Apr-18		117
ADVZ20280	TTA for NB construction (Shift TWSR-W to Temp road)	30	09-Dec-17	16-Jan-18	09-Dec-17	16-Jan-18	0
ADVZ20290	NB at FLHY N/B construction Period	255	17-Jan-18	24-Nov-18	08-Mar-18	04-Dec-18	8
ADVZ20300	TWSR-W lane 2 construction	100	26-Nov-18	27-Mar-19	26-Nov-18	27-Mar-19	0
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	40	12-Nov-13 A	30-Dec-13 A			
Z2.P2N.1242	Pending for design brief from Villager/ Engineer	158	01-Jan-14 A	23-Jul-14 A			
Z2.P2N.1245	Method statement submission/ approval	132	24-Jul-14 A	30-Dec-14 A			
Z2.P2N.1250	Construction of proposed SHRINE	165	01-Aug-16 A	31-Aug-16 A			
Z2.P2N.1260	Demolition of existing SHRINE	3	28-Aug-14 A	30-Aug-14 A			
Z2.P2N.1270	Condition survey	27	26-Aug-14 A	26-Sep-14 A			
Z2.P2N.1290	Demolition of Man Ching Lung Tong	7	29-Jan-15 A	05-Feb-15 A			
Z2.P2N.1300	Condition survey	13	26-Aug-14 A	10-Sep-14 A			
Z2.P2N.1310	Existing trees felling	52	21-Jul-14 A	19-Sep-14 A			
Z2.P2N.1320	Demolition of villiage houses	26	20-Oct-14 A	18-Nov-14 A			
NB47 (Ch.5880-5930)-TWSR West Side							
Noise Barrier Works							
NB00270	NB47 (Ch5880-5930)- Footing & Wall Structure - 5 bays	302	11-Mar-15 A	21-Mar-16 A			
NB00275	NB47 (Ch5880-5930)- backfilling	12	01-Jun-16 A	15-Jun-16 A			
NB00280	NB47 (Ch5880-5930)- NB production	77	19-Mar-16 A	03-Jun-16 A			
NB00290	NB47 (Ch5880-5930)- NB post installation	16	20-Sep-16	08-Oct-16	10-Apr-19	02-May-19	754
DSD Southern Trunk Sewer, Water Main Fire Main Works							
TSZ10250	Sheet Piling & Excavation(~6m below ground) (along NB47)	17	11-Feb-15 A	10-Mar-15 A			
TSZ10260	DSD Trunk Sewer laying (along NB47)	138	17-Aug-15 A	30-Jan-16 A			

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

Project File:WP Rev 04

Layout: WP rev 4

Data Date:20-Sep-16

Page 6 of 44

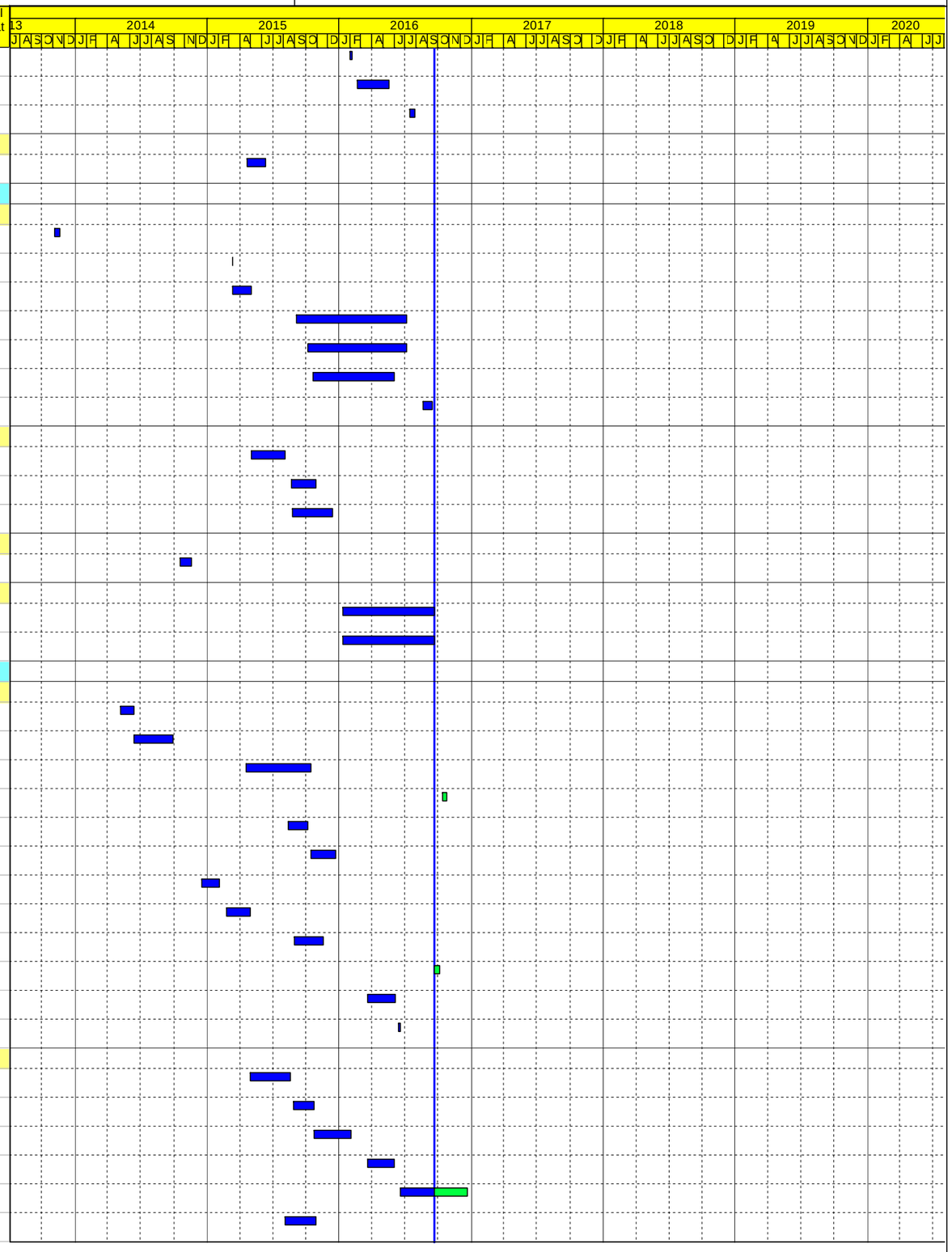
Contract No. HY/2012/06

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

Works Programme - WP Rev. 4

Date	Revision	Checked	Appro...
30-Jun-14	WP Rev 1A		
28-Aug-15	WP Rev 2		
07-Apr-16	WP Rev 3		
17-Oct-16	WP Rev 4		

Activity ID	Activity Name	Original Duration	Start	Finish	Late Start	Late Finish	Total Float
TSZ10270	Backfill up to NB47 footing level	6	01-Feb-16 A	06-Feb-16 A			
TSZ10280	Watermain installation (along NB47)	58	20-Feb-16 A	20-May-16 A			
TSZ10290	Firemain installation (along NB47)	26	15-Jul-16 A	30-Jul-16 A			
Underground Utility Works							
UUZ20100	Utility cable laying by Utility companies (Along NB47)	44	21-Apr-15 A	12-Jun-15 A			
NB47A (Ch.5950-5975)-TWSR West Side							
Noise Barrier Works							
NB00295	NB47A - ID1-1 Pre-drilling	11	07-Nov-13 A	19-Nov-13 A			
NB00300	NB47A - ID1-1 piling (0.19m -24no) - rigs 4 (Deleted)	0	13-Mar-15 A	13-Mar-15 A			
NB00320	NB47A - ID1-1 Footing & Wall Structure - 2 bays	40	14-Mar-15 A	04-May-15 A			
NB00330	NB47A - backfilling	208	07-Sep-15 A	07-Jul-16 A			
NB00335	Backfilling (Along NB47A-above ID1)	185	06-Oct-15 A	07-Jul-16 A			
NB00340	NB47A - NB production	197	20-Oct-15 A	03-Jun-16 A			
NB00350	NB47A - NB post installation	5	20-Aug-16 A	15-Sep-16 A			
DSD Southern Trunk Sewer, Water Main Fire Main Works							
TSZ10350	Sheet Piling & Excavation(~5m below ground) (along NB47A)	78	05-May-15 A	06-Aug-15 A			
TSZ10380	Watermain installation (Along NB47A-above ID1)	56	24-Aug-15 A	30-Oct-15 A			
TSZ10560	Watermain & Firemain installation (Along NB47A)	94	25-Aug-15 A	15-Dec-15 A			
DSD Southern Trunk Sewer - Trenchless Construction							
TSZ11080	DSD Trunk Sewer laying (along NB47A - ID1-1)-Trenchless	28	20-Oct-14 A	20-Nov-14 A			
Underground Utility Works							
UUZ20110	Utility cable laying by Utility companies (Along NB47A)	99	13-Jan-16 A	20-Sep-16 A			
UUZ20240	Utility cable laying by Utility companies (Along NB47A-above ID1)	99	13-Jan-16 A	20-Sep-16 A			
NB48 (Ch.5995-6120)-TWSR West Side							
Noise Barrier Works							
NB00355	NB48 (NB48/1-5)- Pre-drilling	31	07-May-14 A	12-Jun-14 A			
NB00360	NB48 (NB48/1-5 up to THFB) piling (0.19m -52no)	91	14-Jun-14 A	30-Sep-14 A			
NB00380	NB48 (Ch5995-6060) - Footing & Wall Structure - 4 bays	150	18-Apr-15 A	16-Oct-15 A			
NB00390	NB48 (Ch5995-6060) - backfilling	12	13-Oct-16	26-Oct-16	15-Dec-16	30-Dec-16	54
NB00400	NB48 (Ch5995-6060) - NB production	76	13-Aug-15 A	06-Oct-15 A			
NB00410	NB48 (Ch5995-6060) - NB post & panel installation	5	17-Oct-15 A	22-Dec-15 A			
NB00415	NB48 (NB48/5-10) Pre-drilling	40	18-Dec-14 A	05-Feb-15 A			
NB00420	NB48 (NB48/5-10) piling (0.19m -30no) - rigs 4	51	25-Feb-15 A	30-Apr-15 A			
NB00440	NB48 (Ch6060-6120) - Footing & Wall Structure - 5 bays	67	01-Sep-15 A	20-Nov-15 A			
NB00450	NB48 (Ch6060-6120) - backfilling	12	20-Sep-16	04-Oct-16	15-Dec-16	30-Dec-16	72
NB00460	NB48 (Ch6060-6120) - NB production	76	20-Mar-16 A	03-Jun-16 A			
NB00470	NB48 (Ch6060-6120) - NB post & panel installation	5	15-Jun-16 A	20-Jun-16 A			
DSD Southern Trunk Sewer, Water Main Fire Main Works							
TSZ10400	Sheet Piling & Excavation(~5m below ground) (along NB48, 0-60m)	92	02-May-15 A	20-Aug-15 A			
TSZ10410	DSD Trunk Sewer laying (along NB48, 0-60m)	46	28-Aug-15 A	23-Oct-15 A			
TSZ10420	Backfill up to NB48, 0-60m footing level	85	24-Oct-15 A	03-Feb-16 A			
TSZ10430	Watermain installation (along NB48, 0-60m)	34	21-Mar-16 A	02-Jun-16 A			
TSZ10440	Firemain installation (along NB48, 0-60m)	30	20-Jun-16 A	22-Dec-16	08-Oct-16	12-Jan-17	15
TSZ10450	Sheet Piling & Excavation(~5m below ground) (along NB48, 60-110m)	72	05-Aug-15 A	30-Oct-15 A			



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

Project File:WP Rev 04
Layout: WP rev 4
Data Date:20-Sep-16
Page 7 of 44

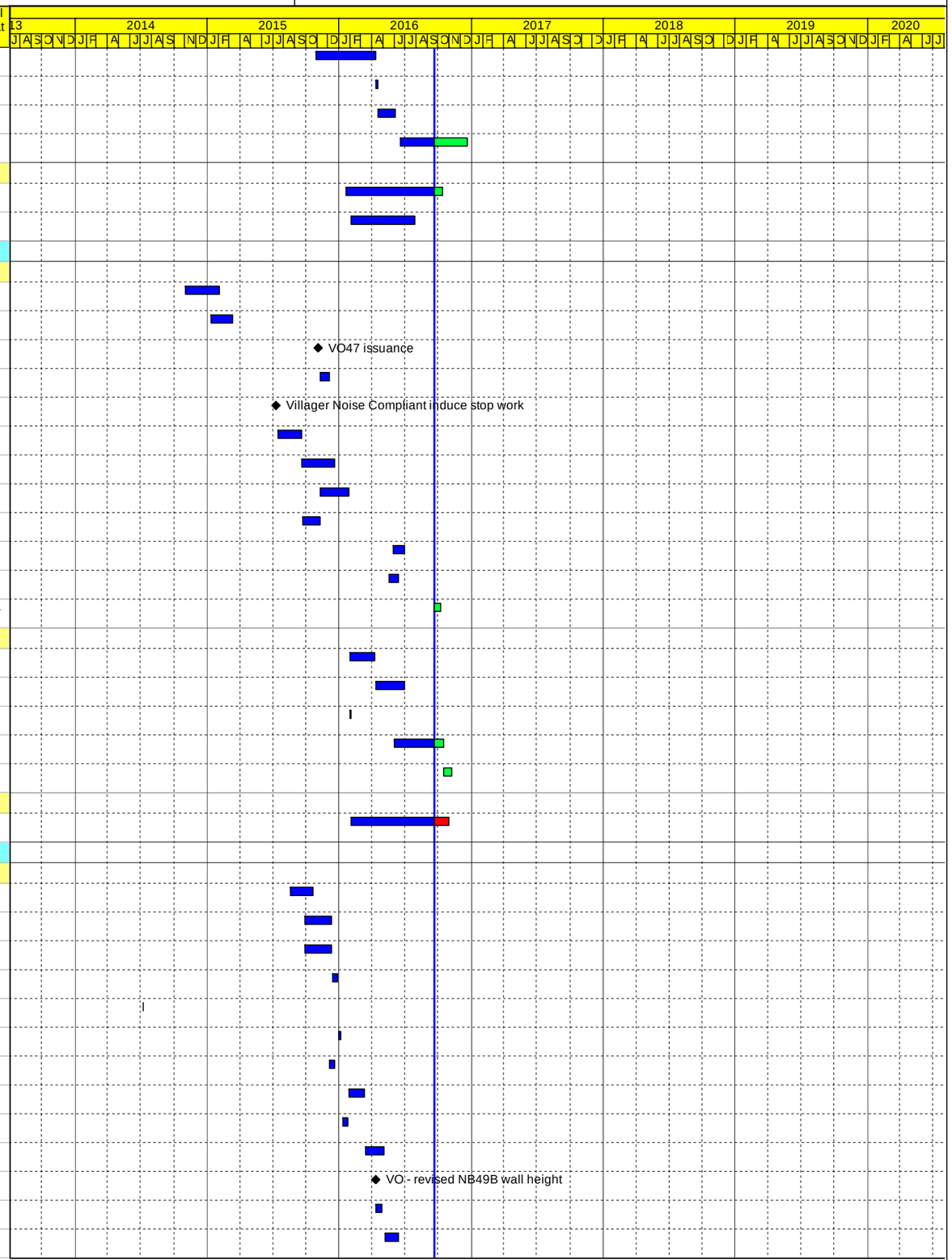
Contract No. HY/2012/06

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

Works Programme - WP Rev. 4

Date	Revision	Checked	Appro...
30-Jun-14	WP Rev 1A		
28-Aug-15	WP Rev 2		
07-Apr-16	WP Rev 3		
17-Oct-16	WP Rev 4		

Activity ID	Activity Name	Original Duration	Start	Finish	Late Start	Late Finish	Total Float
TSZ10460	DSD Trunk Sewer laying (along NB48, 60-110m)	125	31-Oct-15 A	11-Apr-16 A			
TSZ10470	Backfill up to NB48, 60-110m footing level	6	12-Apr-16 A	18-Apr-16 A			
TSZ10480	Watermain installation (along NB48, 60-110m)	27	19-Apr-16 A	04-Jun-16 A			
TSZ10490	Firemain installation (along NB48, 60-110m)	26	20-Jun-16 A	22-Dec-16	08-Oct-16	12-Jan-17	15
Underground Utility Works							
UUZ20120	Utility cable laying by Utility companies (Along NB48, 0-60m)	89	21-Jan-16 A	12-Oct-16	11-Oct-16	31-Oct-16	16
UUZ20130	Utility cable laying by Utility companies (Along NB48, 60-110m)	72	05-Feb-16 A	30-Jul-16 A			
NB49 (Ch.6145-6215)-TWSR West Side							
Noise Barrier Works							
NB00485	NB49 - Pre-drilling	79	03-Nov-14 A	05-Feb-15 A			
NB00490	NB49 piling (0.19m -42no) - rigs 1&2	46	12-Jan-15 A	13-Mar-15 A			
NB00491	VO47 issuance	0	04-Nov-15 A				
NB00493	Procurement couplier	24	09-Nov-15 A	05-Dec-15 A			
NB00507	Villager Noise Compliant induce stop work	0	10-Jul-15 A				
NB00508	VO for using silent piler & slient piler mobilisation	58	16-Jul-15 A	21-Sep-15 A			
NB00509	NB49 - Footing & Wall Structure - bays 5	75	21-Sep-15 A	19-Dec-15 A			
NB00510	NB49 - Footing & Wall Structure - 4 bays	67	11-Nov-15 A	30-Jan-16 A			
NB00513	NB49 bays 1-4 was disrupt & stopped by Villager	40	22-Sep-15 A	10-Nov-15 A			
NB00520	NB49 - backfilling	12	30-May-16 A	30-Jun-16 A			
NB00530	NB49 - NB production	45	20-May-16 A	15-Jun-16 A			
NB00540	NB49 - NB post installation	16	20-Sep-16	08-Oct-16	10-Apr-19	02-May-19	754
DSD Southern Trunk Sewer, Water Main Fire Main Works							
TSZ10500	Sheet Piling & Excavation(~7m below ground) (along NB49)	48	01-Feb-16 A	09-Apr-16 A			
TSZ10510	DSD Trunk Sewer laying (along NB49)	18	11-Apr-16 A	30-Jun-16 A			
TSZ10520	Backfill up to NB49 footing level	3	01-Feb-16 A	03-Feb-16 A			
TSZ10530	Watermain installation (along NB49)	20	01-Jun-16 A	15-Oct-16	23-Nov-16	16-Dec-16	53
TSZ10540	Firemain installation (along NB49)	20	17-Oct-16	08-Nov-16	17-Dec-16	12-Jan-17	53
Underground Utility Works							
UUZ20140	Utility cable laying by Utility companies (Along NB49, 0-70m)	84	03-Feb-16 A	31-Oct-16	20-Sep-16	31-Oct-16	0
NB49B (Ch.6215-6235)-TWSR West Side							
Noise Barrier Works							
NB00536	Re-provision of Hse161 Gate complete	51	20-Aug-15 A	20-Oct-15 A			
NB00538	Pending for U-channel Design & VO	62	30-Sep-15 A	12-Dec-15 A			
NB00542	Pending for Perminent Road Works Design & VO	62	30-Sep-15 A	12-Dec-15 A			
NB00544	Construction of U-channel & perminent road for Hse 161 new access	13	14-Dec-15 A	30-Dec-15 A			
NB00545	NB49B - Pre-drilling (Deleted notified in July-14, VO issued accordingly)	0	08-Jul-14 A	08-Jul-14 A			
NB00547	Hoarding erection to change Hse 161 access	6	31-Dec-15 A	07-Jan-16 A			
NB00549	NB49B - Pre-drilling	13	05-Dec-15 A	19-Dec-15 A			
NB00550	NB49B piling (0.19m -20no	31	28-Jan-16 A	12-Mar-16 A			
NB00560	NB49B- Sheet piling & Excavation	15	11-Jan-16 A	27-Jan-16 A			
NB00570	NB49B - Footing & Wall Structure - 2 bays	41	14-Mar-16 A	05-May-16 A			
NB00572	VO - revised NB49B wall height	0	12-Apr-16 A				
NB00574	Pending for revised RC detail design	13	13-Apr-16 A	27-Apr-16 A			
NB00580	NB49B - backfilling	12	06-May-16 A	15-Jun-16 A			



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

Project File:WP Rev 04

Layout: WP rev 4

Data Date:20-Sep-16

Page 8 of 44

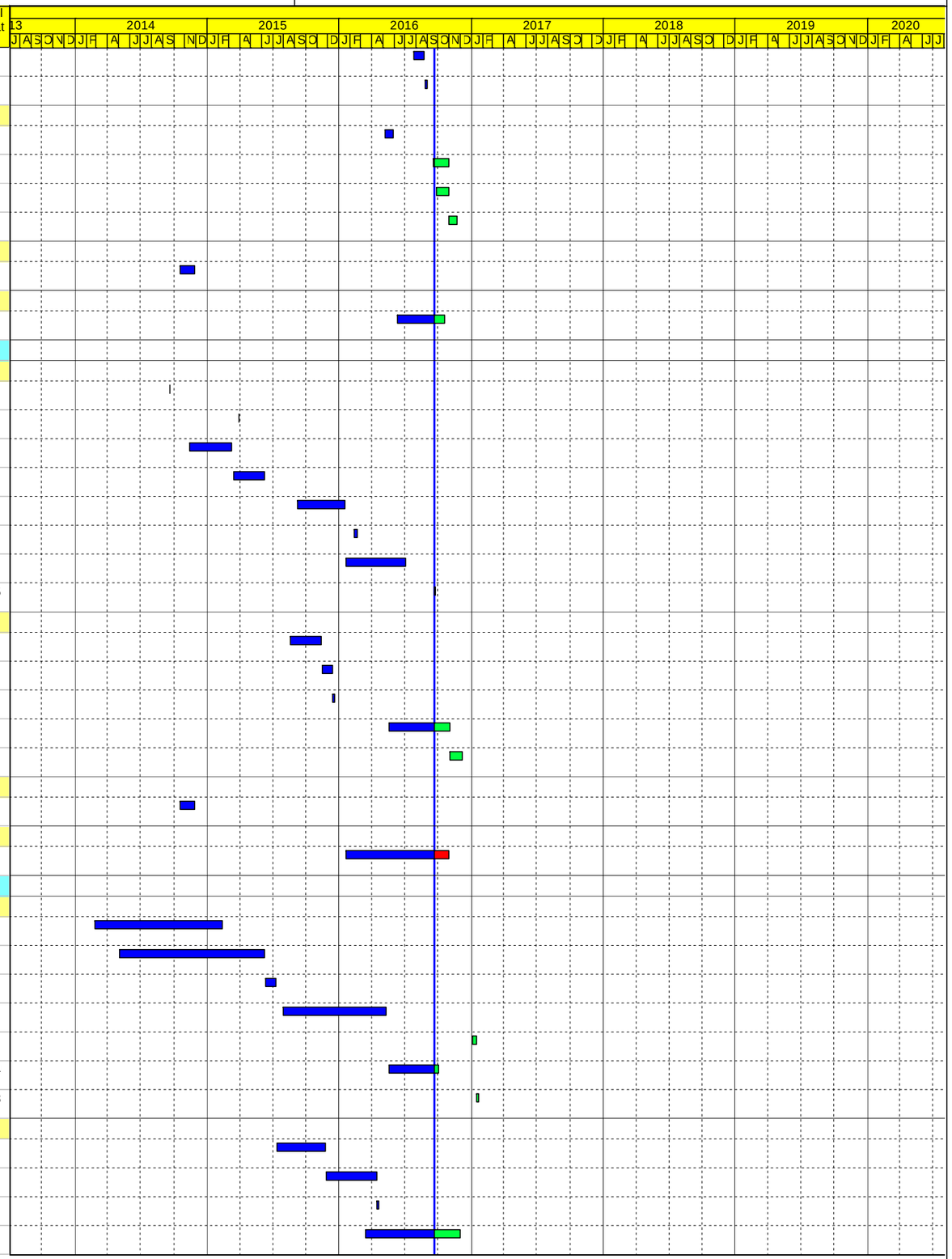
Contract No. HY/2012/06

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

Works Programme - WP Rev. 4

Date	Revision	Checked	Appro...
30-Jun-14	WP Rev 1A		
28-Aug-15	WP Rev 2		
07-Apr-16	WP Rev 3		
17-Oct-16	WP Rev 4		

Activity ID	Activity Name	Original Duration	Start	Finish	Late Start	Late Finish	Total Float
NB00590	NB49B - NB production	45	25-Jul-16 A	25-Aug-16 A			
NB00600	NB49B - NB post installation	5	26-Aug-16 A	02-Sep-16 A			
DSD Southern Trunk Sewer, Water Main Fire Main Works							
TSZ10550	Sheet Piling & Excavation(~5m below ground) (along NB49B)	21	06-May-16 A	31-May-16 A			
TSZ10570	DSD Trunk Sewer laying (along NB49B - ID2-1)	34	19-Sep-16 A	29-Oct-16	04-Oct-16	11-Nov-16	11
TSZ10580	Watermain installation (along NB49B)	26	28-Sep-16	29-Oct-16	22-Dec-16	24-Jan-17	71
TSZ10590	Firemain installation (along NB49B)	20	31-Oct-16	22-Nov-16	25-Jan-17	24-Feb-17	71
DSD Southern Trunk Sewer - Trenchless Construction							
TSZ11040	DSD Trunk Sewer laying (along - ID2-1)-Trenchless	34	20-Oct-14 A	27-Nov-14 A			
Underground Utility Works							
UUZ20150	Utility cable laying by Utility companies (Along NB49B, 0-16m)	10	10-Jun-16 A	18-Oct-16	04-Oct-16	31-Oct-16	11
NB54 (Ch.6240-6280)-TWSR West Side							
Noise Barrier Works							
NB00605	NB54 - ID2-1 Pre-drilling (Deleted notified on14-5-14, VO issued accordingly)	0	20-Sep-14 A	20-Sep-14 A			
NB00610	NB54 - ID2-1 piling (0.19m -18no)- (Deleted notified on14-5-14, VO issued accordingly)	0	31-Mar-15 A	31-Mar-15 A			
NB00665	NB54 -Pre-drilling	91	15-Nov-14 A	12-Mar-15 A			
NB00670	NB54 piling (0.19m -16no) - rigs 1&2	70	16-Mar-15 A	10-Jun-15 A			
NB00690	NB54 - Footing & Wall Structure - 2 bays	107	09-Sep-15 A	18-Jan-16 A			
NB00700	NB54 - backfilling	4	11-Feb-16 A	20-Feb-16 A			
NB00710	NB54 - NB production	136	20-Jan-16 A	04-Jul-16 A			
NB00720	NB54 - NB post & panel installation	5	20-Sep-16	24-Sep-16	26-Apr-19	02-May-19	765
DSD Southern Trunk Sewer, Water Main Fire Main Works							
TSZ10600	Sheet Piling & Excavation(~5m below ground) (along NB54)	72	20-Aug-15 A	14-Nov-15 A			
TSZ10610	DSD Trunk Sewer laying (along NB54 excep ID2-1 section)	25	16-Nov-15 A	14-Dec-15 A			
TSZ10620	Backfill up to NB54 footing level	6	15-Dec-15 A	21-Dec-15 A			
TSZ10630	Watermain installation (along NB54)	30	20-May-16 A	01-Nov-16	30-Nov-16	12-Jan-17	59
TSZ10640	Firemain installation (along NB54)	30	02-Nov-16	06-Dec-16	13-Jan-17	24-Feb-17	59
DSD Southern Trunk Sewer - Trenchless Construction							
TSZ11000	DSD Trunk Sewer laying (along NB54 - ID2-1)-Trenchless	34	20-Oct-14 A	27-Nov-14 A			
Underground Utility Works							
UUZ20160	Utility cable laying by Utility companies (Along NB54, 0-40m)	77	21-Jan-16 A	31-Oct-16	20-Sep-16	31-Oct-16	0
NB54A (Ch.6290-6350)-TWSR West Side							
Noise Barrier Works							
NB00730	NB54A -Pre-drilling	288	26-Feb-14 A	12-Feb-15 A			
NB00740	NB54A piling (0.19m -44no) - rigs 1&2	325	05-May-14 A	11-Jun-15 A			
NB00750	NB54A pile testing	24	12-Jun-15 A	11-Jul-15 A			
NB00760	NB54A - Footing & Wall Structure - 6 bays	211	01-Aug-15 A	10-May-16 A			
NB00770	NB54A - backfilling	12	03-Jan-17	16-Jan-17	17-Jan-17	07-Feb-17	12
NB00780	NB54A - NB production	45	20-May-16 A	03-Oct-16	12-Apr-19	25-Apr-19	934
NB00790	NB54A - NB post & panel installation	5	17-Jan-17	21-Jan-17	26-Apr-19	02-May-19	668
DSD Southern Trunk Sewer, Water Main Fire Main Works							
TSZ10650	Sheet Piling & Excavation(~5m below ground) (along NB54A)	114	13-Jul-15 A	25-Nov-15 A			
TSZ10660	DSD Trunk Sewer laying (along NB54A)	108	26-Nov-15 A	16-Apr-16 A			
TSZ10670	Backfill up to NB54A footing level	4	16-Apr-16 A	20-Apr-16 A			
TSZ10680	Watermain installation (along NB54A)	44	14-Mar-16 A	30-Nov-16	05-Oct-16	14-Dec-16	12



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

Project File:WP Rev 04
Layout: WP rev 4
Data Date:20-Sep-16
Page 9 of 44

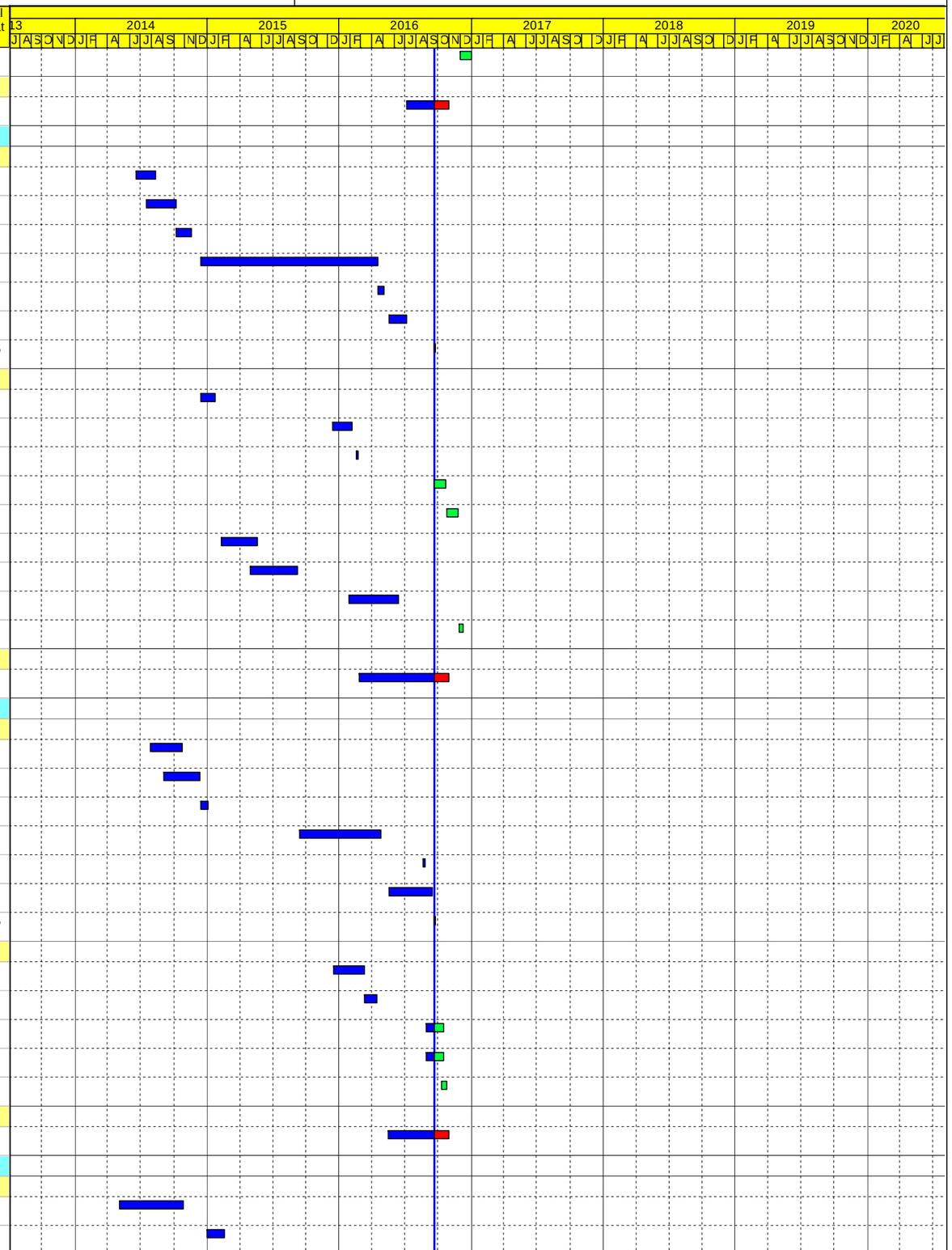
Contract No. HY/2012/06

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

Works Programme - WP Rev. 4

Date	Revision	Checked	Appro...
30-Jun-14	WP Rev 1A		
28-Aug-15	WP Rev 2		
07-Apr-16	WP Rev 3		
17-Oct-16	WP Rev 4		

Activity ID	Activity Name	Original Duration	Start	Finish	Late Start	Late Finish	Total Float
TSZ10690	Firemain installation (along NB54A)	25	01-Dec-16	31-Dec-16	15-Dec-16	16-Jan-17	12
Underground Utility Works							
UUZ20170	Utility cable laying by Utility companies (Along NB54A, 0-60m)	12	05-Jul-16 A	31-Oct-16	20-Sep-16	31-Oct-16	0
NB57 (Ch.6365-6445)-TWSR West Side							
Noise Barrier Works							
NB00800	NB57 -Pre-drilling	46	19-Jun-14 A	12-Aug-14 A			
NB00805	Pending for design information (RFI/00088)	69	17-Jul-14 A	08-Oct-14 A			
NB00810	NB57 piling (0.19m 50no) - rigs 1 & 2	37	09-Oct-14 A	20-Nov-14 A			
NB00830	NB57 - Footing & Wall Structure - 7 bays	386	15-Dec-14 A	18-Apr-16 A			
NB00840	NB57 - backfilling	13	19-Apr-16 A	04-May-16 A			
NB00850	NB57 - NB production	45	20-May-16 A	05-Jul-16 A			
NB00860	NB57 - NB post & panel installation	5	20-Sep-16	24-Sep-16	26-Apr-19	02-May-19	765
DSD Southern Trunk Sewer, Water Main Fire Main Works							
TSZ10700	Sheet Piling & Excavation(~5m below ground) (along NB57)	32	15-Dec-14 A	23-Jan-15 A			
TSZ10710	DSD Trunk Sewer laying (along NB57)	44	15-Dec-15 A	06-Feb-16 A			
TSZ10720	Backfill up to NB57 footing level	6	17-Feb-16 A	23-Feb-16 A			
TSZ10730	Watermain installation (along NB57)	27	20-Sep-16	22-Oct-16	08-Nov-16	08-Dec-16	40
TSZ10740	Firemain installation (along NB57)	30	24-Oct-16	26-Nov-16	09-Dec-16	16-Jan-17	40
TSZ10770	Pending design for existing wash-out chamber diversion at SA325 crash with Truck Sewer Laying	76	10-Feb-15 A	21-May-15 A			
TSZ10774	Completion NB57 Bay 1 & 2 and preparation works	110	02-May-15 A	10-Sep-15 A			
TSZ10785	PCCW drawpit by Pccw	74	29-Jan-16 A	15-Jun-16 A			
TSZ10990	Backfilling for UU and Firemain & Watermain	12	28-Nov-16	10-Dec-16	17-Jan-17	07-Feb-17	40
Underground Utility Works							
UUZ20180	Utility cable laying by Utility companies (Along NB57, 0-80m)	68	26-Feb-16 A	31-Oct-16	20-Sep-16	31-Oct-16	0
NB58 (Ch.6445-6480)-TWSR West Side							
Noise Barrier Works							
NB00870	NB58 -Pre-drilling (2nos after remove Hse 103 wall)	73	30-Jul-14 A	25-Oct-14 A			
NB00875	Pending for RSS revised detail of NB58 - piling	84	03-Sep-14 A	12-Dec-14 A			
NB00880	NB58 - piling (0.19m -24no) - rigs 3 & 4	16	15-Dec-14 A	05-Jan-15 A			
NB00900	NB58 - Footing & Wall Structure - 3 bays	175	15-Sep-15 A	26-Apr-16 A			
NB00910	NB58 - backfilling	12	20-Aug-16 A	27-Aug-16 A			
NB00920	NB58 - NB production	45	20-May-16 A	15-Sep-16 A			
NB00930	NB58 - NB post & panel installation	5	20-Sep-16	24-Sep-16	26-Apr-19	02-May-19	765
DSD Southern Trunk Sewer, Water Main Fire Main Works							
TSZ10750	Sheet Piling & Excavation(~5m below ground) (along NB58)	63	17-Dec-15 A	11-Mar-16 A			
TSZ10760	DSD Trunk Sewer laying (along NB58)	27	12-Mar-16 A	16-Apr-16 A			
TSZ10780	Watermain installation (along NB58)	40	29-Aug-16 A	17-Oct-16	14-Dec-16	11-Jan-17	71
TSZ10790	Firemain installation (along NB58)	40	29-Aug-16 A	17-Oct-16	14-Dec-16	11-Jan-17	71
TSZ11010	Backfilling	12	11-Oct-16	24-Oct-16	05-Jan-17	18-Jan-17	71
Underground Utility Works							
UUZ20190	Utility cable laying by Utility companies (Along NB58, 0-45m)	12	16-May-16 A	31-Oct-16	20-Sep-16	31-Oct-16	0
NB59 (Ch.6490-6590)-TWSR West Side							
Noise Barrier Works							
NB00940	NB59 -Pre-drilling	145	05-May-14 A	27-Oct-14 A			
NB00950	NB59 - piling (0.19m -50no) - rigs 3 & 4	41	02-Jan-15 A	18-Feb-15 A			



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

Project File:WP Rev 04
Layout: WP rev 4
Data Date:20-Sep-16
Page 10 of 44

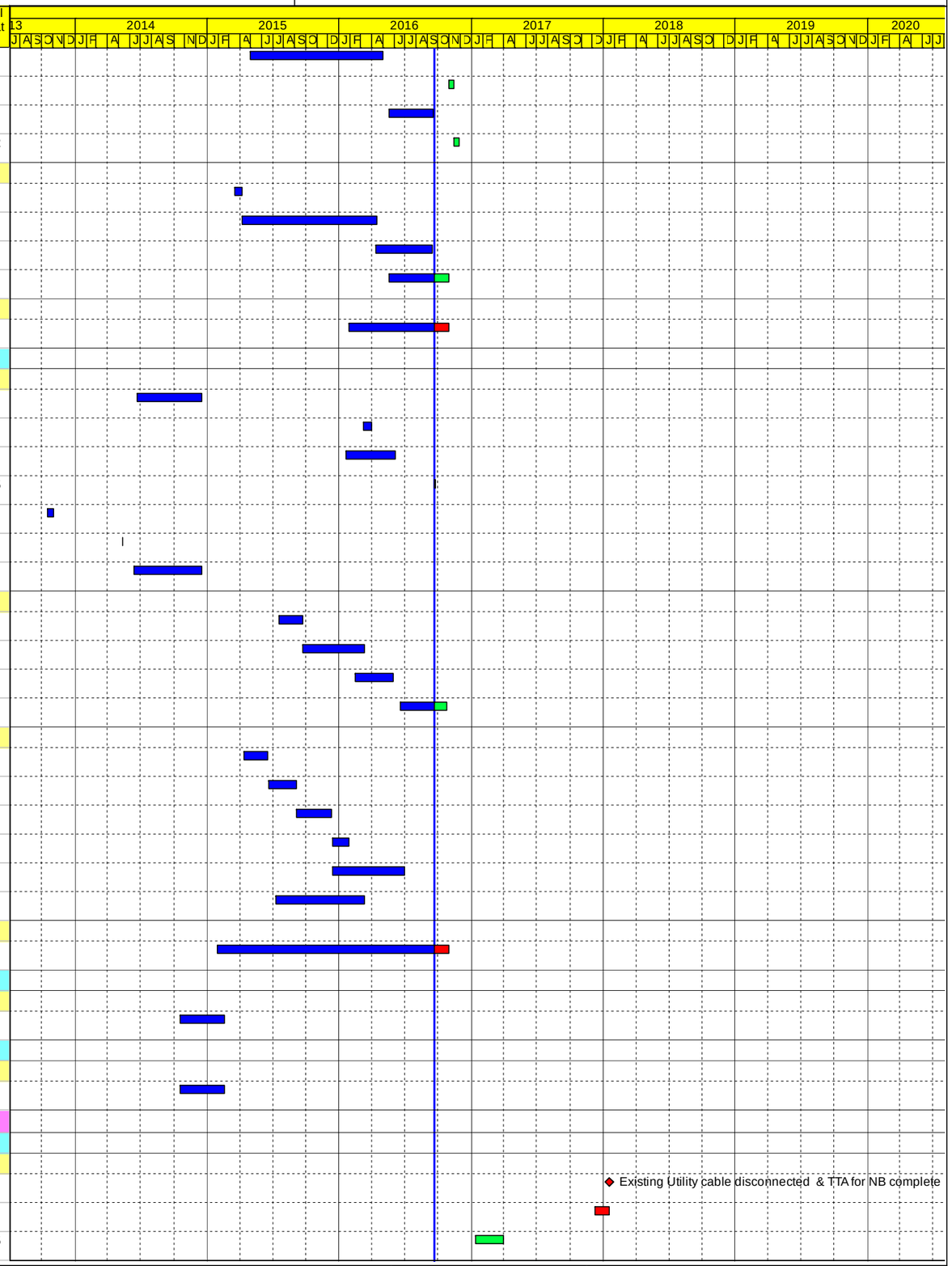
Contract No. HY/2012/06

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

Works Programme - WP Rev. 4

Date	Revision	Checked	Appro...
30-Jun-14	WP Rev 1A		
28-Aug-15	WP Rev 2		
07-Apr-16	WP Rev 3		
17-Oct-16	WP Rev 4		

Activity ID	Activity Name	Original Duration	Start	Finish	Late Start	Late Finish	Total Float
NB00970	NB59 - Footing & Wall Structure - 9 bays	292	02-May-15 A	30-Apr-16 A			
NB00980	NB59 - backfilling	12	01-Nov-16	14-Nov-16	17-Jan-17	07-Feb-17	63
NB00990	NB59 - NB production	45	20-May-16 A	17-Sep-16 A			
NB01000	NB59 - NB post & panel installation	12	15-Nov-16	28-Nov-16	15-Apr-19	02-May-19	712
DSD Southern Trunk Sewer, Water Main Fire Main Works							
TSZ10800	Sheet Piling & Excavation(~5m below ground) (along NB59)	16	18-Mar-15 A	08-Apr-15 A			
TSZ10810	DSD Trunk Sewer laying (along NB59)	300	08-Apr-15 A	16-Apr-16 A			
TSZ10830	Watermain installation (along NB59)	38	11-Apr-16 A	15-Sep-16 A			
TSZ10840	Firemain installation (along NB59)	30	20-May-16 A	31-Oct-16	05-Dec-16	16-Jan-17	63
Underground Utility Works							
UUZ20200	Utility cable laying by Utility companies (Along NB59, 0-95m)	89	29-Jan-16 A	31-Oct-16	20-Sep-16	31-Oct-16	0
NB63 (Ch.6610-6700)-TWSR West Side							
Noise Barrier Works							
NB01020	NB63 - Footing & Wall Structure - 6 bays	151	23-Jun-14 A	19-Dec-14 A			
NB01030	NB63 - backfilling	17	09-Mar-16 A	31-Mar-16 A			
NB01040	NB63 - NB production	136	20-Jan-16 A	03-Jun-16 A			
NB01050	NB63 - NB post & panel installation	5	20-Sep-16	24-Sep-16	26-Apr-19	02-May-19	765
NB4540	NB63 - ID3-1 Pre-drilling	16	17-Oct-13 A	04-Nov-13 A			
NB4550	NB63 - ID3-1 piling (0.19m -18no)-1 rigs - Deleted by VO	0	14-May-14 A	14-May-14 A			
NB4560	NB63 - ID3-1 Footing & Wall Structure - 2 bays	158	14-Jun-14 A	19-Dec-14 A			
DSD Southern Trunk Sewer, Water Main Fire Main Works							
TSZ10300	Sheet Piling & Excavation(~7m below ground) (along NB63)	57	20-Jul-15 A	23-Sep-15 A			
TSZ10310	DSD Trunk Sewer laying (along NB63)	133	24-Sep-15 A	12-Mar-16 A			
TSZ10330	Watermain installation (along NB63)	80	15-Feb-16 A	31-May-16 A			
TSZ10340	Firemain installation (along NB63)	30	20-Jun-16 A	26-Oct-16	23-Dec-16	07-Feb-17	79
DSD Southern Trunk Sewer - Trenchless Construction							
TSZ10950	Construct Pipe jacking pits	55	15-Apr-15 A	19-Jun-15 A			
TSZ10960	DSD Trunk Sewer laying (along NB63 - ID3-1)-Trenchless	65	22-Jun-15 A	05-Sep-15 A			
TSZ10970	Both end manholes construction & trench sewer connection	81	07-Sep-15 A	12-Dec-15 A			
TSZ10980	Backfilling of jacking pits	39	14-Dec-15 A	30-Jan-16 A			
TSZ11020	Watermain & Firemain installation above Trunk Sewer	105	14-Dec-15 A	30-Jun-16 A			
TSZ11035	DSD trunk sewer along NB63	198	10-Jul-15 A	12-Mar-16 A			
Underground Utility Works							
UUZ20230	Utility cable laying by Utility companies (Along NB63~100m)	357	29-Jan-15 A	31-Oct-16	20-Sep-16	31-Oct-16	0
Box Culvert Extension ID1							
Structure Works							
ID1-0100	Box Culvert Extension ID1 structure	91	20-Oct-14 A	18-Feb-15 A			
Box Culvert Extension ID2							
Structure Works							
ID2-0100	Box Culvert Extension ID2 structure	91	20-Oct-14 A	18-Feb-15 A			
Noise Barrier Along Fanling Highway N/B							
Site Clearance & Demolition of Existing Structure							
General							
ADVZ20130	Existing Utility cable disconnected & TTA for NB complete	0	17-Jan-18		17-Jan-18		0
ADVZ20140	Site Clearance (for NB Along FH N/B)	30	09-Dec-17	16-Jan-18	09-Dec-17	16-Jan-18	0
ADVZ20160	TTA for NB works	60	13-Jan-17	31-Mar-17	04-Nov-17	16-Jan-18	235



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

Project File:WP Rev 04
Layout: WP rev 4
Data Date:20-Sep-16
Page 11 of 44

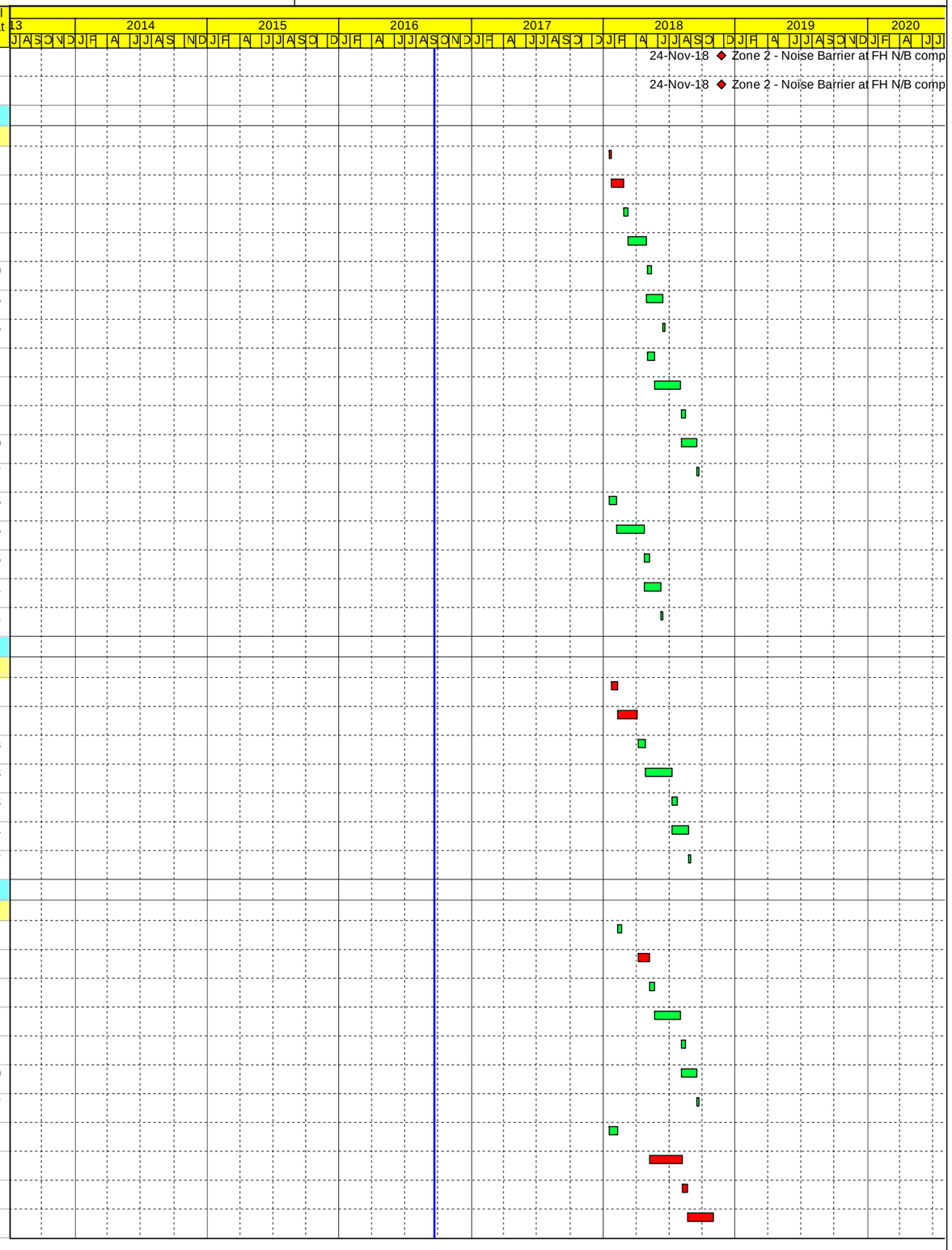
Contract No. HY/2012/06

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

Works Programme - WP Rev. 4

Date	Revision	Checked	Appro...
30-Jun-14	WP Rev 1A		
28-Aug-15	WP Rev 2		
07-Apr-16	WP Rev 3		
17-Oct-16	WP Rev 4		

Activity ID	Activity Name	Original Duration	Start	Finish	Late Start	Late Finish	Total Float
ADVZ20170	Zone 2 - Noise Barrier at FH N/B complete	0		24-Nov-18		24-Nov-18	0
ADVZ20270	Zone 2 - Noise Barrier at FH N/B complete (Without Buffer Zone SBZ1)	0		24-Nov-18		24-Nov-18	0
NB43A (Ch.5880-6060)-FH N/B Side							
Noise Barrier Works							
NB001070	NB43A - ID1-2 Pre-drilling	6	17-Jan-18	23-Jan-18	17-Jan-18	23-Jan-18	0
NB001080	NB43A- ID1-2 piling (0.19m -18no)-1 rigs	27	24-Jan-18	26-Feb-18	24-Jan-18	26-Feb-18	0
NB001090	NB43A - ID1-2 Sheet piling & Excavation	10	27-Feb-18	09-Mar-18	09-Jun-18	21-Jun-18	82
NB001100	NB43A - ID1-2 Footing & Wall Structure	40	10-Mar-18	30-Apr-18	22-Jun-18	08-Aug-18	82
NB001110	NB43A - ID1-2 backfilling	12	02-May-18	15-May-18	12-Nov-18	24-Nov-18	160
NB001120	NB43A - ID1-2 NB production	45	01-May-18	14-Jun-18	12-Mar-19	25-Apr-19	315
NB001130	NB43A - ID1-2 NB post & panel installation	5	15-Jun-18	21-Jun-18	26-Apr-19	02-May-19	256
NB01510	NB43A-1 (0-61.5m) - Sheet piling & Excavation	18	02-May-18	23-May-18	09-Aug-18	29-Aug-18	82
NB01520	NB43A-1 - Footing & Wall Structure	60	24-May-18	03-Aug-18	30-Aug-18	10-Nov-18	82
NB01530	NB43A-1 - backfilling	12	04-Aug-18	17-Aug-18	12-Nov-18	24-Nov-18	82
NB01540	NB43A-1 - NB production	45	04-Aug-18	17-Sep-18	12-Mar-19	25-Apr-19	220
NB01550	NB43A-1 - NB post & panel installation	5	18-Sep-18	22-Sep-18	26-Apr-19	02-May-19	177
NB01560	NB43A-2 (86.8-166.7m) - Sheet piling & Excavation	18	17-Jan-18	06-Feb-18	29-May-18	19-Jun-18	105
NB01570	NB43A-2 - Footing & Wall Structure	60	07-Feb-18	24-Apr-18	20-Jun-18	29-Aug-18	105
NB01580	NB43A-2 - backfilling	12	25-Apr-18	09-May-18	12-Nov-18	24-Nov-18	165
NB01590	NB43A-2 - NB production	45	25-Apr-18	08-Jun-18	12-Mar-19	25-Apr-19	321
NB01600	NB43A-2 - NB post & panel installation	5	09-Jun-18	14-Jun-18	26-Apr-19	02-May-19	261
NB50 (Ch.6060-6130)-FH N/B Side							
Noise Barrier Works							
NB001140	NB50 -Pre-drilling	14	24-Jan-18	08-Feb-18	01-Feb-18	19-Feb-18	7
NB001150	NB50 -piling (0.19m -28no)	42	09-Feb-18	04-Apr-18	20-Feb-18	13-Apr-18	7
NB001160	NB50 -Sheet piling & Excavation	18	06-Apr-18	26-Apr-18	09-Aug-18	29-Aug-18	103
NB001170	NB50 -Footing & Wall Structure	60	27-Apr-18	10-Jul-18	30-Aug-18	10-Nov-18	103
NB001180	NB50 -backfilling	12	11-Jul-18	24-Jul-18	12-Nov-18	24-Nov-18	103
NB001190	NB50 -NB production	45	11-Jul-18	24-Aug-18	12-Mar-19	25-Apr-19	244
NB001200	NB50 -NB post & panel installation	5	25-Aug-18	30-Aug-18	26-Apr-19	02-May-19	197
NB50A (Ch.6130-6450)-FH N/B Side							
Noise Barrier Works							
NB001210	NB50A - ID2-2 Pre-drilling	9	09-Feb-18	21-Feb-18	03-Apr-18	13-Apr-18	40
NB001220	NB50A - ID2-2 piling (0.19m -18no)	27	06-Apr-18	08-May-18	14-Apr-18	16-May-18	7
NB001230	NB50A - ID2-2 Sheet piling & Excavation	12	09-May-18	23-May-18	05-Jun-18	19-Jun-18	22
NB001240	NB50A - ID2-2 Footing & Wall Structure	60	24-May-18	03-Aug-18	20-Jun-18	29-Aug-18	22
NB001250	NB50A - ID2-2 backfilling	12	04-Aug-18	17-Aug-18	12-Nov-18	24-Nov-18	82
NB001260	NB50A - ID2-2 NB production	45	04-Aug-18	17-Sep-18	12-Mar-19	25-Apr-19	220
NB001270	NB50A - ID2-2 NB post & panel installation	5	18-Sep-18	22-Sep-18	26-Apr-19	02-May-19	177
NB01604	NB50A (0-108m)(NB50A/1-11) Pre-drilling	22	17-Jan-18	10-Feb-18	20-Apr-18	16-May-18	74
NB01606	NB50A (0-108m)(NB50A/1-11, 0.19m -50nos) Piling	75	09-May-18	07-Aug-18	17-May-18	15-Aug-18	7
NB01610	NB50A (0-108m) - Sheet piling & Excavation	12	08-Aug-18	21-Aug-18	16-Aug-18	29-Aug-18	7
NB01620	NB50A-1 - Footing & Wall Structure	60	22-Aug-18	02-Nov-18	30-Aug-18	10-Nov-18	7



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

Project File:WP Rev 04
Layout: WP rev 4
Data Date:20-Sep-16
Page 12 of 44

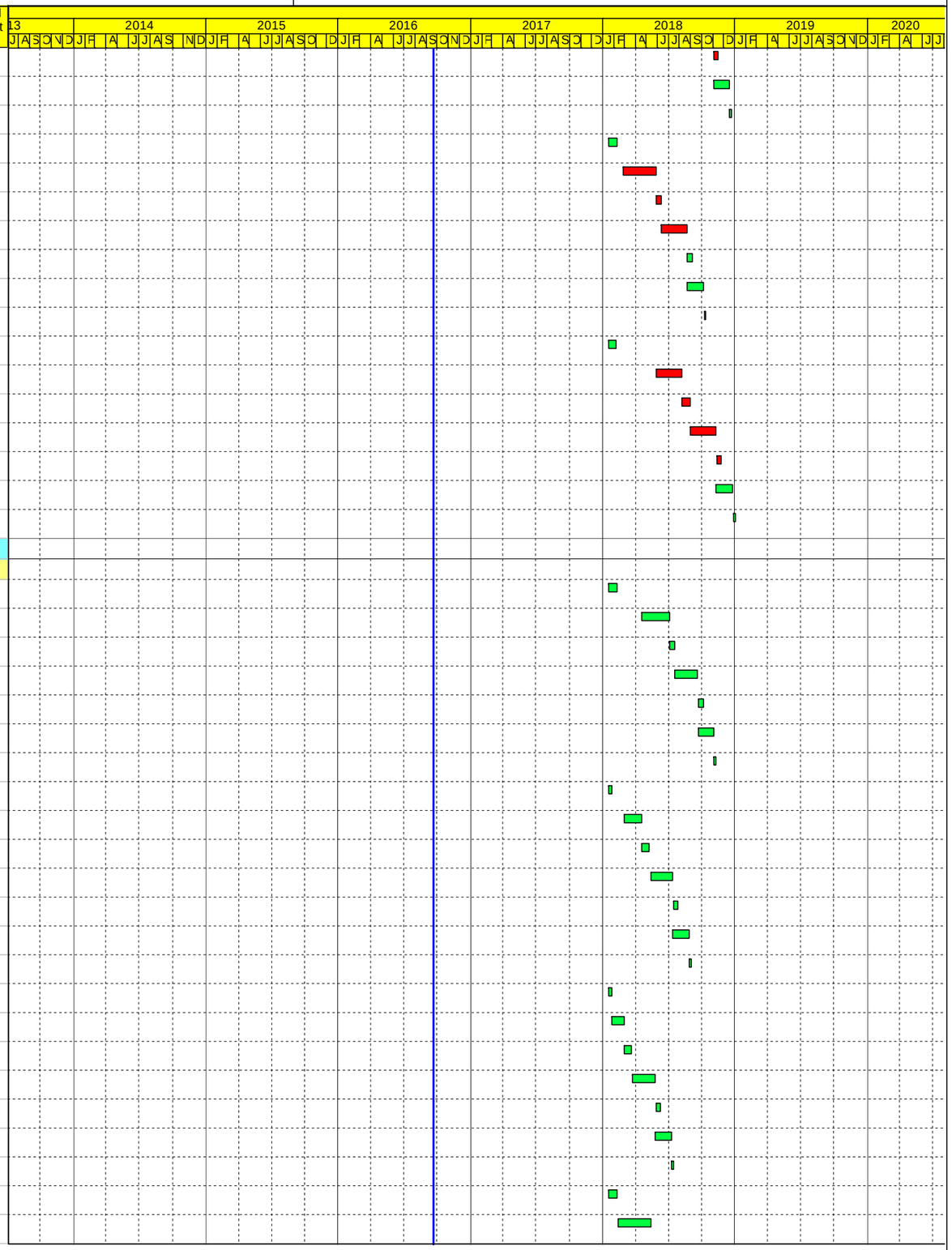
Contract No. HY/2012/06

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

Works Programme - WP Rev. 4

Date	Revision	Checked	Appro...
30-Jun-14	WP Rev 1A		
28-Aug-15	WP Rev 2		
07-Apr-16	WP Rev 3		
17-Oct-16	WP Rev 4		

Activity ID	Activity Name	Original Duration	Start	Finish	Late Start	Late Finish	Total Float
NB01630	NB50A-1 - backfilling	12	03-Nov-18	16-Nov-18	12-Nov-18	24-Nov-18	7
NB01640	NB50A-1 - NB production	45	03-Nov-18	17-Dec-18	12-Mar-19	25-Apr-19	129
NB01650	NB50A-1 - NB post & panel installation	5	18-Dec-18	22-Dec-18	26-Apr-19	02-May-19	102
NB01654	NB50A (132-228m)(NB50A/12-20) & FVMS1 Pre-drilling	22	17-Jan-18	10-Feb-18	30-Jan-18	26-Feb-18	11
NB01656	NB50A (132-228m)(NB50A/12-20, 0.19m -40nos) & FVMS1 (8 nos) Piling	72	27-Feb-18	28-May-18	27-Feb-18	28-May-18	0
NB01660	NB50A (132-228m) - Sheet piling & Excavation	12	29-May-18	11-Jun-18	05-Jun-18	19-Jun-18	6
NB01670	NB50A-2 - Footing & Wall Structure	60	12-Jun-18	22-Aug-18	20-Jun-18	29-Aug-18	6
NB01680	NB50A-2 - backfilling	12	23-Aug-18	05-Sep-18	12-Nov-18	24-Nov-18	66
NB01690	NB50A-2 - NB production	45	23-Aug-18	06-Oct-18	12-Mar-19	25-Apr-19	201
NB01700	NB50A-2 - NB post & panel installation	5	08-Oct-18	12-Oct-18	26-Apr-19	02-May-19	162
NB01704	NB50A (228-309m)(NB50A/21-27) & ADS1 Pre-drilling	18	17-Jan-18	06-Feb-18	07-May-18	28-May-18	87
NB01706	NB50A (228-309m)(NB50A/21-27, 0.19m -32nos) & ADS1 (8nos)Piling	60	29-May-18	08-Aug-18	29-May-18	08-Aug-18	0
NB01710	NB50A (225-311m) - Sheet piling & Excavation	18	09-Aug-18	29-Aug-18	09-Aug-18	29-Aug-18	0
NB01720	NB50A-3 - Footing & Wall Structure	60	30-Aug-18	10-Nov-18	30-Aug-18	10-Nov-18	0
NB01730	NB50A-3 - backfilling	12	12-Nov-18	24-Nov-18	12-Nov-18	24-Nov-18	0
NB01740	NB50A-3 - NB production	45	10-Nov-18	25-Dec-18	12-Mar-19	25-Apr-19	121
NB01750	NB50A-3 - NB post & panel installation	5	27-Dec-18	02-Jan-19	26-Apr-19	02-May-19	96
	NB60 (Ch.6450-6920)-FH N/B Side						
	Noise Barrier Works						
NB01760	NB60 (0-108m)(NB60/1-9) Pre-drilling	21	17-Jan-18	09-Feb-18	12-May-18	06-Jun-18	92
NB01770	NB60 (0-108m)(NB60/1-9, 0.19m -42nos) Piling	63	18-Apr-18	04-Jul-18	07-Jun-18	21-Aug-18	41
NB01780	NB60-1 (0-108m) - Sheet piling & Excavation	12	05-Jul-18	18-Jul-18	22-Aug-18	04-Sep-18	41
NB01790	NB60-1 - Footing & Wall Structure	55	19-Jul-18	20-Sep-18	05-Sep-18	10-Nov-18	41
NB01800	NB60-1 - backfilling	12	21-Sep-18	06-Oct-18	12-Nov-18	24-Nov-18	41
NB01810	NB60-1 - NB production	45	21-Sep-18	04-Nov-18	12-Mar-19	25-Apr-19	172
NB01820	NB60-1 - NB post & panel installation	5	05-Nov-18	09-Nov-18	26-Apr-19	02-May-19	139
NB01830	NB60-2 (108-174m)(NB60/10-15) Pre-drilling	10	17-Jan-18	27-Jan-18	12-Apr-18	23-Apr-18	67
NB01840	NB60-2 (108-174m)(NB60/10-15, 0.19m -24nos) Piling	36	02-Mar-18	17-Apr-18	24-Apr-18	06-Jun-18	41
NB01850	NB60-2 - Sheet piling & Excavation	18	18-Apr-18	09-May-18	15-Jun-18	07-Jul-18	48
NB01860	NB60-2 - Footing & Wall Structure	50	15-May-18	14-Jul-18	09-Jul-18	04-Sep-18	44
NB01870	NB60-2 - backfilling	12	16-Jul-18	28-Jul-18	12-Nov-18	24-Nov-18	99
NB01880	NB60-2 - NB production	45	14-Jul-18	28-Aug-18	12-Mar-19	25-Apr-19	240
NB01890	NB60-2 - NB post & panel installation	5	28-Aug-18	03-Sep-18	26-Apr-19	02-May-19	194
NB01900	NB60 ID3-2 (174-192m), 18nos Pre-drilling	9	17-Jan-18	26-Jan-18	08-Mar-18	17-Mar-18	41
NB01910	NB60 ID3-2 (174-192m) 0.19m -18nos Piling	27	27-Jan-18	01-Mar-18	19-Mar-18	23-Apr-18	41
NB01920	NB60-ID3-2 ((174-192m) - Sheet piling & Excavation	18	02-Mar-18	22-Mar-18	27-Apr-18	18-May-18	44
NB01930	NB60-ID3-2 - Footing & Wall Structure	50	23-Mar-18	26-May-18	19-May-18	19-Jul-18	44
NB01940	NB60-ID3-2 - backfilling	12	28-May-18	09-Jun-18	12-Nov-18	24-Nov-18	139
NB01950	NB60-ID3-2 - NB production	45	26-May-18	10-Jul-18	12-Mar-19	25-Apr-19	289
NB01960	NB60-ID3-2 - NB post & panel installation	5	10-Jul-18	16-Jul-18	26-Apr-19	02-May-19	236
NB01970	NB60 (192-300m)(NB60/17-25) Pre-drilling	22	17-Jan-18	10-Feb-18	17-Apr-18	12-May-18	71
NB01980	NB60 (192-300m)(NB60/16-25, 0.19m -48nos) Piling	72	12-Feb-18	14-May-18	14-May-18	08-Aug-18	71



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

Project File:WP Rev 04

Layout: WP rev 4

Data Date:20-Sep-16

Page 13 of 44

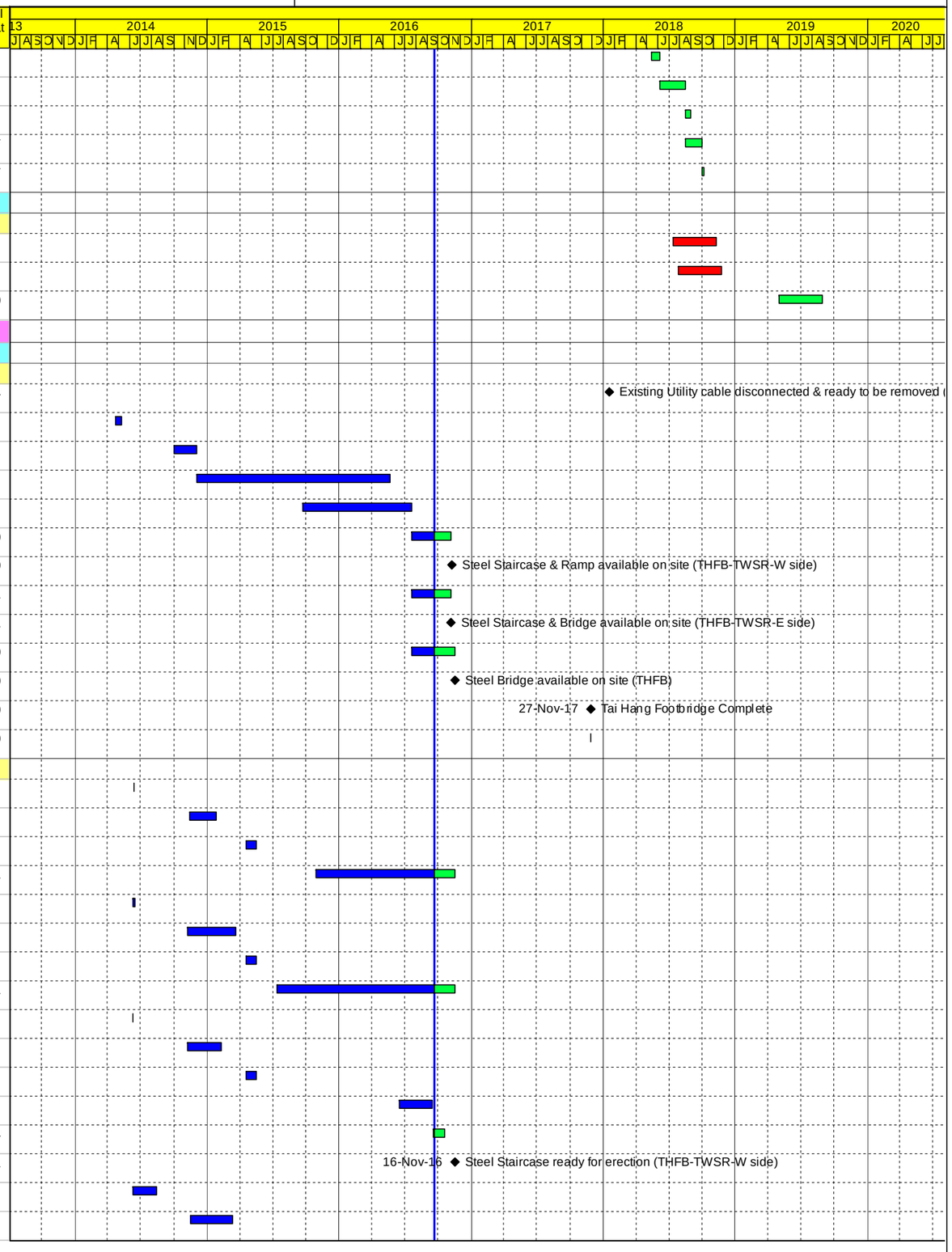
Contract No. HY/2012/06

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

Works Programme - WP Rev. 4

Date	Revision	Checked	Appro...
30-Jun-14	WP Rev 1A		
28-Aug-15	WP Rev 2		
07-Apr-16	WP Rev 3		
17-Oct-16	WP Rev 4		

Activity ID	Activity Name	Original Duration	Start	Finish	Late Start	Late Finish	Total Float
NB01990	NB60-3 (192-300m) - Sheet piling & Excavation	18	15-May-18	05-Jun-18	09-Aug-18	29-Aug-18	71
NB02000	NB60-3 - Footing & Wall Structure	60	06-Jun-18	16-Aug-18	30-Aug-18	10-Nov-18	71
NB02010	NB60-3 - backfilling	12	17-Aug-18	30-Aug-18	12-Nov-18	24-Nov-18	71
NB02020	NB60-3 - NB production	45	17-Aug-18	30-Sep-18	12-Mar-19	25-Apr-19	207
NB02022	NB60-3 - NB post & panel installation	5	02-Oct-18	06-Oct-18	26-Apr-19	02-May-19	167
Underground Utility Works							
Underground Utility Works							
UU0100	CLP cable laying and associated work before backfill in Zone 1 & 2	120	12-Jul-18	09-Nov-18	12-Jul-18	09-Nov-18	0
UU0110	Towngas duct laying and associated work before backfill in Zone 1 & 2	120	27-Jul-18	24-Nov-18	27-Jul-18	24-Nov-18	0
UU0130	TTA, duct laying and Road reinstatement by Towngas in Zone 1 & 2 (if required)	120	03-May-19	30-Aug-19	07-Feb-20	05-Jun-20	280
Bridge Construction							
New Tai Hang Footbridge							
General							
ADVZ20150	Existing Utility cable disconnected & ready to be removed (Z1 & Z2 cable complete installation & connection)	0	17-Jan-18		08-Jul-20		734
THBF0100	Site Clearance	13	24-Apr-14 A	10-May-14 A			
THBF0330	Structure steel Shop drawing submission (THFB)	53	02-Oct-14 A	03-Dec-14 A			
THBF0335	Structure steel Shop drawing approval (THFB)	399	04-Dec-14 A	23-May-16 A			
THBF0340	Structure steel procurement (THFB)	333	22-Sep-15 A	20-Jul-16 A			
THBF0350	Steel Staircase & Ramp prefabrication (THFB-TWSR-W side)	90	20-Jul-16 A	05-Nov-16	30-Jan-18	17-Mar-18	400
THBF0360	Steel Staircase & Ramp available on site (THFB-TWSR-W side)	0	07-Nov-16		19-Mar-18		400
THBF0370	Steel Staircase & Bridge prefabrication (THFB-TWSR-E side)	90	20-Jul-16 A	04-Nov-16	09-Mar-18	26-Apr-18	431
THBF0380	Steel Staircase & Bridge available on site (THFB-TWSR-E side)	0	05-Nov-16		27-Apr-18		431
THBF0390	Steel Bridge prefabrication (THFB)	50	20-Jul-16 A	17-Nov-16	24-Feb-18	26-Apr-18	420
THBF0400	Steel Bridge available on site (THFB)	0	18-Nov-16		27-Apr-18		420
THBF0655	Tai Hang Footbridge Complete	0		27-Nov-17		14-Aug-18	210
THBF0665	Diversion of existing pedestrian from existing to proposed footbrdige	1	28-Nov-17	28-Nov-17	15-Aug-18	15-Aug-18	210
TWSR-West/ FL Highway N/B Side Section							
THBF0110	THP5 - Predrilling	3	12-Jun-14 A	14-Jun-14 A			
THBF0120	THP5 - Pre-bored H pile (8 nos)	63	13-Nov-14 A	28-Jan-15 A			
THBF0130	THP5 - Pile Test	28	20-Apr-15 A	17-May-15 A			
THBF0140	THP5 - Pile cap, Pier and Pier Head	209	31-Oct-15 A	16-Nov-16	26-Feb-18	26-Apr-18	421
THBF0150	THP8, THP9, - Predrilling	8	09-Jun-14 A	17-Jun-14 A			
THBF0160	THP8, THP9 - Pre-bored H pile (8 nos)	105	08-Nov-14 A	21-Mar-15 A			
THBF0170	THP8, THP9 - Pile Test	28	20-Apr-15 A	17-May-15 A			
THBF0180	THP8, THP9 - Pile cap, Pier and Pier Head	301	13-Jul-15 A	16-Nov-16	12-May-18	10-Jul-18	481
THBF0190	THAB3 - Predrilling	3	09-Jun-14 A	11-Jun-14 A			
THBF0200	THAB3 - Pre-bored H pile (4 nos)	79	08-Nov-14 A	11-Feb-15 A			
THBF0210	THAB3 - Pile Test	28	20-Apr-15 A	17-May-15 A			
THBF0220	THAB3 - pile cap & abutment wall	69	15-Jun-16 A	15-Sep-16 A			
THBF0230	THAB3 - Backfilling (~4m)	27	17-Sep-16 A	20-Oct-16	09-Jun-18	10-Jul-18	504
THBF0235	Steel Staircase ready for erection (THFB-TWSR-W side)	0		16-Nov-16		10-Jul-18	481
THBF0240	THP6, THP7 - Predrilling	58	10-Jun-14 A	16-Aug-14 A			
THBF0250	THP6, THP7 - Pre-bored H pile (14 nos)	92	17-Nov-14 A	14-Mar-15 A			



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

Project File:WP Rev 04
Layout: WP rev 4
Data Date:20-Sep-16
Page 14 of 44

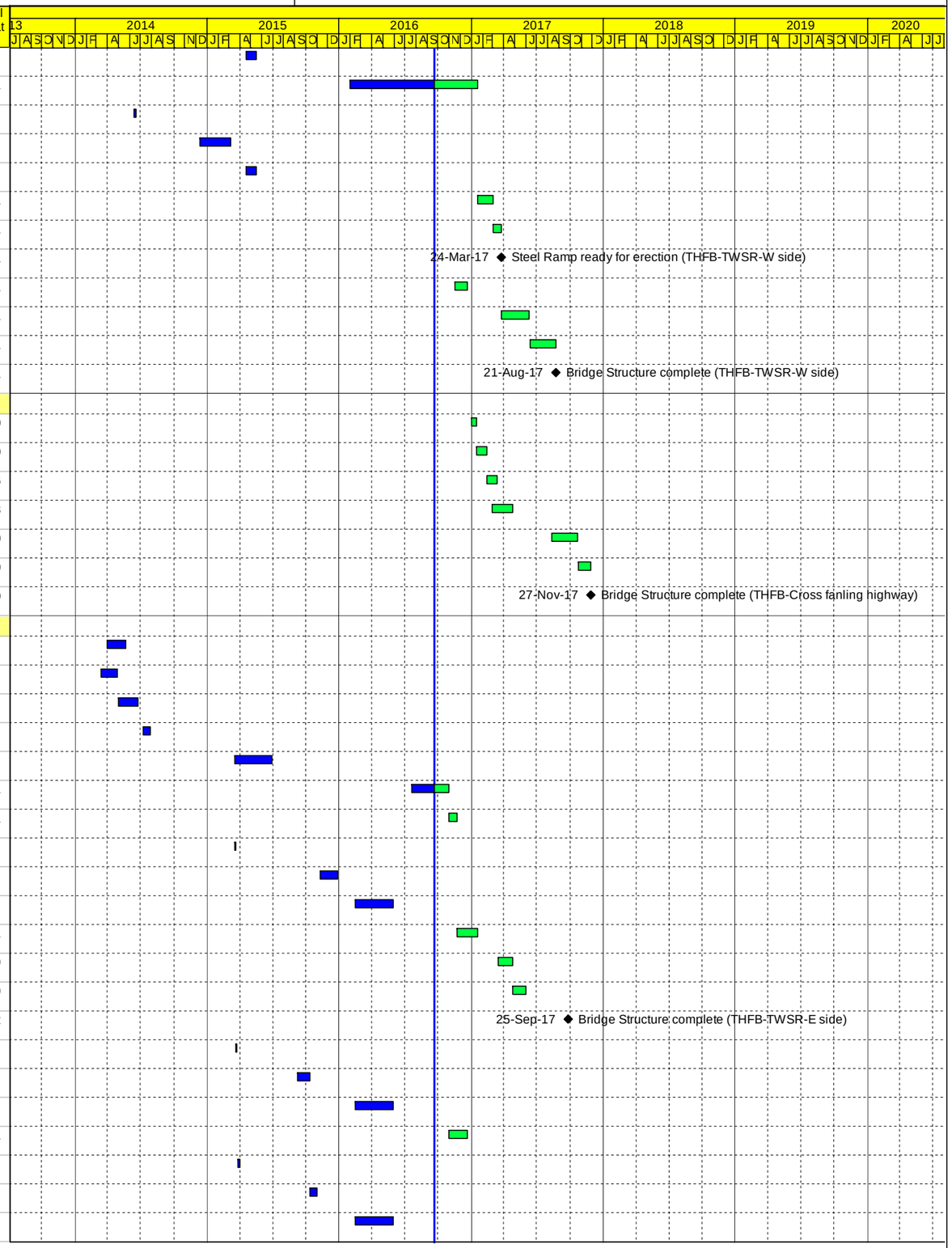
Contract No. HY/2012/06

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

Works Programme - WP Rev. 4

Date	Revision	Checked	Appro...
30-Jun-14	WP Rev 1A		
28-Aug-15	WP Rev 2		
07-Apr-16	WP Rev 3		
17-Oct-16	WP Rev 4		

Activity ID	Activity Name	Original Duration	Start	Finish	Late Start	Late Finish	Total Float
THBF0260	THP6, THP7 - Pile Test	28	20-Apr-15 A	17-May-15 A			
THBF0270	THP6, THP7 - Pile cap, Pier and Pier Head	72	01-Feb-16 A	17-Jan-17	18-Sep-17	16-Jan-18	291
THBF0280	THAB2 - Predrilling	8	12-Jun-14 A	20-Jun-14 A			
THBF0290	THAB2 - Pre-bored H pile (10 nos)	64	12-Dec-14 A	07-Mar-15 A			
THBF0300	THAB2 - Pile Test	28	20-Apr-15 A	17-May-15 A			
THBF0310	THAB2 - pile cap & abutment wall	30	18-Jan-17	01-Mar-17	17-Jan-18	22-Feb-18	291
THBF0320	THAB2 - Backfilling (~3m)	20	02-Mar-17	24-Mar-17	23-Feb-18	17-Mar-18	291
THBF0325	Steel Ramp ready for erection (THFB-TWSR-W side)	0		24-Mar-17		17-Mar-18	291
THBF0410	Erect Staircase (THFB-TWSR-W side)	30	17-Nov-16	21-Dec-16	11-Jul-18	14-Aug-18	481
THBF0420	Erect Ramp	60	25-Mar-17	10-Jun-17	19-Mar-18	02-Jun-18	291
THBF0620	Finishes Work	60	12-Jun-17	21-Aug-17	04-Jun-18	14-Aug-18	291
THBF0625	Bridge Structure complete (THFB-TWSR-W side)	0		21-Aug-17		14-Aug-18	291
Crossing Fanling Highway Section							
THBF0530	THP1 - Predrilling	12	31-Dec-16	14-Jan-17	11-Jan-18	24-Jan-18	300
THBF0540	THP1 - Pre-bored H pile (6 nos)	18	16-Jan-17	13-Feb-17	25-Jan-18	14-Feb-18	300
THBF0550	THP1 - Pile Test	28	14-Feb-17	13-Mar-17	15-Feb-18	14-Mar-18	366
THBF0560	THP1 - Pile cap, Pier and Pier Head	45	28-Feb-17	25-Apr-17	01-Mar-18	26-Apr-18	298
THBF0580	Erect THFB across fanling highway	60	11-Aug-17	21-Oct-17	27-Apr-18	10-Jul-18	210
THBF0590	Finishes Work	30	23-Oct-17	27-Nov-17	11-Jul-18	14-Aug-18	210
THBF0600	Bridge Structure complete (THFB-Cross fanling highway)	0		27-Nov-17		14-Aug-18	210
TWSR-East FL Highway S/B Side Section							
THBF0430	Precautionary work for MTRC I&P area	39	01-Apr-14 A	22-May-14 A			
THBF0432	Trial pit for locating C350 watermain	36	15-Mar-14 A	30-Apr-14 A			
THBF0435	Pending fo RE & WSD information for C350 location	45	01-May-14 A	25-Jun-14 A			
THBF0436	Trial pit for locating C350 watermain (2nd trial)	18	10-Jul-14 A	30-Jul-14 A			
THBF0440	THAB1 - Predrilling	82	20-Mar-15 A	30-Jun-15 A			
THBF0470	THAB1 - pile cap & abutment wall	30	20-Jul-16 A	29-Oct-16	23-Dec-17	02-Feb-18	371
THBF0480	THAB1 - Backfilling (~3m)	20	31-Oct-16	22-Nov-16	03-Feb-18	28-Feb-18	371
THBF0490	THP2 - Predrilling	3	19-Mar-15 A	21-Mar-15 A			
THBF0500	THP2 - Pre-bored H pile (8 nos)	40	11-Nov-15 A	29-Dec-15 A			
THBF0510	THP2 - Pile Test	75	16-Feb-16 A	30-May-16 A			
THBF0520	THP2 - Pile cap, Pier and Pier Head	45	23-Nov-16	17-Jan-17	01-Mar-18	26-Apr-18	371
THBF0570	Erect Stairecase (THFB-TWSR-E side)	30	16-Mar-17	24-Apr-17	04-Jun-18	10-Jul-18	359
THBF0640	Finishes Work	30	25-Apr-17	01-Jun-17	11-Jul-18	14-Aug-18	359
THBF0645	Bridge Structure complete (THFB-TWSR-E side)	0		25-Sep-17		14-Aug-18	262
THBF0700	THP3 - Predrilling	4	23-Mar-15 A	26-Mar-15 A			
THBF0710	THP3 - Pre-bored H pile (4 nos)	27	09-Sep-15 A	12-Oct-15 A			
THBF0720	THP3 - Pile Test	75	16-Feb-16 A	30-May-16 A			
THBF0730	THP3 - Pile cap, Pier and Pier Head	45	31-Oct-16	21-Dec-16	01-Mar-18	26-Apr-18	391
THBF0740	THP4 - Predrilling	6	27-Mar-15 A	02-Apr-15 A			
THBF0750	THP4 - Pre-bored H pile (4 nos)	17	13-Oct-15 A	02-Nov-15 A			
THBF0760	THP4 - Pile Test	75	16-Feb-16 A	30-May-16 A			



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

Project File:WP Rev 04
Layout: WP rev 4
Data Date:20-Sep-16
Page 15 of 44

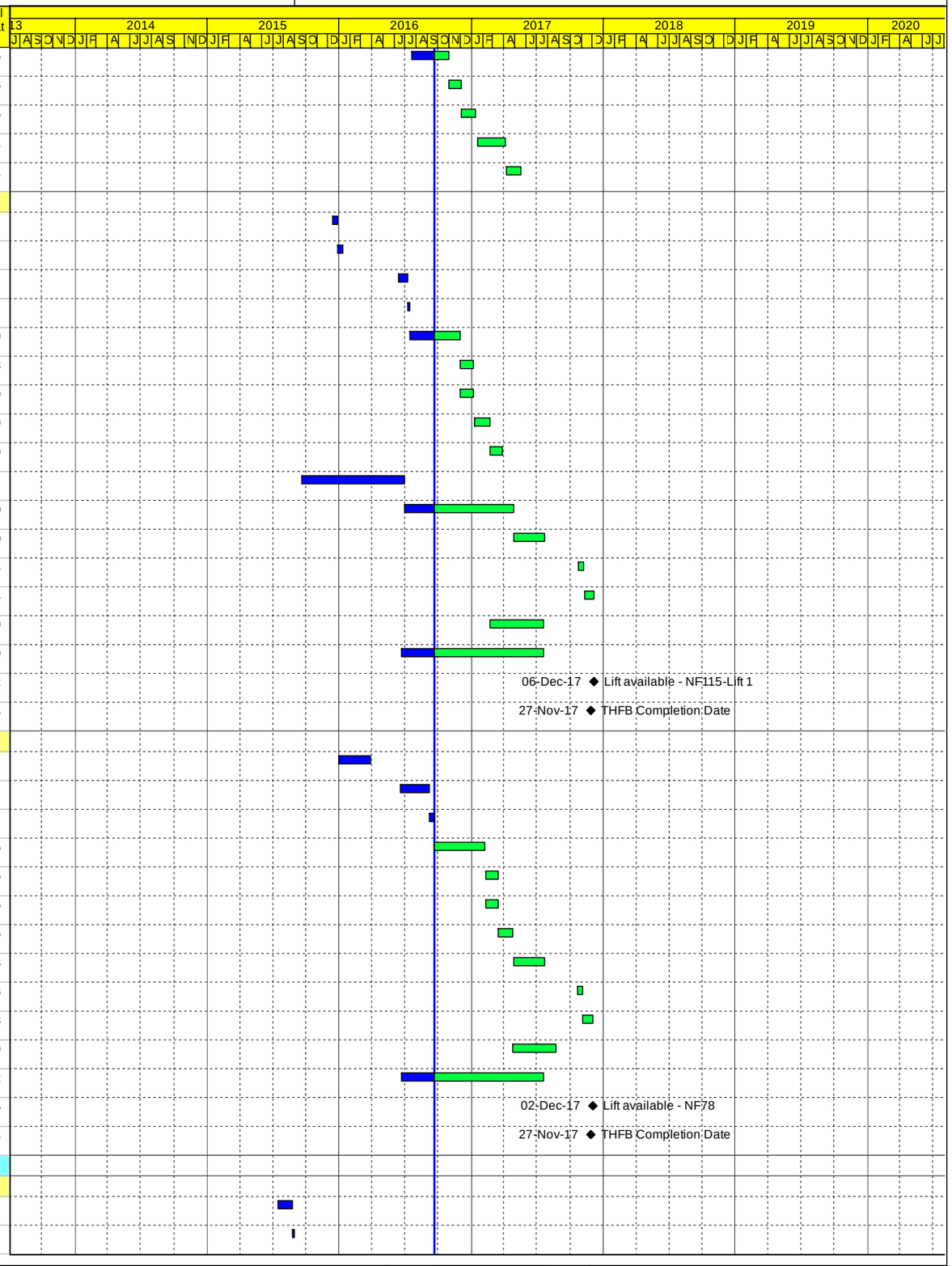
Contract No. HY/2012/06

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

Works Programme - WP Rev. 4

Date	Revision	Checked	Appro...
30-Jun-14	WP Rev 1A		
28-Aug-15	WP Rev 2		
07-Apr-16	WP Rev 3		
17-Oct-16	WP Rev 4		

Activity ID	Activity Name	Original Duration	Start	Finish	Late Start	Late Finish	Total Float
THBF0770	THP4 - Pile cap, Pier and Pier Head	45	20-Jul-16 A	29-Oct-16	02-Jan-18	08-Feb-18	376
THBF0780	Modified existing column head of existing footbridge	30	31-Oct-16	03-Dec-16	09-Feb-18	17-Mar-18	376
THBF0785	Reconstruction of existing span between P4 and existing pier	30	05-Dec-16	11-Jan-17	19-Mar-18	26-Apr-18	376
THBF0790	Erect steel bridge from THP2 to THP4	60	18-Jan-17	06-Apr-17	27-Apr-18	10-Jul-18	371
THBF0800	ABWF work	30	07-Apr-17	17-May-17	11-Jul-18	14-Aug-18	371
Lift at TWSR-W Side							
L1470	Pre-bored H Piling Rig mobilisation & set up period	11	15-Dec-15 A	29-Dec-15 A			
L1480	THB (W) - Pre-bored H pile (4 nos)	11	29-Dec-15 A	11-Jan-16 A			
L1500	Temp work & Pile cap	45	15-Jun-16 A	08-Jul-16 A			
L1510	Lift pit (NF115)	30	09-Jul-16 A	15-Jul-16 A			
L1520	Lift shaft & roof	52	16-Jul-16 A	30-Nov-16	05-Jan-18	17-Mar-18	379
L1530	Structural Laminated glass wall installation	30	01-Dec-16	07-Jan-17	15-May-18	20-Jun-18	423
L1540	RC Platform connect to bridge	30	01-Dec-16	07-Jan-17	19-Mar-18	26-Apr-18	379
L1550	Metal cover on RC platform	30	09-Jan-17	20-Feb-17	27-Apr-18	02-Jun-18	379
L1555	Glass canopy on ground level	30	21-Feb-17	27-Mar-17	19-Sep-18	26-Oct-18	469
L1556	Lift contractor sub-letting	178	21-Sep-15 A	30-Jun-16 A			
L1557	Lift submission & ordering period	240	02-Jul-16 A	27-Apr-17	17-Nov-17	20-Jun-18	340
L1560	Lift installation (NF115)	70	28-Apr-17	22-Jul-17	21-Jun-18	11-Sep-18	340
L1570	Lift T&C	14	23-Oct-17	08-Nov-17	12-Sep-18	28-Sep-18	264
L1580	EMSD inspection & approval	28	09-Nov-17	06-Dec-17	29-Sep-18	26-Oct-18	324
L1590	E&M and Finishes work	120	21-Feb-17	19-Jul-17	04-Jun-18	26-Oct-18	379
L1600	CLP Power available (by CLP)	365	21-Jun-16 A	19-Jul-17	13-Nov-17	11-Sep-18	419
L1610	Lift available - NF115-Lift 1	0		06-Dec-17		26-Oct-18	262
L1800	THFB Completion Date	0		27-Nov-17		08-Jul-20	774
Lift at FLHY S/B							
L1345	THB (E) - Pre-bored H pile - NF78 (8 nos)	92	31-Dec-15 A	30-Mar-16 A			
L1350	Temp work & Pipe cap	40	20-Jun-16 A	06-Sep-16 A			
L1360	Lift pit	30	07-Sep-16 A	20-Sep-16 A			
L1370	Lift shaft & roof	90	20-Sep-16 A	08-Feb-17	24-Nov-17	11-Apr-18	346
L1380	Structural Laminated glass wall installation	30	09-Feb-17	15-Mar-17	18-May-18	23-Jun-18	376
L1390	RC Platform connect to bridge (THSC-2 & TH-P2)	30	09-Feb-17	15-Mar-17	12-Apr-18	17-May-18	346
L1400	Roof cover for RC Platform	30	16-Mar-17	24-Apr-17	18-May-18	23-Jun-18	346
L1410	Lift installation (NF78)	70	28-Apr-17	22-Jul-17	25-Jun-18	14-Sep-18	343
L1420	Lift T&C	14	21-Oct-17	04-Nov-17	15-Sep-18	28-Sep-18	328
L1430	EMSD inspection & approval	28	04-Nov-17	02-Dec-17	29-Sep-18	26-Oct-18	328
L1440	E&M and Finishes work	100	25-Apr-17	23-Aug-17	28-Jun-18	26-Oct-18	349
L1450	CLP Power available (by CLP)	365	21-Jun-16 A	19-Jul-17	16-Nov-17	14-Sep-18	422
L1460	Lift available - NF78	0		02-Dec-17		26-Oct-18	265
L1490	THFB Completion Date	0		27-Nov-17		08-Jul-20	774
Demolition of Existing Tai Hang Footbridge							
TWSR-West/ FL Highway N/B Side Section							
Z2.THF.1040	Temporary steel ramp construction	34	17-Jul-15 A	25-Aug-15 A			
Z2.THF.1050	Modification of existing entrance of Tai Hang Footbridge	5	26-Aug-15 A	31-Aug-15 A			



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

Project File:WP Rev 04

Layout: WP rev 4

Data Date:20-Sep-16

Page 16 of 44

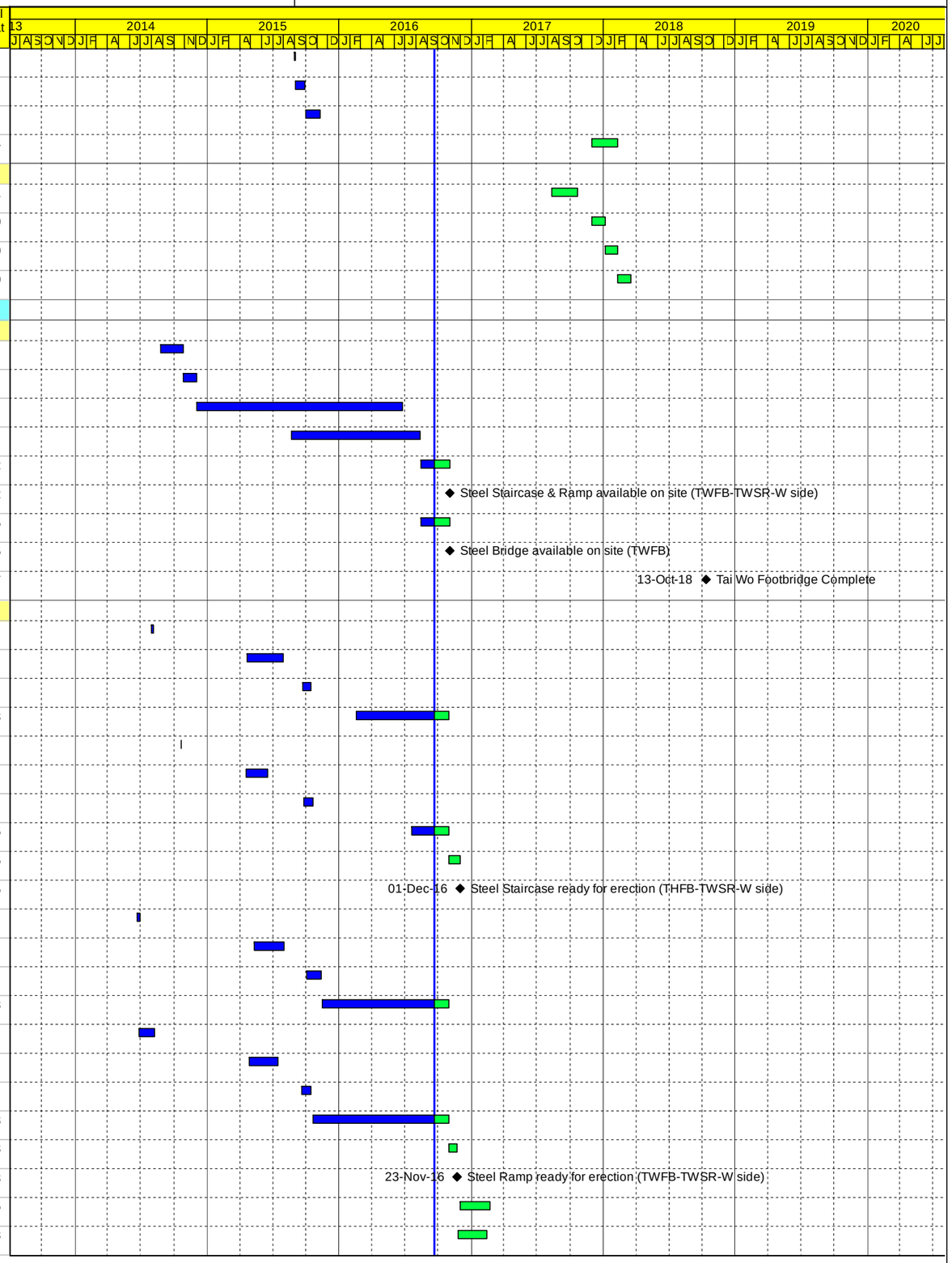
Contract No. HY/2012/06

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

Works Programme - WP Rev. 4

Date	Revision	Checked	Appro...
30-Jun-14	WP Rev 1A		
28-Aug-15	WP Rev 2		
07-Apr-16	WP Rev 3		
17-Oct-16	WP Rev 4		

Activity ID	Activity Name	Original Duration	Start	Finish	Late Start	Late Finish	Total Float
Z2.THF.1060	Diversion of existing pedestrian to temporary steel ramp	3	01-Sep-15 A	03-Sep-15 A			
Z2.THF.1070	Temporary support installation to removal portions of Tai Hang Footbridge	22	04-Sep-15 A	30-Sep-15 A			
Z2.THF.1080	Removal of portion of Tai Hang Footbrdige for THP1 works	33	02-Oct-15 A	10-Nov-15 A			
Z2.THF.1120	Demolish existing Tai Hang footbridge (TWSR-W side)	60	29-Nov-17	09-Feb-18	15-Jan-19	27-Mar-19	334
Crossing Fanling Highway Section							
Z2.THF.1090	Erect Temp platform for bridge demolition	60	11-Aug-17	21-Oct-17	05-Jun-18	15-Aug-18	241
Z2.THF.1100	Demolish existing Tai Hang Footbridge	30	29-Nov-17	05-Jan-18	16-Aug-18	19-Sep-18	210
Z2.THF.1110	Removal of temporary platform	30	06-Jan-18	09-Feb-18	20-Sep-18	27-Oct-18	210
Z2.THF.1130	Demolish remaining column	30	10-Feb-18	19-Mar-18	29-Oct-18	01-Dec-18	210
New Tai Wo Footbridge							
General							
TWFB1010	Site Clearance	53	25-Aug-14 A	28-Oct-14 A			
TWFB1020	Structure steel Shop drawing submission (TWFB)	31	29-Oct-14 A	03-Dec-14 A			
TWFB1030	Structure steel Shop drawing approval (TWFB)	426	04-Dec-14 A	24-Jun-16 A			
TWFB1040	Structure steel procurement (TWFB)	330	22-Aug-15 A	13-Aug-16 A			
TWFB1050	Steel Staircase & Ramp prefabrication (TWFB-TWSR-W side)	60	15-Aug-16 A	01-Nov-16	26-Aug-17	07-Oct-17	272
TWFB1060	Steel Staircase & Ramp available on site (TWFB-TWSR-W side)	0	02-Nov-16		09-Oct-17		272
TWFB1090	Steel Bridge prefabrication (TWFB)	60	15-Aug-16 A	01-Nov-16	23-Oct-18	01-Dec-18	615
TWFB1100	Steel Bridge available on site (TWFB)	0	02-Nov-16		03-Dec-18		615
TWFB1110	Tai Wo Footbridge Complete	0		13-Oct-18		11-Apr-19	147
TWSR-West/ FL Highway N/B Side Section							
TWFB1130	TWP1 - Predrilling	4	02-Aug-14 A	06-Aug-14 A			
TWFB1140	TWP1 - Pre-bored H pile (8 nos)	82	22-Apr-15 A	30-Jul-15 A			
TWFB1150	TWP1 - Pile Test	25	23-Sep-15 A	17-Oct-15 A			
TWFB1160	TWP1 - Pile cap, Pier and Pier Head	81	18-Feb-16 A	31-Oct-16	03-Oct-17	13-Nov-17	303
TWFB1210	TWAB2 - Predrilling	2	21-Oct-14 A	22-Oct-14 A			
TWFB1220	TWAB2 - Pre-bored H pile (4 nos)	50	18-Apr-15 A	17-Jun-15 A			
TWFB1230	TWAB2 - Pile Test	26	25-Sep-15 A	20-Oct-15 A			
TWFB1240	TWAB2 - pile cap & abutment wall	30	20-Jul-16 A	31-Oct-16	10-Oct-18	19-Nov-18	605
TWFB1250	TWAB2 - Backfilling (~4m)	27	01-Nov-16	01-Dec-16	20-Nov-18	20-Dec-18	605
TWFB1260	Steel Staircase ready for erection (THFB-TWSR-W side)	0		01-Dec-16		20-Dec-18	605
TWFB1270	TWP4, TWP5 - Predrilling	8	21-Jun-14 A	30-Jun-14 A			
TWFB1280	TWP4, TWP5 - Pre-bored H pile (14 nos)	71	11-May-15 A	04-Aug-15 A			
TWFB1290	TWP4, TWP5 - Pile Test	40	05-Oct-15 A	13-Nov-15 A			
TWFB1300	TWP4, TWP5 - Pile cap, Pier and Pier Head	128	16-Nov-15 A	31-Oct-16	28-Aug-17	07-Oct-17	273
TWFB1310	TWAB1 - Predrilling	37	27-Jun-14 A	09-Aug-14 A			
TWFB1320	TWAB1 - Pre-bored H pile (18 nos)	66	27-Apr-15 A	16-Jul-15 A			
TWFB1330	TWAB1 - Pile Test	27	21-Sep-15 A	17-Oct-15 A			
TWFB1340	TWAB1 - pile cap & abutment wall	170	22-Oct-15 A	31-Oct-16	04-Aug-17	12-Sep-17	253
TWFB1350	TWAB1 - Backfilling (~3m)	20	01-Nov-16	23-Nov-16	13-Sep-17	07-Oct-17	253
TWFB1360	Steel Ramp ready for erection (TWFB-TWSR-W side)	0		23-Nov-16		07-Oct-17	253
TWFB1370	Erect Stairecase (TWFB-TWSR-W side)	60	02-Dec-16	21-Feb-17	21-Dec-18	06-Mar-19	605
TWFB1380	Erect Ramp	60	24-Nov-16	13-Feb-17	09-Oct-17	18-Dec-17	253



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

Project File:WP Rev 04
Layout: WP rev 4
Data Date:20-Sep-16
Page 17 of 44

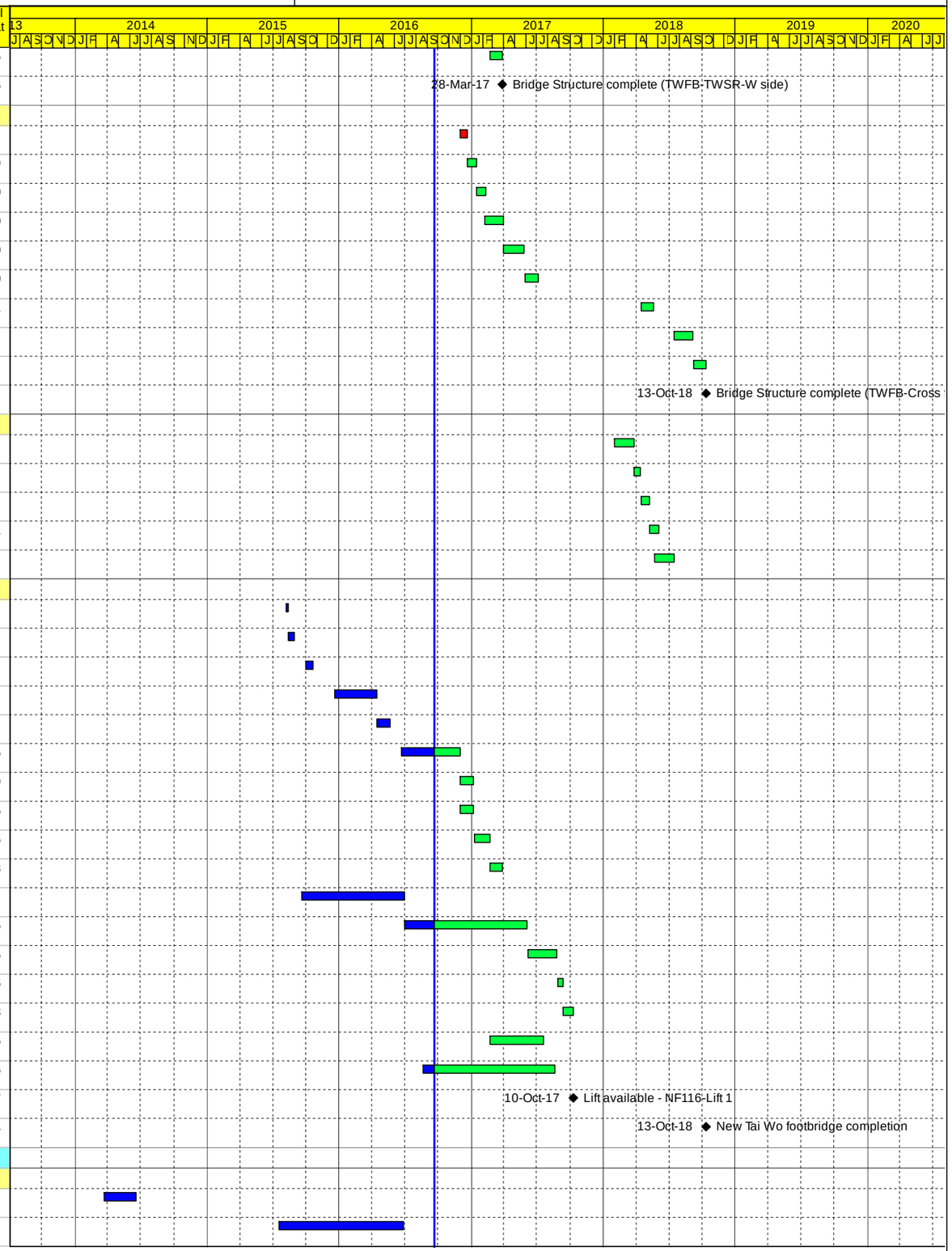
Contract No. HY/2012/06

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

Works Programme - WP Rev. 4

Date	Revision	Checked	Appro...
30-Jun-14	WP Rev 1A		
28-Aug-15	WP Rev 2		
07-Apr-16	WP Rev 3		
17-Oct-16	WP Rev 4		

Activity ID	Activity Name	Original Duration	Start	Finish	Late Start	Late Finish	Total Float
TWFB1390	Finishes Work	30	22-Feb-17	28-Mar-17	07-Mar-19	11-Apr-19	605
TWFB1400	Bridge Structure complete (TWFB-TWSR-W side)	0		28-Mar-17		11-Apr-19	605
Crossing Fanling Highway Section							
TWFB1410	TWP2 - Predrilling	18	01-Dec-16*	21-Dec-16	01-Dec-16	21-Dec-16	0
TWFB1420	TWP2 - Pre-bored H pile (6 nos)	18	22-Dec-16	14-Jan-17	22-Jun-17	13-Jul-17	139
TWFB1430	TWP2 - Pile Test	28	14-Jan-17	11-Feb-17	14-Jul-17	10-Aug-17	180
TWFB1440	TWP2 - Pile cap	45	06-Feb-17	29-Mar-17	28-Jul-17	18-Sep-17	140
TWFB1445	TWP2 - Pier and Pier Head	45	30-Mar-17	27-May-17	19-Sep-17	13-Nov-17	140
TWFB1447	Erect TWFB acrossTWSR-W (P1 to P2)	30	29-May-17	04-Jul-17	14-Nov-17	18-Dec-17	140
TWFB1448	Erect Temp tower for TWFB erection at Central Divier	30	16-Apr-18	21-May-18	29-Oct-18	01-Dec-18	161
TWFB1450	Erect TWFB across fanling highway	45	17-Jul-18	06-Sep-18	03-Dec-18	26-Jan-19	116
TWFB1460	Finishes Work	30	07-Sep-18	13-Oct-18	28-Jan-19	05-Mar-19	116
TWFB1470	Bridge Structure complete (TWFB-Cross fanling highway)	0		13-Oct-18		05-Mar-19	116
TWSR-East FL Highway S/B Side Section							
TWFB1480	Precautionary work for MTRC I&P area	45	01-Feb-18	27-Mar-18	28-Jun-18	20-Aug-18	117
TWFB1540	TWP3 - Predrilling	12	28-Mar-18	14-Apr-18	21-Aug-18	03-Sep-18	117
TWFB1550	TWP3 - Pre-bored H pile (6 nos)	18	16-Apr-18	07-May-18	04-Sep-18	24-Sep-18	117
TWFB1560	TWP3- Pile Test	28	08-May-18	04-Jun-18	26-Sep-18	23-Oct-18	141
TWFB1570	TWP3 - Pile cap, Pier and Pier Head	45	23-May-18	16-Jul-18	10-Oct-18	01-Dec-18	116
Lift at TWSR-W Side							
L1620	Pre-bored H Piling Rig mobilisation & set up period	6	08-Aug-15 A	14-Aug-15 A			
L1630	TWB (W) - Pre-bored H pile (4 nos)	14	15-Aug-15 A	31-Aug-15 A			
L1640	Pile test	16	02-Oct-15 A	20-Oct-15 A			
L1650	Temp work & Pile cap	85	21-Dec-15 A	14-Apr-16 A			
L1660	Lift pit	34	15-Apr-16 A	21-May-16 A			
L1670	Lift shaft & roof	52	21-Jun-16 A	30-Nov-16	25-Jun-18	03-Sep-18	516
L1680	Structural Laminated glass wall installation	30	01-Dec-16	07-Jan-17	27-Oct-18	30-Nov-18	559
L1690	RC Link slab connect to bridge	30	01-Dec-16	07-Jan-17	04-Sep-18	10-Oct-18	516
L1700	Metal cover on RC platform	30	09-Jan-17	20-Feb-17	11-Oct-18	15-Nov-18	516
L1710	Glass canopy on ground level	30	21-Feb-17	27-Mar-17	02-Jun-20	08-Jul-20	973
L1720	Lift contractor sub-letting	177	21-Sep-15 A	30-Jun-16 A			
L1730	Lift submission & ordering period	270	02-Jul-16 A	05-Jun-17	27-Mar-18	30-Nov-18	446
L1740	Lift installation	70	06-Jun-17	26-Aug-17	01-Dec-18	26-Feb-19	446
L1750	Lift T&C	14	28-Aug-17	12-Sep-17	27-Feb-19	14-Mar-19	446
L1760	EMSD inspection & approval	28	13-Sep-17	10-Oct-17	15-Mar-19	11-Apr-19	548
L1770	E&M and Finishes work	120	21-Feb-17	19-Jul-17	16-Nov-18	11-Apr-19	516
L1780	CLP Power available (by CLP)	365	20-Aug-16 A	19-Aug-17	30-Mar-18	26-Feb-19	556
L1790	Lift available - NF116-Lift 1	0		10-Oct-17		11-Apr-19	447
L1810	New Tai Wo footbridge completion	0		13-Oct-18		08-Jul-20	514
Temporary Tai Wo Footbridge							
Design Works							
TWFB-T1000	Procurement of Temporary bridge Design consultant	69	24-Mar-14 A	19-Jun-14 A			
TWFB-T1010	Design preparation	249	20-Jul-15 A	27-Jun-16 A			



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

Project File:WP Rev 04
Layout: WP rev 4
Data Date:20-Sep-16
Page 18 of 44

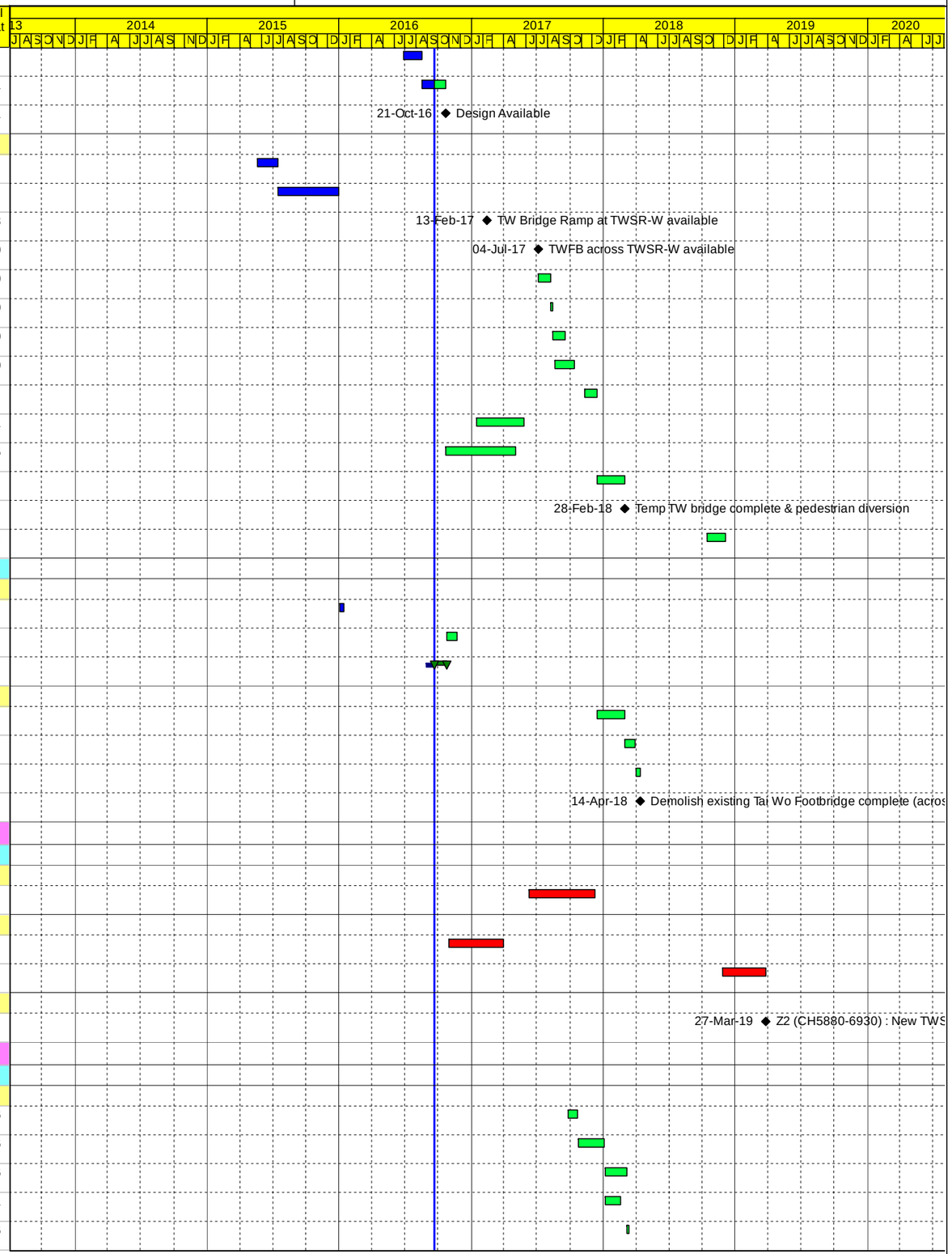
Contract No. HY/2012/06

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

Works Programme - WP Rev. 4

Date	Revision	Checked	Appro...
30-Jun-14	WP Rev 1A		
28-Aug-15	WP Rev 2		
07-Apr-16	WP Rev 3		
17-Oct-16	WP Rev 4		

Activity ID	Activity Name	Original Duration	Start	Finish	Late Start	Late Finish	Total Float
TWFB-T1020	Engineer Comment	26	28-Jun-16 A	18-Aug-16 A			
TWFB-T1030	Design amendment	26	19-Aug-16 A	21-Oct-16	21-Jul-17	19-Aug-17	241
TWFB-T1040	Design Available	0		21-Oct-16		19-Aug-17	241
Construction Works							
TWFB-T1050	TTA for Temp ramp working space	48	20-May-15 A	17-Jul-15 A			
TWFB-T1060	Erect Temp Ramp	138	18-Jul-15 A	31-Dec-15 A			
TWFB-T1065	TW Bridge Ramp at TWSR-W available	0		13-Feb-17		18-Dec-17	253
TWFB-T1070	TWFB across TWSR-W available	0		04-Jul-17		18-Dec-17	140
TWFB-T1080	Erect Temp bridge from TWP2 to Temp Ramp	30	05-Jul-17	08-Aug-17	19-Dec-17	25-Jan-18	140
TWFB-T1090	Diverse Pedestrain to TWFB ramp	5	09-Aug-17	14-Aug-17	26-Jan-18	31-Jan-18	140
TWFB-T1100	Demolish Temp Ramp for TTA	30	15-Aug-17	18-Sep-17	01-Feb-18	09-Mar-18	140
TWFB-T1190	TTA for shifting 2 lane of FLHY N/B to TWSR-W	45	19-Aug-17	12-Oct-17	06-Feb-18	04-Apr-18	140
TWFB-T1200	Erect temp column at new FLHY central divider	30	10-Nov-17	14-Dec-17	06-Apr-18	11-May-18	117
TWFB-T1205	Erect Temp Column at FLHY N/B (besides TW-P2)	100	16-Jan-17	26-May-17	21-Aug-17	18-Dec-17	171
TWFB-T1208	Erect Temp Column & link bridge to existing bridge at FLHY S/B (besides TW-P3)	150	22-Oct-16	02-May-17	07-Nov-17	11-May-18	305
TWFB-T1210	Erect Temp Bridge accross FLHY	60	15-Dec-17	28-Feb-18	12-May-18	24-Jul-18	117
TWFB-T1220	Temp TW bridge complete & pedestrian diversion	0		28-Feb-18		24-Jul-18	117
TWFB-T1240	Removed Temp Footbridge	45	15-Oct-18	06-Dec-18	06-Mar-19	02-May-19	116
Demolition of Existing Tai Wo Footbridge							
TWSR-West/ FL Highway N/B Side Section							
TWFB-T1130	Demolish existing ramp & staircase at TWSR-W	12	02-Jan-16 A	15-Jan-16 A			
TWFB-T1135	Demolish existing TWFB across TWSR-W	25	25-Oct-16	22-Nov-16	19-Jan-17	24-Feb-17	71
TWFB-T1230	Watermain & Firemain at NB58 & backfill	46	29-Aug-16 A	24-Oct-16	29-Aug-16	18-Jan-17	71
Crossing Fanling Highway Section							
TWFB-DE1060	Erect Temp platform for bridge demolition	60	15-Dec-17	28-Feb-18	12-May-18	24-Jul-18	117
TWFB-DE1070	Demolish existing Tai Wo Footbridge	25	01-Mar-18	29-Mar-18	25-Jul-18	22-Aug-18	117
TWFB-DE1090	Demolish remaining columns	10	03-Apr-18	14-Apr-18	23-Aug-18	03-Sep-18	117
TWFB-DE1110	Demolish existing Tai Wo Footbridge complete (across FH)	0		14-Apr-18		03-Sep-18	117
TWSR-West Construction							
Drainage & Road Works							
General							
HW.1025	Processing time allowance for Gazetting Express Way Changes FHW/NB at Zone 2	182	10-Jun-17	08-Dec-17	10-Jun-17	08-Dec-17	0
Ch 5880-6125							
RDZ20160	Z2 : New TWSR-West D&R Works (lane 1)	120	01-Nov-16	31-Mar-17	01-Nov-16	31-Mar-17	0
RDZ20170	Z2 & Z1 : New TWSR-West D&R Works (lane 2)	100	26-Nov-18	27-Mar-19	26-Nov-18	27-Mar-19	0
Ch 6400-6740							
RDZ20140	Z2 (CH5880-6930) : New TWSR- West Road works (2 lanes) complete	0		27-Mar-19		02-May-19	26
Noise Barrier Along Fanling Highway S/B							
NB46A (Ch.5880-5935)-FH S/B Side							
Noise Barrier Works							
NB02200	NB46A - Sheet piling & Excavation	21	26-Sep-17	21-Oct-17	14-Nov-18	07-Dec-18	336
NB02210	NB46A - Footing & Wall Structure	60	23-Oct-17	04-Jan-18	08-Dec-18	21-Feb-19	336
NB02220	NB46A- backfilling	50	05-Jan-18	06-Mar-18	22-Feb-19	25-Apr-19	336
NB02230	NB46A - NB production	45	05-Jan-18	18-Feb-18	12-Mar-19	25-Apr-19	431
NB02240	NB46A - NB post & panel installation	5	07-Mar-18	12-Mar-18	26-Apr-19	02-May-19	336



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

Project File:WP Rev 04

Layout: WP rev 4

Data Date:20-Sep-16

Page 19 of 44

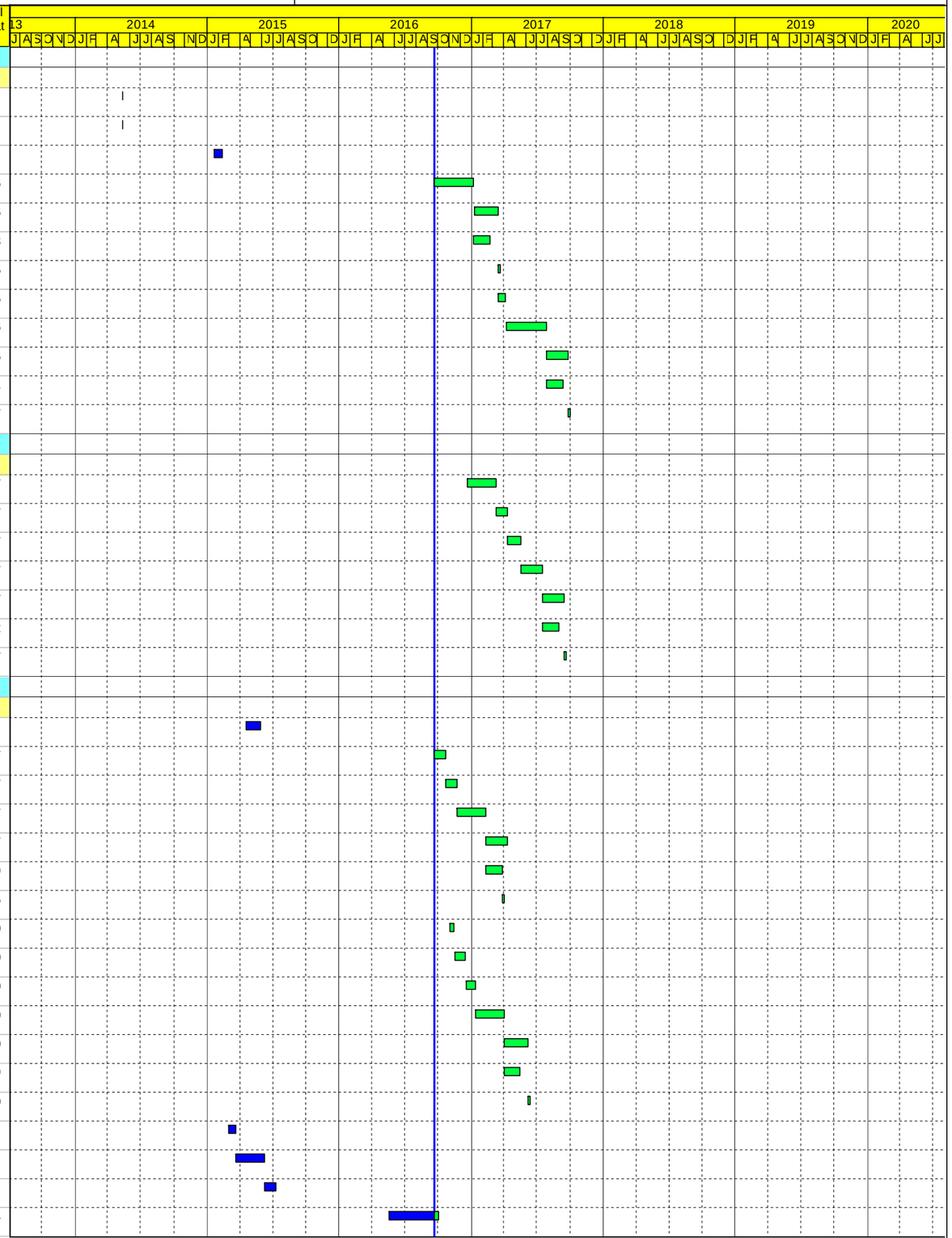
Contract No. HY/2012/06

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

Works Programme - WP Rev. 4

Date	Revision	Checked	Appro...
30-Jun-14	WP Rev 1A		
28-Aug-15	WP Rev 2		
07-Apr-16	WP Rev 3		
17-Oct-16	WP Rev 4		

Activity ID	Activity Name	Original Duration	Start	Finish	Late Start	Late Finish	Total Float
NB51 (Ch.5935-6055)-FH S/B Side							
Noise Barrier Works							
NB02250	NB51 ID1-3 (0-25m), 18nos Predrilling (Deleted notified on 14-5, VO issued accordingly)	0	14-May-14 A	14-May-14 A			
NB02260	NB51 ID1-3 (0-25m) 18nos Piling- (Deleted notified on 14-5, VO issued accordingly)	0	14-May-14 A	14-May-14 A			
NB02270	NB51 ID1-3 (0-25m) - Sheet piling & Excavation	19	22-Jan-15 A	12-Feb-15 A			
NB02280	NB51 ID1-3 (0-25m) - Footing & Wall Structure	90	20-Sep-16	07-Jan-17	13-Nov-17	02-Mar-18	336
NB02290	NB51 ID1-3 (0-25m) - backfilling	50	09-Jan-17	15-Mar-17	03-Mar-18	05-May-18	336
NB02300	NB51 ID1-3 (0-25m) - NB production	45	07-Jan-17	21-Feb-17	12-Mar-19	25-Apr-19	793
NB02310	NB51 ID1-3 (0-25m) - NB post & panel installation	5	16-Mar-17	21-Mar-17	26-Apr-19	02-May-19	625
NB02320	NB51(25-118m) - Sheet piling & Excavation	18	16-Mar-17	06-Apr-17	07-May-18	28-May-18	336
NB02330	NB51(25-118m) - Footing & Wall Structure	90	07-Apr-17	28-Jul-17	29-May-18	12-Sep-18	336
NB02340	NB51(25-118m)- backfilling	50	29-Jul-17	25-Sep-17	13-Sep-18	13-Nov-18	336
NB02350	NB51(25-118m) - NB production	45	29-Jul-17	11-Sep-17	12-Mar-19	25-Apr-19	591
NB02360	NB51(25-118m) - NB post & panel installation	5	26-Sep-17	30-Sep-17	26-Apr-19	02-May-19	467
NB52 (Ch.6055-6125) -FH S/B Side (MTRC I&P Area)							
Noise Barrier Works							
NB02362	Coordinate with MTRC for Precautionary Measure	60	20-Dec-16	10-Mar-17	08-Aug-18	19-Oct-18	477
NB02364	Precautionary Measure installation	26	11-Mar-17	11-Apr-17	20-Oct-18	19-Nov-18	477
NB02370	NB52 - Sheet piling & Excavation	26	12-Apr-17	17-May-17	20-Nov-18	19-Dec-18	477
NB02380	NB52 - Footing & Wall Structure	50	18-May-17	17-Jul-17	20-Dec-18	21-Feb-19	477
NB02390	NB52- backfilling	50	18-Jul-17	13-Sep-17	22-Feb-19	25-Apr-19	477
NB02400	NB52 - NB production	45	18-Jul-17	31-Aug-17	12-Mar-19	25-Apr-19	602
NB02410	NB52 - NB post & panel installation	5	14-Sep-17	19-Sep-17	26-Apr-19	02-May-19	477
NB53 (Ch.6125-6300) -FH S/B Side (MTRC I&P Area)							
Noise Barrier Works							
NB02420	Coordinate with MTRC for Precautionary Measure	32	20-Apr-15 A	28-May-15 A			
NB02430	Precautionary Measure installation	26	20-Sep-16	21-Oct-16	08-May-18	07-Jun-18	477
NB02440	NB53 (0-100m) - Sheet piling & Excavation	26	22-Oct-16	21-Nov-16	08-Jun-18	10-Jul-18	477
NB02450	NB53 (0-100m) - Footing & Wall Structure	60	22-Nov-16	10-Feb-17	11-Jul-18	18-Sep-18	477
NB02460	NB53 (0-100m)- backfilling	50	11-Feb-17	11-Apr-17	19-Sep-18	19-Nov-18	477
NB02470	NB53 (0-100m) - NB production	45	11-Feb-17	27-Mar-17	12-Mar-19	25-Apr-19	759
NB02480	NB53 (0-100m) - NB post & panel installation	5	28-Mar-17	01-Apr-17	26-Apr-19	02-May-19	615
NB02490	NB53 ID2-3 (100-125m), 18nos Predrilling	10	04-Nov-16	15-Nov-16	29-Sep-18	11-Oct-18	560
NB02500	NB53 ID2-3 (100-125m) 18nos Piling- 1 rigs	27	16-Nov-16	16-Dec-16	12-Oct-18	13-Nov-18	560
NB02510	NB53 ID2-3 (100-125m) - Sheet piling & Excavation	21	17-Dec-16	13-Jan-17	14-Nov-18	07-Dec-18	560
NB02520	NB53 ID2-3 (100-125m) - Footing & Wall Structure	60	14-Jan-17	01-Apr-17	08-Dec-18	21-Feb-19	560
NB02530	NB53 ID2-3 (100-125m) - backfilling	50	03-Apr-17	07-Jun-17	22-Feb-19	25-Apr-19	560
NB02540	NB53 ID2-3 (100-125m) - NB production	45	01-Apr-17	16-May-17	12-Mar-19	25-Apr-19	709
NB02550	NB53 ID2-3 (100-125m) - NB post & panel installation	5	08-Jun-17	13-Jun-17	26-Apr-19	02-May-19	560
NB02560	NB53 (125-180m) - Sheet piling & Excavation	18	02-Mar-15 A	22-Mar-15 A			
NB02570	NB53 (125-180m) - Footing & Wall Structure	64	23-Mar-15 A	10-Jun-15 A			
NB02580	NB53 (125-180m)- backfilling	24	11-Jun-15 A	10-Jul-15 A			
NB02590	NB53 (125-180m) - NB production	45	20-May-16 A	03-Oct-16	12-Apr-19	25-Apr-19	934



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

Project File:WP Rev 04

Layout: WP rev 4

Data Date:20-Sep-16

Page 20 of 44

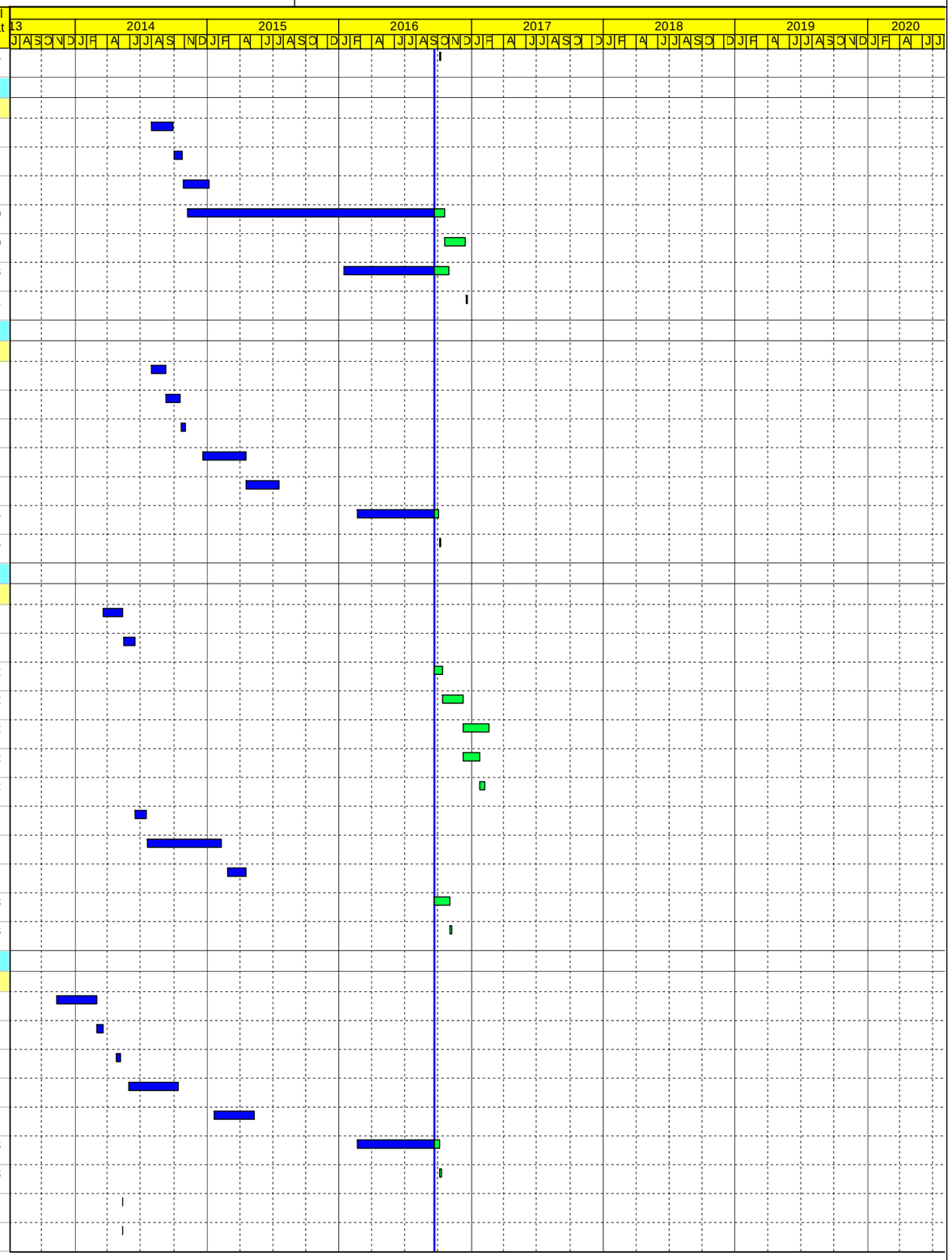
Contract No. HY/2012/06

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

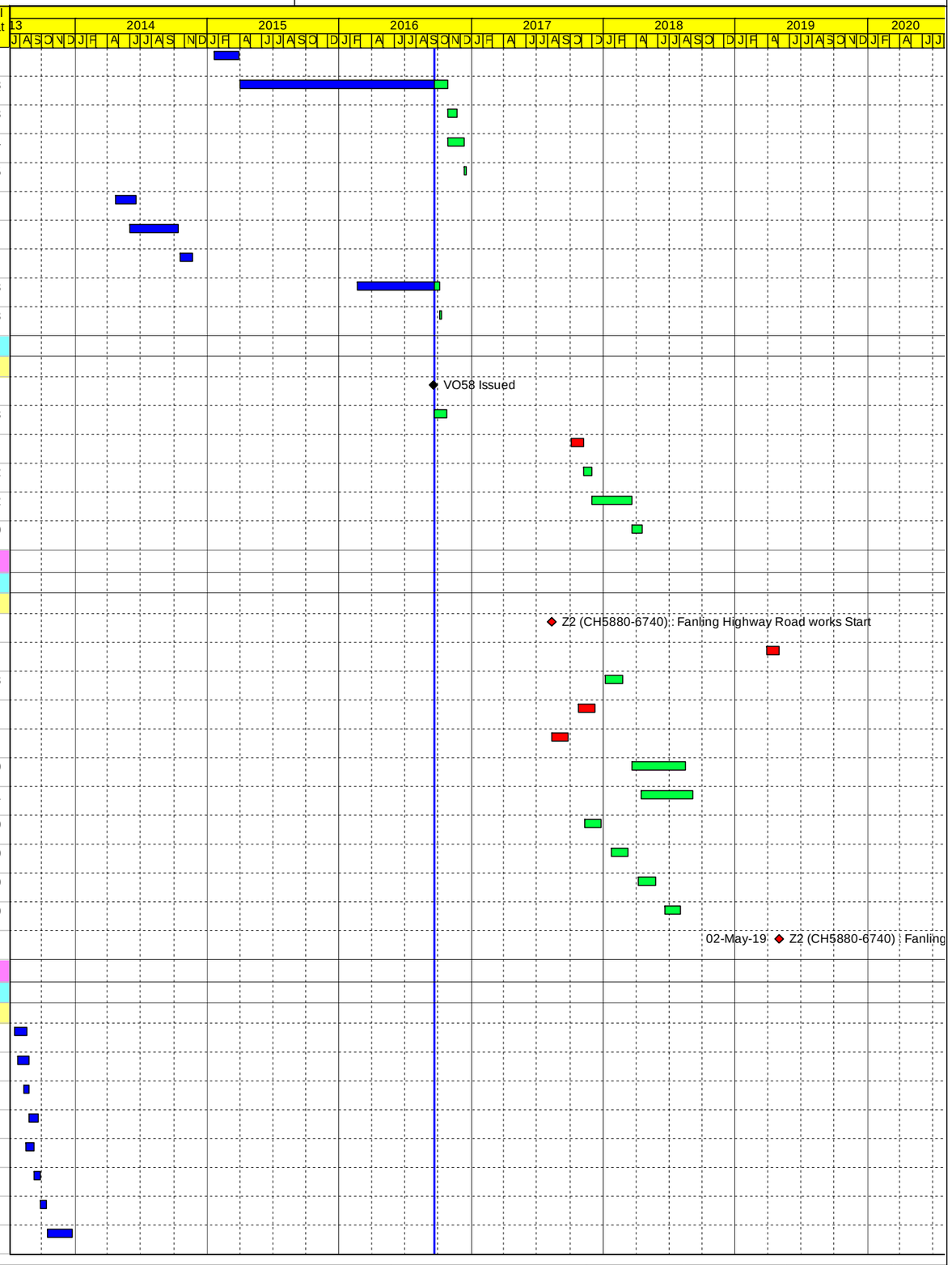
Works Programme - WP Rev. 4

Date	Revision	Checked	Appro...
30-Jun-14	WP Rev 1A		
28-Aug-15	WP Rev 2		
07-Apr-16	WP Rev 3		
17-Oct-16	WP Rev 4		

Activity ID	Activity Name	Original Duration	Start	Finish	Late Start	Late Finish	Total Float
NB02600	NB53 (125-180m) - NB post & panel installation	5	04-Oct-16	08-Oct-16	26-Apr-19	02-May-19	754
NB55 (Ch.6300-6360)-FH S/B Side (MTRC I&P Area)							
Noise Barrier Works							
NB02610	Coordinate with MTRC for Precautionary Measure	51	01-Aug-14 A	30-Sep-14 A			
NB02620	Precautionary Measure installation	20	02-Oct-14 A	25-Oct-14 A			
NB02630	NB55 - Sheet piling & Excavation	60	27-Oct-14 A	07-Jan-15 A			
NB02640	NB55 - Footing & Wall Structure	443	07-Nov-14 A	19-Oct-16	16-Aug-18	12-Sep-18	560
NB02650	NB55- backfilling	50	20-Oct-16	16-Dec-16	13-Sep-18	13-Nov-18	560
NB02660	NB55 - NB production	106	15-Jan-16 A	29-Oct-16	17-Mar-19	25-Apr-19	908
NB02670	NB55 - NB post & panel installation	5	17-Dec-16	22-Dec-16	26-Apr-19	02-May-19	691
NB56 (Ch.6360-6400)-FH S/B Side (MTRC I&P Area)							
Noise Barrier Works							
NB02680	Coordinate with MTRC for Precautionary Measure	33	01-Aug-14 A	09-Sep-14 A			
NB02690	Precautionary Measure installation	33	10-Sep-14 A	20-Oct-14 A			
NB02700	NB56 - Sheet piling & Excavation	12	21-Oct-14 A	03-Nov-14 A			
NB02710	NB56 - Footing & Wall Structure	91	20-Dec-14 A	20-Apr-15 A			
NB02720	NB56- backfilling	75	20-Apr-15 A	20-Jul-15 A			
NB02730	NB56 - NB production	105	20-Feb-16 A	03-Oct-16	12-Apr-19	25-Apr-19	934
NB02740	NB56 - NB post & panel installation	5	04-Oct-16	08-Oct-16	26-Apr-19	02-May-19	754
NB61 (Ch.6400-6560)-FH S/B Side (MTRC I&P Area)							
Noise Barrier Works							
NB02750	Coordinate with MTRC for Precautionary Measure	43	19-Mar-14 A	14-May-14 A			
NB02760	Precautionary Measure installation	27	15-May-14 A	16-Jun-14 A			
NB02770	NB61 (0-50m) - Sheet piling & Excavation	18	20-Sep-16	12-Oct-16	05-Dec-18	27-Dec-18	652
NB02780	NB61 (0-50m) - Footing & Wall Structure	50	13-Oct-16	09-Dec-16	28-Dec-18	27-Feb-19	652
NB02790	NB61 (0-50m)- backfilling	50	10-Dec-16	17-Feb-17	28-Feb-19	02-May-19	652
NB02800	NB61 (0-50m) - NB production	45	10-Dec-16	23-Jan-17	12-Mar-19	25-Apr-19	822
NB02810	NB61 (0-50m) - NB post & panel installation	5	24-Jan-17	06-Feb-17	26-Apr-19	02-May-19	662
NB02820	NB61 (50-160m) - Sheet piling & Excavation	27	17-Jun-14 A	18-Jul-14 A			
NB02830	NB61 (50-160m) - Footing & Wall Structure	171	19-Jul-14 A	10-Feb-15 A			
NB02840	NB61 (50-160m) - backfilling	42	27-Feb-15 A	20-Apr-15 A			
NB02850	NB61 (50-160m) - NB production	45	20-Sep-16	03-Nov-16	12-Mar-19	25-Apr-19	903
NB02860	NB61 (50-160m) - NB post & panel installation	5	04-Nov-16	09-Nov-16	26-Apr-19	02-May-19	728
NB61A (Ch.6560-6745)-FH S/B Side (MTRC I&P Area)							
Noise Barrier Works							
NB02870	Coordinate with MTRC for Precautionary Measure	85	13-Nov-13 A	04-Mar-14 A			
NB02880	Precautionary Measure installation	16	03-Mar-14 A	20-Mar-14 A			
NB02890	NB61A (0-50m) - Sheet piling & Excavation	9	26-Apr-14 A	08-May-14 A			
NB02900	NB61A (0-50m) - Footing & Wall Structure	114	30-May-14 A	15-Oct-14 A			
NB02910	NB61A (0-50m)- backfilling	87	20-Jan-15 A	13-May-15 A			
NB02920	NB61A (0-50m) - NB production	105	20-Feb-16 A	04-Oct-16	11-Apr-19	25-Apr-19	933
NB02930	NB61A (0-50m) - NB post & panel installation	5	05-Oct-16	11-Oct-16	26-Apr-19	02-May-19	753
NB02940	NB61A ID2-3 (50-75m), 18nos Predrilling (Deleted notified on 14-5, VO issued accordingly)	0	14-May-14 A	14-May-14 A			
NB02950	NB61A ID2-3 (50-75m) 18nos Piling- (Deleted notified on 14-5, VO issued accordingly)	0	14-May-14 A	14-May-14 A			



Activity ID	Activity Name	Original Duration	Start	Finish	Late Start	Late Finish	Total Float
NB02960	NB61A ID2-3 (50-75m)- Sheet piling & Excavation	54	20-Jan-15 A	31-Mar-15 A			
NB02970	NB61A ID2-3 (50-75m) - Footing & Wall Structure	337	01-Apr-15 A	28-Oct-16	31-Jan-19	11-Mar-19	698
NB02980	NB61A ID2-3 (50-75m)- backfilling	20	29-Oct-16	21-Nov-16	29-Mar-19	25-Apr-19	713
NB02990	NB61A ID2-3 (50-75m) - NB production	45	29-Oct-16	12-Dec-16	12-Mar-19	25-Apr-19	864
NB03000	NB61A ID2-3 (50-75m) - NB post & panel installation	5	13-Dec-16	17-Dec-16	26-Apr-19	02-May-19	695
NB03010	NB61A (75-190m) - Sheet piling & Excavation	49	22-Apr-14 A	20-Jun-14 A			
NB03020	NB61A (75-190m) - Footing & Wall Structure	112	02-Jun-14 A	15-Oct-14 A			
NB03030	NB61A (75-190m)- backfilling	31	18-Oct-14 A	22-Nov-14 A			
NB03040	NB61A (75-190m) - NB production	105	20-Feb-16 A	04-Oct-16	11-Apr-19	25-Apr-19	933
NB03050	NB61A (75-190m) - NB post & panel installation	5	05-Oct-16	11-Oct-16	26-Apr-19	02-May-19	753
Box Culvert ID3 Works							
VO58 Extension of ID3							
ID30090	VO58 Issued	0	19-Sep-16 A				
ID30095	Preparation work	30	20-Sep-16	26-Oct-16	28-Aug-17	30-Sep-17	273
ID30100	Demolish existing wing walls (N&S)	30	03-Oct-17*	06-Nov-17	03-Oct-17	06-Nov-17	0
ID30110	Rock fill to the box culvert level	20	07-Nov-17	29-Nov-17	06-Oct-18	29-Oct-18	122
ID30120	Box culvert extension structure & Wing Walls	90	30-Nov-17	20-Mar-18	30-Oct-18	16-Feb-19	122
ID30130	Backfill	20	21-Mar-18	17-Apr-18	18-Feb-19	12-Mar-19	270
Fanling Highway Construction							
Drainage & Road Works							
Ch 5880-6740							
RDZ41190	Z2 (CH5880-6740) : Fanling Highway Road works Start	0	11-Aug-17		11-Aug-17		0
RDZ41200	Z2 (CH5880-6740) : Fanling Highway N/B - D&R works (lane 1) (Modify to final road level)	26	28-Mar-19	02-May-19	28-Mar-19	02-May-19	0
RDZ41210	Z2 (CH5880-6740) : Fanling Highway N/B - D&R works (lane 2)(Modify to final road level)	40	05-Jan-18	22-Feb-18	22-Sep-18	10-Nov-18	213
RDZ41220	Z2 (CH5880-6740): Fanling Highway N/B - D&R works (lane 3)	40	23-Oct-17	08-Dec-17	23-Oct-17	08-Dec-17	0
RDZ41230	Z2 (CH5880-6740) : Fanling Highway N/B - D&R works (lane 4)	40	11-Aug-17	26-Sep-17	11-Aug-17	26-Sep-17	0
RDZ41232	Z2 : FLHY N/B after Tai Hang Footbridge removal (Lane 2,3,4)	120	20-Mar-18	15-Aug-18	03-Dec-18	02-May-19	210
RDZ41234	Z2 : FLHY N/B after Tai Wo Footbridge removal (Lane 2,3,4)	120	16-Apr-18	06-Sep-18	03-Dec-18	02-May-19	191
RDZ41240	Z2 (CH5880-6740) : Fanling Highway S/B - D&R works (lane 4)	39	10-Nov-17	27-Dec-17	09-Aug-18	22-Sep-18	220
RDZ41250	Z2 (CH5880-6740) : Fanling Highway S/B - D&R works (lane 3)	39	22-Jan-18	09-Mar-18	20-Oct-18	04-Dec-18	220
RDZ41260	Z2 (CH5880-6740) : Fanling Highway S/B - D&R works (lane 2)	39	07-Apr-18	24-May-18	31-Dec-18	16-Feb-19	220
RDZ41270	Z2 (CH5880-6740) : Fanling Highway S/B - D&R works (lane 1)	39	19-Jun-18	03-Aug-18	13-Mar-19	02-May-19	220
RDZ41280	Z2 (CH5880-6740) : Fanling Highway Road works (8 lanes) complete	0		02-May-19		02-May-19	0
Other Works							
Site Formation Works							
General							
Z2.P2N.1470	Liaison with relevant villages houses's owner and related parties	30	18-Jul-13 A	21-Aug-13 A			
Z2.P2N.1480	Submission of contractor's design for site formation	28	26-Jul-13 A	27-Aug-13 A			
Z2.P2N.1500	Submission of DIA & SIA report	14	12-Aug-13 A	27-Aug-13 A			
Z2.P2N.1510	Approval of contractor's Design by Engineer/Gov't Authorities	21	28-Aug-13 A	21-Sep-13 A			
Z2.P2N.1530	G.I. & Temporary access road construction	21	17-Aug-13 A	10-Sep-13 A			
Z2.P2N.1540	Site clearance	14	10-Sep-13 A	26-Sep-13 A			
Z2.P2N.1550	SA324A: Tree Removal Works	15	26-Sep-13 A	15-Oct-13 A			
Z2.P2N.1560	Site fomration work in according to approved contractor's design	60	16-Oct-13 A	24-Dec-13 A			



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

Project File:WP Rev 04

Layout: WP rev 4

Data Date:20-Sep-16

Page 22 of 44

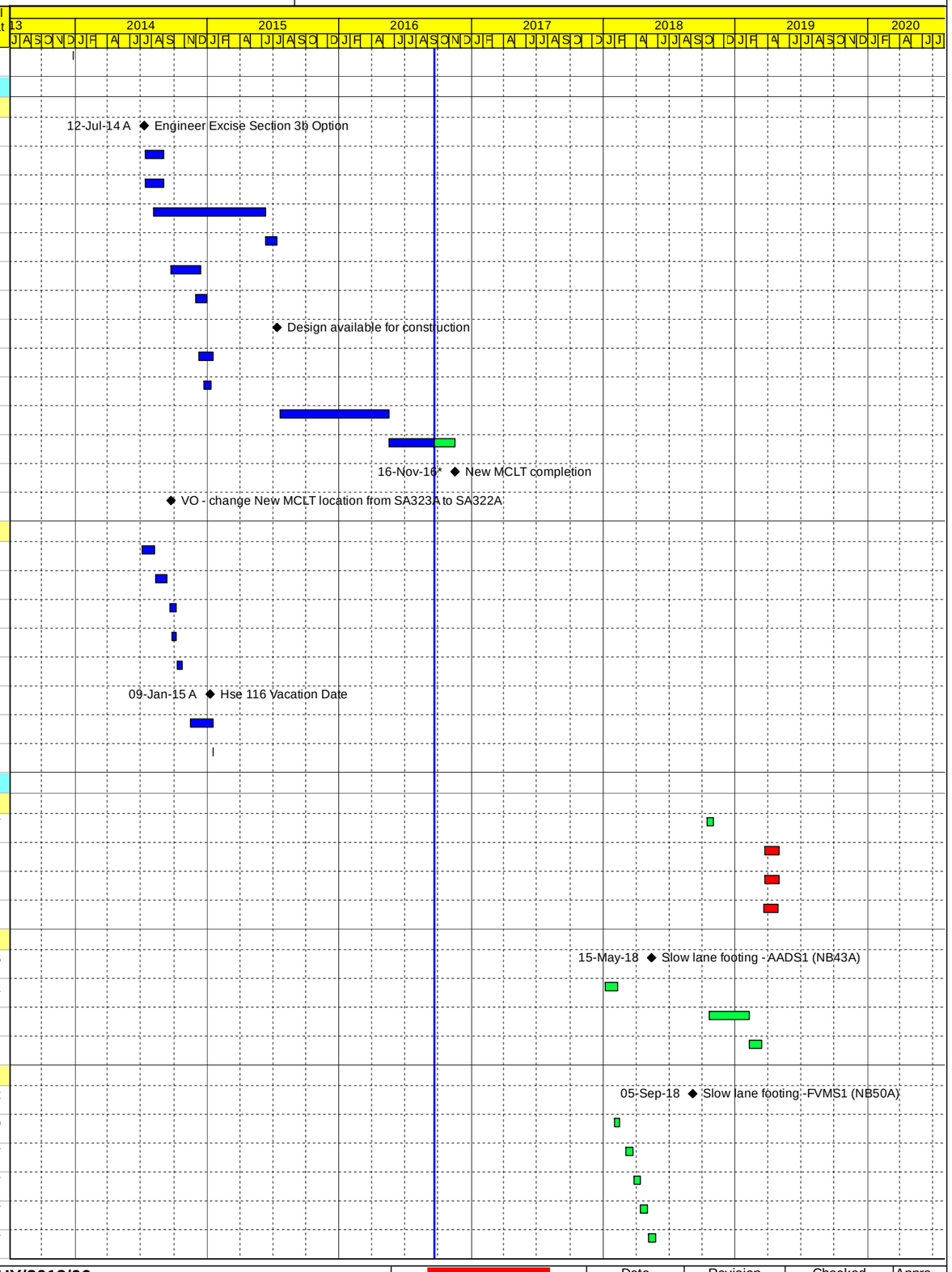
Contract No. HY/2012/06

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

Works Programme - WP Rev. 4

Date	Revision	Checked	Appro...
30-Jun-14	WP Rev 1A		
28-Aug-15	WP Rev 2		
07-Apr-16	WP Rev 3		
17-Oct-16	WP Rev 4		

Activity ID	Activity Name	Original Duration	Start	Finish	Late Start	Late Finish	Total Float
Z2.P2N.1580	Handover inspection	0	27-Dec-13 A	27-Dec-13 A			
Site Clearance & Demolition of Existing Structure							
Contract Condition							
MCLT1000	Engineer Excise Section 3b Option	0		12-Jul-14 A			
MCLT1010	Sublet Design & Build Contractor	45	14-Jul-14 A	03-Sep-14 A			
MCLT1020	Sublet Demolition Contractor	45	14-Jul-14 A	03-Sep-14 A			
MCLT1030	Design Preparation	249	06-Aug-14 A	12-Jun-15 A			
MCLT1040	Engineer approval	25	13-Jun-15 A	14-Jul-15 A			
MCLT1045	Searching Land owner for DLO exemption application	84	24-Sep-14 A	16-Dec-14 A			
MCLT1050	Apply cert for exemption by DLO by Engineer	0	01-Dec-14 A	31-Dec-14 A			
MCLT1060	Design available for construction	0	15-Jul-15 A				
MCLT1070	Method Statement submission & Demolish House for New MCLT construciton (Additional requirement)	32	09-Dec-14 A	17-Jan-15 A			
MCLT1078	Additional site formation work for New MCLT location	15	25-Dec-14 A	14-Jan-15 A			
MCLT1080	Construct New MCLT (Structure)	244	21-Jul-15 A	20-May-16 A			
MCLT1090	New MCLT - finishes works	75	20-May-16 A	16-Nov-16	04-Nov-16	31-Dec-16	37
MCLT1100	New MCLT completion	0		16-Nov-16*		31-Dec-16	37
MCLT1110	VO - change New MCLT location from SA323A to SA322A	0	24-Sep-14 A				
General							
Z2.P2N.1000	Liaison with relevant villages houses's owner and related parties	30	07-Jul-14 A	09-Aug-14 A			
Z2.P2N.1010	Submission of contractor's design for site formation	28	11-Aug-14 A	12-Sep-14 A			
Z2.P2N.1050	Temporary access road construction	14	22-Sep-14 A	09-Oct-14 A			
Z2.P2N.1060	Site clearance	10	26-Sep-14 A	09-Oct-14 A			
Z2.P2N.1070	SA322A: Tree Removal Works	14	10-Oct-14 A	25-Oct-14 A			
Z2.P2N.1075	Hse 116 Vacation Date	0		09-Jan-15 A			
Z2.P2N.1080	Site fomration works (Demolition of existing villiage houses with log no. 115, 116 & 117)	51	17-Nov-14 A	17-Jan-15 A			
Z2.P2N.1100	Handover inspection	0	17-Jan-15 A	17-Jan-15 A			
TCSS Works							
Civil Provision for TCSS Works							
TCSS2140	M10 for CCTV	14	15-Oct-18	31-Oct-18	12-Apr-19	02-May-19	147
TCSS2180	Pillar box & associated duct work - PL204 for G30 & G55	30	23-Mar-19	02-May-19	23-Mar-19	02-May-19	0
TCSS2190	Pillar box & associated duct work - PL205 for G54 & M10	30	23-Mar-19	02-May-19	23-Mar-19	02-May-19	0
TCSS2200	Pillar box & associated duct work - PL206 for G32	30	21-Mar-19	29-Apr-19	23-Mar-19	02-May-19	2
AADS1							
TCSS1400	Slow lane footing - AADS1 (NB43A)	0		15-May-18		22-Mar-19	256
TCSS1410	Fast lane footing - AADS1 (CH5880, N/B)	30	05-Jan-18	08-Feb-18	16-Feb-19	22-Mar-19	331
TCSS1660	TTA application & Approval - AADS1	90	22-Oct-18	08-Feb-19	03-Dec-18	22-Mar-19	36
TCSS1670	Sign Gantry Erection - AADS1	30	09-Feb-19	15-Mar-19	23-Mar-19	02-May-19	36
FVMS1							
TCSS1420	Slow lane footing -FVMS1 (NB50A)	0		05-Sep-18		15-Feb-19	132
TCSS1430	Predrilling (6no, 0.19m mini pile)	12	02-Feb-18	15-Feb-18	12-Nov-18	24-Nov-18	229
TCSS1432	Piling (6nos, 0.19m mini pile)	18	05-Mar-18	24-Mar-18	26-Nov-18	15-Dec-18	217
TCSS1434	Sheeting & excavation (4m)	12	26-Mar-18	12-Apr-18	17-Dec-18	02-Jan-19	217
TCSS1436	Fast lane footing - FVMS1 (CH6280, N/B)	18	13-Apr-18	04-May-18	03-Jan-19	23-Jan-19	217
TCSS1438	Back filling & reinstatemetn road work (2m)	18	05-May-18	26-May-18	24-Jan-19	15-Feb-19	217



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

Project File:WP Rev 04

Layout: WP rev 4

Data Date:20-Sep-16

Page 23 of 44

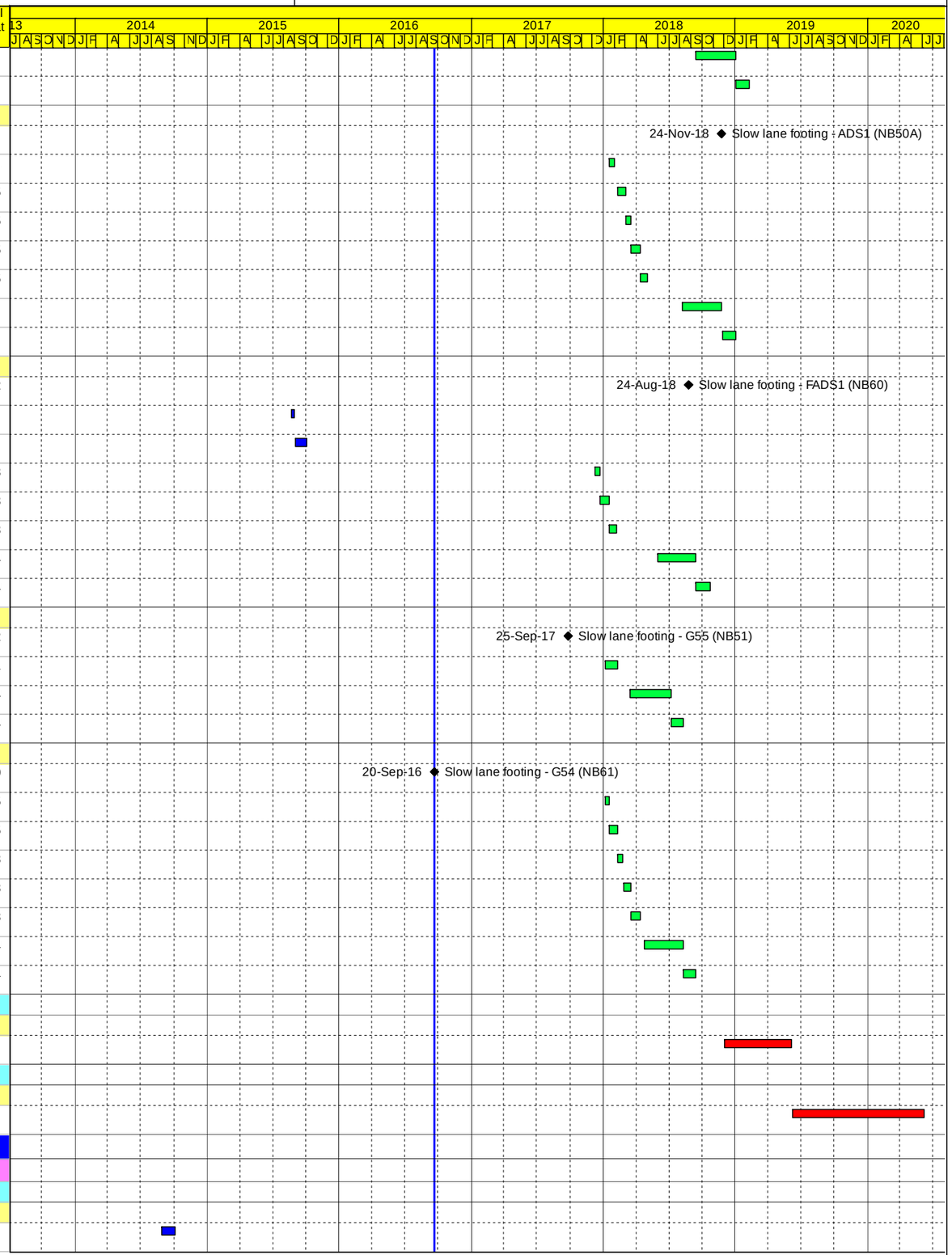
Contract No. HY/2012/06

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

Works Programme - WP Rev. 4

Date	Revision	Checked	Appro...
30-Jun-14	WP Rev 1A		
28-Aug-15	WP Rev 2		
07-Apr-16	WP Rev 3		
17-Oct-16	WP Rev 4		

Activity ID	Activity Name	Original Duration	Start	Finish	Late Start	Late Finish	Total Float
TCSS1680	TTA application & Approval - FVMS1	90	13-Sep-18	02-Jan-19	29-Oct-18	15-Feb-19	36
TCSS1690	Sign Gantry Erection - FVMS1	30	03-Jan-19	08-Feb-19	16-Feb-19	22-Mar-19	36
ADS1							
TCSS1440	Slow lane footing - ADS1 (NB50A)	0		24-Nov-18		09-Jan-19	36
TCSS1930	Predrilling (6no, 0.19m mini pile)	12	19-Jan-18	01-Feb-18	06-Oct-18	20-Oct-18	211
TCSS1940	Piling (6nos, 0.19m mini pile)	18	09-Feb-18	03-Mar-18	22-Oct-18	10-Nov-18	205
TCSS1950	Sheeting & excavation (4m)	12	05-Mar-18	17-Mar-18	12-Nov-18	24-Nov-18	205
TCSS1960	Fast lane footing - ADS1 (CH6400, N/B)	18	19-Mar-18	12-Apr-18	26-Nov-18	15-Dec-18	205
TCSS1970	Back filling & reinstatemetn road work (2m)	18	13-Apr-18	04-May-18	17-Dec-18	09-Jan-19	205
TCSS1980	TTA application & Approval - ADS1	90	09-Aug-18	24-Nov-18	20-Sep-18	09-Jan-19	36
TCSS1990	Sign Gantry Erection - ADS1	30	26-Nov-18	02-Jan-19	10-Jan-19	15-Feb-19	36
FADS1							
TCSS1460	Slow lane footing - FADS1 (NB60)	0		24-Aug-18		22-Mar-19	172
TCSS2000	Predrilling (6no, 0.19m mini pile)	8	24-Aug-15 A	01-Sep-15 A			
TCSS2010	Piling (6nos, 0.19m mini pile)	26	02-Sep-15 A	03-Oct-15 A			
TCSS2020	Sheeting & excavation (4m)	12	09-Dec-17	22-Dec-17	24-Jan-19	08-Feb-19	333
TCSS2030	Fast lane footing - FADS1 (CH6830, N/B)	18	23-Dec-17	16-Jan-18	09-Feb-19	01-Mar-19	333
TCSS2040	Back filling & reinstatemetn road work (2m)	18	17-Jan-18	06-Feb-18	02-Mar-19	22-Mar-19	333
TCSS2050	TTA application & Approval - FADS1	90	31-May-18	14-Sep-18	03-Dec-18	22-Mar-19	154
TCSS2060	Sign Gantry Erection - FADS1	30	15-Sep-18	23-Oct-18	23-Mar-19	02-May-19	154
G55							
TCSS1480	Slow lane footing - G55 (NB51)	0		25-Sep-17		09-Jan-19	382
TCSS1490	Fast lane footing - G55 (CH5970, S/B)	30	05-Jan-18	08-Feb-18	03-Dec-18	09-Jan-19	271
TCSS1740	TTA application & Approval - G55	90	15-Mar-18	06-Jul-18	20-Sep-18	09-Jan-19	154
TCSS1750	Sign Gantry Erection - G55	30	07-Jul-18	10-Aug-18	10-Jan-19	15-Feb-19	154
G54							
TCSS1500	Slow lane footing - G54 (NB61)	0		20-Sep-16		15-Feb-19	710
TCSS2070	Pre-drilling (6nos, 0.19m mini pile)	12	05-Jan-18	18-Jan-18	13-Sep-18	27-Sep-18	205
TCSS2075	Piling (6nos, 0.19m mini pile)	18	19-Jan-18	08-Feb-18	28-Sep-18	20-Oct-18	205
TCSS2080	Sheeting & excavation (4m)	12	09-Feb-18	24-Feb-18	17-Dec-18	02-Jan-19	253
TCSS2090	Fast lane footing - G54 (CH6470, S/B)	18	26-Feb-18	17-Mar-18	03-Jan-19	23-Jan-19	253
TCSS2100	Back filling & reinstatemetn road work (2m)	18	19-Mar-18	12-Apr-18	24-Jan-19	15-Feb-19	253
TCSS2110	TTA application & Approval - G54	90	24-Apr-18	10-Aug-18	29-Oct-18	15-Feb-19	154
TCSS2120	Sign Gantry Erection - G54	30	11-Aug-18	14-Sep-18	16-Feb-19	22-Mar-19	154
Landscape Softwork							
Landscape Works							
Z2.LW.1000	Landscape soft work Zone2	150	03-Dec-18	06-Jun-19	03-Dec-18	06-Jun-19	0
Establishment Works							
Establishment Works							
Z2.EW.1000	Establishment work Zone2	365	07-Jun-19	05-Jun-20	07-Jun-19	05-Jun-20	0
South Buffer Zone 1 (SBZ1) (within Zone 2)(Ch.6740 to 6930)							
General							
General							
General							
POSSA328a	Tree Felling/ Transplant	30	29-Aug-14 A	06-Oct-14 A			



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

Project File:WP Rev 04

Layout: WP rev 4

Data Date:20-Sep-16

Page 24 of 44

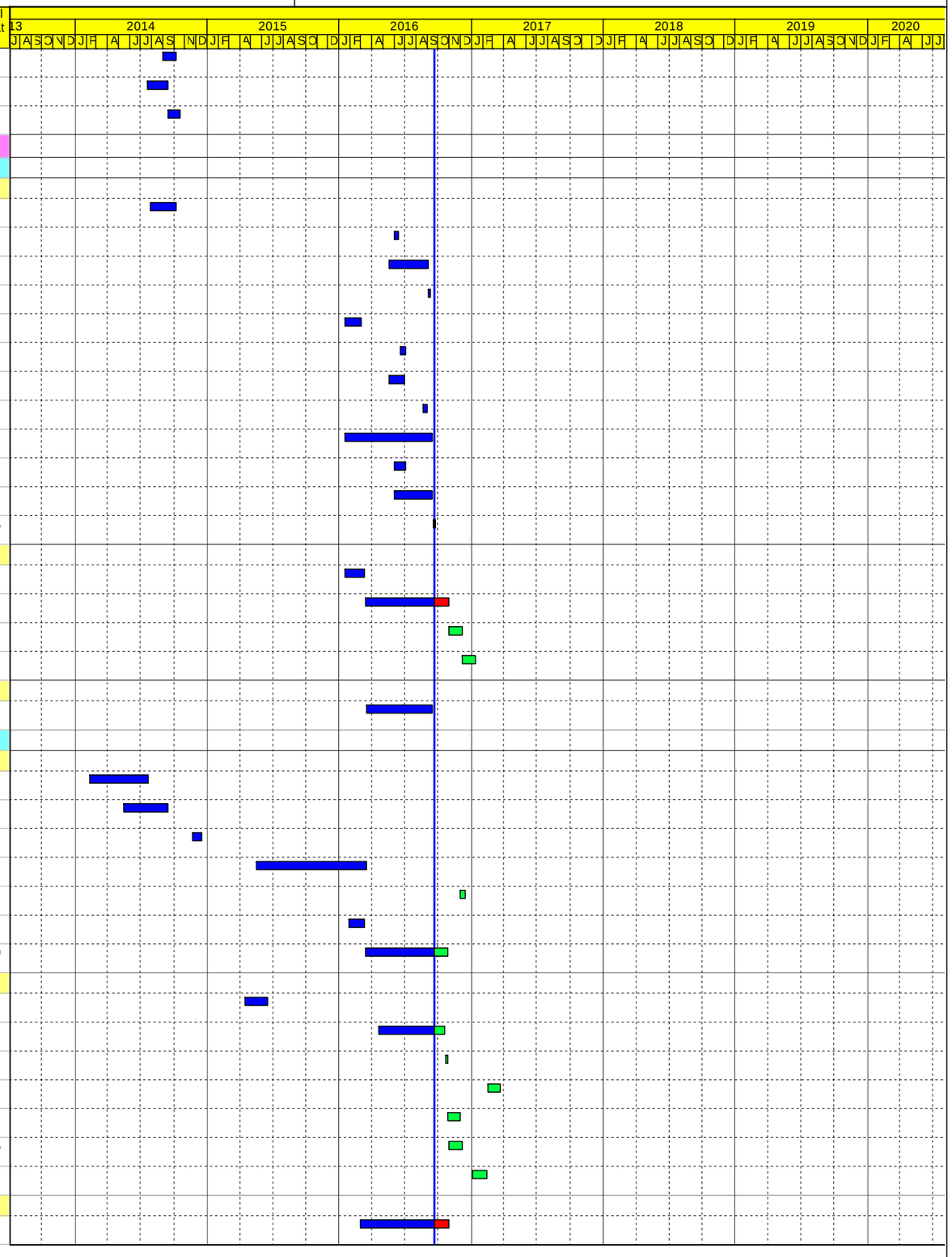
Contract No. HY/2012/06

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

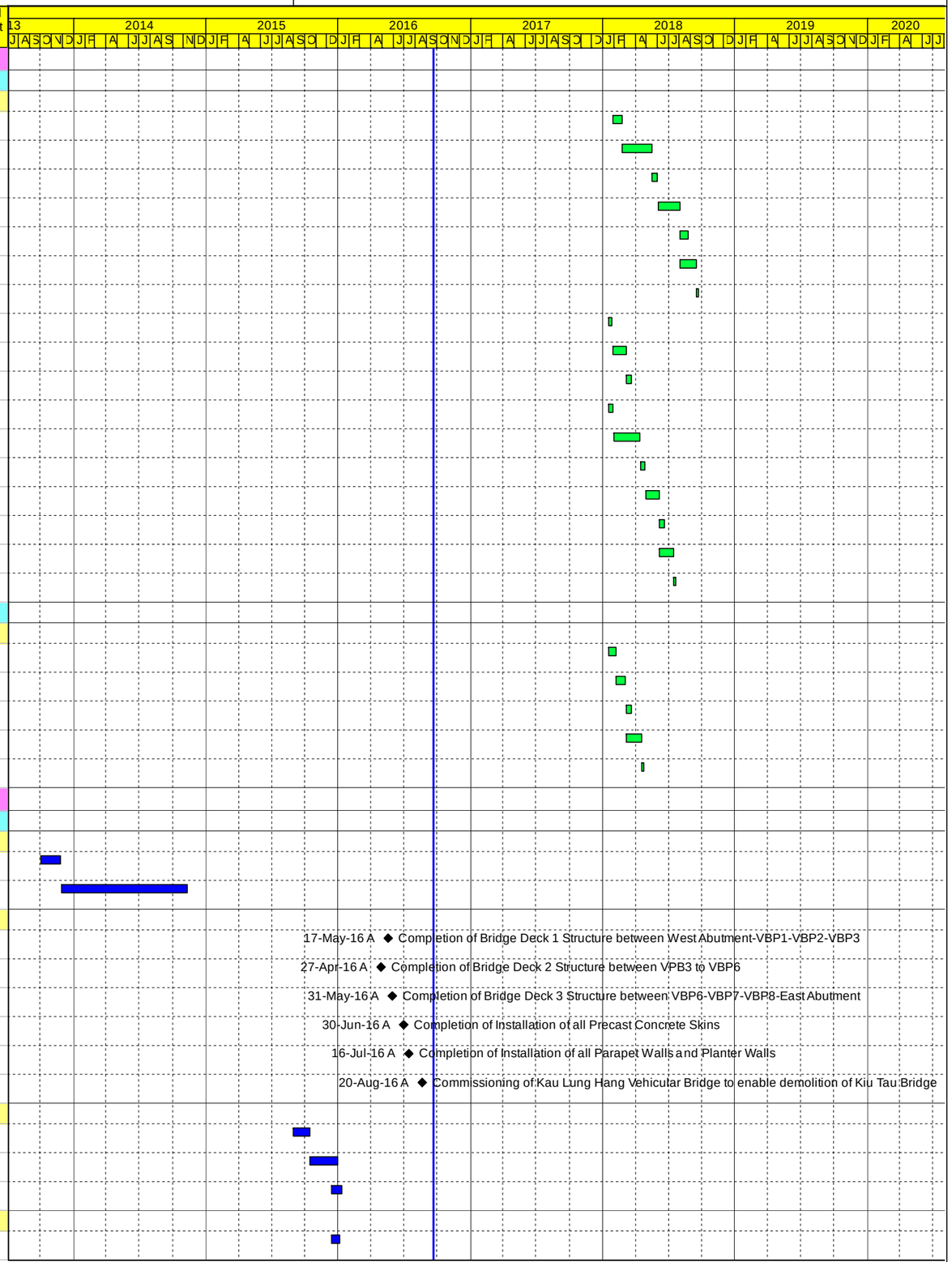
Works Programme - WP Rev. 4

Date	Revision	Checked	Appro...
30-Jun-14	WP Rev 1A		
28-Aug-15	WP Rev 2		
07-Apr-16	WP Rev 3		
17-Oct-16	WP Rev 4		

Activity ID	Activity Name	Original Duration	Start	Finish	Late Start	Late Finish	Total Float
POSSA328a10	Site Clearance/ Trip Pit etc	29	01-Sep-14 A	07-Oct-14 A			
POSSA329a	Tree Felling/ Transplant	49	19-Jul-14 A	15-Sep-14 A			
POSSA329a10	Site Clearance/ Trip Pit etc	28	16-Sep-14 A	20-Oct-14 A			
Noise Barrier Along TWSR-West and Laying New Utilities							
NB63A (Ch.6710-6840)-TWSR West Side							
Noise Barrier Works							
NB01070	NB63A-1 - Footing & Wall Structure (ch0-10.7) - 1 bays	60	28-Jul-14 A	08-Oct-14 A			
NB01080	NB63A-1 - backfilling	12	01-Jun-16 A	13-Jun-16 A			
NB01090	NB63A-1 - NB production	45	20-May-16 A	03-Sep-16 A			
NB01100	NB63A-1 - NB post installation	5	05-Sep-16 A	09-Sep-16 A			
NB01120	NB63A-2 - Footing & Wall Structure (ch10.7-24.2) - 1 bays	31	18-Jan-16 A	02-Mar-16 A			
NB01130	NB63A-2 - backfilling	12	18-Jun-16 A	04-Jul-16 A			
NB01140	NB63A-2 - NB production	45	20-May-16 A	02-Jul-16 A			
NB01150	NB63A-2 - NB post installation	5	20-Aug-16 A	31-Aug-16 A			
NB01170	NB63A-3 - Footing & Wall Structure (ch24.2-86.9) - 5 bays	80	18-Jan-16 A	15-Sep-16 A			
NB01180	NB63A-3 - backfilling	12	01-Jun-16 A	04-Jul-16 A			
NB01190	NB63A-3 - NB production	45	03-Jun-16 A	15-Sep-16 A			
NB01200	NB63A-3 - NB post installation	5	17-Sep-16 A	24-Sep-16	26-Apr-19	02-May-19	765
DSD Southern Trunk Sewer, Water Main Fire Main Works							
TSZ10850	Sheet Piling & Excavation(~6m below ground) (along NB63A)	40	18-Jan-16 A	12-Mar-16 A			
TSZ10860	DSD Trunk Sewer laying (along NB63A)	54	14-Mar-16 A	31-Oct-16	03-Oct-16	11-Nov-16	10
TSZ10880	Watermain installation (along NB63A)	30	01-Nov-16	05-Dec-16	06-Dec-16	12-Jan-17	30
TSZ10890	Firemain installation (along NB63A)	30	06-Dec-16	12-Jan-17	13-Jan-17	24-Feb-17	30
Underground Utility Works							
UUZ20210	Utility cable laying by Utility companies (Along NB63A, 125m)	48	18-Mar-16 A	15-Sep-16 A			
NB64 & NB64A (Ch.6860-6920)-TWSR West Side							
Noise Barrier Works							
NB000900	Pending for Tree felling permit in area SA328 (RFI32)	133	10-Feb-14 A	23-Jul-14 A			
NB001000	NB64 & NB64A -Pre-drilling	103	15-May-14 A	15-Sep-14 A			
NB001010	NB64 & NB64A -piling (0.19m -34no) - rigs 1 & 2	23	22-Nov-14 A	18-Dec-14 A			
NB001030	NB64 & NB64A -Footing & Wall Structure - 7 bays	245	19-May-15 A	18-Mar-16 A			
NB001040	NB64 & NB64A -backfilling	12	02-Dec-16	15-Dec-16	11-Feb-17	24-Feb-17	51
NB001050	NB64 & NB64A -NB production	43	30-Jan-16 A	12-Mar-16 A			
NB001060	NB64 & NB64A -NB post & panel installation	33	14-Mar-16 A	27-Oct-16	22-Mar-19	02-May-19	739
DSD Southern Trunk Sewer, Water Main Fire Main Works							
TSZ10900	Sheet Piling & Excavation(~5m below ground) (along NB64)	52	16-Apr-15 A	17-Jun-15 A			
TSZ10910	DSD Trunk Sewer laying (along NB64)	18	20-Apr-16 A	20-Oct-16	14-Oct-16	11-Nov-16	19
TSZ10920	Backfill up to NB64 footing level	6	21-Oct-16	27-Oct-16	20-Dec-16	28-Dec-16	51
TSZ10930	Watermain installation (along NB64)	30	15-Feb-17	21-Mar-17	20-May-17	24-Jun-17	75
TSZ10940	Firemain installation (along NB64)	30	28-Oct-16	01-Dec-16	29-Dec-16	10-Feb-17	51
TSZ11028	Demolish existing pile caps at Watermain	30	01-Nov-16	05-Dec-16	10-Apr-17	19-May-17	126
TSZ11030	Demolish existing pile cap at Watermain after NWP bridge demolition	30	03-Jan-17	14-Feb-17	10-Apr-17	19-May-17	75
Underground Utility Works							
UUZ20220	Utility cable laying by Utility companies (Along NB64 & NB64A, 60m)	64	29-Feb-16 A	31-Oct-16	20-Sep-16	31-Oct-16	0



Activity ID	Activity Name	Original Duration	Start	Finish	Late Start	Late Finish	Total Float
Noise Barrier Along Fanling Highway N/B							
NB60 (Ch.6450-6920)-FH N/B Side							
Noise Barrier Works							
NB02030	NB60 (300-408m)(NB60/26-34 Pre-drilling	21	29-Jan-18	23-Feb-18	05-May-18	30-May-18	76
NB02040	NB60 (300-408m)(NB60/26-34, 0.19m -44nos) Piling	66	24-Feb-18	17-May-18	31-May-18	17-Aug-18	76
NB02050	NB60-4 (300-408m) - Sheet piling & Excavation	12	18-May-18	01-Jun-18	18-Aug-18	31-Aug-18	76
NB02060	NB60-4 - Footing & Wall Structure	50	02-Jun-18	01-Aug-18	01-Sep-18	01-Nov-18	76
NB02070	NB60-4 - backfilling	20	02-Aug-18	24-Aug-18	02-Nov-18	24-Nov-18	76
NB02080	NB60-4 - NB production	45	02-Aug-18	15-Sep-18	12-Mar-19	25-Apr-19	222
NB02082	NB60-4 - NB post & panel installation	5	17-Sep-18	21-Sep-18	26-Apr-19	02-May-19	178
NB02090	NB60 (408-468m)(NB60/35-39) & FADS1 Pre-drilling	10	17-Jan-18	27-Jan-18	23-Apr-18	04-May-18	76
NB02100	NB60 (408-468m)(NB60/35-39, 0.19m -20nos)	30	29-Jan-18	06-Mar-18	03-Jul-18	06-Aug-18	123
NB02101	NB60 (408-468m) FADS1 (8nos) Piling	12	07-Mar-18	20-Mar-18	07-Aug-18	20-Aug-18	123
NB02103	NB60 (408-468m) Staircase S1 - Pre-drilling	12	17-Jan-18	30-Jan-18	29-May-18	11-Jun-18	105
NB02105	NB60 (408-468m) Staircase S1 - Pre-bored H Pile (16 nos)	58	31-Jan-18	14-Apr-18	12-Jun-18	20-Aug-18	105
NB02110	NB60-5 (408-468m) - Sheet piling & Excavation	12	16-Apr-18	28-Apr-18	21-Aug-18	03-Sep-18	105
NB02120	NB60-5 - Footing & Wall Structure	30	30-Apr-18	05-Jun-18	04-Sep-18	10-Oct-18	105
NB02130	NB60-5 - backfilling	12	06-Jun-18	20-Jun-18	12-Nov-18	24-Nov-18	131
NB02140	NB60-5 - NB production	40	06-Jun-18	15-Jul-18	11-Oct-18	19-Nov-18	127
NB02142	NB60-5 - NB post & panel installation	5	16-Jul-18	20-Jul-18	20-Nov-18	24-Nov-18	106
NB66 (Ch.6920-6930)-FH N/B Side							
Noise Barrier Works							
NB02150	NB66 - Sheet piling & Excavation	18	17-Jan-18	06-Feb-18	20-Sep-18	12-Oct-18	201
NB02160	NB66 - Footing & Wall Structure	21	07-Feb-18	05-Mar-18	13-Oct-18	07-Nov-18	201
NB02170	NB66- backfilling	15	06-Mar-18	22-Mar-18	08-Nov-18	24-Nov-18	201
NB02180	NB66 - NB production	45	06-Mar-18	19-Apr-18	12-Mar-19	25-Apr-19	371
NB02190	NB66 - NB post & panel installation	5	20-Apr-18	25-Apr-18	26-Apr-19	02-May-19	302
Bridge Construction							
Kau Lung Hang Vehicular Bridge							
General							
Z2.KLH.1060	Submission of method statement to Engineer	48	02-Oct-13 A	27-Nov-13 A			
Z2.KLH.1070	Consent from Engineer	276	28-Nov-13 A	10-Nov-14 A			
Target Milestone							
MS01	Completion of Bridge Deck 1 Structure between West Abutment-VBP1-VBP2-VBP3	0		17-May-16 A			
MS02	Completion of Bridge Deck 2 Structure between VPB3 to VBP6	0		27-Apr-16 A			
MS03	Completion of Bridge Deck 3 Structure between VBP6-VBP7-VBP8-East Abutment	0		31-May-16 A			
MS04	Completion of Installation of all Precast Concrete Skins	0		30-Jun-16 A			
MS05	Completion of Installation of all Parapet Walls and Planter Walls	0		16-Jul-16 A			
MS06	Commissioning of Kau Lung Hang Vehicular Bridge to enable demolition of Kiu Tau Bridge	0		20-Aug-16 A			
TWSR-W Precast Yards and Beam Fabrication							
PC0160	Beams Precast Yards - TWSR-W	37	01-Sep-15 A	15-Oct-15 A			
PC0170	Precast Beams Fabrication for P3 to P4 (10 nos)	63	16-Oct-15 A	31-Dec-15 A			
PC0180	Post Tensioning Beams (10 nos)	21	15-Dec-15 A	11-Jan-16 A			
Precast Yards and Beam Fabrication							
PC0120	Precast Beams Fabrication for P4-P5 (1-3 nos)	16	15-Dec-15 A	05-Jan-16 A			



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

Project File:WP Rev 04

Layout: WP rev 4

Data Date:20-Sep-16

Page 26 of 44

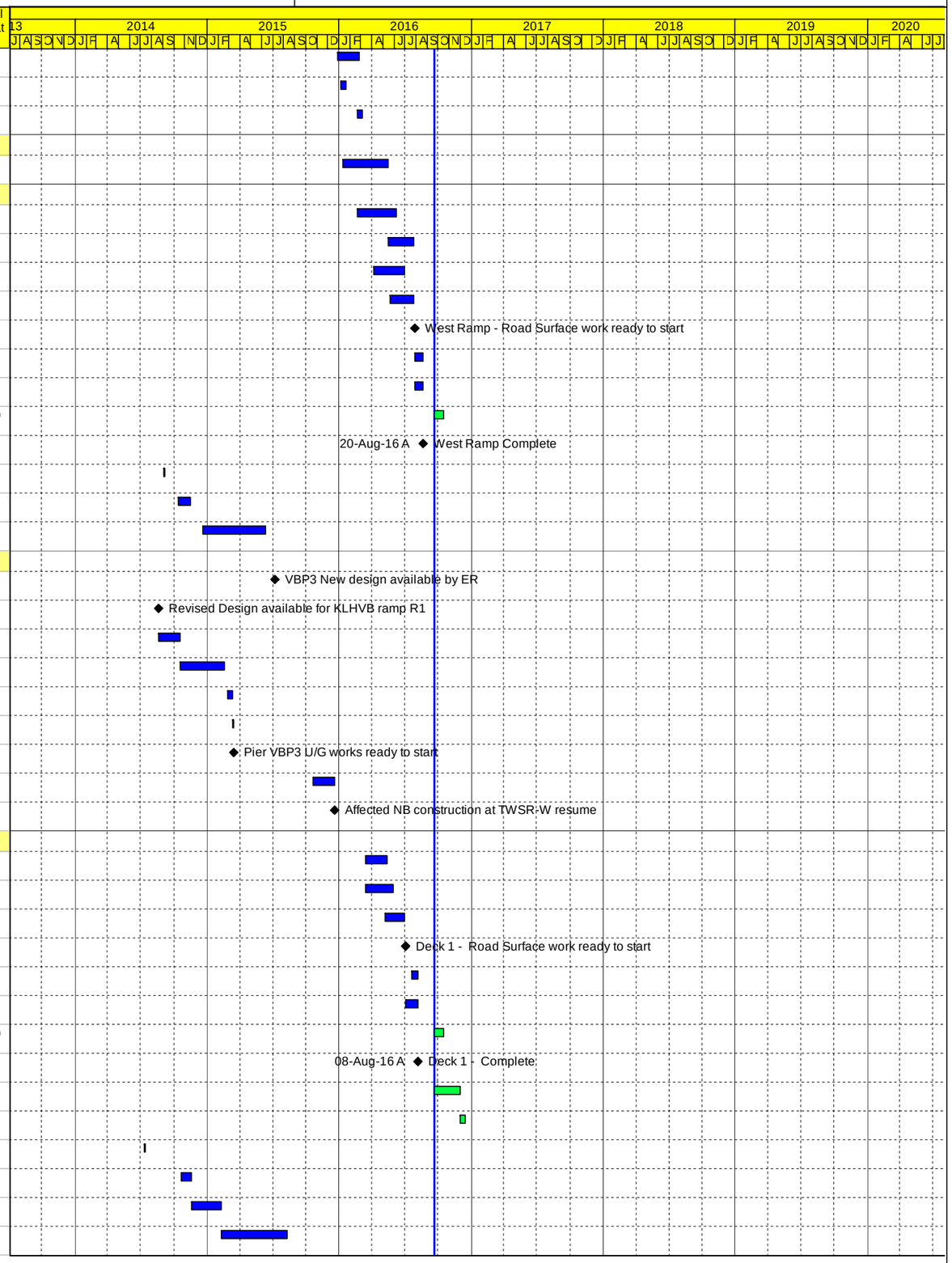
Contract No. HY/2012/06

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

Works Programme - WP Rev. 4

Date	Revision	Checked	Appro...
30-Jun-14	WP Rev 1A		
28-Aug-15	WP Rev 2		
07-Apr-16	WP Rev 3		
17-Oct-16	WP Rev 4		

Activity ID	Activity Name	Original Duration	Start	Finish	Late Start	Late Finish	Total Float
PC0130	Precast Beams Fabrication for P4-P5 (4-10 nos)	44	28-Dec-15 A	26-Feb-16 A			
PC0140	Post Tensioning Beams (1-3nos)	13	06-Jan-16 A	20-Jan-16 A			
PC0150	Post Tensioning Beams (4-10nos)	12	20-Feb-16 A	04-Mar-16 A			
Other Off-Site Prefabrication							
PC0260	Parapet Concrete Skin Fabrication	94	12-Jan-16 A	16-May-16 A			
KLH Bridge - West Ramp							
KLH.1034	West Ramp Structure Work (6 bays after P3-4 beams lifting)	67	20-Feb-16 A	08-Jun-16 A			
KLH.1140	West Ramp - Backfilling & Drainage	45	17-May-16 A	27-Jul-16 A			
KLH.1180	West Ramp - Parapet skin (92nos)	51	07-Apr-16 A	30-Jun-16 A			
KLH.1240	West Ramp -Parapet Wall & Planter Wall	45	21-May-16 A	27-Jul-16 A			
KLH.1250	West Ramp - Road Surface work ready to start	0	29-Jul-16 A				
KLH.1260	West Ramp - barrier	21	28-Jul-16 A	20-Aug-16 A			
KLH.1280	West Ramp - Lighting	21	28-Jul-16 A	20-Aug-16 A			
KLH.1290	West Ramp - Planting	21	20-Sep-16	15-Oct-16	03-Apr-19	02-May-19	749
KLH.1300	West Ramp Complete	0		20-Aug-16 A			
Z2.KLH.0900	West Abutment- Pre-drilling work	4	04-Sep-14 A	08-Sep-14 A			
Z2.KLH.0910	West Abutment- pre-bored H-pile piling works (13nos)	30	15-Oct-14 A	18-Nov-14 A			
Z2.KLH.1002	West Abutment- Pile cap & Structural Wall	136	20-Dec-14 A	13-Jun-15 A			
Advance Works for VBP3 construction							
Z2.KLH.1100	VBP3 New design available by ER	0	07-Jul-15 A				
Z2.KLH.1103	Revised Design available for KLHVB ramp R1	0	20-Aug-14 A				
Z2.KLH.1105	Re-design Temp ramp for NWP bridge & approval	50	20-Aug-14 A	20-Oct-14 A			
Z2.KLH.1110	Erect temp ramp for NWP bridge	102	20-Oct-14 A	18-Feb-15 A			
Z2.KLH.1150	Demolish Existing ramp of NWP bridge	13	27-Feb-15 A	13-Mar-15 A			
Z2.KLH.1155	TTA	2	14-Mar-15 A	16-Mar-15 A			
Z2.KLH.1270	Pier VBP3 U/G works ready to start	0	16-Mar-15 A				
Z2.KLH.1280	Pier VBP3 complete and road reinstatement work	53	20-Oct-15 A	21-Dec-15 A			
Z2.KLH.1290	Affected NB construction at TWSR-W resume	0	21-Dec-15 A				
KLH Bridge - Deck 1							
KLH.1130	Deck 1 - Bridge deck construction (VBP2 to VBP3)	50	14-Mar-16 A	13-May-16 A			
KLH.3380	Deck 1 - Parapet skin (61nos)	57	14-Mar-16 A	31-May-16 A			
KLH.3390	Deck 1 - Parapet Wall & Planter Wall	45	07-May-16 A	30-Jun-16 A			
KLH.3400	Deck 1 - Road Surface work ready to start	0	02-Jul-16 A				
KLH.3410	Deck 1 - barrier	21	20-Jul-16 A	06-Aug-16 A			
KLH.3420	Deck 1 - Lighting	21	02-Jul-16 A	06-Aug-16 A			
KLH.3430	Deck 1 - Planting	21	20-Sep-16	15-Oct-16	03-Apr-19	02-May-19	749
KLH.3440	Deck 1 - Complete	0		08-Aug-16 A			
KLH.3630	Pedestrian walkway Roof & Parapet P2 to P3	60	20-Sep-16	30-Nov-16	06-Oct-16	15-Dec-16	13
KLH.3640	Pedestrian walkway floor finishes P2 to P3	14	01-Dec-16	16-Dec-16	16-Dec-16	04-Jan-17	13
Z2.KLH.1008	Pier VBP1- Pre-drilling work	3	11-Jul-14 A	14-Jul-14 A			
Z2.KLH.1010	Pier VBP1- Pre-bored H-pile piling works (6 Nos.)	25	23-Oct-14 A	20-Nov-14 A			
Z2.KLH.1012	Pier VBP1- Pile testing	68	20-Nov-14 A	10-Feb-15 A			
Z2.KLH.1014	Pier VBP1- Pile caps, pier and pier head construction	143	11-Feb-15 A	12-Aug-15 A			



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

Project File:WP Rev 04

Layout: WP rev 4

Data Date:20-Sep-16

Page 27 of 44

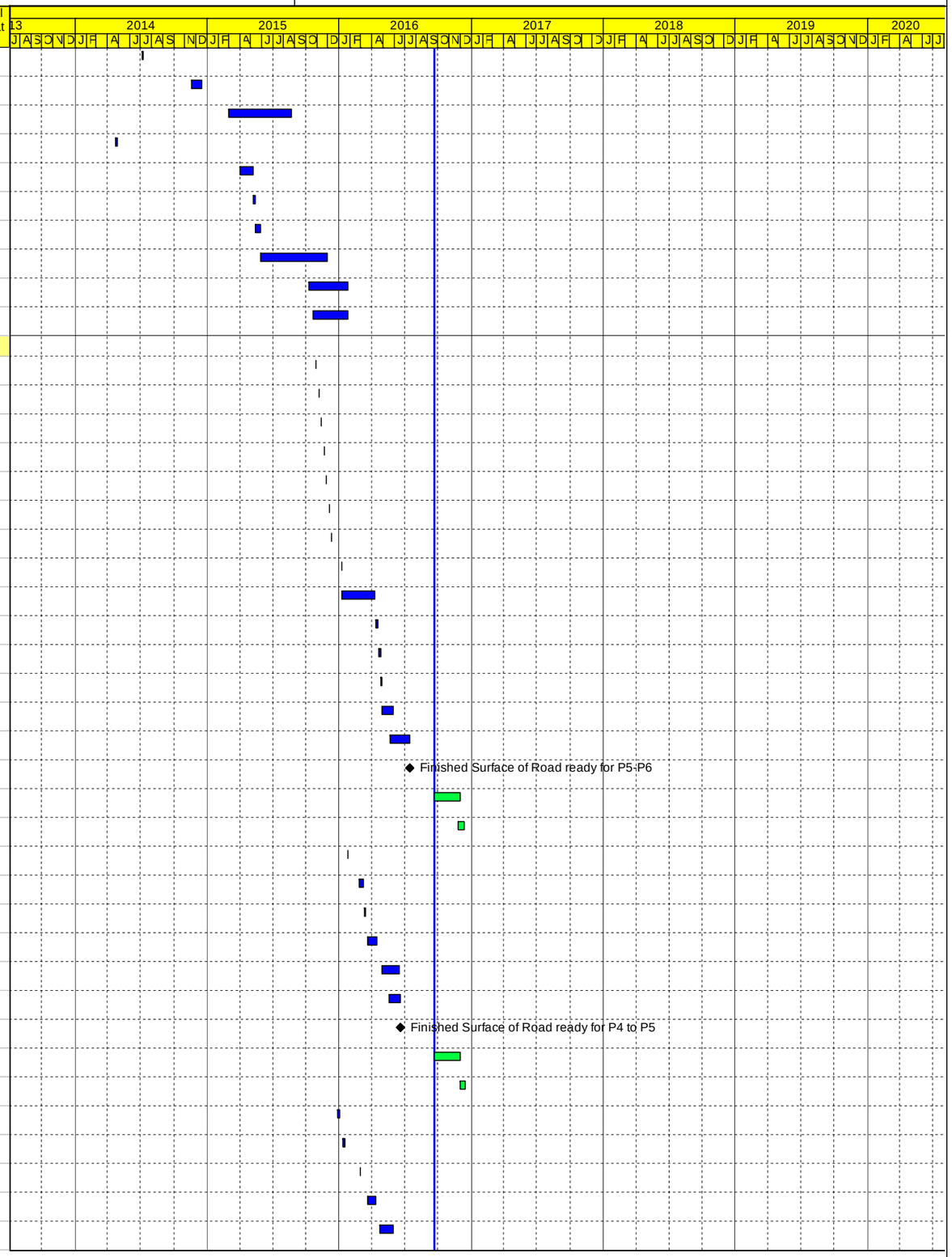
Contract No. HY/2012/06

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

Works Programme - WP Rev. 4

Date	Revision	Checked	Appro...
30-Jun-14	WP Rev 1A		
28-Aug-15	WP Rev 2		
07-Apr-16	WP Rev 3		
17-Oct-16	WP Rev 4		

Activity ID	Activity Name	Original Duration	Start	Finish	Late Start	Late Finish	Total Float
Z2.KLH.1016	Pier VBP2- Pre-drilling work	3	07-Jul-14 A	09-Jul-14 A			
Z2.KLH.1018	Pier VBP2- Pre-bored H-pile piling works (8 Nos.)	23	21-Nov-14 A	17-Dec-14 A			
Z2.KLH.1022	Pier VBP2- Pile caps, pier and pier head construction	143	03-Mar-15 A	24-Aug-15 A			
Z2.KLH.1030	Pier VBP3 - Pre-drilling work	4	24-Apr-14 A	28-Apr-14 A			
Z2.KLH.1040	Pier VBP3 -Pre-bored H-pile piling works (9 Nos.)	29	01-Apr-15 A	08-May-15 A			
Z2.KLH.1045	Pier VBP3 Pile test	5	09-May-15 A	14-May-15 A			
Z2.KLH.1047	Pending for Town gas diversion, due to VBP3 resizing VO	12	15-May-15 A	29-May-15 A			
Z2.KLH.1050	Pier VBP3 Pile caps, pier and pier head construction	153	30-May-15 A	30-Nov-15 A			
Z2.KLH.1120	Deck 1 - Bridge deck construction (West Abutment to VBP1)	90	10-Oct-15 A	27-Jan-16 A			
Z2.KLH.1125	Deck 1 - Bridge deck construction (VBP1 to VBP2)	82	20-Oct-15 A	27-Jan-16 A			
KLH Bridge - Deck 2							
KLH.3030	Beam Erection (P5 to P6)- D2c-7	1	31-Oct-15 A	31-Oct-15 A			
KLH.3040	Beam Erection (P5 to P6)- D2c-3	1	07-Nov-15 A	07-Nov-15 A			
KLH.3050	Beam Erection (P5 to P6)- D2c-8	1	14-Nov-15 A	14-Nov-15 A			
KLH.3060	Beam Erection (P5 to P6)- D2c-2	1	21-Nov-15 A	21-Nov-15 A			
KLH.3070	Beam Erection (P5 to P6)- D2c-9	1	28-Nov-15 A	28-Nov-15 A			
KLH.3080	Beam Erection (P5 to P6)- D2c-1	1	05-Dec-15 A	05-Dec-15 A			
KLH.3090	Beam Erection (P5 to P6)- D2c-10	1	12-Dec-15 A	12-Dec-15 A			
KLH.3100	2nd Edge Working Platform	1	09-Jan-16 A	09-Jan-16 A			
KLH.3110	Insitu concrete top slab (P5 to P6)	32	09-Jan-16 A	08-Apr-16 A			
KLH.3120	2nd Pre-Stressing of Beams (P5 to P6)	3	13-Apr-16 A	18-Apr-16 A			
KLH.3122	Diaphragm construction (steel fixing & formwork)	6	20-Apr-16 A	26-Apr-16 A			
KLH.3124	Diaphragm concreting	1	27-Apr-16 A	27-Apr-16 A			
KLH.3130	Precast Concrete Skin (P5 to P6)(14nos)	8	29-Apr-16 A	30-May-16 A			
KLH.3140	Parapet wall (P5 to P6)	30	23-May-16 A	16-Jul-16 A			
KLH.3150	Finished Surface of Road ready for P5-P6	0	16-Jul-16 A				
KLH.3160	Pedestrian walkway Roof & Parapet P5-P6	60	20-Sep-16	30-Nov-16	12-Oct-16	20-Dec-16	17
KLH.3170	Pedestrian walkway floor finishes P5-P6	14	26-Nov-16	12-Dec-16	16-Dec-16	04-Jan-17	17
KLH.3190	Beam Erections P4 to P5 (1-3nos)	1	26-Jan-16 A	26-Jan-16 A			
KLH.3200	Beam Erections P4 to P5 (4-10nos)	9	27-Feb-16 A	08-Mar-16 A			
KLH.3205	Edge Working Platform for P4 to P5	3	12-Mar-16 A	15-Mar-16 A			
KLH.3210	Insitu concrete top slab (P4 to P5)	18	21-Mar-16 A	14-Apr-16 A			
KLH.3230	Precast Concrete Skin (P4 to P5)(12nos)	5	30-Apr-16 A	17-Jun-16 A			
KLH.3240	Parapet wall (P4 to P5)	30	18-May-16 A	20-Jun-16 A			
KLH.3250	Finished Surface of Road ready for P4 to P5	0	20-Jun-16 A				
KLH.3260	Pedestrian walkway Roof & Parapet P4 to P5	60	20-Sep-16	30-Nov-16	06-Oct-16	15-Dec-16	13
KLH.3270	Pedestrian walkway floor finishes P4 to P5	14	01-Dec-16	16-Dec-16	16-Dec-16	04-Jan-17	13
KLH.3290	Beam Erections P3 to P4 (1-5nos)	6	28-Dec-15 A	04-Jan-16 A			
KLH.3300	Beam Erections P3 to P4 (5-10nos)	7	11-Jan-16 A	18-Jan-16 A			
KLH.3305	Edge Working Platform for P3 to P4	1	01-Mar-16 A	01-Mar-16 A			
KLH.3310	Insitu concrete top slab (P3 to P4)	15	21-Mar-16 A	11-Apr-16 A			
KLH.3330	Precast Concrete Skin (P3 to P4)(11nos)	7	23-Apr-16 A	31-May-16 A			



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

Project File:WP Rev 04

Layout: WP rev 4

Data Date:20-Sep-16

Page 28 of 44

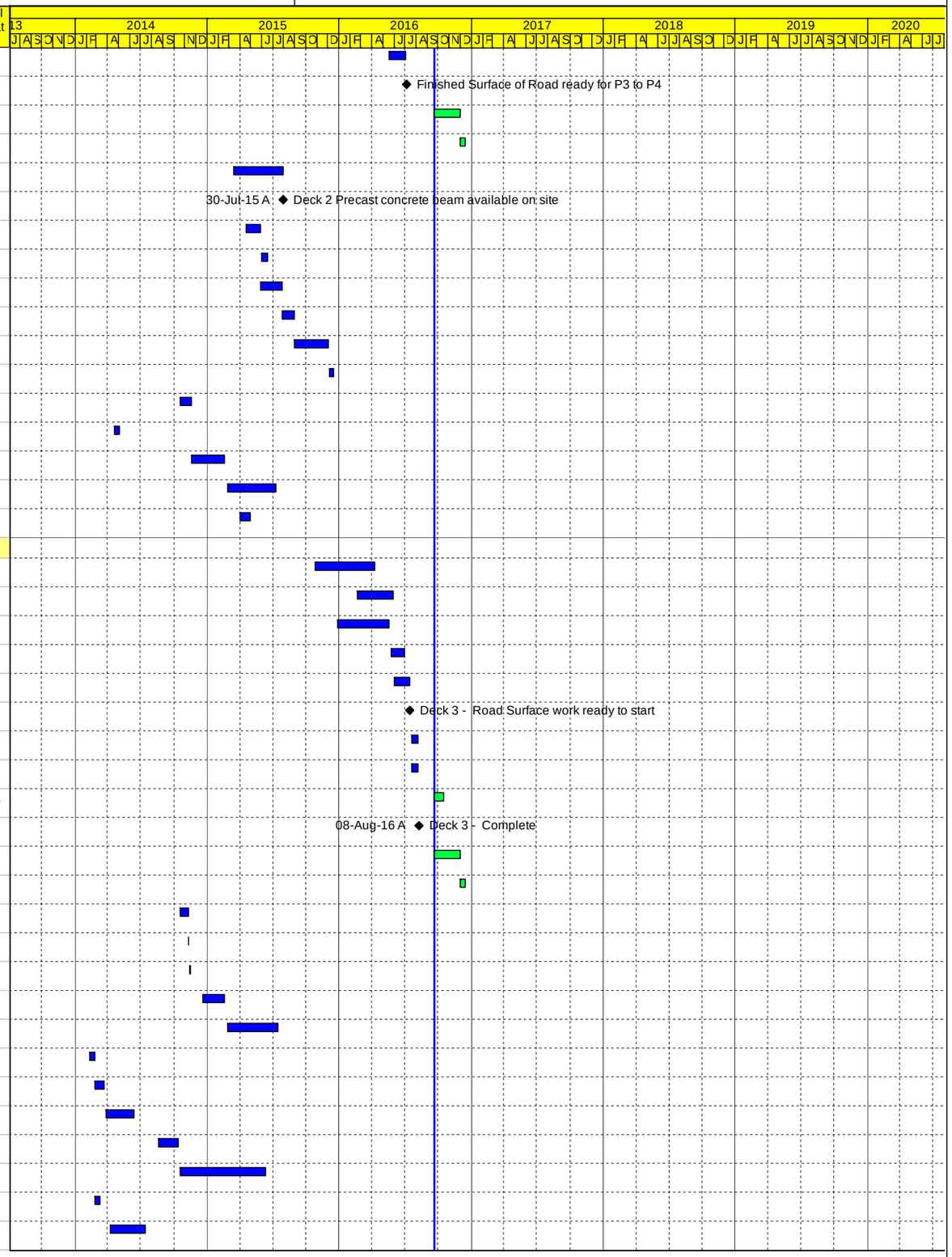
Contract No. HY/2012/06

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

Works Programme - WP Rev. 4

Date	Revision	Checked	Appro...
30-Jun-14	WP Rev 1A		
28-Aug-15	WP Rev 2		
07-Apr-16	WP Rev 3		
17-Oct-16	WP Rev 4		

Activity ID	Activity Name	Original Duration	Start	Finish	Late Start	Late Finish	Total Float
KLH.3340	Parapet wall (P3 to P4)	30	18-May-16 A	04-Jul-16 A			
KLH.3350	Finished Surface of Road ready for P3 to P4	0	05-Jul-16 A				
KLH.3360	Pedestrian walkway Roof & Parapet P3 to P4	60	20-Sep-16	30-Nov-16	06-Oct-16	15-Dec-16	13
KLH.3370	Pedestrian walkway floor finishes P3 to P4	14	01-Dec-16	16-Dec-16	16-Dec-16	04-Jan-17	13
Z2.KLH.1144	Deck 2 Precast concrete beam production (10 beams)	137	16-Mar-15 A	30-Jul-15 A			
Z2.KLH.1146	Deck 2 Precast concrete beam available on site	0		30-Jul-15 A			
Z2.KLH.1157	TTA for VBP4	34	20-Apr-15 A	30-May-15 A			
Z2.KLH.1158	VBP4-Pre-drilling work	15	01-Jun-15 A	17-Jun-15 A			
Z2.KLH.1159	Piling Rig Remobilisation Period due to TGC VO	48	30-May-15 A	27-Jul-15 A			
Z2.KLH.1160	VBP4- Pre-bored H-pile piling works (9 Nos.)	30	28-Jul-15 A	31-Aug-15 A			
Z2.KLH.1170	VBP4- Pile cap, pier & pier head construction	79	01-Sep-15 A	04-Dec-15 A			
Z2.KLH.1180	VBP4 - Backfilling & Road Work for TTA for VBP3	12	05-Dec-15 A	18-Dec-15 A			
Z2.KLH.1190	Temp road diversion at TWSR-W for TTA for VBP5 works	28	20-Oct-14 A	20-Nov-14 A			
Z2.KLH.1200	VBP5- Pre-drilling work	10	21-Apr-14 A	03-May-14 A			
Z2.KLH.1210	VBP5- Pre-bored H-pile piling works (12 Nos.)	75	20-Nov-14 A	18-Feb-15 A			
Z2.KLH.1220	VBP5- Pile cap, pier, pier head construction	109	27-Feb-15 A	11-Jul-15 A			
Z2.KLH.1255	Relocate MTRC OHL for deck construction	24	01-Apr-15 A	02-May-15 A			
KLH Bridge - Deck 3							
KLH.1370	Deck - East abutment to VBP8	127	28-Oct-15 A	09-Apr-16 A			
KLH.1380	Deck - VBP6 to VBP7	81	20-Feb-16 A	30-May-16 A			
KLH.1400	Deck - VBP7 to VBP8	103	28-Dec-15 A	18-May-16 A			
KLH.3450	Deck 3 - Parapet skin (61nos)	44	26-May-16 A	30-Jun-16 A			
KLH.3460	Deck 3 - Parapet Wall & Planter Wall	45	03-Jun-16 A	15-Jul-16 A			
KLH.3470	Deck 3 - Road Surface work ready to start	0	16-Jul-16 A				
KLH.3480	Deck 3 - barrier	21	20-Jul-16 A	06-Aug-16 A			
KLH.3490	Deck 3 - Lighting	21	20-Jul-16 A	06-Aug-16 A			
KLH.3500	Deck 3 - Planting	21	20-Sep-16	15-Oct-16	16-May-19	10-Jun-19	781
KLH.3510	Deck 3 - Complete	0		08-Aug-16 A			
KLH.3650	Pedestrian walkway Roof & Parapet P6 to P7	60	20-Sep-16	30-Nov-16	06-Oct-16	15-Dec-16	13
KLH.3660	Pedestrian walkway floor finishes P6 to P7	14	01-Dec-16	16-Dec-16	16-Dec-16	04-Jan-17	13
Z2.KLH.1325	Construct Temp Road - For diversion of existing TWR east	20	20-Oct-14 A	11-Nov-14 A			
Z2.KLH.1330	VBP6 - Diversion of TWSR east to temporary diversion work	0	12-Nov-14 A	12-Nov-14 A			
Z2.KLH.1340	VBP6 - Pre-drilling work	5	13-Nov-14 A	18-Nov-14 A			
Z2.KLH.1350	VBP6 - Pre-bored H-pile piling works (13 Nos.)	48	22-Dec-14 A	18-Feb-15 A			
Z2.KLH.1360	VBP6 - Pile cap, pier construction	115	26-Feb-15 A	18-Jul-15 A			
Z2.KLH.1780	East Abutment - Pre-drilling work	13	10-Feb-14 A	24-Feb-14 A			
Z2.KLH.1785	Relocation Lamp post by CLP	24	24-Feb-14 A	22-Mar-14 A			
Z2.KLH.1790	East Abutment - Pre-bored H-pile piling works (13 Nos.)	60	28-Mar-14 A	13-Jun-14 A			
Z2.KLH.1800	East Abutment - Pile testing	44	20-Aug-14 A	13-Oct-14 A			
Z2.KLH.1810	East Abutment - Pile caps, abutment wall construction	188	20-Oct-14 A	12-Jun-15 A			
Z2.KLH.1820	VBP7 - Pre-drilling work	13	25-Feb-14 A	11-Mar-14 A			
Z2.KLH.1830	VBP7 - Pre-bored H-pile piling works (7 Nos.)	77	09-Apr-14 A	15-Jul-14 A			



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

Project File:WP Rev 04
Layout: WP rev 4
Data Date:20-Sep-16
Page 29 of 44

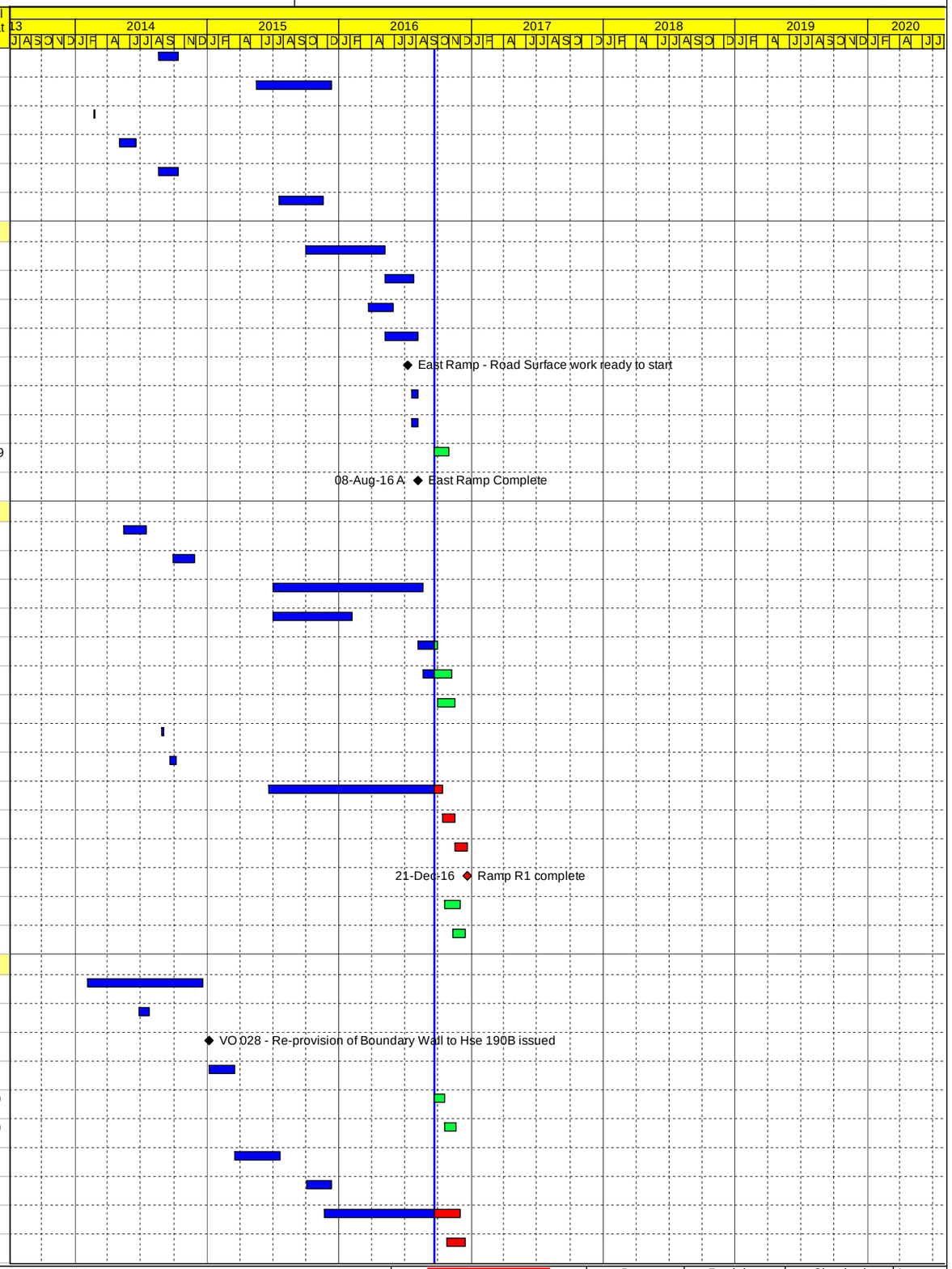
Contract No. HY/2012/06

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

Works Programme - WP Rev. 4

Date	Revision	Checked	Appro...
30-Jun-14	WP Rev 1A		
28-Aug-15	WP Rev 2		
07-Apr-16	WP Rev 3		
17-Oct-16	WP Rev 4		

Activity ID	Activity Name	Original Duration	Start	Finish	Late Start	Late Finish	Total Float
Z2.KLH.1840	VBP7- Pile testing	44	20-Aug-14 A	13-Oct-14 A			
Z2.KLH.1850	VBP7 - Pile caps, pier and pier head construction	174	18-May-15 A	12-Dec-15 A			
Z2.KLH.1860	VBP8 - Pre-drilling work	5	21-Feb-14 A	26-Feb-14 A			
Z2.KLH.1870	VBP8 - Pre-bored H-pile piling works (6 Nos.)	40	03-May-14 A	20-Jun-14 A			
Z2.KLH.1880	VBP8 - Pile testing	44	20-Aug-14 A	13-Oct-14 A			
Z2.KLH.1890	VBP8 - Pile caps, pier and pier head construction	103	20-Jul-15 A	19-Nov-15 A			
KLH Bridge - East Ramp							
KLH.3520	East Ramp Structure Work (5/8 remaining)	166	02-Oct-15 A	07-May-16 A			
KLH.3530	East Ramp - Backfilling & Drainage	60	09-May-16 A	26-Jul-16 A			
KLH.3540	East Ramp - Parapet skin (79nos)	54	23-Mar-16 A	30-May-16 A			
KLH.3550	East Ramp -Parapet Wall & Planter Wall	45	07-May-16 A	06-Aug-16 A			
KLH.3560	East Ramp - Road Surface work ready to start	0	08-Jul-16 A				
KLH.3570	East Ramp - barrier	21	20-Jul-16 A	08-Aug-16 A			
KLH.3580	East Ramp - Lighting	21	20-Jul-16 A	08-Aug-16 A			
KLH.3590	East Ramp - Planting	34	20-Sep-16	31-Oct-16	28-May-20	08-Jul-20	1089
KLH.3600	East Ramp Complete	0		08-Aug-16 A			
KLH Bridge - Ramp R1							
Z2.KLH.1430	Ramp R1 - Pre-drilling work (R1P1-P3)	52	15-May-14 A	16-Jul-14 A			
Z2.KLH.1440	Ramp R1 - Pre-bored H-pile piling works (R1P1-P3) (9 Nos.)	50	30-Sep-14 A	28-Nov-14 A			
Z2.KLH.1450	Ramp R1 - Pile caps and pier construction (R1P1)	254	02-Jul-15 A	20-Aug-16 A			
Z2.KLH.1660	Ramp R1 - Pile caps and pier construction (R1P2)	183	02-Jul-15 A	06-Feb-16 A			
Z2.KLH.1670	Ramp R1 - Pile caps and pier construction (R1P3)	31	08-Aug-16 A	28-Sep-16	06-Oct-16	15-Oct-16	13
Z2.KLH.1680	Ramp R1 - Ramp construction (Abutment R1 to R1P1)	16	20-Aug-16 A	07-Nov-16	16-Nov-16	04-Jan-17	47
Z2.KLH.1685	Ramp R1 - Ramp construction (R1P1 to P1P3)	40	29-Sep-16	16-Nov-16	17-Oct-16	01-Dec-16	13
Z2.KLH.1690	Ramp R1 - Abutment R1 - Predrilling	4	30-Aug-14 A	03-Sep-14 A			
Z2.KLH.1700	Ramp R1 - Abutment R1 - Pre-bored H-pile (8 nos)	13	20-Sep-14 A	07-Oct-14 A			
Z2.KLH.1710	Ramp R1 - Abutment R1 - base slab & wall	262	22-Jun-15 A	12-Oct-16	30-Sep-16	22-Oct-16	9
Z2.KLH.1720	Ramp R1 - Abutment R1 - Top slab	30	13-Oct-16	16-Nov-16	24-Oct-16	26-Nov-16	9
Z2.KLH.1730	Ramp R1 - Abutment R1 - Staircase	30	17-Nov-16	21-Dec-16	28-Nov-16	04-Jan-17	9
Z2.KLH.1740	Ramp R1 complete	0		21-Dec-16		04-Jan-17	9
Z2.KLH.3610	Ramp R1 - Steel roof	40	18-Oct-16	02-Dec-16	02-Nov-16	17-Dec-16	13
Z2.KLH.3620	Ramp R1 - finishes work	30	12-Nov-16	16-Dec-16	28-Nov-16	04-Jan-17	13
KLH Bridge - Ramp R2							
Z2.KLH.1510	Ramp R2 - Pre-drilling work	259	06-Feb-14 A	20-Dec-14 A			
Z2.KLH.1520	Ramp R2 - Pre-bored H-pile piling works (9 Nos.) - R2P1-3	25	27-Jun-14 A	26-Jul-14 A			
Z2.KLH.1521	VO 028 - Re-provision of Boundary Wall to Hse 190B issued	0	08-Jan-15 A				
Z2.KLH.1522	VO 028 - Design Information available	55	08-Jan-15 A	20-Mar-15 A			
Z2.KLH.1523	VO 028 - Boundary Wall to Hse 190B structure	24	20-Sep-16*	19-Oct-16	28-Feb-19	27-Mar-19	720
Z2.KLH.1524	VO 028 - Boundary Wall to Hse 190B E&M, Drainage	26	20-Oct-16	18-Nov-16	28-Mar-19	02-May-19	720
Z2.KLH.1525	Ramp R2 - mini piling (0.32m-30nos) works - R2P4-5 & R2 Abutment - rig 3 new	101	19-Mar-15 A	22-Jul-15 A			
Z2.KLH.1526	Ramp R2 - Abutment cap & P2P1 cap	60	03-Oct-15 A	12-Dec-15 A			
Z2.KLH.1530	Ramp R2 - Pile cap, abutment and pier construction	147	20-Nov-15 A	30-Nov-16	20-Sep-16	30-Nov-16	0
Z2.KLH.1540	Ramp R2 - Ramp construction	45	24-Oct-16	14-Dec-16	24-Oct-16	14-Dec-16	0



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

Project File:WP Rev 04

Layout: WP rev 4

Data Date:20-Sep-16

Page 30 of 44

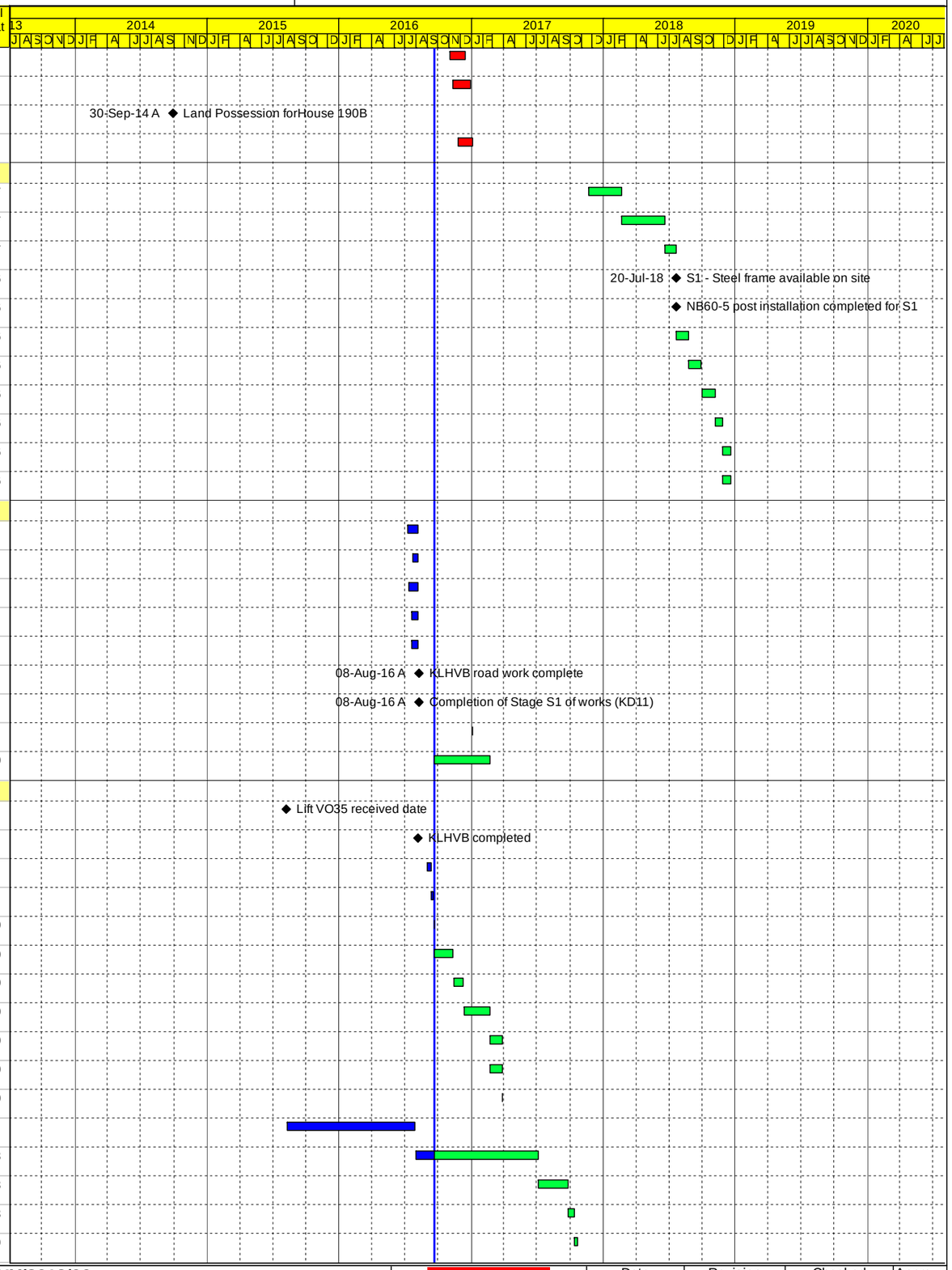
Contract No. HY/2012/06

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

Works Programme - WP Rev. 4

Date	Revision	Checked	Appro...
30-Jun-14	WP Rev 1A		
28-Aug-15	WP Rev 2		
07-Apr-16	WP Rev 3		
17-Oct-16	WP Rev 4		

Activity ID	Activity Name	Original Duration	Start	Finish	Late Start	Late Finish	Total Float
Z2.KLH.1545	Ramp R2 - Ramp construction (section after VBP6-7 deck)	35	04-Nov-16	14-Dec-16	11-Nov-16	21-Dec-16	6
Z2.KLH.1550	Ramp R2 - Steel roof	40	12-Nov-16	30-Dec-16	19-Nov-16	07-Jan-17	6
Z2.KLH.1590	Land Possession forHouse 190B	0		30-Sep-14 A			
Z2.KLH.1920	Ramp R2 - finishes work	30	26-Nov-16	03-Jan-17	26-Nov-16	03-Jan-17	0
KLH Bridge - Staircase S1							
Z2.KLH.1460	S1 - Staircase steel work, handrail Shop drawing submission & approval	90	23-Nov-17	20-Feb-18	29-Mar-18	27-Jun-18	127
Z2.KLH.1462	S1 - Steel work ordering	120	21-Feb-18	20-Jun-18	27-Jun-18	25-Oct-18	127
Z2.KLH.1464	S1 - Steel work prefabrication	30	21-Jun-18	20-Jul-18	25-Oct-18	24-Nov-18	127
Z2.KLH.1466	S1 - Steel frame available on site	0		20-Jul-18		24-Nov-18	106
Z2.KLH.1470	NB60-5 post installation completed for S1	0	21-Jul-18		26-Nov-18		106
Z2.KLH.1480	S1- Deck Steel Frame erection	30	21-Jul-18	24-Aug-18	26-Nov-18	02-Jan-19	106
Z2.KLH.1490	S1- RC deck slab	30	25-Aug-18	29-Sep-18	03-Jan-19	08-Feb-19	106
Z2.KLH.1500	S1 - Roof steel frame installation	30	02-Oct-18	06-Nov-18	09-Feb-19	15-Mar-19	106
Z2.KLH.1750	S1 - Corrugated steel roof	18	07-Nov-18	27-Nov-18	16-Mar-19	06-Apr-19	106
Z2.KLH.1760	S1 - Handrail	18	28-Nov-18	18-Dec-18	08-Apr-19	02-May-19	106
Z2.KLH.1770	S1 - Lighting & finishes works	18	28-Nov-18	18-Dec-18	08-Apr-19	02-May-19	106
Bridge Road Work							
Z2.KLH.1930	Road Pavement Works (East Ramp)	26	08-Jul-16 A	06-Aug-16 A			
Z2.KLH.1940	Road Pavement Works (Deck 1)	26	23-Jul-16 A	08-Aug-16 A			
Z2.KLH.1950	Road Pavement Works (Deck 2)	26	13-Jul-16 A	08-Aug-16 A			
Z2.KLH.1960	Road Pavement Works (Deck 3)	21	20-Jul-16 A	08-Aug-16 A			
Z2.KLH.1970	Road Pavement Works (West Ramp)	26	20-Jul-16 A	08-Aug-16 A			
Z2.KLH.1980	KLHVB road work complete	0		08-Aug-16 A			
Z2.KLH.2020	Completion of Stage S1 of works (KD11)	0		08-Aug-16 A			
Z2.KLH.2030	Diversion of existing pedestrian to proposed Kiu Lung Hang Vehicular bridge	1	04-Jan-17	04-Jan-17	04-Jan-17	04-Jan-17	0
Z2.KLH.2040	Landscape work of KLHVB	120	20-Sep-16	20-Feb-17	03-Dec-18	02-May-19	650
Lift at TWSR-W Side							
L00900	Lift VO35 received date	0	07-Aug-15 A				
L01000	KLHVB completed	0	08-Aug-16 A				
L01015	Pre-bored H Piling Rig mobilisation & set up period	10	01-Sep-16 A	12-Sep-16 A			
L01020	KLH (W) lift -Pre-bored H pile (4 nos)	16	13-Sep-16 A	19-Sep-16 A			
L01030	Pile test (As Confirmed by ER, No pile test is required)	0	20-Sep-16	20-Sep-16	11-Jul-18	11-Jul-18	530
L01040	Temp work & Pile cap	45	20-Sep-16	12-Nov-16	12-Jul-18	01-Sep-18	530
L01050	Lift pit	24	14-Nov-16	10-Dec-16	03-Sep-18	02-Oct-18	530
L01060	Lift shaft & roof	52	12-Dec-16	21-Feb-17	03-Oct-18	03-Dec-18	530
L01070	Structural Laminated glass wall installation	30	22-Feb-17	28-Mar-17	04-Dec-18	10-Jan-19	530
L01080	RC Platform connect to bridge	30	22-Feb-17	28-Mar-17	04-Dec-18	10-Jan-19	530
L01090	Glass canopy (As Confirmed by ER, No glass canopy is required)	0	29-Mar-17	29-Mar-17	10-Jan-19	10-Jan-19	530
L01093	Lift contractor sub-letting	220	10-Aug-15 A	30-Jul-16 A			
L01094	Lift submission & ordering period	270	01-Aug-16 A	05-Jul-17	09-Apr-18	10-Jan-19	453
L01100	Lift installation	70	06-Jul-17	25-Sep-17	11-Jan-19	04-Apr-19	453
L01110	Lift T&C	14	26-Sep-17	13-Oct-17	06-Apr-19	25-Apr-19	453
L01120	EMSD inspection & approval (Assume 7 days is required instead of 28 days)	7	14-Oct-17	20-Oct-17	26-Apr-19	02-May-19	559



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

Project File:WP Rev 04

Layout: WP rev 4

Data Date:20-Sep-16

Page 31 of 44

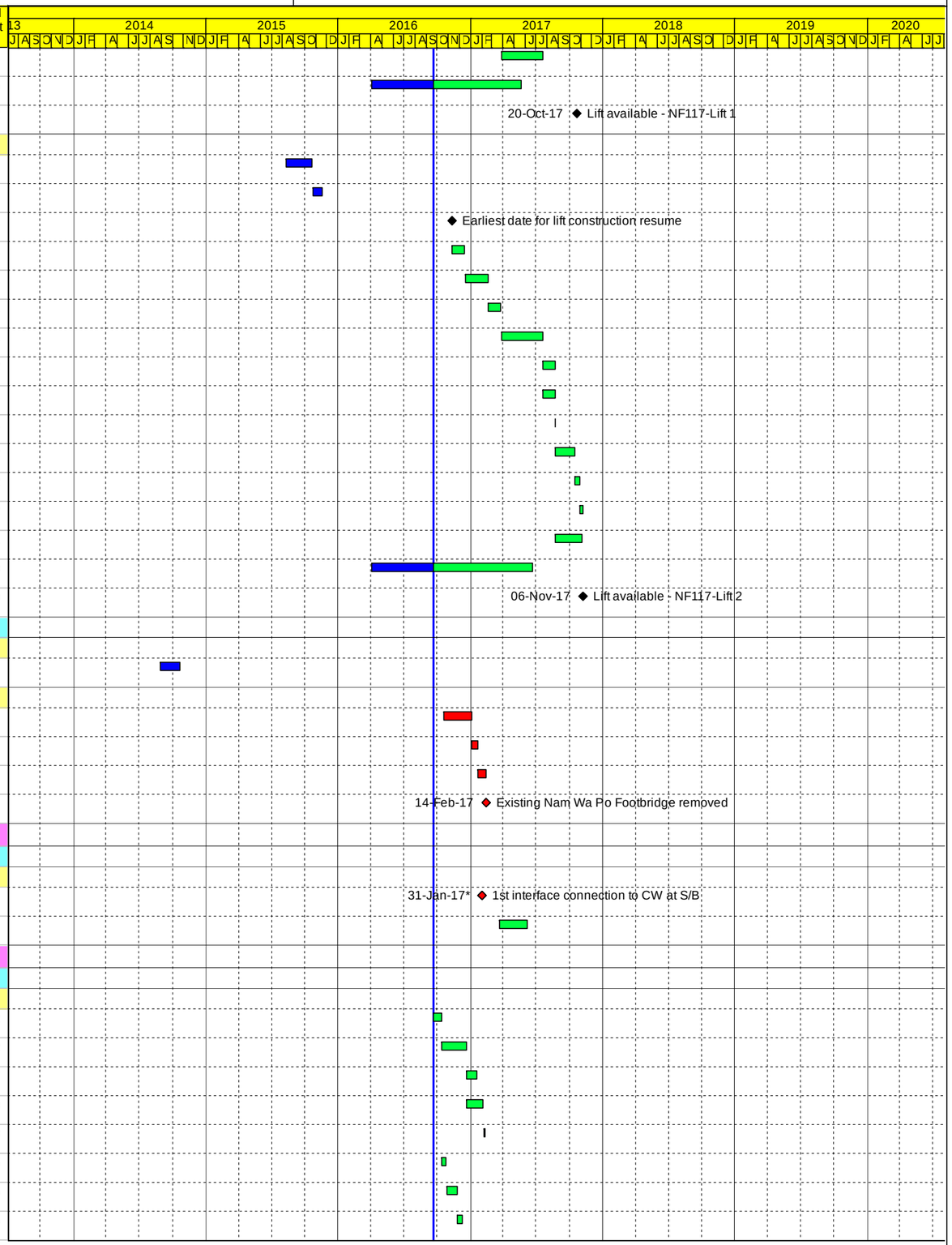
Contract No. HY/2012/06

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

Works Programme - WP Rev. 4

Date	Revision	Checked	Appro...
30-Jun-14	WP Rev 1A		
28-Aug-15	WP Rev 2		
07-Apr-16	WP Rev 3		
17-Oct-16	WP Rev 4		

Activity ID	Activity Name	Original Duration	Start	Finish	Late Start	Late Finish	Total Float
L01130	Finishes work	88	29-Mar-17	18-Jul-17	12-Jan-19	02-May-19	531
L01140	CLP Power available (by CLP)	381	04-Apr-16 A	20-May-17	06-Aug-18	05-Apr-19	685
L01150	Lift available - NF117-Lift 1	0		20-Oct-17		02-May-19	452
Lift at FLHY S/B							
L01160	Piling Rig mobilisation & set up period	61	10-Aug-15 A	22-Oct-15 A			
L01170	KLH (E) lift - pile (9 nos)	25	23-Oct-15 A	20-Nov-15 A			
L01180	Earliest date for lift construction resume	0	12-Nov-16		17-May-18		441
L01190	Set up & Pile test	30	12-Nov-16	16-Dec-16	17-May-18	22-Jun-18	441
L01200	Temp work & Pier cap	45	17-Dec-16	18-Feb-17	23-Jun-18	15-Aug-18	441
L01210	Lift pit	30	20-Feb-17	25-Mar-17	16-Aug-18	19-Sep-18	441
L01220	Lift shaft & roof	90	27-Mar-17	18-Jul-17	20-Sep-18	09-Jan-19	441
L01230	Structural Laminated glass wall installation	30	19-Jul-17	22-Aug-17	11-Jan-19	16-Feb-19	442
L01240	RC Platform connect to bridge	30	19-Jul-17	22-Aug-17	10-Jan-19	15-Feb-19	441
L01250	Glass canopy (As Confirmed by ER, No glass canopy is required)	0	23-Aug-17	23-Aug-17	15-Feb-19	15-Feb-19	441
L01260	Lift installation	45	23-Aug-17	16-Oct-17	18-Feb-19	11-Apr-19	442
L01270	Lift T&C	14	17-Oct-17	30-Oct-17	12-Apr-19	25-Apr-19	542
L01280	EMSD inspection & approval (Assume 7 days is required instead of 28 days)	7	31-Oct-17	06-Nov-17	26-Apr-19	02-May-19	542
L01290	Finishes work	60	23-Aug-17	03-Nov-17	16-Feb-19	02-May-19	441
L01300	CLP Power available (by CLP)	365	04-Apr-16 A	20-Jun-17	12-Jul-18	11-Apr-19	660
L01310	Lift available - NF117-Lift 2	0		06-Nov-17		02-May-19	439
Demolition of Existing Nam Wa Po Footbridge							
General							
Z2.NWP.0500	Site Clearance	44	29-Aug-14 A	22-Oct-14 A			
Demolition Work							
Z2.NWP.1060	Temporary support installation at existing Fanling Highway	65	18-Oct-16	04-Jan-17	18-Oct-16	04-Jan-17	0
Z2.NWP.1070	Removal of existing bridge deck and pier at verge area	14	05-Jan-17	20-Jan-17	05-Jan-17	20-Jan-17	0
Z2.NWP.1080	Removal of existing bridge deck and Temporary support	14	21-Jan-17	14-Feb-17	21-Jan-17	14-Feb-17	0
Z2.NWP.1090	Existing Nam Wa Po Footbridge removed	0		14-Feb-17		14-Feb-17	0
TWSR-West Construction							
Drainage & Road Works							
General							
CW01	1st interface connection to CW at S/B	0		31-Jan-17*		31-Jan-17	0
RDZ20130	Z2: S3: Connection of realigned TWSR-W at interface Zone 2 & 3	60	22-Mar-17	07-Jun-17	26-Jun-17	04-Sep-17	75
Noise Barrier Along Fanling Highway S/B							
NB62 (Ch.6745-6910)-FH S/B Side (MTRC I&P Area)							
Noise Barrier Works							
NB03080	NB62 (0-80m) - Sheet piling & Excavation	18	20-Sep-16	12-Oct-16	05-Dec-18	27-Dec-18	652
NB03090	NB62 (0-80m) - Footing & Wall Structure	60	13-Oct-16	21-Dec-16	28-Dec-18	11-Mar-19	652
NB03100	NB62 (0-80m) - backfilling	20	22-Dec-16	17-Jan-17	29-Mar-19	25-Apr-19	667
NB03110	NB62 (0-80m) - NB production	45	22-Dec-16	04-Feb-17	12-Mar-19	25-Apr-19	810
NB03120	NB62 (0-80m) - NB post & panel installation	5	06-Feb-17	10-Feb-17	26-Apr-19	02-May-19	658
NB03130	NB62 (80-110m) Under bridge - Sheet piling & Excavation	12	13-Oct-16	26-Oct-16	25-Jan-19	09-Feb-19	675
NB03140	NB62 (80-110m) Under bridge - Footing & Wall Structure	25	27-Oct-16	24-Nov-16	11-Feb-19	11-Mar-19	675
NB03150	NB62 (80-110m) Under bridge - backfilling	14	25-Nov-16	10-Dec-16	06-Apr-19	25-Apr-19	696



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

Project File:WP Rev 04
Layout: WP rev 4
Data Date:20-Sep-16
Page 32 of 44

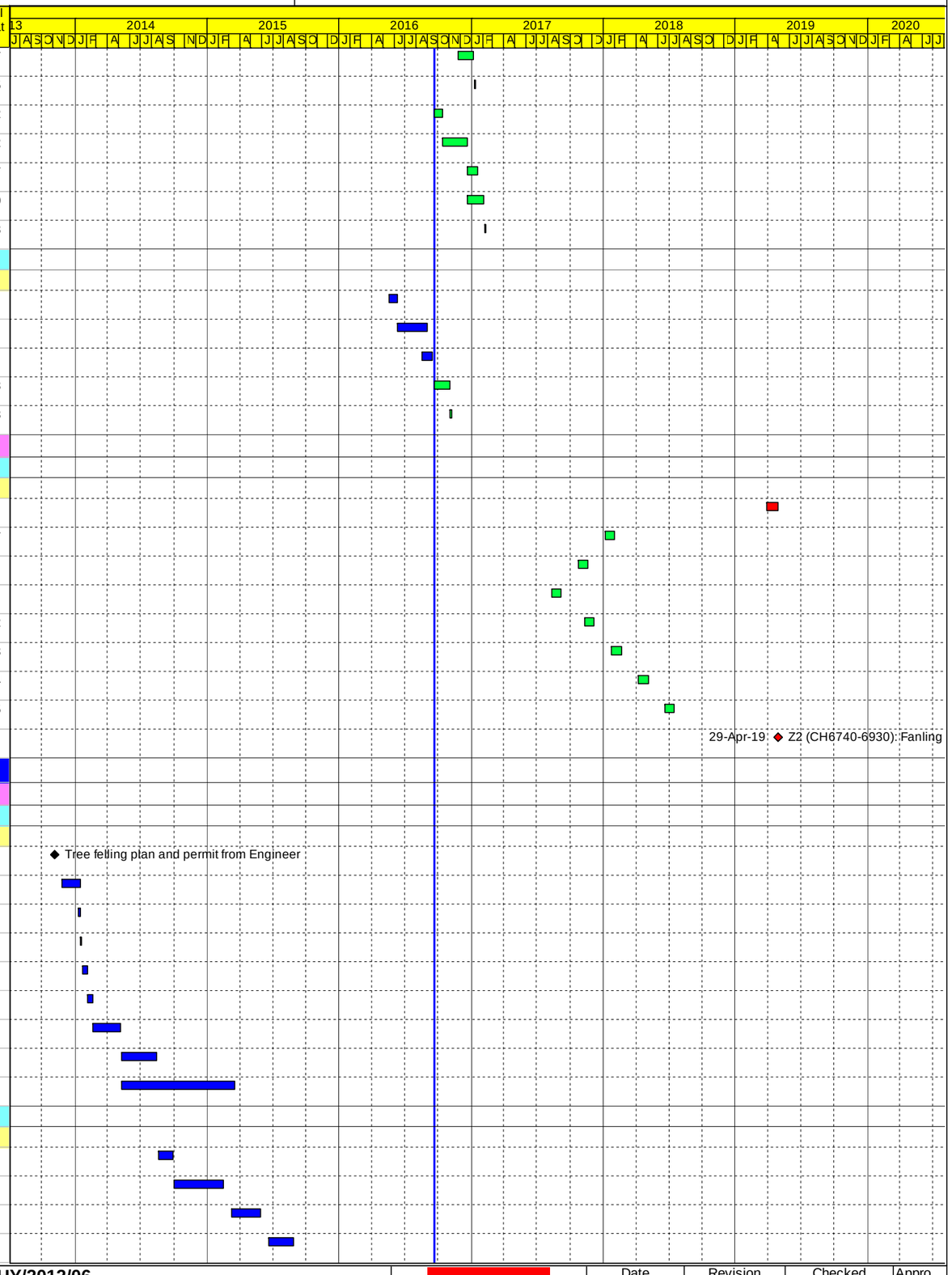
Contract No. HY/2012/06

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

Works Programme - WP Rev. 4

Date	Revision	Checked	Appro...
30-Jun-14	WP Rev 1A		
28-Aug-15	WP Rev 2		
07-Apr-16	WP Rev 3		
17-Oct-16	WP Rev 4		

Activity ID	Activity Name	Original Duration	Start	Finish	Late Start	Late Finish	Total Float
NB03160	NB62 (80-110m) Under bridge - NB production	45	25-Nov-16	08-Jan-17	12-Mar-19	25-Apr-19	837
NB03170	NB62 (80-110m) Under bridge - NB post & panel installation	5	09-Jan-17	13-Jan-17	26-Apr-19	02-May-19	675
NB03180	NB62 (110-170m) - Sheet piling & Excavation	18	20-Sep-16	12-Oct-16	05-Dec-18	27-Dec-18	652
NB03190	NB62 (110-170m) - Footing & Wall Structure	60	13-Oct-16	21-Dec-16	28-Dec-18	11-Mar-19	652
NB03200	NB62 (110-170m) - backfilling	20	22-Dec-16	17-Jan-17	29-Mar-19	25-Apr-19	667
NB03210	NB62 (110-170m) - NB production	45	22-Dec-16	04-Feb-17	12-Mar-19	25-Apr-19	810
NB03220	NB62 (110-170m) - NB post & panel installation	5	06-Feb-17	10-Feb-17	26-Apr-19	02-May-19	658
NB70 (Ch.6910-6930)-FH S/B Side							
Noise Barrier Works							
NB03250	NB70 - Sheet piling & Excavation	18	20-May-16 A	10-Jun-16 A			
NB03260	NB70 - Footing & Wall Structure	26	11-Jun-16 A	31-Aug-16 A			
NB03270	NB70- backfilling	12	19-Aug-16 A	15-Sep-16 A			
NB03280	NB70 - NB production	45	20-Sep-16	03-Nov-16	12-Mar-19	25-Apr-19	903
NB03290	NB70- NB post & panel installation	5	04-Nov-16	09-Nov-16	26-Apr-19	02-May-19	728
Fanling Highway Construction							
Drainage & Road Works							
Ch 6740-6930							
RDZ20440	Z2 (CH6740-6930) : Fanling Highway N/B - D&R works (lane 1) (Modify to final road level)	24	28-Mar-19	29-Apr-19	30-Mar-19	02-May-19	2
RDZ20450	Z2 (CH6740-6930) : Fanling Highway N/B - D&R works (lane 2) (Modify to final road level)	24	05-Jan-18	01-Feb-18	30-Mar-19	02-May-19	367
RDZ20460	Z2 (CH6740-6930): Fanling Highway N/B - D&R works (lane 3)	24	23-Oct-17	20-Nov-17	11-Nov-17	08-Dec-17	16
RDZ20470	Z2 (CH6740-6930) : Fanling Highway N/B - D&R works (lane 4)	24	11-Aug-17	07-Sep-17	11-Nov-17	08-Dec-17	76
RDZ20490	Z2 (CH6740-6930) : Fanling Highway S/B - D&R works (lane 4)	24	10-Nov-17	07-Dec-17	30-Mar-19	02-May-19	412
RDZ20500	Z2 (CH6740-6930) : Fanling Highway S/B - D&R works (lane 3)	24	22-Jan-18	20-Feb-18	30-Mar-19	02-May-19	353
RDZ20510	Z2 (CH6740-6930): Fanling Highway S/B - D&R works (lane 2)	24	07-Apr-18	05-May-18	30-Mar-19	02-May-19	294
RDZ20520	Z2 (CH6740-6930) : Fanling Highway S/B - D&R works (lane 1)	24	19-Jun-18	17-Jul-18	30-Mar-19	02-May-19	235
RDZ20530	Z2 (CH6740-6930): Fanling Highway Road works (8 lanes) complete	0		29-Apr-19		02-May-19	2
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	06-Nov-13 A				
Z4SF1010	Tree felling	42	27-Nov-13 A	17-Jan-14 A			
Z4SF1020	Install temp filter dam at existing box culvert	4	11-Jan-14 A	15-Jan-14 A			
Z4SF1030	Laying temp drainage pipe for drainage diversion	3	16-Jan-14 A	18-Jan-14 A			
Z4SF1040	Construct earth bund	9	21-Jan-14 A	04-Feb-14 A			
Z4SF1050	Remove existing unsutiable material	10	06-Feb-14 A	20-Feb-14 A			
Z4SF1060	Backfilling up to formation level for Drainage work	59	20-Feb-14 A	06-May-14 A			
Z4SF1065	Drainage Work	82	10-May-14 A	15-Aug-14 A			
Z4SF1070	Backfilling (~20000m3)	254	10-May-14 A	19-Mar-15 A			
Retaining Wall W76							
Structure Works							
RW761080	Base slab - W76 (~7m high)	35	20-Aug-14 A	30-Sep-14 A			
RW761085	Wall construction - W76 (~7m high)	113	03-Oct-14 A	14-Feb-15 A			
Z4SF1090	Watermains installation	65	10-Mar-15 A	29-May-15 A			
Z4SF1110	Backfilling up to road finishes level	58	22-Jun-15 A	28-Aug-15 A			



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

Project File:WP Rev 04
Layout: WP rev 4
Data Date:20-Sep-16
Page 33 of 44

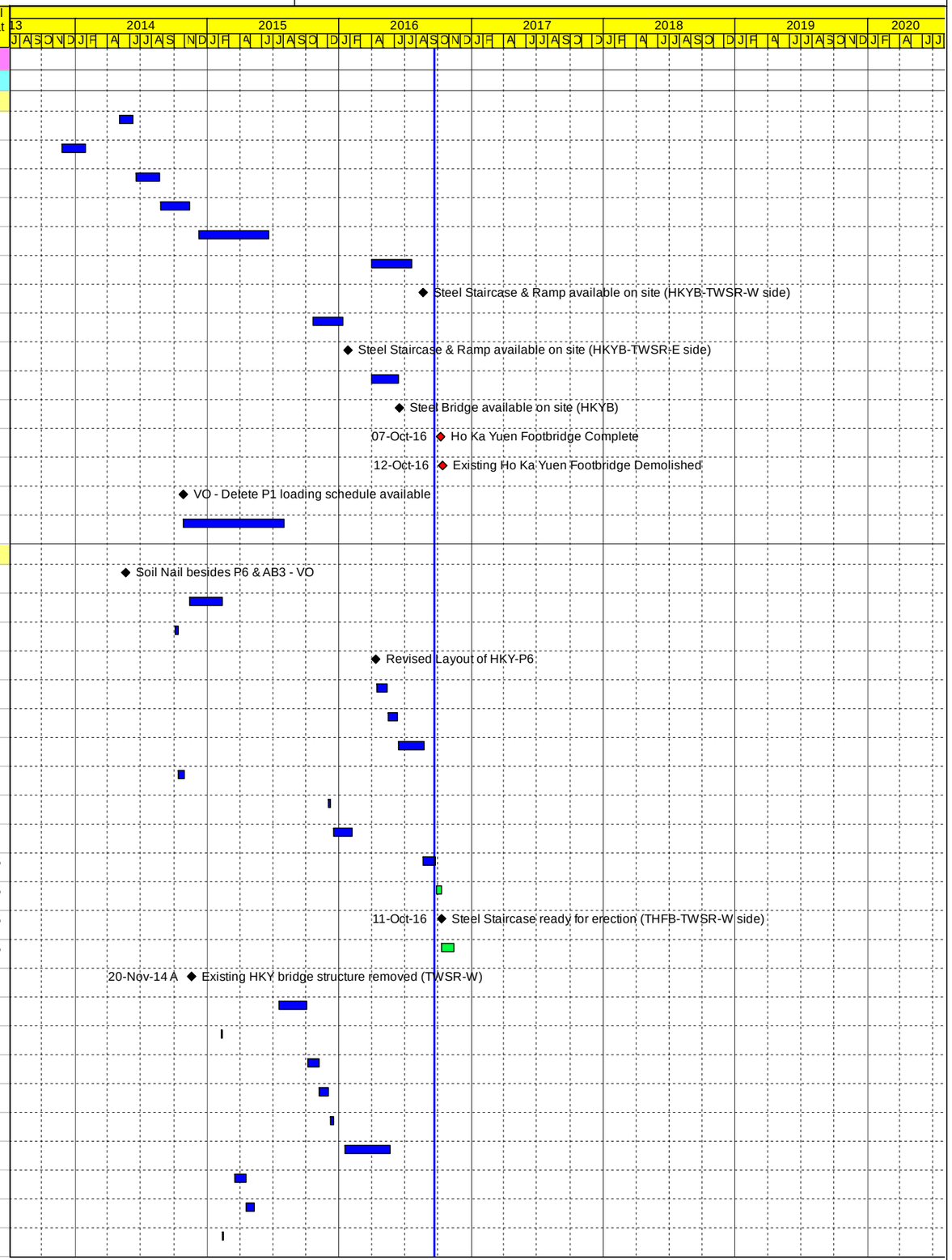
Contract No. HY/2012/06

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

Works Programme - WP Rev. 4

Date	Revision	Checked	Appro...
30-Jun-14	WP Rev 1A		
28-Aug-15	WP Rev 2		
07-Apr-16	WP Rev 3		
17-Oct-16	WP Rev 4		

Activity ID	Activity Name	Original Duration	Start	Finish	Late Start	Late Finish	Total Float
Bridge Construction							
New Ho Ka Yuen Footbridge							
General							
HKY1020	Site Clearance (TWSR-W side)	30	05-May-14 A	10-Jun-14 A			
HKY1025	Site Clearance (TWSR-E side)(SA346)	53	27-Nov-13 A	30-Jan-14 A			
HKY1030	Structure steel Shop drawing submission (HKYB)	54	20-Jun-14 A	22-Aug-14 A			
HKY1040	Structure steel Shop drawing approval (HKYB)	67	25-Aug-14 A	13-Nov-14 A			
HKY1050	Structure steel procurement (HKYB)	195	10-Dec-14 A	22-Jun-15 A			
HKY1060	Steel Staircase & Ramp prefabrication (HKYB-TWSR-W side)	45	01-Apr-16 A	20-Jul-16 A			
HKY1070	Steel Staircase & Ramp available on site (HKYB-TWSR-W side)	0	22-Aug-16 A				
HKY1080	Steel Staircase & Ramp prefabrication (HKYB-TWSR-E side)	69	21-Oct-15 A	13-Jan-16 A			
HKY1090	Steel Staircase & Ramp available on site (HKYB-TWSR-E side)	0	27-Jan-16 A				
HKY1100	Steel Bridge prefabrication (HKYB)	60	01-Apr-16 A	14-Jun-16 A			
HKY1110	Steel Bridge available on site (HKYB)	0	15-Jun-16 A				
HKY1180	Ho Ka Yuen Footbridge Complete	0		07-Oct-16		08-Oct-16	1
HKY1190	Existing Ho Ka Yuen Footbridge Demolished	0		12-Oct-16		13-Oct-16	1
HKY1200	VO - Delete P1 loading schedule available	0	28-Oct-14 A				
HKY1210	HKY footbridge design available for FLHY & TWSR-W section	223	28-Oct-14 A	03-Aug-15 A			
TWSR-West/ FL Highway N/B Side Section							
HKY1130	Soil Nail besides P6 & AB3 - VO	0	22-May-14 A				
HKY1135	Soil Nail Works	76	15-Nov-14 A	14-Feb-15 A			
HKY1140	HKYP6 - Predrilling	9	06-Oct-14 A	15-Oct-14 A			
HKY1160	Revised Layout of HKY-P6	0	13-Apr-16 A				
HKY1162	Mobilisation, backfill & remove completed ELS & Redesign ELS	25	14-Apr-16 A	13-May-16 A			
HKY1164	HKYP6 - additional rock breaking	23	16-May-16 A	11-Jun-16 A			
HKY1170	HKYP6 - Pile cap, Pier and Pier Head	60	13-Jun-16 A	22-Aug-16 A			
HKY1220	HKYAB3 - Predrilling	15	15-Oct-14 A	31-Oct-14 A			
HKY1230	HKYAB3 - Pre-bored H pile (6 nos) - VO40	6	03-Dec-15 A	09-Dec-15 A			
HKY1240	HKYAB3 - Pile Test	43	16-Dec-15 A	06-Feb-16 A			
HKY1250	HKYAB3 - pile cap & abutment wall	30	20-Aug-16 A	24-Sep-16	11-Apr-19	16-Apr-19	755
HKY1260	HKYAB3 - Backfilling (~4m)	12	26-Sep-16	11-Oct-16	17-Apr-19	04-May-19	755
HKY1270	Steel Staircase ready for erection (THFB-TWSR-W side)	0		11-Oct-16		04-May-19	755
HKY1273	Erect Stairecase (HKY-TWSR-W side)	30	12-Oct-16	15-Nov-16	06-May-19	10-Jun-19	755
HKY1275	Existing HKY bridge structure removed (TWSR-W)	0		20-Nov-14 A			
HKY1278	HKYP7 - ELS & Remove existing structure	64	20-Jul-15 A	03-Oct-15 A			
HKY1280	HKYP7 - Predrilling	5	10-Feb-15 A	14-Feb-15 A			
HKY1288	TMLG additional stop work period	26	08-Oct-15 A	07-Nov-15 A			
HKY1289	Additional re-set up works after stop work period	21	08-Nov-15 A	02-Dec-15 A			
HKY1290	HKYP7 - Pre-bored H pile (6 nos)	6	10-Dec-15 A	16-Dec-15 A			
HKY1310	HKYP7 - Pile cap, Pier and Pier Head	101	18-Jan-16 A	20-May-16 A			
HKY1314	TTA Closure for Ching Ming Festival	32	20-Mar-15 A	20-Apr-15 A			
HKY1315	Sheet piling for HKYAB4	18	20-Apr-15 A	11-May-15 A			
HKY1320	HKYAB4 - Predrilling	3	14-Feb-15 A	17-Feb-15 A			



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

Project File:WP Rev 04
Layout: WP rev 4
Data Date:20-Sep-16
Page 34 of 44

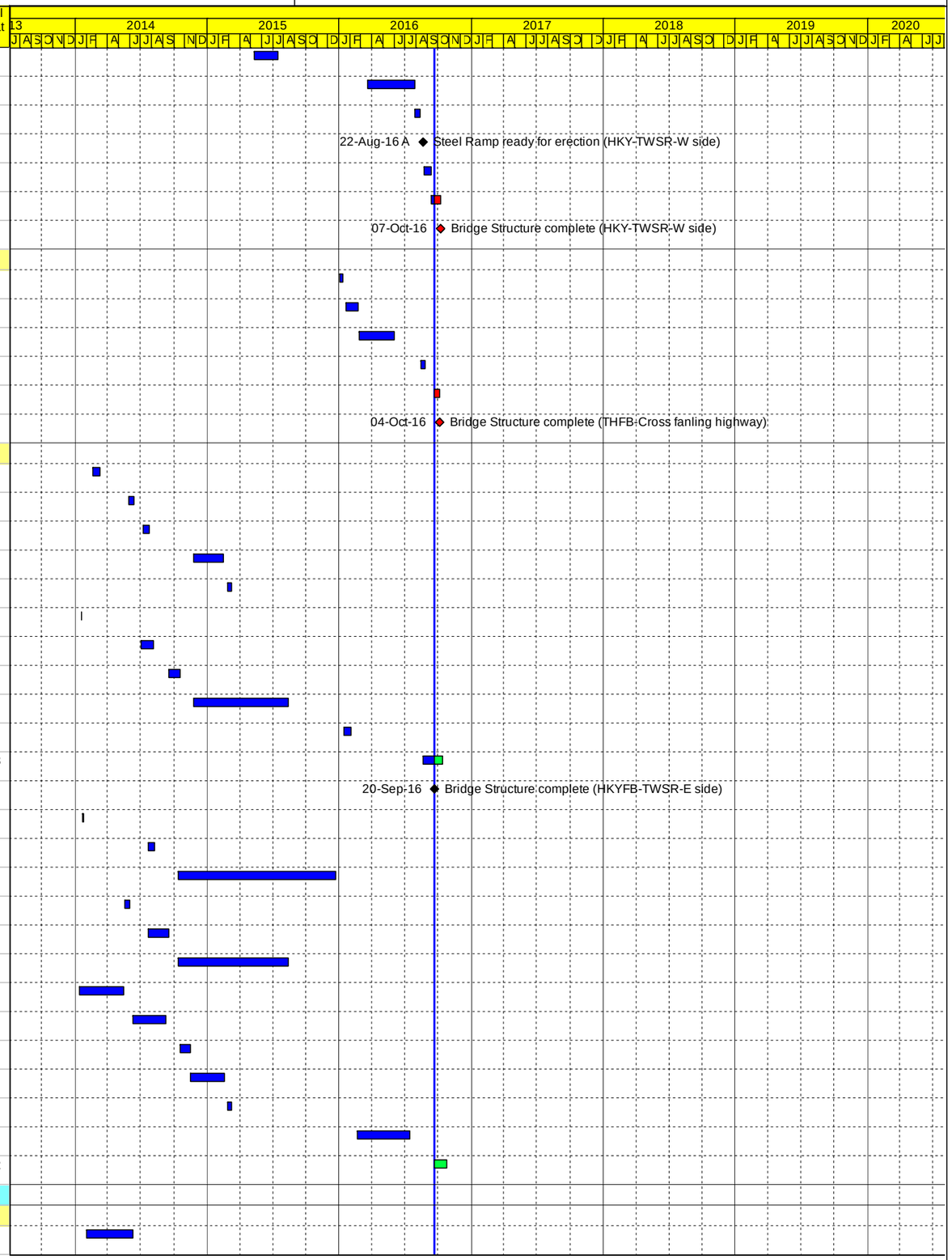
Contract No. HY/2012/06

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

Works Programme - WP Rev. 4

Date	Revision	Checked	Appro...
30-Jun-14	WP Rev 1A		
28-Aug-15	WP Rev 2		
07-Apr-16	WP Rev 3		
17-Oct-16	WP Rev 4		

Activity ID	Activity Name	Original Duration	Start	Finish	Late Start	Late Finish	Total Float
HKY1330	HKYAB4 - Pre-bored H pile (16 nos)	55	12-May-15 A	17-Jul-15 A			
HKY1350	HKYAB4 - pile cap & abutment wall	55	21-Mar-16 A	28-Jul-16 A			
HKY1360	HKYAB4 - Backfilling (~3m)	12	29-Jul-16 A	11-Aug-16 A			
HKY1370	Steel Ramp ready for erection (HKY-TWSR-W side)	0		22-Aug-16 A			
HKY1390	Erect Ramp (HKY-TWSR-W)	26	23-Aug-16 A	13-Sep-16 A			
HKY1400	Finishes Work	26	14-Sep-16 A	07-Oct-16	21-Sep-16	08-Oct-16	1
HKY1410	Bridge Structure complete (HKY-TWSR-W side)	0		07-Oct-16		08-Oct-16	1
Crossing Fanling Highway Section							
HKY1420	HKYP2 - Predrilling (1nos)	8	04-Jan-16 A	12-Jan-16 A			
HKY1430	HKYP2 - Pre-bored H pile (8 nos)	24	20-Jan-16 A	25-Feb-16 A			
HKY1450	HKYP2 - Pile cap, Pier and Pier Head	78	26-Feb-16 A	02-Jun-16 A			
HKY1460	Erect HKY bridge Structure across fanling highway	12	15-Aug-16 A	27-Aug-16 A			
HKY1470	Finishes Work	12	20-Sep-16	04-Oct-16	24-Sep-16	08-Oct-16	4
HKY1480	Bridge Structure complete (THFB-Cross fanling highway)	0		04-Oct-16		08-Oct-16	4
TWSR-East FL Highway S/B Side Section							
HKY1490	Temp Access formation	18	20-Feb-14 A	12-Mar-14 A			
HKY1500	HKYAB1 - Predrilling	12	29-May-14 A	12-Jun-14 A			
HKY1510	HKYAB1 - Pre-bored H pile (4 nos)	16	09-Jul-14 A	26-Jul-14 A			
HKY1530	HKYAB1 - pile cap & abutment wall	71	24-Nov-14 A	17-Feb-15 A			
HKY1540	HKYAB1 - Backfilling (~3m)	12	27-Feb-15 A	12-Mar-15 A			
HKY1550	HKYP3 - Predrilling	2	18-Jan-14 A	20-Jan-14 A			
HKY1560	HKYP3 - Pre-bored H pile (8 nos)	28	04-Jul-14 A	05-Aug-14 A			
HKY1570	HKYP3 - Pile Test	31	18-Sep-14 A	18-Oct-14 A			
HKY1580	HKYP3 - Pile cap, Pier and Pier Head	209	24-Nov-14 A	13-Aug-15 A			
HKY1590	Erect Stairecase (HKYFB-TWSR-E side)	17	15-Jan-16 A	03-Feb-16 A			
HKY1600	Finishes Work	30	20-Aug-16 A	13-Oct-16	18-May-19	10-Jun-19	783
HKY1610	Bridge Structure complete (HKYFB-TWSR-E side)	0		20-Sep-16		08-Oct-16	16
HKY1730	HKYP4 - Predrilling	5	21-Jan-14 A	25-Jan-14 A			
HKY1740	HKYP4 - Pre-bored H pile (6 nos)	16	22-Jul-14 A	08-Aug-14 A			
HKY1760	HKYP4 - Pile cap, Pier and Pier Head	353	15-Oct-14 A	23-Dec-15 A			
HKY1770	HKYP5 - Predrilling	12	20-May-14 A	03-Jun-14 A			
HKY1780	HKYP5 - Pre-bored H pile (8 nos)	49	22-Jul-14 A	17-Sep-14 A			
HKY1800	HKYP5 - Pile cap, Pier and Pier Head	243	15-Oct-14 A	13-Aug-15 A			
HKY1810	HKYAB2 - Predrilling	91	14-Jan-14 A	15-May-14 A			
HKY1820	HKYAB2 - Pre-bored H pile (18 nos)	78	10-Jun-14 A	10-Sep-14 A			
HKY1830	HKYAB2 - Pile Test	29	20-Oct-14 A	17-Nov-14 A			
HKY1840	HKYAB2 - pile cap & abutment wall	78	17-Nov-14 A	18-Feb-15 A			
HKY1850	HKYAB2 - Backfilling (~4m)	12	27-Feb-15 A	12-Mar-15 A			
HKY1860	Erect Steel Ramp (HKYFB-TWSR-E side)	79	20-Feb-16 A	15-Jul-16 A			
HKY1870	Steel Ramp finishes work (HKYFB-TWSR-E side)	30	20-Sep-16	26-Oct-16	06-May-19	10-Jun-19	772
Demolition of Existing Ho Ka Yuen Footbridge							
TWSR-West/ FL Highway N/B Side Section							
HKY1875	Design and Procurement of Temp Ramp	97	01-Feb-14 A	10-Jun-14 A			



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

Project File:WP Rev 04

Layout: WP rev 4

Data Date:20-Sep-16

Page 35 of 44

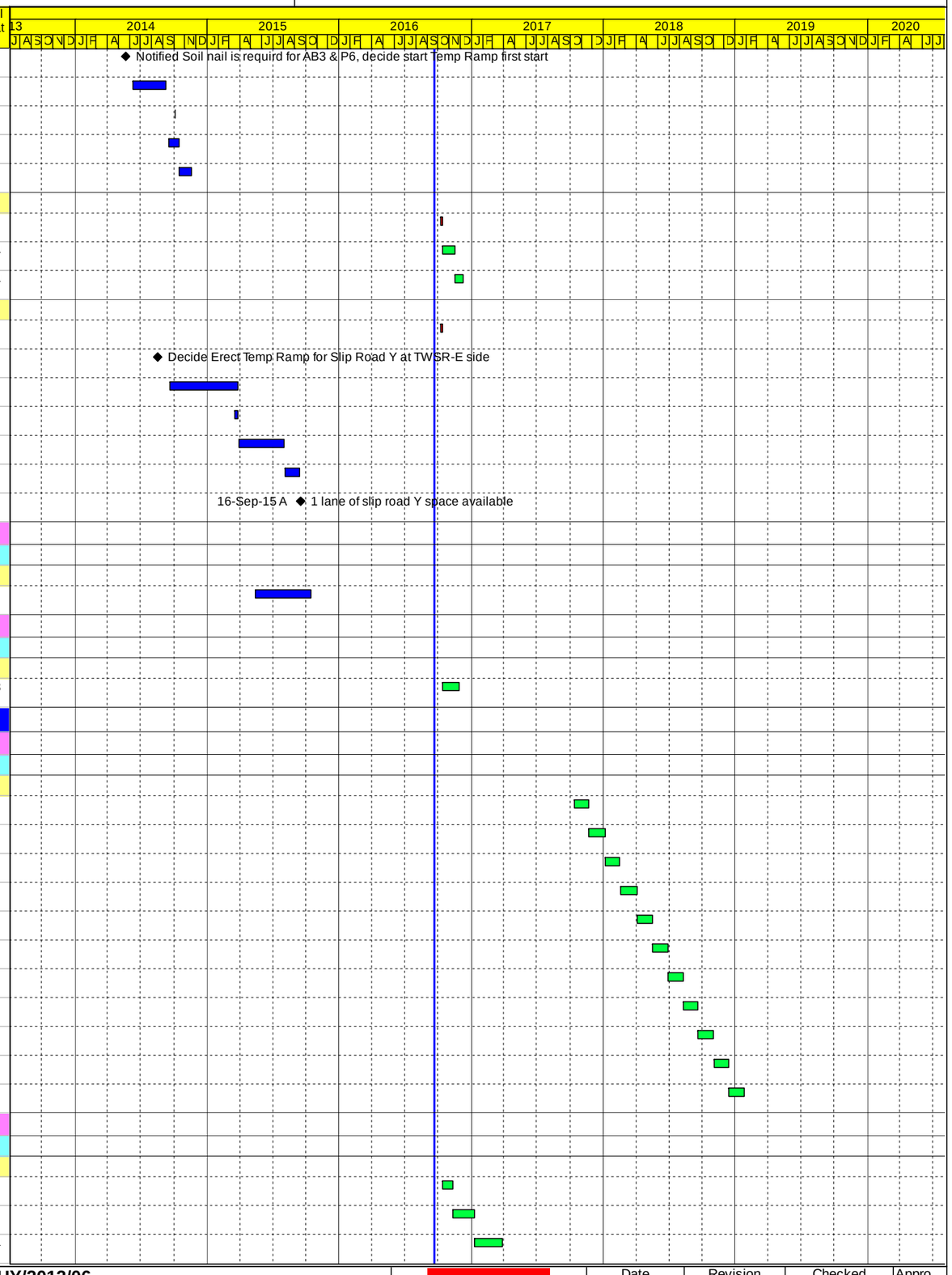
Contract No. HY/2012/06

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

Works Programme - WP Rev. 4

Date	Revision	Checked	Appro...
30-Jun-14	WP Rev 1A		
28-Aug-15	WP Rev 2		
07-Apr-16	WP Rev 3		
17-Oct-16	WP Rev 4		

Activity ID	Activity Name	Original Duration	Start	Finish	Late Start	Late Finish	Total Float
HKY1877	Notified Soil nail is requird for AB3 & P6, decide start Temp Ramp first start	0	22-May-14 A				
HKY1880	Construct Temp Ramp for existing HKY footbridge	77	11-Jun-14 A	10-Sep-14 A			
HKY1890	Pedestrian diversion	0	06-Oct-14 A	06-Oct-14 A			
HKY1900	Erect temp platform for demolishing Ramp & staircase at TWSR-W	24	17-Sep-14 A	16-Oct-14 A			
HKY1910	Demolish existing ramp & staircase at TWSR-W	30	17-Oct-14 A	20-Nov-14 A			
Crossing Fanling Highway Section							
HKY1690	Demolish existing HKY Footbridge	3	08-Oct-16	12-Oct-16	11-Oct-16	13-Oct-16	1
HKY1700	Removal of temporary platform	30	13-Oct-16	16-Nov-16	08-Apr-19	16-May-19	734
HKY1720	Reinstate road work	20	17-Nov-16	09-Dec-16	17-May-19	10-Jun-19	734
TWSR-East FL Highway S/B Side Section							
HKY1670	Demolish existing HKY footbridge (TWSR-E side)	3	08-Oct-16	12-Oct-16	11-Oct-16	13-Oct-16	1
HKY1920	Decide Erect Temp Ramp for Slip Road Y at TWSR-E side	0	19-Aug-14 A				
HKY1930	Procurement of Temp Ramp	190	20-Sep-14 A	28-Mar-15 A			
HKY1940	Demolish existing TWSR-E Existing Staircase	8	20-Mar-15 A	28-Mar-15 A			
HKY1950	Erection of Temp Ramp at TWSR-E Existing Staircase location	103	30-Mar-15 A	04-Aug-15 A			
HKY1960	Demolish existing TWSR-E existing Ramp	36	05-Aug-15 A	15-Sep-15 A			
HKY1970	1 lane of slip road Y space available	0		16-Sep-15 A			
TWSR-East Construction							
Drainage & Road Works							
TWSR-East FL Highway S/B Side Section							
TWSRE1000	Road work for New TWSR-East	128	15-May-15 A	16-Oct-15 A			
Other Works							
Slope Works							
TWSR-East FL Highway S/B Side Section							
S1000	Slope S51-Fill ~3m	40	13-Oct-16	28-Nov-16	16-Nov-18	04-Jan-19	618
ZONE 4 (Ch. 7925 to 8700)							
Noise Barrier Along TWSR-West and Laying New Utilities							
Underground Utility Works							
DN450 DI Watermain "A" (Ch 1989-2529)							
DI0100	DN450 DI watermain laying (0-50m)	35	12-Oct-17	22-Nov-17	22-Nov-17	04-Jan-18	34
DI0110	DN450 DI watermain laying (50-100m)	35	23-Nov-17	05-Jan-18	05-Jan-18	14-Feb-18	34
DI0120	DN450 DI watermain laying (100-150m)	35	06-Jan-18	15-Feb-18	15-Feb-18	29-Mar-18	34
DI0130	DN450 DI watermain laying (150-200m)	35	19-Feb-18	03-Apr-18	03-Apr-18	15-May-18	34
DI0140	DN450 DI watermain laying (200-250m)	35	04-Apr-18	16-May-18	16-May-18	27-Jun-18	34
DI0150	DN450 DI watermain laying (250-300m)	35	17-May-18	28-Jun-18	28-Jun-18	08-Aug-18	34
DI0160	DN450 DI watermain laying (300-350m)	35	29-Jun-18	09-Aug-18	09-Aug-18	18-Sep-18	34
DI0170	DN450 DI watermain laying (350-400m)	35	10-Aug-18	19-Sep-18	19-Sep-18	01-Nov-18	34
DI0180	DN450 DI watermain laying (400-450m)	35	20-Sep-18	02-Nov-18	02-Nov-18	12-Dec-18	34
DI0190	DN450 DI watermain laying (450-500m)	35	03-Nov-18	13-Dec-18	13-Dec-18	25-Jan-19	34
DI0200	DN450 DI watermain laying (500-540m)	35	14-Dec-18	26-Jan-19	26-Jan-19	09-Mar-19	34
Noise Barrier Along Fanling Highway N/B							
NB75 (Ch.7930-8090)-FH N/B Side							
Noise Barrier Works							
NB4040	NB75 -Pre-drilling (Ch7930-7990)	24	14-Oct-16	10-Nov-16	19-Jan-17	23-Feb-17	80
NB4050	NB75 - piling (NB75/01-05, 0.19m -24no)	48	11-Nov-16	09-Jan-17	24-Feb-17	25-Apr-17	80
NB4060	NB75 - Footing & Wall Structure (Ch7930-7990)	60	10-Jan-17	28-Mar-17	20-Jun-17	29-Aug-17	124



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

Project File:WP Rev 04

Layout: WP rev 4

Data Date:20-Sep-16

Page 36 of 44

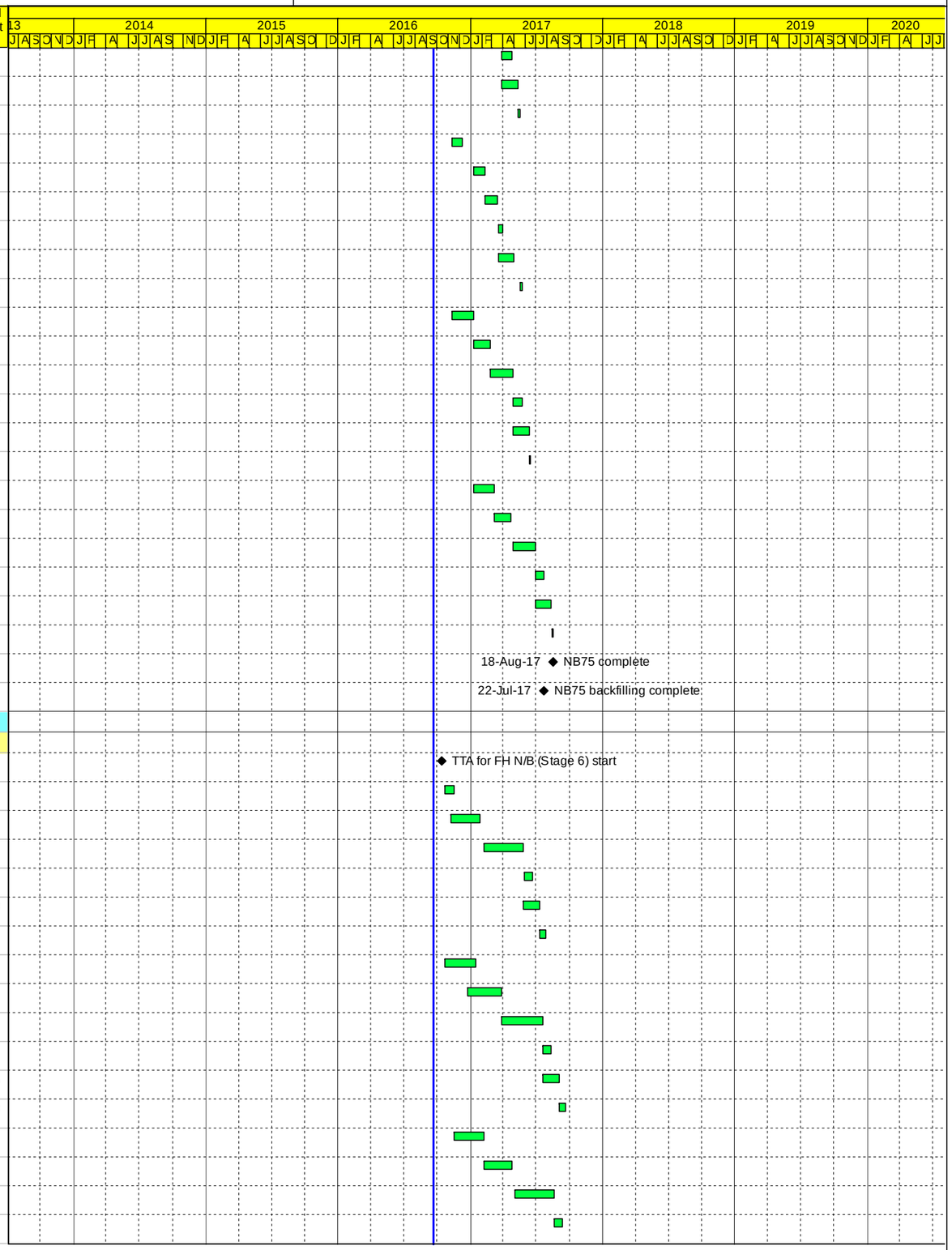
Contract No. HY/2012/06

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

Works Programme - WP Rev. 4

Date	Revision	Checked	Appro...
30-Jun-14	WP Rev 1A		
28-Aug-15	WP Rev 2		
07-Apr-16	WP Rev 3		
17-Oct-16	WP Rev 4		

Activity ID	Activity Name	Original Duration	Start	Finish	Late Start	Late Finish	Total Float
NB4070	NB75 - backfilling (Ch7930-7990)	20	29-Mar-17	25-Apr-17	30-Aug-17	21-Sep-17	124
NB4080	NB75 - NB production (Ch7930-7990)	45	29-Mar-17	12-May-17	26-Sep-17	09-Nov-17	181
NB4090	NB75 - NB post & panel installation (Ch7930-7990)	5	13-May-17	18-May-17	10-Nov-17	15-Nov-17	150
NB4100	NB75 -Pre-drilling (Ch7990-8000)-(HKY-P1) & G34	24	11-Nov-16	08-Dec-16	06-Jul-17	02-Aug-17	185
NB4110	NB75 - piling (NB75/06, 0.19m -4no) & G34 (10 nos)	21	10-Jan-17	10-Feb-17	03-Aug-17	26-Aug-17	161
NB4120	NB75 - Footing & Wall Structure (Ch7990-8000) & G34	30	11-Feb-17	17-Mar-17	28-Aug-17	30-Sep-17	161
NB4130	NB75 - backfilling (Ch7990-8000)-(HKY-P1)	12	18-Mar-17	31-Mar-17	27-Oct-17	10-Nov-17	181
NB4140	NB75 - NB production (Ch7990-8000)-(HKY-P1)	45	18-Mar-17	01-May-17	02-Oct-17	15-Nov-17	198
NB4150	NB75 - NB post & panel installation (Ch7990-8000)-(HKY-P1)	5	19-May-17	24-May-17	16-Nov-17	21-Nov-17	150
NB4160	NB75 -Pre-drilling (Ch8000-8050)	48	11-Nov-16	09-Jan-17	24-Feb-17	25-Apr-17	80
NB4170	NB75 - piling (NB75/07-10, 0.19m -20no)	32	10-Jan-17	23-Feb-17	26-Apr-17	05-Jun-17	80
NB4180	NB75 - Footing & Wall Structure (Ch8000-8050)	50	24-Feb-17	27-Apr-17	06-Jun-17	03-Aug-17	80
NB4190	NB75 - backfilling (Ch8000-8050)	20	28-Apr-17	23-May-17	22-Sep-17	17-Oct-17	122
NB4200	NB75 - NB production (Ch8000-8050)	45	28-Apr-17	11-Jun-17	02-Oct-17	15-Nov-17	157
NB4210	NB75 - NB post & panel installation (Ch8000-8050)	5	12-Jun-17	16-Jun-17	16-Nov-17	21-Nov-17	131
NB4220	NB75 -Pre-drilling (Ch8050-8090)	42	10-Jan-17	07-Mar-17	02-May-17	21-Jun-17	84
NB4230	NB75 - piling (NB75/11-14, 0.19m -18no)	36	08-Mar-17	22-Apr-17	22-Jun-17	03-Aug-17	84
NB4240	NB75 - Footing & Wall Structure (Ch8050-8090)	50	28-Apr-17	28-Jun-17	04-Aug-17	30-Sep-17	80
NB4250	NB75 - backfilling (Ch8050-8090)	20	29-Jun-17	22-Jul-17	18-Oct-17	10-Nov-17	92
NB4260	NB75 - NB production (Ch8050-8090)	45	29-Jun-17	12-Aug-17	02-Oct-17	15-Nov-17	95
NB4270	NB75 - NB post & panel installation (Ch8050-8090)	5	14-Aug-17	18-Aug-17	16-Nov-17	21-Nov-17	78
NB4280	NB75 complete	0		18-Aug-17		21-Nov-17	78
NB4580	NB75 backfilling complete	0		22-Jul-17		10-Nov-17	92
	NB77 (Ch.8090-8450)-FH N/B Side						
	Noise Barrier Works						
NB4285	TTA for FH N/B (Stage 6) start	0	14-Oct-16		19-Nov-16		31
NB4290	NB77 -Pre-drilling (Ch8090-8190)	24	21-Oct-16	17-Nov-16	19-Nov-16	16-Dec-16	25
NB4300	NB77 - piling (NB77/01-08, 0.19m -34no)	68	07-Nov-16	27-Jan-17	06-Dec-16	06-Mar-17	25
NB4310	NB77 - Footing & Wall Structure (Ch8090-8190)	90	06-Feb-17	27-May-17	03-Apr-17	25-Jul-17	48
NB4320	NB77 - backfilling (Ch8090-8190)	20	29-May-17	21-Jun-17	22-Sep-17	17-Oct-17	98
NB4330	NB77 - NB production (Ch8090-8190)	45	27-May-17	11-Jul-17	08-Apr-19	22-May-19	680
NB4340	NB77 - NB post & panel installation (Ch8090-8190)	15	11-Jul-17	28-Jul-17	23-May-19	10-Jun-19	554
NB4350	NB77 -Pre-drilling (Ch8190-8290)	72	21-Oct-16	16-Jan-17	13-Dec-16	17-Mar-17	45
NB4360	NB77 - piling (NB77/09-17, 0.19m -36no)	72	23-Dec-16	28-Mar-17	25-Feb-17	26-May-17	45
NB4370	NB77 - Footing & Wall Structure (Ch8190-8290)	90	29-Mar-17	20-Jul-17	10-Jun-17	23-Sep-17	56
NB4380	NB77 - backfilling (Ch8190-8290)	20	21-Jul-17	12-Aug-17	03-Oct-17	26-Oct-17	62
NB4390	NB77 - NB production (Ch8190-8290)	45	21-Jul-17	03-Sep-17	08-Apr-19	22-May-19	626
NB4400	NB77 - NB post & panel installation (Ch8190-8290)	15	04-Sep-17	20-Sep-17	23-May-19	10-Jun-19	508
NB4410	NB77 -Pre-drilling (Ch8290-8390)	60	18-Nov-16	07-Feb-17	06-Jan-17	24-Mar-17	39
NB4420	NB77 - piling (NB77/18-25, 0.19m -34no)	64	06-Feb-17	25-Apr-17	07-Mar-17	26-May-17	25
NB4430	NB77 - Footing & Wall Structure (Ch8290-8390)	90	05-May-17	19-Aug-17	03-Jul-17	17-Oct-17	48
NB4440	NB77 - backfilling (Ch8290-8390)	20	21-Aug-17	12-Sep-17	18-Oct-17	10-Nov-17	48



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

Project File:WP Rev 04
Layout: WP rev 4
Data Date:20-Sep-16
Page 37 of 44

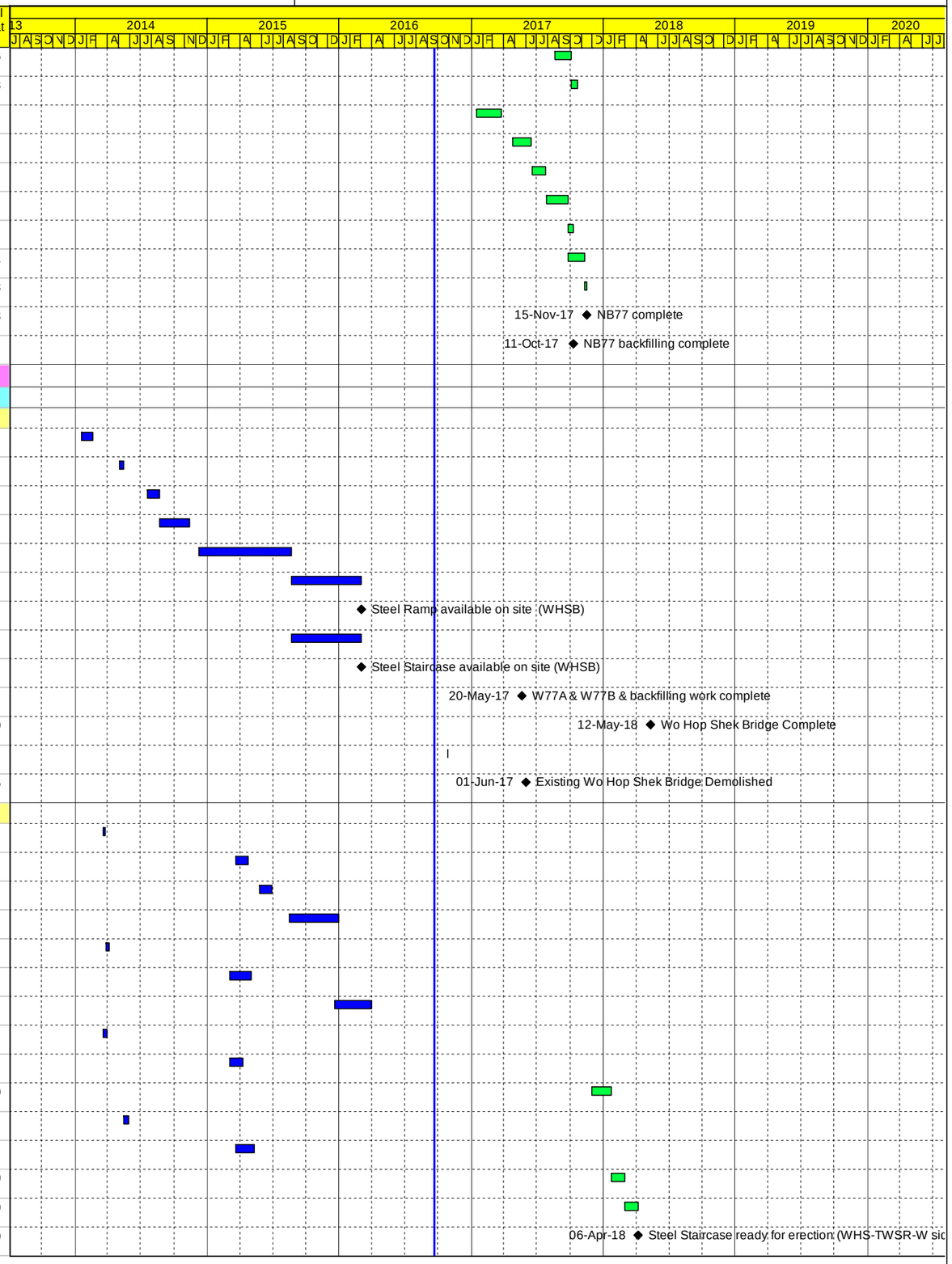
Contract No. HY/2012/06

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

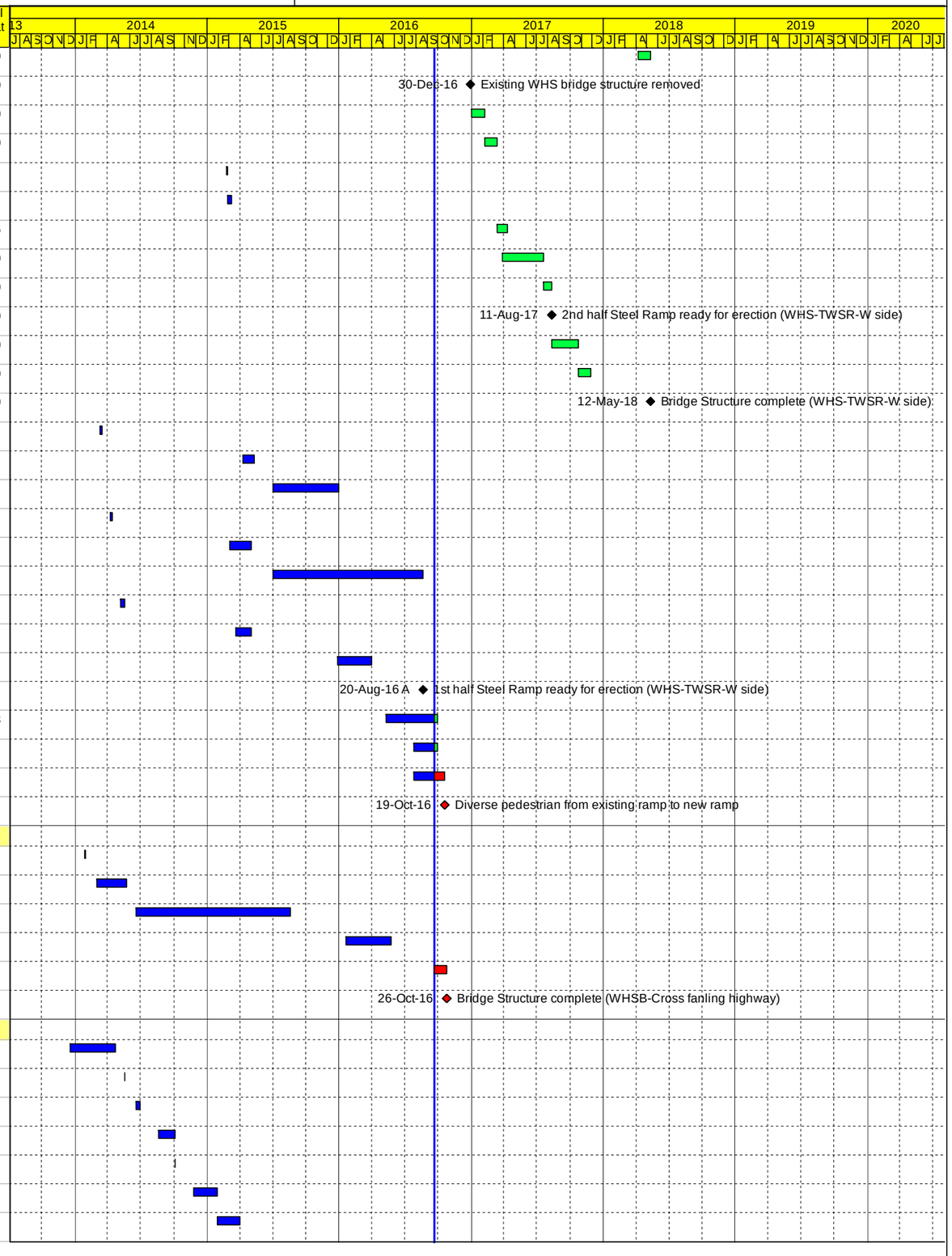
Works Programme - WP Rev. 4

Date	Revision	Checked	Appro...
30-Jun-14	WP Rev 1A		
28-Aug-15	WP Rev 2		
07-Apr-16	WP Rev 3		
17-Oct-16	WP Rev 4		

Activity ID	Activity Name	Original Duration	Start	Finish	Late Start	Late Finish	Total Float
NB4450	NB77 - NB production (Ch8290-8390)	45	19-Aug-17	03-Oct-17	08-Apr-19	22-May-19	596
NB4460	NB77 - NB post & panel installation (Ch8290-8390)	15	03-Oct-17	21-Oct-17	23-May-19	10-Jun-19	483
NB4470	NB77 -Pre-drilling (Ch8390-8450)& G35	51	17-Jan-17	24-Mar-17	11-Apr-17	15-Jun-17	64
NB4480	NB77 - piling (NB77/26-29, 0.19m -28no)	42	26-Apr-17	16-Jun-17	27-May-17	17-Jul-17	25
NB4485	NB77 - piling (NB77/30, 0.19m -14no) & G35 (8nos)	33	17-Jun-17	26-Jul-17	18-Jul-17	24-Aug-17	25
NB4490	NB77 - Footing & Wall Structure (Ch8390-8450)	52	27-Jul-17	25-Sep-17	25-Aug-17	26-Oct-17	25
NB4500	NB77 - backfilling (Ch8390-8450)	12	26-Sep-17	11-Oct-17	27-Oct-17	10-Nov-17	25
NB4510	NB77 - NB production (Ch8390-8450)	45	26-Sep-17	09-Nov-17	20-Apr-19	03-Jun-19	571
NB4520	NB77 - NB post & panel installation (Ch8390-8450)	5	10-Nov-17	15-Nov-17	04-Jun-19	10-Jun-19	463
NB4530	NB77 complete	0		15-Nov-17		10-Jun-19	463
NB4570	NB77 backfilling complete	0		11-Oct-17		10-Nov-17	25
Bridge Construction							
New Wo Hop Shek Pedstrian & Cycle Bridge							
General							
WHS1000	Site Clearance (Main bridge area SA344)	20	20-Jan-14 A	20-Feb-14 A			
WHS1010	Site Clearance & Temp Platform erection (SA340)	9	05-May-14 A	15-May-14 A			
WHS1020	Structure steel Shop drawing submission (WHSB)	29	21-Jul-14 A	22-Aug-14 A			
WHS1030	Structure steel Shop drawing approval (WHSB)	68	23-Aug-14 A	13-Nov-14 A			
WHS1040	Structure steel procurement (WHSB)	256	10-Dec-14 A	22-Aug-15 A			
WHS1050	Steel Ramp prefabrication (WHSB)	152	24-Aug-15 A	03-Mar-16 A			
WHS1060	Steel Ramp available on site (WHSB)	0	04-Mar-16 A				
WHS1070	Steel Staircase prefabrication (WHSB)	152	24-Aug-15 A	03-Mar-16 A			
WHS1080	Steel Staircase available on site (WHSB)	0	04-Mar-16 A				
WHS1105	W77A & W77B & backfilling work complete	0		20-May-17		10-Jun-19	611
WHS1110	Wo Hop Shek Bridge Complete	0		12-May-18		10-Jun-19	320
WHS1120	Diversion of existing pedestrian from existing to proposed footbrdige	1	27-Oct-16	27-Oct-16	01-Nov-16	01-Nov-16	4
WHS1140	Existing Wo Hop Shek Bridge Demolished	0		01-Jun-17		15-Nov-18	436
TWSR-West/ FL Highway N/B Side Section							
WHS1150	WHSP2 - Predrilling	7	19-Mar-14 A	26-Mar-14 A			
WHS1160	WHSP2 - Pre-bored H pile (8 nos)	27	23-Mar-15 A	25-Apr-15 A			
WHS1170	WHSP2 - Pile Test	35	27-May-15 A	30-Jun-15 A			
WHS1180	WHSP2 - Pile cap, Pier and Pier Head	113	17-Aug-15 A	31-Dec-15 A			
WHS1190	WHSP6 - Predrilling	9	27-Mar-14 A	07-Apr-14 A			
WHS1200	WHSP6 - Pre-bored H pile (6 nos)	48	05-Mar-15 A	04-May-15 A			
WHS1220	WHSP6 - Pile cap, Pier and Pier Head	74	21-Dec-15 A	31-Mar-16 A			
WHS1222	WHSP7 - Predrilling	12	19-Mar-14 A	01-Apr-14 A			
WHS1224	WHSP7 - Pre-bored H pile (6 nos)	29	05-Mar-15 A	10-Apr-15 A			
WHS1228	WHSP7 - Pile cap, Pier and Pier Head	45	29-Nov-17	23-Jan-18	28-Dec-18	21-Feb-19	320
WHS1230	WHSAB1 - Predrilling	13	16-May-14 A	30-May-14 A			
WHS1240	WHSAB1 - Pre-bored H pile (4 nos)	39	23-Mar-15 A	11-May-15 A			
WHS1260	WHSAB1 - pile cap & abutment wall	30	24-Jan-18	01-Mar-18	22-Feb-19	28-Mar-19	320
WHS1270	WHSAB1 - Backfilling (~4m)	27	02-Mar-18	06-Apr-18	29-Mar-19	04-May-19	320
WHS1280	Steel Staircase ready for erection (WHS-TWSR-W side)	0		06-Apr-18		04-May-19	320



Activity ID	Activity Name	Original Duration	Start	Finish	Late Start	Late Finish	Total Float
WHS1290	Erect Stairecase (WHS-TWSR-W side)	30	07-Apr-18	12-May-18	06-May-19	10-Jun-19	320
WHS1300	Existing WHS bridge structure removed	0		30-Dec-16		02-Feb-18	320
WHS1350	WHSAB2 - Predrilling (VO018)	24	31-Dec-16	06-Feb-17	03-Feb-18	05-Mar-18	320
WHS1360	WHSAB2 - Pre-bored H pile (9 nos) (VO018)	30	07-Feb-17	13-Mar-17	06-Mar-18	13-Apr-18	320
WHS1362	WHSP8, P9 - Predrilling (VO018)	0	23-Feb-15 A	27-Feb-15 A			
WHS1364	WHSP8, P9 - Pre-bored H pile (12 nos) (VO018)	10	27-Feb-15 A	10-Mar-15 A			
WHS1370	WHSAB2, P8, P9 - Pile Test	28	14-Mar-17	10-Apr-17	14-Apr-18	11-May-18	396
WHS1380	WHSAB2, P8, P9 - pile cap & abutment wall	90	28-Mar-17	19-Jul-17	28-Apr-18	15-Aug-18	320
WHS1390	WHSAB2, P8, P9 - Backfilling (~3m)	20	20-Jul-17	11-Aug-17	16-Aug-18	07-Sep-18	320
WHS1400	2nd half Steel Ramp ready for erection (WHS-TWSR-W side)	0		11-Aug-17		07-Sep-18	320
WHS1410	Erect 2nd half Ramp	60	12-Aug-17	23-Oct-17	08-Sep-18	20-Nov-18	320
WHS1420	Ramp Finishes Work	30	24-Oct-17	28-Nov-17	21-Nov-18	27-Dec-18	320
WHS1430	Bridge Structure complete (WHS-TWSR-W side)	0		12-May-18		10-Jun-19	320
WHS1892	WHSP3 - Predrilling	6	11-Mar-14 A	17-Mar-14 A			
WHS1894	WHSP3 - Pre-bored H pile (6 nos)	26	10-Apr-15 A	11-May-15 A			
WHS1898	WHSP3 - Pile cap, Pier and Pier Head	152	02-Jul-15 A	31-Dec-15 A			
WHS1900	WHSP4 - Predrilling	6	09-Apr-14 A	15-Apr-14 A			
WHS1910	WHSP4 - Pre-bored H pile (8 nos)	48	05-Mar-15 A	04-May-15 A			
WHS1930	WHSP4 - Pile cap, Pier and Pier Head	268	02-Jul-15 A	20-Aug-16 A			
WHS1940	WHSP5 - Predrilling	12	06-May-14 A	20-May-14 A			
WHS1950	WHSP5 - Pre-bored H pile (6 nos)	33	23-Mar-15 A	04-May-15 A			
WHS1970	WHSP5 - Pile cap, Pier and Pier Head	69	29-Dec-15 A	31-Mar-16 A			
WHS1980	1st half Steel Ramp ready for erection (WHS-TWSR-W side)	0		20-Aug-16 A			
WHS1990	Erect 1st half ramp	60	10-May-16 A	29-Sep-16	30-May-19	10-Jun-19	793
WHS2000	Erect temp pedestrian ramp besides 1st half ramp	45	27-Jul-16 A	30-Sep-16	20-Oct-16	31-Oct-16	24
WHS2010	Erect temp access between existing bridge to 1st half ramp	45	27-Jul-16 A	19-Oct-16	03-Oct-16	31-Oct-16	10
WHS2020	Diverse pedestrian from existing ramp to new ramp	0		19-Oct-16		31-Oct-16	10
Crossing Fanling Highway Section							
WHS1440	WHSP1 - Predrilling	4	27-Jan-14 A	30-Jan-14 A			
WHS1450	WHSP1 - Pre-bored H pile (6 nos)	65	03-Mar-14 A	23-May-14 A			
WHS1470	WHSP1 - Pile cap, Pier and Pier Head	346	18-Jun-14 A	19-Aug-15 A			
WHS1480	Erect WHS bridge Structure across fanling highway	93	20-Jan-16 A	23-May-16 A			
WHS1490	Finishes Work	30	20-Sep-16	26-Oct-16	24-Sep-16	31-Oct-16	4
WHS1500	Bridge Structure complete (WHSB-Cross fanling highway)	0		26-Oct-16		31-Oct-16	4
TWSR-East FL Highway S/B Side Section							
WHS2042	Tree felling	91	20-Dec-13 A	22-Apr-14 A			
WHS2045	Temp footbridge construction for pedestrian diversion	0	20-May-14 A	20-May-14 A			
WHS2050	North Abutment Wall (AW1) - Predrilling	9	20-Jun-14 A	30-Jun-14 A			
WHS2060	North Abutment Wall (AW1) - Pre-bored H pile (4 nos)	38	20-Aug-14 A	06-Oct-14 A			
WHS2070	North Abutment Wall (AW1) - Pile Test	0	06-Oct-14 A	06-Oct-14 A			
WHS2075	North Abutment Wall (AW1) - Temp Shoring	56	24-Nov-14 A	30-Jan-15 A			
WHS2080	North Abutment Wall (AW1) -pile cap & abutment wall	45	31-Jan-15 A	01-Apr-15 A			



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

Project File:WP Rev 04
Layout: WP rev 4
Data Date:20-Sep-16
Page 39 of 44

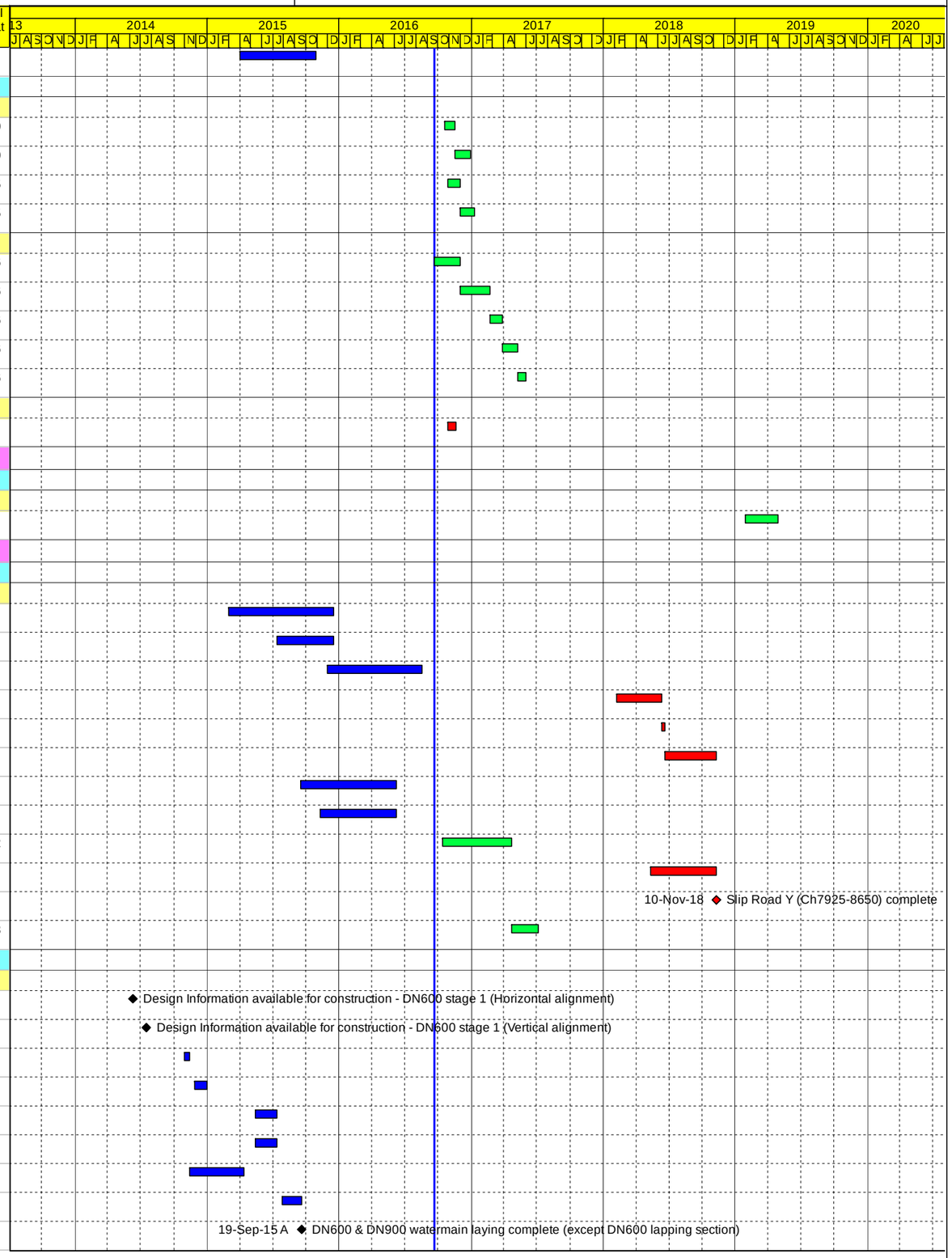
Contract No. HY/2012/06

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

Works Programme - WP Rev. 4

Date	Revision	Checked	Appro...
30-Jun-14	WP Rev 1A		
28-Aug-15	WP Rev 2		
07-Apr-16	WP Rev 3		
17-Oct-16	WP Rev 4		

Activity ID	Activity Name	Original Duration	Start	Finish	Late Start	Late Finish	Total Float
WHS2090	North Abutment Wall (AW1) - Backfilling (~6m)	173	02-Apr-15 A	31-Oct-15 A			
Demolition of Existing Wo Hop Shek Pedestrian & Cycle Bridge							
TWSR-West/ FL Highway N/B Side Section							
WHS1870	Install Temp support to remove existing ramp	25	20-Oct-16	17-Nov-16	22-Nov-17	20-Dec-17	320
WHS1880	Remove existing ramp for 2nd half new ramp construction	35	18-Nov-16	30-Dec-16	21-Dec-17	02-Feb-18	320
WHS1890	Demolish existing WHS footbridge (TWSR-W side)	30	28-Oct-16	01-Dec-16	04-Sep-18	10-Oct-18	545
WHS2030	Remove temp filled platform	30	02-Dec-16	09-Jan-17	11-Oct-18	15-Nov-18	545
Crossing Fanling Highway Section							
WHS1790	Erect Temp platform for bridge demolition	60	20-Sep-16	30-Nov-16	15-Mar-18	30-May-18	436
WHS1800	Demolish existing WHS Footbridge	60	01-Dec-16	20-Feb-17	31-May-18	10-Aug-18	436
WHS1810	Removal of temporary platform	30	21-Feb-17	27-Mar-17	11-Aug-18	14-Sep-18	436
WHS1820	Remove existing column	30	28-Mar-17	08-May-17	15-Sep-18	23-Oct-18	436
WHS1830	Reinstate road work	20	09-May-17	01-Jun-17	24-Oct-18	15-Nov-18	436
TWSR-East FL Highway S/B Side Section							
WHS1840	Demolish existing WHS Footbridge abutment wall at W77A	20	28-Oct-16	19-Nov-16	02-Nov-16	24-Nov-16	4
TWSR-West Construction							
Drainage & Road Works							
TWSR-West/ FL Highway N/B Side Section							
RDZ41180	TWSR -W Road Works rectification	73	28-Jan-19	29-Apr-19	11-Mar-19	10-Jun-19	34
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)	239	02-Mar-15 A	16-Dec-15 A			
RDZ41010	Construct Slip Rd Y (Ch8100-8250)(SA342) (Z4 TTA-Stage 2)	132	13-Jul-15 A	16-Dec-15 A			
RDZ41020	Construct Slip Rd Y @ existing TWSR-E junction (Ch8050-8100)(SA341) (Z4 TTA-Stage 3)	140	01-Dec-15 A	19-Aug-16 A			
RDZ41060	Construct Slip Rd Y - Half Lane (Ch8370-8650)(SA340) (Z4 TTA-Stage 4)	100	06-Feb-18	11-Jun-18	10-Feb-18	15-Jun-18	4
RDZ41070	Traffic diversion to slip rd Y - half lane(Z4 TTA-Stage 4)	6	12-Jun-18	19-Jun-18	16-Jun-18	23-Jun-18	4
RDZ41080	Construct Slip Rd Y- remaining half lane (Ch8370-8650)(SA340) (Z4 TTA-Stage 5)	120	20-Jun-18	10-Nov-18	25-Jun-18	15-Nov-18	4
RDZ41082	Construct Slip Rd Y (Ch7925-8050)(SA3460) - 1 lane @ Existing Ramp location	201	17-Sep-15 A	07-Jun-16 A			
RDZ41084	Construct Slip Rd Y (Ch7925-8050)(SA3460) - 1 temp lane	157	11-Nov-15 A	07-Jun-16 A			
RDZ41085	Construct Slip Rd Y (Ch7925-8050)(SA346) - remaining lane	150	13-Oct-16	21-Apr-17	10-Feb-18	15-Aug-18	392
RDZ41088	Gazettal period for Slip Road Y commissioning	183	11-May-18	10-Nov-18	17-May-18	15-Nov-18	5
RDZ41089	Slip Road Y (Ch7925-8650) complete	0		10-Nov-18		15-Nov-18	4
RDZ41095	Remove Temp slip road Y (Ch7925-8050)	60	22-Apr-17	05-Jul-17	04-Sep-18	15-Nov-18	408
Underground Utility Works							
DN600 and DN900 Watermain							
DN0900	Design Information available for construction - DN600 stage 1 (Horizontal alignment)	0	11-Jun-14 A				
DN0910	Design Information available for construction - DN600 stage 1 (Vertical alignment)	0	18-Jul-14 A				
DN0990	DN600 & DN900 watermain laying (Ch8250-8370)(SA340) (near Z4 TTA-Stage 1) (W76A bay 3 to 7)	12	31-Oct-14 A	13-Nov-14 A			
DN1000	DN600 & DN900 watermain laying (Ch8250-8370)(SA340) (near Z4 TTA-Stage 1) (W76A bay 7 to petrol station)	26	29-Nov-14 A	31-Dec-14 A			
DN1010	DN600 & DN900 watermain laying (Ch8100-8250)(SA342) (near Z4 TTA-Stage 2)	50	15-May-15 A	15-Jul-15 A			
DN1020	DN600 & DN900 watermain laying (Ch8050-8100)(SA341) (near Z4 TTA-Stage 3)	50	15-May-15 A	15-Jul-15 A			
DN1030	DN600 & DN900 watermain laying (Ch7925-8050)(SA346)	117	15-Nov-14 A	15-Apr-15 A			
DN1040	DN600 & DN900 watermain laying(Ch8370-8650)(SA340) (near Z4 TTA-Stage 4)	45	29-Jul-15 A	19-Sep-15 A			
DN1050	DN600 & DN900 watermain laying complete (except DN600 lapping section)	0		19-Sep-15 A			



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

Project File:WP Rev 04

Layout: WP rev 4

Data Date:20-Sep-16

Page 40 of 44

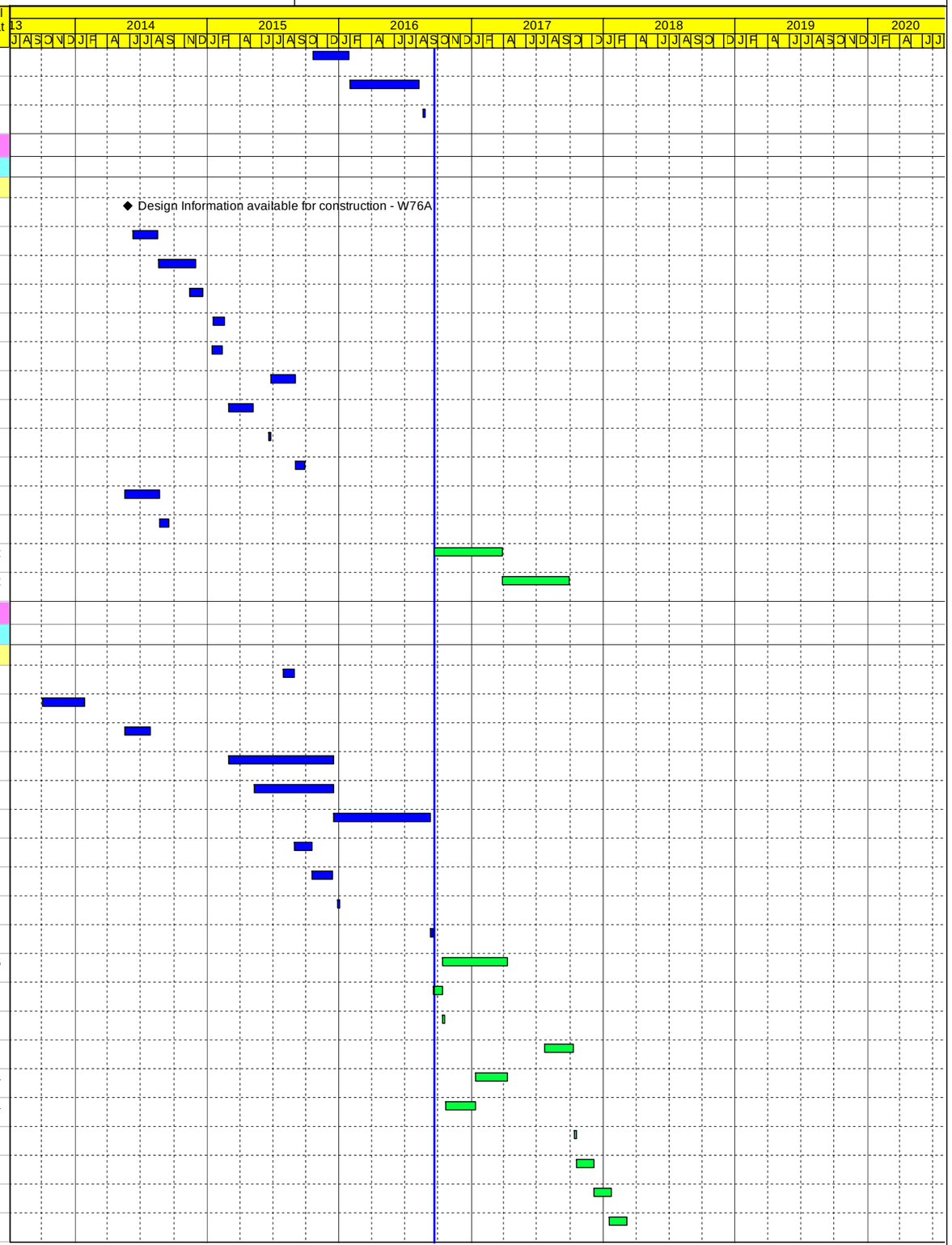
Contract No. HY/2012/06

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

Works Programme - WP Rev. 4

Date	Revision	Checked	Appro...
30-Jun-14	WP Rev 1A		
28-Aug-15	WP Rev 2		
07-Apr-16	WP Rev 3		
17-Oct-16	WP Rev 4		

Activity ID	Activity Name	Original Duration	Start	Finish	Late Start	Late Finish	Total Float
DN1054	Watermain (DN900/1200) changeover for DN600 Works	85	20-Oct-15 A	30-Jan-16 A			
DN1056	Laying DN600 section after DN900 changeover Works	90	01-Feb-16 A	09-Aug-16 A			
DN1060	Watermain (DN600) changeover for TTA stage 4	6	22-Aug-16 A	26-Aug-16 A			
VO - Wall 76A Construction							
Retaining Wall W76A							
TWSR-East FL Highway S/B Side Section							
W76A1000	Design Information available for construction - W76A	0	26-May-14 A				
W76A1015	Temp. road work for TTA for DN600 & W76A (bay4-8)(TTA-1)	59	11-Jun-14 A	19-Aug-14 A			
W76A1016	W76A construction (bay 3, 6-8,10)	85	20-Aug-14 A	30-Nov-14 A			
W76A1017	W76A backfilling work (bay 3, 6-8,10)	32	14-Nov-14 A	20-Dec-14 A			
W76A1018	PCCW drawpit construction	27	19-Jan-15 A	18-Feb-15 A			
W76A1019	W76A construction (bay 4,5 wall)	27	15-Jan-15 A	14-Feb-15 A			
W76A1020	W76A construction (bay 9)	57	27-Jun-15 A	02-Sep-15 A			
W76A1024	Watermain installation	56	02-Mar-15 A	09-May-15 A			
W76A1026	WSD installation for Caltex (CS)	5	22-Jun-15 A	26-Jun-15 A			
W76A1030	W76A backfilling work (bay 4,5,9)	23	02-Sep-15 A	29-Sep-15 A			
W76A1032	W76A construction (bay 1-2 & 11-13)	81	19-May-14 A	22-Aug-14 A			
W76A1035	W76A backfilling work (bay 1-2 & 11-13)	23	23-Aug-14 A	19-Sep-14 A			
W76A1050	Drainage work for Caltex access road	150	20-Sep-16	27-Mar-17	07-Jun-18	04-Dec-18	502
W76A1060	Road work for Caltex access road	150	28-Mar-17	27-Sep-17	05-Dec-18	10-Jun-19	502
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	26	01-Aug-15 A	31-Aug-15 A			
RDZ41002	TTA approval period	120	02-Oct-13 A	29-Jan-14 A			
RDZ41004	Site Clearance & Tree Felling	60	20-May-14 A	30-Jul-14 A			
RDZ41005	Construct FH S/B Lane 1,2 (Ch8250-8370)(SA340) (Z4 TTA-Stage 1)	240	02-Mar-15 A	17-Dec-15 A			
RDZ41015	Construct FH S/B Lane 1,2 (Ch8100-8250)(SA342) (Z4 TTA-Stage 2)	183	12-May-15 A	17-Dec-15 A			
RDZ41025	Construct FH S/B Lane 1,2 @ existing TWSR-E junction (Ch8050-8100)(SA341) (Z4 TTA-Stage 3)	125	18-Dec-15 A	09-Sep-16 A			
RDZ41030	Realign Temp Road from TWSR-E to Petrol station (Z4 TTA-Stage 3)	40	01-Sep-15 A	19-Oct-15 A			
RDZ41040	Construct FH S/B Lane 1,2 (Ch8000-8050)(SA340)(Z4 TTA-Stage 3)	49	19-Oct-15 A	15-Dec-15 A			
RDZ41042	TTA for HKY P2 works	5	28-Dec-15 A	02-Jan-16 A			
RDZ41050	Traffic Diversion for FH S/B road construction (Z4 TTA-Stage 4)	6	10-Sep-16 A	17-Sep-16 A			
RDZ41086	Construct FH S/B Lane 1 & 2 (Ch7925-8000)(SA346) (after HKY bridge demolition)	145	13-Oct-16	12-Apr-17	17-Oct-17	14-Apr-18	296
RDZ41090	Remove FH central barrier	20	17-Sep-16 A	13-Oct-16	21-Oct-16	11-Nov-16	25
RDZ41100	TTA for FH N/B Lane 1, 2, 3 construction (Ch7925-8600)(SA340) (Z4 TTA-Stage 6)	6	14-Oct-16	20-Oct-16	12-Nov-16	18-Nov-16	25
RDZ41110	Construct FH N/B Lane 1 (Ch7925-8600)	68	22-Jul-17	11-Oct-17	21-Aug-17	10-Nov-17	25
RDZ41112	Construct FH N/B Lane 2 (Ch7925-8600)	68	12-Jan-17	10-Apr-17	21-Aug-17	10-Nov-17	174
RDZ41114	Construct FH N/B Lane 3 (Ch7925-8600)	68	21-Oct-16	11-Jan-17	01-Jun-17	19-Aug-17	174
RDZ41120	TTA for FH N/B lane 4, S/B Lane 3 & 4 (Z4 TTA-Stage 7)	6	12-Oct-17	18-Oct-17	11-Nov-17	17-Nov-17	25
RDZ41130	Construct FH N/B lane 4	40	19-Oct-17	05-Dec-17	18-Nov-17	06-Jan-18	25
RDZ41132	Construct FH S/B Lane 3	40	06-Dec-17	24-Jan-18	08-Jan-18	24-Feb-18	25
RDZ41134	Construct FHS/B Lane 4	40	18-Jan-18	07-Mar-18	19-Feb-18	10-Apr-18	25



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

Project File:WP Rev 04

Layout: WP rev 4

Data Date:20-Sep-16

Page 41 of 44

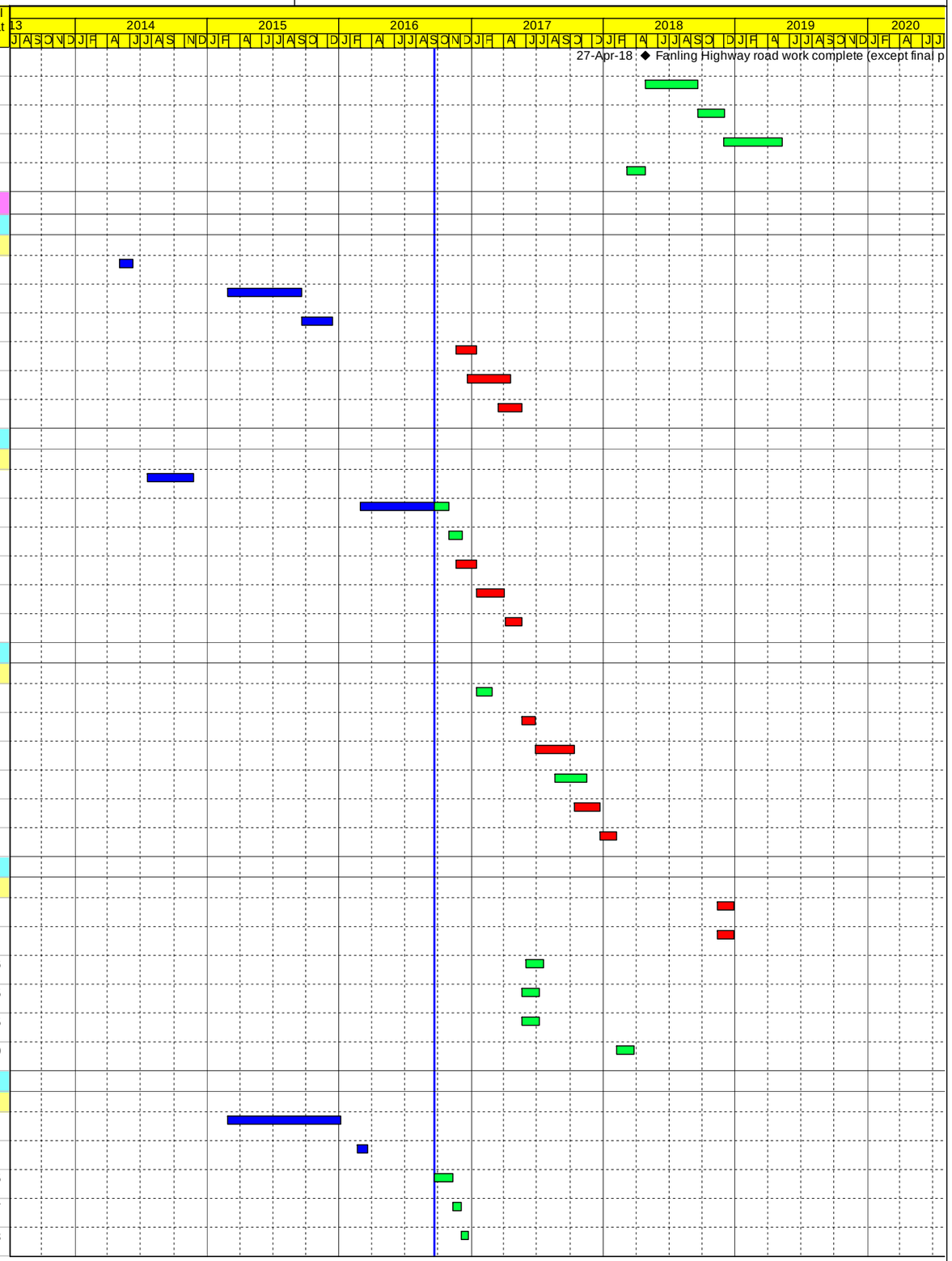
Contract No. HY/2012/06

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

Works Programme - WP Rev. 4

Date	Revision	Checked	Appro...
30-Jun-14	WP Rev 1A		
28-Aug-15	WP Rev 2		
07-Apr-16	WP Rev 3		
17-Oct-16	WP Rev 4		

Activity ID	Activity Name	Original Duration	Start	Finish	Late Start	Late Finish	Total Float
RDZ41140	Fanling Highway road work complete (except final pavement and central diverder)	0		27-Apr-18		29-May-18	25
RDZ41150	Central Divider construction	120	28-Apr-18	19-Sep-18	30-May-18	22-Oct-18	25
RDZ41160	Final pavement & final road marking	60	20-Sep-18	01-Dec-18	23-Oct-18	03-Jan-19	25
RDZ41170	Complete Slip road V and associated slope work	130	29-Nov-18	10-May-19	31-Dec-18	10-Jun-19	25
RDZ41290	Construct FH N/B Lane 1 (Ch7925-8600) (besides NB75)	40	08-Mar-18	27-Apr-18	11-Apr-18	29-May-18	25
Other Works							
Retaining Wall W77A							
TWSR-East FL Highway S/B Side Section							
RWZ4.1050	Site Clearance	30	05-May-14 A	10-Jun-14 A			
RWZ4.1060	Base slab & Wall (0-3m high)- RW77A (Ch.50-130)	169	27-Feb-15 A	19-Sep-15 A			
RWZ4.1070	Backfilling (0-3m) - RW77A (Ch.50-130)	71	21-Sep-15 A	15-Dec-15 A			
RWZ4.1075	Temp Shoring & Excavation	45	21-Nov-16	14-Jan-17	25-Nov-16	19-Jan-17	4
RWZ4.1080	Base slab & Wall (3-7m high)- RW77A (Ch.0-50)	90	20-Dec-16	19-Apr-17	24-Dec-16	24-Apr-17	4
RWZ4.1090	Backfilling (3-7m high) - RW77A (Ch.0-50)	50	17-Mar-17	20-May-17	22-Mar-17	25-May-17	4
Retaining Wall W77B							
TWSR-East FL Highway S/B Side Section							
RWZ4.1092	Site Clearance	106	21-Jul-14 A	24-Nov-14 A			
RWZ4.1100	Base slab & Wall (0-3m high)- RW77B (Ch 0-40)	98	01-Mar-16 A	31-Oct-16	08-Dec-16	19-Jan-17	66
RWZ4.1110	Backfilling (0-3m) - RW77B (Ch 0-40)	30	01-Nov-16	05-Dec-16	04-Mar-17	08-Apr-17	96
RWZ4.1115	Temp Shoring & Excavation	45	21-Nov-16	14-Jan-17	25-Nov-16	19-Jan-17	4
RWZ4.1120	Base slab & Wall (3-4m high)- RW77B (Ch.40-75)	60	16-Jan-17	03-Apr-17	20-Jan-17	08-Apr-17	4
RWZ4.1130	Backfilling (3-4m high) - RW77B (Ch.40-75)	35	04-Apr-17	20-May-17	10-Apr-17	25-May-17	4
Retaining Wall W78							
TWSR-East FL Highway S/B Side Section							
RWZ4.0900	Site Clearance	30	16-Jan-17	27-Feb-17	26-May-17	30-Jun-17	99
RWZ4.0910	Temp road for TTA for W78 Works	30	22-May-17	26-Jun-17	26-May-17	30-Jun-17	4
RWZ4.1010	Base slab & Wall (6-11m high)- RW78 (Ch.0-50)	90	27-Jun-17	12-Oct-17	03-Jul-17	17-Oct-17	4
RWZ4.1020	Backfilling (6-11m high) - RW78 (Ch.0-50)	75	19-Aug-17	17-Nov-17	28-Sep-17	29-Dec-17	34
RWZ4.1030	Base slab & Wall (0-6m high)- RW78 (Ch.50-101)	60	13-Oct-17	22-Dec-17	18-Oct-17	29-Dec-17	4
RWZ4.1040	Backfilling (0-6m high) - RW78 (Ch.50-101)	35	23-Dec-17	05-Feb-18	30-Dec-17	09-Feb-18	4
Slope Works							
TWSR-East FL Highway S/B Side Section							
S1010	Slope S51A-Fill ~2m	40	12-Nov-18	29-Dec-18	16-Nov-18	04-Jan-19	4
S1020	Slope S52-Fill ~2m	40	12-Nov-18	29-Dec-18	16-Nov-18	04-Jan-19	4
S1030	Slope S53-Fill ~2m	40	02-Jun-17	19-Jul-17	16-Nov-18	04-Jan-19	436
S1040	Slope S54A-Cut ~4m	40	22-May-17	08-Jul-17	16-Nov-18	04-Jan-19	445
S1050	Slope S54B-Cut ~5m	40	22-May-17	08-Jul-17	16-Nov-18	04-Jan-19	445
S1060	Slope S55-Fill ~5m	40	06-Feb-18	26-Mar-18	16-Nov-18	04-Jan-19	230
TCSS Works							
TCSS Pre-Construction Works							
TCSS0100	Acquire Design Criteria from Drawing & procurement	256	27-Feb-15 A	06-Jan-16 A			
TCSS0110	Confirm Design criteria with Engineer	29	20-Feb-16 A	19-Mar-16 A			
TCSS0120	Prepare Shop Drawing-TCSS	45	20-Sep-16	12-Nov-16	26-Jul-17	15-Sep-17	245
TCSS0130	Shop Drawing Comment & Approval	21	12-Nov-16	03-Dec-16	16-Sep-17	06-Oct-17	307
TCSS0140	Revised & Re-submission TCSS shop Drawing	18	05-Dec-16	24-Dec-16	07-Oct-17	27-Oct-17	243



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

Project File:WP Rev 04

Layout: WP rev 4

Data Date:20-Sep-16

Page 42 of 44

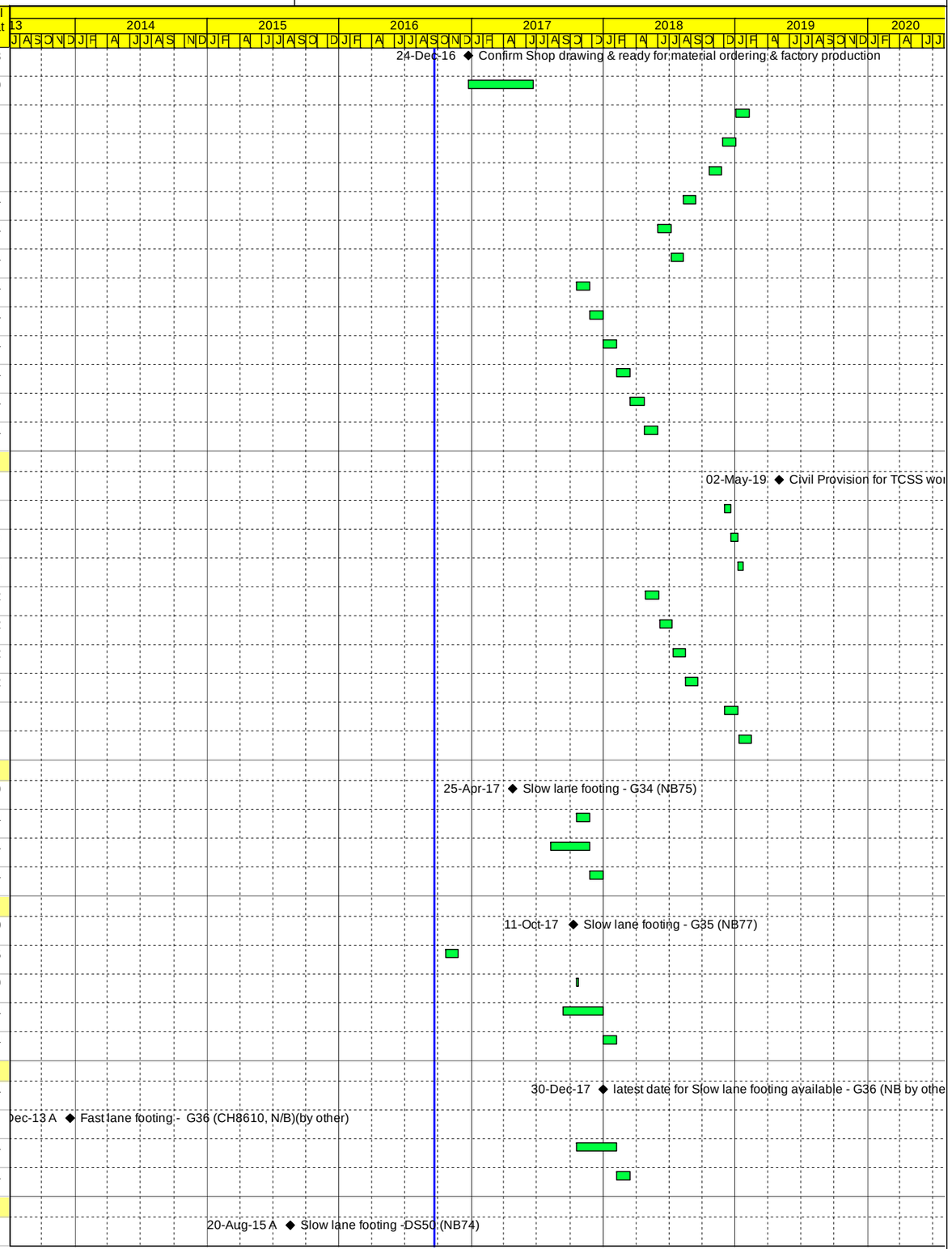
Contract No. HY/2012/06

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

Works Programme - WP Rev. 4

Date	Revision	Checked	Appro...
30-Jun-14	WP Rev 1A		
28-Aug-15	WP Rev 2		
07-Apr-16	WP Rev 3		
17-Oct-16	WP Rev 4		

Activity ID	Activity Name	Original Duration	Start	Finish	Late Start	Late Finish	Total Float
TCSS0150	Confirm Shop drawing & ready for material ordering & factory production	0		24-Dec-16		27-Oct-17	243
TCSS0160	Raw material procurement	180	24-Dec-16	22-Jun-17	30-Oct-17	27-Apr-18	309
TCSS0170	Sign Gantry Factory production - AADS1	30	03-Jan-19	08-Feb-19	16-Feb-19	22-Mar-19	36
TCSS0180	Sign Gantry Factory production - FVMS1	30	26-Nov-18	02-Jan-19	10-Jan-19	15-Feb-19	36
TCSS0190	Sign Gantry Factory production - ADS1	30	22-Oct-18	24-Nov-18	03-Dec-18	09-Jan-19	36
TCSS0200	Sign Gantry Factory production - FADS1	30	11-Aug-18	14-Sep-18	16-Feb-19	22-Mar-19	154
TCSS0210	Sign Gantry Factory production - G55	30	31-May-18	06-Jul-18	03-Dec-18	09-Jan-19	154
TCSS0220	Sign Gantry Factory production - G54	30	07-Jul-18	10-Aug-18	10-Jan-19	15-Feb-19	154
TCSS0230	Sign Gantry Factory production - G34 (Z4)	30	19-Oct-17	23-Nov-17	28-Apr-18	04-Jun-18	154
TCSS0240	Sign Gantry Factory production - G35 (Z4)	30	24-Nov-17	30-Dec-17	05-Jun-18	11-Jul-18	154
TCSS0250	Sign Gantry Factory production - G36 (Z4)	30	02-Jan-18	05-Feb-18	12-Jul-18	15-Aug-18	154
TCSS0260	Sign Gantry Factory production - DS50 (Z4)	30	06-Feb-18	14-Mar-18	16-Aug-18	19-Sep-18	154
TCSS0270	Sign Gantry Factory production - FADS8 (Z4)	30	15-Mar-18	23-Apr-18	20-Sep-18	27-Oct-18	154
TCSS0280	Sign Gantry Factory production - FVMS2 (Z4)	30	24-Apr-18	30-May-18	29-Oct-18	01-Dec-18	154
Civil Provision for TCSS Works							
TCSS2130	Civil Provision for TCSS works available	0		02-May-19		10-Jun-19	32
TCSS2150	M12 for CCTV	14	03-Dec-18	18-Dec-18	17-Apr-19	07-May-19	110
TCSS2160	P51 for VSLS	14	19-Dec-18	07-Jan-19	08-May-19	23-May-19	110
TCSS2170	P52 for VSLS	14	08-Jan-19	23-Jan-19	24-May-19	10-Jun-19	110
TCSS2210	Pillar box & associated duct work - PL207 for G34 & G35	30	28-Apr-18	04-Jun-18	12-Jan-19	18-Feb-19	212
TCSS2220	Pillar box & associated duct work - PL252 for G52	30	05-Jun-18	11-Jul-18	19-Feb-19	25-Mar-19	212
TCSS2230	Pillar box & associated duct work - PL251 for G51 & FL01	30	12-Jul-18	15-Aug-18	26-Mar-19	04-May-19	212
TCSS2240	Pillar box & associated duct work - PL208 for M12, G36, P51, P52 & FL02	30	16-Aug-18	19-Sep-18	06-May-19	10-Jun-19	212
TCSS2250	FL01 mounted on top of DS53	30	03-Dec-18	09-Jan-19	26-Mar-19	04-May-19	92
TCSS2260	FL02 mounted on top of ADS52	30	10-Jan-19	15-Feb-19	06-May-19	10-Jun-19	92
G34							
TCSS1520	Slow lane footing - G34 (NB75)	0		25-Apr-17		04-Jun-18	329
TCSS1530	Fast lane footing - G34 (CH7990, N/B)	30	19-Oct-17	23-Nov-17	28-Apr-18	04-Jun-18	154
TCSS1780	TTA application & Approval - G34 (Z4)	90	08-Aug-17	23-Nov-17	10-Feb-18	04-Jun-18	154
TCSS1790	Sign Gantry Erection - G34 (Z4)	30	24-Nov-17	30-Dec-17	05-Jun-18	11-Jul-18	154
G35							
TCSS1540	Slow lane footing - G35 (NB77)	0		11-Oct-17		11-Jul-18	220
TCSS1550	Slip road island footing - G35 (CH8410, N/B)	30	21-Oct-16	24-Nov-16	05-Jun-18	11-Jul-18	475
TCSS1560	Fast lane footing - G35 (CH8410, N/B)	5	19-Oct-17	24-Oct-17	06-Jul-18	11-Jul-18	209
TCSS1800	TTA application & Approval - G35 (Z4)	90	12-Sep-17	30-Dec-17	20-Mar-18	11-Jul-18	154
TCSS1810	Sign Gantry Erection - G35 (Z4)	30	02-Jan-18	05-Feb-18	12-Jul-18	15-Aug-18	154
G36							
TCSS1570	latest date for Slow lane footing available - G36 (NB by other)	0		30-Dec-17		11-Jul-18	154
TCSS1580	Fast lane footing - G36 (CH8610, N/B)(by other)	0		20-Dec-13 A			
TCSS1820	TTA application & Approval - G36 (Z4)	90	19-Oct-17	05-Feb-18	28-Apr-18	15-Aug-18	154
TCSS1830	Sign Gantry Erection - G36 (Z4)	30	06-Feb-18	14-Mar-18	16-Aug-18	19-Sep-18	154
DS50							
TCSS1590	Slow lane footing -DS50 (NB74)	0		20-Aug-15 A			



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

Project File:WP Rev 04
Layout: WP rev 4
Data Date:20-Sep-16
Page 43 of 44

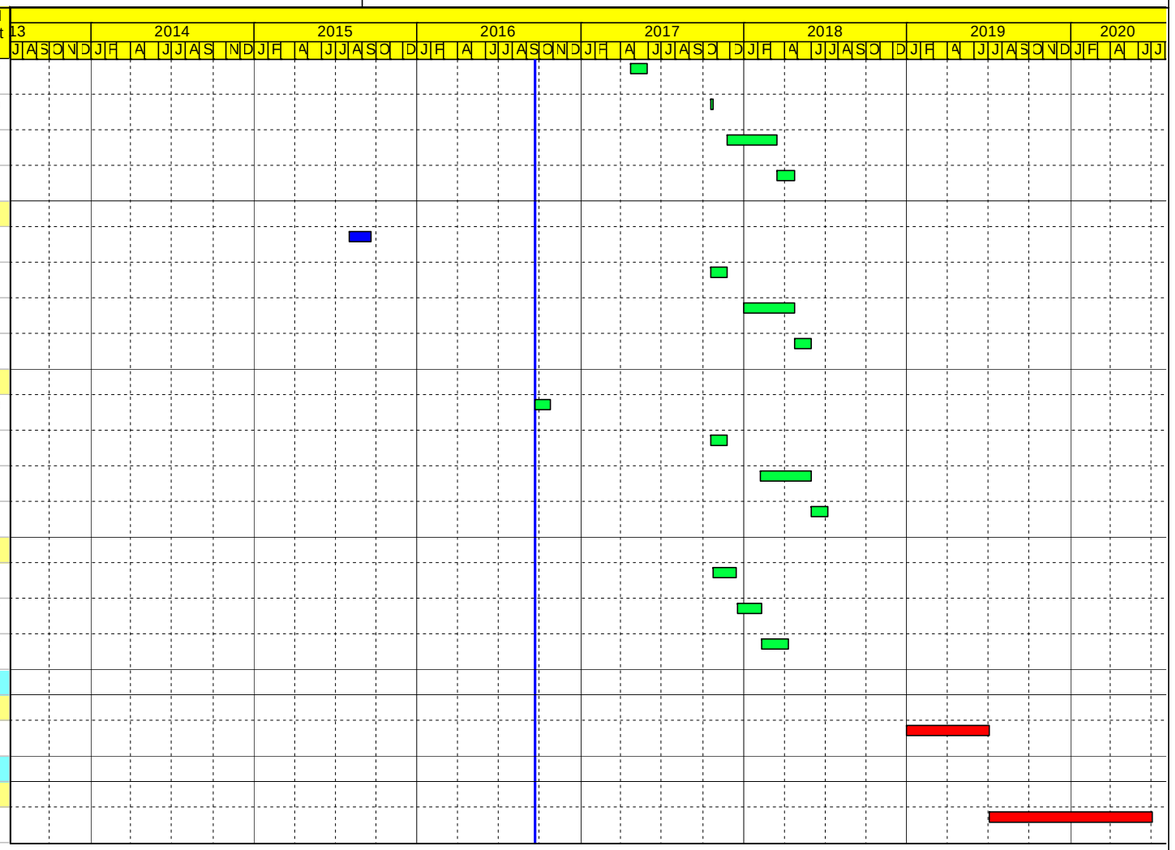
Contract No. HY/2012/06

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

Works Programme - WP Rev. 4

Date	Revision	Checked	Appro...
30-Jun-14	WP Rev 1A		
28-Aug-15	WP Rev 2		
07-Apr-16	WP Rev 3		
17-Oct-16	WP Rev 4		

Activity ID	Activity Name	Original Duration	Start	Finish	Late Start	Late Finish	Total Float
TCSS1600	Slip road island footing - DS50 (CH7940, S/B)	30	22-Apr-17	29-May-17	16-Aug-18	19-Sep-18	392
TCSS1610	Fast lane footing - DS50 (CH7940, S/B)	5	19-Oct-17	24-Oct-17	14-Sep-18	19-Sep-18	269
TCSS1840	TTA application & Approval - DS50 (Z4)	90	24-Nov-17	14-Mar-18	05-Jun-18	19-Sep-18	154
TCSS1850	Sign Gantry Erection - DS50 (Z4)	30	15-Mar-18	23-Apr-18	20-Sep-18	27-Oct-18	154
FADS8							
TCSS1620	Slow lane footing - FADS8 (CH8220, S/B)	42	04-Aug-15 A	21-Sep-15 A			
TCSS1630	Fast lane footing - FADS8 (CH8220, S/B)	30	19-Oct-17	23-Nov-17	20-Sep-18	27-Oct-18	274
TCSS1860	TTA application & Approval - FADS8 (Z4)	90	02-Jan-18	23-Apr-18	12-Jul-18	27-Oct-18	154
TCSS1870	Sign Gantry Erection - FADS8 (Z4)	30	24-Apr-18	30-May-18	29-Oct-18	01-Dec-18	154
FVMS2 (Deleted by RFI-138, Pending for VO)							
TCSS1640	Slow lane footing - FVMS2 (CH8400, S/B)- Deleted by RFI-138 pending for VO	30	20-Sep-16	26-Oct-16	29-Oct-18	01-Dec-18	620
TCSS1650	Fast lane footing - FVMS2 (CH8400, S/B)	30	19-Oct-17	23-Nov-17	29-Oct-18	01-Dec-18	304
TCSS1880	TTA application & Approval - FVMS2 (Z4)	90	06-Feb-18	30-May-18	16-Aug-18	01-Dec-18	154
TCSS1890	Sign Gantry Erection - FVMS2 (Z4)	30	31-May-18	06-Jul-18	03-Dec-18	09-Jan-19	154
TCSS Hub Room							
TCSS1900	TCSS Hub Room Structure	45	24-Oct-17	15-Dec-17	22-Dec-18	18-Feb-19	347
TCSS1910	TCSS Hub Room Finishes	45	16-Dec-17	09-Feb-18	19-Feb-19	12-Apr-19	347
TCSS1920	TCSS Hub Room BS provision	45	10-Feb-18	10-Apr-18	13-Apr-19	10-Jun-19	347
Landscape Softwork							
Landscape Works							
Z4.LW.1000	Landscape soft work Zone4	150	31-Dec-18	04-Jul-19	05-Jan-19	09-Jul-19	4
Establishment Works							
Establishment Works							
Z3.EW.1000	Establishment work Zone4	365	05-Jul-19	03-Jul-20	10-Jul-19	08-Jul-20	5



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

Project File:WP Rev 04

Layout: WP rev 4

Data Date:20-Sep-16

Page 44 of 44

Contract No. HY/2012/06

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

Works Programme - WP Rev. 4

Date	Revision	Checked	Appro...
30-Jun-14	WP Rev 1A		
28-Aug-15	WP Rev 2		
07-Apr-16	WP Rev 3		
17-Oct-16	WP Rev 4		

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 15	Dec 15	Jan 16	Feb 16	Mar 16	Apr 16	May 16	Jun 16	Jul 16	Aug 16	Sep 16	Oct 16
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	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	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	@	@	@	@	@	@	@	@

Noise - Schedule of Recommended Mitigation Measures

Impact	Mitigation Measures	Timing	Implementation Status											
			Nov 15	Dec 15	Jan 16	Feb 16	Mar 16	Apr 16	May 16	Jun 16	Jul 16	Aug 16	Sep 16	Oct 16
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	V	V	V	V
	Reduce the number of equipment and their percentage on-time.		V	V	V	V	V	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).		V	V	V	V	V	V	V	V	V	V	V	V
	3 m high temporary noise barrier along the northern edge of Bridge 12 at ground level (Figure 2b of the Environmental Permit).		V	V	V	V	V	V	V	V	V	V	V	V
	2 m high temporary noise barrier along the northern edge of Bridge 12 at bridge level (Figure 2b of the Environmental Permit).		V	V	V	V	V	V	V	V	V	V	V	V
	2.5 m high temporary noise barrier along Tai Wo Service Road West (Figure 2c of the Environmental Permit).		V	V	V	V	V	V	V	V	V	V	V	V
	3.5m and 7m high temporary noise barrier along Tai Wo Services Road West near Tai Hang (Figure 2c of the Environmental Permit).		V	V	V	V	V	V	V	V	V	V	V	V
	7 m high temporary noise barrier along Tai Wo Service Road West near Tai Wo Footbridge work area (Figure 2d of the Environmental Permit).		V	V	V	V	V	V	V	V	V	V	V	V
	7 m high temporary noise barrier near Kiu Tau Footbridge work area (Figure 2d of the Environmental Permit).		V	V	V	V	V	V	V	V	V	V	V	V

	2.5 m high temporary noise barrier near river diversion work area (Figure 2e of the Environmental Permit).		N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.

Water Quality - Schedule of Recommended Mitigation Measures

Impact	Mitigation Measures	Timing	Implementation Status											
			Nov 15	Dec 15	Jan 16	Feb 16	Mar 16	Apr 16	May 16	Jun 16	Jul 16	Aug 16	Sep 16	Oct 16
Water quality during Construction	Demolition and reconstruction of bridges - 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	V	@	V	V	V	V	V	V	V	V	V
	Road Widening Works, Earthworks and Culvert Extension Works - Wastewater generated from any concrete batching washdown of equipment or similar activities should be discharged into foul sewers, after the removal of settable solids, and pH adjustment as necessary. All sewage discharges from the study area should meet the TM standards and approval from EPD through the licensing process is required. - 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	@	@

Waste - Schedule of Recommended Mitigation Measures

Impact	Mitigation Measures	Timing	Implementation Status											
			Nov 15	Dec 15	Jan 16	Feb 16	Mar 16	Apr 16	May 16	Jun 16	Jul 16	Aug 16	Sep 16	Oct 16
Waste Management during Construction	General Waste - 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
	Vegetation from site clearance - 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 - Segregation of materials to facilitate disposal. - Appropriate stockpile management.		V	V	V	V	V	V	V	V	V	V	V	V
	Excavated Materials - Segregation of materials to facilitate disposal / reuse. - Appropriate stockpile management. - Re-use of excavated material on or off site (where possible). - Special handling and disposal procedures in the event that contaminated materials are		V	V	V	V	V	V	V	V	V	V	V	V

	excavated.												
	Construction Wastes - 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.		@	V	V	V	V	V	V	V	V	V	@	V
	Bentonite Slurries - Bentonite slurries should be reused as far as possible. - Disposal in accordance with Practice Note For Professional Persons ProPECC PN 1/94.		#	#	#	#	#	#	#	#	#	#	#	#
	Chemical Wastes - 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.		@	@	@	@	V	V	@	@	@	@	V	@
	Municipal Wastes - Waste shall be stored within a temporary refuse collection facility, in appropriate containers prior to collection and disposal. - Regular, daily collections are required by an approved waste collector.		V	V	V	V	+	V	V	V	V	V	V	V

Ecology - Schedule of Recommended Mitigation Measures

Impact	**Mitigation Measures**	**Timing**	**Implementation Status**											
			Nov 15	**Dec 15**	**Jan 16**	**Feb 16**	**Mar 16**	**Apr 16**	**May 16**	**Jun 16**	**Jul 16**	**Aug 16**	**Sep 16**	**Oct 16**
	Accurate Delineation of Works Area - 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.		V	V	V	V	V	V	V	V	V	V	V	V
	Vegetation Clearance - 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.		V	V	V	V	V	V	V	V	V	V	V	V
	Dust generation 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: - 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.		V	V	V	V	V	V	V	V	V	V	V	V
	Surface Run-off In general, mitigation measures shall be in accordance with ProPECC PN1/94 on 'Construction		V	V	V	V	V	V	V	V	V	V	V	V

	Site Drainage'. Key measures include: - 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).													

Landscape and Visual Impact - Schedule of Recommended Mitigation Measures

Impact	Mitigation Measures	Timing	Implementation Status											
			Nov 15	Dec 15	Jan 16	Feb 16	Mar 16	Apr 16	May 16	Jun 16	Jul 16	Aug 16	Sep 16	Oct 16
Landscape and Visual during Construction	Preservation of Existing Vegetation - 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 - 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	V	V	V
	Hoarding - 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	V	V
	Top Soils - 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 - 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/m3	500 μg/m3

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

Location	Action Level	Limit Level
AM2	200.7 μg/m3	260 μg/m3

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

Location	Action Level	Limit Level
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

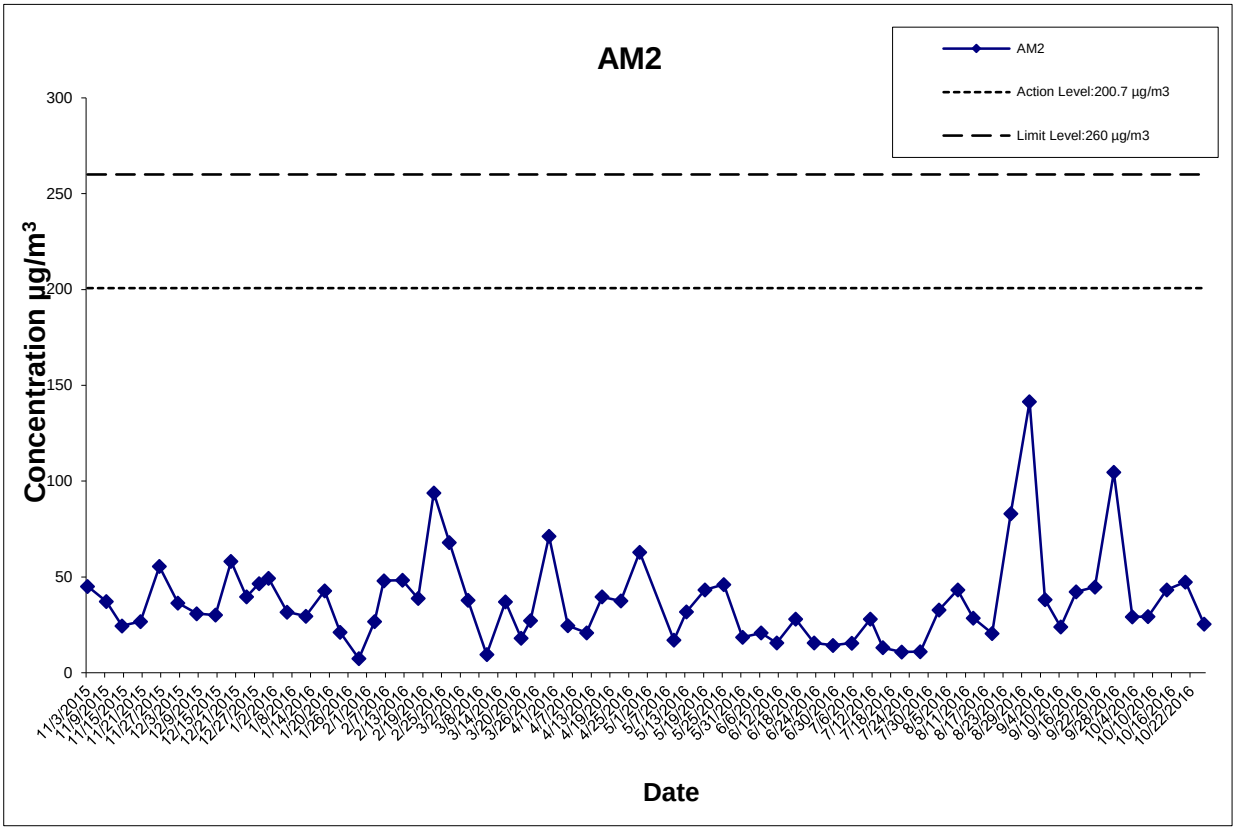
APPENDIX E
IMPACT AIR QUALITY MONITORING RESULTS AND THEIR GRAPHICAL PRESENTATION

Impact Air Quality Monitoring Results

24-hour TSP Monitoring Results at Station AM2 (Fanling Government Secondary School)

Date	Weather Condition	Air Temp. (°C)	Atmospheric Pressure(hPa)	Flow Rate (m^3/min.) Initial	Flow Rate (m^3/min.) Final	Av. flow (m^3/min)	Total vol. (m^3)	Filter Weight (g) Initial	Filter Weight (g) Final	Particulate weight(g)	Elapse Time Initial	Elapse Time Final	Sampling Time(hrs.)	Conc. (μg/m^3)	Actino Level (μg/m^3)	Limit Level (μg/m^3)
3-Nov-15	Sunny	23.7	1019.5	1.314	1.314	1.314	1892.2	2.8270	2.9124	0.0854	6338.03	6362.03	24.00	45.1	200.7	260
9-Nov-15	Sunny	26.7	1015.8	1.314	1.314	1.314	1892.2	2.8287	2.8991	0.0704	6362.03	6386.03	24.00	37.2	200.7	260
14-Nov-15	Cloudy	24.3	1014.5	1.314	1.314	1.314	1892.2	2.7789	2.8252	0.0463	6386.03	6410.03	24.00	24.5	200.7	260
20-Nov-15	Sunny	24.8	1017.2	1.314	1.314	1.314	1892.2	2.8246	2.8754	0.0508	6410.03	6434.03	24.00	26.8	200.7	260
26-Nov-15	Sunny	18.2	1020.6	1.314	1.314	1.314	1892.2	2.7640	2.8691	0.1051	6434.03	6458.03	24.00	55.5	200.7	260
2-Dec-15	Sunny	23.3	1017.1	1.314	1.314	1.314	1892.2	2.8084	2.8773	0.0689	6458.03	6482.03	24.00	36.4	200.7	260
8-Dec-15	Fine	18.0	1022.2	1.314	1.314	1.314	1892.2	2.7871	2.8455	0.0584	6482.03	6506.03	24.00	30.9	200.7	260
14-Dec-15	Sunny	18.4	1019.0	1.314	1.314	1.314	1892.2	2.8342	2.8911	0.0569	6506.03	6530.03	24.00	30.1	200.7	260
19-Dec-15	Sunny	16.2	1025.4	1.314	1.314	1.314	1892.2	2.7980	2.9079	0.1099	6530.03	6554.03	24.00	58.1	200.7	260
24-Dec-15	Sunny	22.3	1016.8	1.314	1.314	1.314	1892.2	2.8477	2.9226	0.0749	6554.03	6578.03	24.00	39.6	200.7	260
28-Dec-15	Fine	17.3	1026.6	1.314	1.314	1.314	1892.2	2.8146	2.9028	0.0882	6578.03	6602.03	24.00	46.6	200.7	260
31-Dec-15	Fine	20.5	1026.4	1.314	1.314	1.314	1892.2	2.8115	2.9048	0.0933	6602.03	6626.03	24.00	49.3	200.7	260
6-Jan-16	Fine	20.9	1018.8	1.314	1.314	1.314	1892.2	2.8890	2.9490	0.0600	6626.03	6650.03	24.00	31.7	200.7	260
12-Jan-16	Fine	17.3	1019.9	1.314	1.314	1.314	1892.2	2.9183	2.9743	0.0560	6650.03	6674.03	24.00	29.6	200.7	260
18-Jan-16	Fine	15.2	1017.1	1.314	1.314	1.314	1892.2	2.8988	2.9798	0.0810	6674.03	6698.03	24.00	42.8	200.7	260
23-Jan-16	Cloudy	8.5	1027.1	1.314	1.314	1.314	1892.2	2.9150	2.9550	0.0400	6698.03	6722.03	24.00	21.1	200.7	260
29-Jan-16	Rainy	16.6	1017.9	1.314	1.314	1.314	1892.2	2.8928	2.9068	0.0140	6722.03	6746.03	24.00	7.4	200.7	260
3-Feb-16	Fine	12.5	1023.6	1.314	1.314	1.314	1892.2	2.8827	2.9335	0.0508	6746.03	6770.03	24.00	26.8	200.7	260
6-Feb-16	Sunny	13.6	1024.9	1.314	1.314	1.314	1892.2	2.8636	2.9546	0.0910	6770.03	6794.03	24.00	48.1	200.7	260
12-Feb-16	Cloudy	19.2	1013.4	1.314	1.314	1.314	1892.2	2.8981	2.9894	0.0913	6794.03	6818.03	24.00	48.3	200.7	260
17-Feb-16	Cloudy	12.9	1024.1	1.314	1.314	1.314	1892.2	2.8231	2.8966	0.0735	6818.03	6842.03	24.00	38.8	200.7	260
22-Feb-16	Cloudy	16.1	1020.6	1.314	1.314	1.314	1892.2	2.8389	3.0164	0.1775	6842.03	6866.03	24.00	93.8	200.7	260
27-Feb-16	Cloudy	15.5	1024.7	1.314	1.314	1.314	1892.2	2.8154	2.9441	0.1287	6866.03	6890.03	24.00	68.0	200.7	260
4-Mar-16	Sunny	20.2	1018.1	1.314	1.314	1.314	1892.2	2.7468	2.8184	0.0716	6890.03	6914.03	24.00	37.8	200.7	260
10-Mar-16	Rainy	13.4	1019.5	1.314	1.314	1.314	1892.2	2.8466	2.8645	0.0179	6914.03	6938.03	24.00	9.5	200.7	260
16-Mar-16	Fine	15.3	1015.0	1.314	1.314	1.314	1892.2	2.8321	2.9023	0.0702	6938.03	6962.03	24.00	37.1	200.7	260
21-Mar-16	Cloudy	17.1	1014.8	1.314	1.314	1.314	1892.2	2.8048	2.8391	0.0343	6962.03	6986.03	24.00	18.1	200.7	260
24-Mar-16	Cloudy	15.3	1020.2	1.314	1.314	1.314	1892.2	2.9065	2.9580	0.0515	6986.03	7010.03	24.00	27.2	200.7	260
30-Mar-16	Cloudy	20.0	1018.3	1.314	1.314	1.314	1892.2	2.8067	2.9416	0.1349	7010.03	7034.03	24.00	71.3	200.7	260
5-Apr-16	Cloudy	22.3	1013.3	1.314	1.314	1.314	1892.2	2.7931	2.8396	0.0465	7034.03	7058.03	24.00	24.6	200.7	260
11-Apr-16	Cloudy	21.5	1010.1	1.314	1.314	1.314	1892.2	2.8907	2.9302	0.0395	7058.03	7082.03	24.00	20.9	200.7	260
16-Apr-16	Cloudy	24.7	1010.5	1.314	1.314	1.314	1892.2	2.8864	2.9614	0.0750	7082.03	7106.03	24.00	39.6	200.7	260
22-Apr-16	Cloudy	23.7	1010.7	1.314	1.314	1.314	1892.2	2.8361	2.9071	0.0710	7106.03	7130.03	24.00	37.5	200.7	260
28-Apr-16	Sunny	26.0	1010.4	1.314	1.314	1.314	1892.2	2.8699	2.9889	0.1190	7130.03	7154.03	24.00	62.9	200.7	260
9-May-16	Rainy	28.7	1010.1	1.314	1.314	1.314	1892.2	2.8156	2.8480	0.0324	7178.03	7202.03	24.00	17.1	200.7	260
13-May-16	Sunny	25.5	1012.4	1.314	1.314	1.314	1892.2	2.8226	2.8828	0.0602	7202.03	7226.03	24.00	31.8	200.7	260
19-May-16	Sunny	25.5	1009.9	1.314	1.314	1.314	1892.2	2.8048	2.8867	0.0819	7226.03	7250.03	24.00	43.3	200.7	260
25-May-16	Sunny	28.0	1007.8	1.314	1.314	1.314	1892.2	2.8067	2.8940	0.0873	7250.03	7274.03	24.00	46.1	200.7	260
31-May-16	Sunny	29.9	1009.5	1.314	1.314	1.314	1892.2	2.8274	2.8625	0.0351	7274.03	7298.03	24.00	18.6	200.7	260
6-Jun-16	Fine	26.2	1008.8	1.314	1.314	1.314	1892.2	2.8206	2.8600	0.0394	7318.03	7342.03	24.00	20.8	200.7	260
11-Jun-16	Rainy	26.6	1005.9	1.314	1.314	1.314	1892.2	2.8108	2.8404	0.0296	7342.03	7366.03	24.00	15.6	200.7	260
17-Jun-16	Sunny	29.4	1008.2	1.314	1.314	1.314	1892.2	2.8073	2.8604	0.0531	7366.03	7390.03	24.00	28.1	200.7	260
23-Jun-16	Fine	30.4	1008.4	1.314	1.314	1.314	1892.2	2.7637	2.7933	0.0296	7390.03	7414.03	24.00	15.6	200.7	260
29-Jun-16	Sunny	29.0	1010.0	1.314	1.314	1.314	1892.2	2.8801	2.9071	0.0270	7414.03	7438.03	24.00	14.3	200.7	260
5-Jul-16	Fine	30.1	1006.6	1.314	1.314	1.314	1892.2	2.8262	2.8555	0.0293	7438.03	7462.03	24.00	15.5	200.7	260
11-Jul-16	Cloudy	28.9	1002.2	1.314	1.314	1.314	1892.2	2.8838	2.9368	0.0530	7462.03	7486.03	24.00	28.0	200.7	260
15-Jul-16	Sunny	28.9	1006.8	1.314	1.314	1.314	1892.2	2.7982	2.8230	0.0248	7486.03	7510.03	24.00	13.1	200.7	260
21-Jul-16	Rainy	29.2	1009.8	1.314	1.314	1.314	1892.2	2.8147	2.8354	0.0207	7510.03	7534.03	24.00	10.9	200.7	260
27-Jul-16	Sunny	29.4	1008.3	1.314	1.314	1.314	1892.2	2.8455	2.8664	0.0209	7534.03	7558.03	24.00	11.0	200.7	260
2-Aug-16	Rainy	27.1	995.9	1.314	1.314	1.314	1892.2	2.8072	2.8693	0.0621	7558.03	7582.03	24.00	32.8	200.7	260
8-Aug-16	Sunny	30.5	1003.0	1.314	1.314	1.314	1892.2	2.8007	2.8827	0.0820	7582.03	7606.03	24.00	43.3	200.7	260
13-Aug-16	Sunny	28.8	999.8	1.314	1.314	1.314	1892.2	2.8278	2.8818	0.0540	7606.03	7630.03	24.00	28.5	200.7	260
19-Aug-16	Fine	28.2	1003.0	1.314	1.314	1.314	1892.2	2.8446	2.8833	0.0387	7630.03	7654.03	24.00	20.5	200.7	260
25-Aug-16	Fine	30.4	1004.2	1.314	1.314	1.314	1892.2	2.8290	2.9860	0.1570	7654.03	7678.03	24.00	83.0	200.7	260
31-Aug-16	Sunny	28.6	1006.3	1.314	1.314	1.314	1892.2	2.8408	3.1086	0.2678	7678.03	7702.03	24.00	141.5	200.7	260
5-Sep-16	Rainy	27.1	1006.1	1.314	1.314	1.314	1892.2	2.8580	2.9303	0.0723	7702.03	7726.03	24.00	38.2	200.7	260
10-Sep-16	Rainy	26.3	1007.8	1.314	1.314	1.314	1892.2	2.8700	2.9153	0.0453	7726.03	7750.03	24.00	23.9	200.7	260
15-Sep-16	Sunny	42703.0	1002.9	1.314	1.314	1.314	1892.2	2.8643	2.9443	0.0800	7750.03	7774.03	24.00	42.3	200.7	260
21-Sep-16	Sunny	27.1	1014.4	1.314	1.314	1.314	1892.2	2.7900	2.8746	0.0846	7774.03	7798.03	24.00	44.7	200.7	260
27-Sep-16	Sunny	31.1	1002.6	1.314	1.314	1.314	1892.2	2.8658	3.0638	0.1980	7798.03	7822.03	24.00	104.6	200.7	260
3-Oct-16	Sunny	27.5	1007.8	1.314	1.314	1.314	1892.2	2.8192	2.8744	0.0552	7722.03	7746.03	24.00	29.2	200.7	260
8-Oct-16	Cloudy	28.1	1006.8	1.314	1.314	1.314	1892.2	2.8385	2.8940	0.0555	7746.03	7770.03	24.00	29.3	200.7	260
14-Oct-16	Fine	26.7	1013.2	1.314	1.314	1.314	1892.2	2.8303	2.9121	0.0818	7770.03	7794.03	24.00	43.2	200.7	260
20-Oct-16	Fine	25.1	1008.7	1.314	1.314	1.314	1892.2	2.8317	2.9213	0.0896	7794.03	7818.03	24.00	47.4	200.7	260
26-Oct-16	Sunny	27.1	1015.6	1.314	1.314	1.314	1892.2	2.8283	2.8763	0.0480	7818.03	7842.03	24.00	25.4	200.7	260

Average for the reporting period (Nov 15 to Oct 16)	37.4
Minimum for the reporting period (Nov 15 to Oct 16)	7.4
Maximum for the reporting period (Nov 15 to Oct 16)	141.5



CONTRACT NO. HY/2012/06

WIDENING OF FANLING HIGHWAY

- TAI HANG TO WO HOP SHEK INTERCHANGE

AECOM

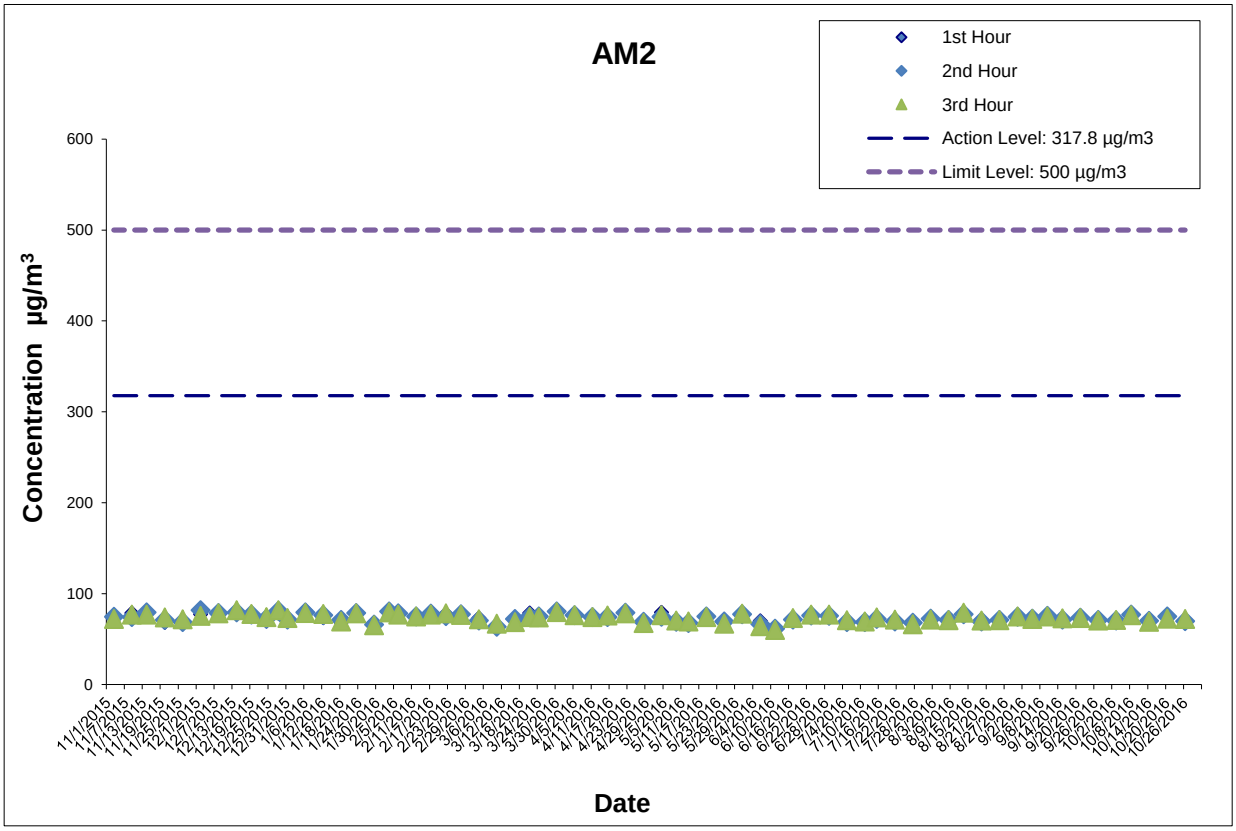
Graphical Presentation of Impact 24-hour TSP Monitoring Results

Project No.: 60307376 **Date: Dec-16** **Appendix E**

Impact Air Quality Monitoring Results

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

Date	Start Time (hh:mm)	1st Hour Conc. ($\mu g/m^3$)	2nd Hour Conc. ($\mu g/m^3$)	3rd Hour Conc. ($\mu g/m^3$)
3-Nov-15	14:00	73.3	74.6	72.4
9-Nov-15	14:00	78.8	74.5	77.3
14-Nov-15	13:34	78.5	79.6	77.2
20-Nov-15	13:00	68.6	71.4	73.9
26-Nov-15	14:05	67.6	68.9	71.8
2-Dec-15	9:50	77.6	81.8	75.9
8-Dec-15	13:52	77.6	78.8	78.4
14-Dec-15	13:40	81.2	79.6	82.1
19-Dec-15	13:45	76.4	77.2	77.8
24-Dec-15	14:15	69.9	72.7	74.4
28-Dec-15	13:00	79.3	81.3	81.9
31-Dec-15	13:05	72.3	71.6	73.2
6-Jan-16	13:40	81.6	79.4	79.0
12-Jan-16	10:15	73.8	76.3	77.9
18-Jan-16	10:00	68.6	71.2	69.4
23-Jan-16	13:11	78.0	78.9	78.4
29-Jan-16	10:30	68.2	66.2	65.4
3-Feb-16	9:35	80.9	80.5	79.4
6-Feb-16	10:03	77.6	78.5	77.3
12-Feb-16	9:52	75.6	74.9	75.1
17-Feb-16	10:02	77.4	78.2	77.1
22-Feb-16	10:00	77.8	75.3	78.4
27-Feb-16	12:52	76.2	77.5	76.7
4-Mar-16	9:50	73.3	70.5	72.1
10-Mar-16	10:00	65.2	63.8	67.2
16-Mar-16	10:10	70.6	72.4	68.8
21-Mar-16	10:05	78.8	75.2	74.4
24-Mar-16	13:06	74.6	75.1	74.1
30-Mar-16	13:25	81.2	80.7	79.8
5-Apr-16	10:02	77.4	76.3	76.5
11-Apr-16	11:29	73.3	74.4	74.2
16-Apr-16	9:57	75.6	74.2	76.0
22-Apr-16	10:15	78.4	79.1	78.5
28-Apr-16	9:50	68.6	69.2	67.9
4-May-16	11:00	79.6	74.8	76.4
9-May-16	10:00	68.8	69.2	70.7
13-May-16	10:00	68.6	67.9	69.4
19-May-16	12:07	74.6	75.1	74.3
25-May-16	11:20	68.6	69.4	67.1
31-May-16	13:05	75.4	77.5	78.3
6-Jun-16	10:50	70.1	66.8	64.2
11-Jun-16	10:30	62.2	61.7	60.3
17-Jun-16	11:30	70.8	71.6	73.3
23-Jun-16	9:40	74.9	76.1	77.0
29-Jun-16	11:50	74.9	75.8	77.3
5-Jul-16	11:49	69.5	68.7	70.9
11-Jul-16	15:30	67.4	68.9	69.5
15-Jul-16	9:59	73.4	72.2	74.0
21-Jul-16	15:07	70.5	69.7	71.6
27-Jul-16	11:05	66.9	68.2	66.4
2-Aug-16	13:00	72.1	72.6	71.7
8-Aug-16	14:59	70.4	71.2	70.8
13-Aug-16	10:15	78.4	77.6	79.1
19-Aug-16	11:40	71.2	69.4	70.6
25-Aug-16	15:09	70.8	71.2	70.9
31-Aug-16	10:08	96.1	74.8	75.2
5-Sep-16	10:49	73.4	72.7	72.2
10-Sep-16	10:10	76.4	75.7	75.2
15-Sep-16	13:30	72.5	71.6	73.0
21-Sep-16	13:50	72.8	73.8	73.3
27-Sep-16	14:00	72.1	71.3	70.6
3-Oct-16	11:58	72.0	70.6	71.3
8-Oct-16	10:22	75.6	77.2	76.4
14-Oct-16	12:39	68.9	70.2	69.1
20-Oct-16	13:10	74.3	75.2	72.5
26-Oct-16	11:10	71.6	70.0	72.4
Average for the reporting period (Nov 15 to Oct 16)				73.7
Minimum for the reporting period (Nov 15 to Oct 16)				60.3
Maximum for the reporting period (Nov 15 to Oct 16)				96.1



CONTRACT NO. HY/2012/06

WIDENING OF FANLING HIGHWAY

- TAI HANG TO WO HOP SHEK INTERCHANGE

AECOM

Graphical Presentation of Impact 1-hour TSP Monitoring Results

Project No.: 60307376 **Date: Dec-16** **Appendix E**

APPENDIX F
METEROLOGICAL DATA

Appendix F Meteorological Data

November 2015

November 2015 emerged as the warmest November in Hong Kong since records began in 1884 with a record-breaking mean temperature of 24.0 degrees, 2.2 degrees above the November normal of 21.8 degrees. The anomalously warm weather was mainly attributed to the relatively high sea surface temperatures over the northern part of the South China Sea and the rather weak advection of cold air from the north despite the prevailing northeast monsoon. The month was also drier than usual with only 22.8 millimetres of rainfall, a deficit of about 39 percent as compared to the normal figure of 37.6 millimetres. The accumulated rainfall of 1810.2 millimetres since 1 January was about 24 percent below the normal figure of 2371.7 millimetres for the same period.

December 2015

With a relatively humid air mass affecting the territory for most part of the month, the weather of December 2015 was gloomier and wetter than usual. The total duration of sunshine recorded in the month was 75.9 hours, only about 44 percent of the normal figure of 172.2 hours. Two rainy episodes on 5 and 9 December mostly contributed to the monthly rainfall of 64.3 millimetres, more than double the normal figure of 26.8 millimetres. However, the annual rainfall of 1874.5 millimetres was still about 22 percent below the normal of 2398.5 millimetres. December 2015 was also warmer than usual with a monthly mean temperature of 18.6 degrees, 0.7 degrees above the normal figure of 17.9 degrees.

January 2016

January 2016 was characterized by an intense cold surge in the latter part of the month and exceptionally high monthly rainfall. The unseasonably warm weather in the first three weeks of the month was totally offset by the freezing temperatures during the 3-day period of 23 - 25 January. The mean sea level pressure of 1037.7 hectopascals on 24 January was the highest ever recorded at the Observatory. Yet the monthly averaged temperature of 16.0 degrees turned out to be deceptively unremarkable, only 0.3 degree below normal. With upper-air disturbances repeatedly affecting the south China coastal areas and bringing outbreaks of heavy rain, the Observatory recorded an all-time high monthly rainfall of 266.9 millimetres, more than ten times the January normal of 24.7 millimetres and easily breaking the previous record of 214.3 millimetres set way back in January 1887. The heavy rain on 5 January also broke the hourly rainfall record for January.

February 2016

With frequent replenishments of the winter monsoon, February 2016 was cooler than usual. The monthly mean temperature was 15.5 degrees, 1.3 degrees below the normal figure of 16.8 degrees. The month was also drier than usual with 24.8 millimetres of rainfall, only about 46 percent of the normal figure of 54.4 millimetres. However, due to an extremely rainy January, the accumulated rainfall of 291.7 millimetres in the first two months of the year was more than three times the normal figure of 79.1 millimetres for the same period.

March 2016

With the northeast monsoon and a humid maritime airstream competing for dominance over the south China coast, March 2016 in Hong Kong was characterized by gloomy, rainy and humid weather with fluctuating temperatures. Overall, the month was cooler than usual with rainfall above normal. The monthly mean temperature was 17.5 degrees, 1.6 degrees lower than the normal figure of 19.1 degrees. The monthly total rainfall was 148.7 millimetres, about 81 percent more than the normal figure of 82.2 millimetres. The accumulated rainfall of 440.4 millimetres in the first three months of the year was about 1.7 times above the normal figure of 161.3 millimetres for the same period.

April 2016

With a maritime airstream trying to exert control over the coastal areas of Guangdong in a change of seasons, the weather of April 2016 was exceptionally humid and gloomy. The monthly mean relative humidity was 89 percent, six percent higher than normal and also the most humid for April since 1961. Under long spells of clouds, fog or mist, the sunshine duration of 6.9 hours on 6 April already made it the sunniest day in the month. The total duration of bright sunshine recorded in the month was only 55.4 hours, around 54 percent of normal and the sixth lowest for April on record. The month was also warmer and rainier than usual. The monthly mean temperature was 23.6 degrees, 1.0 degrees above the normal figure of 22.6 degrees. The monthly total rainfall was 211.4 millimetres, about 21 percent more than the normal figure of 174.7 millimetres. The accumulated rainfall of 651.8 millimetres in the first four months of the year was nearly double the normal figure of 336.1 millimetres for the same period.

May 2016

The weather for May 2016 was warmer and drier than usual. The monthly mean temperature was 26.7 degrees, 0.8 degree above the normal figure of 25.9 degrees. Despite several rainstorms in the month, the monthly total rainfall was only 233.6 millimetres, about 23 percent below the normal figure of 304.7 millimetres. However, the accumulated rainfall of 885.4 millimetres in the first five months of the year was still about 38 percent more than the normal figure of 640.8 millimetres for the same period.

June 2016

June 2016 was characterized by rainy weather during the first part of the month and persistent very hot weather in the latter part. Overall, the month was exceptionally hot. The monthly mean temperature was 29.4 degrees, 1.5 degrees higher than the normal figure of 27.9 degrees and the second hottest June on record. The monthly mean maximum temperature of 32.4 degrees and minimum temperature of 27.5 degrees were respectively the highest and the second highest for June. Despite there were several heavy rain episodes in the first half of the month, the monthly total rainfall was only 347.4 millimetres, about 24 percent below the normal figure of 456.1 millimetres. The accumulated rainfall for the first half year of 1232.8 millimetres was about 12 percent above the normal figure of 1096.9 millimetres for the same period.

July 2016

With long spells of sunny skies under the dominance of the subtropical ridge, the weather was unusually hot in July 2016. The monthly mean temperature of 29.8 degrees was 1.0 degree higher than the normal figure of 28.8 degrees, equalling the previous highest record set in 2014. The month was much drier than usual with only 175.9 millimetres of rainfall, less than half of the July normal of 376.5 millimetres. The accumulated rainfall of 1408.7 millimetres for the first seven months was about 4 percent below the normal figure of 1473.3 millimetres for the same period.

August 2016

The weather of August 2016 was generally rainy with less sunshine than usual. The total duration of sunshine recorded in the month was 148.5 hours, about 21 percent below the normal figure of 188.9 hours. The monthly total rainfall was 532.7 millimetres, about 23 percent above the normal figure of 432.2 millimetres. The accumulated rainfall of 1941.4 millimetres for the first eight months was about 2 percent above the normal figure of 1905.5 millimetres for the same period.

September 2016

With rainy weather dominating the first part of the month, September 2016 was gloomier than usual. The total duration of sunshine recorded in the month was 135.7 hours, 36.6 hours below the normal figure of 172.3 hours and the seventh lowest on record for September. However, the month was slightly warmer than usual with a monthly mean temperature of 27.9 degrees, 0.2 degree higher than the normal figure of 27.7 degrees. The monthly total rainfall was 323.1 millimetres, slightly below the normal figure of 327.6 millimetres. The accumulated rainfall of 2264.5 millimetres for the first nine months was about 1 percent above the normal figure of 2233.1 millimetres for the same period.

October 2016

October 2016 was marked by record-breaking high mean temperatures, despite a succession of cyclonic systems passing by in the vicinity of Hong Kong and the duration of sunshine falling under 80 percent of the October normal. The monthly mean maximum temperature of 29.1 degrees, monthly mean temperature of 26.8 degrees and monthly mean minimum temperature of 25.0 degrees were all 1.3 degrees above their respective normals and were the highest ever on record for October. After the passage of the remnant circulation of Severe Typhoon Megi over southern China in late September, Tropical Storm Aere hovered for days over the coastal waters of Guangdong at the doorstep of Hong Kong in early October. Then came Super Typhoon Sarika and Super Typhoon Haima in less than a week between 16 and 21 October. The former brought torrential rain that broke the October hourly rainfall record and triggered the Black Rainstorm Warning on 19 October, while the latter led to the issuance of the No. 8 Gale or Storm Signal on 21 October. The monthly rainfall recorded at the Hong Kong Observatory was 624.4 millimetres, more than six times the October normal of 100.9 millimetres and the second highest on record for October. The accumulated rainfall of 2888.9 millimetres up to the end of October was about 24 percent above the normal figure 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)

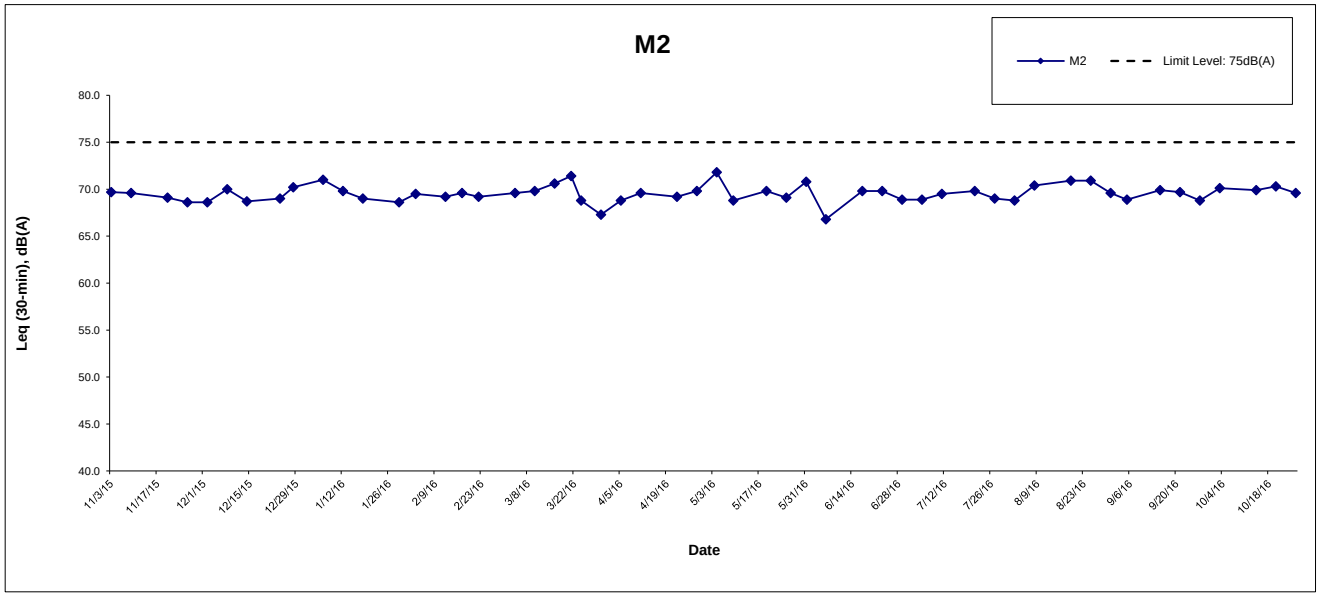
Day time 07:00-19:00 hrs Normal Weekdays Impact Noise Monitoring Results

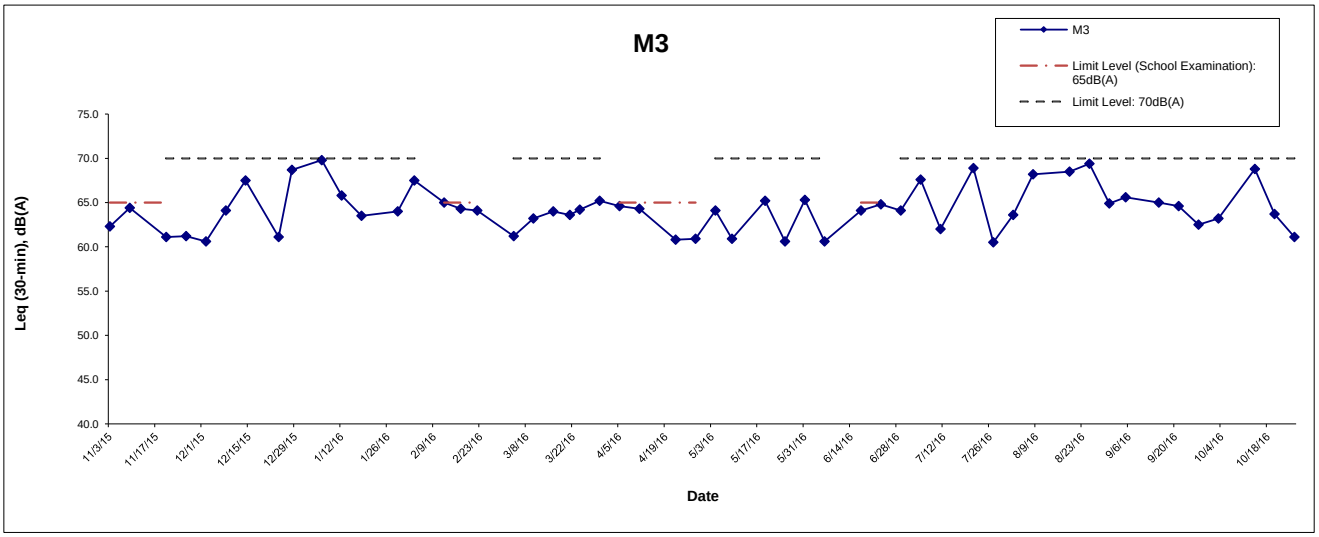
Date	Measured Noise Level for 30-min, dB(A)				Limit Level, dB(A)	Exceedance (Y/N)
	Start Time	Leq*	L10*	L90*		
3-Nov-15	14:30	69.7	72.0	67.0	75	N
9-Nov-15	13:15	69.6	72.3	67.0	75	N
20-Nov-15	14:00	69.1	71.5	66.5	75	N
26-Nov-15	15:00	68.6	70.0	66.5	75	N
2-Dec-15	10:15	68.6	70.5	66.0	75	N
8-Dec-15	14:42	70.0	72.2	66.8	75	N
14-Dec-15	15:49	68.7	70.2	66.4	75	N
24-Dec-15	14:35	69.0	71.5	66.5	75	N
28-Dec-15	14:36	70.2	72.4	68.7	75	N
6-Jan-16	14:06	71.0	73.1	69.5	75	N
12-Jan-16	11:20	69.8	71.5	67.5	75	N
18-Jan-16	10:50	69.0	71.5	66.5	75	N
29-Jan-16	11:10	68.6	71.2	63.4	75	N
3-Feb-16	14:40	69.5	71.3	67.5	75	N
12-Feb-16	10:36	69.2	71.1	66.0	75	N
17-Feb-16	10:48	69.6	71.1	68.9	75	N
22-Feb-16	10:06	69.2	74.0	66.4	75	N
4-Mar-16	10:45	69.6	71.5	67.4	75	N
10-Mar-16	11:05	69.8	73.4	65.9	75	N
16-Mar-16	11:00	70.6	74.8	67.5	75	N
21-Mar-16	10:10	71.4	74.5	67.2	75	N
24-Mar-16	11:19	68.8	70.1	64.6	75	N
30-Mar-16	15:49	67.3	69.8	72.9	75	N
5-Apr-16	11:00	68.8	70.4	64.9	75	N
11-Apr-16	10:02	69.6	72.4	65.2	75	N
22-Apr-16	11:15	69.2	71.4	65.4	75	N
28-Apr-16	10:35	69.8	72.0	68.5	75	N
4-May-16	13:10	71.8	74.9	68.8	75	N
9-May-16	10:15	68.8	71.0	66.5	75	N
19-May-16	15:02	69.8	72.1	66.3	75	N
25-May-16	11:35	69.1	72.0	68.0	75	N
31-May-16	14:05	70.8	72.5	67.0	75	N
6-Jun-16	11:45	66.8	69.5	64.0	75	N
17-Jun-16	13:10	69.8	72.3	64.2	75	N
23-Jun-16	15:19	69.8	71.9	67.2	75	N
29-Jun-16	15:08	68.9	70.5	67.0	75	N
5-Jul-16	9:26	68.9	71.4	66.7	75	N
11-Jul-16	15:45	69.5	72.0	68.0	75	N
21-Jul-16	16:14	69.8	72.4	68.1	75	N
27-Jul-16	11:20	69.0	71.0	66.5	75	N
2-Aug-16	12:55	68.8	70.0	63.4	75	N
8-Aug-16	15:20	70.4	72.5	68.2	75	N
19-Aug-16	11:29	70.9	72.4	68.2	75	N
25-Aug-16	15:29	70.9	72.5	68.2	75	N
31-Aug-16	9:54	69.6	71.2	66.4	75	N
5-Sep-16	10:03	68.9	70.0	65.9	75	N
15-Sep-16	14:30	69.9	71.5	63.0	75	N
21-Sep-16	13:00	69.7	71.1	66.8	75	N
27-Sep-16	14:20	68.8	70.5	66.0	75	N
3-Oct-16	13:50	70.1	73.2	68.4	75	N
14-Oct-16	13:30	69.9	71.5	67.2	75	N
20-Oct-16	14:02	70.3	72.0	67.5	75	N
26-Oct-16	13:00	69.6	72.0	68.0	75	N
Minimum for Nov 15 to Oct 16		66.8	69.5	63.0		
Maximum for Nov 15 to Oct 16		71.8	74.9	72.9		
Average for Nov 15 to Oct 16		69.5	71.7	67.0		

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		
3-Nov-15	14:00	62.3	63.5	60.0	70	N
9-Nov-15	14:00	64.4	67.3	61.2	65	N
20-Nov-15	13:00	61.1	62.5	59.5	70	N
26-Nov-15	14:05	61.2	62.5	59.0	70	N
2-Dec-15	9:50	60.6	62.0	58.5	70	N
8-Dec-15	15:33	64.1	65.6	61.7	70	N
14-Dec-15	14:39	67.5	69.7	65.4	70	N
24-Dec-15	14:15	61.1	62.5	57.5	70	N
28-Dec-15	15:42	68.7	70.3	66.5	70	N
6-Jan-16	14:50	69.8	71.6	65.9	70	N
12-Jan-16	10:22	65.8	67.0	63.0	70	N
18-Jan-16	10:00	63.5	65.0	60.0	70	N
29-Jan-16	10:30	64.0	67.9	60.5	70	N
3-Feb-16	15:50	67.5	69.7	65.3	70	N
12-Feb-16	9:53	65.0	66.1	63.7	65	N
17-Feb-16	10:02	64.3	66.1	62.7	65	N
22-Feb-16	11:00	64.1	67.9	61.5	65	N
4-Mar-16	9:50	61.2	62.5	57.5	70	N
10-Mar-16	10:10	63.2	66.8	59.6	70	N
16-Mar-16	10:10	64.0	67.6	60.2	70	N
21-Mar-16	11:10	63.6	67.5	60.2	70	N
24-Mar-16	13:00	64.2	66.3	62.0	70	N
30-Mar-16	16:40	65.2	67.9	71.4	70	N
5-Apr-16	10:02	64.6	65.7	61.4	65	N
11-Apr-16	11:29	64.3	66.0	60.5	65	N
22-Apr-16	10:20	60.8	62.6	59.4	65	N
28-Apr-16	9:50	60.9	62.0	58.5	65	N
4-May-16	11:00	64.1	67.8	61.2	70	N
9-May-16	10:00	60.9	62.0	58.0	70	N
19-May-16	15:43	65.2	67.1	62.6	70	N
25-May-16	11:20	60.6	61.5	57.0	70	N
31-May-16	13:10	65.3	67.0	62.0	70	N
6-Jun-16	11:00	60.6	62.0	58.0	70	N
17-Jun-16	14:00	64.1	67.3	59.2	65	N
23-Jun-16	16:17	64.8	69.4	60.2	65	N
29-Jun-16	16:00	64.1	65.5	63.0	70	N
5-Jul-16	11:29	67.6	69.2	65.3	70	N
11-Jul-16	15:30	62.0	63.5	60.0	70	N
21-Jul-16	15:12	68.9	71.5	67.4	70	N
27-Jul-16	11:05	60.5	61.5	57.0	70	N
2-Aug-16	13:00	63.6	66.0	60.1	70	N
8-Aug-16	16:10	68.2	70.5	66.3	70	N
19-Aug-16	11:14	68.5	70.4	66.7	70	N
25-Aug-16	15:16	69.4	71.5	67.2	70	N
31-Aug-16	10:46	64.9	66.0	62.1	70	N
5-Sep-16	10:49	65.6	66.2	62.1	70	N
15-Sep-16	13:30	65.0	67.5	61.0	70	N
21-Sep-16	13:50	64.6	66.1	62.0	70	N
27-Sep-16	14:00	62.5	63.5	60.0	70	N
3-Oct-16	14:00	63.2	66.2	58.6	70	N
14-Oct-16	14:29	68.8	70.2	66.5	70	N
20-Oct-16	13:13	63.7	65.5	61.5	70	N
26-Oct-16	11:10	61.1	62.5	58.5	70	N
Minimum for Nov 15 to Oct 16		60.5	61.5	57.0		
Maximum for Nov 15 to Oct 16		69.8	71.6	71.4		
Average for Nov 15 to Oct 16		64.6	66.7	62.3		

* +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.

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 this month	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	0	5
	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 this month	Total no. followed up by the ET since project commencement
Environmental complaints	23 October 2014	EPD referred an air complaint on 24 October 2014. 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. The resident also complained that the stockpiles have not been covered and watered properly. He now requires the EPD to follow up. The location of complaint is near Lamppost Location EB5717.	Closed		
	31 December 2014	EPD referred a water complaint on 31 December 2014. The complainant complained about the muddy river outside Tai Hang Village Office on 29 December 2014. It was suspected that the muddy water was discharged from the construction works of the Project. He required the EPD to follow up.	Closed		
	25 March 2015	EPD referred a water complaint on 25 March 2015. The complainant complained about the generation of the smell of gasoline from the Widening of Fanling Highway construction site on Tai Wo Service Road West, causing serious nuisance to nearby houses. The situation has continued for a few weeks and she asked the EPD to follow up as soon as possible.	Closed		

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