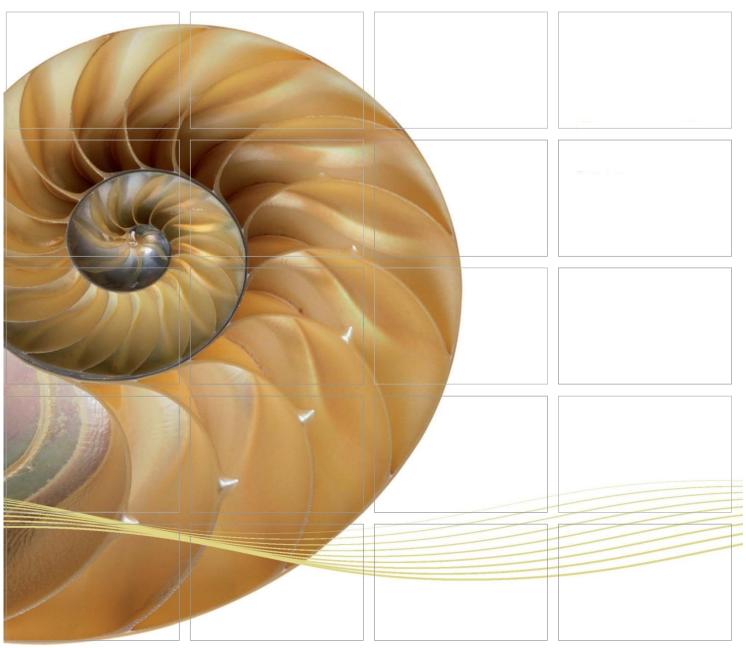
REPORT



Contract No. HY/2017/10 Tuen Mun – Chek Lap Kok Link – Northern Connection Tunnel Buildings, Electrical and Mechanical Works

Twenty-seventh Monthly EM&A Report

14 September 2020

Environmental Resources Management 2507, 25/F One Harbourfront 18 Tak Fung Street Hunghom, Kowloon Hong Kong Telephone 2271 3000



www.erm.com

Facsimile 2723 5660



Contract No. HY/2017/10 Tuen Mun – Chek Lap Kok Link – Northern Connection Tunnel Buildings, Electrical and Mechanical Works

Environmental Resources Management

2507, 25/F One Harbourfront 18 Tak Fung Street Hunghom, Kowloon Hong Kong Telephone: (852) 2271 3000 Facsimile: (852) 2723 5660 E-mail: post.hk@erm.com http://www.erm.com

Twenty-seventh Monthly EM&A Report

Document Code: 0463091_27th Monthly EM&A_20200914.doc

Gammon 0463091 Summary: Date: 14 September 2020 Approved by: This document presents the Twenty-seventh Monthly EM&A Report for Tuen Mun – Chek Lap Kok Link – Northern Connection Tunnel Buildings, Electrical and Mechanical Works. Mr Craig Reid Partner Mr Craig Reid Partner Official Reid Partner Certified by: Jamw Jamw Dr Jasmine Ng ET Leader Image: Twenty-seventh Monthly EM&A Report CW Jame Image: Seventh Monthly EM&A Report Revision Description	Summary This doc	n	Project N	0:			
This document presents the Twenty-seventh Monthly EM&A Report for Tuen Mun – Chek Lap Kok Link – Northern Connection Tunnel Buildings, Electrical and Mechanical Works. Image: Content of the second seco	This doc	лт Л	046309	1			
This document presents the Twenty-seventh Monthly EM&A Report for Tuen Mun – Chek Lap Kok Link – Northern Connection Tunnel Buildings, Electrical and Mechanical Works.			Date:				
This document presents the Twenty-seventh Monthly EM&A Report for Tuen Mun – Chek Lap Kok Link – Northern Connection Tunnel Buildings, Electrical and Mechanical Works. Image: Control of the context of			14 Sept	ember 20	020		
for Tuen Mun – Chek Lap Kok Link – Northern Connection Tunnel			Approved	l by:			
Partner Certified by: Jamiw Jamiw Dr Jasmine Ng ET Leader Image: Seventh Monthly EM&A Report CW JN CAR		This document presents the Twenty-seventh Monthly EM&A Report for Tuen Mun – Chek Lap Kok Link – Northern Connection Tunnel			lifi		
Partner Certified by: Jamiw Jamiw Dr Jasmine Ng ET Leader Image: Strength of the second s			Mr Crai	a Reid			
Jamir Jamir Dr Jasmine Ng Dr Jasmine Ng ET Leader Image: Comparison of the second				0			
ET Leader Image: Second state sta			Certified	by:			
ET Leader Image: Second state sta			Jam				
Image: Constraint of the second se			Dr Jasr	nine Ng			
		1	ET Leade	er			
Revision Description By Checked Approved		Twenty-seventh Monthly EM&A Report	CW	JN	CAR	14/9/20	
		Description	Ву	Checked	Approved	Date	
Business and taking account of the resources devoted to it by agreement with the client. We disclaim any responsibility to the client and others in respect of any matters outside the scope of the above.	Revision	name of 'ERM Hong-Kong, Limited', with all reasonable skill, care and diligence within the terms of the Contract with the client, incorporating our General Terms and Conditions of Business and taking account of the resources devoted to it by agreement with the client. We disclaim any responsibility to the client and others in respect of any matters outside		□ Internal OH5A5 18001:2007 ○H5A5 18001:2007 Certificate No. OH5 515 ○ Public OH5A5 1800 □ Confidential ISO 9001 : 2008		BSI	





Ref.: HYDHZMBEEM00_0_8198L.20.doc

14 September 2020

By Fax (2783 0155) and By Post

AECOM Asia Company Limited Supervising Officer's Representative Office No. 8 Mong Fat Street, Tuen Mun, New Territories, Hong Kong

Attention: Mr. Desmond Fung

Dear Mr. Fung,

Re: Agreement No. CE 48/2011 (EP) Environmental Project Office for the HZMB Hong Kong Link Road, HZMB Hong Kong Boundary Crossing Facilities, and Tuen Mun-Chek Lap Kok Link – Investigation

Contract No. HY/2017/10 TM-CLKL – Northern Connection Tunnel Buildings, E&M Works 27th Monthly EM&A Report for July 2020

Reference is made to the Environmental Team's submission of the monthly EM&A report for August 2020 (ET's ref.: "0463091_27th Monthly EM&A_20200914.doc" dated 14 September 2020) certified by the ET Leader and provided to us via e-mail on 14 September 2020.

Please be informed that we have no adverse comments on the captioned submission. We write to verify the captioned submission in accordance with Condition 4.4 of EP-354/2009/D.

Thank you for your attention. Please feel free to contact the undersigned or the ENPO Leader, Mr. Y H Hui, should you require further information.

Yours sincerely, For and on behalf of Ramboll Hong Kong Limited

Manson Yeung Independent Environmental Checker Tuen Mun-Chek Lap Kok Link

c.c.

HyD	Mr. Patrick Ng	(By Fax: 3188 6614)
HyD	Mr. Andy Ho	(By Fax: 3188 6614)
AECOM	Mr. Conrad Ng	(By Fax: 3922 9797)
ERM	Dr. Jasmine Ng	(By Fax: 2723 5660)
Gammon	Mr. Max Poon	(By Fax: 3520 0486)

Internal: DY, YH, ENPO Site

Q:\Projects\HYDHZMBEEM00\02_Proj_Mgt\02_Corr\HYDHZMBEEM00_0_8198L.20.doc.doc

TABLE OF CONTENTS

EXECUTIVE SUMMARY

1	INTRODUCTION	1
1.1	BACKGROUND	1
1.2	SCOPE OF REPORT	2
1.3	ORGANIZATION STRUCTURE	2
1.4	SUMMARY OF CONSTRUCTION WORKS	2
2	EM&A RESULTS	5
2.1	AIR QUALITY	5
2.2	LANDFILL GAS HAZARD MONITORING	6
2.3	EM&A SITE INSPECTION	7
2.4	WASTE MANAGEMENT STATUS	8
2.5	LANDSCAPE AND VISUAL MONITROING FOR 24-MONTH ESTABLISHMENT PERIC	DD 8
2.6	ENVIRONMENTAL LICENSES AND PERMITS	9
2.7	IMPLEMENTATION STATUS OF ENVIRONMENTAL MITIGATION MEASURES	11
2.8	SUMMARY OF EXCEEDANCES OF THE ENVIRONMENTAL QUALITY PERFORMANC	Έ
	LIMIT	11
2.9	SUMMARY OF COMPLAINTS, NOTIFICATION OF SUMMONS AND SUCCESSFUL PROSECUTIONS	11
3	FUTURE KEY ISSUES	12
3.1	CONSTRUCTION ACTIVITIES FOR THE COMING MONTH	12
3.2	Key Issues for the Coming Month	13
4	CONCLUSIONS AND RECOMMENDATIONS	14
4.1	Conclusions	14

I

List of Appendices

- Appendix A Project Organization for Environmental Works
- Appendix B Construction Programmes
- Appendix C Implementation Schedule of Environmental Mitigation Measures (EMIS)
- Appendix D Summary of Action and Limit Levels
- Appendix E Event Action Plan
- Appendix F EM&A Monitoring Schedule
- Appendix G Calibration Certificate of Monitoring Equipment
- Appendix H Landfill Gas Monitoring Results and Graphical Presentation
- Appendix I Monthly Summary of Waste Flow Table
- Appendix J Cumulative Statistics on Exceedances, Complaints, Notifications of Summons and Successful Prosecutions
- Appendix K Landscape and Visual Monitoring for 24-Month Establishment Period

EXECUTIVE SUMMARY

Under *Contract No. HY/2017/10*, Gammon Construction Limited (GCL) is commissioned by the Highways Department (HyD) to undertake Northern Connection Tunnel Buildings, Electrical and Mechanical Works of the Tuen Mun – Chek Lap Kok Link Project (TM-CLK Link Project) while AECOM Asia Company Limited was appointed by HyD as the Engineer. For implementation of the environmental monitoring and audit (EM&A) programme under the Contract, ERM-Hong Kong, Limited (ERM) has been appointed as the Environmental Team (ET) in accordance with *Environmental Permit No. EP-354/2009/A*. Ramboll Hong Kong Ltd. was employed by HyD as the Independent Environmental Checker (IEC) and Environmental Project Office (ENPO). Subsequent applications for variation of environmental permits (VEP), *EP-354/2009/B*, *EP-354/2009/C* and *EP-354/2009/D*, were granted on 28 January 2014, 10 December 2014 and 13 March 2015, respectively.

The construction phase of the Contract commenced on 7 June 2018 and will tentatively be completed by 2021. The impact monitoring of the EM&A programme, including air quality and environmental site inspections, were commenced on 7 June 2018.

This is the Twenty-seventh Monthly EM&A report presenting the EM&A works carried out during the period from 1 to 31 August 2020 for the *Contract No. HY/2017/10 Northern Connection Tunnel Buildings, Electrical and Mechanical Works* (the "Contract") in accordance with the Updated EM&A Manual of the TM-CLK Link Project. As informed by the Contractor, major activities in the reporting period included:

Land-based Works

- Handover Inspection at Main Control Building;
- Electrical and Mechanical Works at Ventilation Plant Room;
- Handover Inspection at North Ventilation Building;
- Handover Inspection at Administration Building;
- Handover Inspection at Maintenance Depot;
- Electrical and Mechanical Works and Architectural Builder's Work and Finishes at Fire Services Department Building;
- Electrical and Mechanical Works and Architectural Builder's Work and Finishes at Customs and Excise Department Building;
- Electrical and Mechanical Works and Architectural Builder's Work and Finishes at N1;

- Electrical and Mechanical Works at Kiosk N2;
- Electrical and Mechanical Works and Architectural Builder's Work and Finishes at the Tunnel;
- Electrical and Mechanical Works and Architectural Builder's Work and Finishes at underpass at C3 area;
- Handover Inspection at Satellite Control Building;
- Electrical and Mechanical Works and Architectural Builder's Work and Finishes at Kiosk S2;
- Handover Inspection at South Ventilation Building; and
- Soil Mix and Landscape Works at Northern Landfall and Southern Landfall.

A summary of monitoring and audit activities conducted in the reporting period is listed below ⁽¹⁾:

24-hour TSP Monitoring	10 sessions
1-hour TSP Monitoring	10 sessions
Landfill Gas Hazard Monitoring	26 days
Joint Environmental Site Inspection	4 sessions

Summary of Breaches of Action/Limit Levels

Breaches of Action and Limit Levels for Air Quality

One (1) Action Level exceedance for 1-hour TSP was recorded by the Environmental Team of Contract No. *HY/2012/08* during the reporting period. No exceedance of Action and Limit Levels for 24-hour TSP were recorded.

Breaches of Action Level for Landfill Gas Hazard Montioring

Results of landfill gas hazard monitoring in the reporting month complied with the Action Level.

Environmental Complaints, Non-compliance & Summons

There was no environmental complaint, notification of summons or successful prosecution recorded in the reporting period.

ET justification on the Contract Specific Environmental Monitoring and Audit activities under this Contract was submitted to ENPO on 11 September 2018

Reporting Change

Landscape and visual monitoring for 24-month establishment period conducted by Contract No. HY/2012/07 and HY/2013/12 was reported in the EM&A report for this Contract.

Upcoming Works for the Next Reporting Month

Works to be undertaken in the next monitoring period of September 2020 include the following:

Land-based Works

- Handover Inspection at Main Control Building;
- Electrical and Mechanical Works at Ventilation Plant Room;
- Handover Inspection at North Ventilation Building;
- Handover Inspection at Administration Building;
- Handover Inspection at Maintenance Depot;
- Electrical and Mechanical Works and Architectural Builder's Work and Finishes at Fire Services Department Building;
- Electrical and Mechanical Works and Architectural Builder's Work and Finishes at Customs and Excise Department Building;
- Electrical and Mechanical Works and Architectural Builder's Work and Finishes at N1;
- Electrical and Mechanical Works at Kiosk N2;
- Electrical and Mechanical Works and Architectural Builder's Work and Finishes at the Tunnel;
- Electrical and Mechanical Works and Architectural Builder's Work and Finishes at underpass at C3 area;
- Handover Inspection at Satellite Control Building;
- Electrical and Mechanical Works and Architectural Builder's Work and Finishes at Kiosk S2;
- Handover Inspection at South Ventilation Building; and
- Soil Mix and Landscape Works at Northern Landfall and Southern Landfall.

Future Key Issues

Potential environmental impacts arising from the above upcoming construction activities in the next reporting month of September 2020 are mainly associated with dust, waste management and landfill gas monitoring issues.

1.1 BACKGROUND

According to the findings of the Northwest New Territories (NWNT) Traffic and Infrastructure Review conducted by the Transport Department, Tuen Mun Road, Ting Kau Bridge, Lantau Link and North Lantau Highway would be operating beyond capacity after 2016. This forecast has been based on the estimated increase in cross boundary traffic, developments in the Northwest New Territories (NWNT), and possible developments in North Lantau, including the Airport developments, the Lantau Logistics Park (LLP) and the Hong Kong – Zhuhai – Macao Bridge (HZMB). In order to cope with the anticipated traffic demand, two new road sections between NWNT and North Lantau – Tuen Mun – Chek Lap Kok Link (TM-CLKL) and Tuen Mun Western Bypass (TMWB) are proposed.

An Environmental Impact Assessment (EIA) of TM-CLKL (the Project) was prepared in accordance with the EIA Study Brief (No. ESB-175/2007) and the *Technical Memorandum of the Environmental Impact Assessment Process (EIAO-TM*). The EIA Report was submitted under the Environmental Impact Assessment Ordinance (EIAO) in August 2009. Subsequent to the approval of the EIA Report (EIAO Register Number AEIAR-146/2009), an Environmental Permit (EP-354/2009) for TM-CLKL was granted by the Director of Environmental Protection (DEP) on 4 November 2009, and EP variation (VEP) (EP-354/2009/A) was issued on 8 December 2010. Subsequent applications for variation of environmental permits (VEPs), *EP-354/2009/B, EP-354/2009/C* and *EP-354/2009/D*, were granted on 28 January 2014, 10 December 2014 and 13 March 2015, respectively.

Under *Contract No. HY/2017/10*, Gammon Construction Limited (GCL) is commissioned by the Highways Department (HyD) to undertake the Northern Connection Tunnel Buildings, Electrical and Mechanical Works of TM-CLKL while AECOM Asia Company Limited was appointed by HyD as the Engineer. For implementation of the environmental monitoring and audit (EM&A) programme under the Contract, ERM-Hong Kong, Limited (ERM) has been appointed as the Environmental Team (ET). Ramboll Hong Kong Ltd. was employed by HyD as the Independent Environmental Checker (IEC) and Environmental Project Office (ENPO).

The construction phase of the Contract commenced on 7 June 2018 and will be tentatively completed by 2021. The impact monitoring phase of the EM&A programme, including air quality and environmental site inspections, commenced on 7 June 2018.

The general layout plan of the Contract components is presented in *Figures 1.1* & *1.2a to c.*





PROJECT

TUEN MUN -CHEK LAP KOK LINK

CONTRACT TITLE TUEN MUN - CHEK LAP KOK LINK - NORTHERN CONNECTION TUNNEL BUILDINGS, ELECTRICAL AND MECHANICAL WORKS CLIENT





CONSULTANT

AECOM Asia Company Ltd. www.aecom.com

SUB-CONSULTANTS 分月工作新闻公司

Figure 1.1

ISSUE/REVISION

-			Kul
A	JAN.18	TENDER ADDENDUM NO.1	SYLC
	DEC.17	TENDER DRAWING	SYLC
I/R	DATE	DESCRIPTION 内容摘要	CHK.

STATUS

SCALE

DIMENSION UNIT

A1 1:40000

KEY PLAN

MILLIMETRES

PROJECT NO.

CONTRACT NO.

SHEET TITLE

60240249

HY/2017/10





PROJECT

TUEN MUN -CHEK LAP KOK LINK

CONTRACT TITLE

TUEN MUN - CHEK LAP KOK LINK - NORTHERN CONNECTION TUNNEL BUILDINGS, ELECTRICAL AND MECHANICAL WORKS

CLIENT



CONSULTANT

AECOM Asia Company Ltd. www.aecom.com

SUB-CONSULTANTS 公用工程期間公司

Figure 1.2a

ISSUE/REVISION

			<u> </u>
			-
			Kerl
А	JAN.18	TENDER ADDENDUM NO.1	SYLC
-	DEC.17	TENDER DRAWING	SYLC
/R 修訂	DATE 山翔	DESCRIPTION 内容描述	CHK. 後株

STATUS

SCALE

DIMENSION UNIT

MILLIMETRES

KEY PLAN

PROJECT NO.

CONTRACT NO. HY/2017/10

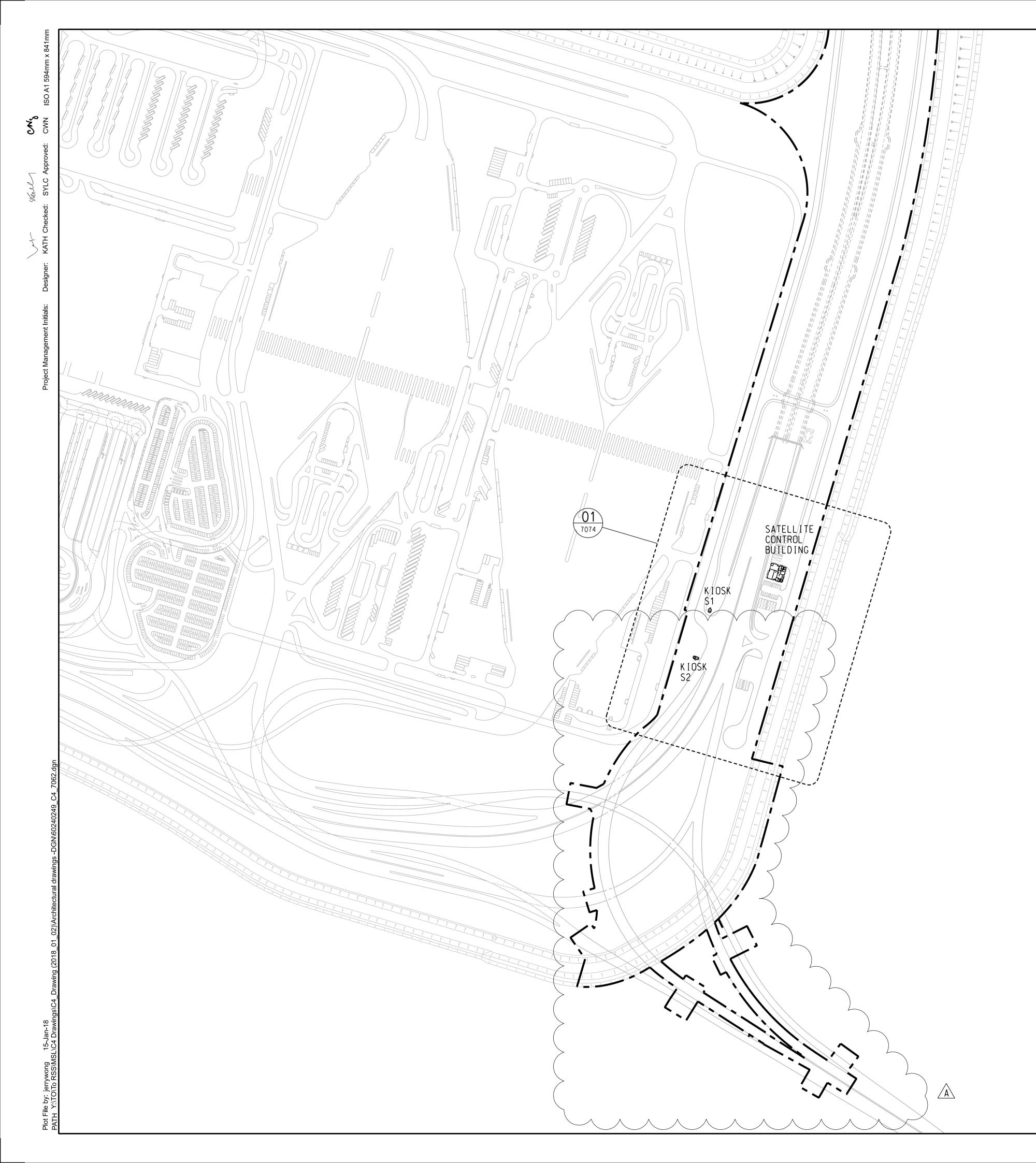
60240249

SHEET TITLE

ZONING PLAN (SHEET 1)

SHEET NUMBER

60240249/C4/7061A





 \wedge

Ν

TUEN MUN -CHEK LAP KOK LINK

CONTRACT TITLE

TUEN MUN - CHEK LAP KOK LINK - NORTHERN CONNECTION TUNNEL BUILDINGS, ELECTRICAL AND MECHANICAL WORKS

CLIENT ^{業主}



■▲■ 路 政 署 HIGHWAYS DEPARTMENT 港珠澳大橋香港工程管理處 Hong Kong - Zhuhai - Macao Bridge Hong Kong Project Management Office

CONSULTANT 工程顧問公司

AECOM Asia Company Ltd. www.aecom.com

SUB-CONSULTANTS 分判工程顧問公司

Figure 1.2b

ISSUE/REVISION

修訂	日期	内容摘要	複核
I/R	DATE	DESCRIPTION	СНК.
-	DEC.17	TENDER DRAWING	SYLC
А	JAN.18	TENDER ADDENDUM NO.1	SYLC
			sterel

STATUS 階段

SCALE ^{比例}	DIMENSION UNIT 尺寸單位	
1 1:2500	MILLIMETRES	

KEY PLAN 索引圖

PROJECT NO. 項目編號

CONTRACT NO. ^{合約編號}

60240249

HY/2017/10

SHEET TITLE 圖紙名稱

ZONING PLAN (SHEET 2)

SHEET NUMBER 圖紙編號

60240249/C4/7062A





PROJECT

Ν

TUEN MUN -CHEK LAP KOK LINK

CONTRACT TITLE

TUEN MUN - CHEK LAP KOK LINK - NORTHERN CONNECTION TUNNEL BUILDINGS, ELECTRICAL AND MECHANICAL WORKS

CLIENT ^{業主}



■▲■ 路政署 HIGHWAYS DEPARTMENT 港珠澳大橋香港工程管理處 Hong Kong - Zhuhai - Macao Bridge Hong Kong Project Management Office

CONSULTANT 工程顧問公司

AECOM Asia Company Ltd. www.aecom.com

SUB-CONSULTANTS 分判工程顧問公司

Figure 1.2c

ISSUE/REVISION

			sterel
А	JAN.18	TENDER ADDENDUM NO.1	SYLC
-	DEC.17	TENDER DRAWING	SYLC
I/R 修訂	DATE 日期	DESCRIPTION 內容摘要	CHK. 複核

STATUS 階段

SCALE ^{比例}	DIMENSION UNIT 尺寸單位
1 1:2500	MILLIMETRES

KEY PLAN 索引圖

PROJECT NO. 項目編號

CONTRACT NO. ^{合約編號}

HY/2017/10

60240249

SHEET TITLE 圖紙名稱

ZONING PLAN (SHEET 3)

SHEET NUMBER 圖紙編號

60240249/C4/7063A

1.2 SCOPE OF REPORT

This is the Twenty-seventh Monthly EM&A Report under the *Contract No. HY*/2017/10 *Tuen Mun – Chek Lap Kok Link – Northern Connection Tunnel Buildings, Electrical and Mechanical Works.* This report presents a summary of the environmental monitoring and audit works in August 2020.

1.3 ORGANIZATION STRUCTURE

The organization structure of the Contract is shown in *Appendix A*. The key personnel contact names and contact details are summarized in *Table 1.1* below.

Party	Position	Name	Telephone	Fax
HyD (Highways Department)	Project Coordinator	Joseph Lee	2762 4958	3188 6614
. ,	Senior Engineer	Cheng Pan	2762 3383	3188 6614
ER (AECOM Asia Company Limited)	Principle Resident Engineer	S. W. Fok	2293 6200	2293 6300
	Resident Engineer	Desmond Fung	2293 6200	2293 6300
ENPO / IEC (Ramboll Hong Kong	ENPO Leader	Y.H. Hui	3465 2850	3465 2899
Ltd.)	IEC	Manson Yeung	9700 6767	3465 2899
Contractor (Gammon	Site Agent	H. H. Lee	6096 6281	-
Construction Limited)	Environmental Officer	Max Poon	9103 6303	-
ET (ERM-HK)	ET Leader	Dr. Jasmine Ng	2271 3311	2723 5660

Table 1.1Contact Information of Key Personnel

1.4 SUMMARY OF CONSTRUCTION WORKS

The construction phase of the Contract commenced on 7 June 2018. The three-month rolling construction programme is shown in Appendix B.

As informed by the Contractor, details of the major works carried out in this reporting month are listed below:

Land-based Works

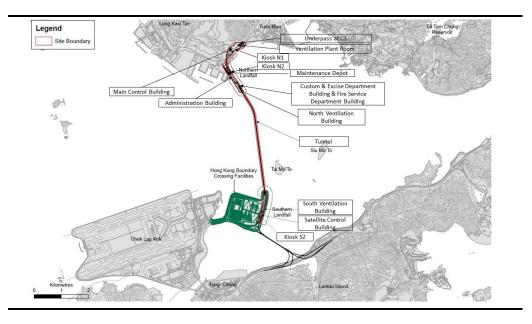
- Handover Inspection at Main Control Building;
- Electrical and Mechanical Works at Ventilation Plant Room;
- Handover Inspection at North Ventilation Building;

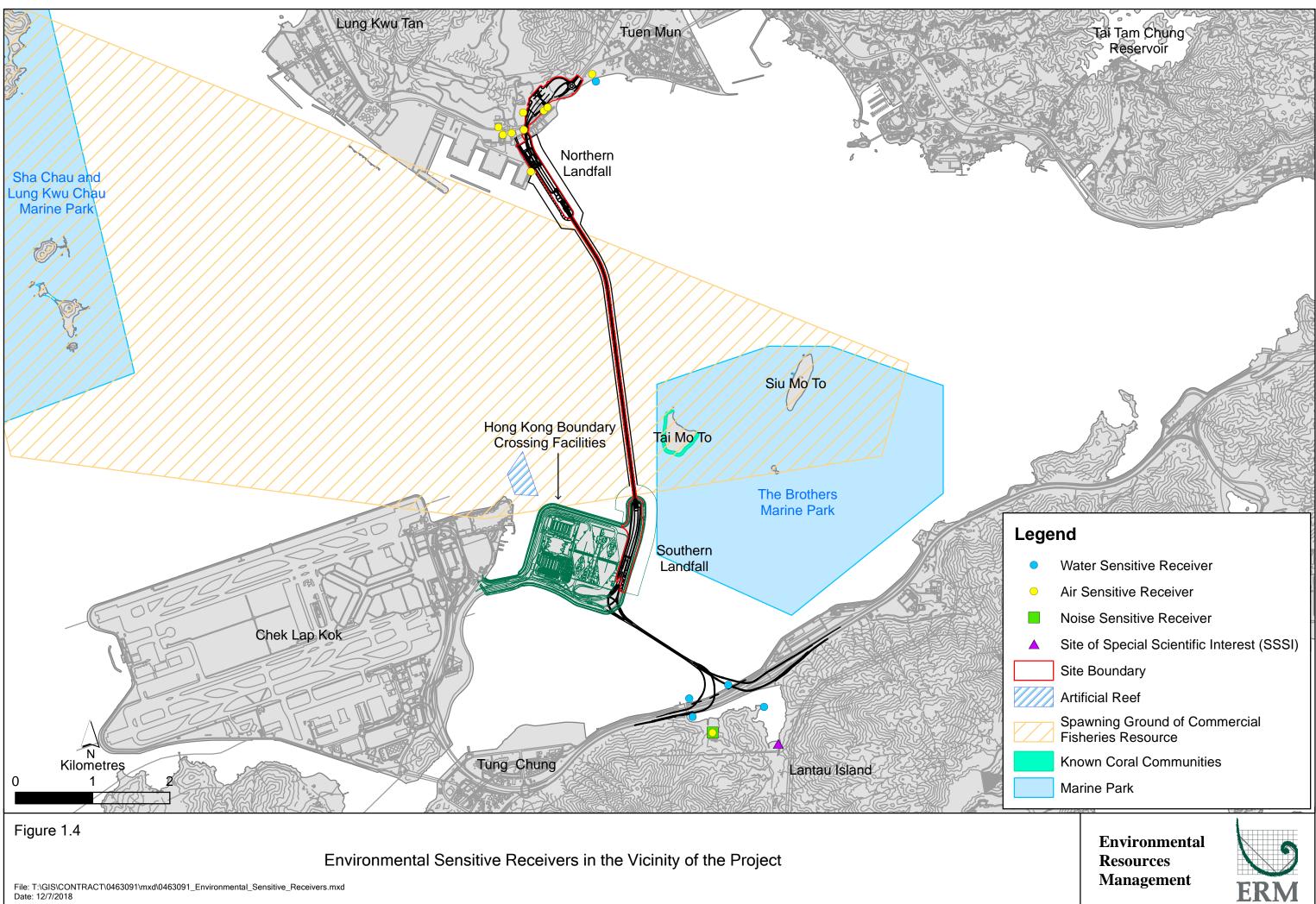
- Handover Inspection at Administration Building;
- Handover Inspection at Maintenance Depot;
- Electrical and Mechanical Works and Architectural Builder's Work and Finishes at Fire Services Department Building;
- Electrical and Mechanical Works and Architectural Builder's Work and Finishes at Customs and Excise Department Building;
- Electrical and Mechanical Works and Architectural Builder's Work and Finishes at N1;
- Electrical and Mechanical Works at Kiosk N2;
- Electrical and Mechanical Works and Architectural Builder's Work and Finishes at the Tunnel;
- Electrical and Mechanical Works and Architectural Builder's Work and Finishes at underpass at C3 area;
- Handover Inspection at Satellite Control Building;
- Electrical and Mechanical Works and Architectural Builder's Work and Finishes at Kiosk S2;
- Handover Inspection at South Ventilation Building; and
- Soil Mix and Landscape Works at Northern Landfall and Southern Landfall.

The locations of the construction activities are shown in *Figure 1.3*. The Environmental Sensitive Receivers in the vicinity of the Contract are shown in *Figure 1.4*.

The implementation schedule of environmental mitigation measures is presented in *Appendix C*.

Figure 1.3 Locations of Major Construction Activities in the Reporting Month





2 EM&A RESULTS

The EM&A programme required environmental monitoring for air quality and environmental site inspections for air quality, water quality and waste management. The EM&A requirements and related findings for each component are summarized in the following sections

2.1 AIR QUALITY

2.1.1 Monitoring Requirements and Equipment

In accordance with the Updated EM&A Manual and the Enhanced TSP Monitoring Plan, impact 1-hour TSP monitoring was conducted three (3) times every six (6) days and impact 24-hour TSP monitoring was carried out once every six (6) days when the highest dust impact was expected. 1-hr and 24hr TSP monitoring frequency was increased to three times per day every three days and daily every three days, respectively, as excavation works for launching shaft under *Contract No. HY/2012/08 Tuen Mun-Chek Lap Kok Link – Northern Connection Sub-sea Tunnel Section* commenced on 24 October 2014.

Results of air quality monitoring were adopted from the published EM&A data of *Contract No. HY/2012/08 Tuen Mun-Chek Lap Kok Link – Northern Connection Sub-sea Tunnel Section* ⁽¹⁾.

The Action and Limit Levels of the air quality monitoring were adopted from the published EM&A reports of *Contract No. HY/2012/08 Tuen Mun-Chek Lap Kok Link – Northern Connection Sub-sea Tunnel Section* ⁽²⁾. The Action and Limit Levels are provided in *Appendix D*.

The locations of the monitoring stations overlapped with Contract No. HY/2012/08 are shown in *Figure 2.1* and presented in *Table 2.1*.

Table 2.1Locations of Impact Air Quality Monitoring Stations and its Corresponding
Monitoring Requirements

Monitoring Station	Monitoring Dates	Location	Description	Parameters & Frequency
ASR1	3, 6, 9, 12, 15, 18, 21,	Tuen Mun	Office	TSP monitoring
	24, 27 and 20 August	Fireboat Station		 1-hour Total Suspended
	2020			Particulates (1-hour TSP,
ASR5		Pillar Point Fire	Office	μ g/m ³), 3 times in every 6 days
		Station		• 24-hour Total Suspended
				Particulates (24-hour TSP,
AQMS1		Previous River	Bare ground	μ g/m ³), daily for 24-hour in
		Trade Golf		every 6 days
				Enhanced TSP monitoring

 Published EM&A data for impact air quality monitoring by *Contract No. HY/2012/08* are available at: http://www.hzmbenpo.com/

(2) Published EM&A reports of *Contract No. HY/2012/08* are available at: http://www.hzmbenpo.com/

ENVIRONMENTAL RESOURCES MANAGEMENT 0463091_27th Monthly EM&A_20200914.doc

Monitoring Station Monitoring Dates	Location	Description	Parameters & Frequency
ASR6	Butterfly Beach	Office	(commenced on 24 October 2014
	Laundry		under Contract No. HY/2012/08)
			 1-hour Total Suspended
ASR10	Butterfly Beach	Recreational	Particulates (1-hour TSP,
	Park	uses	μ g/m ³), 3 times in every 3 days
			• 24-hour Total Suspended
			Particulates (24-hour TSP,
			μ g/m ³), daily for 24-hour in
			every 3 days

2.1.2 Results and Observations

Results of air quality monitoring were adopted from the published EM&A data of *Contract No. HY/2012/08 Tuen Mun-Chek Lap Kok Link – Northern Connection Sub-sea Tunnel Section* ⁽¹⁾.

One (1) Action Level exceedance for 1-hour TSP was recorded by the Environmental Team of Contract No. *HY/2012/08* during the reporting period. No exceedance of Action and Limit Levels for 24-hour TSP were recorded. The exceedance was considered not related to this Contract upon further investigation and the investigation report is presented in *Appendix J*. No action is required to be undertaken in accordance with the Event Action Plan as presented in *Appendix E*.

2.2 LANDFILL GAS HAZARD MONITORING

In accordance with the Updated EM&A Manual of the TM-CLK Link Project, landfill gas hazard monitoring should be perform to ensure that the works area at Pillar Point Valley (PPV) Landfill is free of landfill gas. A total of 26 days of landfill gas hazard monitoring was conducted at Main Control Building during 1 to 31 August 2020 (*Appendix F*).

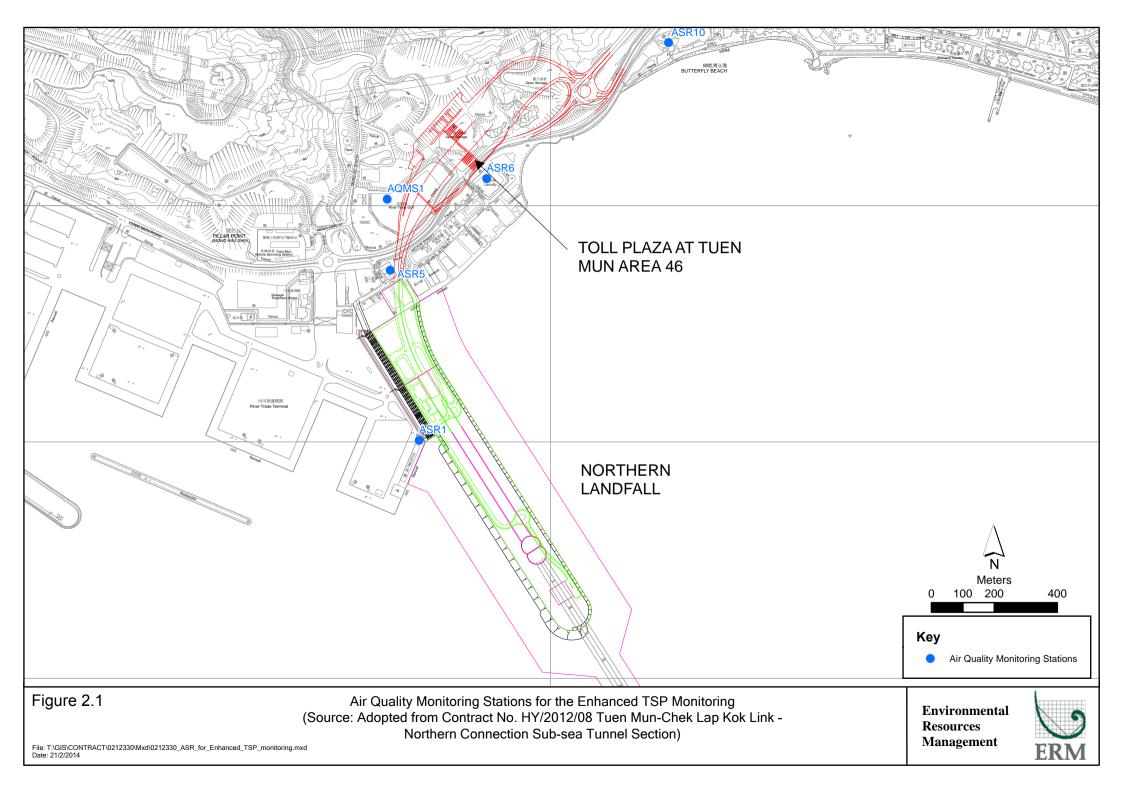
The landfill gas hazard monitoring was conducted in accordance to the Upated EM&A Manual with a Altair 5X Gas Detector. The calibration certificate for the equipment is presented in *Appendix G*.

The Action Level of the landfill gas hazard monitoring was adopted from the Updated EM&A Manual of the TM-CLK Link Project and are provided in Appendix D.

2.2.1 Results and Observations

Results for landfill gas hazard monitoring are summarized in *Table 2.2* and the monitoring data is provided in *Appendix H*.

Results of methane, oxygen and carbon dioxide in the reporting month complied with the Action Level. No action as stated in the Updated EM&A



Manual of the TM-CLK Link Project and presented in *Appendix D* is required to be undertaken.

Table 2.2Summary of Landfill Gas Hazard Monitoring Results in the Reporting Period

	Average (%)	Range (%)	Action Level (%) (a)
Methane	0	0	10/20
Oxygen	20.8	20.7-20.8	19/18
Carbon Dioxide	0.03	0.03-0.04	0.5/1.5

Notes:

(a) Depending on the results of the measurements, actions required will vary. Actions in the event of landfill gas being detected in excavation/confined area was adopted from the Updated EM&A Manual of the TM-CLK Link Project.

2.3 EM&A SITE INSPECTION

Site inspections were carried out on a weekly basis to monitor the implementation of proper environmental pollution control and mitigation measures under the Contract. In the reporting month, four (4) site inspections were carried out on 7, 14, 21 and 28 August 2020.

Key observations and recommendations during the site inspections in this reporting period are summarized in *Table 2.3*.

Table 2.3Specific Observations and Recommendations during the Weekly SiteInspection in this Reporting Month

Inspection Date	Observations	Recommendations/ Remarks
7 August 2020	Southern Landfall (Container Office)Chemical containers should be placed on drip tray.	Southern Landfall (Container Office)The Contractor was reminded to place chemical containers on drip tray.
14 August 2020	Container Village (Portion XX1a)Chemical containers should be placed on drip tray.	Container Village (Portion XX1a)The Contractor was reminded to place chemical containers on drip tray.
21 August 2020	Fire Services Department BuildingSoapy water was observed discharge to the drainage system.	Fire Services Department BuildingThe Contractor was reminded to take measures to avoid illegal discharge.
28 August 2020	 Container Village (Portion XX1a) Chemical container should be placed on drip tray. Fire Services Department Building Chemical container should be placed on drip tray. Oil stain was observed. 	 Container Village (Portion XX1a) The Contractor was reminded to place chemical container on drip tray. Fire Services Department Building The Contractor was reminded to place chemical container on drip tray. The Contractor was reminded to cleanup oil stain and dispose of the chemical waste separately.

The Contractor has rectified all of the observations as identified during environmental site inspections in the reporting month.

2.4 WASTE MANAGEMENT STATUS

The Contractor had submitted application form for registration as chemical waste producer under the Contract. Sufficient numbers of receptacles were available for general refuse collection and sorting.

Wastes generated during this reporting period included mainly construction wastes (inert and non-inert). Reference has been made to the waste flow table prepared by the Contractor (*Appendix I*). The quantities of different types of wastes are summarized in *Table 2.4*.

Table 2.4Quantities of Different Waste Generated in the Reporting Month

Month/Year	Inert C&D Materials ^(a) (m ³)	Inert Construction Waste Re- used (m ³)	Non-inert Construction Waste ^(b) (kg)	Imported Fill (m³)	Recyclable Materials ^(c) (kg)	Chemical Wastes (kg)
August 2020	10,705	0	132,420	10,541	35	0
	Notes:					
	(a) Inert const	truction wastes in	nclude hard rock a	and large broken co	oncrete disposed a	s public fill.
	(b) Non-inert	construction was	stes include gener	al refuse disposed	at landfill.	
	() D 111		1 , 1	11 1 1	1 . 1 . 1	

(c) Recyclable materials include metals, paper, cardboard, plastics, timber and others.

The Contractor was advised to properly maintain on site C&D materials and waste collection, sorting and recording system, dispose of C&D materials and wastes at designated ground and maximize reuse/ recycle of C&D materials and wastes. The Contractor was also reminded to properly maintain the site tidiness and dispose of the wastes accumulated on site regularly and properly.

For chemical waste containers, the Contractor was reminded to treat properly and store temporarily in designated chemical waste storage area on site in accordance with the *Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes*.

2.5

LANDSCAPE AND VISUAL MONITROING FOR 24-MONTH ESTABLISHMENT PERIOD

In accordance with the EM&A Manual, site audits for the monitoring of the planting works during the 24-month establishment period after completion of the construction works shall be conducted by the ET in every 3 months.

The proposal of the Landscape and visual monitoring for 24month establishment period for Contract No. HY/2012/07 and HY/2013/12 was approved by EPD on 1 June 2020. Landscape and visual monitoring for 24-month establishment period for Contract No. HY/2012/07 and HY/2013/12 commenced on the same day.

Landscape and visual monitoring for 24-month establishment period was conducted on 16 and 22 June 2020 by Contract No. HY/2012/07 and 17 and 26 August 2020 by HY/2013/12 for the period from June to August 2020. Results were provided in *Appendix K*.

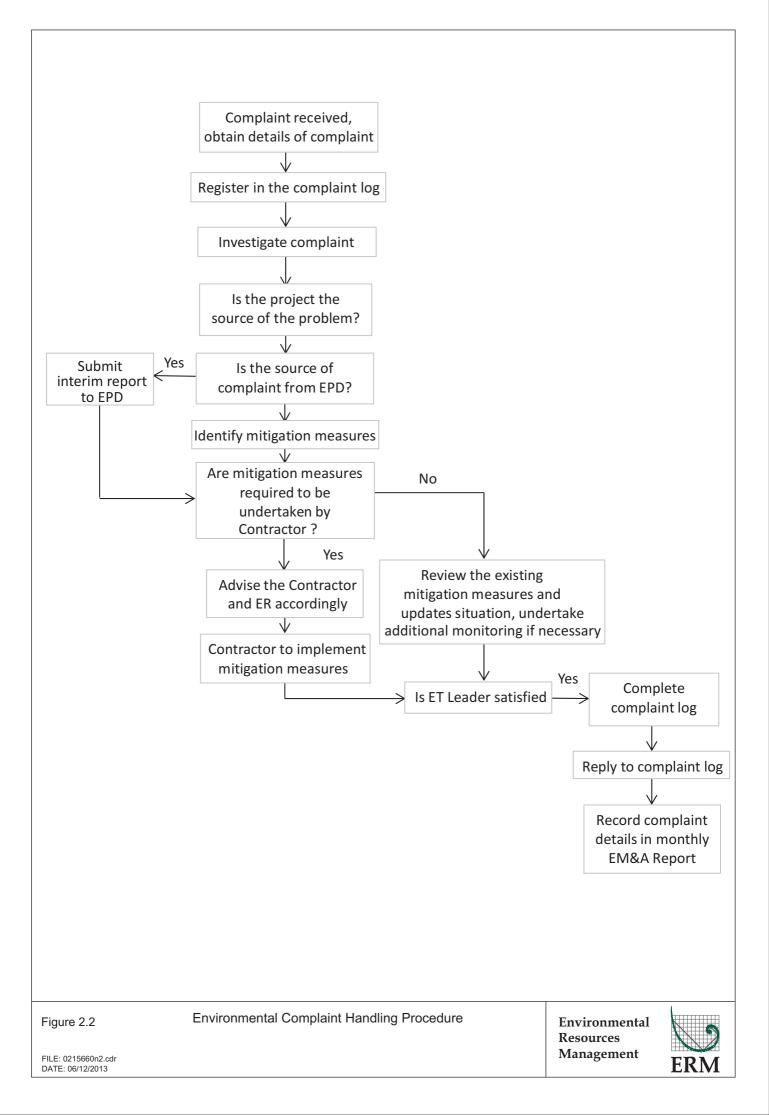
2.6 Environmental Licenses and Permits

The status of environmental licensing and permit is summarized in *Table 2.5* below.

License/ Permit	License or Permit No.	Date of Issue	Date of Expiry	License/ Permit Holder	Remarks
Environmental Permit	EP-354/2009/D	13 March 2015	N/A	HyD	Tuen Mun- Chek Lap Kok Link
APCO Construction Dust	433493	14 May 2018	N/A	GCL	For Tuen Mun working area
Notification					
Construction Waste Billing	7030836	15 May 2018	N/A	GCL	N/A
Account					
Chemical Waste Producer	5213-422-G2827-01	13 June 2018	N/A	GCL	N/A
Registration					
Discharge License under	WT00031783-2018	22 October 2018	31 October 2023	GCL	Sampling Frequency: Bimonthly
WPCO for Buildings at C2					
area					
Discharge License under	WT00032062-2018	30 October 2018	31 October 2023	GCL	Sampling Frequency: Quarterly
WPCO for Buildings at C3					
area					
Discharge License under	WT00034878-2019	1 April 2020	31 March 2025	GCL	Sampling Frequency: Quarterly
WPCO for Southern					
Landfall					
Construction Noise Permit	GW-RW0054-20	11 February 2020	11 August 2020	GCL	For Northern Landfall and Tunnel
Construction Noise Permit	GW-RW0351-20	3 August 2020	29 January 2021	GCL	For Northern Landfall and Tunnel
Construction Noise Permit	GW-RS0413-20	19 June 2020	15 December 2020	GCL	For HKBCF Area

Table 2.5Summary of Environmental Licensing and Permit Status

2.7	IMPLEMENTATION STATUS OF ENVIRONMENTAL MITIGATION MEASURES
	In response to the site audit findings, the Contractors carried out all corrective actions.
	A summary of the Implementation Schedule of Environmental Mitigation Measures (EMIS) is presented in <i>Appendix C</i> . The necessary mitigation measures relevant to this Contract were implemented properly.
	The landscape and visual (L&V) mitigation measures were also monitored on weekly basis in the reporting period. The monitoring status is summarized in <i>Appendix C</i> .
2.8	SUMMARY OF EXCEEDANCES OF THE ENVIRONMENTAL QUALITY PERFORMANCE Limit
	One (1) Action Level exceedance for 1-hour TSP was recorded by the Environmental Team of Contract No. <i>HY/2012/08</i> during the reporting period. No exceedance of Action and Limit Levels for 24-hour TSP were recorded.
	Results of landfill gas hazard monitoring in the reporting month complied with the Action Level.
	Cumulative statistics are provided in <i>Appendix J</i> .
2.9	SUMMARY OF COMPLAINTS, NOTIFICATION OF SUMMONS AND SUCCESSFUL Prosecutions
	The Environmental Complaint Handling Procedure is provided in <i>Figure 2.2</i> .
	There was no environmental complaint, notification of summons or successful prosecution recorded in the reporting period.
	Statistics on complaints, notifications of summons, successful prosecutions are summarized in <i>Appendix J</i> .



3 FUTURE KEY ISSUES

3.1 CONSTRUCTION ACTIVITIES FOR THE COMING MONTH

As informed by the Contractor, the major works for the Contract in September 2020 will be:

Land-based Works

- Handover Inspection at Main Control Building;
- Electrical and Mechanical Works at Ventilation Plant Room;
- Handover Inspection at North Ventilation Building;
- Handover Inspection at Administration Building;
- Handover Inspection at Maintenance Depot;
- Electrical and Mechanical Works and Architectural Builder's Work and Finishes at Fire Services Department Building;
- Electrical and Mechanical Works and Architectural Builder's Work and Finishes at Customs and Excise Department Building;
- Electrical and Mechanical Works and Architectural Builder's Work and Finishes at N1;
- Electrical and Mechanical Works at Kiosk N2;
- Electrical and Mechanical Works and Architectural Builder's Work and Finishes at the Tunnel;
- Electrical and Mechanical Works and Architectural Builder's Work and Finishes at underpass at C3 area;
- Handover Inspection at Satellite Control Building;
- Electrical and Mechanical Works and Architectural Builder's Work and Finishes at Kiosk S2;
- Handover Inspection at South Ventilation Building; and
- Soil Mix and Landscape Works at Northern Landfall and Southern Landfall.

3.2 KEY ISSUES FOR THE COMING MONTH

Potential environmental impacts arising from the above upcoming construction activities in the next reporting month of September 2020 are mainly associated with dust, waste management and landfill gas monitoring issues.

4 CONCLUSIONS AND RECOMMENDATIONS

4.1 CONCLUSIONS

This Twenty-seventh Monthly EM&A Report presents the findings of the EM&A activities undertaken during the period from 1 to 31 August 2020, in accordance with the Updated EM&A Manual and the requirements of EP-354/2009/D.

Air quality (including 1-hour TSP and 24-hour TSP) monitoring were carried out in this reporting month.

One (1) Action Level exceedance for 1-hour TSP was recorded by the Environmental Team of Contract No. *HY/2012/08* during the reporting period. No exceedance of Action and Limit Levels for 24-hour TSP were recorded.

Results of landfill gas hazard monitoring in the reporting month complied with the Action Level.

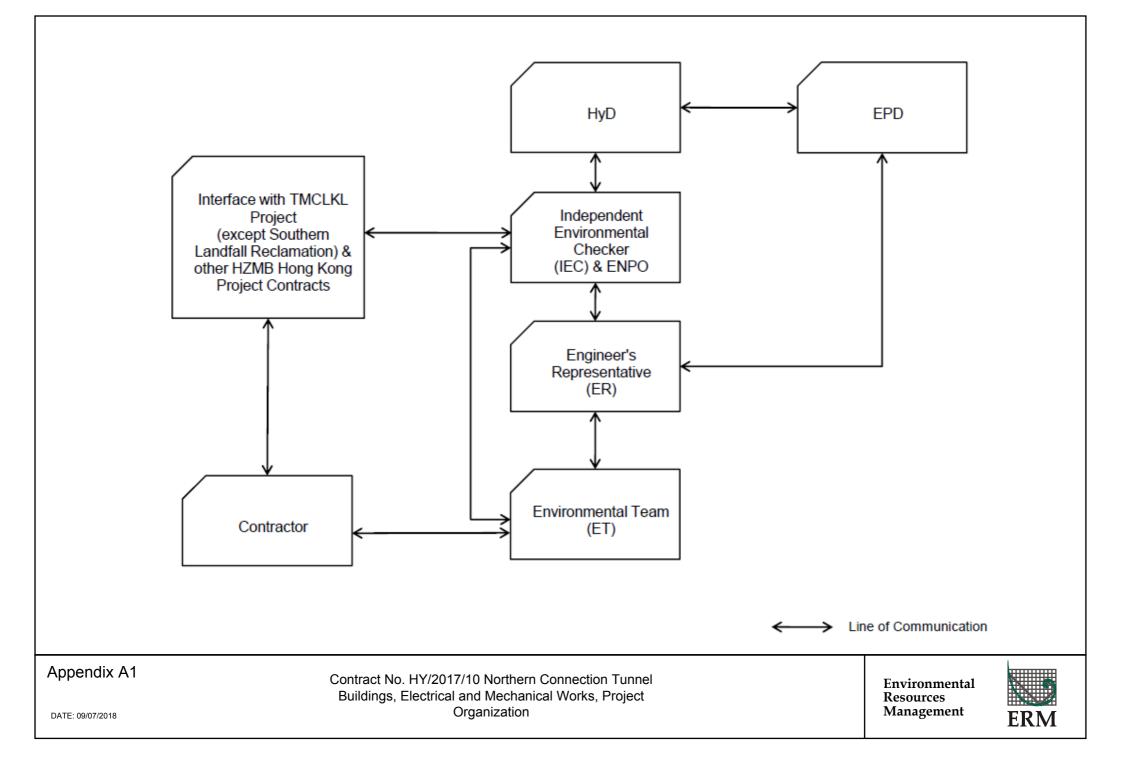
Environmental site inspection was carried out four (4) times in August 2020. Remedial actions recommended for the deficiencies identified during the site audits were properly implemented by the Contractor.

Landscape and visual monitoring for 24-month establishment period was conducted on 16 and 22 June 2020 by Contract No. HY/2012/07 and 17 and 26 August 2020 by HY/2013/12 for the period from June to August 2020.

There was no environmental complaint, notification of summons or successful prosecution recorded in the reporting period.

The ET will keep track on the construction works to confirm compliance of environmental requirements and the proper implementation of all necessary mitigation measures. Appendix A

Project Organization for Environmental Works



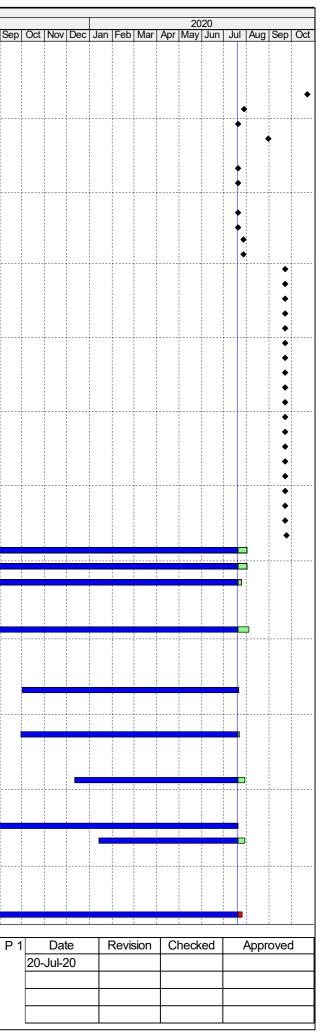
Appendix B

Construction Programme

	Activity	Duration (Days)	Duration % Complete
		(Days)	Complete
HY2017/10 - Works Programr	ne Three Month Rolling Programme 20-Jul-20		
Contract Dates			
Key Dates			
KD08	KD08 - All Other Works for Tunnel Comissioning & Opening	0	0%
KD09	KD09 - C&ED Building, E&M Works, & FSD Inspection	0	0%
		-	
KD10	KD10 - FSD Building, E&M Works, & FSD Inspection	0	0%
KD11	KD11 - Landscape Soft Works & Trees Protection	0	0%
Portion Possession Dates			
P325	Possession to Portion XXII (Day 483)	0	0%
P335	Possession to Portion XXIII (Day 483)	0	0%
Portion Handover Dates			
H120	Vacate Portion XVIb (KD10+28)	0	0%
		-	
H130	Vacate Portion XVIa (KD10+28)	0	0%
H140	Vacate Portion XVb (KD9+28)	0	0%
H150	Vacate Portion XVa (KD9+28)	0	0%
H160	Vacate Portion XXIa (KD8+28)	0	0%
H170	Vacate Portion XXIb (KD8+28)	0	0%
			0%
H180	Vacate Portion XXII (KD8+28)	0	
H190	Vacate Portion XXIII (KD8+28)	0	0%
H200	Vacate Portion XII (KD8+28)	0	0%
H210	Vacate Portion XIII (KD8+28)	0	0%
H220	Vacate Portion XIV (KD8+28)	0	0%
H230	Vacate Portion XVIIa (KD8+28)	0	0%
H240	Vacate Portion Ve (KD8+28)	0	0%
H250	Vacate Portion Vc (KD8+28)	0	0%
H260	Vacate Portion VIb (KD8+28)	0	0%
H270	Vacate Portion VIII (KD8+28)	0	0%
H280	Vacate Portion XI (KD8+28)	0	0%
H290	Vacate Portion VII (KD8+28)	0	0%
H300	Vacate Portion IX (KD8+28)	0	0%
H310	Vacate Portion X (KD8+28)	0	0%
H320	Vacate Portion XXIc (KD8+28)	0	0%
H330	Vacate Portion WA6 (KD8+28)	0	0%
H340	Vacate Portion XIX (KD11+28)	0	0%
Major Design Submission & A	Annroval		
_Major Material Submission 8			
Drawing Submission & Appro	oval		
Key Date 1 - Toll Control Build	ling (TCB) & TCSS Provision		
ABWF Works (for All)			
ATCB1130	ABWF second fix & final fix	90	85%
	Building, Maintenance Depot, Kiosk N2, TCSS Provision		0070
Administration Building (AD	3)		
ABWF Works (for All)			
		00	98%
AADB1200	ABWF second fix & final fix	90	
AADB1200	ABWF second fix & final fix	90	
AADB1200 Maintenance Depot	ABWF second fix & final fix	90	
AADB1200 Maintenance Depot ABWF Works (for All)			
AADB1200 Maintenance Depot	ABWF second fix & final fix ABWF second fix & final fix	80	97%
AADB1200 Maintenance Depot ABWF Works (for All) AMD1070	ABWF second fix & final fix		97%
AADB1200 Maintenance Depot ABWF Works (for All) AMD1070 Key Date 6 - E&M Works for A			97%
AADB1200 Maintenance Depot ABWF Works (for All) AMD1070 Key Date 6 - E&M Works for <i>n</i> Remaining Works	ABWF second fix & final fix Administration Building, Maintenance Depot, North Vent Building, Kiosk N2	80	
AADB1200 Maintenance Depot ABWF Works (for All) AMD1070 Key Date 6 - E&M Works for A Remaining Works KD6-OSW-1000	ABWF second fix & final fix Administration Building, Maintenance Depot, North Vent Building, Kiosk N2 Remaining Works (Non FSI related)		97% 80%
AADB1200 Maintenance Depot ABWF Works (for All) AMD1070 Key Date 6 - E&M Works for <i>n</i> Remaining Works	ABWF second fix & final fix Administration Building, Maintenance Depot, North Vent Building, Kiosk N2 Remaining Works (Non FSI related)	80	
AADB1200 Maintenance Depot ABWF Works (for All) AMD1070 Key Date 6 - E&M Works for A Remaining Works KD6-OSW-1000 Key Date 3 - Satellite Control	ABWF second fix & final fix Administration Building, Maintenance Depot, North Vent Building, Kiosk N2 Remaining Works (Non FSI related)	80	
AADB1200 Maintenance Depot ABWF Works (for All) AMD1070 Key Date 6 - E&M Works for A Remaining Works KD6-OSW-1000 Key Date 3 - Satellite Control ABWF Works (for All)	ABWF second fix & final fix Administration Building, Maintenance Depot, North Vent Building, Kiosk N2 Remaining Works (Non FSI related) Building & TCSS Provision	80 42	80%
AADB1200 Maintenance Depot ABWF Works (for All) AMD1070 Key Date 6 - E&M Works for A Remaining Works KD6-OSW-1000 Key Date 3 - Satellite Control ABWF Works (for All) ASCB1020	ABWF second fix & final fix Administration Building, Maintenance Depot, North Vent Building, Kiosk N2 Remaining Works (Non FSI related) Building & TCSS Provision ABWF Works to Plant Rooms G/F	80 42 60	80%
AADB1200 Maintenance Depot ABWF Works (for All) AMD1070 Key Date 6 - E&M Works for A Remaining Works KD6-OSW-1000 Key Date 3 - Satellite Control ABWF Works (for All) ASCB1020 ASCB1070	ABWF second fix & final fix Administration Building, Maintenance Depot, North Vent Building, Kiosk N2 Remaining Works (Non FSI related) Building & TCSS Provision ABWF Works to Plant Rooms G/F ABWF second fix & final fix	80 42	80%
AADB1200 Maintenance Depot ABWF Works (for All) AMD1070 Key Date 6 - E&M Works for A Remaining Works KD6-OSW-1000 Key Date 3 - Satellite Control ABWF Works (for All) ASCB1020 ASCB1070	ABWF second fix & final fix Administration Building, Maintenance Depot, North Vent Building, Kiosk N2 Remaining Works (Non FSI related) Building & TCSS Provision ABWF Works to Plant Rooms G/F	80 42 60	80%
AADB1200 Maintenance Depot ABWF Works (for All) AMD1070 Key Date 6 - E&M Works for Remaining Works KD6-OSW-1000 Key Date 3 - Satellite Control ABWF Works (for All) ASCB1020 ASCB1070 Key Date 5 - E&M Works for	ABWF second fix & final fix Administration Building, Maintenance Depot, North Vent Building, Kiosk N2 Remaining Works (Non FSI related) Building & TCSS Provision ABWF Works to Plant Rooms G/F ABWF second fix & final fix	80 42 60	80%
AADB1200 Maintenance Depot ABWF Works (for All) AMD1070 Key Date 6 - E&M Works for All Remaining Works KD6-OSW-1000 Key Date 3 - Satellite Control ABWF Works (for All) ASCB1020 ASCB1020 Key Date 5 - E&M Works for E&M Works for TCB	ABWF second fix & final fix Administration Building, Maintenance Depot, North Vent Building, Kiosk N2 Remaining Works (Non FSI related) Building & TCSS Provision ABWF Works to Plant Rooms G/F ABWF second fix & final fix	80 42 60	80%
AADB1200 Maintenance Depot ABWF Works (for All) AMD1070 Key Date 6 - E&M Works for All Remaining Works KD6-OSW-1000 Key Date 3 - Satellite Control ABWF Works (for All) ASCB1020 ASCB1020 Key Date 5 - E&M Works for E&M Works for TCB Installation	ABWF second fix & final fix Administration Building, Maintenance Depot, North Vent Building, Kiosk N2 Remaining Works (Non FSI related) Building & TCSS Provision ABWF Works to Plant Rooms G/F ABWF second fix & final fix	80 42 60	80%
AADB1200 Maintenance Depot ABWF Works (for All) AMD1070 Key Date 6 - E&M Works for All Remaining Works KD6-OSW-1000 Key Date 3 - Satellite Control ABWF Works (for All) ASCB1020 ASCB1020 Key Date 5 - E&M Works for E&M Works for TCB	ABWF second fix & final fix Administration Building, Maintenance Depot, North Vent Building, Kiosk N2 Remaining Works (Non FSI related) Building & TCSS Provision ABWF Works to Plant Rooms G/F ABWF second fix & final fix	80 42 60	80%

TM-CLKL NORTHERN CONNECTION TUNNEL BUILDINGS, E&M WORKS

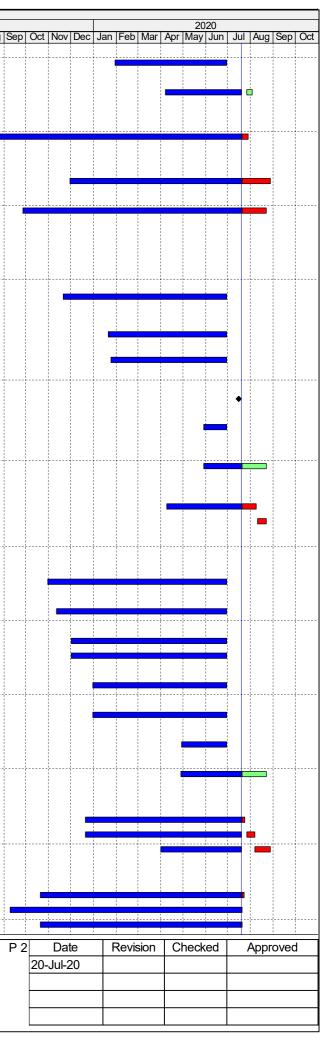
THREE MONTHLY PROGRAMME AS OF 20 Jul 2020



	Activity	Duration (Days)	Duration % Complete
T 10 10 11			
Testing and Commissioning TCB-TC1030	Non-Essential T&C	12	100%
Remaining Works for TCB (N		12	10070
	Remaining Works (Non FSI related)	42	85%
Underpass			0070
E&M Works at Underpass			
	Cladding Works	25	68%
Approach Roads		23	0070
Under Portions IX, XI, XX			
	T&C of Roading Lighting	30	0%
			070
Under Portion X			
	T&C of Roading Lighting in portion X	30	0%
Key Date 7 - E&M Works for Sat	tellite Control Building and Kiosks S1&S2		
E&M Works for Satellite Contro	bl Building		
E&M Works			
Installation			
G/F			
SCB-EMGF1200	E&M Installation - PD Plant Rooms - G/F	90	100%
1/F			
SCB-EM1F1050	E&M Installation - Computer Room (TCSS) - 1/F	60	100%
SCB-EM1F1120	E&M Installation - ELV Plant Room - 1/F	70	100%
Lift Installation (L01) SCB-LF1050		0	4000/
	Issuance of lift use permit	0	100%
Testing & Commission in		20	1000/
SCB-TC1030	Non-Essential T&C	30	100%
Remaining Works for SC	P (Non ESI mistod)		
	Remaining Works (Non-FSI related)	42	30%
KD7-0300-1010	Remaining works (Non-FSI related)	42	30%
Kiosk S2			
	FOM words	00	50%
	E&M works	36	50%
	T&C	12	0%
_Key Date 6C - E&M Works for So	outh Ventilation Building		
Installation			
B2/F			
SVB-EMB21110	E&M Installation - PD PaInt Rooms - B2/F	60	100%
B1/F			
	E&M Installation - Elv Plant Rooms - B1/F	48	100%
			10070
G/F		10	40.00/
	E&M Installation - PD Plant Rooms - G/F	40	100%
SVB-EMGF1220	E&M Installation - Elv Plant Rooms - G/F	48	100%
1/F			
SVB-EM1F1280	E&M Installation - ELV Plant Rooms - 1/F	50	100%
2/F			
	E&M Installation - PD Plant Rooms - 2/F	40	100%
	Non-Essential T&C	30	100%
Testing & Commissioning			100 %
SVB-TC1040			
SVB-TC1040 Remaining Works for SVB (Non-	r-FSI related)		200/_
SVB-TC1040 Remaining Works for SVB (Non-		42	30%
SVB-TC1040 Remaining Works for SVB (Non-	+FSI related) Remaining Works (Non-FSI related)	42	30%
SVB-TC1040 Remaining Works for SVB (Non- KD6C-OSW-1000 Key Date 6A - E&M Works for A	+FSI related) Remaining Works (Non-FSI related)	42	30%
SVB-TC1040 Remaining Works for SVB (Non- KD6C-OSW-1000 Key Date 6A - E&M Works for A Approach Roads	rFSI related) Remaining Works (Non-FSI related) pproach Roads at North Side		
SVB-TC1040 Remaining Works for SVB (Non- KD6C-OSW-1000 Key Date 6A - E&M Works for A Approach Roads EAR120	FSI related) Remaining Works (Non-FSI related) pproach Roads at North Side Road Lighting Cabling	50	90%
SVB-TC1040 Remaining Works for SVB (Non- KD6C-OSW-1000 Key Date 6A - E&M Works for A Approach Roads EAR120 EAR130	+FSI related) Remaining Works (Non-FSI related) pproach Roads at North Side Road Lighting Cabling Road Ligting Installation & Termination	50 50	90% 80%
SVB-TC1040 Remaining Works for SVB (Non- KD6C-OSW-1000 Key Date 6A - E&M Works for A Approach Roads EAR120 EAR130 EAR140	FSI related) Remaining Works (Non-FSI related) pproach Roads at North Side Road Lighting Cabling Road Ligting Installation & Termination T&C & Miscellaneous Works for Statutory Inspection	50	90%
SVB-TC1040 Remaining Works for SVB (Non KD6C-OSW-1000 Key Date 6A - E&M Works for A Approach Roads EAR120 EAR130 EAR140 Key Date 10 - FSD Building Struct	FSI related) Remaining Works (Non-FSI related) pproach Roads at North Side Road Lighting Cabling Road Ligting Installation & Termination T&C & Miscellaneous Works for Statutory Inspection	50 50	90% 80%
SVB-TC1040 Remaining Works for SVB (Non KD6C-OSW-1000 Key Date 6A - E&M Works for A Approach Roads EAR120 EAR130 EAR140 Key Date 10 - FSD Building Struct ABWF Works	FSI related) Remaining Works (Non-FSI related) pproach Roads at North Side Road Lighting Cabling Road Ligting Installation & Termination T&C & Miscellaneous Works for Statutory Inspection cture & E&M Works	50 50 12	90% 80% 0%
SVB-TC1040 Remaining Works for SVB (Non- KD6C-OSW-1000 Key Date 6A - E&M Works for A Approach Roads EAR120 EAR130 EAR130 EAR140 Key Date 10 - FSD Building Struct ABWF Works AFSD1010	FSI related) Remaining Works (Non-FSI related) pproach Roads at North Side Road Lighting Cabling Road Lighting Installation & Termination T&C & Miscellaneous Works for Statutory Inspection cture & E&M Works Door and Window Frames	50 50 12	90% 80% 0% 80%
SVB-TC1040 Remaining Works for SVB (Non- KD6C-OSW-1000 Key Date 6A - E&M Works for A Approach Roads EAR120 EAR130 EAR130 EAR140 Key Date 10 - FSD Building Struct ABWF Works AFSD1010	FSI related) Remaining Works (Non-FSI related) pproach Roads at North Side Road Lighting Cabling Road Ligting Installation & Termination T&C & Miscellaneous Works for Statutory Inspection cture & E&M Works	50 50 12	90% 80% 0%
SVB-TC1040 Remaining Works for SVB (Non- KD6C-OSW-1000 Key Date 6A - E&M Works for A Approach Roads EAR120 EAR130 EAR140 Key Date 10 - FSD Building Struct ABWF Works AFSD1010 AFSD1020	FSI related) Remaining Works (Non-FSI related) pproach Roads at North Side Road Lighting Cabling Road Lighting Installation & Termination T&C & Miscellaneous Works for Statutory Inspection cture & E&M Works Door and Window Frames	50 50 12	90% 80% 0% 80%

TM-CLKL NORTHERN CONNECTION TUNNEL BUILDINGS, E&M WORKS

THREE MONTHLY PROGRAMME AS OF 20 Jul 2020



	Activity	Duration (Days)	Duration % Complete
AFSD1030	ABWF Works to Office and Corridors G/F	124	99%
AFSD1031	ABWF Works to Office and Corridors 1/F	124	99%
AFSD1040	ABWF Works to Toilets G/F	136	99%
AFSD1060	External Cladding and Wall Plastering	101	88%
AFSD1070	ABWF second fix & final fix	73	78%
&M Works			
Installation G/F			
FSDB-EMGF1160	E&M Installation - Elv Plant Rooms - G/F	50	85%
1/F FSDB-EM1F1140	E&M Installation - PD Plant Rooms - 1/F	60	85%
Testing and Commissioning			
FSDB-TC1030	Non-Essential T&C	30	80%
Statutory Inspections and a			
FSDB-SI1040	Submit WWO46 Part IV for PD	0	0%
FSDB-SI1060	WSD inspection of Plumbing Installation (PL)	4	0%
FSDB-SI1070	WSD inspection of Plumbing Installation (FS)	4	0%
FSDB-SI1080	Water Samples Test	24	0%
FSDB-SI1090	Obtain Water Certificate and water supply connection - FS	4	0%
FSDB-SI1100	Obtain Water Certificate and water supply connection - PL	4	0%
FSDB-SI1120	FSD Inspection	12	0%
FSDB-SI1130	Obtain FSI Certificate FS 172	0	0%
FSDB-SI1140	KD10 Achieved	0	0%
	Approach Roads at South Side		
Approach Roads EAR180	Road Lighting Cabling (VIa)	18	80%
	Road Lighting Cabling (Via) Road Lighting Installation & Termination	18	60%
		10	007
EAR190		12	0%
EAR200	T&C	12	0%
EAR200	T&C	12	0%
EAR200 unnel Remaining Works for Tunne	T&C el (CH2500 - 1800)		
EAR200 unnel Remaining Works for Tunne A1010	T&C el (CH2500 - 1800) Remaining Works (Non FSI related)	98	
EAR200 unnel Remaining Works for Tunne A1010 r Date 9 - C&ED Building & B	T&C el (CH2500 - 1800) Remaining Works (Non FSI related)		
EAR200 unnel Remaining Works for Tunne A1010 r Date 9 - C&ED Building & B	T&C el (CH2500 - 1800) Remaining Works (Non FSI related)		0% 48.98% 50%
EAR200 unnel Remaining Works for Tunne A1010 r Date 9 - C&ED Building & B BWF Works	T&C el (CH2500 - 1800) Remaining Works (Non FSI related) &M Works	98	48.98% 50%
EAR200 unnel Remaining Works for Tunne A1010 r Date 9 - C&ED Building & E ABWF Works ACED1010	T&C el (CH2500 - 1800) Remaining Works (Non FSI related) &M Works Door and Window Frames	98	48.98% 50% 95%
EAR200 unnel Remaining Works for Tunne A1010 r Date 9 - C&ED Building & E ABWF Works ACED1010 ACED1020	T&C I (CH2500 - 1800) Remaining Works (Non FSI related) E&M Works Door and Window Frames ABWF Works to Plant Rooms G/F	98 48 60	48.98% 50% 95% 85%
EAR200 unnel Remaining Works for Tunne A1010 Date 9 - C&ED Building & E BWF Works ACED1010 ACED1020 ACED1021 ACED1022	T&C T&C (CH2500 - 1800) Remaining Works (Non FSI related) E&M Works Door and Window Frames ABWF Works to Plant Rooms G/F ABWF Works to Plant Rooms 1/F ABWF Works to Plant Rooms 2/F	98 98 48 60 60	48.98% 50% 95% 85% 85%
EAR200 iunnel Remaining Works for Tunne A1010 / Date 9 - C&ED Building & E MWF Works ACED1010 ACED1020 ACED1021	T&C I (CH2500 - 1800) Remaining Works (Non FSI related) E&M Works Door and Window Frames ABWF Works to Plant Rooms G/F ABWF Works to Plant Rooms 1/F	98 48 60 60 60	48.98% 50% 95% 85% 85% 85%
EAR200 iunnel Remaining Works for Tunne A1010 / Date 9 - C&ED Building & B ACED1010 ACED1020 ACED1021 ACED1022 ACED1023	T&C el (CH2500 - 1800) Remaining Works (Non FSI related) &M Works Door and Window Frames ABWF Works to Plant Rooms G/F ABWF Works to Plant Rooms 1/F ABWF Works to Plant Rooms 2/F ABWF Works to Plant Rooms 3/F	98 98 48 60 60 60 60 60	48.98% 50% 95% 85% 85% 85% 95%
EAR200 unnel Remaining Works for Tunne A1010 7 Date 9 - C&ED Building & B BWF Works ACED1010 ACED1020 ACED1021 ACED1022 ACED1023 ACED1030	T&C el (CH2500 - 1800) Remaining Works (Non FSI related) 58/M Works Door and Window Frames ABWF Works to Plant Rooms G/F ABWF Works to Plant Rooms 1/F ABWF Works to Plant Rooms 2/F ABWF Works to Plant Rooms 3/F ABWF Works to Office and Corridors G/F	98 98 48 60 60 60 60 60 133	48.98% 50% 95% 85% 85% 95% 85%
EAR200 unnel Remaining Works for Tunne A1010 / Date 9 - C&ED Building & B WF Works ACED1010 ACED1020 ACED1021 ACED1022 ACED1023 ACED1030 ACED1031 ACED1032	T&C T&C (CH2500 - 1800) Remaining Works (Non FSI related) CM Works Door and Window Frames ABWF Works to Plant Rooms G/F ABWF Works to Plant Rooms 1/F ABWF Works to Plant Rooms 2/F ABWF Works to Plant Rooms 3/F ABWF Works to Office and Corridors G/F ABWF Works to Office and Corridors 1/F	98 98 48 60 60 60 60 133 118	48.98% 50% 95% 85% 85% 95% 85% 85%
EAR200 unnel Remaining Works for Tunne A1010 / Date 9 - C&ED Building & B WF Works ACED1010 ACED1020 ACED1021 ACED1022 ACED1023 ACED1030 ACED1031	T&C T&C Remaining Works (Non FSI related) EXIM Works Door and Window Frames ABWF Works to Plant Rooms G/F ABWF Works to Plant Rooms 1/F ABWF Works to Plant Rooms 2/F ABWF Works to Plant Rooms 3/F ABWF Works to Office and Corridors G/F ABWF Works to Office and Corridors 1/F ABWF Works to Office and Corridors 1/F ABWF Works to Office and Corridors 2/F	98 98 48 60 60 60 60 133 118 118 130	48.98% 50% 95% 85% 85% 95% 85% 85% 85% 85%
EAR200 unnel Remaining Works for Tunne A1010 / Date 9 - C&ED Building & B WF Works ACED1010 ACED1020 ACED1021 ACED1022 ACED1023 ACED1030 ACED1031 ACED1032 ACED1033	T&C T&C (CH2500 - 1800) Remaining Works (Non FSI related) E&M Works Door and Window Frames ABWF Works to Plant Rooms G/F ABWF Works to Plant Rooms 1/F ABWF Works to Plant Rooms 2/F ABWF Works to Plant Rooms 3/F ABWF Works to Office and Corridors G/F ABWF Works to Office and Corridors 1/F ABWF Works to Office and Corridors 2/F ABWF Works to Office and Corridors 2/F ABWF Works to Office and Corridors 2/F ABWF Works to Office and Corridors 3/F	98 98 48 60 60 60 60 133 118 118 130 92	48.98% 50% 95% 85% 85% 85% 85% 85% 85% 85% 85% 85%
EAR200 unnel Remaining Works for Tunne A1010 / Date 9 - C&ED Building & E BWF Works ACED1010 ACED1020 ACED1021 ACED1022 ACED1023 ACED1030 ACED1031 ACED1032 ACED1033 ACED1033 ACED1040 ACED1041	T&C el (CH2500 - 1800) Remaining Works (Non FSI related) 84M Works Door and Window Frames ABWF Works to Plant Rooms G/F ABWF Works to Plant Rooms 1/F ABWF Works to Plant Rooms 2/F ABWF Works to Plant Rooms 3/F ABWF Works to Office and Corridors G/F ABWF Works to Office and Corridors 1/F ABWF Works to Office and Corridors 2/F ABWF Works to Office and Corridors 3/F ABWF Works to Office and Corridors 3/F ABWF Works to Toilets G/F ABWF Works to Toilets 2/F	98 48 60 60 60 60 133 118 130 92 92 142	48.98% 50% 95% 85% 85% 85% 85% 85% 85% 85% 85% 85% 8
EAR200 unnel Remaining Works for Tunne A1010 / Date 9 - C&ED Building & E BWF Works ACED1010 ACED1020 ACED1021 ACED1022 ACED1023 ACED1030 ACED1031 ACED1032 ACED1033 ACED1034 ACED1041 ACED1042	T&C Image: Ima	98 98 48 60 60 60 60 133 118 130 92 92 142	48.98% 50% 95% 85% 85% 85% 85% 85% 85% 85% 85% 85% 8
EAR200 unnel Remaining Works for Tunne A1010 / Date 9 - C&ED Building & E BWF Works ACED1010 ACED1020 ACED1021 ACED1022 ACED1023 ACED1030 ACED1031 ACED1032 ACED1033 ACED1033 ACED1040 ACED1041	T&C el (CH2500 - 1800) Remaining Works (Non FSI related) 84M Works Door and Window Frames ABWF Works to Plant Rooms G/F ABWF Works to Plant Rooms 1/F ABWF Works to Plant Rooms 2/F ABWF Works to Plant Rooms 3/F ABWF Works to Office and Corridors G/F ABWF Works to Office and Corridors 1/F ABWF Works to Office and Corridors 2/F ABWF Works to Office and Corridors 3/F ABWF Works to Office and Corridors 3/F ABWF Works to Toilets G/F ABWF Works to Toilets 2/F	98 48 60 60 60 60 133 118 130 92 142 142 142 98	48.98% 50% 95% 85% 85% 95% 85% 85% 85% 85% 85% 85% 85% 85% 85% 8
EAR200 unnel Remaining Works for Tunne A1010 Date 9 - C&ED Building & B BWF Works ACED1010 ACED1020 ACED1021 ACED1022 ACED1023 ACED1033 ACED1033 ACED1033 ACED1033 ACED1040 ACED1041 ACED1042 ACED1060 ACED1070	T&C el (CH2500 - 1800) Remaining Works (Non FSI related) 8.M Works Door and Window Frames ABWF Works to Plant Rooms G/F ABWF Works to Plant Rooms 1/F ABWF Works to Plant Rooms 2/F ABWF Works to Plant Rooms 3/F ABWF Works to Plant Rooms 3/F ABWF Works to Office and Corridors G/F ABWF Works to Office and Corridors 1/F ABWF Works to Office and Corridors 3/F ABWF Works to Office and Corridors 3/F ABWF Works to Toilets G/F ABWF Works to Toilets G/F ABWF Works to Toilets 3/F ABWF Works to Toilets 3/F External Cladding and Wall Plastering	98 98 48 60 60 60 60 133 133 118 130 92 142 142 98 98 97	48.98% 50% 95% 85% 85% 95% 85% 85% 85% 85% 85% 85% 85% 85% 85% 8
EAR200 unnel Remaining Works for Tunne A1010 Date 9 - C&ED Building & B BWF Works ACED1010 ACED1020 ACED1021 ACED1022 ACED1023 ACED1033 ACED1033 ACED1033 ACED1033 ACED1040 ACED1041 ACED1042 ACED1060 ACED1070	T&C el (CH2500 - 1800) Remaining Works (Non FSI related) 8.M Works Door and Window Frames ABWF Works to Plant Rooms G/F ABWF Works to Plant Rooms 1/F ABWF Works to Plant Rooms 2/F ABWF Works to Plant Rooms 3/F ABWF Works to Plant Rooms 3/F ABWF Works to Office and Corridors G/F ABWF Works to Office and Corridors 1/F ABWF Works to Office and Corridors 3/F ABWF Works to Office and Corridors 3/F ABWF Works to Toilets G/F ABWF Works to Toilets G/F ABWF Works to Toilets 3/F ABWF Works to Toilets 3/F External Cladding and Wall Plastering	98 98 48 60 60 60 60 133 133 118 130 92 142 142 98 98 97	48.98% 50% 95% 85% 85% 95% 85% 95% 85% 85% 85% 85% 85% 85% 85% 85%
EAR200	T&C el (CH2500 - 1800) Remaining Works (Non FSI related) 28.M Works Door and Window Frames ABWF Works to Plant Rooms G/F ABWF Works to Plant Rooms 1/F ABWF Works to Plant Rooms 2/F ABWF Works to Plant Rooms 3/F ABWF Works to Plant Rooms 3/F ABWF Works to Office and Corridors G/F ABWF Works to Office and Corridors 1/F ABWF Works to Office and Corridors 2/F ABWF Works to Toilets G/F ABWF Works to Toilets G/F ABWF Works to Toilets 3/F External Cladding and Wall Plastering ABWF second fix & final fix	98 48 60 60 60 133 133 118 130 92 142 98 98 97 69	48.98% 50% 95% 85% 85% 85% 85% 85% 85% 85% 85% 85% 8
EAR200	T&C Image: CH2500 - 1800) Remaining Works (Non FSI related) E&M Works Door and Window Frames ABWF Works to Plant Rooms G/F ABWF Works to Plant Rooms 1/F ABWF Works to Plant Rooms 2/F ABWF Works to Plant Rooms 3/F ABWF Works to Plant Rooms 3/F ABWF Works to Office and Corridors G/F ABWF Works to Office and Corridors 1/F ABWF Works to Office and Corridors 3/F ABWF Works to Toilets G/F ABWF Works to Toilets G/F ABWF Works to Toilets 3/F External Cladding and Wall Plastering ABWF second fix & final fix	98 48 60 60 60 133 133 118 130 92 142 142 98 97 69	48.98% 50% 95% 85% 85% 85% 85% 85% 85% 85% 85% 85% 95% 95% 95% 95% 95% 95% 95% 95% 95% 9
EAR200	T&C Image: CH2500 - 1800) Remaining Works (Non FSI related) E&M Works Door and Window Frames ABWF Works to Plant Rooms G/F ABWF Works to Plant Rooms 1/F ABWF Works to Plant Rooms 2/F ABWF Works to Plant Rooms 3/F ABWF Works to Plant Rooms 3/F ABWF Works to Office and Corridors G/F ABWF Works to Office and Corridors 1/F ABWF Works to Office and Corridors 3/F ABWF Works to Toilets G/F ABWF Works to Toilets G/F ABWF Works to Toilets 3/F External Cladding and Wall Plastering ABWF second fix & final fix E&M Installation - 1st fix - G/F E&M Installation - 2nd fix - G/F	98 98 48 60 60 60 60 133 133 118 130 92 142 142 98 98 97 69 97 69	48.98% 50% 95% 85% 85% 85% 85% 85% 85% 65% 20% 97% 88%
EAR200	T&C Image: CH2500 - 1800) Remaining Works (Non FSI related) E&M Works Door and Window Frames ABWF Works to Plant Rooms G/F ABWF Works to Plant Rooms 1/F ABWF Works to Plant Rooms 2/F ABWF Works to Plant Rooms 3/F ABWF Works to Plant Rooms 3/F ABWF Works to Office and Corridors G/F ABWF Works to Office and Corridors 1/F ABWF Works to Office and Corridors 3/F ABWF Works to Toilets G/F ABWF Works to Toilets G/F ABWF Works to Toilets 3/F External Cladding and Wall Plastering ABWF second fix & final fix	98 48 60 60 60 133 133 118 130 92 142 142 98 97 69	48.98% 50% 95% 85% 85% 85% 85% 85% 85% 65% 20% 97% 88%
EAR200	T&C Image: CH2500 - 1800) Remaining Works (Non FSI related) E&M Works Door and Window Frames ABWF Works to Plant Rooms G/F ABWF Works to Plant Rooms 1/F ABWF Works to Plant Rooms 2/F ABWF Works to Plant Rooms 3/F ABWF Works to Plant Rooms 3/F ABWF Works to Office and Corridors G/F ABWF Works to Office and Corridors 1/F ABWF Works to Office and Corridors 3/F ABWF Works to Toilets G/F ABWF Works to Toilets G/F ABWF Works to Toilets 3/F External Cladding and Wall Plastering ABWF second fix & final fix E&M Installation - 1st fix - G/F E&M Installation - 2nd fix - G/F	98 98 48 60 60 60 60 133 133 118 130 92 142 142 98 98 97 69 97 69	48.98% 50% 95% 85% 85% 85% 85% 85% 65% 20% 97% 88% 75%
EAR200	T&C Image: CH2500 - 1800) Remaining Works (Non FSI related) E&M Works Door and Window Frames ABWF Works to Plant Rooms G/F ABWF Works to Plant Rooms 1/F ABWF Works to Plant Rooms 2/F ABWF Works to Plant Rooms 3/F ABWF Works to Plant Rooms 3/F ABWF Works to Office and Corridors G/F ABWF Works to Office and Corridors 1/F ABWF Works to Office and Corridors 3/F ABWF Works to Toilets G/F ABWF Works to Toilets G/F ABWF Works to Toilets 3/F External Cladding and Wall Plastering ABWF second fix & final fix E&M Installation - 1st fix - G/F E&M Installation - 2nd fix - G/F E&M Installation - Final fix - G/F	98 48 60 60 60 60 133 118 130 92 142 142 142 98 98 97 69 7 69 7 69	48.98%
EAR200	T&C Image: CH2500 - 1800) Remaining Works (Non FSI related) E&M Works Door and Window Frames ABWF Works to Plant Rooms G/F ABWF Works to Plant Rooms 1/F ABWF Works to Plant Rooms 2/F ABWF Works to Plant Rooms 3/F ABWF Works to Plant Rooms 3/F ABWF Works to Office and Corridors G/F ABWF Works to Office and Corridors 1/F ABWF Works to Office and Corridors 3/F ABWF Works to Toilets G/F ABWF Works to Toilets G/F ABWF Works to Toilets 3/F External Cladding and Wall Plastering ABWF second fix & final fix E&M Installation - 1st fix - G/F E&M Installation - 2nd fix - G/F Installation by CLP - CLP Tx Room - G/F	98 48 60 60 60 60 133 118 130 92 142 142 142 98 98 97 69 7 69 7 69 40 40 40 40 40 82	48.98% 50% 95% 85% 85% 85% 85% 85% 85% 85% 85% 85% 8
EAR200	T&C I (CH2500 - 1800) Remaining Works (Non FSI related) 58.M Works Door and Window Frames ABWF Works to Plant Rooms G/F ABWF Works to Plant Rooms 1/F ABWF Works to Plant Rooms 2/F ABWF Works to Plant Rooms 3/F ABWF Works to Plant Rooms 3/F ABWF Works to Office and Corridors G/F ABWF Works to Office and Corridors 1/F ABWF Works to Office and Corridors 3/F ABWF Works to Toilets G/F ABWF Works to Toilets 2/F ABWF Works to Toilets 3/F External Cladding and Wall Plastering ABWF second fix & final fix E&M Installation - 1st fix - G/F E&M Installation - 1st fix - G/F Installation by CLP - CLP Tx Room - G/F Wiring Inspection with CLP	98 48 60 60 60 133 118 130 92 142 142 142 98 97 69 97 69 40 40 40 40 82 12	48.98% 50% 95% 85% 85% 85% 85% 85% 85% 85% 85% 85% 8
EAR200	T&C I (CH2500 - 1800) Remaining Works (Non FSI related) 28.M Works Door and Window Frames ABWF Works to Plant Rooms G/F ABWF Works to Plant Rooms 1/F ABWF Works to Plant Rooms 2/F ABWF Works to Plant Rooms 3/F ABWF Works to Plant Rooms 3/F ABWF Works to Office and Corridors G/F ABWF Works to Office and Corridors 1/F ABWF Works to Office and Corridors 3/F ABWF Works to Toilets G/F ABWF Works to Toilets 3/F External Cladding and Wall Plastering ABWF second fix & final fix E&M Installation - 1st fix - G/F E&M Installation - 2nd fix - G/F Installation by CLP - CLP Tx Room - G/F Wiring Inspection with CLP Power On Energization by CLP	98 98 48 60 60 60 133 138 138 130 92 412 142 142 142 98 97 69 97 69 97 69 97 69	48.98% 50% 95% 85% 85% 85% 85% 85% 65% 20% 97% 88% 75% 100%

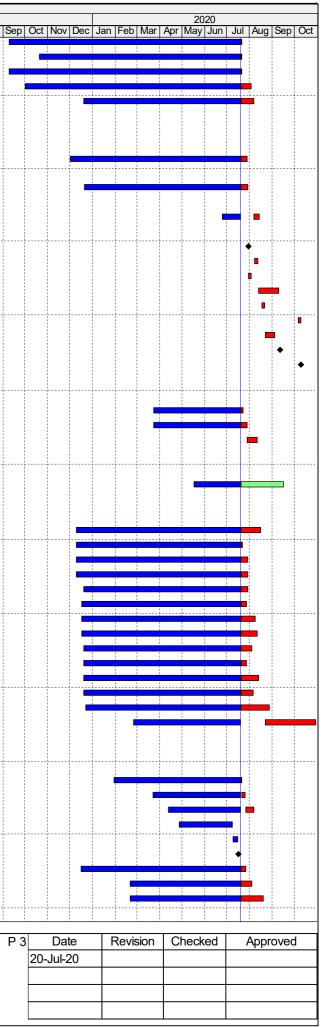
ID

	20	18	_	_	2018 May Jun Jul Aug Sep Oct Nov Dec							2019					
May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	
						: : :	: : :			: : :					! !		
						- - 			1	- - 				- - - - -	- 	_	
			1			1 1 1 1 1	1 1 1 1 1		1	1 1 1 1 1	1	1	1 1 1 1	1	1 1 1 1		
						L					L			L			
			1 1 1 1			1 1 1 1 1	5 5 5 5	1	1 1 1 1	1 1 1 1	1 1 1 1	1 1 1 1	1 1 1 1	1 1 1 1	1 1 1 1		
			1 1 1 1			1 1 1 1	1 1 1 1		1	1 1 1 1	1 1 1 1	1 1 1 1	1 1 1 1	: : :	1 1 1 1	1	
						1 2 2 1 2	1 2 2 1 2			1 1 1 1	1 1 1 1		1 1 1 1	1	5 2 2 5		
						: : :	: : :			: : :			1		1		
						, ; ; ;	, ; ; ;			, ; ; ;			, ; ;				
			-			! !	! !			! !							
			1			1 1 1 1 1	1 1 1 1		1	1 1 1 1	1	1	1	1	1 1 1 1		
						1 1 1 1	1 1 1 1			1 1 1 1	1 1 1 1		1 1 1 1	1 1 1 1	1 1 1		
			1 1 1 1			1 1 1 1	1 1 1 1	1	1	1 1 1 1	1 1 1 1	1 1 1 1	1 1 1 1	: : : :	1 1 1 1	1	
						: : : :				: : : :							
						5 5 5 7	5 5 5 7			1	1		1	1	1		
			: : :			: : : :	1 1 1 1			: : : :	: : :	: : :	: : :		1 1 1 1		
						: : :	1 1 1 1			: : :			1				
			- - - -			: : :	, 1 1 1			: : :		- - - -	: : :		: :		
										- - - -					1		
						- - - - - -	- - - - - -			- - - - - -							
						1 1 1 1	1 1 1 1			1 1 1 1			1 1 1 1	1 1 1 1	1 1 1		
						: 				: 							
						1 5 5 1	1 1 1 1		1	1 1 1 1	1		1 1 1 1	1 1 1 1	1 1 1 1		
						5 5 5 7	5 5 5 7			5 5 5 7			1		1		
			1 1 1 1			1 1 1 1	1 1 1 1		1	1 1 1 1	1 1 1 1	1 1 1 1	1 1 1 1	: : : :	1 1 1 1	1	
						1 1 1 1	1 1 1 1			1 1 1 1				1			
															1		
						1 1 1	1 1 1			1 1 1 1							
			:			: : : :	1 1 1 1		:	: : : :	: : :	:	: : :	: : : :	: : :		
			: : :			1 1 1 1	1 1 1 1		1	1 1 1 1	1 1 1 1	: : :	1 1 1 1	1	1 1 1 1		
			 !							 							
			1 1 1 1			1 1 5 1 1	1 1 5 1 1	1	1	1 1 1 1 1	1 1 1 1	: : :	1 1 1 1		1 1 1 1 1		
						1 1 1 1	1 1 1 1			1 1 1 1					1		
						1 1 1 1	1 1 1 1 1			1 1 1 1 1			1 1 1 1		5 5 5 5		
						1 1 1 1	1 1 1 1			1 1 1 1					1		
						1 1 1 1	1 1 1 1										
						1 1 1 1	1 1 1 1			1 1 1 1							
			: : :			1 1 1 1 1	5 5 5 5		1	1 1 1 1	1 1 1 1	: : :	1 1 1 1		5 5 5 5		
			 ! ! !			 				 							
							: : :										
						5 5 5 5	5 5 5 5			1 1 1 1			5 5 7 8		1		

CONTRACT NO. HY2017/10

TM-CLKL NORTHERN CONNECTION TUNNEL BUILDINGS, E&M WORKS

THREE MONTHLY PROGRAMME AS OF 20 Jul 2020



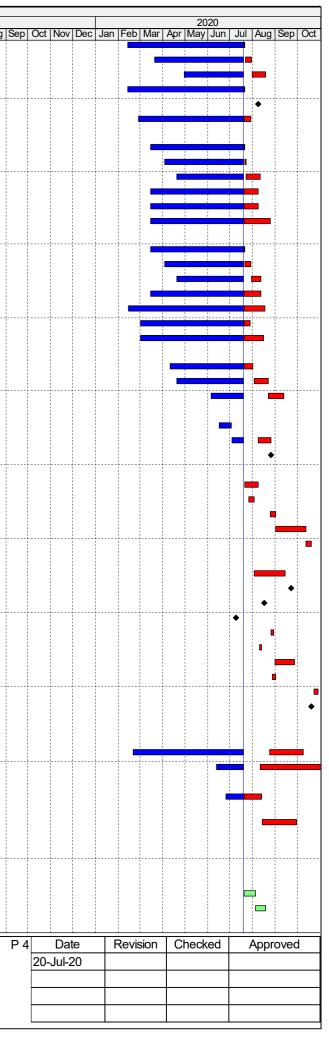
	Activity (Durint	Duration 0/1
	Activity	Duration	Duration %
		(Days)	Complete
C&EDB-1F1010	E&M Installation - 1st fix - 1/F	40	95%
C&EDB-1F1020	E&M Installation - 2nd fix - 1/F	40	80%
C&EDB-1F1030	E&M Installation - Final fix - 1/F	40	60%
C&EDB-1F1050	E&M Installation - LV Switch Room - 1/F	60	98%
C&EDB-1F1070	Sub-Circuit Power On - LV Switch Room - 1/F	0	0%
C&EDB-1F1090	E&M Installation - Electrical Plant Rooms - 1/F	90	90%
	EQIVITIStaliation - Electrical Flant Rooms - 1/F	90	9076
2/F			
C&EDB-2F1010	E&M Installation - 1st fix - 2/F	40	97%
C&EDB-2F1020	E&M Installation - 2nd fix - 2/F	40	95%
C&EDB-2F1030	E&M Installation - Final fix - 2/F	40	60%
C&EDB-2F1060	E&M Installation - Electrical Plant Rooms - 2/F	90	80%
C&EDB-2F1080	E&M Installation - FS Plant Rooms - 2/F	90	80%
C&EDB-2F1100	E&M Installation - Elv Plant Rooms - 2/F	90	65%
3/F			
C&EDB-3F1010	E&M Installation - 1st fix - 3/F	30	95%
C&EDB-3F1020	E&M Installation - 2nd fix - 3/F	30	75%
C&EDB-3F1030	E&M Installation - Final fix - 3/F	30	60%
C&EDB-3F1060	E&M Installation - Electrical Plant Rooms - 3/F	84	75%
C&EDB-3F1080	E&M Installation - MVAC Plant Rooms - 3/F	84	70%
C&EDB-3F1100	E&M Installation - FS Plant Rooms - 3/F	80	90%
C&EDB-3F1120	E&M Installation - PD Plant Rooms - 3/F	60	60%
		00	0070
Roof			
C&EDB-RF1010	E&M Installation - 1st fix - Roof	30	60%
C&EDB-RF1020	E&M Installation - 2nd fix - Roof	25	30%
C&EDB-RF1030	E&M Installation - Final fix - Roof	20	10%
		20	1070
Lift Installation			
C&EDB-LF1030	Testing & commissioning	12	100%
C&EDB-LF1040	Final adjustment, Submission of Form LE5 & EMSD processing	30	50%
C&EDB-LF1050	Issuance of lift use permit	0	0%
		0	070
Testing and Commissioning			
C&EDB-TC1000	T&C for Subcircuit Power On	16	0%
C&EDB-TC1010	T&C for DG Licence	6	0%
C&EDB-TC1020		6	0%
	Equipment Start-up T&C for FSI		
C&EDB-TC1023	Individual E&M System T&C for FSI	33	0%
C&EDB-TC1025	Intergrated T&C for FSI	6	0%
Statutory Inspections and ap			
		00	00/
C&EDB-SI1020	DG Inspection by FSD	36	0%
C&EDB-SI1030	Obtain DG Licence	0	0%
C&EDB-SI1040	Submit WWO46 Part IV for PD	0	0%
C&EDB-SI1050	Submit WWO46 Part IV for FS	0	100%
C&EDB-SI1060	WSD inspection of Plumbing Installation (PL)	4	0%
C&EDB-SI1070	WSD inspection of Plumbing Installation (FS)	4	0%
C&EDB-SI1080	Water Samples Test	24	0%
C&EDB-SI1090	Obtain Water Certificate and water supply connection - FS	4	0%
C&EDB-SI1100	Obtain Water Certificate and water supply connection - PL	4	0%
C&EDB-SI1110	Final Submission of Form FSI 314 / 501 to FSD	0	0%
Key Date 11 - Landscape Soft V	Works & Trees Protection		
Landscape Soft Works			
	Landscape Soft Works at North Side (wet season)	122	68.85%
SL120		102	15%
SL120	Landscape Soft Works at South Side (wet season)	102	1370
SL140	Landscape Soft Works at South Side (wet season)		
SL140 Trees Protection			
SL140	Landscape Soft Works at South Side (wet season) Protection Existing Trees & Submit Report with Photographic Record	41	46.34%
SL140 Trees Protection		41	46.34%
SL140 Trees Protection SL203	Protection Existing Trees & Submit Report with Photographic Record No.14		
SL140 Trees Protection	Protection Existing Trees & Submit Report with Photographic Record No.14 Protection Existing Trees & Submit Report with Photographic Record	41	46.34% 0%
SL140 Trees Protection SL203 SL204	Protection Existing Trees & Submit Report with Photographic Record No.14 Protection Existing Trees & Submit Report with Photographic Record No.15		
SL140 Trees Protection SL203 SL204 Key Date 8 - All Works for Tunn	Protection Existing Trees & Submit Report with Photographic Record No.14 Protection Existing Trees & Submit Report with Photographic Record No.15		
SL140 Trees Protection SL203 SL204	Protection Existing Trees & Submit Report with Photographic Record No.14 Protection Existing Trees & Submit Report with Photographic Record No.15		
SL140 Trees Protection SL203 SL204 Key Date 8 - All Works for Tunn Petrol Filling Station	Protection Existing Trees & Submit Report with Photographic Record No.14 Protection Existing Trees & Submit Report with Photographic Record No.15		
SL140 Trees Protection SL203 SL204 Key Date 8 - All Works for Tunn Petrol Filing Station Structure	Protection Existing Trees & Submit Report with Photographic Record No.14 Protection Existing Trees & Submit Report with Photographic Record No.15 nel Comissioning & Opening	40	0%
SL140 Trees Protection SL203 SL204 Key Date 8 - All Works for Tunn Petrol Filing Station Structure PS140	Protection Existing Trees & Submit Report with Photographic Record No. 14 Protection Existing Trees & Submit Report with Photographic Record No. 15 nel Comissioning & Opening Petrol Filling Station Roof	40	0%
SL140 Trees Protection SL203 SL204 Key Date 8 - All Works for Tunn Petrol Filing Station Structure	Protection Existing Trees & Submit Report with Photographic Record No.14 Protection Existing Trees & Submit Report with Photographic Record No.15 nel Comissioning & Opening	40	0%
SL140 Trees Protection SL203 SL204 Key Date 8 - All Works for Tunn Petrol Filing Station Structure PS140	Protection Existing Trees & Submit Report with Photographic Record No. 14 Protection Existing Trees & Submit Report with Photographic Record No. 15 nel Comissioning & Opening Petrol Filling Station Roof	40	0%

ID

CONTRACT NO. HY2017/10

TM-CLKL NORTHERN CONNECTION TUNNEL BUILDINGS, E&M WORKS

THREE MONTHLY PROGRAMME AS OF 20 Jul 2020



	Activity	Duration (Days)	Duration % Complet
EPS140	T&C	12	0%
statutory Inspections and ap	provals		
Administration Building			
ADB-SI1010	Submit WWO46 Part IV for PD	0	100%
ADB-SI1030	WSD inspection of Plumbing Installation (PL)	4	0%
ADB-SI1070	Obtain Water Certificate and water supply connection - PL	4	0%
ADB-SI1120	EMSD examines site acceptance report and acceptance	36	09
ADB-SI1130	Submit WWO46 part IV for CT plumbing works	0	09
ADB-SI1140	WSD inspection and water connection for CT plumbing works	6	09
Maintenance Depot			
MD-SI1060	WSD inspection of Plumbing Installation (PL)	4	09
MD-SI1100	Obtain Water Certificate and water supply connection - PL	4	09
North Ventilation Building	z		
NVB-SI1090	Submit WWO46 Part IV for PD	0	09
NVB-SI1110	WSD inspection of Plumbing Installation (PL)	4	09
NVB-SI1130	Water Samples Test	24	09
NVB-SI1140	Obtain Water Certificate and water supply connection - PL	4	09
Petrol Filling Station			
PFS-SI1010	T&C of E&M System	6	1009
PFS-SI1030	DG Inspection	18	00
PFS-SI1040	Obtain DG Licence	0	00
PFS-SI1060	FSD Inspection	42	1009
PFS-SI1070	Obtain Fire Certificate	0	00
Underpass & Plant Room			
VUP-SI1095	Obtain Water Certificate and water supply connection - FS	4	100
VUP-SI2000	Final Submission of Form FSI 314 / 501 to FSD	0	100
VUP-SI2010	FSD Inspection	42	00
VUP-SI2020	Obtain FSI Certificate FS 172	0	00
Toll Control Building & To	Il Collector Subway		
TCB-SI2000	Submit WWO46 Part IV for PD	0	00
TCB-SI2020	WSD inspection of Plumbing Installation (PL)	4	00
TCB-SI2030	WSD inspection of Plumbing Installation (FS)	4	100
TCB-SI2040	Water Samples Test	24	00
TCB-SI2045	Obtain Water Certificate and water supply connection - FS	4	00
TCB-SI2050	Obtain Water Certificate and water supply connection - PL	4	00
TCB-SI3010	EMSD examines site acceptance report and acceptance	36	00
TCB-SI3020	Submit WWO46 part IV for CT plumbing works	0	00
TCB-SI3030	WSD inspection and water connection for CT plumbing works	4	00
Satellite Control Building			
SCB-SI1040	Submit WWO46 Part IV for PD	0	00
SCB-SI1060	WSD inspection of Plumbing Installation (PL)	4	00
SCB-SI1070	WSD inspection of Plumbing Installation (FS)	4	09
SCB-SI1080	Water Samples Test	24	00
SCB-SI1090	Obtain Water Certificate and water supply connection - FS	1	00
SCB-SI1100	Obtain Water Certificate and water supply connection - PL	1	00
SCB-SI1130	Obtain FSI Certificate FS 172	0	00
South Ventilation Building	3		
SVB-SI1090	Submit WWO46 Part IV for PD	0	04
SVB-SI1110	WSD inspection of Plumbing Installation (PL)	4	00
SVB-SI1130	Water Samples Test	24	00
SVB-SI1140	Obtain Water Certificate and water supply connection - PL	4	00
SVB-SI2020	Obtain FSI Certificate FS 172	0	00
Tunnel			
TNL-10TC2010	FSD inspection & re-inspection	42	309
TNL-10TC2020	Obtain Fire Certificate	0	00
Others Works for Road Ope			
OW120	Hard Landscaping Works & Irrigation Systems	96	09
OW130	Street Furniture	96	00
OW135	All T&C Completed	0	09
	Toll Collection System Test	70	09

ID

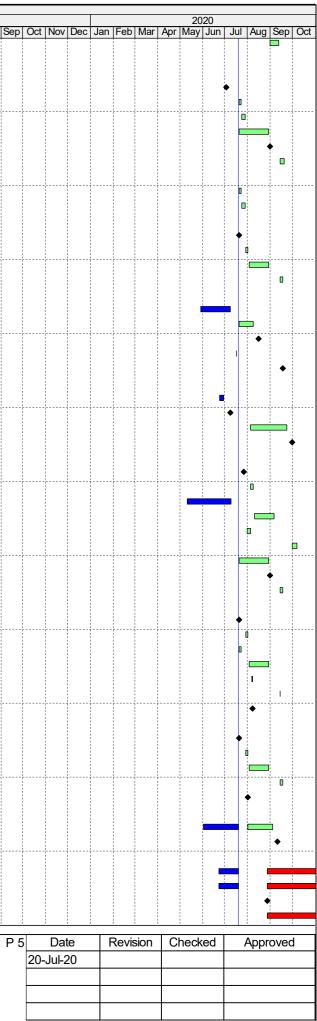
		20	18											20	19		
/la	y	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	i	1															
	-																
	-																
	-																
	-																
	-																
	į																
	-																
	-																
	-																
		1															
		1															
	ł	1															
		1															
		1															
		1															
		1															
	į																
		1															
		1															
	į	1															
		1															
		1															
	-	1															
		1															
		1															
		1															
	ł	1															
	į	1															
		1															
		1															
	-																

CONTRACT NO. HY2017/10

1

TM-CLKL NORTHERN CONNECTION TUNNEL BUILDINGS, E&M WORKS

THREE MONTHLY PROGRAMME AS OF 20 Jul 2020



	Activity	Duration	Duration %			
		(Days)	Complete	2018	2019	2020
				May Jun Jul Aug Sep Oct Nov	Dec Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov De	ec Jan Feb Mar Apr May Jun Jul
OW145	ELV System Test	70	32%			
OW155	Interfacing T&C with C5	70	80%			

CONTRACT NO. HY2017/10

TM-CLKL NORTHERN CONNECTION TUNNEL BUILDINGS, E&M WORKS

THREE MONTHLY PROGRAMME AS OF 20 Jul 2020

Ρ6	Date	Revision	Checked	Approved
	20-Jul-20			

Appendix C

Environmental Mitigation and Enhancement Measure Implementation Schedules

(In reference to CINOTECH (2011) Agreement No. CE35/2011 EP Baseline Environmental Monitoring for Hong Kong-Zhuhai-Macao Bridge Tuen Mun-Chep Lap Kok Link – Investigation. Updated EM&A Manual for Tuen Mun-Chek Lap Kok Link)

EIA Reference	EM&A Manual	Environmental Protection Measures	Location/ Timing	Implementation Agent	Relevant Standard or Requirement	-	olementa Stages		Status *
	Reference					D	С	0	
Air Quality 4.8.1	3.8	Watering of the construction sites in Lantau for 8 times/day and in Tuen Mun for 12 times/day to reduce dust emissions by 87.5% and 91.7% respectively and shall be undertaken.		Contractor	TMEIA Avoid dust generation		Y		~
4.8.1	3.8	The Contractor shall, to the satisfaction of the Engineer, install effective dust suppression measures and take such other measures as may be necessary to ensure that at the Site boundary and any nearby sensitive receiver, dust levels are kept to acceptable levels.	construction period	Contractor	TMEIA Avoid dust generation		Y		4
4.8.1	3.8	The Contractor shall not burn debris or other materials on the works areas.	All areas / throughout construction period	Contractor	TMEIA Avoid dust generation		Y		1
4.8.1	3.8	In hot, dry or windy weather, the watering programme shall maintain all exposed road surfaces and dust sources wet.	All unpaved haul roads / throughout construction period in hot, dry or windy weather	Contractor	TMEIA Avoid smoke impacts and disturbance		Y		1
4.8.1	3.8	Where breaking of oversize rock/concrete is required, watering shall be implemented to control dust. Water spray shall be used during the handling of fill material at the site and at active cuts, excavation and fill sites where dust is likely to be created.	construction period	Contractor	TMEIA Avoid dust generation		Y		N/A
4.8.1	3.8	Open dropping heights for excavated materials shall be controlled to a maximum height of 2m to minimise the fugitive dust arising from unloading.	, 0	Contractor	TMEIA Avoid dust generation		Y		N/A
4.8.1	3.8	During transportation by truck, materials shall not be loaded to a level higher than the side and tail boards, and shall be dampened or covered before transport.		Contractor	TMEIA Avoid dust generation		Y		N/A
4.8.1	3.8	Materials having the potential to create dust shall not be loaded to a level higher than the side and tail boards, and shall be covered by a clean tarpaulin. The tarpaulin shall be properly secured and shall extend at least 300mm over the edges of the side and tail boards.	construction period	Contractor	TMEIA Avoid dust generation		Y		N/A
4.8.1	3.8	No earth, mud, debris, dust and the like shall be deposited on public roads. Wheel washing facility shall be usable prior to any earthworks excavation activity on the site.		Contractor	TMEIA Avoid dust		Y		4

Legend: D=Design, C=Construction, O=Operation

EIA Reference	EM&A	Environmental Protection Measures	Location/ Timing	Implementation	Relevant Standard	-	mentation	Status *
	Manual Reference			Agent	or Requirement	D	tages C O	-
4.8.1	3.8	Areas of exposed soil shall be minimised to areas in which works have been completed shall be restored as soon as is practicable.	All exposed surfaces / throughout construction period	Contractor	TMEIA Avoid dust generation		Y	~
4.8.1	3.8	All stockpiles of aggregate or spoil shall be enclosed or covered and water applied in dry or windy condition.	All areas / throughout construction period	Contractor	TMEIA Avoid dust generation		Y	N/A
4.11	Section 3	EM&A in the form of 1 hour and 24 hour dust monitoring and site audit.	All representative existing ASRs / throughout construction period	Contractor	EM&A Manual		Y	N/A (Results adopted from published EM&A data of Contract No. HY/2012/08)
WATER QUAL	ITY (LAND V							
6.10	-	Wastewater from temporary site facilities should be controlled to prevent direct discharge to surface or marine waters.	construction period	Contractor	TM-EIAO		Y	N/A
6.10	-	Sewage effluent and discharges from on-site kitchen facilities shall be directed to Government sewer in accordance with the requirements of the WPCO or collected for disposal offsite. The use of soakaways shall be avoided.	All areas/ throughout construction period	Contractor	TM-EIAO		Y	*
6.10	-	Storm drainage shall be directed to storm drains via adequately designed sand/silt removal facilities such as sand traps, silt traps and sediment basins. Channels, earth bunds or sand bag barriers should be provided on site to properly direct stormwater to such silt removal facilities. Catchpits and perimeter channels should be constructed in advance of site formation works and earthworks.	All areas/ throughout construction period	Contractor	TM-EIAO		Y	
6.10	-	Silt removal facilities, channels and manholes shall be maintained and any deposited silt and grit shall be removed regularly, including specifically at the onset of and after each rainstorm.	, 0	Contractor	TM-EIAO		Y	-
6.10	-	Temporary access roads should be surfaced with crushed stone or gravel.	All areas/ throughout construction period	Contractor	TM-EIAO		Y	~
6.10	-	Rainwater pumped out from trenches or foundation excavations should be discharged into storm drains via silt removal facilities.	All areas/ throughout construction period	Contractor	TM-EIAO		Y	N/A
6.10	-	Measures should be taken to prevent the washout of construction materials, soil, silt or debris into any drainage system.	All areas/ throughout construction period	Contractor	TM-EIAO		Y	~
6.10	-	Open stockpiles of construction materials (e.g. aggregates and sand) on site should be covered with tarpaulin or similar fabric during rainstorms.	All areas/ throughout construction period	Contractor	TM-EIAO		Y	N/A
6.10	5.8	Manholes (including any newly constructed ones) should always be adequately covered and temporarily sealed so as to prevent silt, construction materials or debris from getting into the drainage system, and to prevent storm run-off from getting into foul sewers.	construction period	Contractor	TM-EIAO		Y	

Note: Funding Agent for all mitigation measures will be the Highways Department of the Hong Kong SAR Government

EIA Reference	EM&A Manual	Environmental Protection Measures	Location/ Timing	Implementation Agent	Relevant Standard or Requirement	Imp	olementat Stages	tion	Status *
	Reference					D	С	0	
6.10	-	Discharges of surface run-off into foul sewers must always be prevented in order not to unduly overload the foul sewerage system.	All areas/ throughout construction period	Contractor	TM-EIAO		Y		4
6.10	-	All vehicles and plant should be cleaned before they leave the construction site to ensure that no earth, mud or debris is deposited by them on roads. A wheel washing bay should be provided at every site exit.	construction period	Contractor	TM-EIAO		Y		4
6.10	-	Wheel wash overflow shall be directed to silt removal facilities before being discharged to the storm drain.	All areas/ throughout construction period	Contractor	TM-EIAO		Y		√
6.10	-	Section of construction road between the wheel washing bay and the public road should be surfaced with crushed stone or coarse gravel.	All areas/ throughout construction period	Contractor	TM-EIAO		Y		~
6.10	-	Wastewater generated from concreting, plastering, internal decoration, cleaning work and other similar activities, shall be screened to remove large objects.	All areas/ throughout construction period	Contractor	TM-EIAO		Y		N/A
6.10	-	Vehicle and plant servicing areas, vehicle wash bays and lubrication facilities shall be located under roofed areas. The drainage in these covered areas shall be connected to foul sewers via a petrol interceptor in accordance with the requirements of the WPCO or collected for off site disposal.	construction period	Contractor	TM-EIAO		Y		N/A
6.10	-	The Contractor shall prepare an oil / chemical cleanup plan and ensure that leakages or spillages are contained and cleaned up immediately.		Contractor	TM-EIAO		Y		\$
6.10	-	Waste oil should be collected and stored for recycling or disposal, in accordance with the Waste Disposal Ordinance.	All areas/ throughout construction period	Contractor	TM-EIAO Waste Disposal Ordinance		Y		~

EIA Reference	EM&A Manual	Environmental Protection Measures	Location/ Timing	Implementation Agent	Relevant Standard or Requirement	Imj	plementa Stages	tion	Status *
	Reference					D	Č	0	
6.10	-	All fuel tanks and chemical storage areas should be provided with locks and be sited on sealed areas. The storage areas should be surrounded by bunds with a capacity equal to 110% of the storage capacity of the largest tank.		Contractor	TM-EIAO		Y		\$
6.10	-	Surface run-off from bunded areas should pass through oil/grease traps prior to discharge to the stormwater system.	All areas/ throughout construction period	Contractor	TM-EIAO		Y		N/A
6.10	-	Roadside gullies to trap silt and grit shall be provided prior to discharging the stormwater into the marine environment. The sumps will be maintained and cleaned at regular intervals.	Roadside/design and operation	Design Consultant/ Contractor	TM-EIAO	Y		Y	N/A
6.10	Section 11	All construction works shall be subject to routine audit to ensure implementation of all EIA recommendations and good working practice.	All areas/ throughout construction period	Contractor	EM&A Manual		Y		*
WASTE									
12.6		The Contractor shall identify a coordinator for the management of waste.	Contract mobilisation	Contractor	TMEIA		Y		4
12.6		The Contractor shall prepare and implement a Waste Management Plan which specifies procedures such as a ticketing system, to facilitate tracking of loads and to ensure that illegal disposal of wastes does not occur, and protocols for the maintenance of records of the quantities of wastes generated, recycled and disposed. A recording system for the amount of waste generated, recycled and disposed (locations) should be established.	Contract mobilisation	Contractor	TMEIA, Works Branch Technical Circular No. 5/99 for the Trip-ticket System for Disposal of Construction and Demolition Material		Y		*
12.6		The Contractor shall apply for and obtain the appropriate licenses for the disposal of public fill, chemical waste and effluent discharges.	Contract mobilisation	Contractor	TMEIA, Land (Miscellaneous Provisions) Ordinance (Cap 28); Waste Disposal Ordinance (Cap 354); Dumping at Sea Ordinance (Cap 466); Water Pollution Control Ordinance.		Y		~
12.6	8.1	Training shall be provided to workers about the concepts of site cleanliness and appropriate waste management procedures including waste reduction, reuse and recycling.		Contractor	TMEIA		Y		1
12.6	8.1	The extent of cutting operation should be optimised where possible. Earth retaining structures and bored pile walls should be proposed to minimise the extent of cutting.		Contractor	TMEIA		Y		1
12.6	8.1	The site and surroundings shall be kept tidy and litter free.	All areas / throughout construction period	Contractor	TMEIA		Y		✓

Legend: D=Design, C=Construction, O=Operation

Note: Funding Agent for all mitigation measures will be the Highways Department of the Hong Kong SAR Government

EIA Reference	EM&A Manual	Environmental Protection Measures	Location/ Timing	Implementation Agent	Relevant Standard or Requirement	Imj	plementa Stages	tion	Status *
	Reference					D	C	0	
12.6	8.1	No waste shall be burnt on site.	All areas / throughout construction period	Contractor	TMEIA		Y		4
12.6	8.1	The Contractor shall be prohibited from disposing of C&D materials at any sensitive locations. The Contractor should propose the final disposal sites in the EMP and WMP for approval before implementation.	construction period	Contractor	TMEIA		Y		✓
12.6	8.1	Stockpiled material shall be covered by tarpaulin and /or watered as appropriate to prevent windblown dust/ surface run off.	All areas / throughout construction period	Contractor	TMEIA		Y		~
12.6	8.1	Excavated material in trucks shall be covered by tarpaulins to reduce the potential for spillage and dust generation.	All areas / throughout construction period	Contractor	TMEIA		Y		4
12.6	8.1	Wheel washing facilities shall be used by all trucks leaving the site to prevent transfer of mud onto public roads.	All areas / throughout construction period	Contractor	TMEIA		Y		1
12.6	8.1	Standard formwork or pre-fabrication should be used as far as practicable so as to minimise the C&D materials arising. The use of more durable formwork/plastic facing for construction works should be considered. The use of wooden hoardings should be avoided and metal hoarding should be used to facilitate recycling. Purchasing of construction materials should avoid over-ordering and wastage.	construction period	Contractor	TMEIA		Y		✓

EIA Reference	EM&A Manual	Environmental Protection Measures	Location/ Timing	Implementation Agent	Relevant Standard or Requirement	Imj	plementa Stages	tion	Status *
	Reference					D	C	0	
12.6	8.1	The Contractor should recycle as many C&D materials (this is a waste section) as possible on-site. The public fill and C&D waste should be segregated and stored in separate containers or skips to facilitate the reuse or recycling of materials and proper disposal. Where practicable, the concrete and masonry should be crushed and used as fill materials. Steel reinforcement bar should be collected for use by scrap steel mills. Different areas of the sites should be considered for segregation and storage activities.	construction period	Contractor	TMEIA		Y		~
12.6	8.1	All falsework will be steel instead of wood.	All areas / throughout construction period	Contractor	TMEIA		Y		✓
12.6	8.1	Chemical waste producers should register with the EPD. Chemical waste should be handled in accordance with the Code of Practice on the Packaging, Handling and Storage of Chemical Wastes as follows: <i>f</i> suitable for the substance to be held, resistant to corrosion, maintained in good conditions and securely closed; <i>f</i> Having a capacity of <450L unless the specifications have been approved by the EPD; and w Chinese according to the instructions prescribed in Schedule 2 of the Regulations. <i>f</i> Clearly labelled and used solely for the storage of chemical wastes; <i>f</i> Enclosed with at least 3 sides; <i>f</i> Impermeable floor and bund with capacity to accommodate 110% of the volume of the largest container or 20% by volume of the chemical waste stored in the area, whichever is greatest; <i>f</i> Adequate ventilation; <i>f</i> Sufficiently covered to prevent rainfall entering (water collected within the bund must be tested and disposed of as chemical waste, if necessary); and	construction period	Contractor	TMEIA		Y		♦

Legend: D=Design, C=Construction, O=Operation

Note: Funding Agent for all mitigation measures will be the Highways Department of the Hong Kong SAR Government

EIA Reference	Manual	Environmental Protection Measures	Location/ Timing	Implementation Agent	Relevant Standard or Requirement	S	nentation ages	Status *
	Reference					D	C O	
		f Incompatible materials are adequately						
		separated.						
12.6	8.1	Waste oils, chemicals or solvents shall not be disposed of to drain,	All areas / throughout construction period	Contractor	TMEIA		Y	\$
12.6	8.1	Adequate numbers of portable toilets should be provided for on- site workers. Portable toilets should be maintained in reasonable states, which will not deter the workers from utilising them.	, 0	Contractor	TMEIA		Y	*
12.6	8.1	Night soil should be regularly collected by licensed collectors.	All areas / throughout construction period	Contractor	TMEIA		Y	N/A
12.6	8.1	General refuse arising on-site should be stored in enclosed bins or compaction units separately from C&D and chemical wastes. Sufficient dustbins shall be provided for storage of waste as required under the Public Cleansing and Prevention of Nuisances By-laws. In addition, general refuse shall be cleared daily and shall be disposed of to the nearest licensed landfill or refuse transfer station. Burning of refuse on construction sites is prohibited.	construction period	Contractor	TMEIA		Y	~
12.6	8.1	All waste containers shall be in a secure area on hardstanding;	All areas / throughout construction period	Contractor	TMEIA		Y	~
12.6		Office wastes can be reduced by recycling of paper if such volume is sufficiently large to warrant collection. Participation in a local collection scheme by the Contractor should be advocated. Waste separation facilities for paper, aluminium cans, plastic bottles, etc should be provided on-site.	construction period	Contractor	TMEIA		Y	✓
12.6 LANDSCAPE A		EM&A of waste handling, storage, transportation, disposal procedures and documentation through the site audit programme shall be undertaken.	, 0	Contractor	EM&A Manual		Y	

Legend: D=Design, C=Construction, O=Operation

EIA Reference	EM&A Manual		Location/ Timing	Implementation Agent	Relevant Standard or Requirement	Im	plementa Stages	tion	Status *
	Reference					D	C	0	
10.9	7.6	Existing trees on boundary of the Project Area shall be carefully protected during construction. Detailed Tree Protection Specification shall be provided in the Contract Specification. Under this specification, the Contractor shall be required to submit, for approval, a detailed working method statement for the protection of trees prior to undertaking any works adjacent to all retained trees, including trees in contractor's works areas (Tree protection measures will be detailed at Tree Removal Application Stage) (CM1)	during construction	Design Consultant/ Contractor	TMEIA	Y	Y		N/A
10.9	7.6	Trees unavoidably affected by the works shall be transplanted where practical. Trees will be transplanted straight to their final receptor site and not held in a temporary nursery. A detailed Tree Transplanting Specification shall be provided in the Contract Specification. Sufficient time for necessary tree root and crown preparation periods shall be allowed in the project programme (CM2)	during construction	Design Consultant/ Contractor	TMEIA	Y	Y		N/A
10.9	7.6	Hillside and roadside screen planting to proposed roads, associated structures and slope works (CM3)	All areas/detailed design/ during construction/post construction	Design Consultant/ Contractor	TMEIA	Y	Y		N/A
.0.9	7.6	Hydroseeding or sheeting of soil stockpiles with visually unobstrusive material (in earth tone) (CM4)	All areas/detailed design/ during construction/post construction	Design Consultant/ Contractor	TMEIA	Y	Y		N/A
10.9	7.6	Screening of construction works by hoardings around works area in visually unobtrusive colours, to screen works (CM5)	All areas/detailed design/ during construction	Design Consultant/ Contractor	TMEIA	Y	Y		N/A
0.9	7.6	Control night-time lighting and glare by hooding all lights (CM6)	All areas/detailed design/ during construction	Design Consultant/ Contractor	TMEIA	Y	Y		N/A
0.9	7.6	Ensure no run-off into water body adjacent to the Project Area (CM7)	All areas/detailed design/ during construction	Design Consultant/ Contractor	TMEIA	Y	Y		N/A
0.9	7.6	Avoidance of excessive height and bulk of buildings and structures (CM8)	All areas/detailed design/ during construction	Design Consultant/ Contractor	TMEIA	Y	Y		4
0.9	7.6	Recycle/ Reuse all felled trees and vegetation, e.g. mulching (CM9)	All areas/detailed design/ during construction	Design Consultant/ Contractor	TMEIA	Y	Y		N/A
0.9	7.6		All areas/detailed design/ during construction	Design Consultant/ Contractor	TMEIA	Y	Y		N/A
0.9	7.6	Re-vegetation of affected woodland/shrubland with native species (OM1)	All areas/detailed design/ during construction/ during operation	Design Consultant/ Contractor	TMEIA	Y	Ŷ		n/a. To be maintained by HyD

Legend: D=Design, C=Construction, O=Operation

EIA Reference	EM&A Manual	Manual	Location/ Timing	Implementation Agent				ation	Status *
	Reference					D	C	0	
10.9	7.6	Tall buffer screen tree / shrub / climber planting should be incorporated to soften hard engineering structures and facilities (OM2)	All areas/detailed design/ during construction/ during operation	Design Consultant/ Contractor	TMEIA	Y	Y		n/a. To be maintained by HyD/LCSD
10.9	7.6	Streetscape elements (e.g. paving, signage, street furniture, lighting etc.) shall be sensitively designed in a manner that responds to the local context, and minimises potential negative landscape and visual impacts. Lighting units should be directional and minimise unnecessary light spill (OM3)	All areas/detailed design/ during construction / during operation	Design Consultant/ Contractor	TMEIA	Y	Y		n/a. To be maintained by HyD
10.9	7.6	Structure, ornamental tree / shrub / climber planting should be provided along roadside amenity strips, central dividers and newly formed slopes to enhance the townscape quality and further greenery enhancement (OM4)	All areas/detailed design/ during construction / during operation	Design Consultant/ Contractor	TMEIA	Y	Y	Y	n/a. To be maintained by HyD/ArchSD
10.9	7.6	Aesthetically pleasing design (visually unobtrusive and non- reflective) as regard to the form, material and finishes shall be incorporated to all buildings, engineering structures and associated infrastructure facilities (OM5)	All areas/detailed design/ during construction / during operation	Design Consultant/ Contractor	TMEIA	Y	Y	Y	n/a. To be maintained by HyD/ArchSD
10.9	7.6	Avoidance of excessive height and bulk of buildings and structures (OM6)	All areas/detailed design/ during construction / during operation	Design Consultant/ Contractor	TMEIA	Y	Y		n/a. To be maintained by HyD/ArchSD

EIA Reference	EM&A	Environmental Protection Measures	Location/ Timing	Implementation	Relevant Standard	Imp	lementat	tion	Status *
	Manual			Agent	or Requirement		Stages		
	Reference					D	С	0	

* Remarks:

<> Compliance of Mitigation but need improvement

x Non-compliance of Mitigation Measures

▲ Non-compliance of Mitigation Measures but rectified by Contractor

 Δ Deficiency of Mitigation Measures but rectified by Contractor

N/A Not Applicable in Reporting Period

Legend: D=Design, C=Construction, O=Operation

Note: Funding Agent for all mitigation measures will be the Highways Department of the Hong Kong SAR Government

[✓] Compliance of Mitigation Measures

Appendix D

Summary of Action and Limit Levels

Parameters	Action	Limit
4 Hour TSP Level in μg/m³	ASR1 = 213	260
	ASR5 = 238	
	AQMS1 = 213	
	ASR6 = 238	
	ASR10 = 214	
Hour TSP Level in µg /m³	ASR1 = 331	500
	ASR5 = 340	
	AQMS1 = 335	
	ASR6 = 338	
	ASR10 = 337	

Table D1Action and Limit Levels for 1-hour and 24-hour TSP

Table D2Actions in the Event of Landfill Gas being Detectedin Excavation / Confined Area

Parameter	Measurement	Action
Oxygen	< 19%	- Ventilate to restore oxygen to > 19%
	< 18%	- Stop work
		- Evacuate personnel / prohibit entry
		- Increase ventilation to restore to > 19%
Methane	>10% LEL (>	- Prohibit hot work
	0.5% v/v)	- Ventilate to restore methane to < 10% LEL
	> 20% LEL	- Stop work
	(>1% v/v)	- Evacuate personnel / prohibit entry
		- Increase ventilation to restore to $< 10\%$
Carbon Dioxide	> 0.5%	- Ventilate to restore oxygen to $< 0.5\%$
	> 1.5%	- Stop work
		- Evacuate personnel / prohibit entry
		- Increase ventilation to restore to $< 0.5\%$

Appendix E

Event Action Plan

Appendix E1Event/Action Plan for Air Quality

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

	ACTION						
EVENT	ET ⁽¹⁾	IEC ⁽¹⁾	ER ⁽¹⁾	Contractor			
Limit Level							
1. Exceedance for one sample	 Identify the source. Inform the ER and the DEP. 	1. Check monitoring data submitted by the ET.	 Confirm receipt of notification of failure in writing. 	1. Take immediate action to avoid further exceedance			
	3. Repeat measurement to confirm finding.	2. Check Contractor's working method.	 Notify the Contractor. Ensure remedial measures are 	2. Submit proposals for remedial actions to IEC within 3 working days of notification			
	4. Increase monitoring frequency to daily.	 Discuss with the ET and the Contractor on possible remedial measures. 	properly implemented.	3. Implement the agreed proposals			
	5. Assess effectiveness of Contractor's remedial actions and keep the IEC, the DEP and the ER informed of	 Advise the ER on the effectiveness of the proposed remedial measures. 		4. Amend proposal if appropriate			
	the results.	5. Supervise implementation of remedial measures.					
2. Exceedance for two or more consecutive	1. Notify the IEC, the ER, the DEP and the Contractor.	the Contractor on the potential remedial actions. 2. 2. Review the Contractor's 3. remedial actions whenever necessary to assure their effectiveness and advise the ER accordingly. 4. 3. Supervise the implementation of remedial measures. 5.	1. Confirm receipt of notification of failure in writing.	1. Take immediate action to avoid further exceedance.			
samples	2. Identify the source.		2. Notify the Contractor.	2. Notify the Contractor.	2. Submit proposals for remedial		
	3. Repeat measurements to confirm findings.		3. In consultation with the IEC, agree with the Contractor on the	actions to IEC within 3 working days of notification.			
	4. Increase monitoring frequency to daily.		remedial measures to be implemented.	3. Implement the agreed proposals.4. Resubmit proposals if problem sti			
	 5. Carry out analysis of the Contractor's working procedures to determine possible mitigation to be implemented. 6. Arrange meeting with the IEC 		 Ensure remedial measures are properly implemented. If exceedance continues, consider what activity of the work is responsible and instruct the Contractor to stop that activity of work until the exceedance is 	not under control. 5. Stop the relevant activity of works as determined by the ER until the exceedance is abated.			
	and the ER to discuss the remedial actions to be taken. 7. Assess effectiveness of the Contractor's remedial actions		work until the exceedance is abated.				

and keep the IEC, the DEP and the ER informed of the results.

8. If the exceedance stops, cease additional monitoring.

Abbreviations: ET - Environmental Team, IEC - Independent Environmental Checker, ER - Engineer's Representative, DEP - Director of Environmental Protection

Appendix F

EM&A Monitoring Schedule

HY/2017/10 Tuen Mun - Chek Lap Kok Link - Northern Tunnel Connection Buildings, E&M Works Landfill Gas Monitoring Schedule (1 to 31 August 2020)

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
						01-Aug
						LFG Monitoring (a.m.
						& p.m.)
02-Aug	03-Aug	04-Aug	05-Aug	06-Aug	07-Aug	08-Aug
v		LFG Monitoring (a.m. &				LFG Monitoring (a.m.
				p.m.)	& p.m.)	& p.m.)
	p)	β)	p.m.)	p.m.)	d p.m.)	d p.m.)
09-Aug	10-Aug					
	LFG Monitoring (a.m. &	LFG Monitoring (a.m. &	LFG Monitoring (a.m. &	LFG Monitoring (a.m. &	LFG Monitoring (a.m.	LFG Monitoring (a.m.
	p.m.)	p.m.)	p.m.)	p.m.)	& p.m.)	& p.m.)
16-Aug	17-Aug	18-Aug	19-Aug	20-Aug	21-Aug	22-Aug
				H = (-1)/(0)/(0)/(0)/(0)/(0)/(0)/(0)/(0)/(0)/(0	II EG Monitorina (a m	II E(- Monitoring (2 m
					- ·	LFG Monitoring (a.m.
			p.m.)	p.m.)	LFG Monitoring (a.m. & p.m.)	& p.m.)
						- · ·
						- · ·
23-Aug	p.m.) 24-Aug	p.m.) 25-Aug	p.m.) 26-Aug	p.m.) 27-Aug	& p.m.) 28-Aug	& p.m.)
23-Aug	p.m.) 24-Aug	p.m.)	p.m.) 26-Aug	p.m.) 27-Aug	& p.m.) 28-Aug	& p.m.)
23-Aug	p.m.) 24-Aug LFG Monitoring (a.m. &	p.m.) <u>25-Aug</u> LFG Monitoring (a.m. &	p.m.) 26-Aug	p.m.) 27-Aug	& p.m.) 28-Aug	& p.m.)
23-Aug	p.m.) 24-Aug LFG Monitoring (a.m. &	p.m.) <u>25-Aug</u> LFG Monitoring (a.m. &	p.m.) <u>26-Aug</u> LFG Monitoring (a.m. &	p.m.) 27-Aug LFG Monitoring (a.m. &	& p.m.) 28-Aug LFG Monitoring (a.m.	& p.m.) 29-Aug LFG Monitoring (a.m.
23-Aug	p.m.) 24-Aug LFG Monitoring (a.m. &	p.m.) <u>25-Aug</u> LFG Monitoring (a.m. &	p.m.) <u>26-Aug</u> LFG Monitoring (a.m. &	p.m.) 27-Aug LFG Monitoring (a.m. &	& p.m.) 28-Aug LFG Monitoring (a.m.	& p.m.) 29-Aug LFG Monitoring (a.m.
23-Aug	p.m.) <mark>24-Aug</mark> LFG Monitoring (a.m. & p.m.)	p.m.) <u>25-Aug</u> LFG Monitoring (a.m. &	p.m.) <u>26-Aug</u> LFG Monitoring (a.m. &	p.m.) 27-Aug LFG Monitoring (a.m. &	& p.m.) 28-Aug LFG Monitoring (a.m.	& p.m.) 29-Aug LFG Monitoring (a.m.
23-Aug	p.m.) <mark>24-Aug</mark> LFG Monitoring (a.m. & p.m.) 31-Aug	p.m.) <u>25-Aug</u> LFG Monitoring (a.m. &	p.m.) <u>26-Aug</u> LFG Monitoring (a.m. &	p.m.) 27-Aug LFG Monitoring (a.m. &	& p.m.) 28-Aug LFG Monitoring (a.m.	& p.m.) 29-Aug LFG Monitoring (a.m.
23-Aug	p.m.) 24-Aug LFG Monitoring (a.m. & p.m.) 31-Aug LFG Monitoring (a.m.	p.m.) <u>25-Aug</u> LFG Monitoring (a.m. &	p.m.) <u>26-Aug</u> LFG Monitoring (a.m. &	p.m.) 27-Aug LFG Monitoring (a.m. &	& p.m.) 28-Aug LFG Monitoring (a.m.	& p.m.) 29-Aug LFG Monitoring (a.m.
23-Aug	p.m.) <mark>24-Aug</mark> LFG Monitoring (a.m. & p.m.) 31-Aug	p.m.) <u>25-Aug</u> LFG Monitoring (a.m. &	p.m.) <u>26-Aug</u> LFG Monitoring (a.m. &	p.m.) 27-Aug LFG Monitoring (a.m. &	& p.m.) 28-Aug LFG Monitoring (a.m.	& p.m.) 29-Aug LFG Monitoring (a.m.
23-Aug	p.m.) 24-Aug LFG Monitoring (a.m. & p.m.) 31-Aug LFG Monitoring (a.m.	p.m.) <u>25-Aug</u> LFG Monitoring (a.m. &	p.m.) <u>26-Aug</u> LFG Monitoring (a.m. &	p.m.) 27-Aug LFG Monitoring (a.m. &	& p.m.) 28-Aug LFG Monitoring (a.m.	& p.m.) 29-Aug LFG Monitoring (a.m.

HY/2017/10 Tuen Mun - Chek Lap Kok Link - Northern Tunnel Connection Buildings, E&M Works Landfill Gas Monitoring Schedule (1 to 30 September 2020)

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
		01-Sep	02-Sep	03-Sep	04-Sep	05-Sep
		LFG Monitoring (a.m. &				
		p.m.)	p.m.)	p.m.)	p.m.)	p.m.)
06-Sep	07-Sep	08-Sep	09-Sep	10-Sep	11-Sep	12-Sep
00-000		LFG Monitoring (a.m. &	-			
				• •	p.m.)	p.m.)
	p.m.)	p)	p.m.)	p.m.)	p.m.)	p.m.)
13-Sep	14-Sep	15-Sep				19-Sep
	LFG Monitoring (a.m. &					
	p.m.)	p.m.)	p.m.)	p.m.)	p.m.)	p.m.)
20-Sep	21-Sep	22-Sep	23-Sep	24-Sep	25-Sep	26-Sep
		LFG Monitoring (a.m. &				
	p.m.)	- · ·		p.m.)	p.m.)	p.m.)
		<i>)</i>	[)	[·····)	(F)	[·····)
27-Sep	28-Sep	1	-			
	- 1	LFG Monitoring (a.m. &				
	p.m.)	p.m.)	p.m.)			

The schedule is subject to excavation work at Main Control Building. The schedule will be revised after reviewing the progress of the construction works or due to adverse (safety, weather etc) conditions.

Appendix G

Calibration Certificate of Monitoring Equipment



MSA Hong Kong Ltd.

25/F Jupiter Tower, 9 Jupiter Street, Hong Kong Tel 852-22587588 Fax 25478780 Email info.hk@msasafety.com Website www.msasafety.com

Ref.2019/12/009CustomerGammon Constructions Limited

Date: 11-Dec-19

CERTIFICATE FOR CALIBRATION CHECK TEST

Model	Serial No.	Calibration Check Gas	Regulator	Full Scale	Response
		1.45% Methane,		100% LEL	29%LEL
Altair 5XIR	145986	15% Oxygen	.25litre/min	30% Vol	15% O2
		2.5% Carbon Dioxide		9.99%	2.5% CO2

Remarks: Regular inspection completed. Calibration passed

MSA Hong Kong Ltd. certify that instrument/s listed above has/have been calibrated check tested on: 11-Dec-19

This instrument was calibrated in accordance with all requirements of the specifications of MSA.

This instrument must be calibration checked prior to use in accordance with the instruction manual.

This instrument was calibrated using NIST traceable equipment and was in accordance with all requirements of the drawings and specifications of MSA.

For and on behalf of MSA Hong Kong Ltd.

Authorised Signature

Appendix H

Landfill Gas Monitoring Results and Graphical Presentation

Landfill Gas Monitoring Results on Methane Level

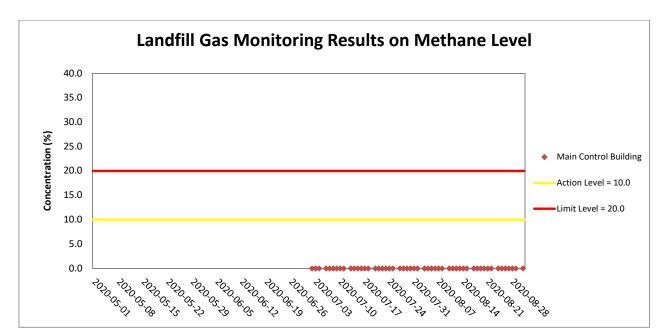
Landfill Ga	as monitoring R	esults on Methane Level					
Project	Works	Date(yyyy-mm-dd)	Monitoring Location	Time (hh:mm, 24hour)	Results (%)	Action Level (%)	Limit Level (%)
TMCLKL	HY/2017/10	2020-08-01	Main Control Building	8:15	0		
TMCLKL	HY/2017/10	2020-08-01	Main Control Building	13:15	0		
TMCLKL	HY/2017/10	2020-08-03	Main Control Building	8:15	0		
TMCLKL	HY/2017/10	2020-08-03	Main Control Building	13:15	0		
TMCLKL	HY/2017/10	2020-08-04	Main Control Building	8:15	0		
TMCLKL	HY/2017/10	2020-08-04	Main Control Building	13:15	0		
TMCLKL	HY/2017/10	2020-08-05	Main Control Building	8:15	0		
TMCLKL	HY/2017/10	2020-08-05	Main Control Building	13:15	0		
TMCLKL	HY/2017/10	2020-08-06	Main Control Building	8:15	0		
TMCLKL	HY/2017/10	2020-08-06	Main Control Building	13:15	0		
TMCLKL	HY/2017/10	2020-08-07	Main Control Building	8:15	0		
TMCLKL	HY/2017/10	2020-08-07	Main Control Building	13:15	0		
TMCLKL	HY/2017/10	2020-08-08	Main Control Building	8:15	0		
TMCLKL	HY/2017/10	2020-08-08	Main Control Building	13:15	0		
TMCLKL	HY/2017/10	2020-08-10	Main Control Building	8:15	0		
TMCLKL	HY/2017/10	2020-08-10	Main Control Building	13:15	0		
TMCLKL	HY/2017/10	2020-08-11	Main Control Building	8:15	0		
TMCLKL	HY/2017/10	2020-08-11	Main Control Building	13:15	0		
TMCLKL	HY/2017/10	2020-08-12	Main Control Building	8:15	0		
TMCLKL	HY/2017/10	2020-08-12	Main Control Building	13:15	0		
TMCLKL	HY/2017/10	2020-08-13	Main Control Building	8:15	0		
TMCLKL	HY/2017/10	2020-08-13	Main Control Building	13:15	0		
TMCLKL	HY/2017/10	2020-08-13	Main Control Building	8:15	0		
TMCLKL	HY/2017/10	2020-08-14	Main Control Building	13:15	0		
TMCLKL	HY/2017/10	2020-08-14	Main Control Building	8:15	0		
TMCLKL	HY/2017/10	2020-08-15	Main Control Building	13:15	0		
TMCLKL	HY/2017/10		Main Control Building		0	10.0	20.0
		2020-08-17	-	8:15			
TMCLKL	HY/2017/10	2020-08-17	Main Control Building	13:15	0		
TMCLKL TMCLKL	HY/2017/10	2020-08-18	Main Control Building	8:15	0		
	HY/2017/10	2020-08-18	Main Control Building	13:15	0		
TMCLKL	HY/2017/10	2020-08-19	Main Control Building	8:15			
TMCLKL	HY/2017/10	2020-08-19	Main Control Building	13:15	0		
TMCLKL	HY/2017/10	2020-08-20	Main Control Building	8:15	0		
TMCLKL	HY/2017/10	2020-08-20	Main Control Building	13:15	0		
TMCLKL	HY/2017/10	2020-08-21	Main Control Building	8:15	0		
TMCLKL	HY/2017/10	2020-08-21	Main Control Building	13:15	0		
TMCLKL	HY/2017/10	2020-08-22	Main Control Building	8:15	0		
TMCLKL	HY/2017/10	2020-08-22	Main Control Building	13:15	0		
TMCLKL	HY/2017/10	2020-08-24	Main Control Building	8:15	0		
TMCLKL	HY/2017/10	2020-08-24	Main Control Building	13:15	0		
TMCLKL	HY/2017/10	2020-08-25	Main Control Building	8:15	0		
TMCLKL	HY/2017/10	2020-08-25	Main Control Building	13:15	0		
TMCLKL	HY/2017/10	2020-08-26	Main Control Building	8:15	0		
TMCLKL	HY/2017/10	2020-08-26	Main Control Building	13:15	0		
TMCLKL	HY/2017/10	2020-08-27	Main Control Building	8:15	0		
TMCLKL	HY/2017/10	2020-08-27	Main Control Building	13:15	0		
TMCLKL	HY/2017/10	2020-08-28	Main Control Building	8:15	0		
TMCLKL	HY/2017/10	2020-08-28	Main Control Building	13:15	0		
TMCLKL	HY/2017/10	2020-08-29	Main Control Building	8:15	0		
TMCLKL	HY/2017/10	2020-08-29	Main Control Building	13:15	0		
TMCLKL	HY/2017/10	2020-08-31	Main Control Building	8:15	0		
TMCLKL	HY/2017/10	2020-08-31	Main Control Building	13:15	0		
				Average	0		•
				Min.	0		
				Max.	0		

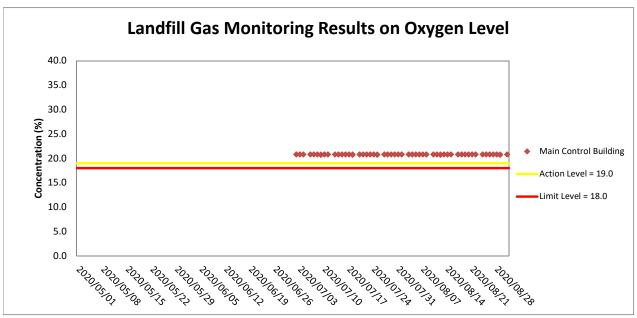
Landfill Gas Monitoring Results on Oxygen Level

		esults on Oxygen Level	04-41-1	Time (theme Others)		A other Lawel (0()	
Project	Works	Date(yyyy-mm-dd)	Station	Time (hh:mm, 24hour)	Results (%)	Action Level (%)	Limit Level (%)
TMCLKL	HY/2017/10	2020-08-01	Main Control Building	8:15	20.8		
TMCLKL	HY/2017/10	2020-08-01	Main Control Building	13:15	20.8		
TMCLKL	HY/2017/10	2020-08-03	Main Control Building	8:15	20.8		
TMCLKL	HY/2017/10	2020-08-03	Main Control Building	13:15	20.8		
TMCLKL	HY/2017/10	2020-08-04	Main Control Building	8:15	20.8		
TMCLKL	HY/2017/10	2020-08-04	Main Control Building	13:15	20.8		
TMCLKL	HY/2017/10	2020-08-05	Main Control Building	8:15	20.8		
TMCLKL	HY/2017/10	2020-08-05	Main Control Building	13:15	20.8		
TMCLKL	HY/2017/10	2020-08-06	Main Control Building	8:15	20.8		
TMCLKL	HY/2017/10	2020-08-06	Main Control Building	13:15	20.8		
TMCLKL	HY/2017/10	2020-08-07	Main Control Building	8:15	20.8		
TMCLKL	HY/2017/10	2020-08-07	Main Control Building	13:15	20.8		
TMCLKL	HY/2017/10	2020-08-08	Main Control Building	8:15	20.8		
TMCLKL	HY/2017/10	2020-08-08	Main Control Building	13:15	20.8		
TMCLKL	HY/2017/10	2020-08-10	Main Control Building	8:15	20.8		
TMCLKL	HY/2017/10	2020-08-10	Main Control Building	13:15	20.8		
TMCLKL	HY/2017/10	2020-08-11	Main Control Building	8:15	20.8		
TMCLKL	HY/2017/10	2020-08-11	Main Control Building	13:15	20.8		
TMCLKL	HY/2017/10	2020-08-11	Main Control Building	8:15	20.0		
TMCLKL	HY/2017/10	2020-08-12	Main Control Building	13:15	20.8		
TMCLKL	HY/2017/10	2020-08-12	Main Control Building	8:15	20.8		
TMCLKL	HY/2017/10		-		20.8		
		2020-08-13	Main Control Building	13:15			
TMCLKL	HY/2017/10	2020-08-14	Main Control Building	8:15	20.8		
TMCLKL	HY/2017/10	2020-08-14	Main Control Building	13:15	20.8		
TMCLKL	HY/2017/10	2020-08-15	Main Control Building	8:15	20.8		
TMCLKL	HY/2017/10	2020-08-15	Main Control Building	13:15	20.8	19.0	18.0
TMCLKL	HY/2017/10	2020-08-17	Main Control Building	8:15	20.8		
TMCLKL	HY/2017/10	2020-08-17	Main Control Building	13:15	20.8		
TMCLKL	HY/2017/10	2020-08-18	Main Control Building	8:15	20.8		
TMCLKL	HY/2017/10	2020-08-18	Main Control Building	13:15	20.8		
TMCLKL	HY/2017/10	2020-08-19	Main Control Building	8:15	20.8		
TMCLKL	HY/2017/10	2020-08-19	Main Control Building	13:15	20.8		
TMCLKL	HY/2017/10	2020-08-20	Main Control Building	8:15	20.8		
TMCLKL	HY/2017/10	2020-08-20	Main Control Building	13:15	20.8		
TMCLKL	HY/2017/10	2020-08-21	Main Control Building	8:15	20.8		
TMCLKL	HY/2017/10	2020-08-21	Main Control Building	13:15	20.8		
TMCLKL	HY/2017/10	2020-08-22	Main Control Building	8:15	20.8		
TMCLKL	HY/2017/10	2020-08-22	Main Control Building	13:15	20.8		
TMCLKL	HY/2017/10	2020-08-24	Main Control Building	8:15	20.8		
TMCLKL	HY/2017/10	2020-08-24	Main Control Building	13:15	20.8		
TMCLKL	HY/2017/10	2020-08-24	Main Control Building	8:15	20.8		
TMCLKL	HY/2017/10	2020-08-25	Main Control Building	13:15	20.8		
TMCLKL	HY/2017/10	2020-08-25	Main Control Building	8:15	20.8		
			-				
TMCLKL	HY/2017/10	2020-08-26	Main Control Building	13:15	20.8		
TMCLKL	HY/2017/10	2020-08-27	Main Control Building	8:15	20.8		
TMCLKL	HY/2017/10	2020-08-27	Main Control Building	13:15	20.8		
TMCLKL	HY/2017/10	2020-08-28	Main Control Building	8:15	20.8		
TMCLKL	HY/2017/10	2020-08-28	Main Control Building	13:15	20.8		
TMCLKL	HY/2017/10	2020-08-29	Main Control Building	8:15	20.8		
TMCLKL	HY/2017/10	2020-08-29	Main Control Building	13:15	20.7		
TMCLKL	HY/2017/10	2020-08-31	Main Control Building	8:15	20.8		
TMCLKL	HY/2017/10	2020-08-31	Main Control Building	13:15	20.8		
				Average	20.8		
				Min.	20.7		

Landfill Gas Monitoring Results on Carbon Dioxide Level

	_	esults on Carbon Dioxide		T	D	A - 41 1 1 /0/ 1	11
Project	Works	Date(yyyy-mm-dd)	Station	Time (hh:mm, 24hour)	Results (%)	Action Level (%)	Limit Level (%)
TMCLKL	HY/2017/10	2020-08-01	Main Control Building	8:15	0.03		
TMCLKL	HY/2017/10	2020-08-01	Main Control Building	13:15	0.03		
TMCLKL	HY/2017/10	2020-08-03	Main Control Building	8:15	0.03		
TMCLKL	HY/2017/10	2020-08-03	Main Control Building	13:15	0.03		
TMCLKL	HY/2017/10	2020-08-04	Main Control Building	8:15	0.03		
TMCLKL	HY/2017/10	2020-08-04	Main Control Building	13:15	0.03		
TMCLKL	HY/2017/10	2020-08-05	Main Control Building	8:15	0.03		
TMCLKL	HY/2017/10	2020-08-05	Main Control Building	13:15	0.03		
TMCLKL	HY/2017/10	2020-08-06	Main Control Building	8:15	0.03		
TMCLKL	HY/2017/10	2020-08-06	Main Control Building	13:15	0.03		
TMCLKL	HY/2017/10	2020-08-07	Main Control Building	8:15	0.03		
TMCLKL	HY/2017/10	2020-08-07	Main Control Building	13:15	0.03		
TMCLKL	HY/2017/10	2020-08-08	Main Control Building	8:15	0.03		
TMCLKL	HY/2017/10	2020-08-08	Main Control Building	13:15	0.03		
TMCLKL	HY/2017/10	2020-08-10	Main Control Building	8:15	0.03		
TMCLKL	HY/2017/10	2020-08-10	Main Control Building	13:15	0.03		
TMCLKL	HY/2017/10	2020-08-11	Main Control Building	8:15	0.03		
TMCLKL	HY/2017/10	2020-08-11	Main Control Building	13:15	0.03		
TMCLKL	HY/2017/10	2020-08-12	Main Control Building	8:15	0.03		
TMCLKL	HY/2017/10	2020-08-12	Main Control Building	13:15	0.03		
TMCLKL	HY/2017/10	2020-08-13	Main Control Building	8:15	0.03		
TMCLKL	HY/2017/10	2020-08-13	Main Control Building	13:15	0.03		
TMCLKL	HY/2017/10	2020-08-14	Main Control Building	8:15	0.03		
TMCLKL	HY/2017/10	2020-08-14	Main Control Building	13:15	0.04		
TMCLKL	HY/2017/10	2020-08-15	Main Control Building	8:15	0.03		
TMCLKL	HY/2017/10	2020-08-15	Main Control Building	13:15	0.03		
TMCLKL	HY/2017/10	2020-08-17	Main Control Building	8:15	0.03	0.5	1.5
TMCLKL	HY/2017/10	2020-08-17	Main Control Building	13:15	0.03		
TMCLKL	HY/2017/10	2020-08-18	Main Control Building	8:15	0.03		
TMCLKL	HY/2017/10	2020-08-18	Main Control Building	13:15	0.03		
TMCLKL	HY/2017/10	2020-08-19	Main Control Building	8:15	0.03		
TMCLKL	HY/2017/10	2020-08-19	Main Control Building	13:15	0.03		
TMCLKL	HY/2017/10	2020-08-20	Main Control Building	8:15	0.03		
TMCLKL	HY/2017/10	2020-08-20	Main Control Building	13:15	0.03		
TMCLKL	HY/2017/10	2020-08-20	Main Control Building	8:15	0.03		
TMCLKL	HY/2017/10	2020-08-21	Main Control Building	13:15	0.03		
TMCLKL	HY/2017/10	2020-08-21	Main Control Building	8:15	0.03		
TMCLKL	HY/2017/10	2020-08-22	Main Control Building	13:15	0.03		
TMCLKL			-				
TMCLKL	HY/2017/10 HY/2017/10	2020-08-24	Main Control Building	8:15	0.03		
		2020-08-24	Main Control Building	13:15	0.03		
TMCLKL	HY/2017/10	2020-08-25	Main Control Building	8:15	0.03		
TMCLKL	HY/2017/10	2020-08-25	Main Control Building	13:15	0.03		
TMCLKL	HY/2017/10	2020-08-26	Main Control Building	8:15	0.03		
TMCLKL	HY/2017/10	2020-08-26	Main Control Building	13:15	0.03		
TMCLKL	HY/2017/10	2020-08-27	Main Control Building	8:15	0.04		
TMCLKL	HY/2017/10	2020-08-27	Main Control Building	13:15	0.03		
TMCLKL	HY/2017/10	2020-08-28	Main Control Building	8:15	0.03		
TMCLKL	HY/2017/10	2020-08-28	Main Control Building	13:15	0.03		
TMCLKL	HY/2017/10	2020-08-29	Main Control Building	8:15	0.03		
TMCLKL	HY/2017/10	2020-08-29	Main Control Building	13:15	0.03		
TMCLKL	HY/2017/10	2020-08-31	Main Control Building	8:15	0.03		
TMCLKL	HY/2017/10	2020-08-31	Main Control Building	13:15	0.03		
				Average	0.03		
				Min.	0.03		
				Max.	0.04		

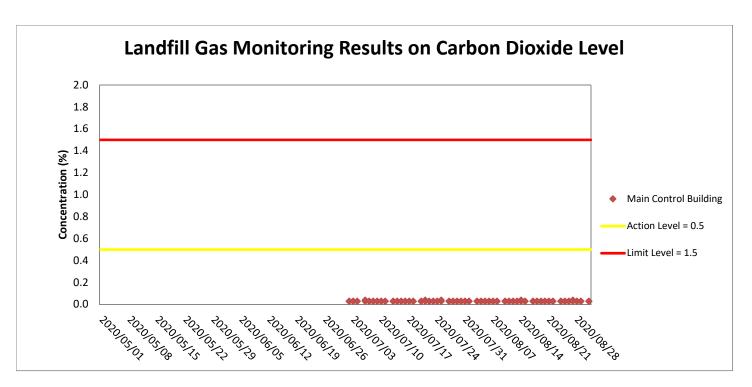




Weather condition within the reporting period was sunny to rainy

Major construction works undertaken within the reporting period include

- Handover Inspection at Main Control Building;
- Electrical and Mechanical Works at Ventilation Plant Room;
- Handover Inspection at North Ventilation Building;
- Handover Inspection at Administration Building;
- Handover Inspection at Maintenance Depot;
- Electrical and Mechanical Works and Architectural Builder's Work and Finishes at Fire Services Department Building;
- Electrical and Mechanical Works and Architectural Builder's Work and Finishes at Customs and Excise Department Building;
- Electrical and Mechanical Works and Architectural Builder's Work and Finishes at N1;
- Electrical and Mechanical Works at Kiosk N2;
- Electrical and Mechanical Works and Architectural Builder's Work and Finishes at the Tunnel;
- Electrical and Mechanical Works and Architectural Builder's Work and Finishes at underpass at C3 area;
- Handover Inspection at Satellite Control Building;
- Electrical and Mechanical Works and Architectural Builder's Work and Finishes at Kiosk S2;
- Handover Inspection at South Ventilation Building; and
- Soil Mix and Landscape Works at Northern Landfall and Southern Landfall.



Weather condition within the reporting period was sunny to rainy

- Major construction works undertaken within the reporting period include
- Handover Inspection at Main Control Building;
- Electrical and Mechanical Works at Ventilation Plant Room;
- Handover Inspection at North Ventilation Building;
- Handover Inspection at Administration Building;
- Handover Inspection at Maintenance Depot;
- Electrical and Mechanical Works and Architectural Builder's Work and Finishes at Fire Services Department Building;
- Electrical and Mechanical Works and Architectural Builder's Work and Finishes at Customs and Excise Department Building;
- Electrical and Mechanical Works and Architectural Builder's Work and Finishes at N1;
- Electrical and Mechanical Works at Kiosk N2;
- Electrical and Mechanical Works and Architectural Builder's Work and Finishes at the Tunnel;
- Electrical and Mechanical Works and Architectural Builder's Work and Finishes at underpass at C3 area;
- Handover Inspection at Satellite Control Building;
- Electrical and Mechanical Works and Architectural Builder's Work and Finishes at Kiosk S2;
- Handover Inspection at South Ventilation Building; and
- Soil Mix and Landscape Works at Northern Landfall and Southern Landfall.

Appendix I

Monthly Summary of Waste Flow Table

Contract No. : HY/2017/10 Tuen Mun Chek Lap Kok Link – Northern Connection Tunnel Buildings, Electrical and Mechanical Works Monthly Summary Waste Flow Table for 2020 (Year)

Month\Material	Actual Quantities of Inert C&D Materials Generation					Actual Quantities of C&D wastes Generation		Actual Quantities of Recyclables Generation				
	Total Quantity Generated	Hard Rock and Large Broken Concrete	Reused in the Contract	Reused in other Projects	Disposed as Public Fills	Imported Fill	Chemical Waste	General Refuse	Metals	Felled trees	Paper/ cardboard packaging	Plastics
Unit	('000m ³)	('000m ³)	('000m ³)	('000m ³)	('000m ³)	('000m ³)	('000Kg)	('000Kg)	('000Kg)	('000Kg)	('000Kg)	('000Kg)
Jan	0.025	0.000	-	-	0.025	-	-	187.500	-	-	0.070	-
Feb	0.074	0.026	-	-	0.074	-	-	176.100	-	-	0.084	-
Mar	0.650	0.117	-	-	0.366	0.284	-	237.850	-	-	0.042	-
Apr	0.139	0.000	-	-	0.139	-	-	167.820	-	-	-	-
Мау	6.429	0.000	-	1.975	0.023	4.431	-	252.730	-	-	0.056	-
Jun	17.715	0.053	-	0.421	0.034	17.260	-	255.300	-	-	-	-
SUB-TOTAL	25.032	0.196	0.000	2.396	0.661	21.975	0.000	1277.300	0.000	0.000	0.252	0.000
Jul	41.044	0.008	-	6.284	0.035	34.725	-	134.530	-	-	0.056	-
Aug	10.705	0.007	-	-	0.163	10.541	-	132.420	-	-	0.035	-
Sep	-	-	-	-	-	-	-	-	-	-	-	-
Oct	-	-	-	-	-	-	-	-	-	-	-	-
Nov	-	-		-	-	-			-	-	-	-
Dec	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL	76.781	0.211	0.000	8.680	0.859	67.241	0.000	1,544.250	0.000	0.000	0.343	0.000

Notes :

1 - The waste flow table shall also include C&D materials that are specified in the Contract to be imported for use at the Site.

2 - Plastics refer to plastic bottles/containers, plastic sheets/foam from packaging material.

3 - Broken concrete for recycling into aggregates.

4 - Assumed 5 kg per damaged water-filled barrier.

5 - Disposed as Public Fills includes Hard Rock and Large Broken Concrete.

Appendix J

Cumulative Statistics on Exceedances, Complaints, Notifications of Summons and Successful Prosecutions

Appendix J1 Cumulative Statistics on Exceedances

		Total No. recorded in this reporting month	Total No. recorded since contract commencement
1-Hr TSP	Action	1	45
	Limit	0	9
24-Hr TSP	Action	0	2
	Limit	0	0
Landfill gas hazar	rd monitoring		
Methane		0	0
 Oxygen 		0	0
Carbon Diox	ide	0	0

Appendix J2 Cumulative Statistics on Complaints, Notifications of Summons and Successful Prosecutions

Reporting Period	Cumulative Statistics				
	Complaints	Notifications of	Successful		
		Summons	Prosecutions		
This Reporting Month (August 2020)	0	0	0		
Total No. received since contract commencement	1	0	0		

Email message		Environmental Resources Management
То	Ramboll Hong Kong Limited (ENPO)	2507, 25/F One Harbourfront, 18 Tak Fung Street,
From	ERM- Hong Kong, Limited	Hung Hom, Hong Kong Telephone: (852) 2271 3113 Facsimile: (852) 2723 5660
Ref/Project number	Contract No. HY/2017/10	E-mail: jasmine.ng@erm.com
	Tuen Mun - Chek Lap Kok Link - Northern	
	Connection Tunnel Buildings, Electrical and	
	Mechanical Works	
Subject	Notification of Exceedance for Air Quality	
Subject	Impact Monitoring	
	impact monitoring	ERM
Date	19 August 2020	

Dear Sir/ Madam,

Please find attached the Notification of Exceedance (NOE) of the following Log no.:

Action Level Exceedance 0463091_12August2020_1hrTSP_Station ASR1

One (1) exceedance was recorded on 12 August 2020.

Regards,

Jamin

Dr Jasmine Ng Environmental Team Leader

CONFIDENTIALITY NOTICE

This facsimile transmission is intended only for the use of the addressee and is confidential. If you are not the addressee it may be unlawful for you to read, copy, distribute, disclose or otherwise use the information in this facsimile. If you are not the intended recipient, please telephone or fax us immediately.



ERM-Hong Kong, Limited

Contract No. HY/2017/10 Tuen Mun – Chek Lap Kok Link – Northern Connection Tunnel Buildings, Electrical and Mechanical Works

Air Quality Impact Monitoring

Notification of Exceedance

Log No	1	Action Level Exceedance				
Log No.	0463091_12August2020_1hrTSP_Station ASR1					
		[Total No. of Exceedances = 1]				
Date		12 August 2020 (Measured)				
	19 Au	19 August 2020 (Results obtained from ENPO Website)				
Monitoring Station		ASR1				
Parameter(s) with						
Exceedance(s)		1- hr TSP				
Action Levels	1-hr TSP ($\mu g/m^3$)	ASR1 = 331				
		ASR5 = 340				
		ASR6 = 338				
		ASR10 = 335				
		AQMS1 = 337				
	24-hr TSP (μg/m ³)	ASR1 = 213				
		ASR5 = 238				
		ASR6 = 238 ASR10 = 214				
		ASK10 - 214 AQMS1 = 213				
Limit Levels	1-hr TSP (μg/m ³)	500				
	24-hr TSP ($\mu g/m^3$)	260				
Measured Levels						
		e source from Contract No. HY/2012/08).				
Works Undertaken (at		s Contract on 12 August 2020 included				
the time of monitoring		al Works and Architectural Builder's Work and Finishes at Fire Services				
event)	Department Building;					
		al Works and Architectural Builder's Work and Finishes at Customs and				
	Excise Department Building; and					
	-	North Ventilation Building				
Possible Reason for		be due to the Contract, in view of the following:				
Action or Limit Level		orded wind direction (ranged between 44° and 322°), blowing from a				
Exceedance(s)	north-easterly/north-wes	terly direction) and wind speed (ranged between 0 and 0.9 m/s) when				
	exceedance recorded, ASI	R1 is located downstream to Fire Services Department Building,				
	Customs and Excise Depa	artment Building and North Ventilation Building. However, only				
	inspection works, electric	al and mechanical works and architectural builder's work and finishes				
	were conducted which ar	e considered not major dust generating works (refer to <i>Appendix B</i> and				
	С).					
	,	ler this Contract were mainly paved. The remaining unpaved area are				
		as crane machines and generators or used as material storage area with				
	-	sheet. The exposed area are suppressed/covered. Dust are not				
	anticipated.	sicei. The exposed area are suppressed, covered. Dust are not				
	-	edance is unlikely to be due to the Contract.				
Actions Taken / To Be		dered necessary. The ET will monitor for future trends in				
Taken	exceedances.	uereu necessary. The ET will monitor for future trends in				
Remarks		August 2020 locations of size quality manifesting a stations of discussion				
Remarks	e e e e e e e e e e e e e e e e e e e	August 2020, locations of air quality monitoring stations and wind				
	data are attached (refer to Ap	penuix A).				

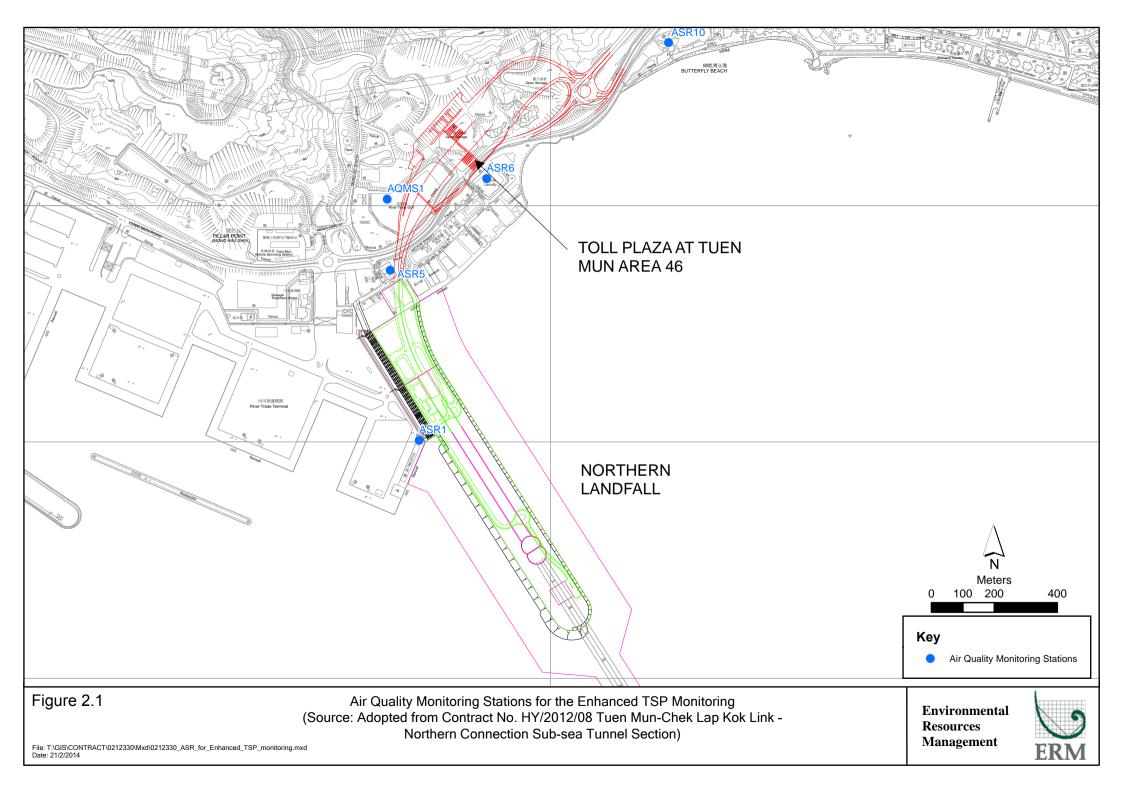
Appendix A

Results of Air Quality Monitoring, Meteorological Data and Locations of Air Quality Monitoring Stations

	Air quality monitoring results on 12/8/2020							
Project	Contract	Date	Station	Weather	Start time	Parameters	Results	Unit
TMCLKL	HY/2012/08	2020-08-12	ASR10	Sunny	8:00:00	1-hour TSP	31	ug/m3
TMCLKL	HY/2012/08	2020-08-12	ASR10	Sunny	9:02:00	1-hour TSP	33	ug/m3
TMCLKL	HY/2012/08	2020-08-12	ASR10	Sunny	10:04:00	1-hour TSP	18	ug/m3
TMCLKL	HY/2012/08	2020-08-12	ASR6	Sunny	8:15:00	1-hour TSP	113	ug/m3
TMCLKL	HY/2012/08	2020-08-12	ASR6	Sunny	9:17:00	1-hour TSP	46	ug/m3
TMCLKL	HY/2012/08	2020-08-12	ASR6	Sunny	10:19:00	1-hour TSP	35	ug/m3
TMCLKL	HY/2012/08	2020-08-12	ASR5	Sunny	8:30:00	1-hour TSP	200	ug/m3
TMCLKL	HY/2012/08	2020-08-12	ASR5	Sunny	9:32:00	1-hour TSP	126	ug/m3
TMCLKL	HY/2012/08	2020-08-12	ASR5	Sunny	10:34:00	1-hour TSP	71	ug/m3
TMCLKL	HY/2012/08	2020-08-12	ASR1	Sunny	8:40:00	1-hour TSP	352	ug/m3
TMCLKL	HY/2012/08	2020-08-12	ASR1	Sunny	9:42:00	1-hour TSP	97	ug/m3
TMCLKL	HY/2012/08	2020-08-12	ASR1	Sunny	10:44:00	1-hour TSP	38	ug/m3
TMCLKL	HY/2012/08	2020-08-12	AQMS1	Sunny	8:50:00	1-hour TSP	106	ug/m3
TMCLKL	HY/2012/08	2020-08-12	AQMS1	Sunny	9:52:00	1-hour TSP	37	ug/m3
TMCLKL	HY/2012/08	2020-08-12	AQMS1	Sunny	10:54:00	1-hour TSP	57	ug/m3
TMCLKL	HY/2012/08	2020-08-12	ASR10	Sunny	11:06:00	24-hour TSP	22	ug/m3
TMCLKL	HY/2012/08	2020-08-12	ASR6	Sunny	11:21:00	24-hour TSP	27	ug/m3
TMCLKL	HY/2012/08	2020-08-12	ASR5	Sunny	11:36:00	24-hour TSP	43	ug/m3
TMCLKL	HY/2012/08	2020-08-12	ASR1	Sunny	11:46:00	24-hour TSP	40	ug/m3
TMCLKL	HY/2012/08	2020-08-12	AQMS1	Sunny	11:56:00	24-hour TSP	41	ug/m3

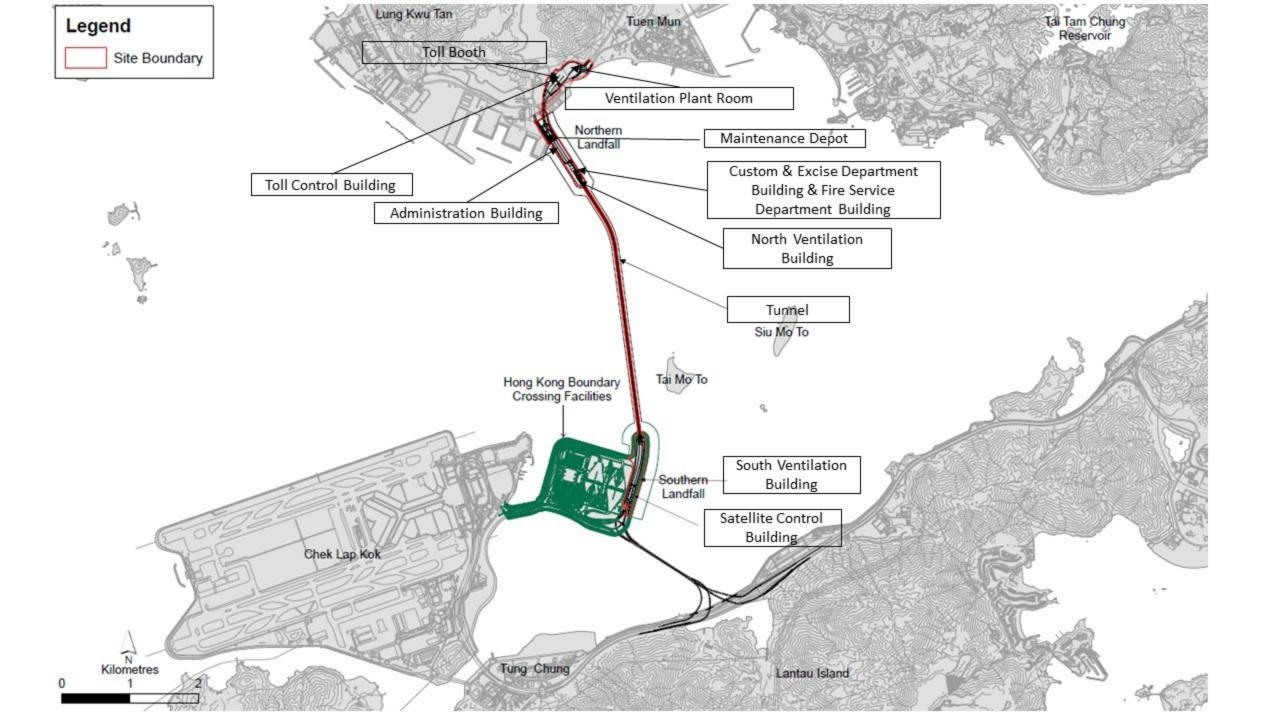
Action level exceedance
Limit level exceedance

	Meteorological Data for Impact Monitoring in the reporting period				
Date (yy-mm-dd)	Time (24hrs)	Average of Wind Speed (m/s)	Average of Wind Direction(degree)		
20/08/12	0:00	2.7	81		
20/08/12	1:00	2.2	90		
20/08/12	2:00	2.7	138		
20/08/12	3:00	1.8	132		
20/08/12	4:00	0.9	49		
20/08/12	5:00	0.9	65		
20/08/12	6:00	1.8	358		
20/08/12	7:00	0	324		
20/08/12	8:00	0	322		
20/08/12	9:00	0.9	44		
20/08/12	10:00	0.9	36		
20/08/12	11:00	1.3	65		
20/08/12	12:00	1.8	271		
20/08/12	13:00	1.3	36		
20/08/12	14:00	2.2	87		
20/08/12	15:00	2.7	95		
20/08/12	16:00	3.1	88		
20/08/12	17:00	1.8	93		
20/08/12	18:00	2.2	101		
20/08/12	19:00	1.8	101		
20/08/12	20:00	2.2	92		
20/08/12	21:00	2.2	96		
20/08/12	22:00	1.8	93		
20/08/12	23:00	1.3	100		



Appendix B

Works Locations



Appendix C

Site Photo



Photo 1 – Fire Services Department Building & Customs and Excise Department Building



Photo 2 - North Ventilation Building

Appendix K

Landscape and Visual Monitoring for Establishment Period

Environmental Resources Management

2507, 25/F One Harbourfront 18 Tak Fung Street Hunghom, Kowloon Hong Kong

Telephone: (852) 2271 3000 Facsimile: (852) 2723 5660 E-mail: post.hk@erm.com http://www.erm.com



5 September 2020

Our ref: 0215660_225_Establishment L&V Checklist Jun-Aug 2020.docx

By email

Mr Manson Yeung Independent Environmental Checker Ramboll Hong Kong Limited 21/F, BEA Harbour View Centre 56 Gloucester Road Wan Chai, Hong Kong

Dear Sir,

Contract No. HY/2012/07 Tuen Mun-Chek Lap Kok Link -Southern Connection Viaduct Section

<u>Reporting of Landscape Planting Works during the 24-month</u> <u>Establishment Period (June to August 2020)</u>

In accordance with *Section 7.3.1.2* of the *Updated EM&A Manual*, we are pleased to provide you with the *Establishment Landscape Monitoring Checklist for June to August 2020* for your perusal and counter-signature.

Should you require any further information or clarification, please do not hesitate to contact the undersigned.

Yours faithfully For ERM-Hong Kong, Ltd

Dr Jasmine Ng Environmental Team Leader

Direct Tel: (852) 2271 3311 E-mail: jasmine.ng@erm.com

<u>c.c.</u> AECOM GCL

(Attn: Mr K P Wong) (Attn: Mr Roy Leung)



Registered Office ERM-Hong Kong, Ltd 2507, 25/F One Harbourfront 18 Tak Fung Street Hunghom, Kowloon Hong Kong

OHSAS 18001 Occupational Health and Safety Management OHS 515956

Offices worldwide

Contract No. HY/2012/07 – Tuen Mun – Chek Lap Kok Link – Southern Connection Viaduct Section

ŗ

Establishment Inspection Checklist

Inspe	ction Date: 16 6 22 June 2020 Inspected By:	Ra	in Ya	un;	Candy Way
Time:	<u>G=30 a.m 4=30 p.m.</u> Weather Cond	ition:	Sin	ing_	
Partic	ipants: 16th Jun - SOR - Siluon Li (AM session), Spring 7 Contractor - Roy Leung (AM session), Agner Wong 22nd June - Sor - Adrian Wong, Spring Tsri	Sui Advia (PM Session (Aba Socc-	$\frac{1}{2}$	y (PM -Ma	<u>Lessien) j</u> 1952n Yenhij
1	Zone 1: Area along Cheung Tung Road	N/A or not observed	Yes	No	Remarks / Photo
1.1	Is watering provided to plants to ensure satisfactory growth and health (manual and automatic irrigation)?		Ø		
1.2	Are tree stakes, guys and ties provided properly for safety and avoid chaffing of bark?		ø		
1.3	Are trees or limb overhanging branches pruned?		Ø		
1.4	Are pest and disease observed?			ø	۲
1.5	Are litter and debris removed?		Ø	φΛ'\	em
1.6	Are plants/ grasses overgrown?			Ø	
1.7	After inclement weather conditions, are proper action implemented to replace dead plants, repair damaged plants, bed in all plants that have blown over, firm up all other plants and immediately thereafter, remove dead plants and plant debris from the site?	Ø			
1.8	Are planting locations and tree spacing matched with the approved		Ø		
1.9	planting plans? Are the planting species on site matched with the approved planting plans? Consolidated planting schedule in Annex B.		ø		
		Good	Fair	Poor	
1.10	Overall health condition of the plants?	Ø			
2	Zone 2: Southern Landfall, HKBCF	N/A or not observed	Yes	No	Remarks / Photo
2.1	Is watering provided to plants to ensure satisfactory growth and health		Q⁄		
2.2	(manual and automatic irrigation)? Are tree stakes, guys and ties provided properly for safety and avoid chaffing of bark?		Ø		
2.3	Are trees or limb overhanging branches pruned?		Ø		
2.4	Are pest and disease observed?			Ø	
2.5	Are litter and debris removed?		Ø		
2.6	Are plants/ grasses overgrown?			Ø	
2.7	After inclement weather conditions, are proper action implemented to replace dead plants, repair damaged plants, bed in all plants that have blown over, firm up all other plants and immediately thereafter, remove dead plants and plant debris from the site?	Ø			
2.8	Are planting locations and tree spacing matched with the approved planting plans?		ø		
2.9	Are the planting species on site matched with the approved planting plans? Consolidated planting schedule in Annex B.		Ø		
		Good	Fair	Poor	
2.10	Overall health condition of the plants?	Ø			

3	Zone 3: Area within Expressway Boundary	N/A or not observed	Yes	No	Remarks / Photo
3.1	Is watering provided to plants to ensure satisfactory growth and health (manual and automatic irrigation)?		Ø		
3.2	Are tree stakes, guys and ties provided properly for safety and avoid chaffing of bark?			Ø	Obs.
3.3	Are trees or limb overhanging branches pruned?		Γ		
3.4	Are pest and disease observed?			Ø	
3.5	Are litter and debris removed?			Ø	044.3
3.6	Are plants/ grasses overgrown?			Ø	**************************************
3.7	After inclement weather conditions, are proper action implemented to replace dead plants, repair damaged plants, bed in all plants that have blown over, firm up all other plants and immediately thereafter, remove dead plants and plant debris from the site?				
3.8	Are planting locations and tree spacing matched with the approved		₽∕		
3.9	planting plans? Are the planting species on site matched with the approved planting plans? Consolidated planting schedule in Annex B.		Ø		
		Good	Fair	Poor	,
3.10	Overall health condition of the plants?	Ø			0h5. 2
4	Zone 4: Slopes outside Expressway Boundary	N/A or not observed	Yes	No	Remarks / Photo
4.1	Is watering provided to plants to ensure satisfactory growth and health (manual and automatic irrigation)?		Ø		
4.2	Are tree stakes, guys and ties provided properly for safety and avoid		Ø		
4.3	chaffing of bark? Are trees or limb overhanging branches pruned?		Ø		
4.4	Are pest and disease observed?			Ø	
4.5	Are litter and debris removed?		Ø		
4.6	Are plants/ grasses overgrown?			,Ø	
4.7	After inclement weather conditions, are proper action implemented to replace dead plants, repair damaged plants, bed in all plants that have blown over, firm up all other plants and immediately thereafter, remove dead plants and plant debris from the site?	₽∕	D		
4.8	Are planting locations and tree spacing matched with the approved planting plans?		Ł		
4.9	Are the planting species on site matched with the approved planting plans? Consolidated planting schedule in Annex B.		Ø		
		Good	Fair	Poor	
4.10	Overall health condition of the plants?	Ŗ			<u></u>
		N/A or not	Yes	No	Remarks /
5	General Document	observed	,	/	Photo
5.1	Are the records of watering, fertilizing, weeding, pruning and mowing kept for checking?		ø		

Ē

	Follow up actions for previous Site Audit:
The second s	NIA
	Observations:
	Obs. 1 - Collaged Non slope (IONW-C/F13) should be vectified in up-right position.
	Obs. 1 = Collaged how slope (IONW-C/F13) should be vectified in Up-right position. Obs. 2 = The tree with dead leaves should be venewed in terms of inigation.
	Obs. 3: General refuse scattered on slope (IDNW-C/F3) Should be removed.
	Corrective Actions (if any):
	Health condition of trees as med as any supporting inaterials to trees
	should be regularly checked and reviewed.
	General nefise should be curvided being discarded within landscape area.
	General Conclusion:
	Total number of trees planted: Zone 1:72; zone 2:275; zone 3,714;
	Zone 4, 143.
	Planting aver under Contract No. HY/2012/07 = 14.42ha (based on the survey data provided
	the SOR.
	Inspected by (ET's Representative): Ray Yan Title: Entriventual Team

Signature:

Reviewed by (RSS Landscape Representative):

Signature:

Contractor's Representative:

Signature:

Checked by (IEC's Representative):

Signature:

Ray Yan Dal Pay Titl

Adrian Jong

52

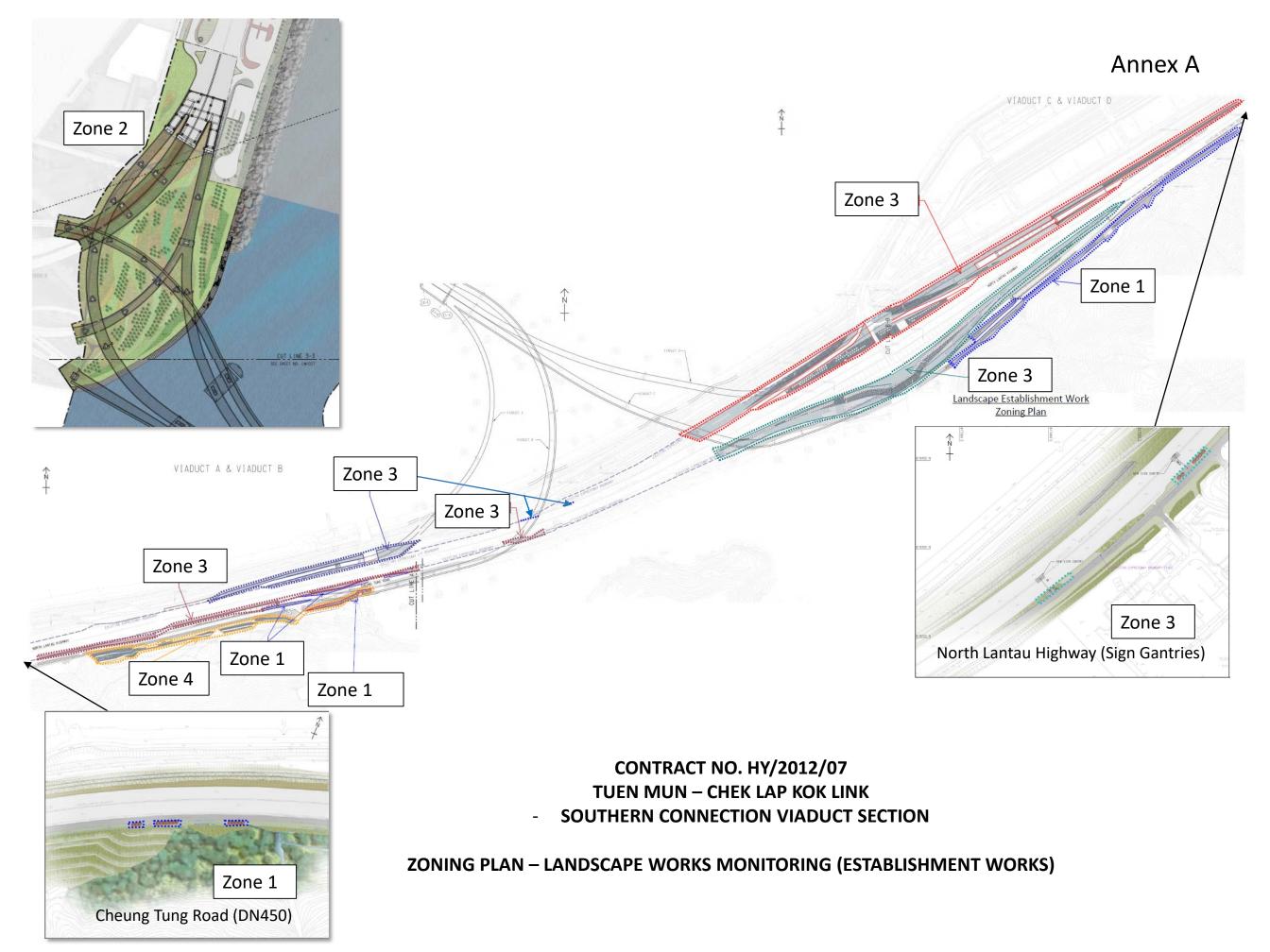
Manson Jean

Title:	Entricitudal Team
Date:	22 Jun 2020
Title:	John Nev
	RE
Date:	22 JUNE 2020
Title:	
	En Officer
Date:	22/6/2020
Title:	
	266
Date:	14 Sep 20

Contract No. HY/2012/07 – Tuen Mun – Chek Lap Kok Link – Southern Connection Viaduct Section

Establishment Inspection Checklist

Location	Photo	Information
Zone 3 (10NW-C/F13)		Date: 22 June 2020 Observation 1: Collapsed tree on slope (10NW-C/F13) should be rectified in upright position. Species: <i>Bauhinia variegata</i>
Zone 3 (10NW-C/F15)		Date: 22 June 2020 Observation 2: The tree with dead leaves should be reviewed in terms of irrigation. Species: <i>Bauhinia variegata</i>
Zone 3 (10NW-C/F3)		Date: 22 June 2020 Observation 3: General refuse scattered on slope (10NW-C/F3) should be removed. Species: <i>Hymenocallis littoralis, Ficus microcarpa</i> 'Golden leaf', <i>Gardenia jasminoides, Pittosporum tobira, Rhodomyrtus tomentosa</i> and <i>Schefflera arboricola</i>



Slope Planting

CODE	BOTANCIAL NAME	CHINESE NAME	SIZE (mm) HEIGHT (H) x SPREAD (S)	SPACING (mm)
		NAME	HEIGHT (H) X SPREAD (S)	(mm)
WHIP				
BRI.TOM.	Bridelia tomentosa *	土蜜樹	WHIP	1500-2000
GOR.AXI.	Gordonia axillaris *	大頭茶	WHIP	1500-2000
LIT.GLU.	Litsea glutinosa *	漏槁樹	WHIP	1500-2000
PHY.EMS.	Phyllanthus emblica *	餘甘子	WHIP	1500-2000
REE.THY.	Reevesia thyrsoidea *	梭羅樹	WHIP	1500-2000
TREE		LANE IN		
BAU.VAR.(A)	Bauhinia variegata	宮粉羊蹄甲	LIGHT STANDARD TREE	4000
BAU.VAR.(B)	Bauhinia variegata	宮粉羊蹄甲	STANDARD TREE	4000
BOM.CEI.	Bombax ceiba	木棉	LIGHT STANDARD TREE	4000-5000
BRI.TOM.	Bridelia tomentosa *	土蜜樹	LIGHT STANDARD TREE	3000
CIN.BUR.(A)	Cinnamomum burmannii *	陰香	LIGHT STANDARD TREE	4000
MEL.AZE.(A)	Melia azedarach	苦楝	LIGHT STANDARD TREE	4000
PLU.RUB.	Plumeria rubra	雞蛋花	2000 (H) X 2000 (S)	3500-4000
PALM		ALTER 10		
CAR.MIT.	Caryota mitis	短穗魚尾葵	2500(H) x 1500(S)	2500
LIV.CHI.	Livistona chinensis	蒲葵	1500-2500(H) X 1500(S)	3500-4000
PHO.ROE.	Phoenix roebelenii	日本募	2000(H) x 1500(S)	2000
WAS, ROB.	Washingtonia robusta	華盛頓葵	1500 - 2500(H) X 1500(S)	3500-400
SHRUB	n asningtonia robusta	中血病天	1000 2000(1)/11000(0)	0000 100
CAL.HAE.	Calliandra haematocephala	紅絨球	300(H) X 300(S)	1000
FIC.MIC.'GOL'	Ficus microcarpa 'Golden Leaf'	黄榕	300(H) X 300(S)	500
GAR.JAS.	Gardenia jasminoides *	白蟬	300(H) x 300(S)	500
GOR.AXI.	Gordonia axillaris *	大頭茶	500(H) X 500(S)	500
HIB.ROS.	Hibiscus rosa-sinensis	大紅花	300(H) x 300(S)	1000
LIG.SIN.	Ligustrum sinense *	山指甲	300(H) x 300(S)	500
MEL.CAN.	Melastoma candidum *	野牡丹	300(H) X 300(S)	500
MEL.SAN.	Melastoma sanguineum *	毛茶	300(H) X 300(S)	500
NER.OLE.	Nerium oleander		300(H) X 300(S)	1000
PIT.TOB.	Pittosporum tobira *	海桐花	300(H) x 300(S)	500
PSY. ASI.	Psychotria asiatica *	九節	300(H) x 300(S)	500
RHO.SIM.	Rhododendron simsii *			500
RHO.SIM.	Rhodomyrtus tomentosa *	紅杜鵑	300(H) x 300(S)	500
SCH.ARB.	Schefflera arboricola	桃金娘 八葉	300(H) X 300(S)	500
GROUNDCOVE		八朱	300(H) x 300(S)	500
GROUNDCOVE	ĸ			
HYM.LIT.	Hymenocallis littoralis	蜘蛛蘭	300(H) X 300(S)	300
CLIMBER				
EPI.AUR.	Epipremnum aureum	綠蘿	MIN. 4 SHOOTS PER PLANT,	500
			300mm LONG MIN. 3 SHOOTS PER PLANT, 300-	
FIC.PUM.	Ficus pumila *	薜荔	1000mm LONG	300
LON.JAP.	Lonicera japonica *	金銀花	MIN. 4 SHOOTS PER PLANT, 600mm LONG	500
PAR.DAL.	Parthenocissus dalzielii	爬牆虎	MIN. 3 SHOOTS PER PLANT, 600- 1000mm LONG	300/500
HYDROSEEDIN	IG / GRASS	•		
-	HYDROSEEDING	噴草	-	-

CODE	BOTANCIAL NAME	CHINESE	SIZE (mm) HEIGHT (H) x SPREAD (S)	SPACING (mm)
TREE		MAPLE	inclosed (i) x SI KEAD (S)	()
BAU.VAR.(A)	Bauhinia variegata	宮粉羊蹄甲	LIGHT STANDARD TREE	4000
BAU.VAR.(B)	Bauhinia variegata	宮粉羊蹄甲	STANDARD TREE	5000
BAU.VAR.(H)	Bauhinia variegata	宮粉羊蹄甲	HEAVY STANDARD TREE	4000-5000
GAR.SUB.	Garcinia subelliptica	菲島福木	LIGHT STANDARD TREE	4000-5000
GRE.ROB.(H)	Grevillea robusta	銀樺	HEAVY STANDARD TREE	5000
ILE.ROT.	Ilex rotunda	鐵冬青	HEAVY STANDARD TREE	5000
LAG.SPE.	Lagerstroemia speciosa	大花紫薇	HEAVY STANDARD TREE	4000-4500
	Dagerstroema speciosa	ZNTGZRUK	2000 (H) X 2000 (S)	
PLU.RUB.	Plumeria rubra	雜蛋花		4000-5000
		ABBATO	2500 (H) X 2500 (S)	
TAB.IMP	Tabebuia impetiginosa	風鈴木	HEAVY STANDARD TREE	5000
PALM		(and a first		
LIV.CHI.	Livistona chinensis	蒲葵	2500(H) X 1500(S)	4000
PHO.SYL.	Phoenix sylvestris	銀海棗	2000(H) X 1500(S)	4000
SHRUB		2007 P.005		
ALL.CAT.	Allamanda cathartica	軟枝黃蟬	300(H) X 300(S)	300/350
DUR.REP.	Duranta repens	假蓮翹	300(H) x 250(S)	400
FIC.MIC.'GOL'	Ficus microcarpa 'Golden Leaf'	黄榕	300(H) X 300(S)	350/500
GAR.JAS.	Gardenia jasminoides *	白蟬	300(H) x 300(S)	500
GOR.AXI.	Gordonia axillaris *	大頭茶	300(H) X 300(S)	350
IXO.CHI.	Ixora chinensis *	龍船花	300(H) x 300(S)	300
LIG.SIN.	Liaustrum sinense *	山指甲	300(H) x 250(S)	400
MEL.CAN.	Melastoma candidum *	野牡丹	300(H) X 300(S)	350
MEL.SAN.	Melastoma sanguineum *	毛菍	300(H) X 300(S)	350
			400(H) x 250(S) /	
NER.OLE.	Nerium oleander	夾竹桃	300(H) X 300(S)	400/500
PIT.TOB.	Pittosporum tobira *	海桐花	300(H) x 300(S)	500
RHA.IND.	Rhaphiolepis indica *	車輪梅	300(H) x 300(S)	300
RHO.TOM.	Rhodomyrtus tomentosa *	桃金娘	300(H) X 300(S)	350/500
SCH.ARB.	Schefflera arboricola	八葉	300(H) x 300(S)	350/500
GROUNDCOVE	R			
ARA.DUR.	Arachis duranensis	金花生	100(H) X 200(S)	250
EPI.AUR.	Epipremnum aureum	綠蘿	200(H) x 300(S)	300
HYM.LIT.	Hymenocallis littoralis	蜘蛛蘭	300(H) X 300(S)	300
TRA.SPA.	Tradescantia spathacea	蚌花	150-200(H) x 150-300(S)	250
WED.TRI.	Wedelia trilobata	蟛蜞菊	200(H) X 150(S)	300
CLIMBER				
EPI.AUR.	Epipremnum aureum	綠蘿	MIN. 4 SHOOTS PER PLANT, 300mm LONG	500
FIC.PUM.	Ficus pumila *	薜荔	MIN. 3 SHOOTS PER PLANT, 300- 1000mm LONG	300
PAR.DAL.	Parthenocissus dalzielii	爬牆虎	MIN. 3 SHOOTS PER PLANT, 600- 1000mm LONG	300
HYDROSEEDIN	NG / GRASS			
-	HYDROSEEDING	噴草	-	-
АХО.СОМ.	Axonopus compressus	地毯草(大葉草)	Whole piece turf 300(L)x300(W)x50(H)	-
L	+			

NOTE:

Roadside Planting

1. ALL PROPOSED PLANT SPECIES AND SPECIFICATIONS ARE SUBJECT TO CHANGE DURING CONSTRUCTION TO SUIT THE SITE CONDITIONS. 2. SHRUB / GROUNDCOVER SHOULD BE PLANTED IN A STAGGERED PATTERN.

3. GRASS SEED AS CEDD GENERAL SPECIFICATION 3.26(3).

4.* SPECIES NATIVE TO HONG KONG ACCORDING TO THE HONG KONG HERBARIUM WEBSITE.

5. PLANTING FOR SOUTHERN LANDFALL REFER TO FIGURE 6.4.

Status: Planting Schedule is a consolidated list of plant species based on the planting plans as commented/ approved by the relevant Government departments, i.e. LCSD or HyD/Landscape Division.

AECOM	lmagine it. Delivered.
-------	---------------------------

Agreement No. CE 7/2011(HY) Tuen Mun – Chek Lap Kok Link – Design and Construction Planting Schedule (Contract 1 – HY/2012/07)

Drawing Title: Figure 6.1

Planting Schedule - HY/2012/07 (Contract I) for Southern Landfall

CODE	BOTANCIAL NAME	CHINESE NAME	SIZE (mm) HEIGHT (H) x SPREAD (S)	SPACING (mm)
TREE				
GRE.ROB.	Grevillea robusta	銀樺	HEAVY STANDARD TREE	4000-5000
PLU.RUB.	Plumeria rubra	雞蛋花(紅)	HEAVY STANDARD TREE	4000-5000
SHRUB	•			
RUS.EQU.	Russelia equisetiformis	爆仗竹	300(H) x 300(S)	250
GROUNDCOV	ER		•	
IPO.PES.	Ipomoea pes-caprae *	海灘牽牛	200(H) x 200(S)	200
LAN.MON.	Lantana montevidensis	鋪地臭金鳳	200(H) x 200(S)	250
OPH.JAP.	Ophiopogon japonicus *	麥冬	150(H) x 200(S)	200
SYN.POD.	Syngonium podophyllum	白蝴蝶	100(H) x 200(S)	200
TRA.SPA.	Tradescantia spathacea	蚌花	200(H) x 300(S)	250
ZEP.ROS.	Zephyranthes rosea	玫瑰蔥蓮	100(H) x 200(S)	150
CLIMBER	•			
MON.DEL.	Monstera deliciosa	龜貴竹	MIN. 5 SHOOTS PER PLANT, 300mm LONG	500
HYDROSEEDI	NG / GRASS			
-	HYDROSEEDING	噴草		-
ZOY.JAP.	Zoysia japonica	朝鮮草	300(L)x300(W)x50(H)	-

NOTE:

1. ALL PROPOSED PLANT SPECIES AND SPECIFICATIONS ARE SUBJECT TO CHANGE DURING CONSTRUCTION TO SUIT THE SITE CONDITIONS.

2. SHRUB / GROUNDCOVER SHOULD BE PLANTED IN A STAGGERED PATTERN.

3. GRASS SEED AS CEDD GENERAL SPECIFICATION 3.26(3).

4. * SPECIES NATIVE TO HONG KONG ACCORDING TO THE HONG KONG HERBARIUM WEBSITE.

5. THE PLANT SPECIES ALLOWED FOR PLANTING IN EACH ZONE STATED IN THE HONG KONG INTERNATIONAL AIRPORT (HKIA) APPROVED PLANT SPECIES LIST (Revision. 4.0.1: October 2015).

Status: Planting Schedule is a consolidated list of plant species based on the planting plans as commented/ approved by the relevant Government departments, i.e. LCSD or HyD/Landscape Division.

AECOM Imagine it. Delivered.

Agreement No. CE 7/2011(HY) Tuen Mun – Chek Lap Kok Link – Design and Construction Planting Schedule (Contract 1 – HY/2012/07)

Drawing Title: Figure 6.4

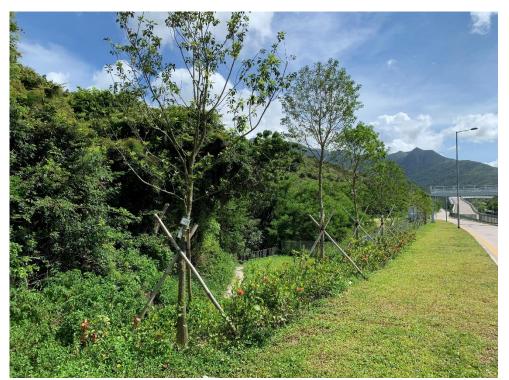


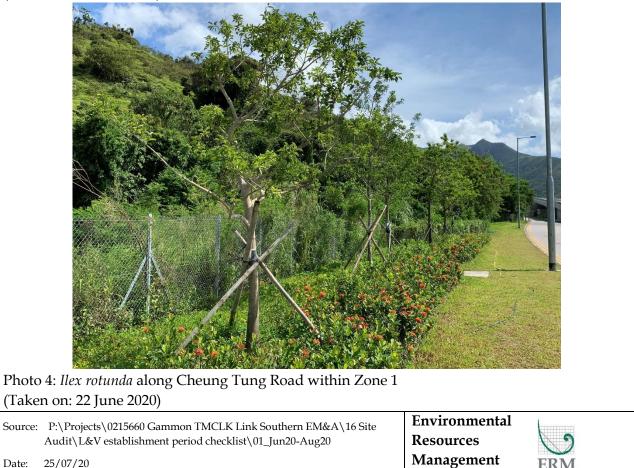
Photo 1: *Ilex rotunda* along Cheung Tung Road within Zone 1 (Taken on: 22 June 2020)



Source:	P:\Projects\0215660 Gammon TMCLK Link Southern EM&A\16 Site	Environmental	
	Audit\L&V establishment period checklist\01_Jun20-Aug20	Resources	\mathbf{i}
Date:	25/07/20	Management	ERM



Photo 3: Ilex rotunda along Cheung Tung Road within Zone 1 (Taken on: 22 June 2020)

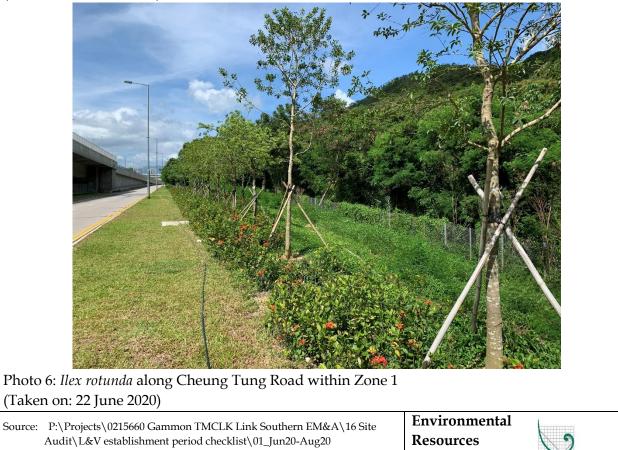


ERM

25/07/20 Date:



Photo 5: (A): *Ilex rotunda;* and (B): *Tabebuia impetiginosa* along Cheung Tung Road within Zone 1 (Taken on: 22 June 2020)



Date:

25/07/20

Management

ERM



Photo 7: *Garcinia subelliptica* along Cheung Tung Road within Zone 1 (Taken on: 22 June 2020)



(Take	n on: 16 June 2020)		
Source:	P:\Projects\0215660 Gammon TMCLK Link Southern EM&A\16 Site Audit\L&V establishment period checklist\01_Jun20-Aug20	Environmental Resources	9
Date:	25/07/20	Management	ERM

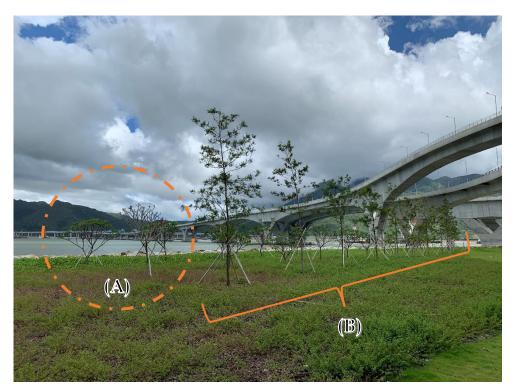
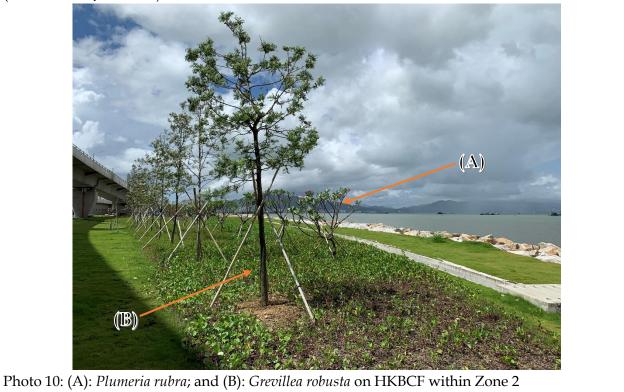


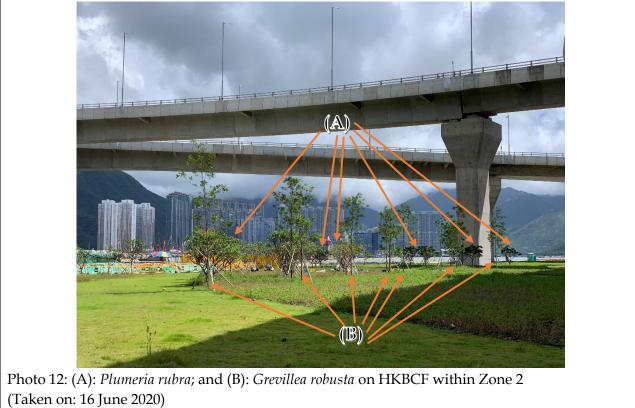
Photo 9: (A): *Plumeria rubra*; and (B): *Grevillea robusta* on HKBCF within Zone 2 (Taken on: 16 June 2020)



(Taken on: 16 June 2020)			
Source: P:\Projects\0215660 Gammon TMCLK Link Southern EM&A\16 Site Audit\L&V establishment period checklist\01_Jun20-Aug20 Date: 25/07/20	Environmental Resources Management ERM		



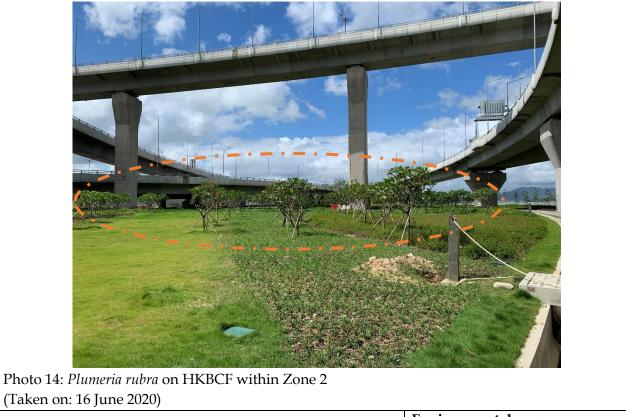
Photo 11: (A): *Plumeria rubra;* and (B): *Grevillea robusta* on HKBCF within Zone 2 (Taken on: 16 June 2020)



Source:	P:\Projects\0215660 Gammon TMCLK Link Southern EM&A\16 Site	Environmental	
		Resources	
Date:	29/07/20	Management	ERM

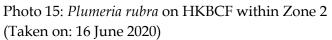


Photo 13: *Plumeria rubra* on HKBCF within Zone 2 (Taken on: 16 June 2020)



Source:	P:\Projects\0215660 Gammon TMCLK Link Southern EM&A\16 Site	Environmental	
	Audit\L&V establishment period checklist\01_Jun20-Aug20	Resources	0
Date:	25/07/20	Management	ERM

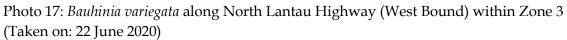






Source:	P:\Projects\0215660 Gammon TMCLK Link Southern EM&A\16 Site	Environmental	
	Audit\L&V establishment period checklist\01_Jun20-Aug20	Resources	\mathbf{x}
Date:	25/07/20	Management E	RM







Source: P:\Projects\0215660 Gammon TMCLK Link Southern EM&A\16 Site	Environmental
Audit\L&V establishment period checklist\01_Jun20-Aug20	Resources
Date: 25/07/20	Management ERM



Photo 19: *Hymenocallis littoralis* along North Lantau Highway (East Bound) within Zone 3 (Taken on: 22 June 2020)



 Photo 20: (A): *Hymenocallis littoralis*; (B): *Tradescantia spathacea*; and (C): *Gordonia axillaris*, *Melastoma candidum*, *Melastoma sanguineum* & *Rhodomyrtus tomentosa* along North Lantau Highway (slip road West Bound) within Zone 3
 (Taken on: 22 June 2020)

`			
Source	: P:\Projects\0215660 Gammon TMCLK Link Southern EM&A\16 Site	Environmental	
	Audit\L&V establishment period checklist\01_Jun20-Aug20	Resources	
Date:	25/07/20	Management	ERM



Photo 21: *Plumeria rubra* opposite to Bridge Column C19 within Zone 3 (Taken on: 22 June 2020)

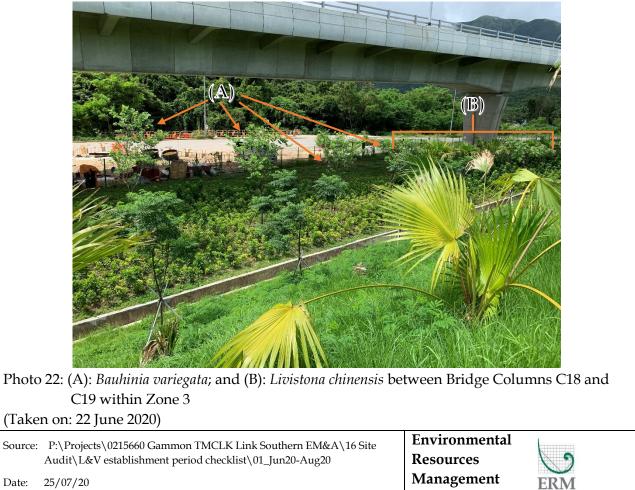
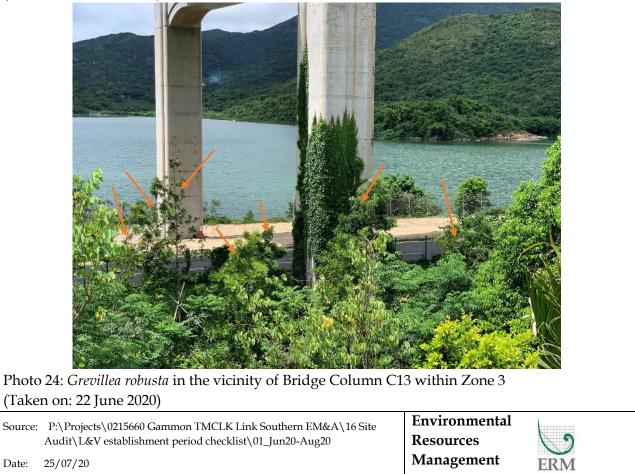
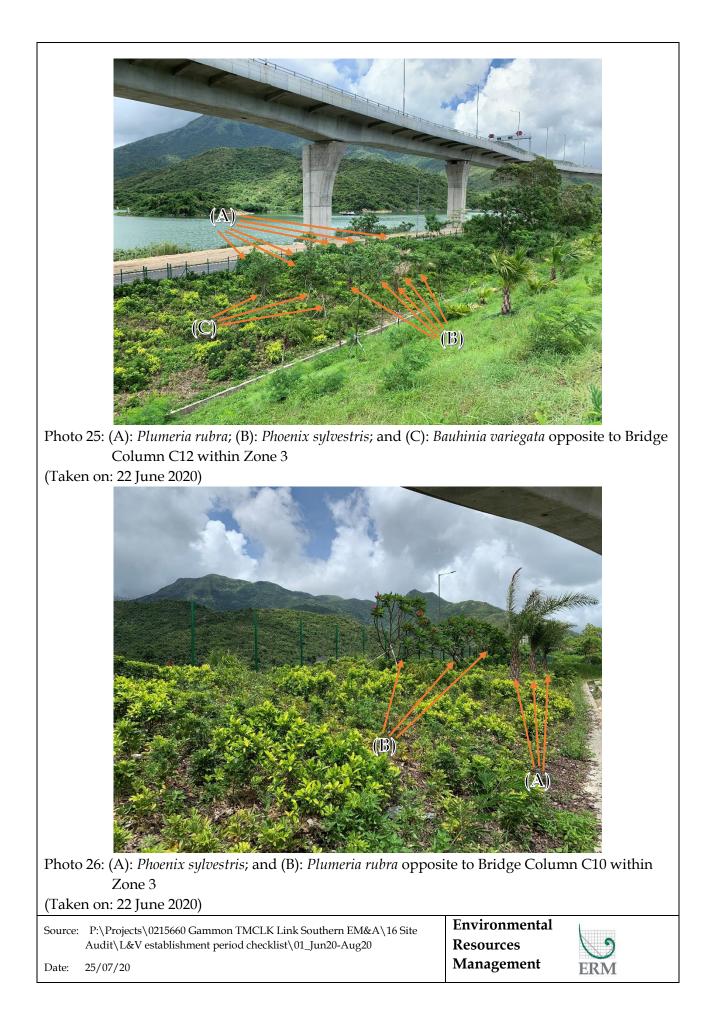




Photo 23: *Plumeria rubra* between Bridge Columns C13 and C14 within Zone 3 (Taken on: 22 June 2020)





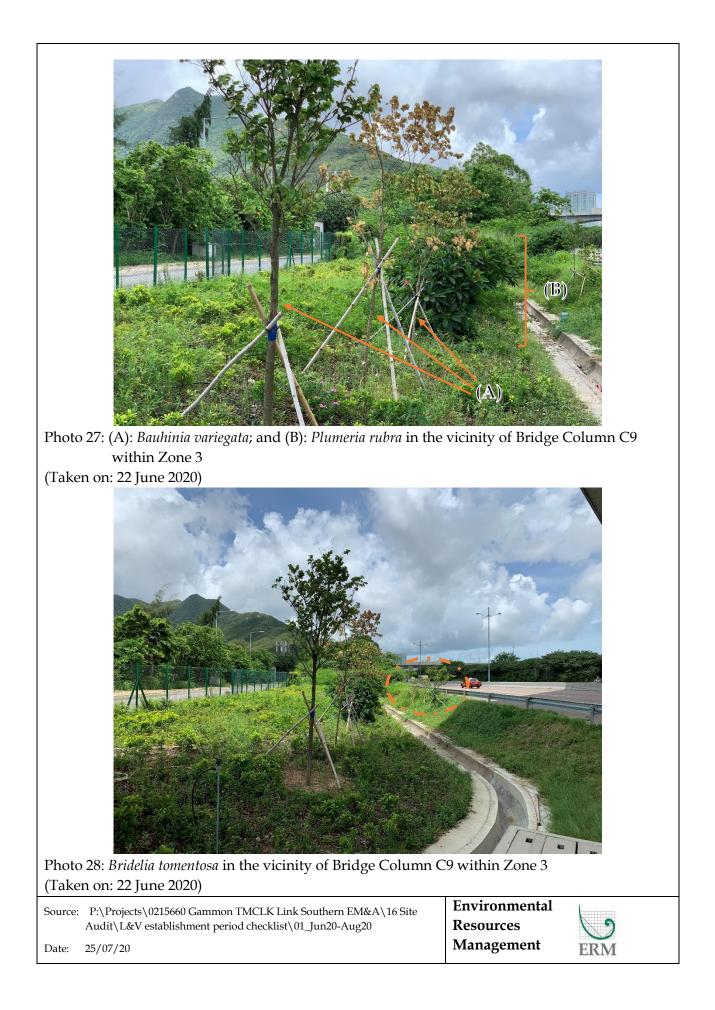
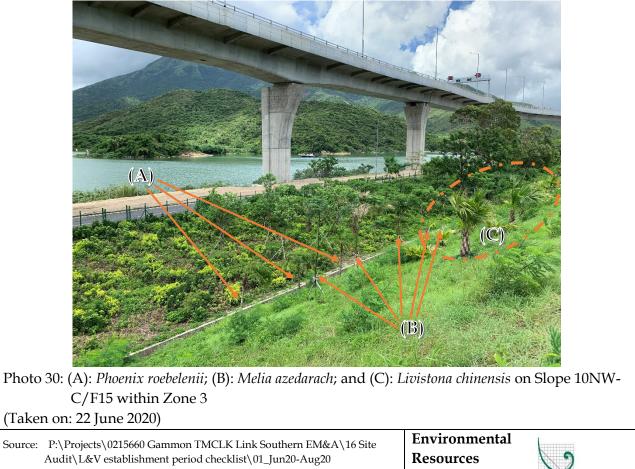




Photo 29: *Livistona chinensis* on Slope 10NW-C/F15 within Zone 3 (Taken on: 22 June 2020)



Date: 25/07/20



Photo 31: *Livistona chinensis* on Slope 10NW-C/F14 within Zone 3 (Taken on: 22 June 2020)



Source	: P:\Projects\0215660 Gammon TMCLK Link Southern EM&A\16 Site	Environmental	
	Audit\L&V establishment period checklist\01_Jun20-Aug20	Resources	0
Date:	29/07/20	Management	ERM

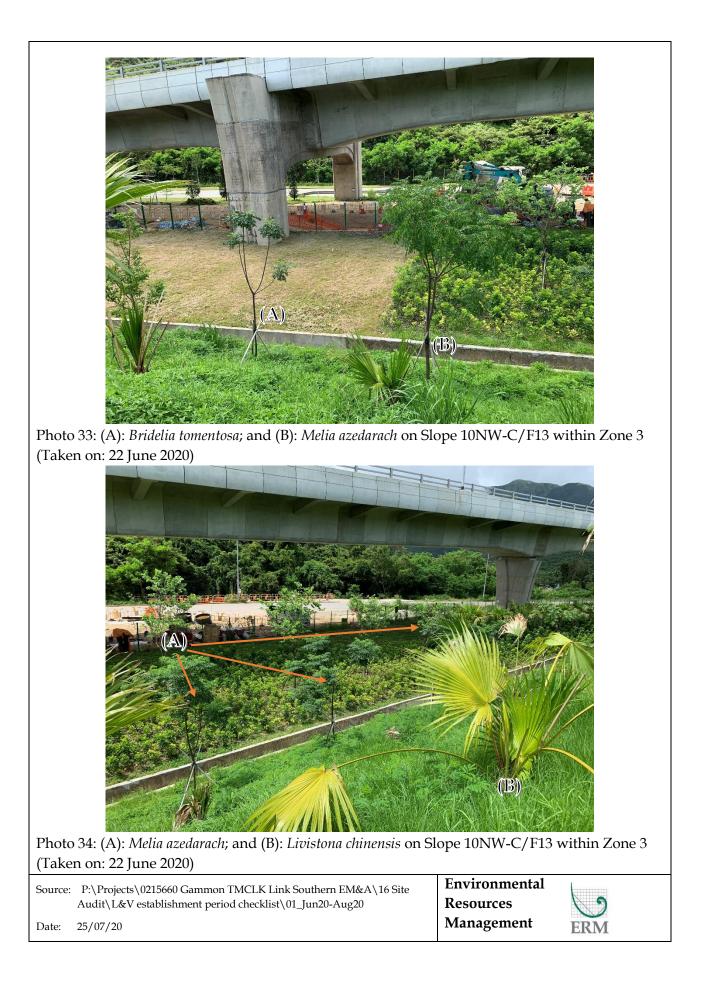




Photo 35: Phoenix roebelenii on Slope 10NW-C/F13 within Zone 3 (Taken on: 22 June 2020)

Date:

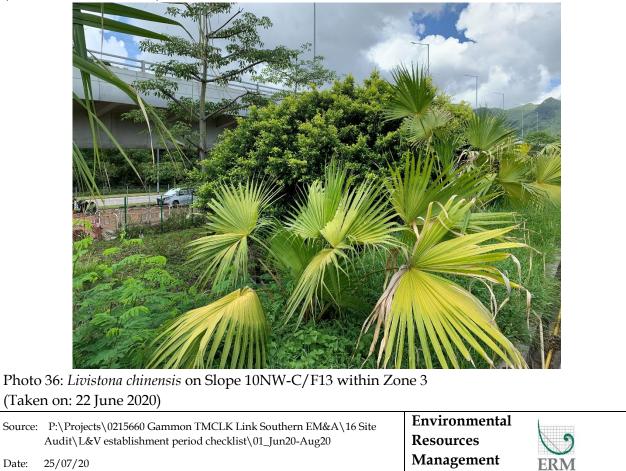




Photo 37: *Hymenocallis littoralis* on Slope 10NW-C/F52 within Zone 3 (Taken on: 22 June 2020)



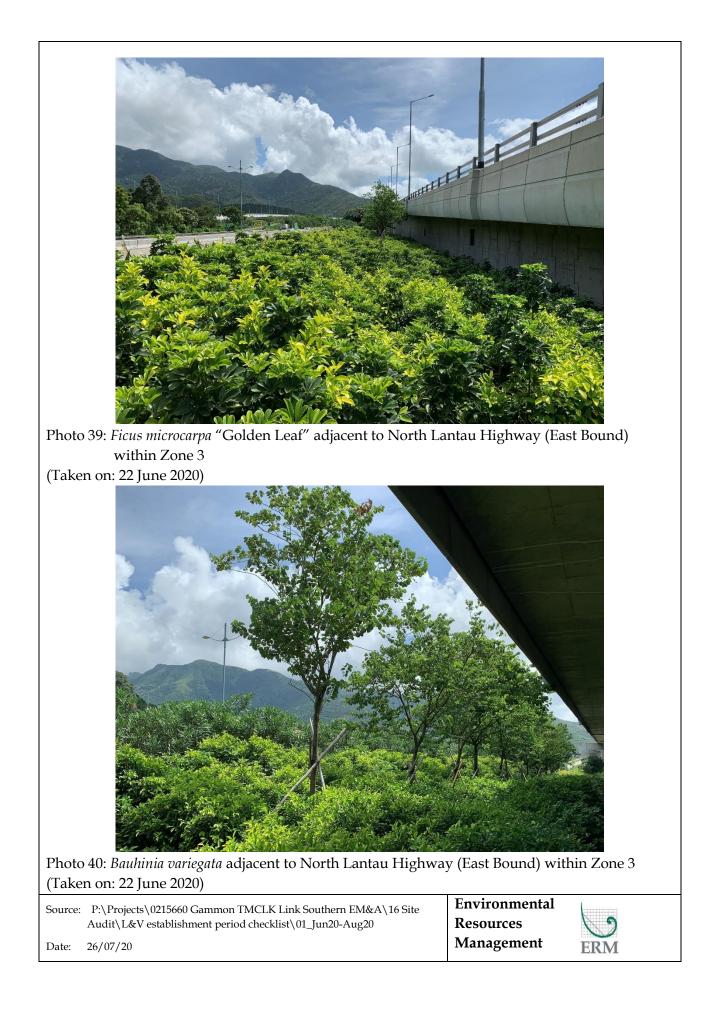
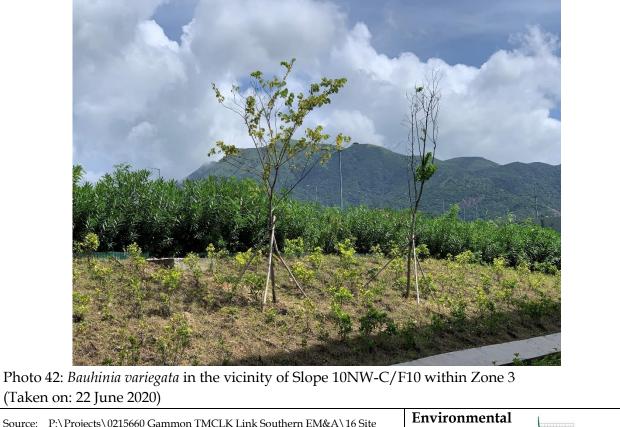
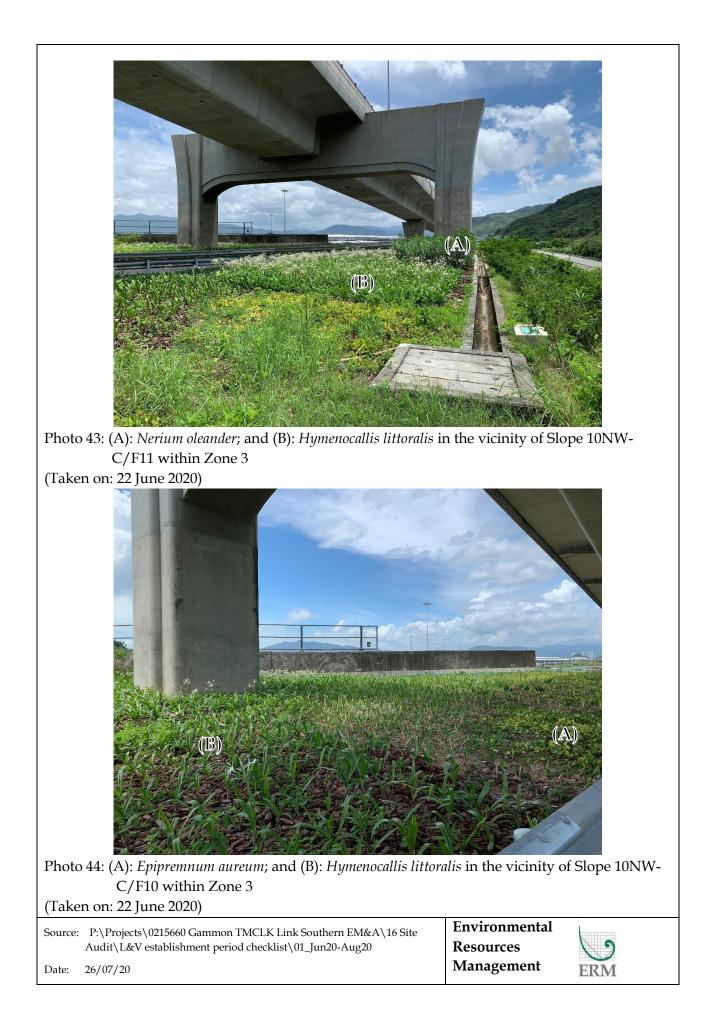




Photo 41: *Bauhinia variegata* in the vicinity of Slope 10NW-C/F10 within Zone 3 (Taken on: 22 June 2020)



Source:	P:\Projects\0215660 Gammon TMCLK Link Southern EM&A\16 Site	Environmental	
	Audit\L&V establishment period checklist\01_Jun20-Aug20	Resources	0
Date:	26/07/20	Management	ERM



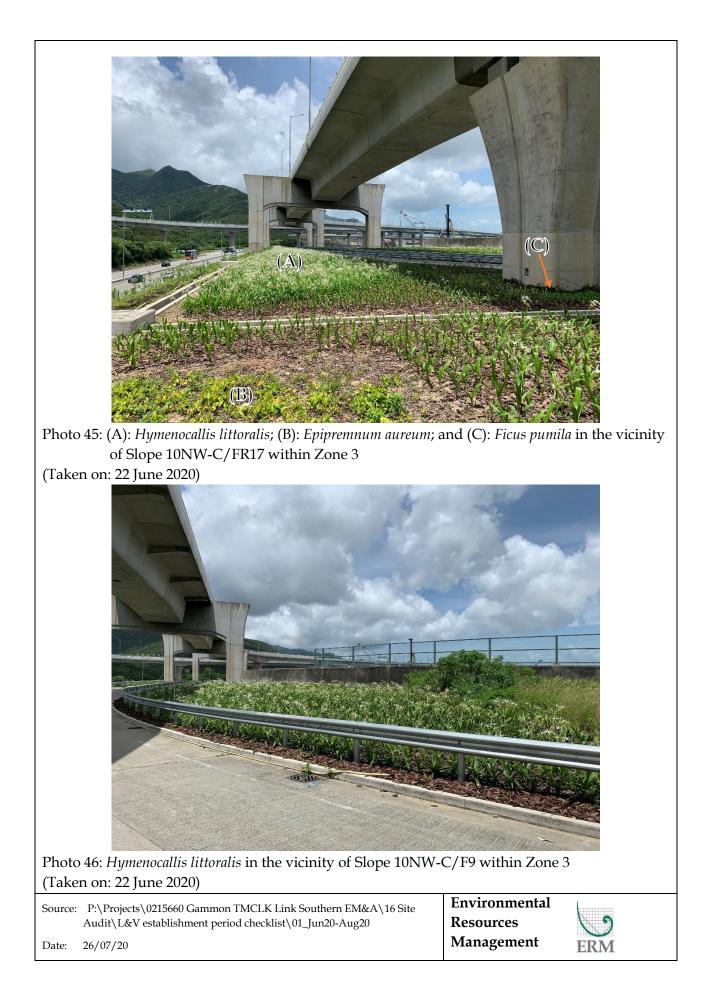
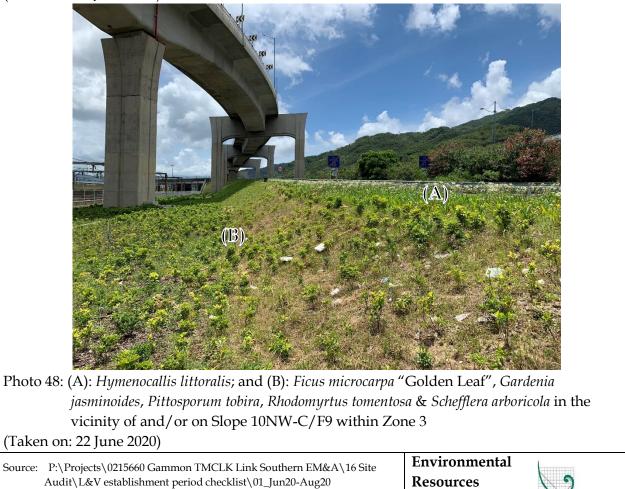




Photo 47: *Hymenocallis littoralis* in the vicinity of Slope 10NW-C/F9 within Zone 3 (Taken on: 22 June 2020)

26/07/20

Date:



Management

ERM



Photo 49: *Bauhinia variegata* in the vicinity of Bridge Column C8 within Zone 3 (Taken on: 22 June 2020)

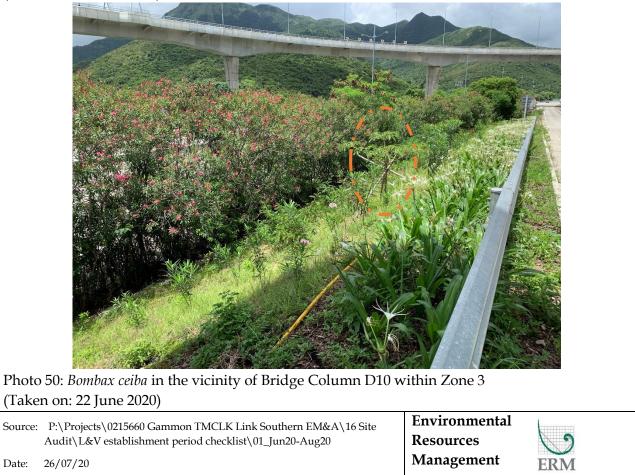




Photo 51: *Bombax ceiba* on Slope 10NW-C/FR17 within Zone 3 (Taken on: 22 June 2020)



Source:	P:\Projects\0215660 Gammon TMCLK Link Southern EM&A\16 Site Audit\L&V establishment period checklist\01_Jun20-Aug20	Environmental Resources	9
Date:	26/07/20	Management	ERM



Photo 53: *Bombax ceiba* on Slope 10NW-C/F11 within Zone 3 (Taken on: 22 June 2020)



Photo 54: *Bombax ceiba* on Slope 10NW-C/F11 within Zone 3 (Taken on: 22 June 2020)

Source:	P:\Projects\0215660 Gammon TMCLK Link Southern EM&A\16 Site	Environmental	
	Audit/L&V establishment period checklist/01_Jun20-Aug20	Resources	0
Date:	26/07/20	Management	ERM

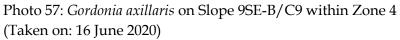


Photo 55: *Bauhinia variegata* in the vicinity of sign gantry near North Lantau Highway (West Bound) within Zone 3



Source:	P:\Projects\0215660 Gammon TMCLK Link Southern EM&A\16 Site	Environmental	
		Resources	\mathbf{i}
Date:	26/07/20	Management	ERM





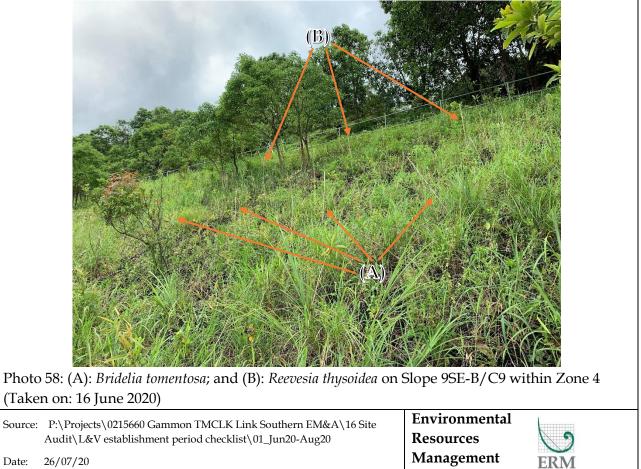
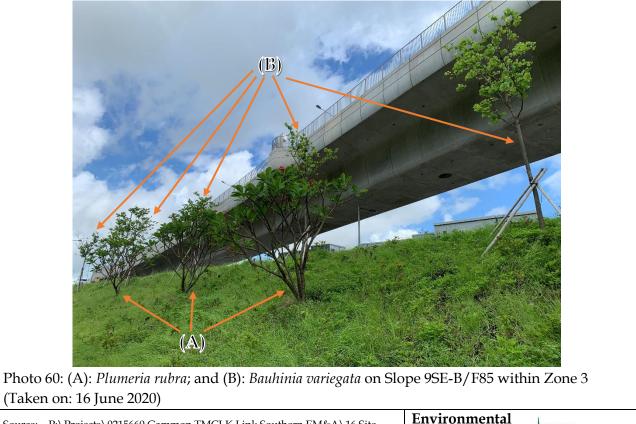




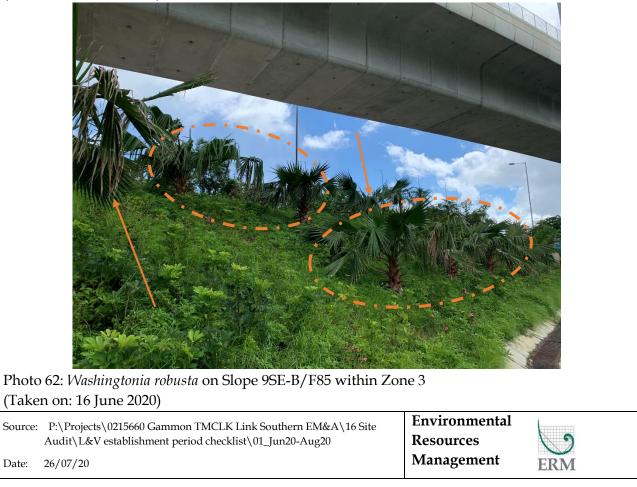
Photo 59: Existing vegetation on Slope 9SE-B/C112 within Zone 4 (Taken on: 16 June 2020)



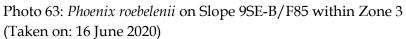
Source	: P:\Projects\0215660 Gammon TMCLK Link Southern EM&A\16 Site	Environmental	
	Audit\L&V establishment period checklist\01_Jun20-Aug20	Resources	9
Date:	26/07/20	Management	ERM



Photo 61: (A): *Plumeria rubra*; and (B): *Bauhinia variegata* on Slope 9SE-B/F85 within Zone 3 (Taken on: 16 June 2020)







26/07/20

Date:



Management

ERM

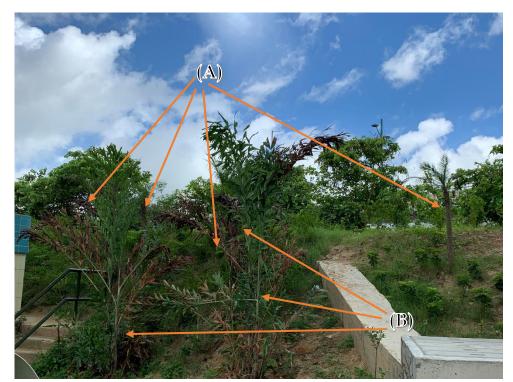


Photo 65: (A): *Phoenix roebelenii*; and (B): *Caryota mitis* on Slope 9SE-B/F85 within Zone 3 (Taken on: 16 June 2020)





Photo 67: Lagerstroemia speciosa along Cheung Tung Road (DN450) within Zone 1 (Taken on: 22 June 2020)

Date:





Photo 69: *Lagerstroemia speciosa* along Cheung Tung Road (DN450) within Zone 1 (Taken on: 22 June 2020)



Source	: P:\Projects\0215660 Gammon TMCLK Link Southern EM&A\16 Site	Environmental	
	Audit\L&V establishment period checklist\01_Jun20-Aug20	Resources	9
Date:	27/07/20	Management	ERM

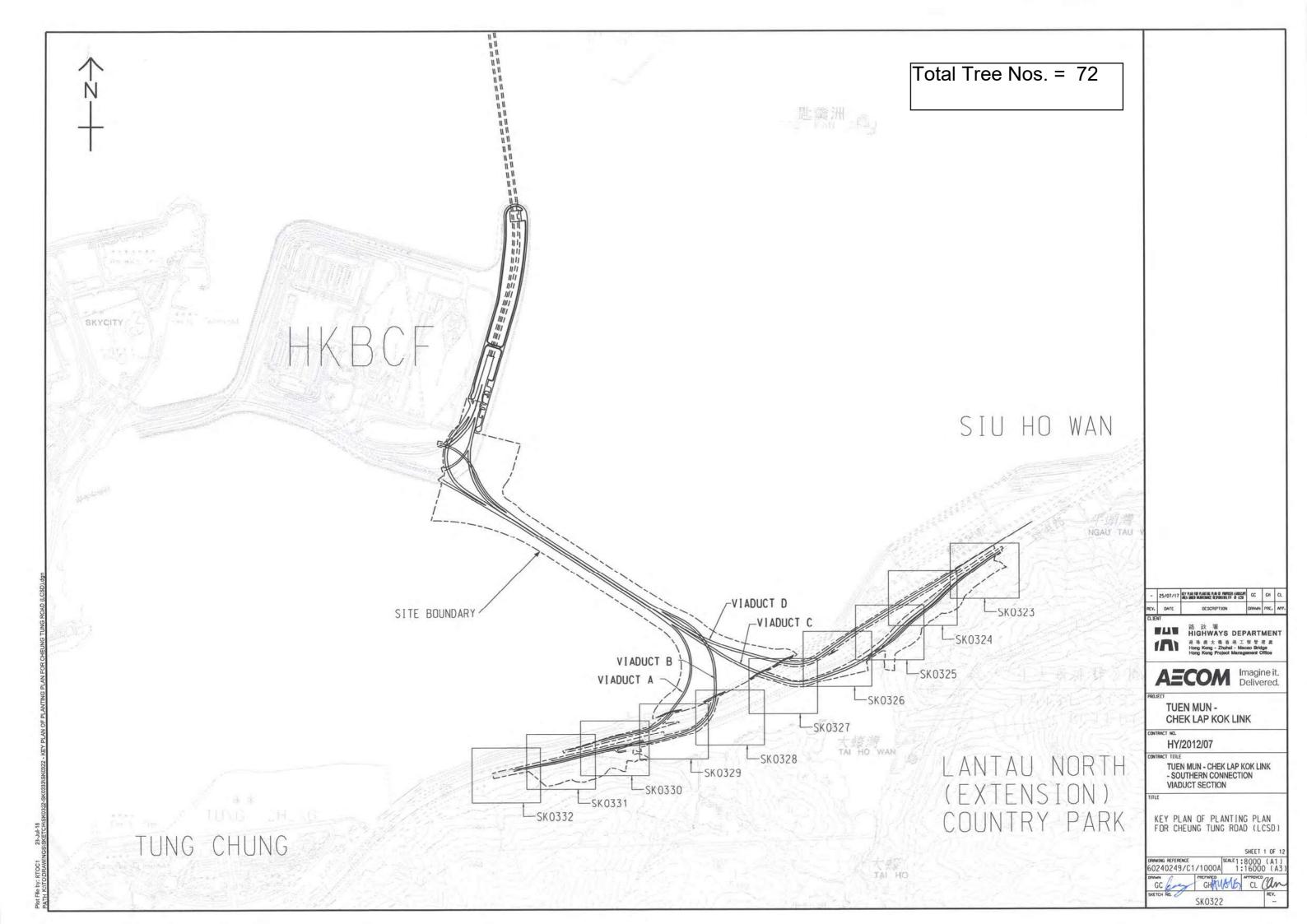


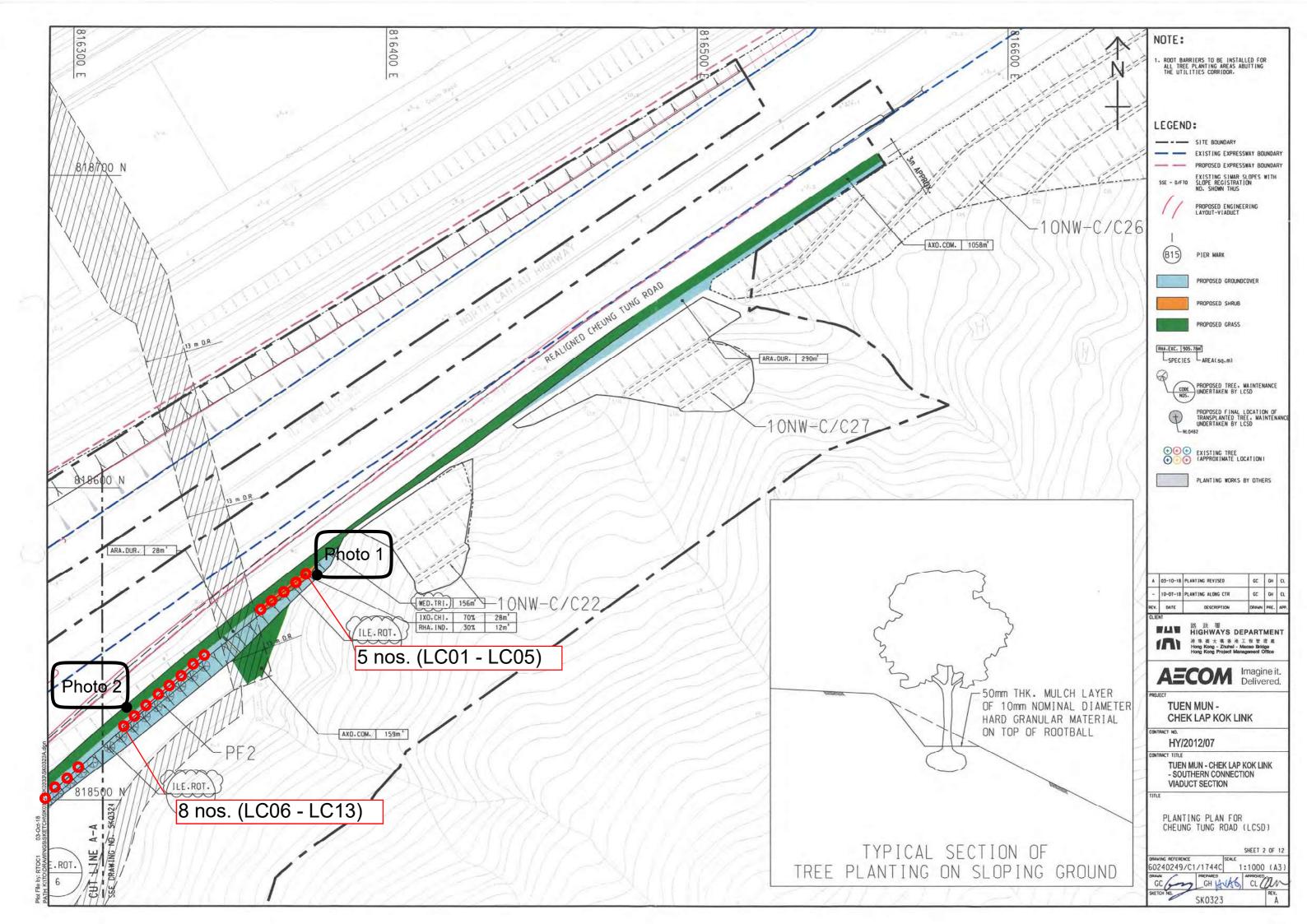
Photo 71: *Lagerstroemia speciosa* along Cheung Tung Road (DN450) within Zone 1 (Taken on: 22 June 2020)

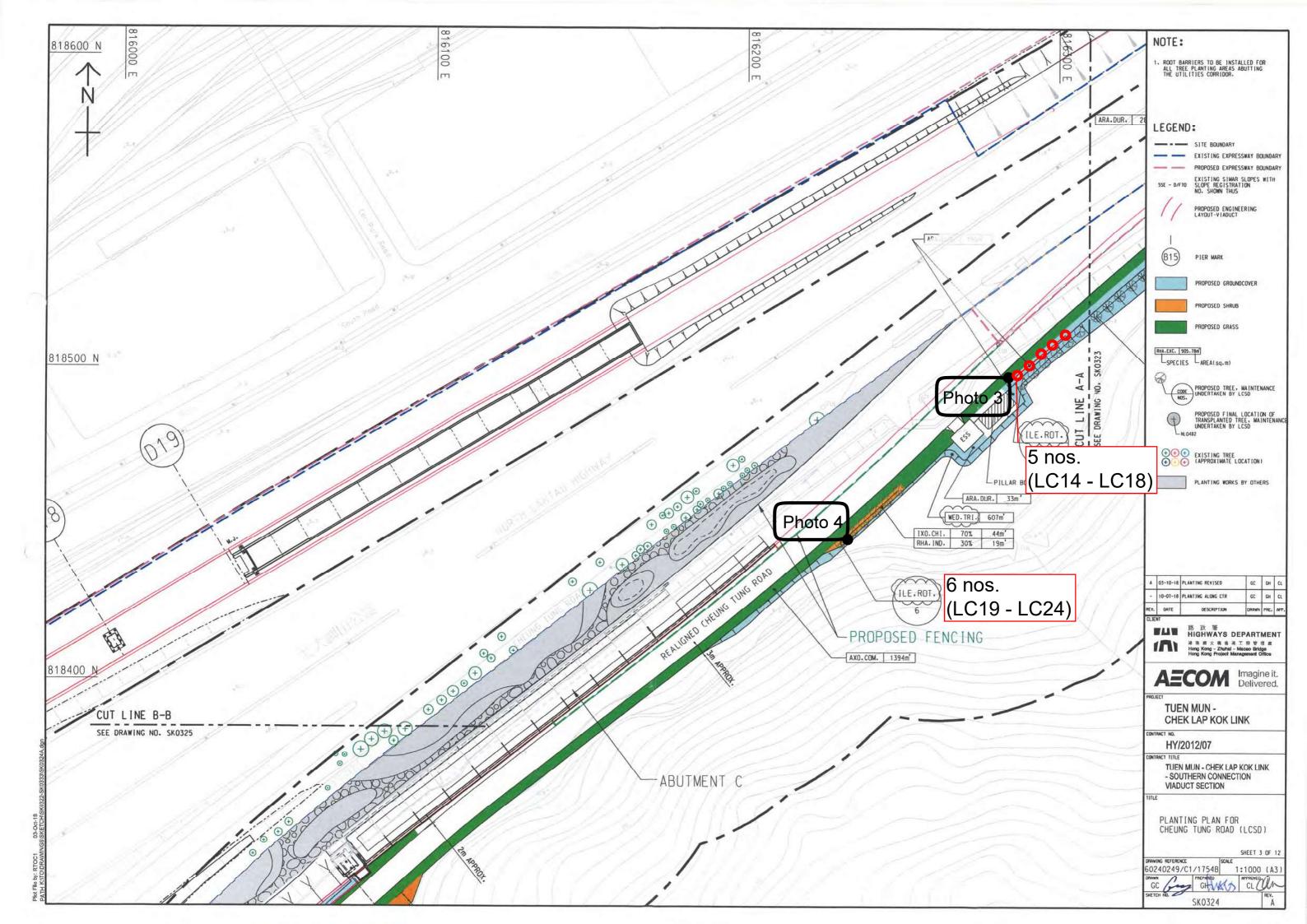


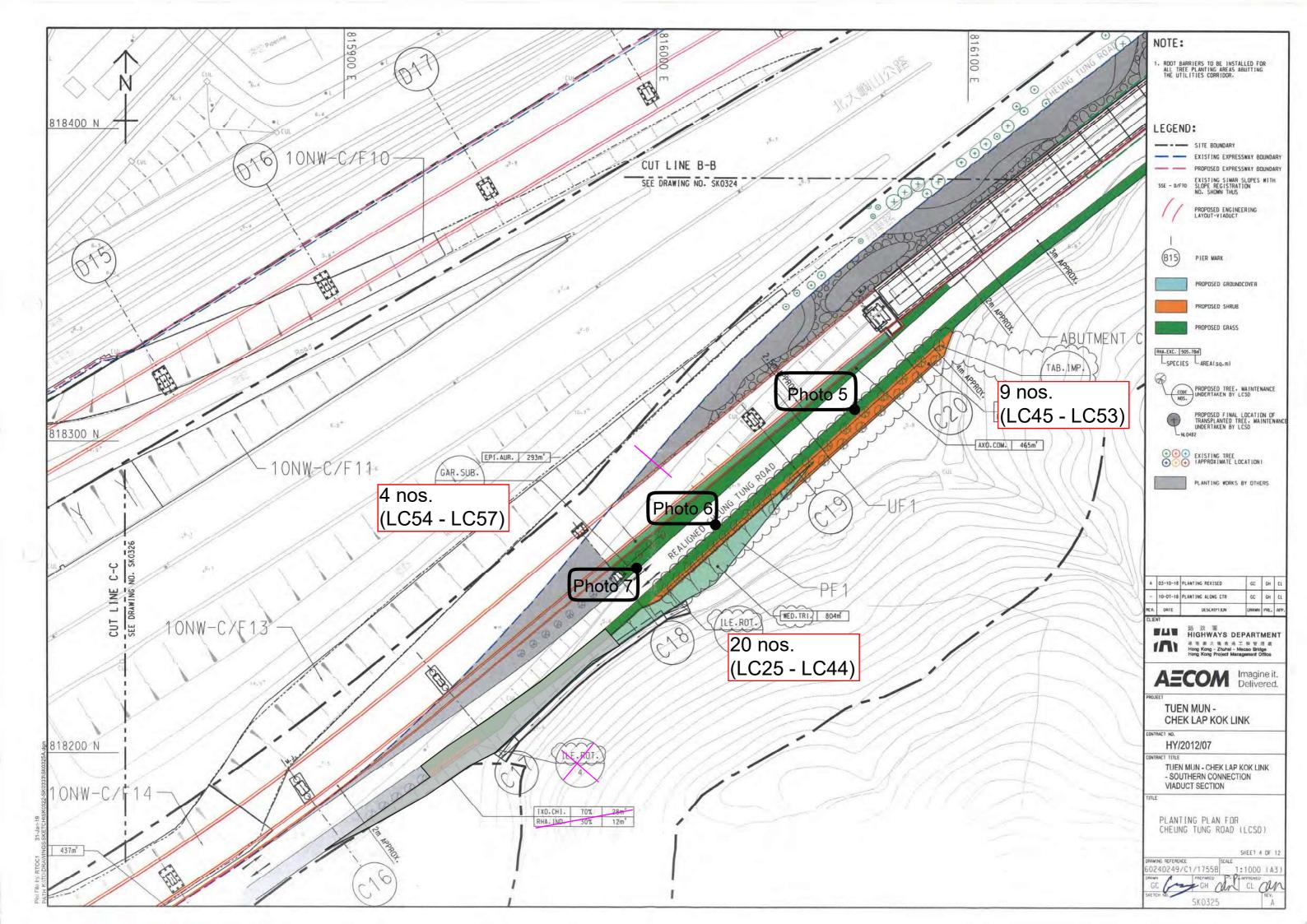
Photo 72: *Lagerstroemia speciosa* along Cheung Tung Road (DN450) within Zone 1 (Taken on: 22 June 2020)

Source:	P:\Projects\0215660 Gammon TMCLK Link Southern EM&A\16 Site Audit\L&V establishment period checklist\01_Jun20-Aug20	Environmental Resources	2
Date:	27/07/20	Management	ERM

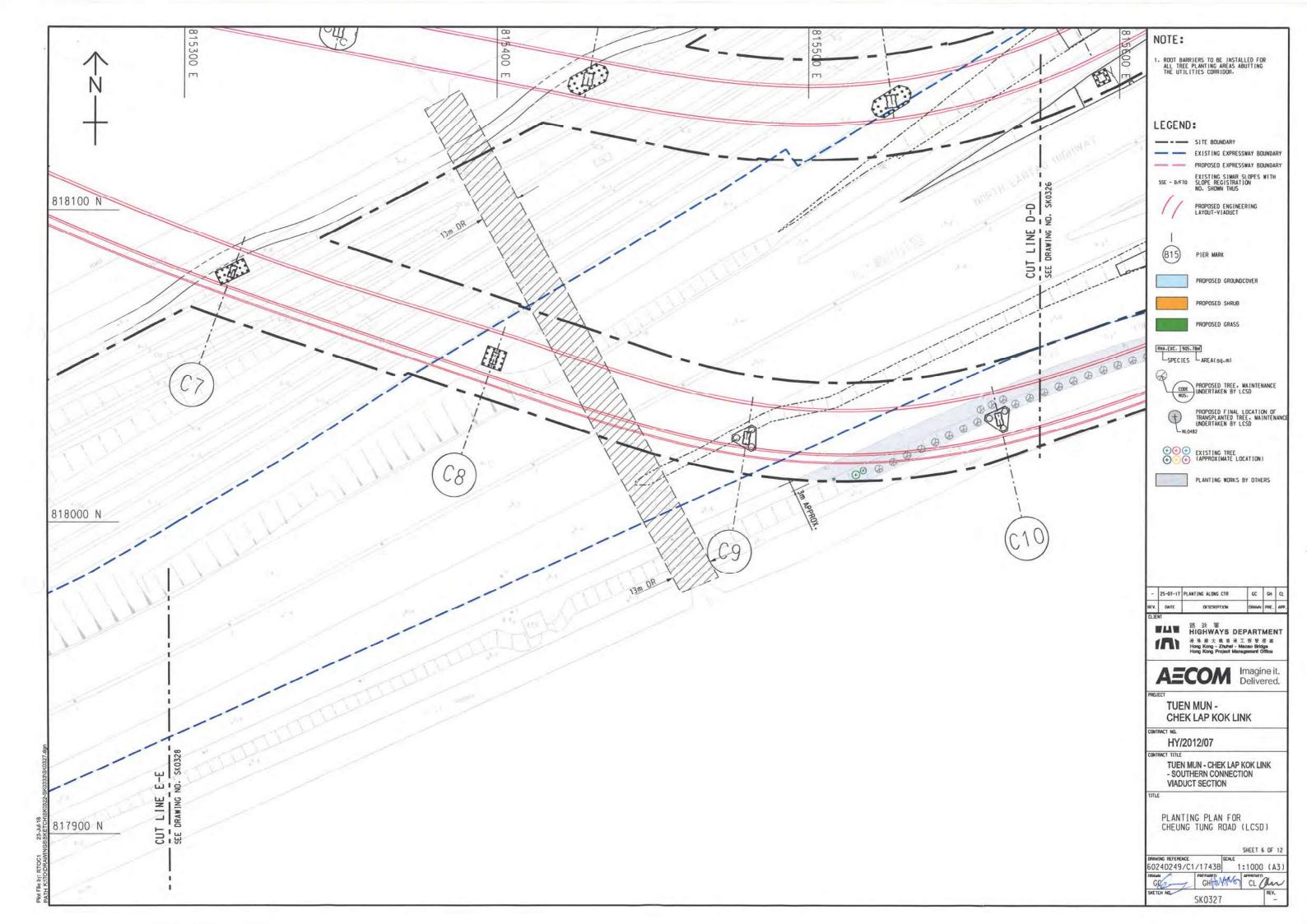


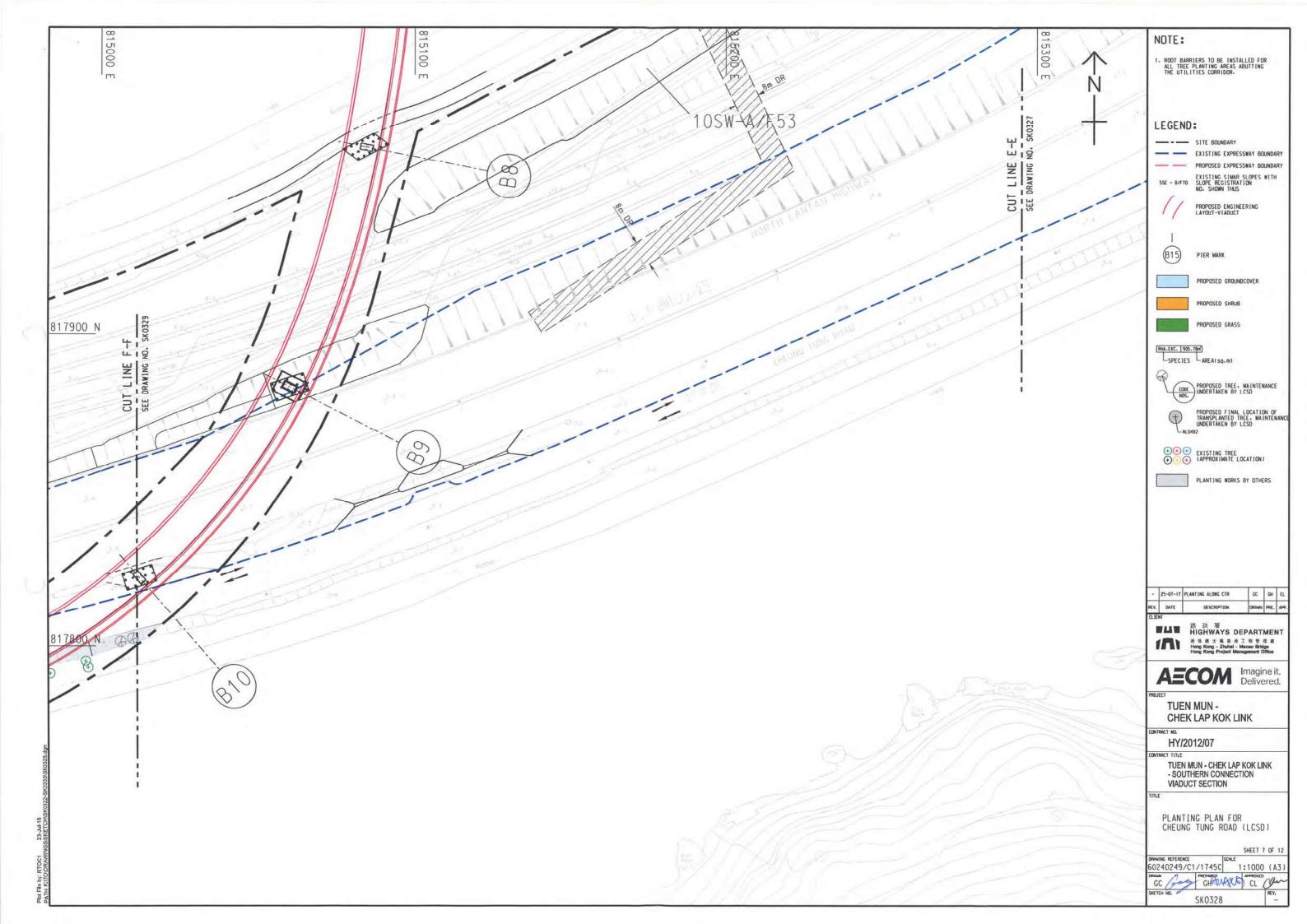


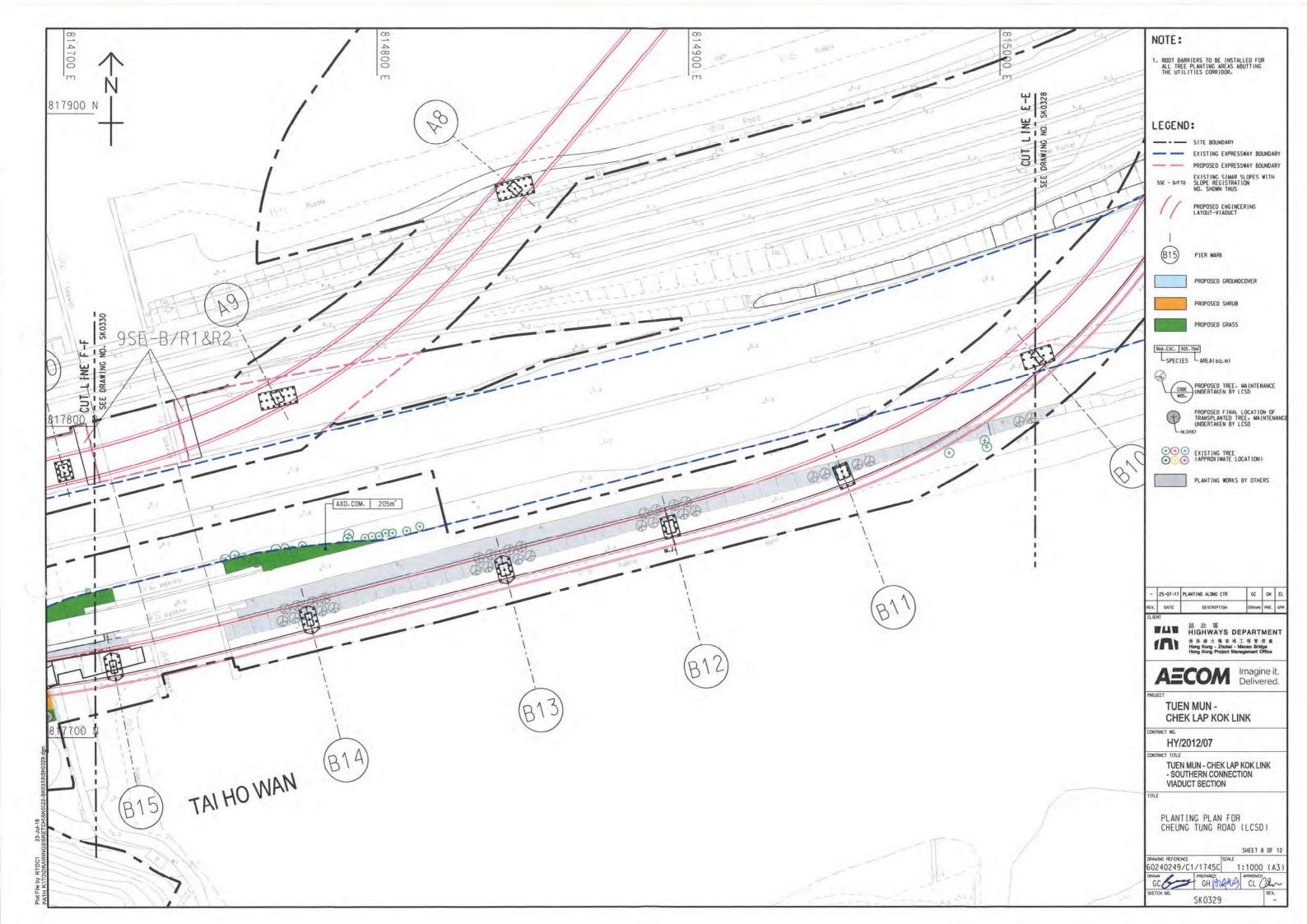


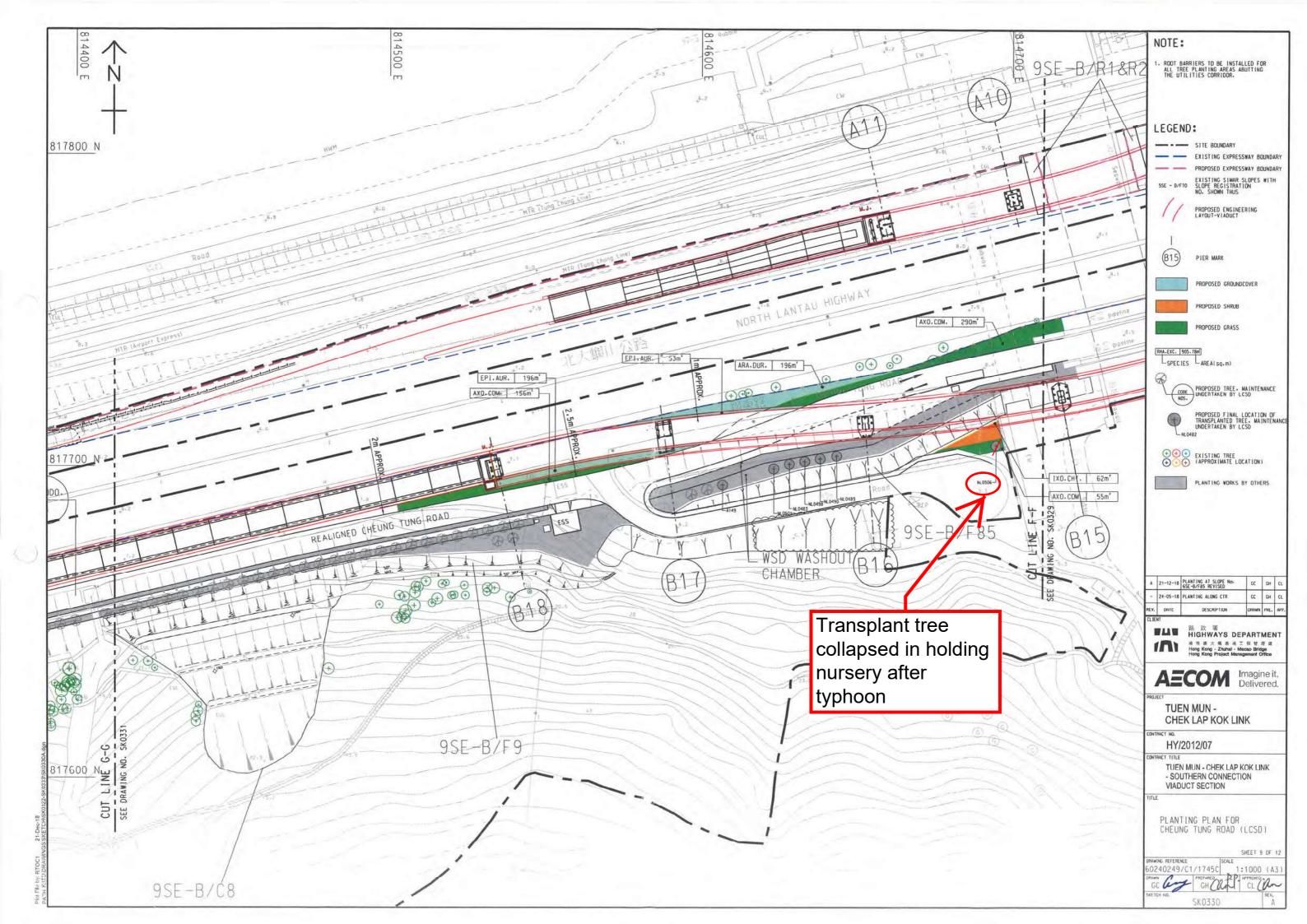


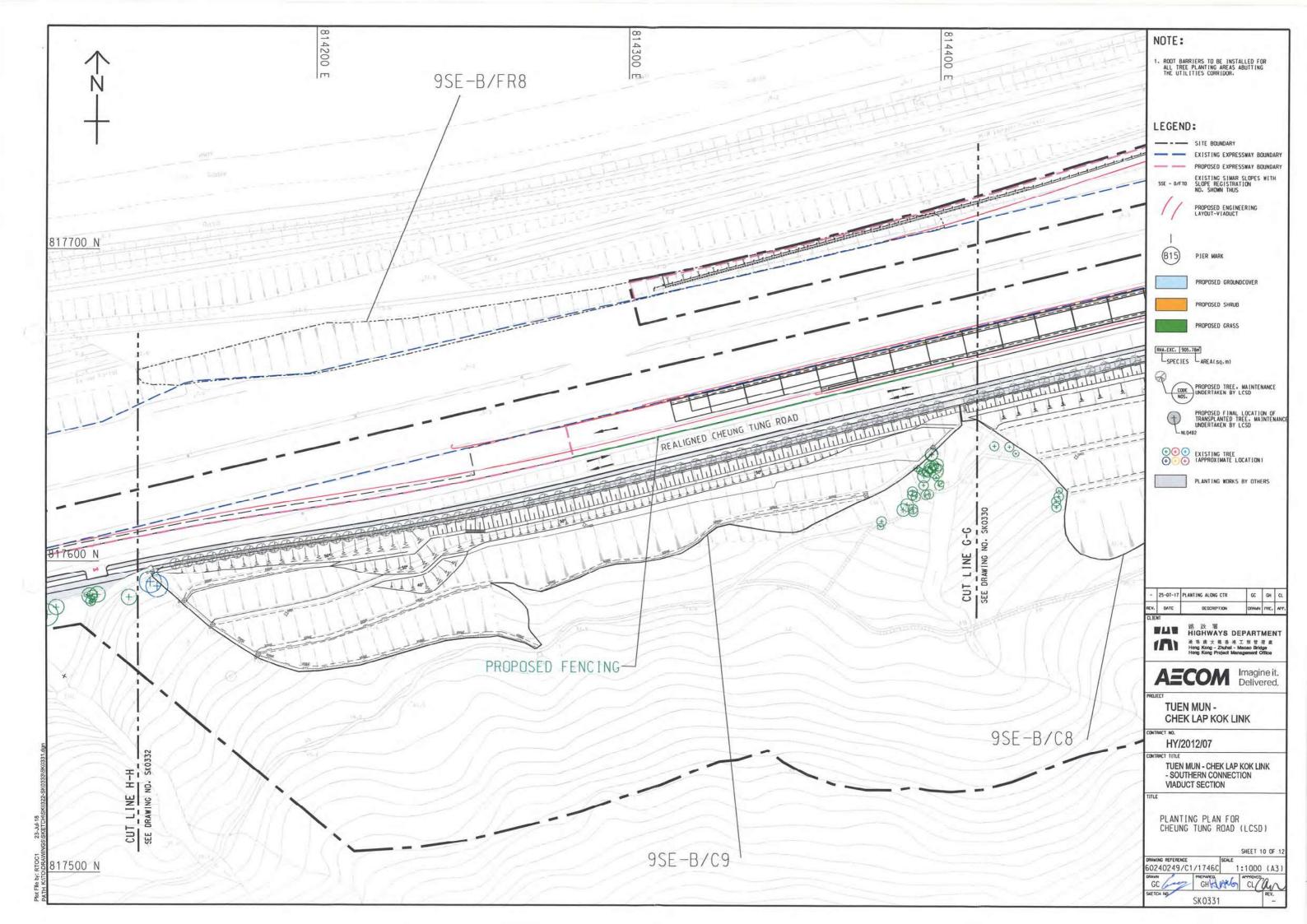


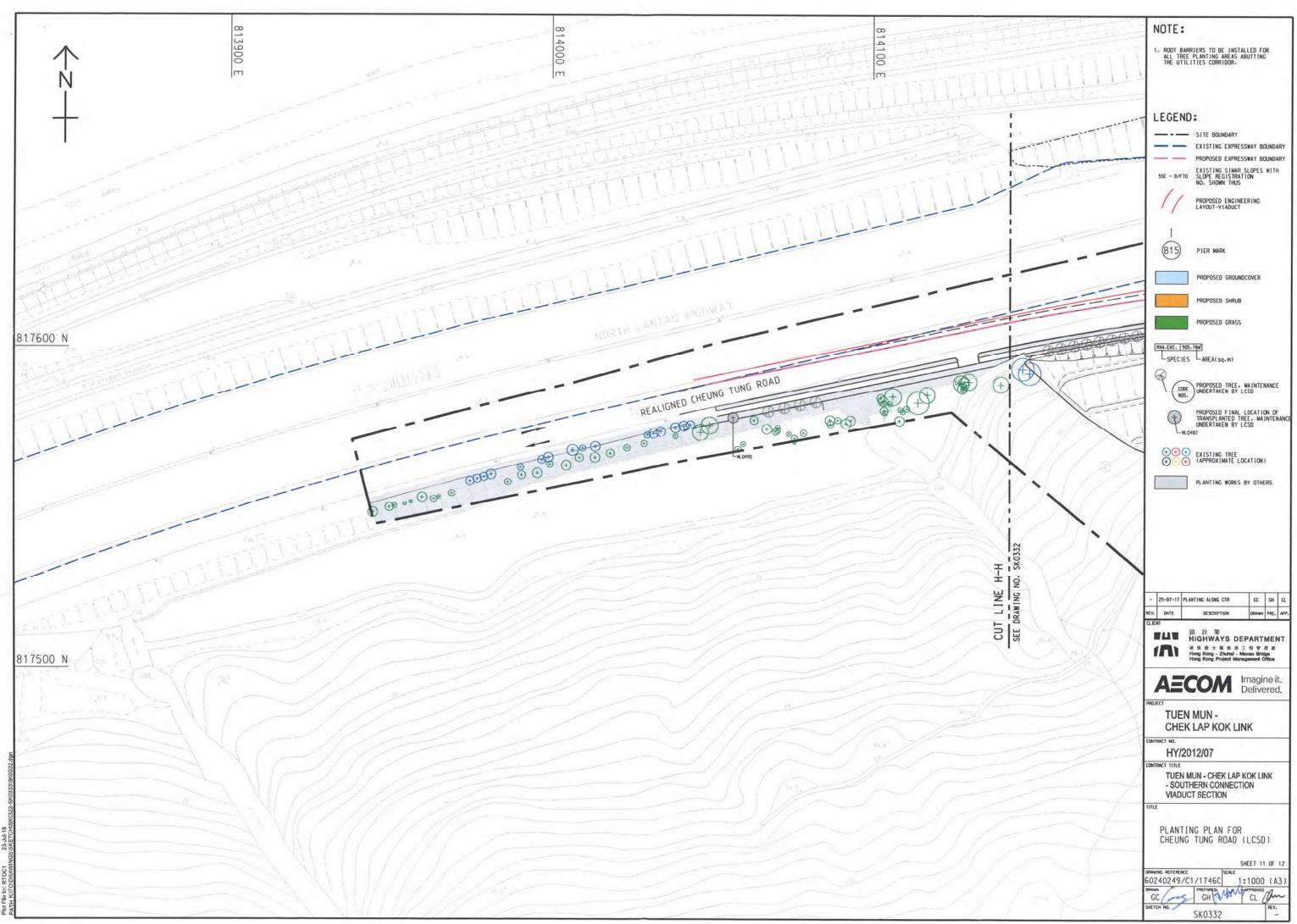




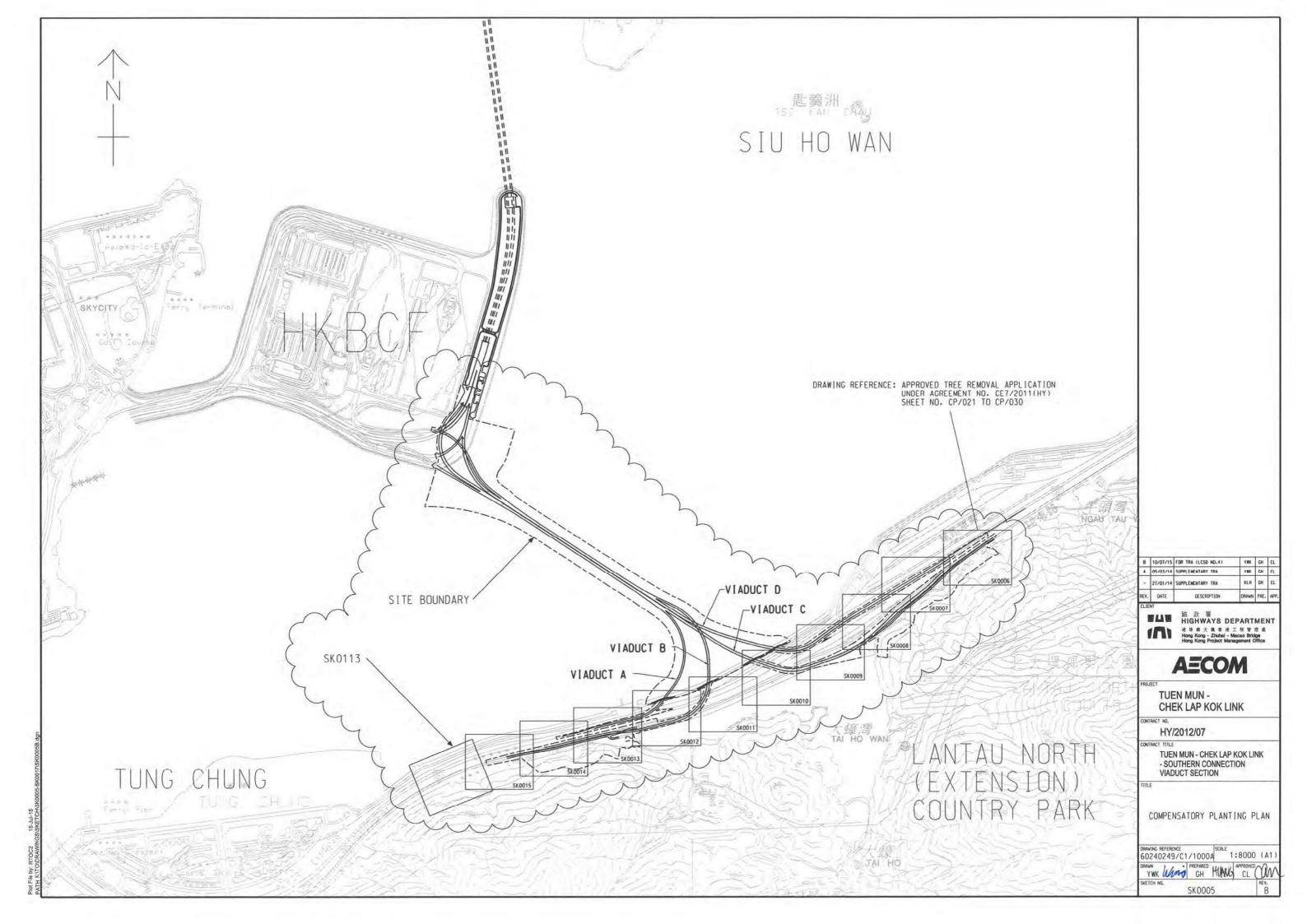








-lie



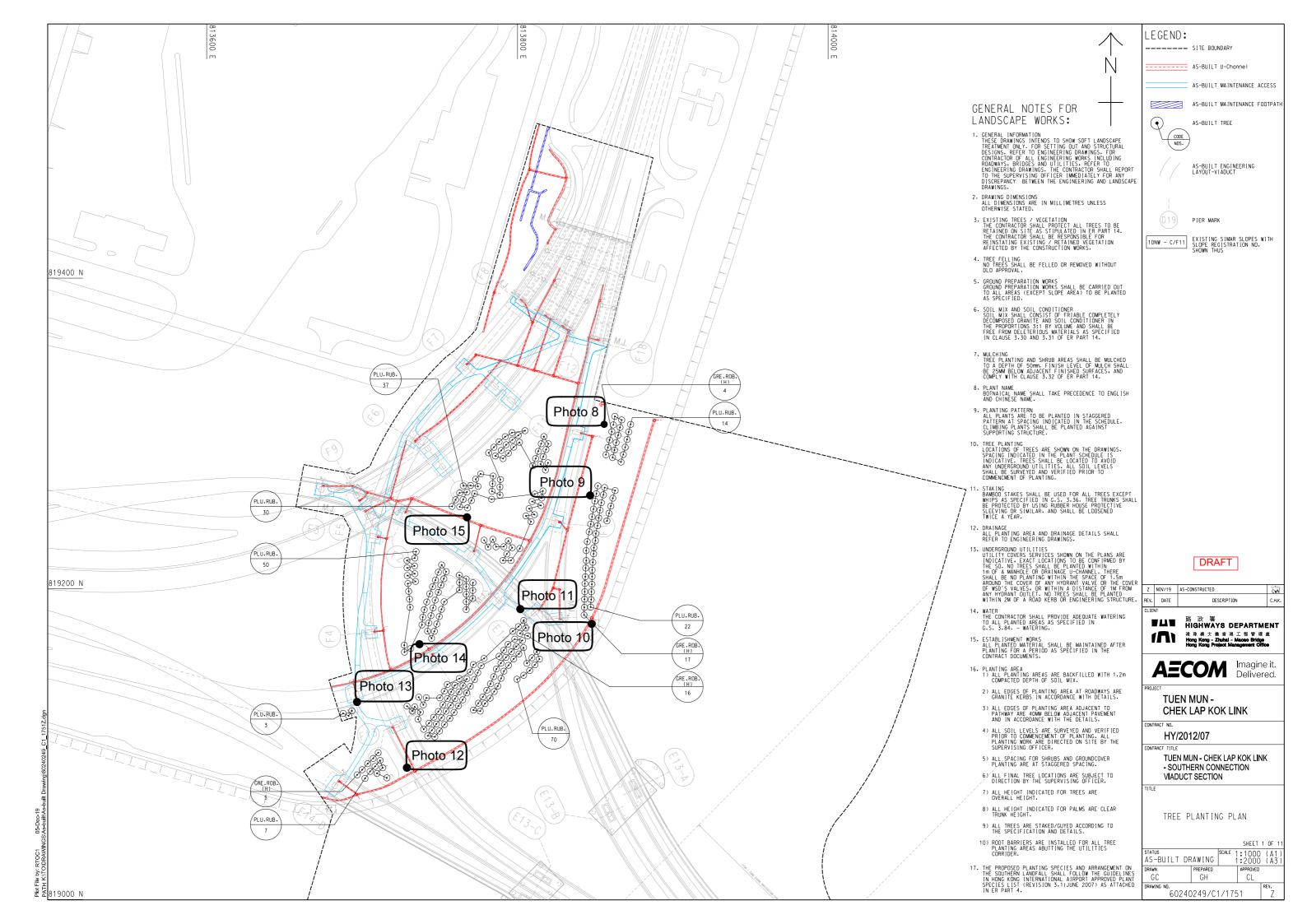
	LECEND: NOS. OF COMPENSATORY TREE MAINTENANCE UNDERTAREN BY LCSD SUBJECT TO DETAILED DESIGNS DN450 PROPOSED WATERMAIN (DN450)
Photos 67, 68 & 69	
6 nos. (LC67 - LC72) DSD VENT AND VENT STACK	- 10/01/15 TRA FOR LCSD NO.4 YWK GH CL REV. DATE DESCRIPTION DRAWN PRE. APP. CLIENT 路政署 HIGHWAYS DEPARTMENT 准路政署
	IM ARAC ALAR ALARA ALARA Horg Kong - Zhahai - Macao Bridge Horg Kong Project Management Office RECOMPACE PROJECT TUEN MUN - CHEK LAP KOK LINK CONTRACT INC. HY/2012/07 CONTRACT ITLE TUEN MUN - CHEK LAP KOK LINK - SOUTHERN CONNECTION VIADUCT SECTION TITLE
 SETTING OUT OF COMPENSATORY TREE PLANTING TO ALIGN WITH EXISTING TREES. SETTING OUT OF COMPENSATORY TREE PLANTING TO ADJUST ON SITE TO SUIT FOOTINGS OF DN450 WATERMAIN. 	COMPENSATORY PLANTING PLAN FOR TRA LCSD NO. 4 DRAWING REFERENCE NEW DRAWING 1:1000 (A3) DRAWN YWK WING CH WANG APPROVED SKETCH NO. SK0113 REV

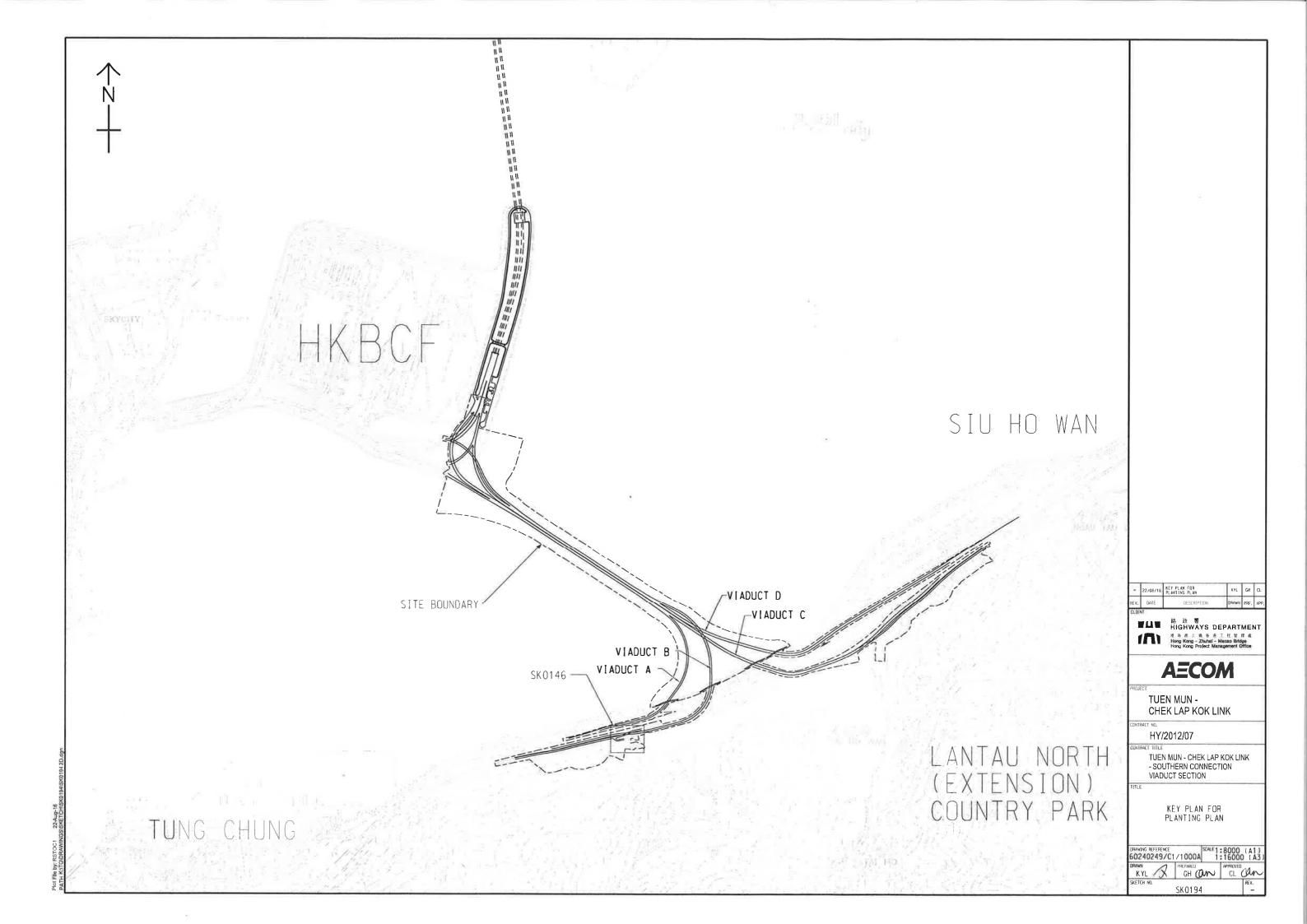
Plot File by:

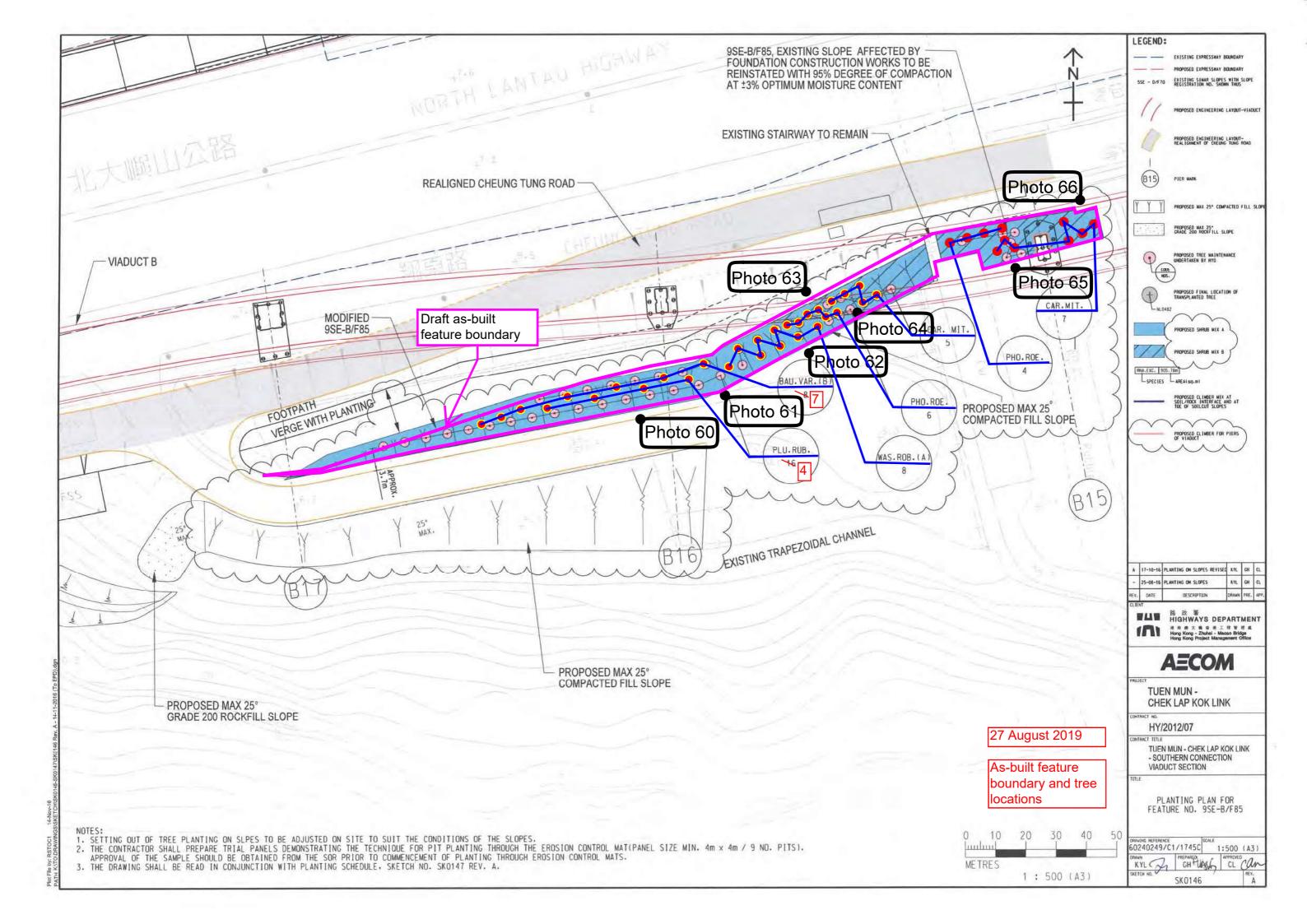


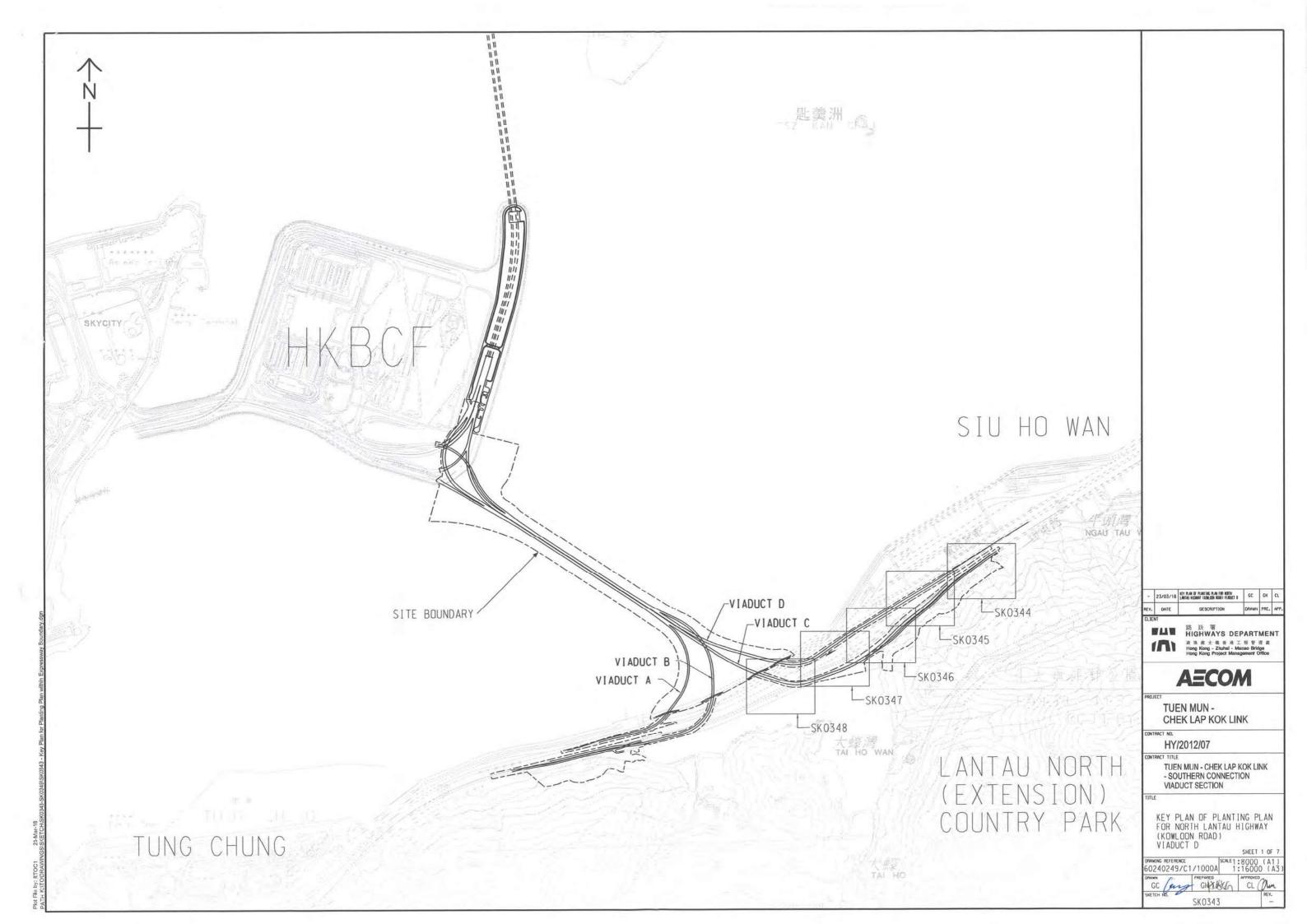
File

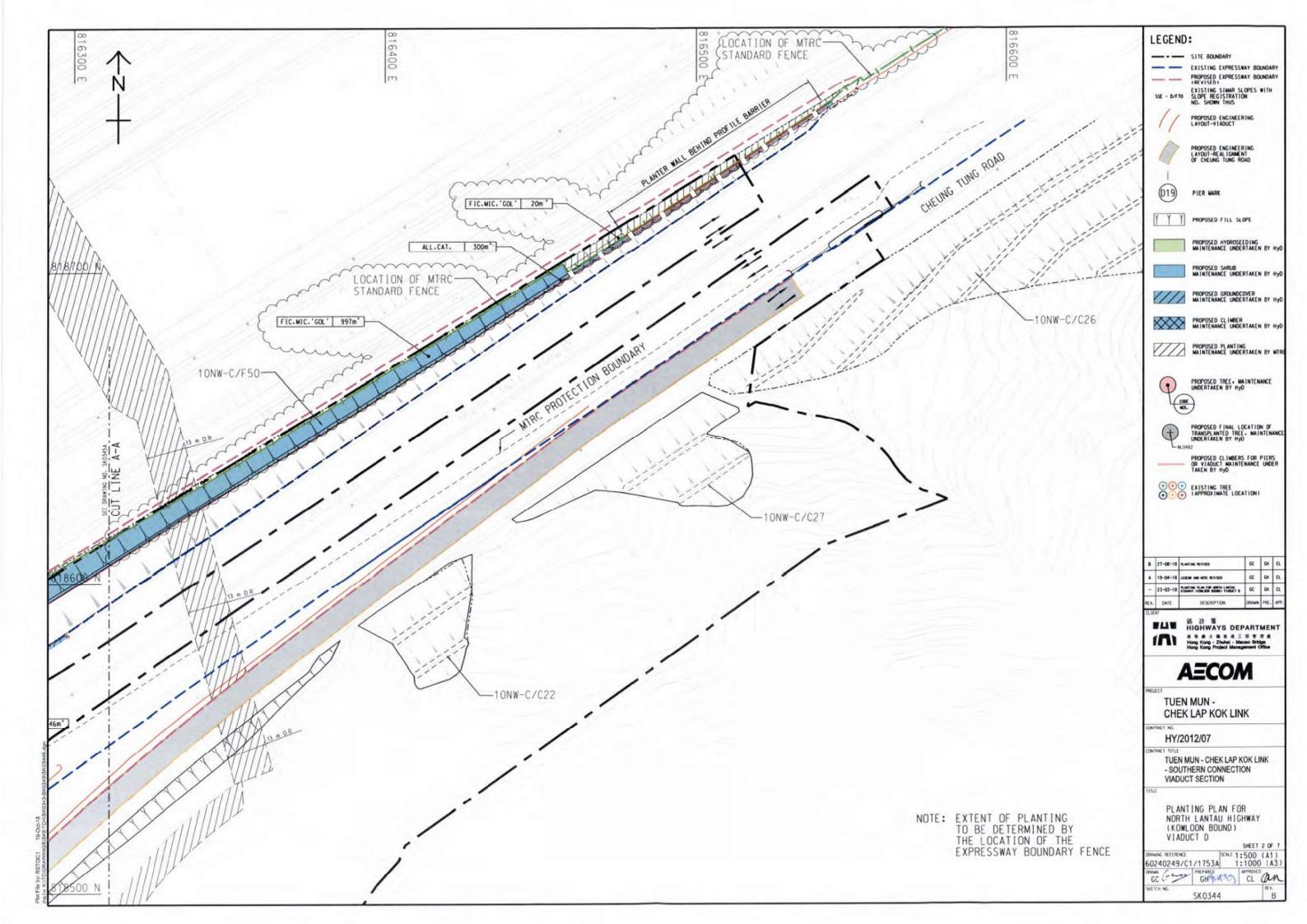
 \wedge NOTES: . THE PROPOSED PLANTING SPECIES AND ARRANGEMENT ON THE SOUTHERN LANDFALL SHALL FOLLOW THE GUIDELINES IN HONG KONG INTERNATIONAL AIRPORT APPROVED PLANT SPECIES LIST (REVISION 3.1:JUNE 2007). AS ATTACHED IN ER AREA 4. Ν • THE DRAWING SHALL BE READ IN CONJUNCTION WITH SHEET NOS. 60240249/C1/1741 TO 1746 AND 1771. EGEND: ---- SITE BOUNDARY AS-BUILT U-Channel AS-BUILT MAINTENANCE ACCESS AS-BUILT MAINTENANCE FOOTPATH AS-BUILT SHRUB PLANTING AS-BUILT ENGINEERING LAYOUT-VIADUCT PIER MARK RHA.EXC. 905.78 m² SPECIES AREA(sq.m) 10NW - C/F11 SLOPE REGISTRATION NO. DRAFT Z NOV/19 AS-CONSTRUCTED CWN EV. DATE DESCRIPTION с.н.к. 路政署 HIGHWAYS DEPARTMENT 地球集大教会通工保管理点 Hong Kong - Zhuhai - Macao Bridge Hong Kong Project Management Office **AECOM** Imagine it. Delivered. TUEN MUN -CHEK LAP KOK LINK NTRACT NO HY/2012/07 RACT TITLE TUEN MUN - CHEK LAP KOK LINK - SOUTHERN CONNECTION VIADUCT SECTION SHRUB PLANTING PLAN SHEET 1 OF SCALE 1:1000 (A1) 1:2000 (A3) TATUS AS-BUILT DRAWING PREPARED RAWN PPROVE GC GH CL RAWING NO.

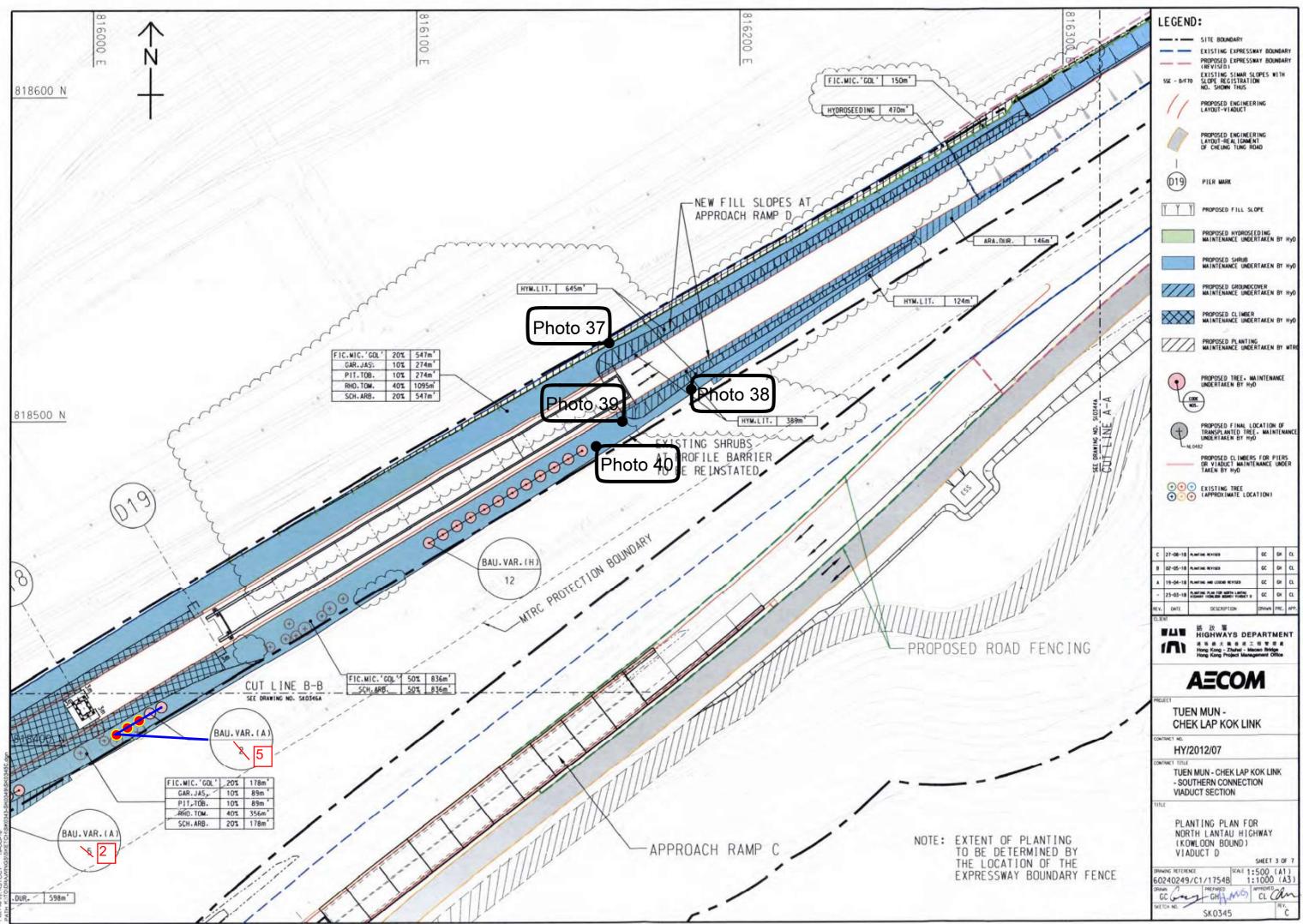




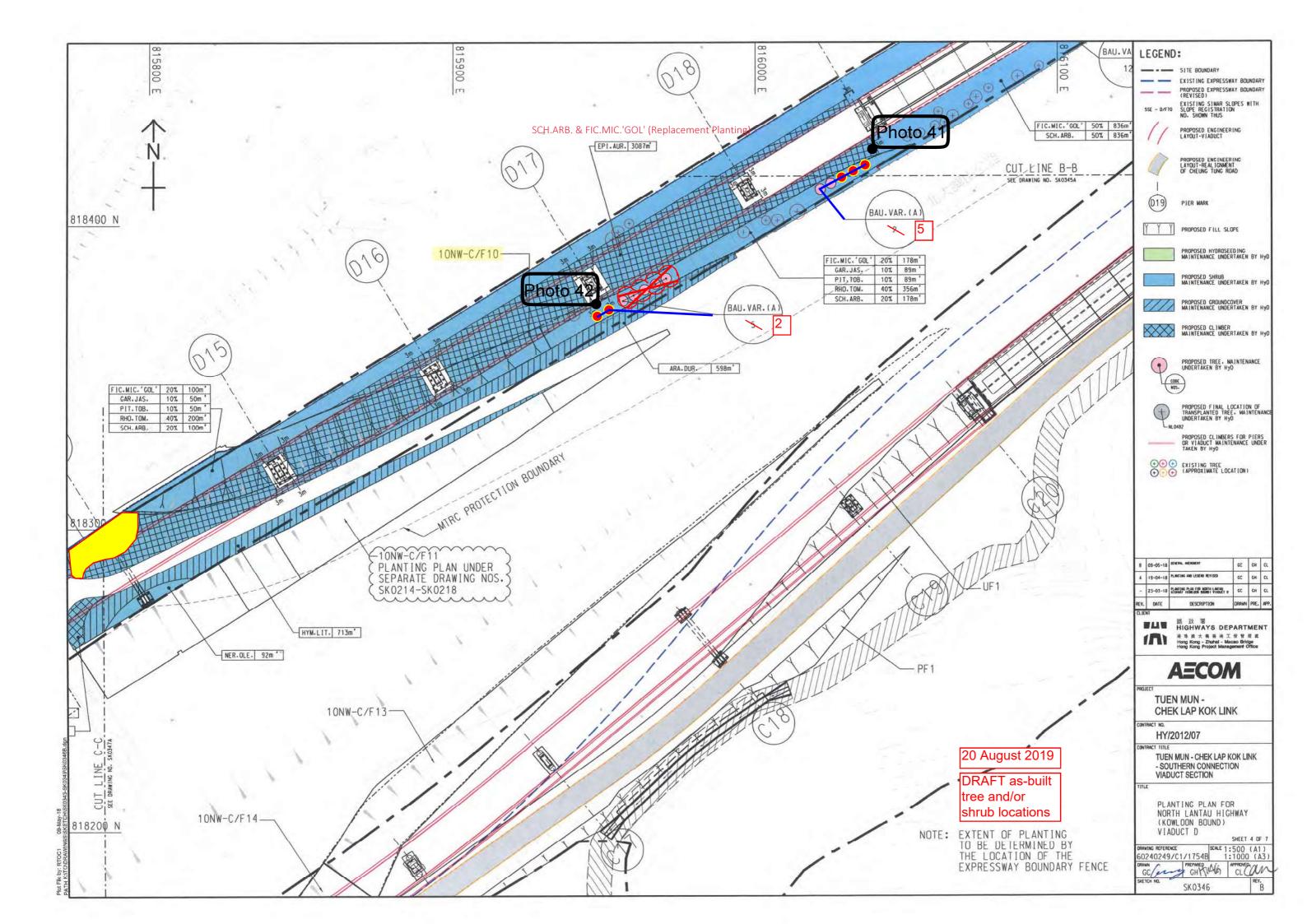


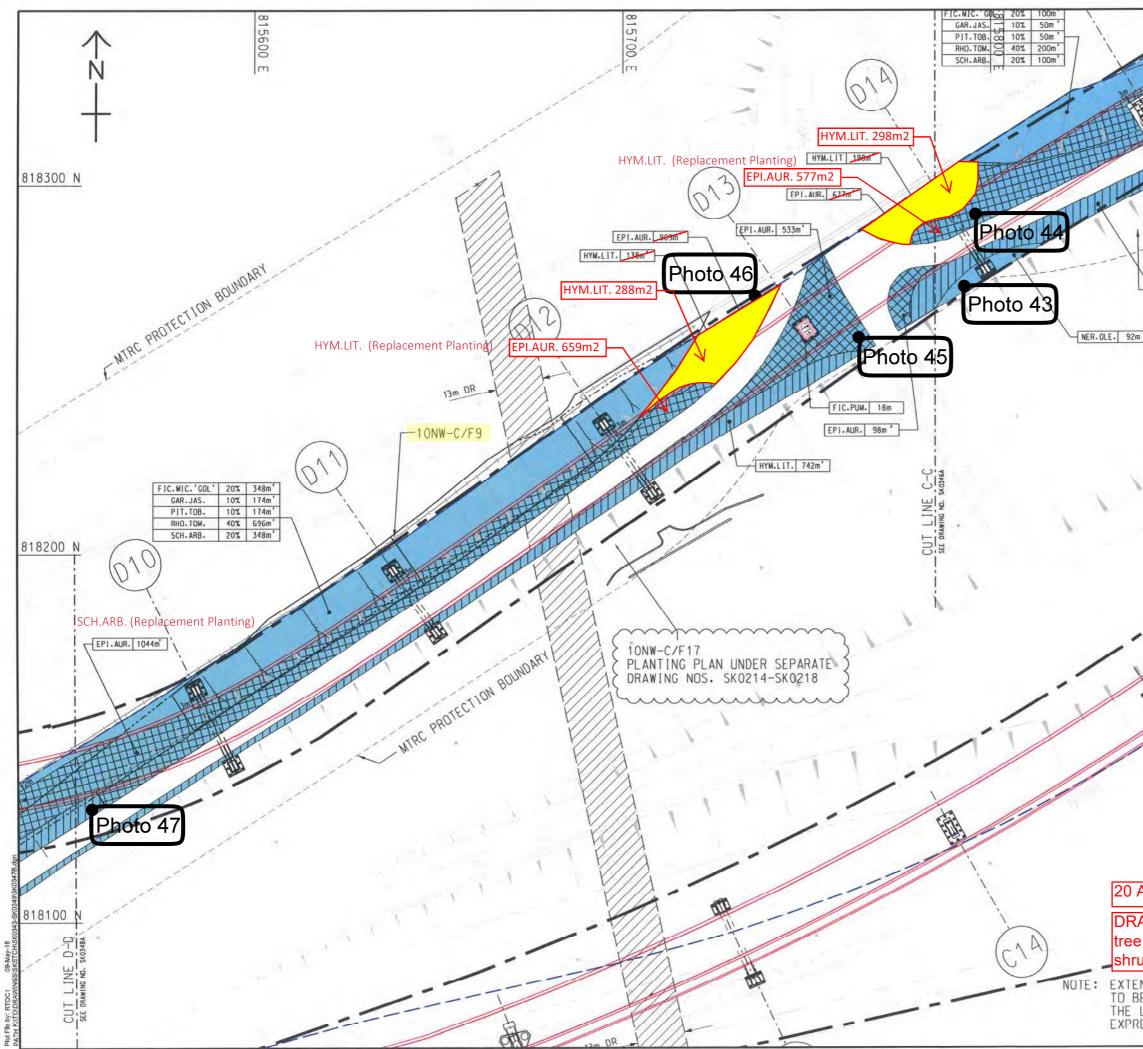




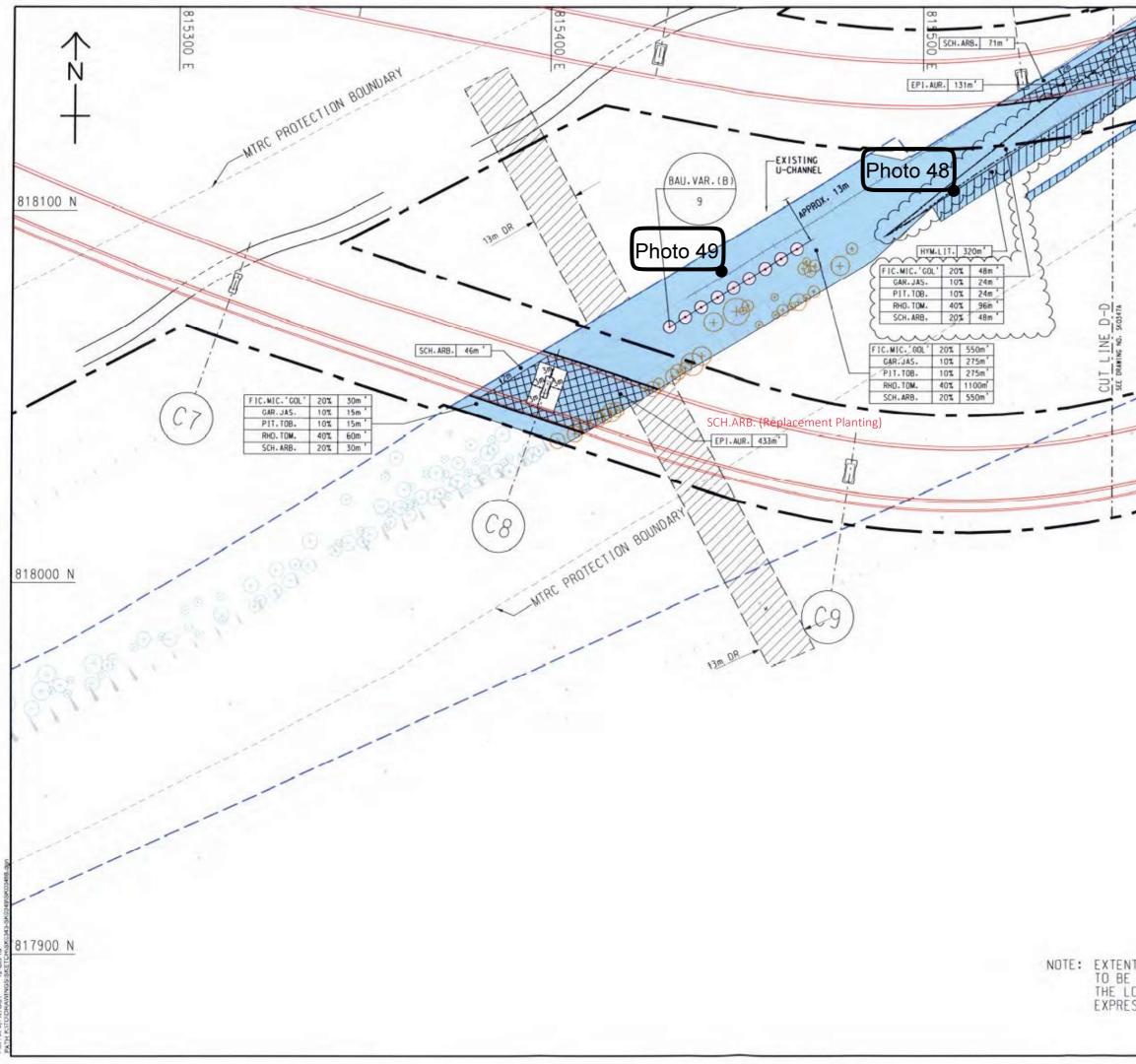


Plot File by: RSTOC

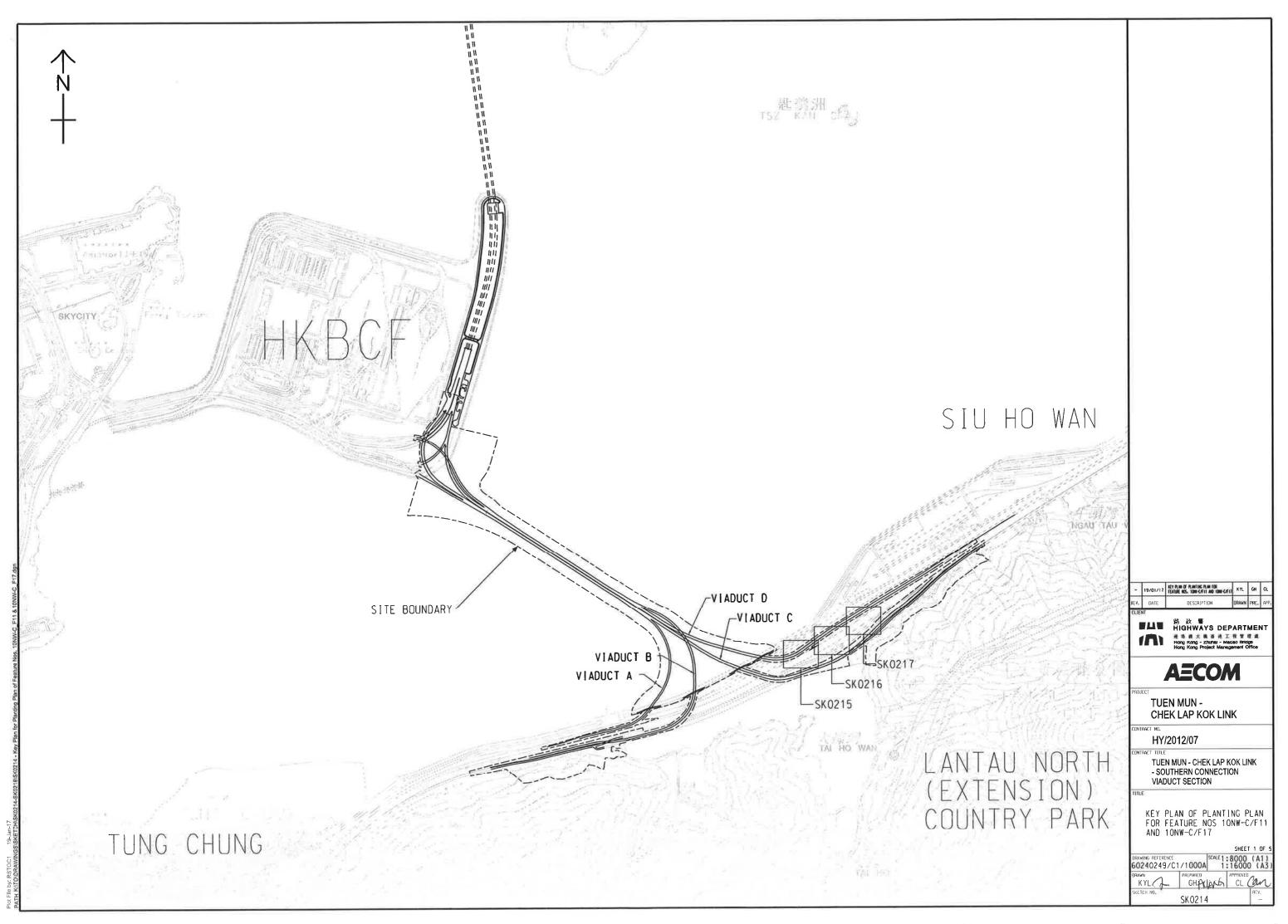


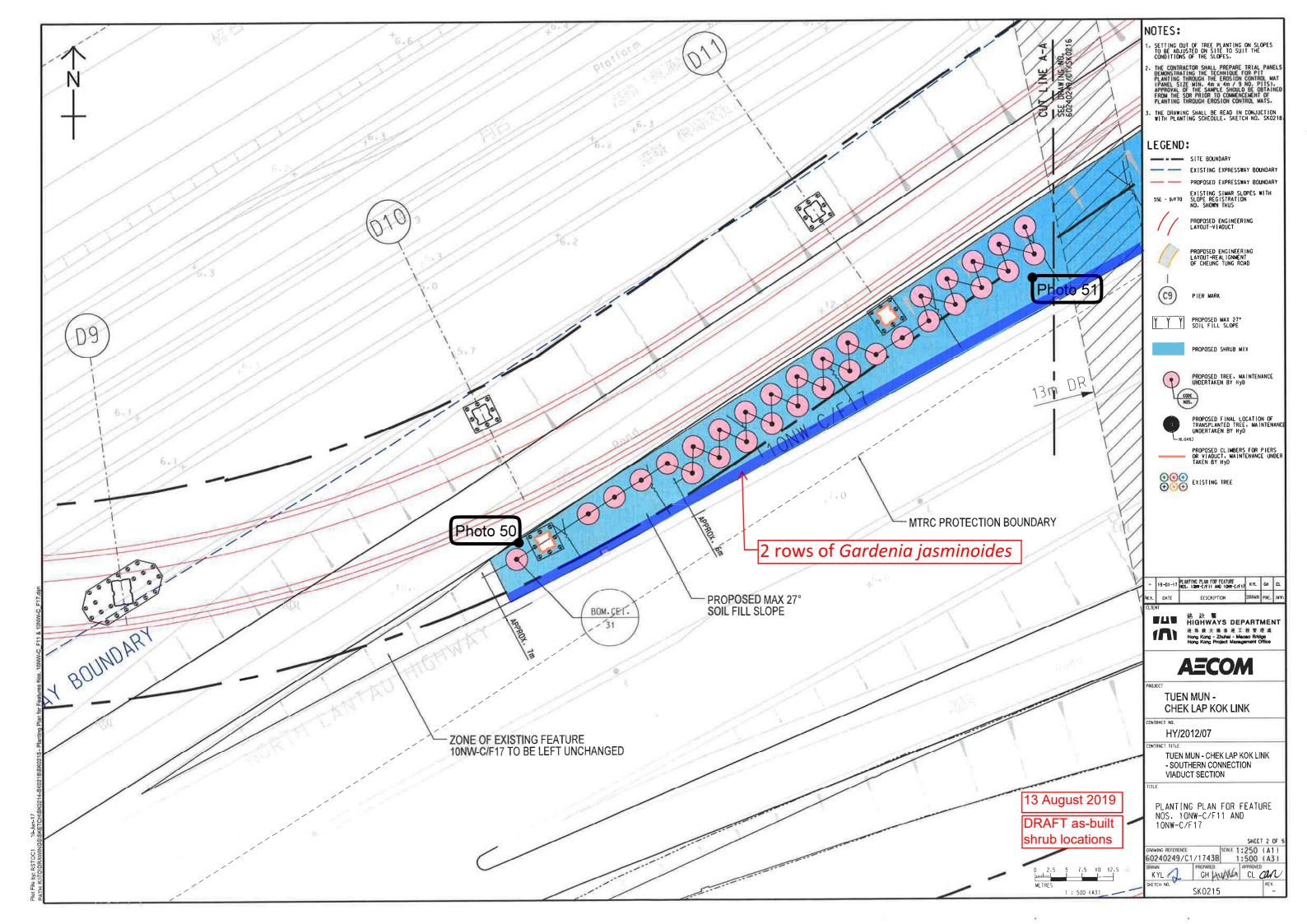


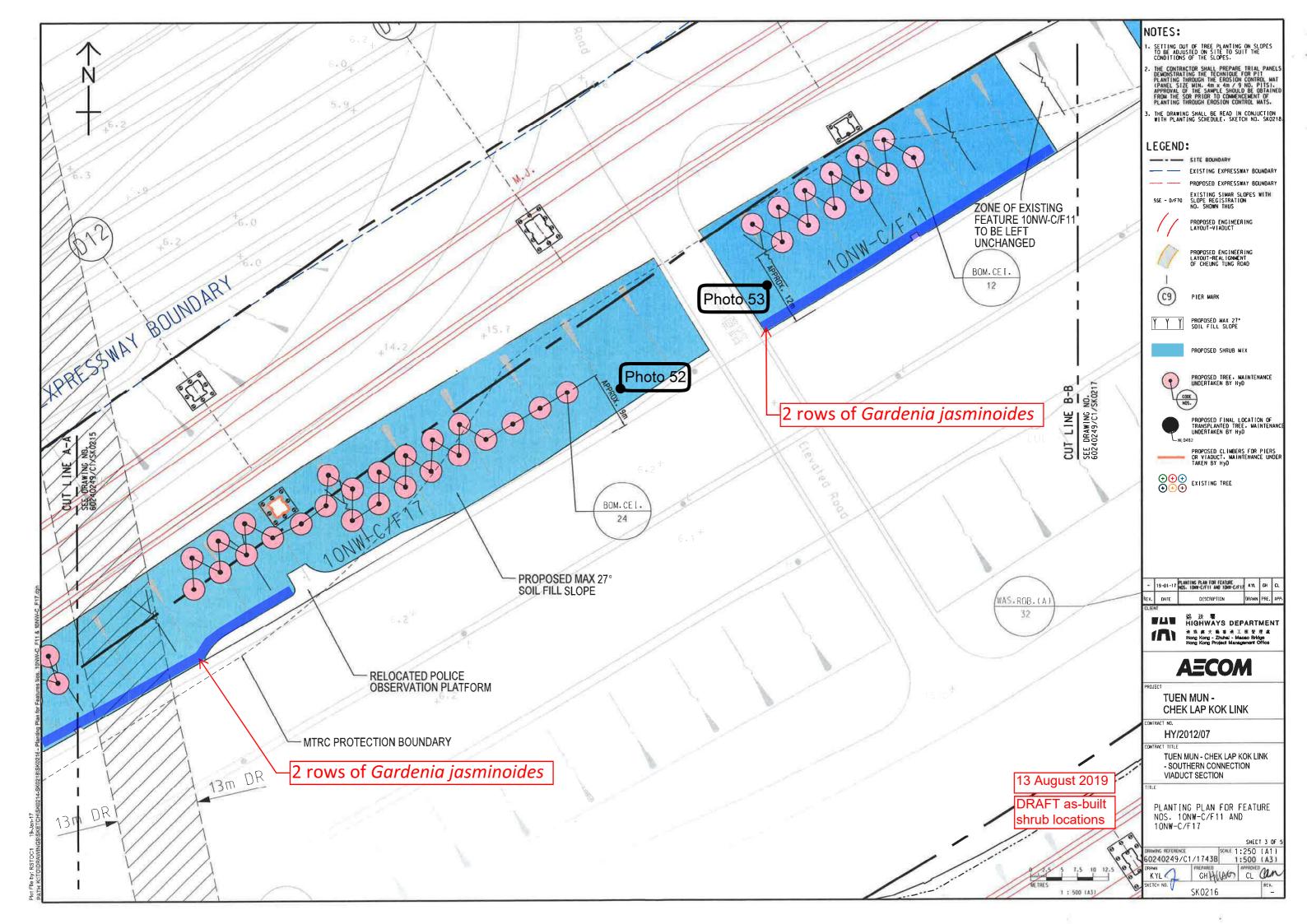
	LEGEND:			
	SITE BOUNDARY EXISTING EXPRESSWAY BOUNDARY PROPOSED EXPRESSWAY BOUNDARY IREVISED EXISTING SIMAR SLOPES WITH SLOPE REGISTRATION NO. SHOWN THUS PROPOSED ENGINEERING LAYOUT-VIADUCT			
	PROPOSED ENGINEERING LAYOUT-REALICAMENT OF CHEUNG TUNG ROAD			
	D19 PIER MARK			
	Y Y Y PROPOSED FILL SLOPE			
10NW-CZF11	PROPOSED HYDROSEEDING MAINTENANCE UNDERTAKEN BY HyD			
HYM.LIT. 713m'	PROPOSED SHRUB MAINTENANCE UNDERTAKEN BY HYD			
1	MATHTENANCE UNDERTAKEN BY HYD			
`	PROPOSED TREE - MAINTENANCE UNDERTAKEN BY HyD			
· · · · ·	PROPOSED FINAL LOCATION OF TRANSPLANTED TREE. MAINTENANC UNDERTAKEN BY HyD			
1	PROPOSED CLINGERS FOR PIERS OR VIADUCT MAINTENANCE UNDER TAKEN BY HYD			
1	€ € € EXISTING TREE € • • • • • • • • • • • • • • • • • • •			
1				
	B 09-05-18 CINCERA, ANCHINE MEN CC CH CL A 19-04-18 PLANTING AND LEGEND REVISED CC CH CL			
	- 23-03-18 PLANTING PLAN CON MOTIFIC LANTAU B CC GH CL REV. DATE DESCRIPTION DRAWN PRE. APP			
	DJBNT B 放響 HIGHWAYS DEPARTMENT 港市大岛市工家管理業 Hong Kong - Zhahal - Macao Bridge Hong Kong Project Managament Office			
il il	RECOM			
G	CHEK LAP KOK LINK CONTRACT NO. HY/2012/07 CONTRACT TITLE TUEN MUN - CHEK LAP KOK LINK - SOUTHERN CONNECTION VIADUCT SECTION			
ugust 2019				
FT as-built and/or b locations	TITLE PLANTING PLAN FOR NORTH LANTAU HIGHWAY (KOWLOON BOUND) VIADUCT D SHEET 5 DF 7			
IT OF PLANTING DETERMINED BY OCATION OF THE SSWAY BOUNDARY FENCE	ORAWING REFERENCE SCALE 1:500 (A1) 60240249/C1/1755B 1:1000 (A3) DRAMM PREPARED GC GL SKETCH NG. SK0347			
	SKU341 B			

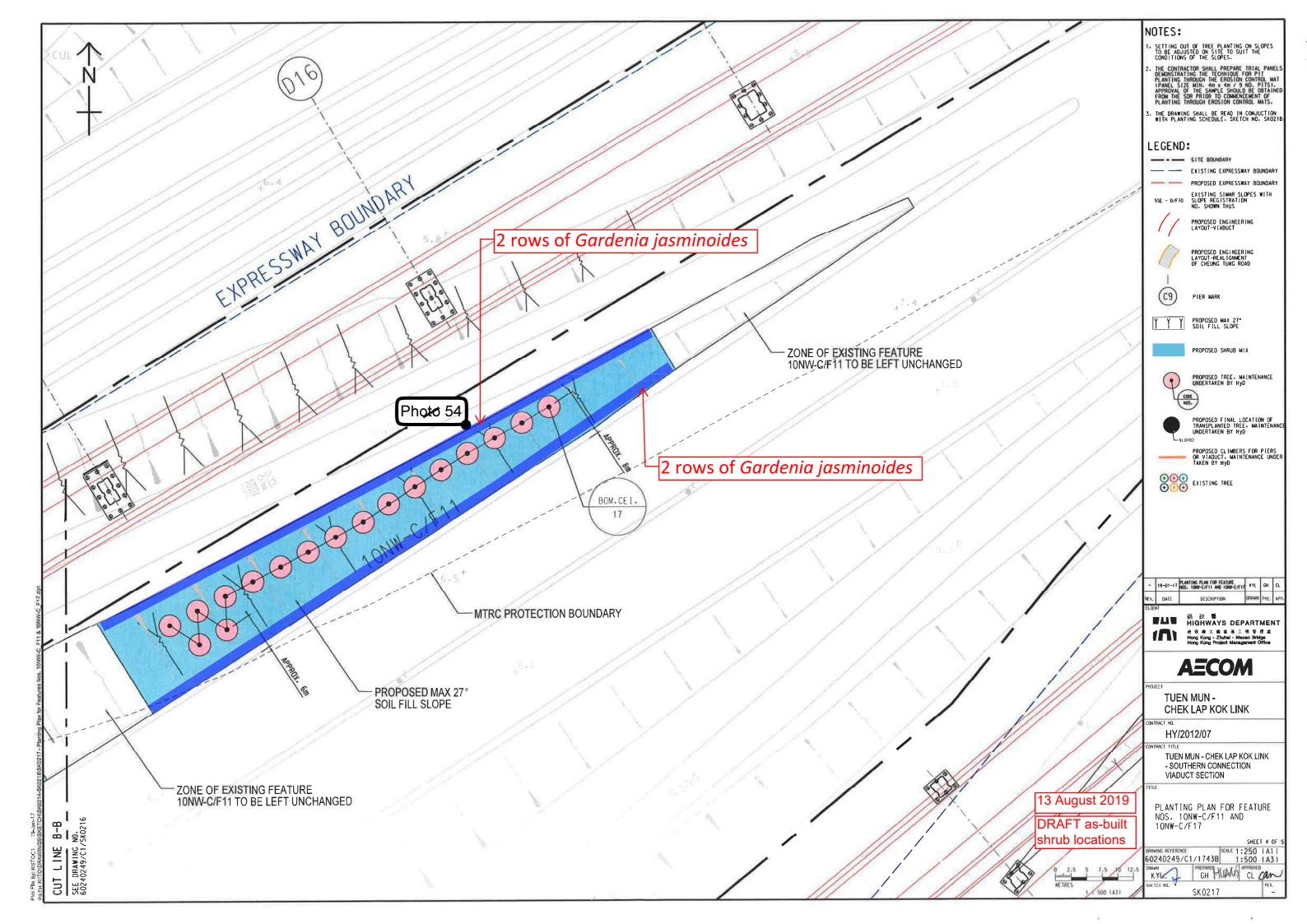


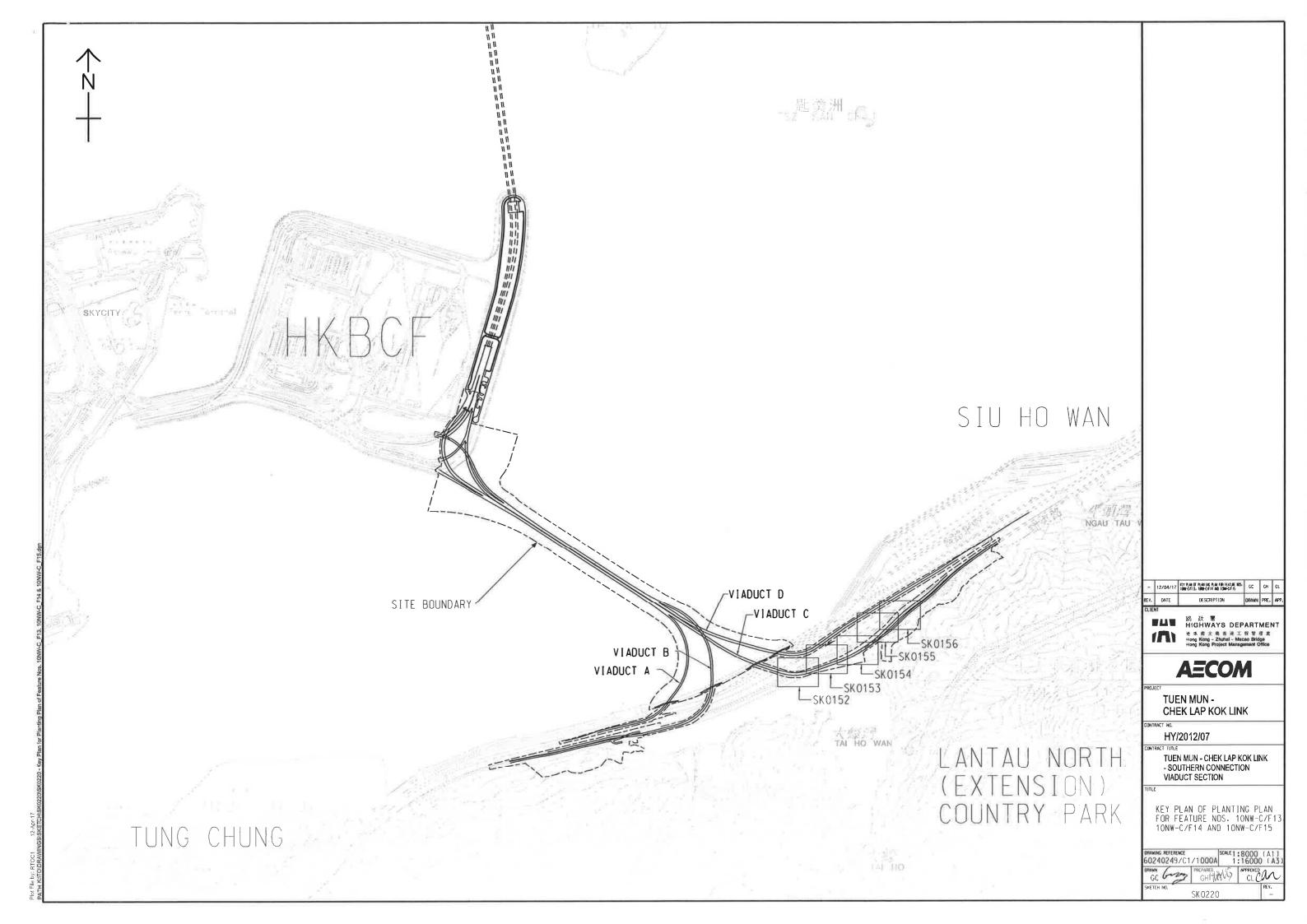
-		5	LEGEND	:	
	-10NW-C/	600 E	55E - 0/F10	SITE BOUNDARY EXISTING EXPRESS PROPOSED EXPRESS (REVISED) EXISTING SIMAR SLOPE REGISTRATI NO. SHOWN THUS PROPOSED ENGINEEL LAYOUT-VIADUCT	VAY BOUNDARY LOPES WITH ON
		r J	0	PROPOSED ENGINEED LAYOUT-REALIGNMEN OF CHEUNG TUNG RU	NT
1		_	 (019)	PIER MARK	
			YYY	PROPOSED FILL SL	OPE
		-		PROPOSED HYDROSE MAINTENANCE UNDE	
				PROPOSED SHRUB MAINTENANCE UNDE	RTAKEN BY HyD
			(//)	PROPOSED GROUNDC MAINTENANCE UNDE	OVER RTAKEN BY HYD
-		-	***	PROPOSED CLIMBER MAINTENANCE UNDER	RTAKEN BY HYD
+			P		A INTENANCE D
the second			P.	PROPOSED FINAL L TRANSPLANTED TRE UNDERTAKEN BY Hy	OCATION OF E. MAINTENANCE D
+	-			PROPOSED CLIMBER OR VIADUCT MAINTI TAKEN BY HYD	S FOR PIERS ENANCE UNDER
(C1	0			EXISTING TREE (APPROXIMATE LOC	AT (ON)
		8	24-08-18 ^{PLB}	THE REVISED	GC GH CL
		-	13 04 16	find and Loucho Ackings Gat intercom addient attacts o	CC CH CL
				DESCRIPTION 語 註 著 HIGHWAYS DEF E 11 由 大 18 中王 Tiong Kong Project Manag	
			TUEN	MUN -	
			CHEK LAP KOK LINK		
		COM	HY/2012/07 CONTRACT TITLE TUEN MUN - CHEK LAP KOK LINK - SOUTHERN CONNECTION VIADUCT SECTION		
IT OF PLANTING DETERMINED BY OCATION OF THE		TIF	TITLE PLANTING PLAN FOR NORTH LANTAU HIGHWAY (KOWLOON BOUND) VIADUCT D SHEET 6 OF 7		
SSWAY BO	UNDARY FENCE	60 094	NING REFERENCE 1240249/C NN SC TCH NOL	1/17568 SEALE 1:	500 (A1) 1000 (A3)

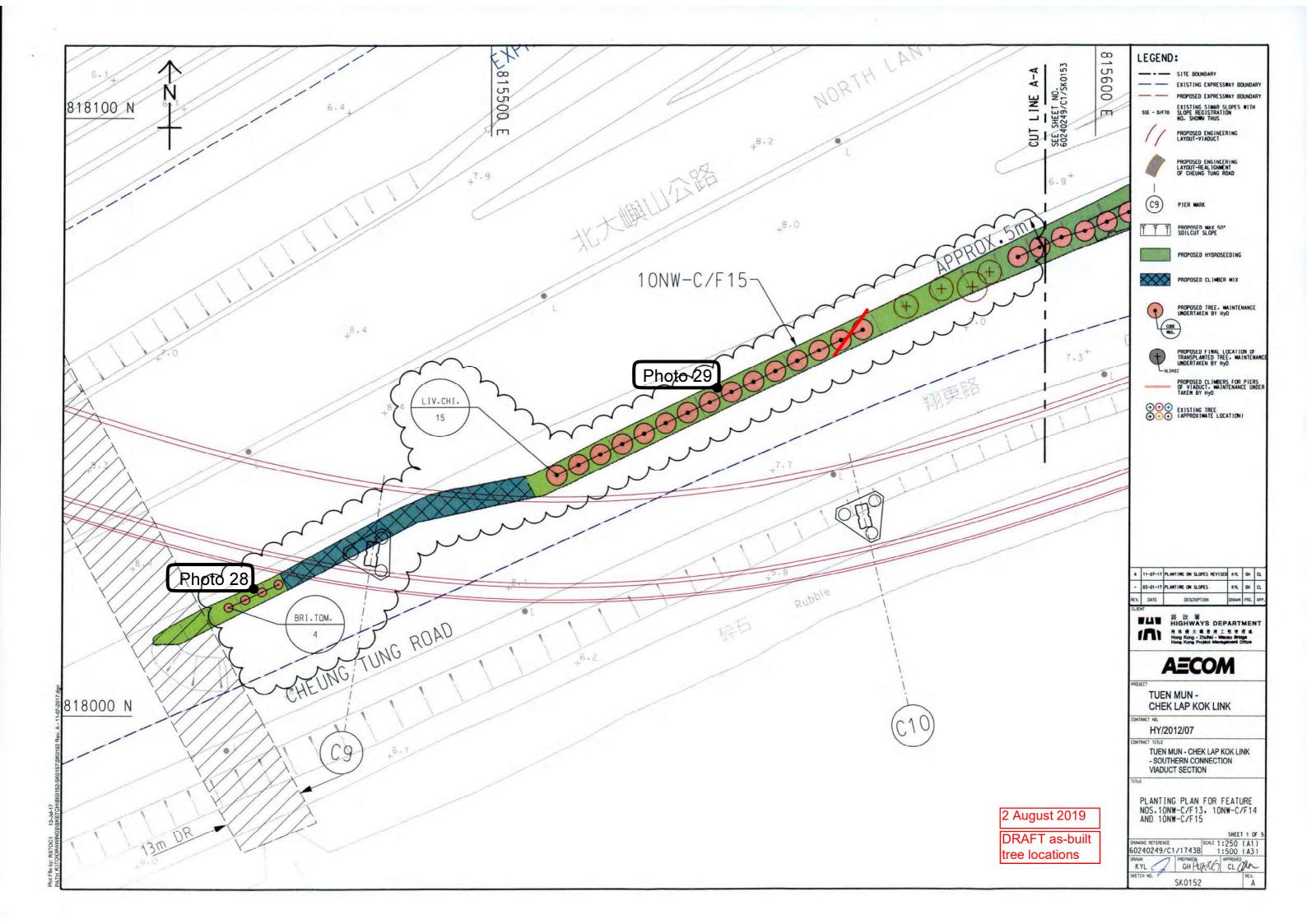


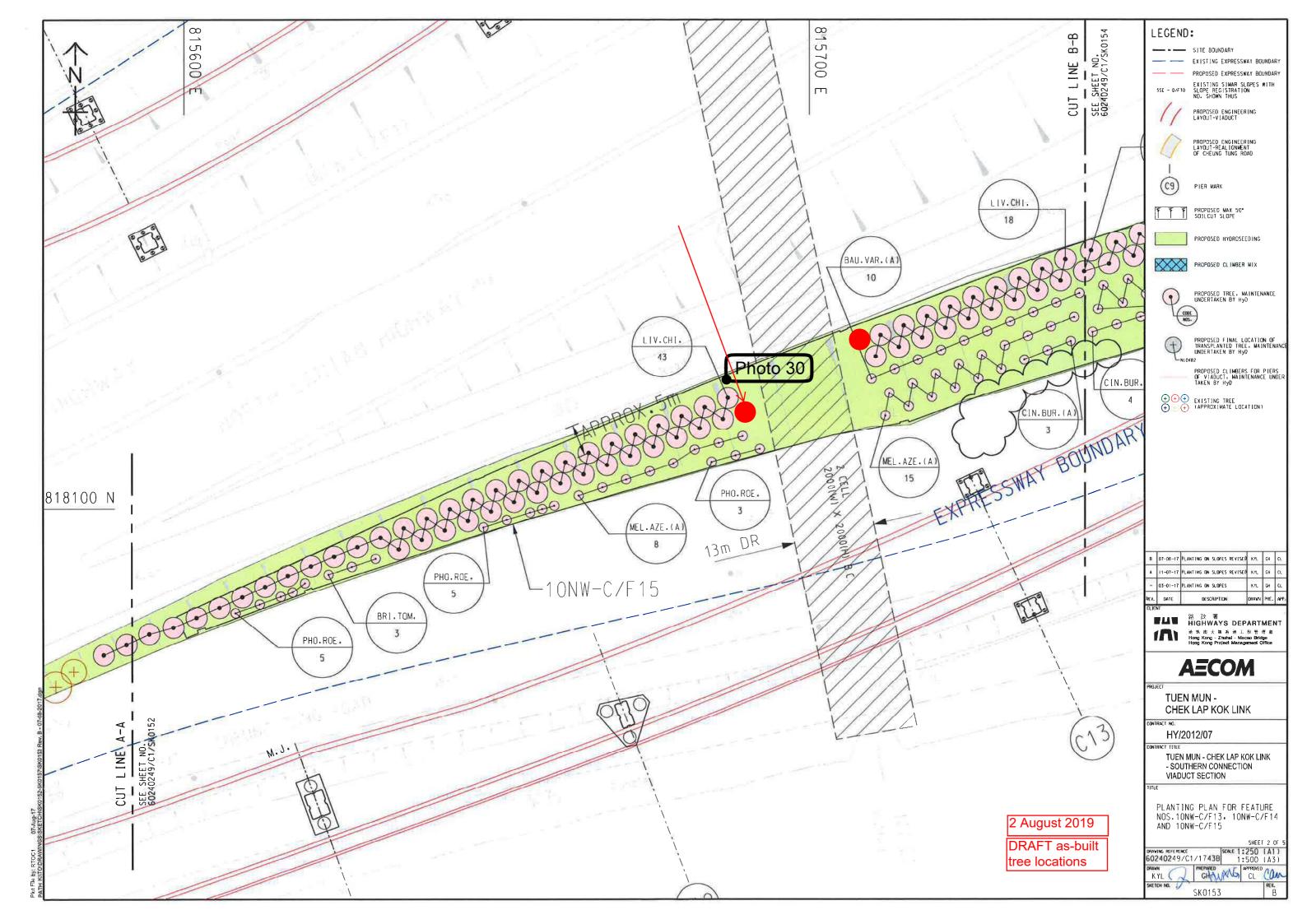


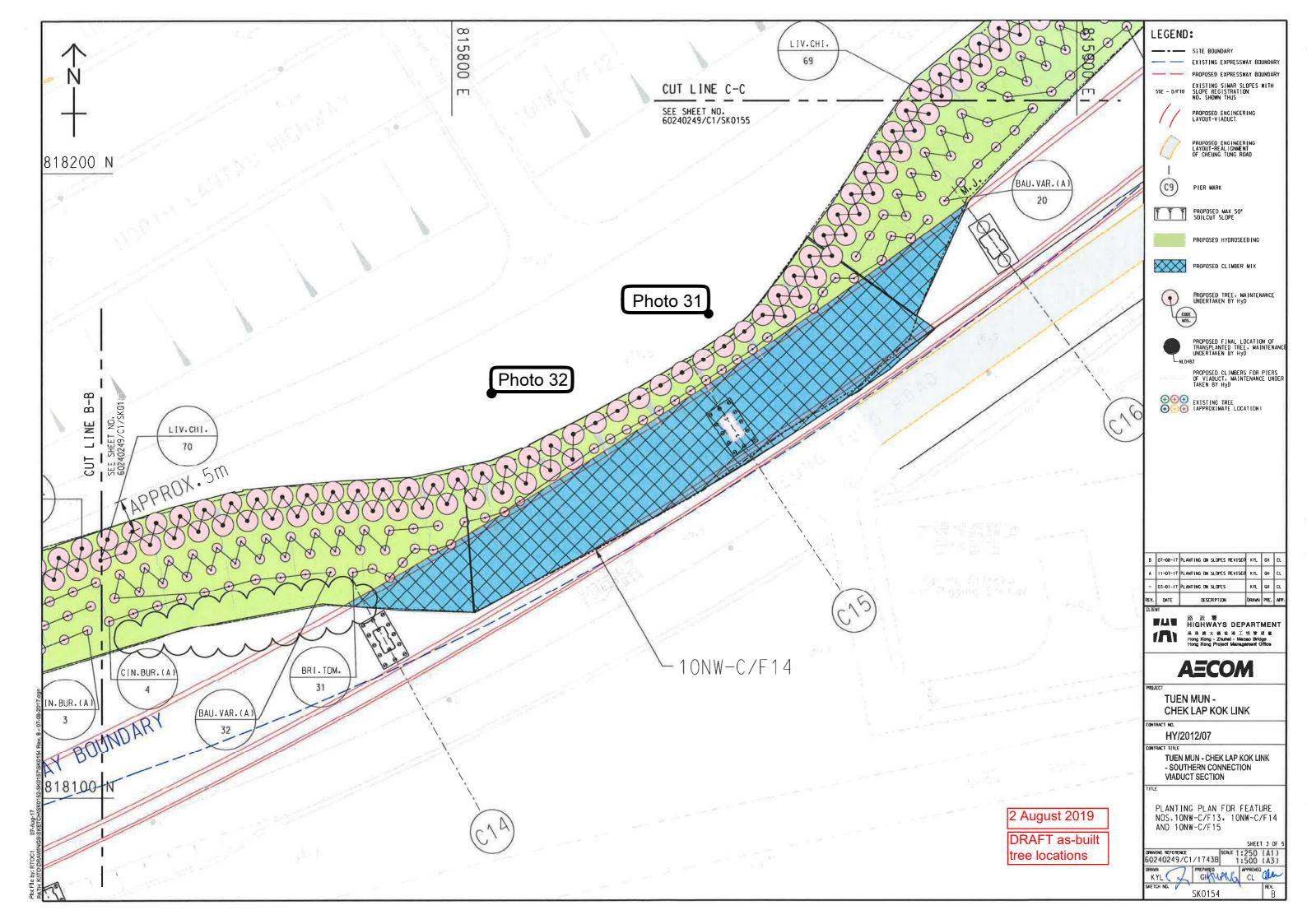


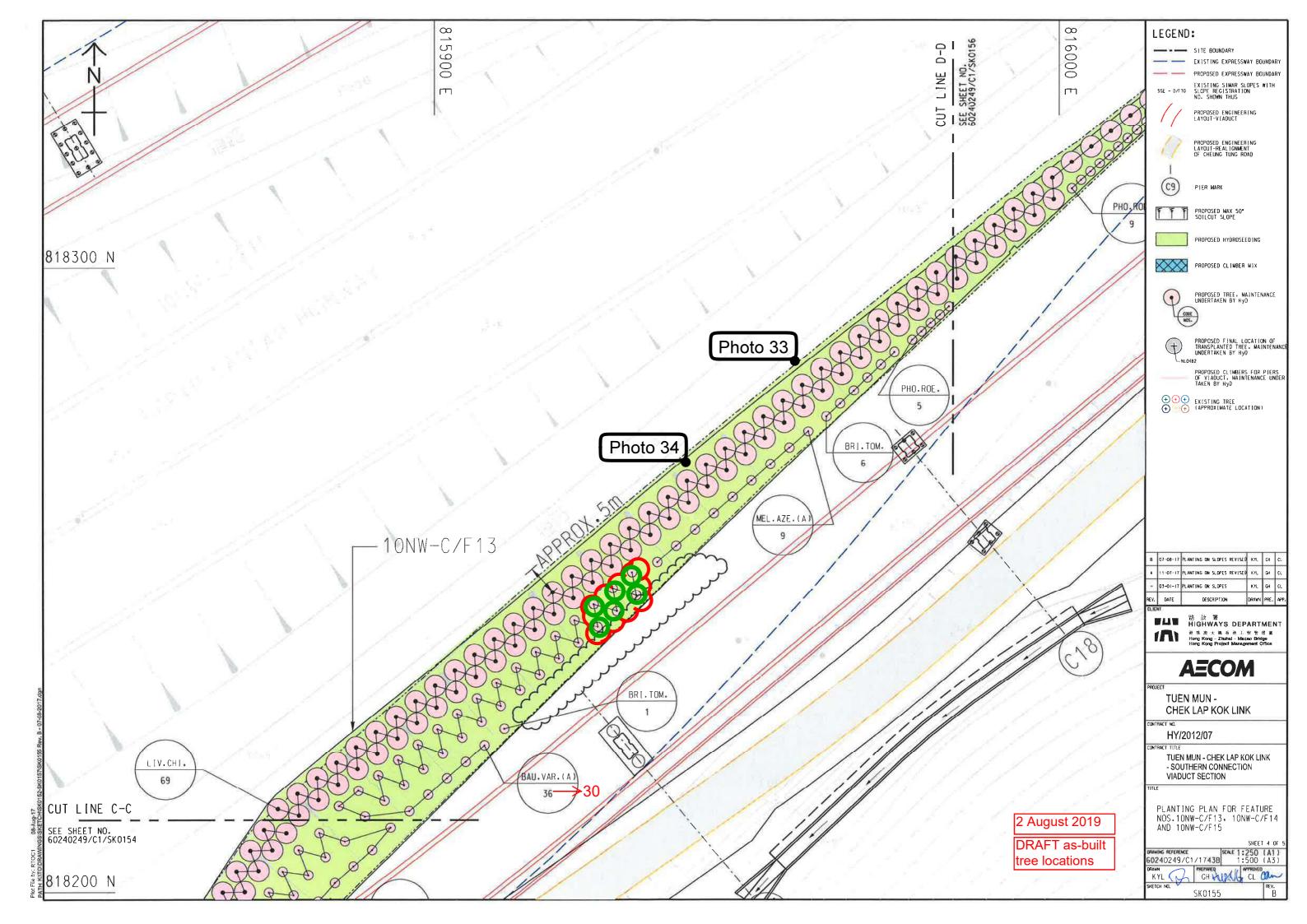


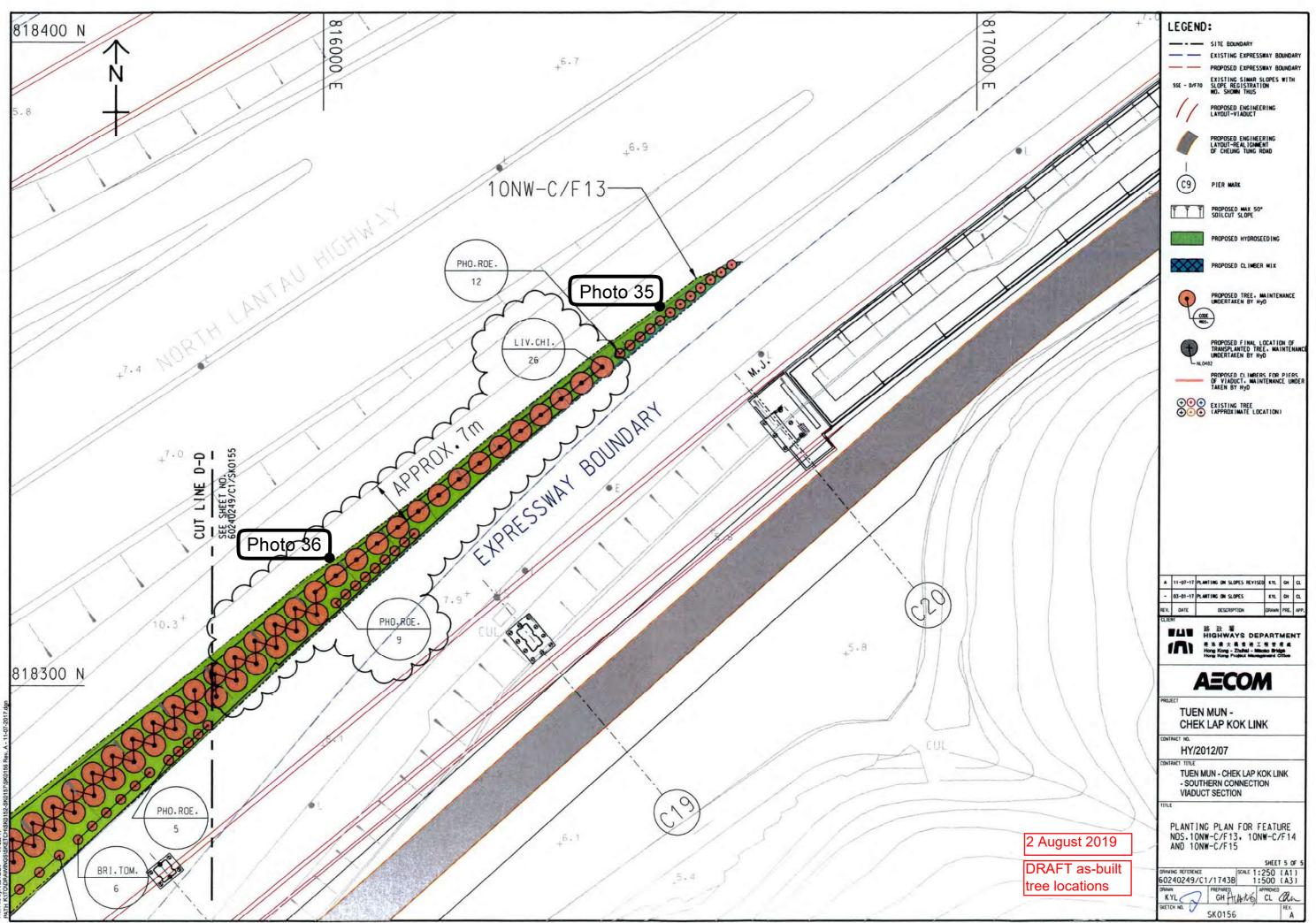


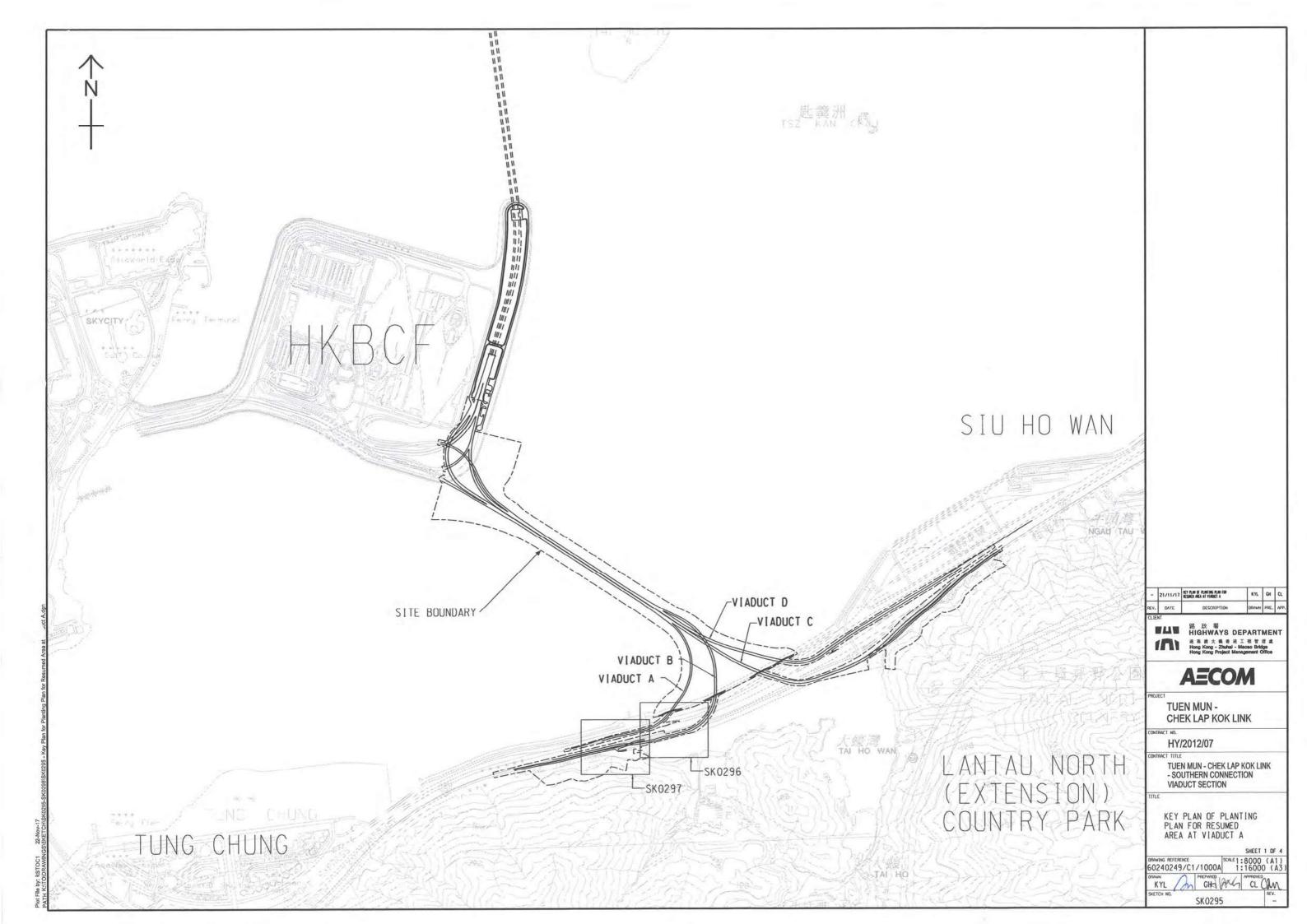


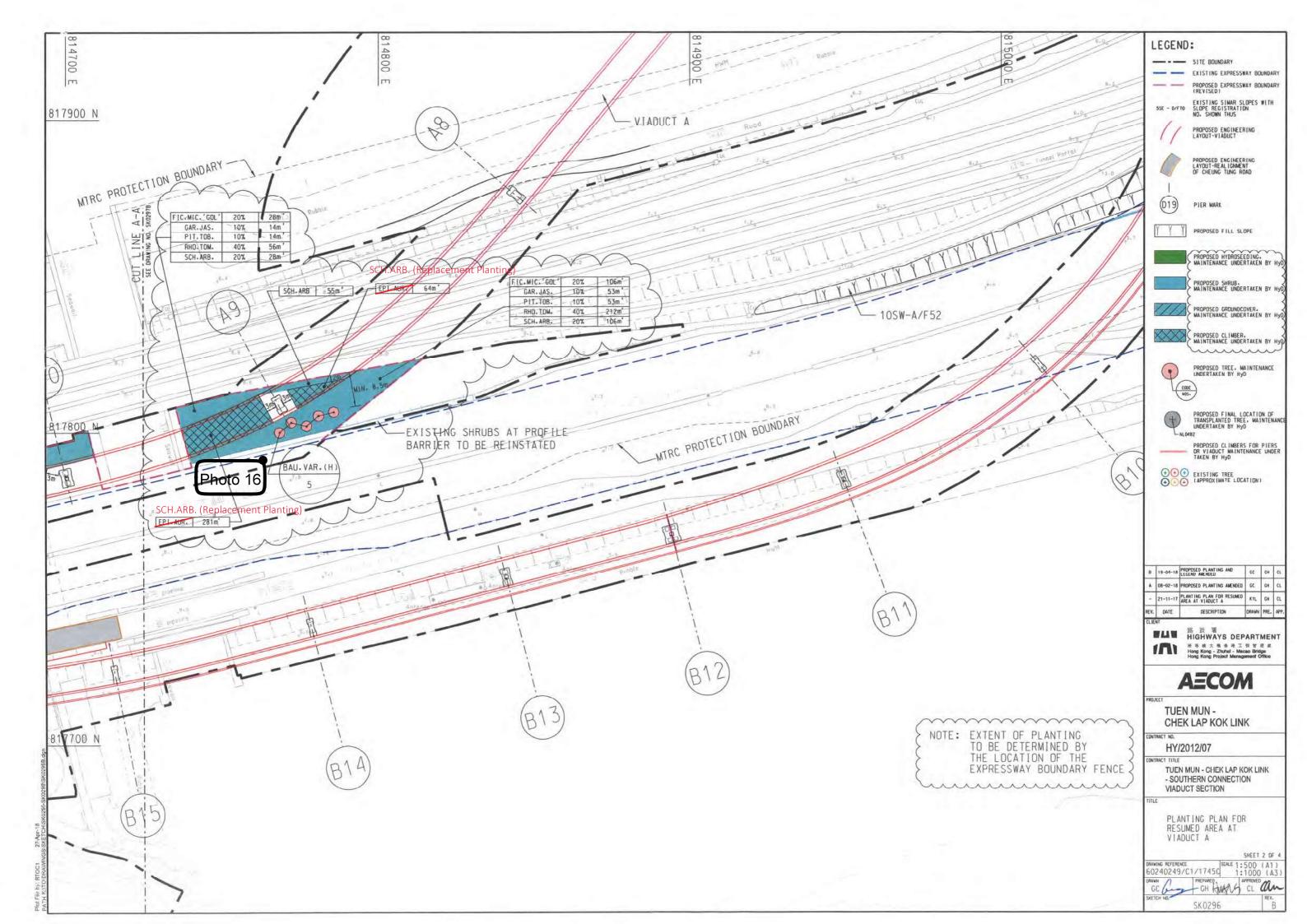


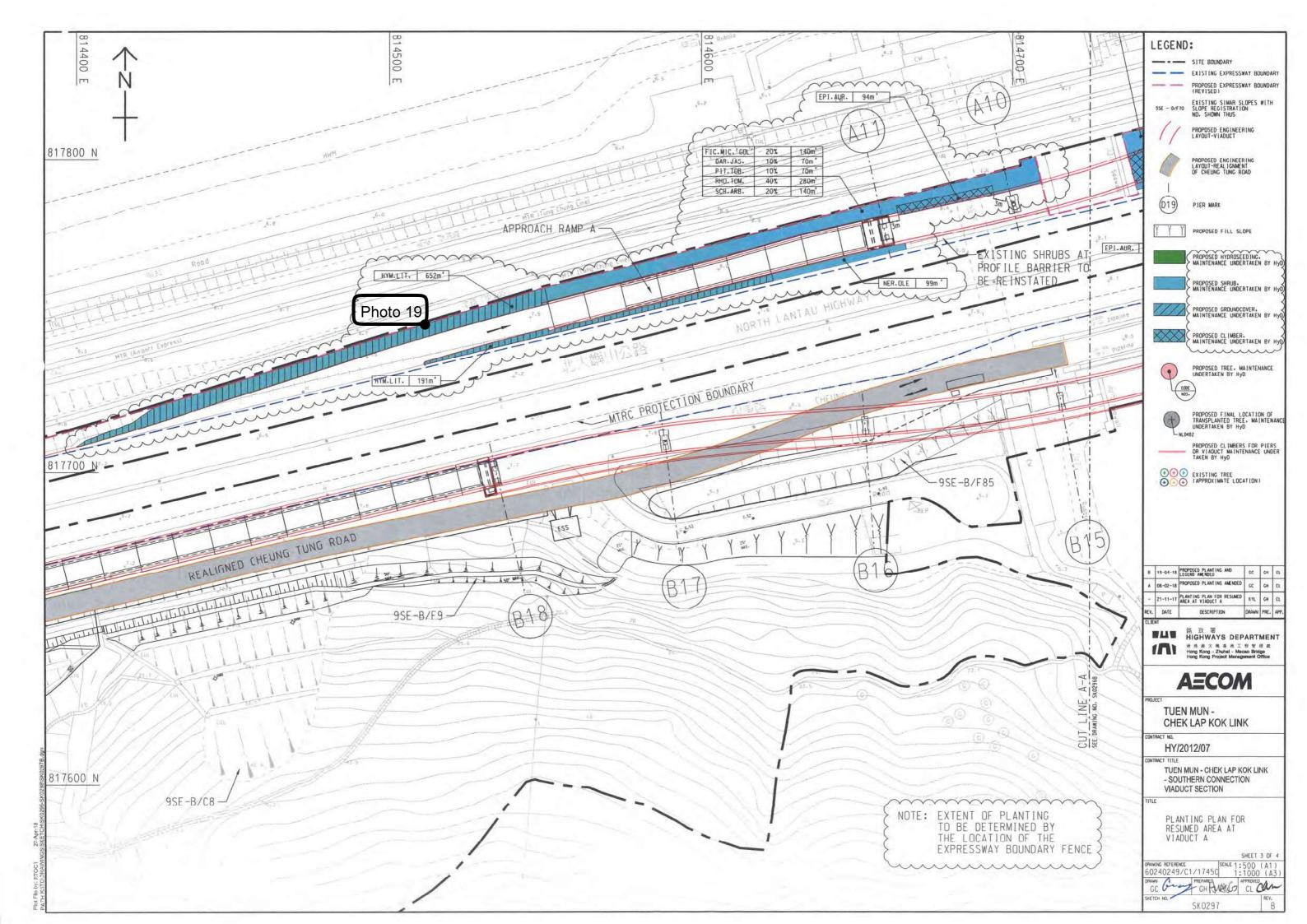


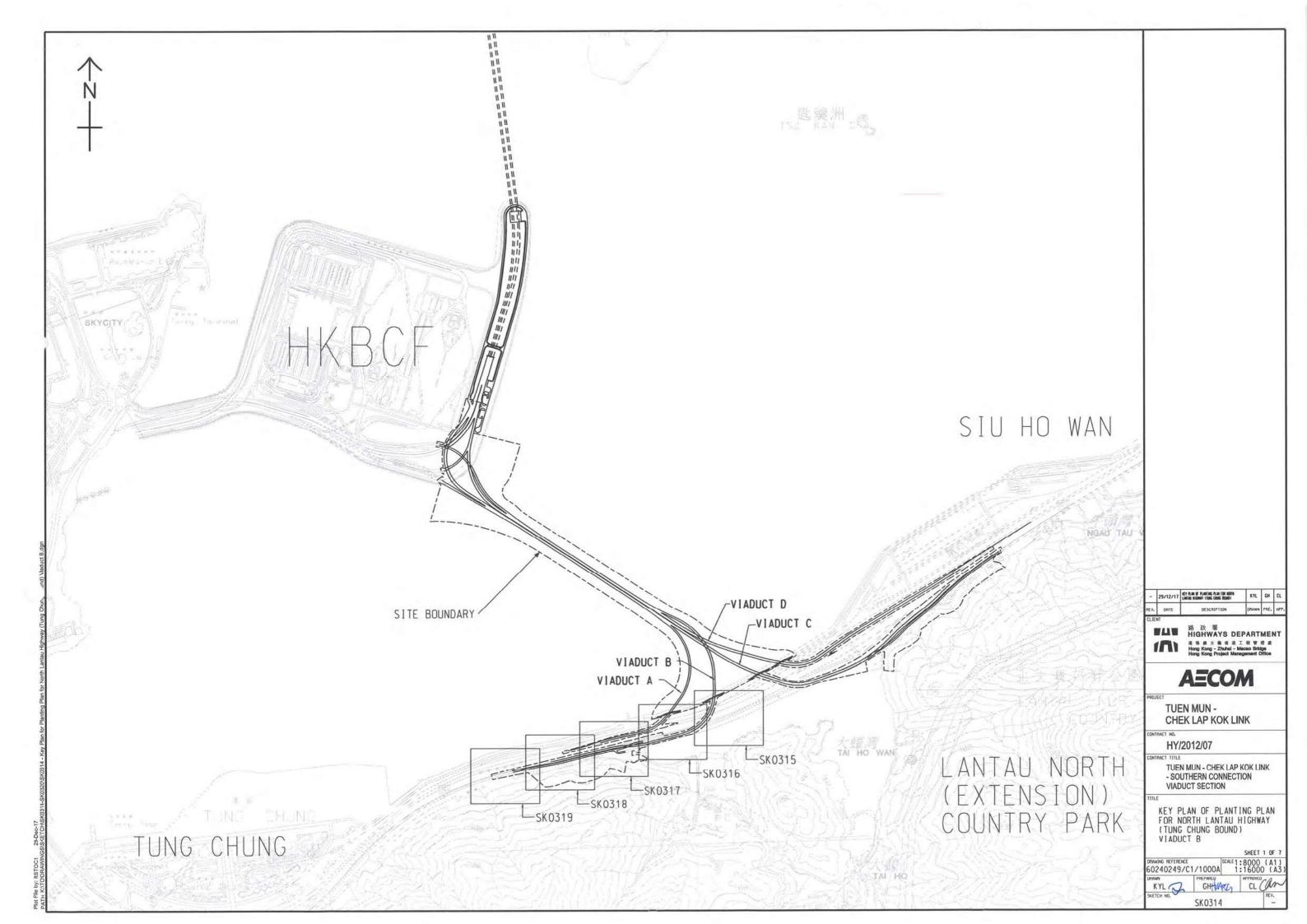


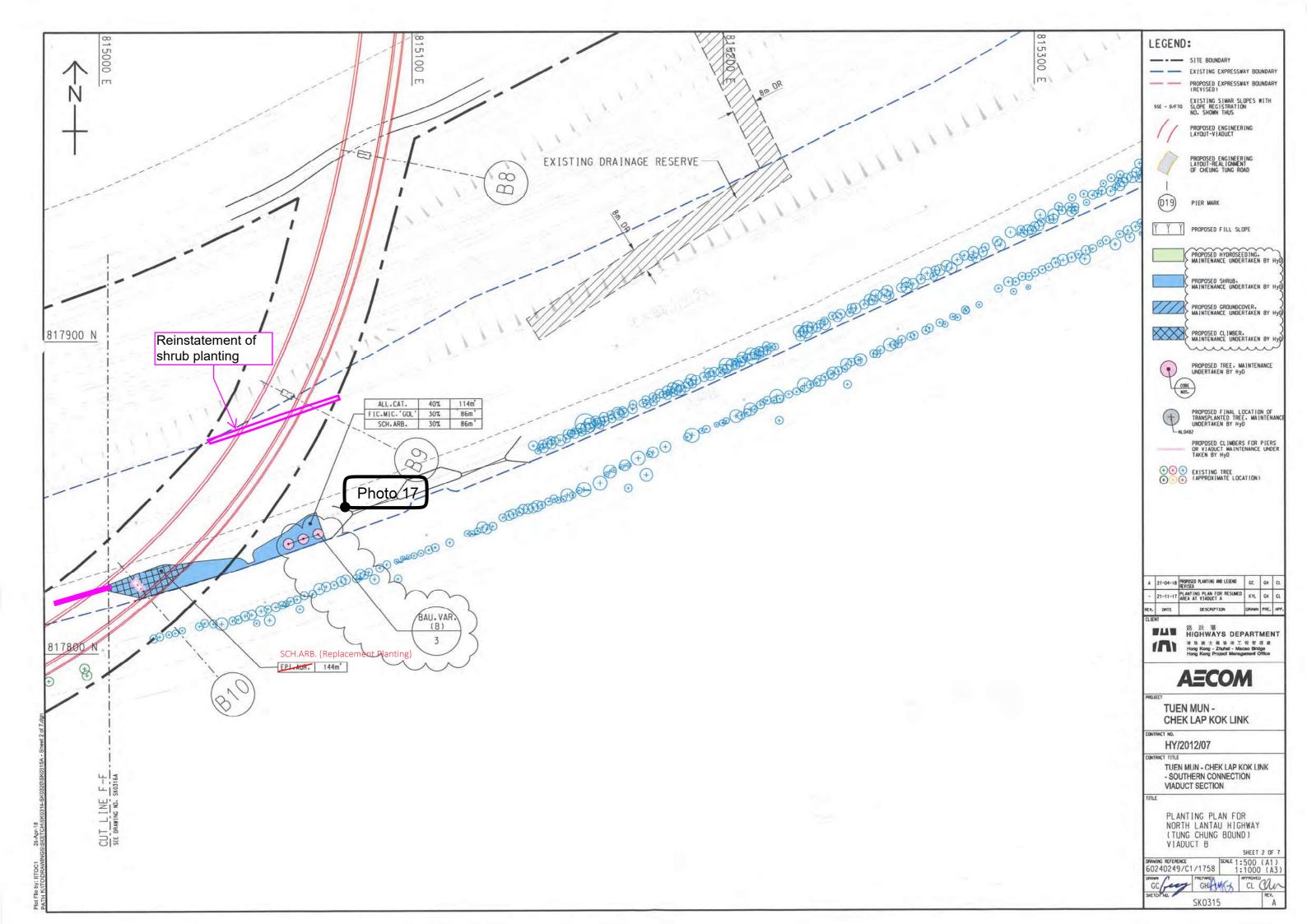


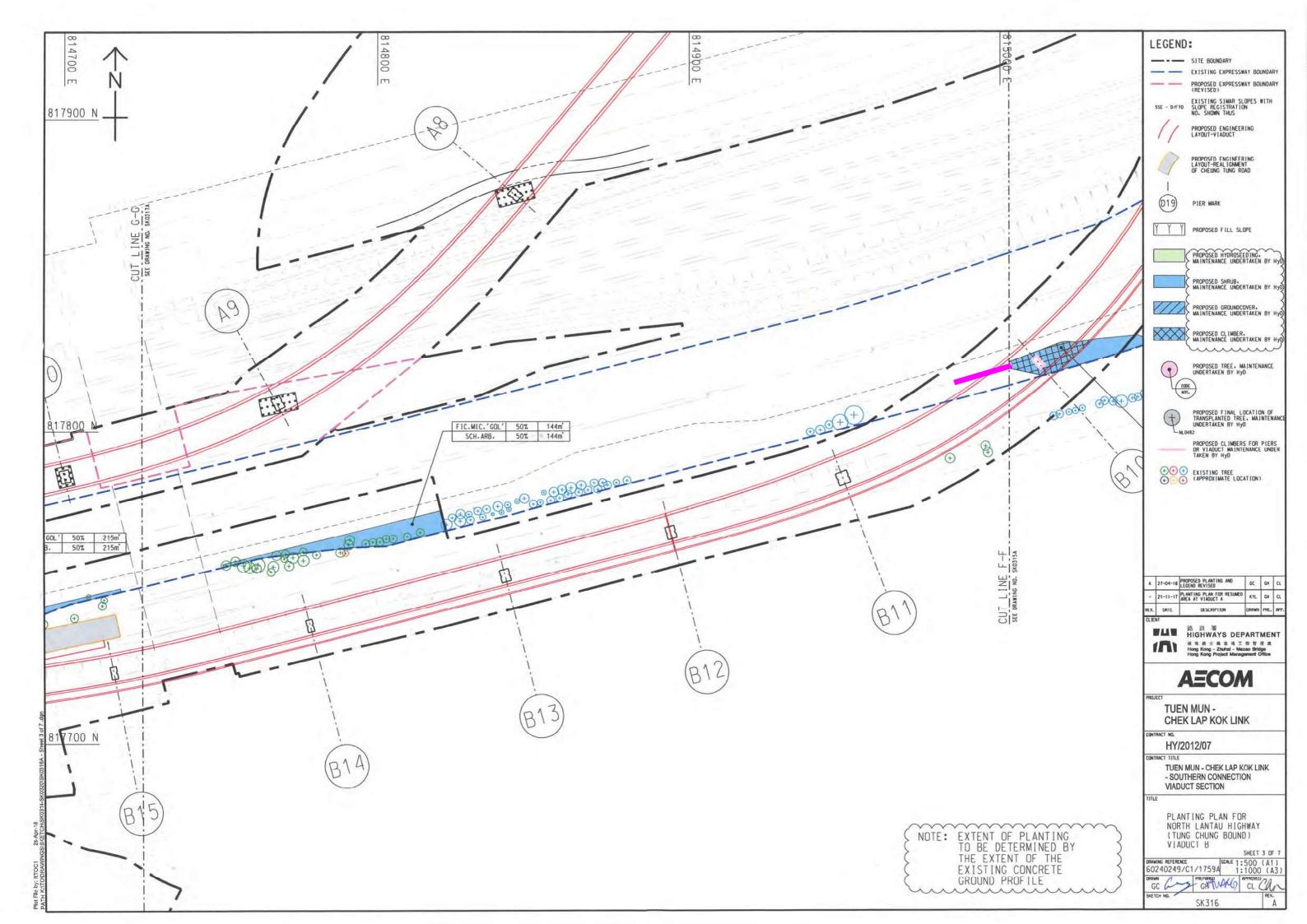


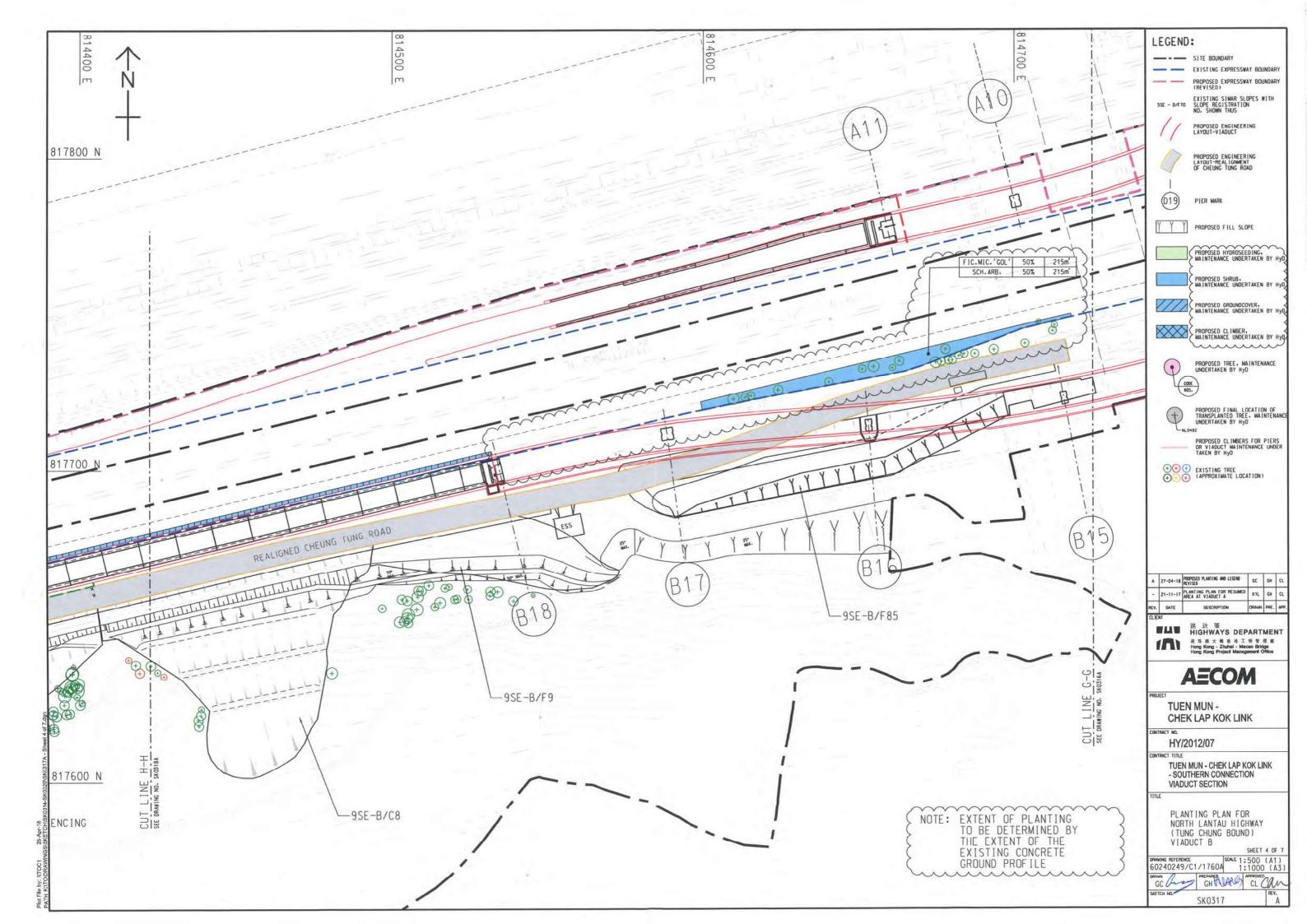


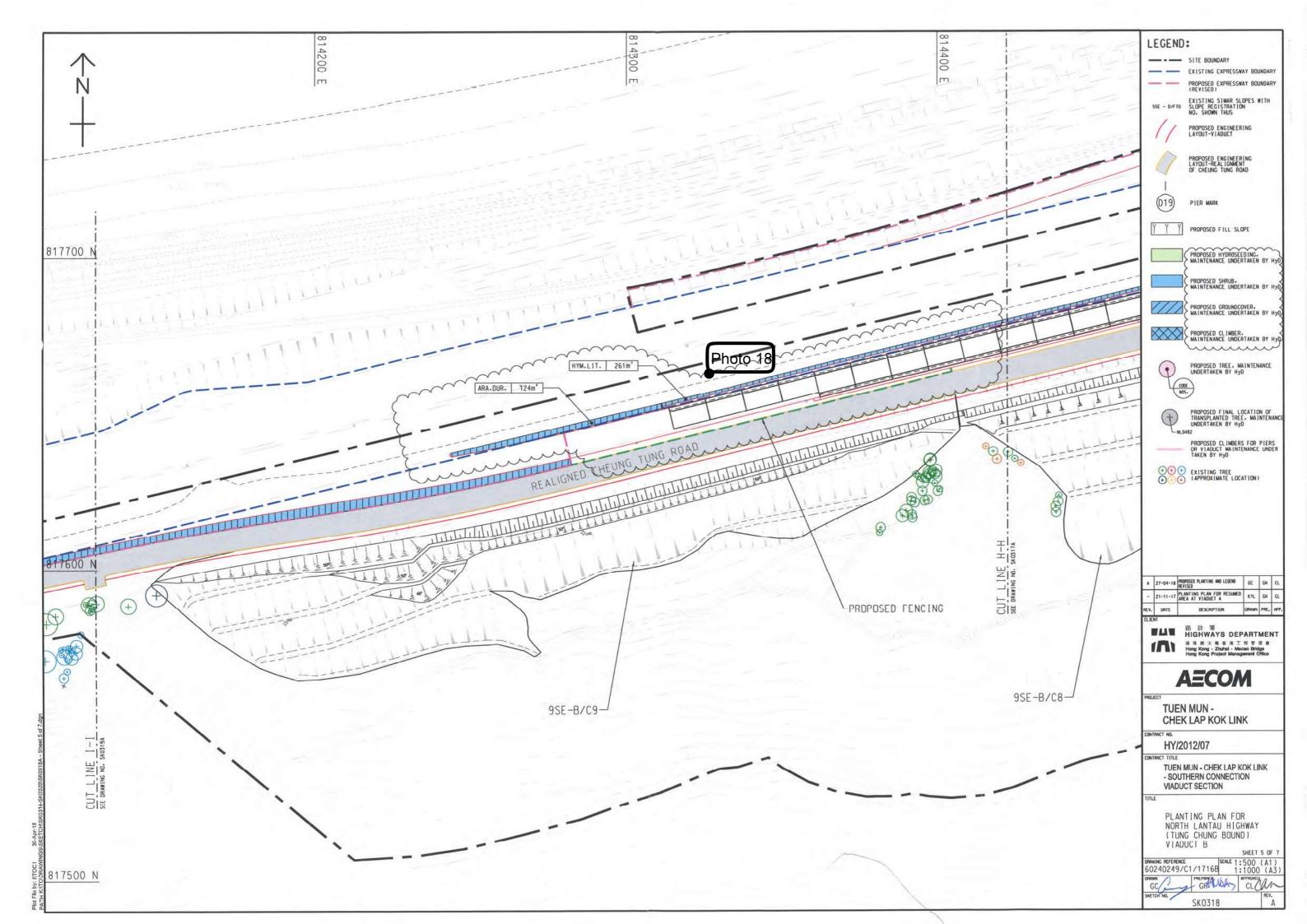


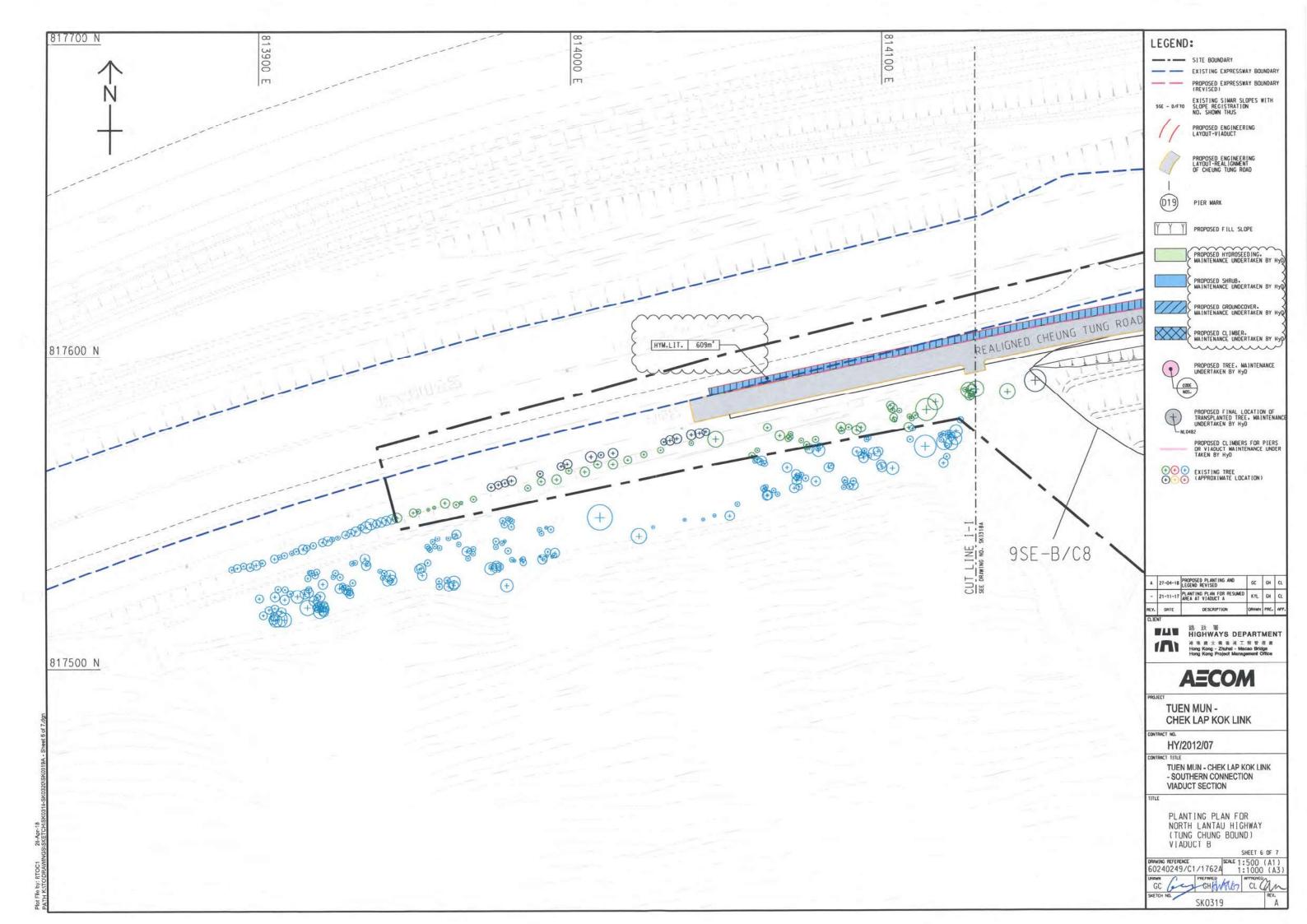


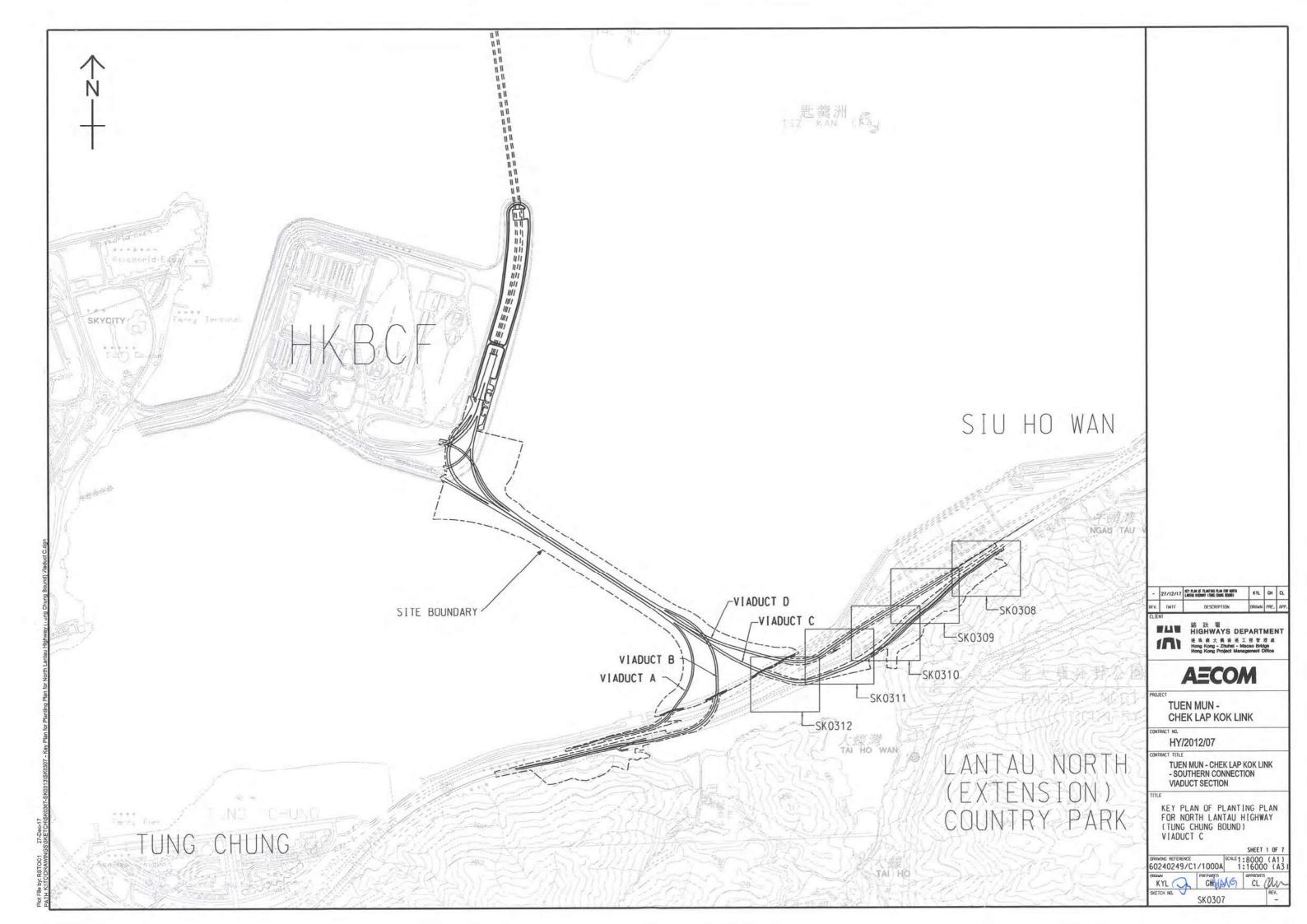


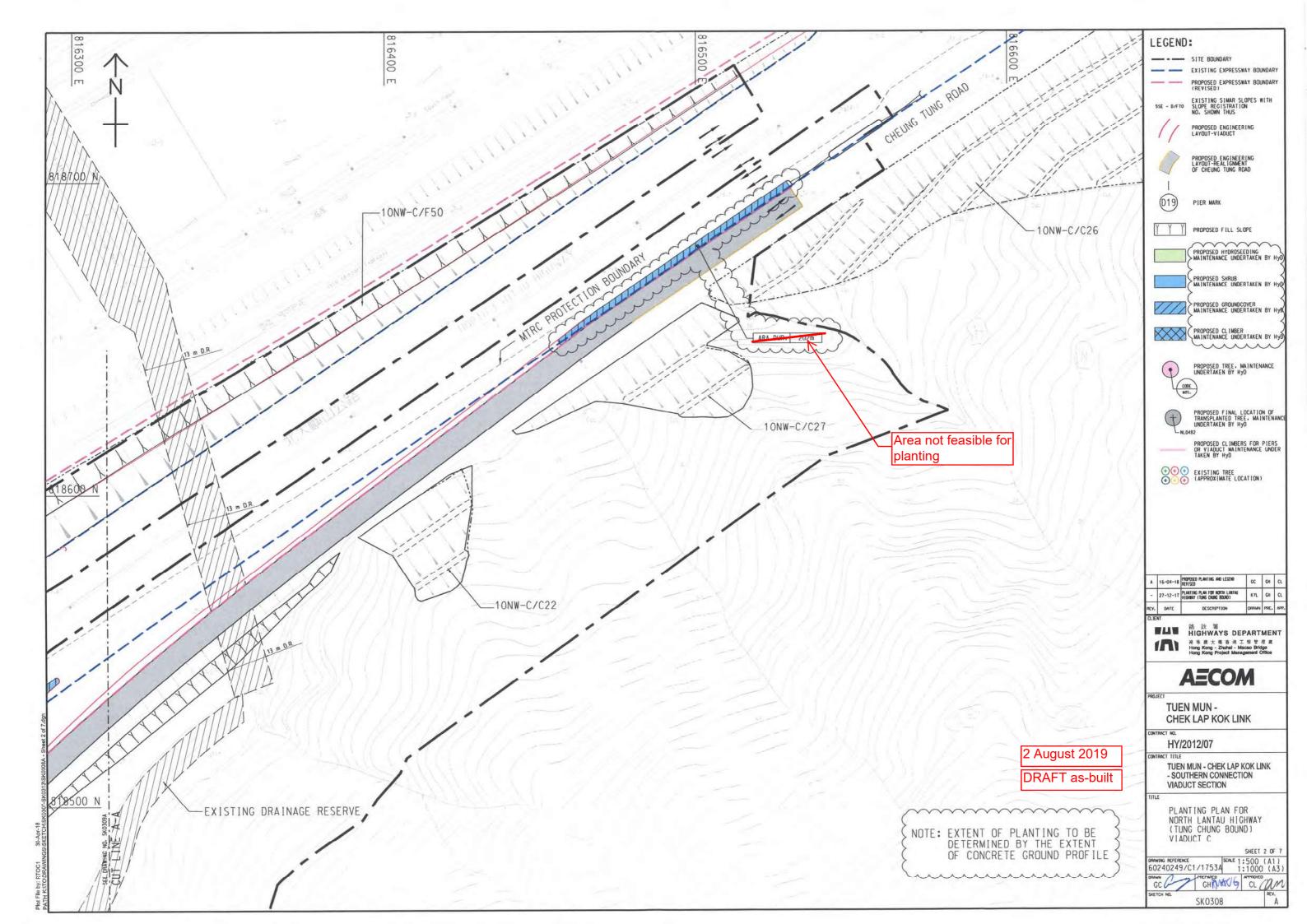


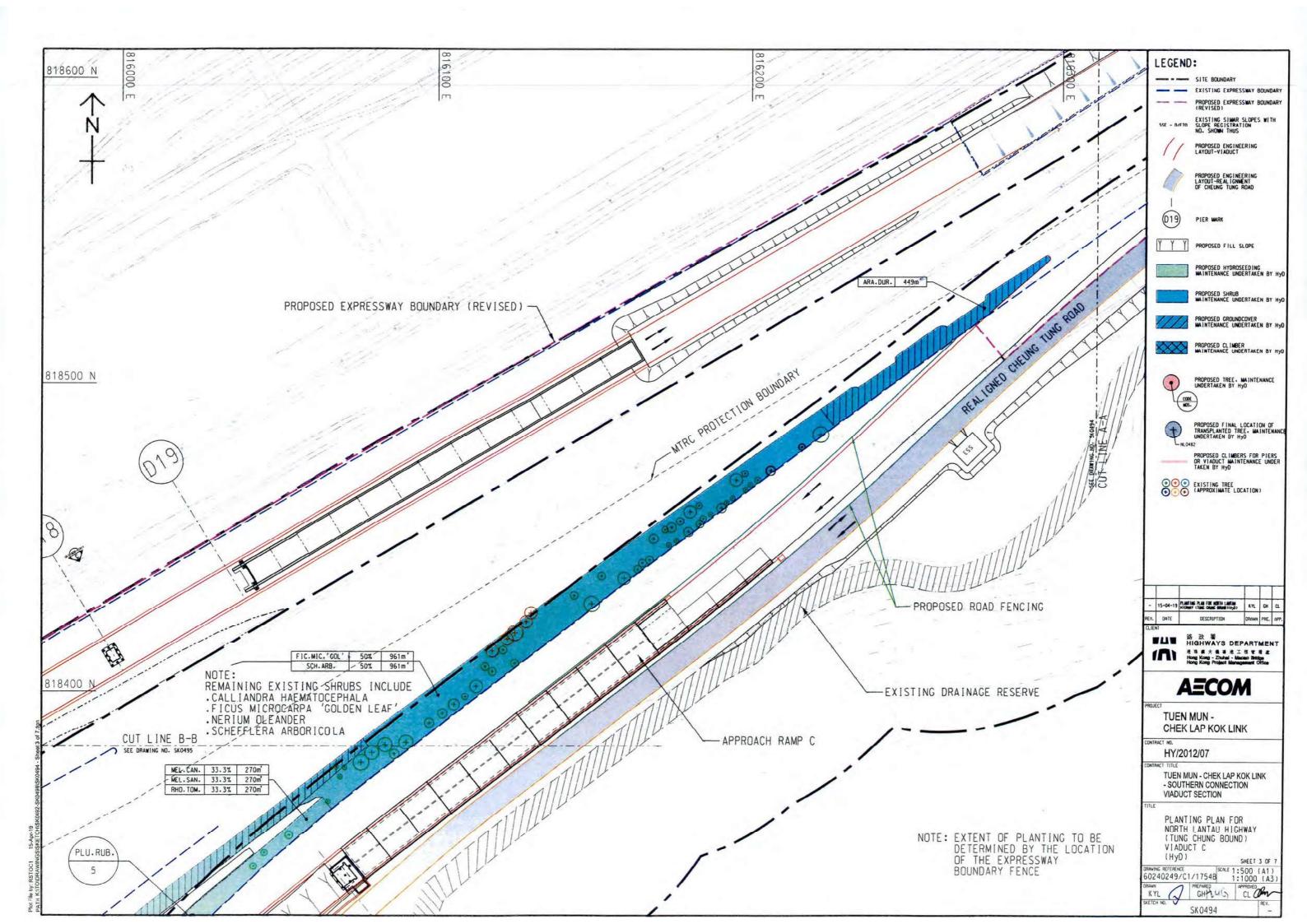


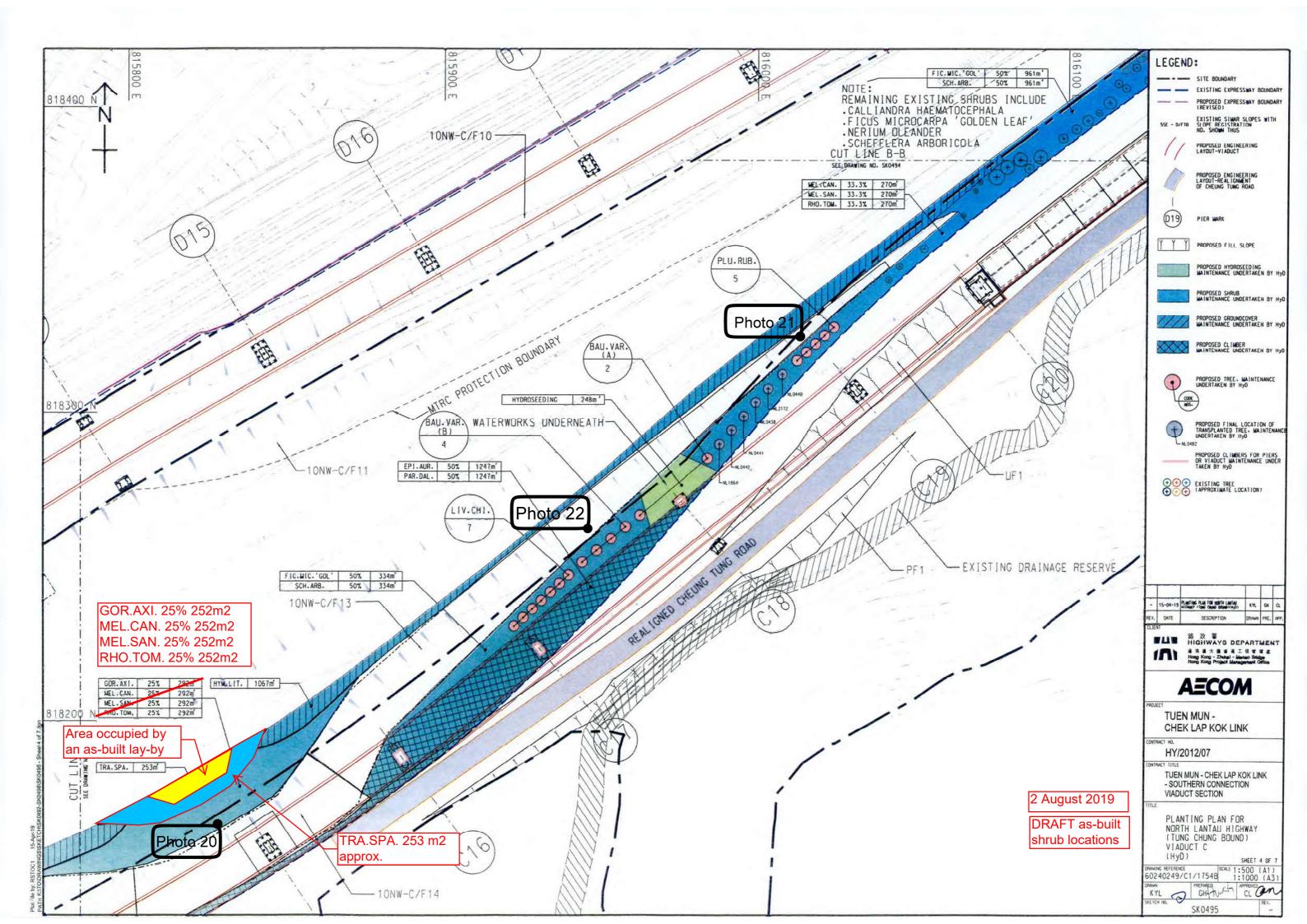


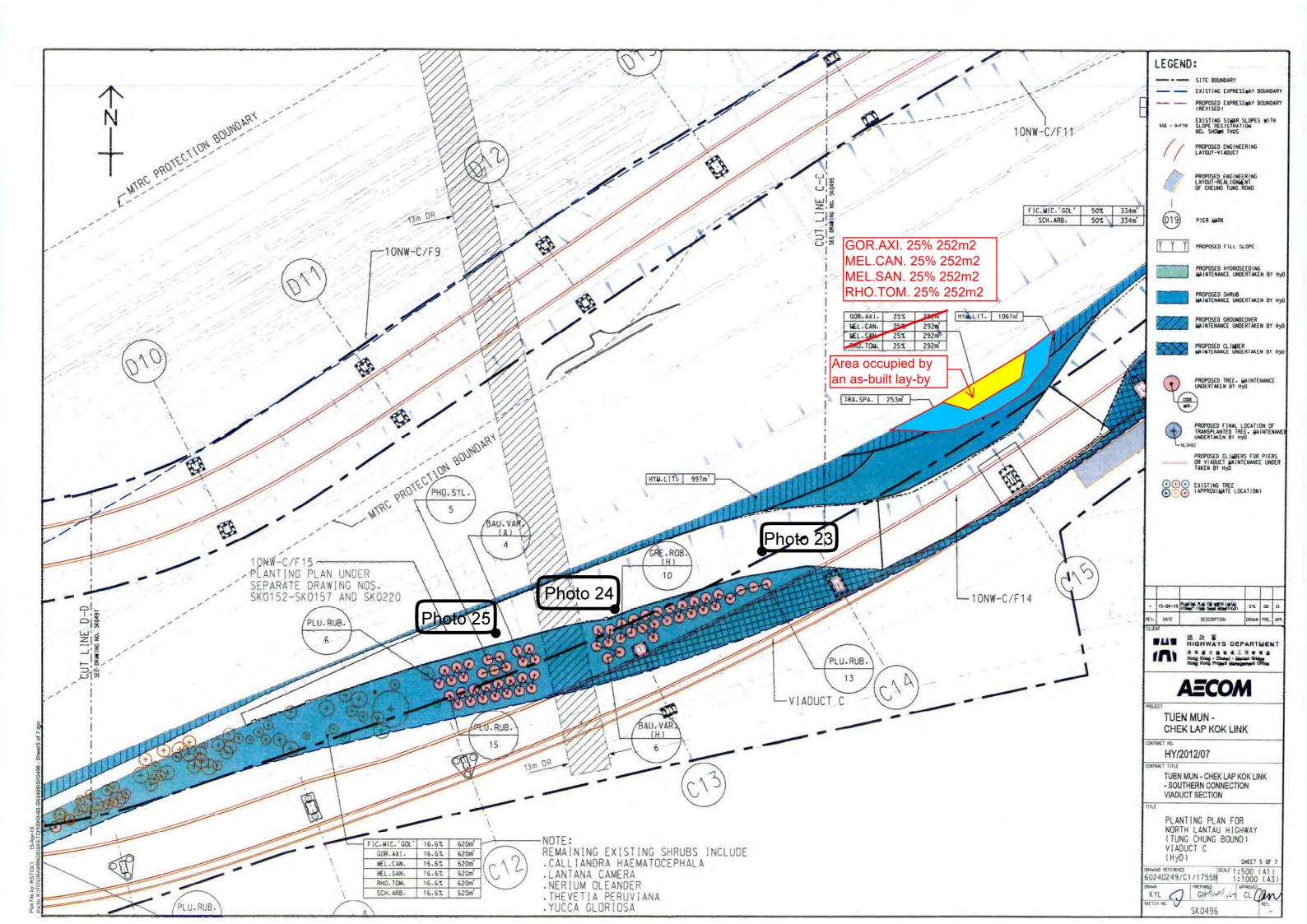


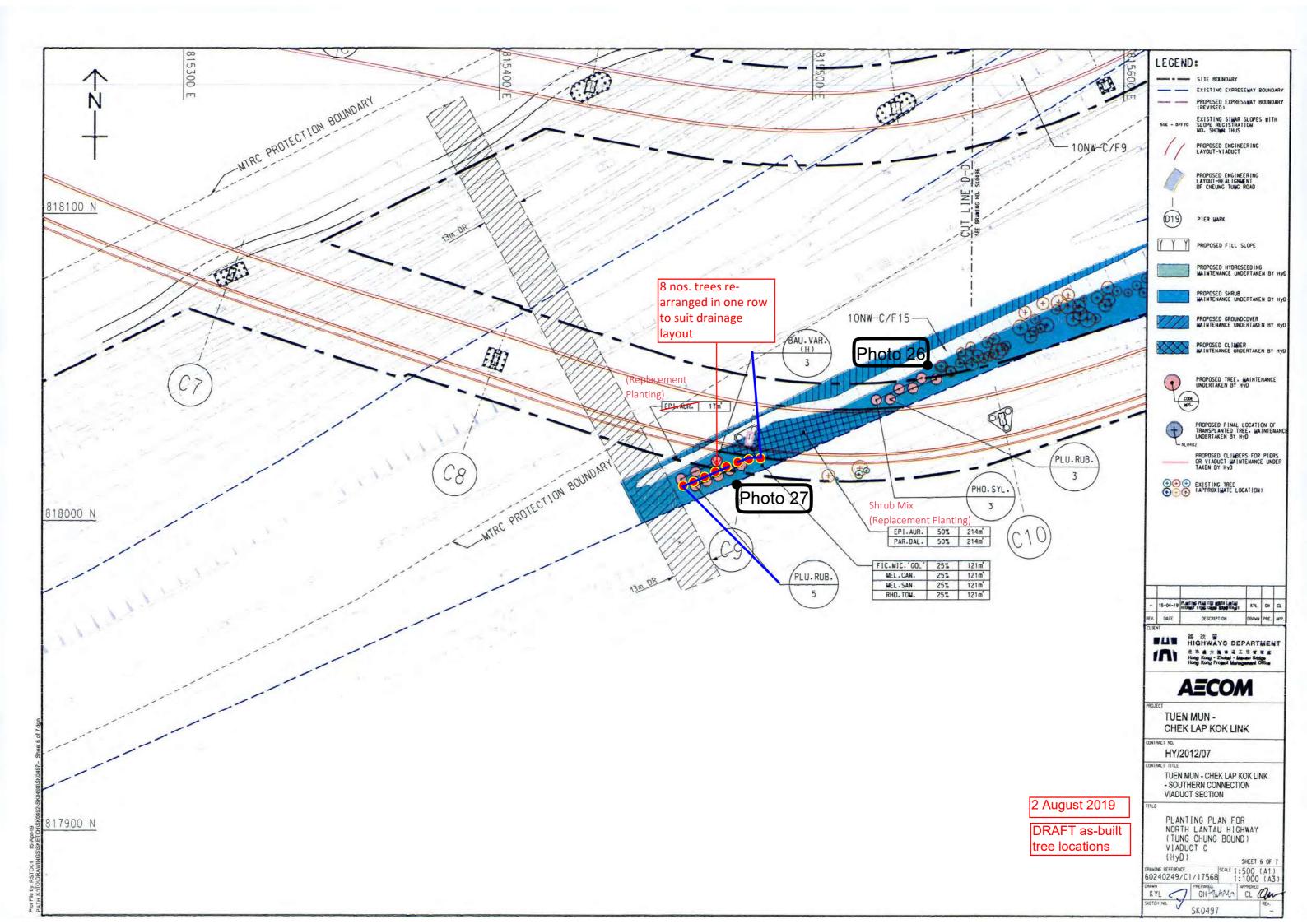


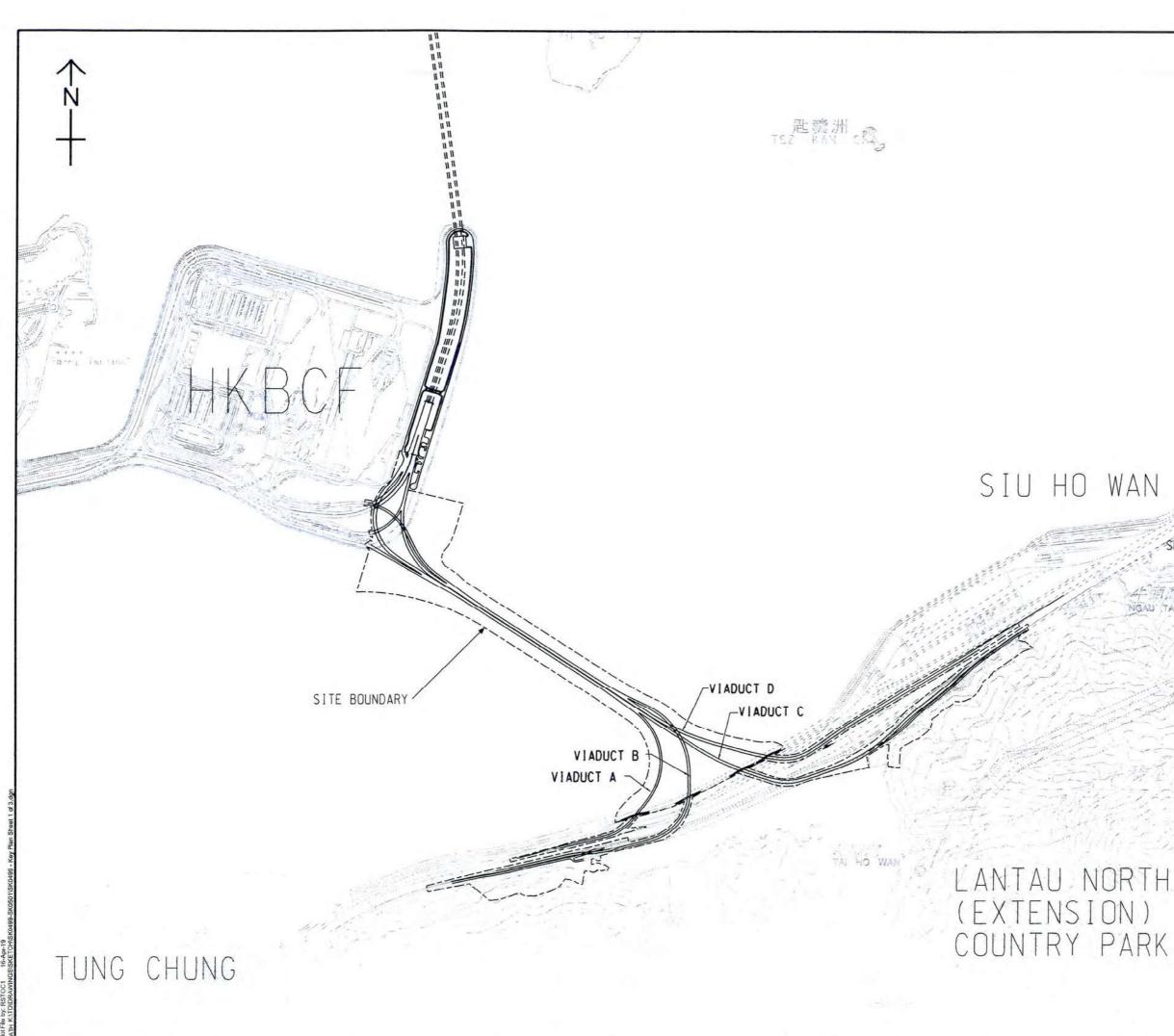




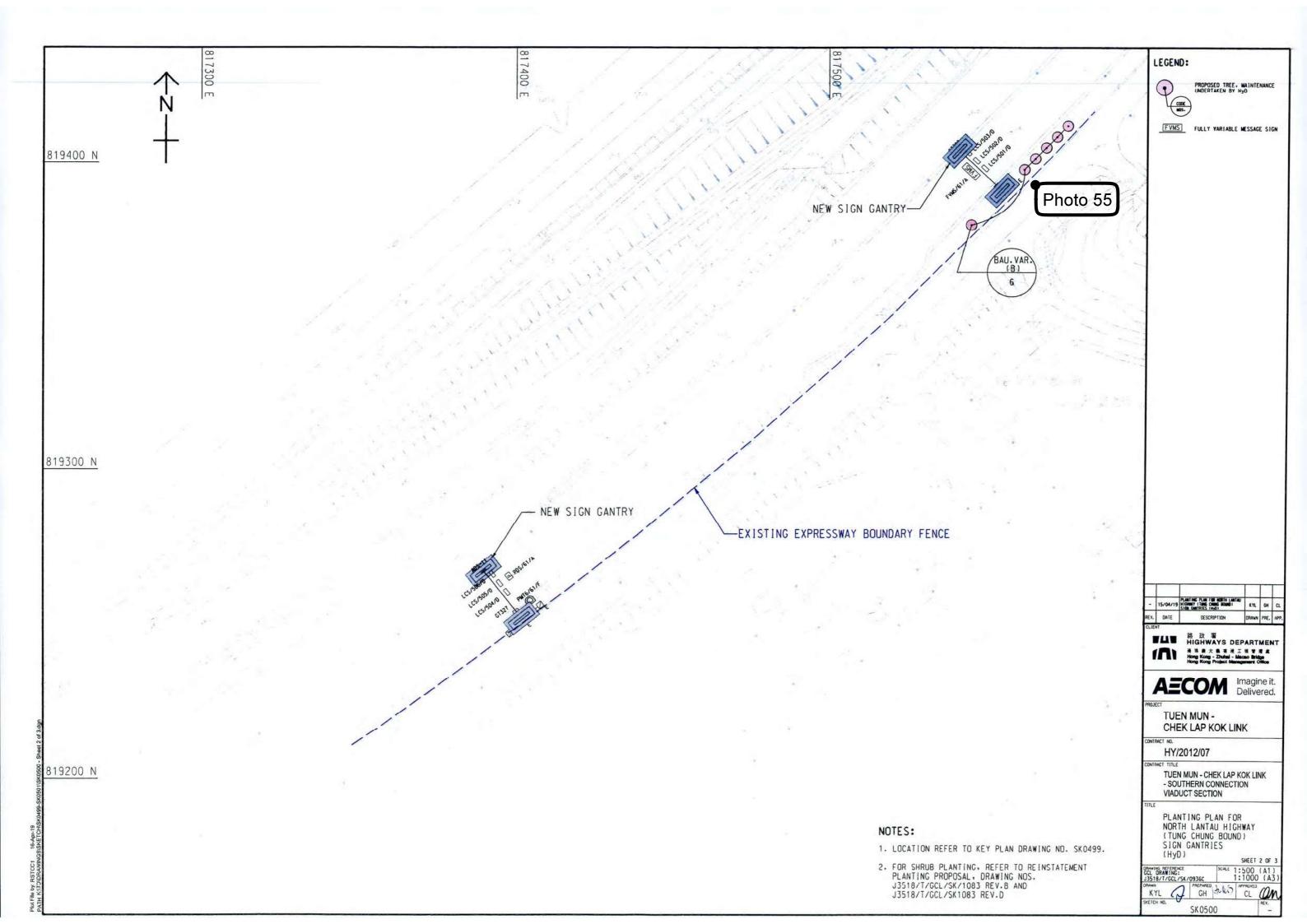


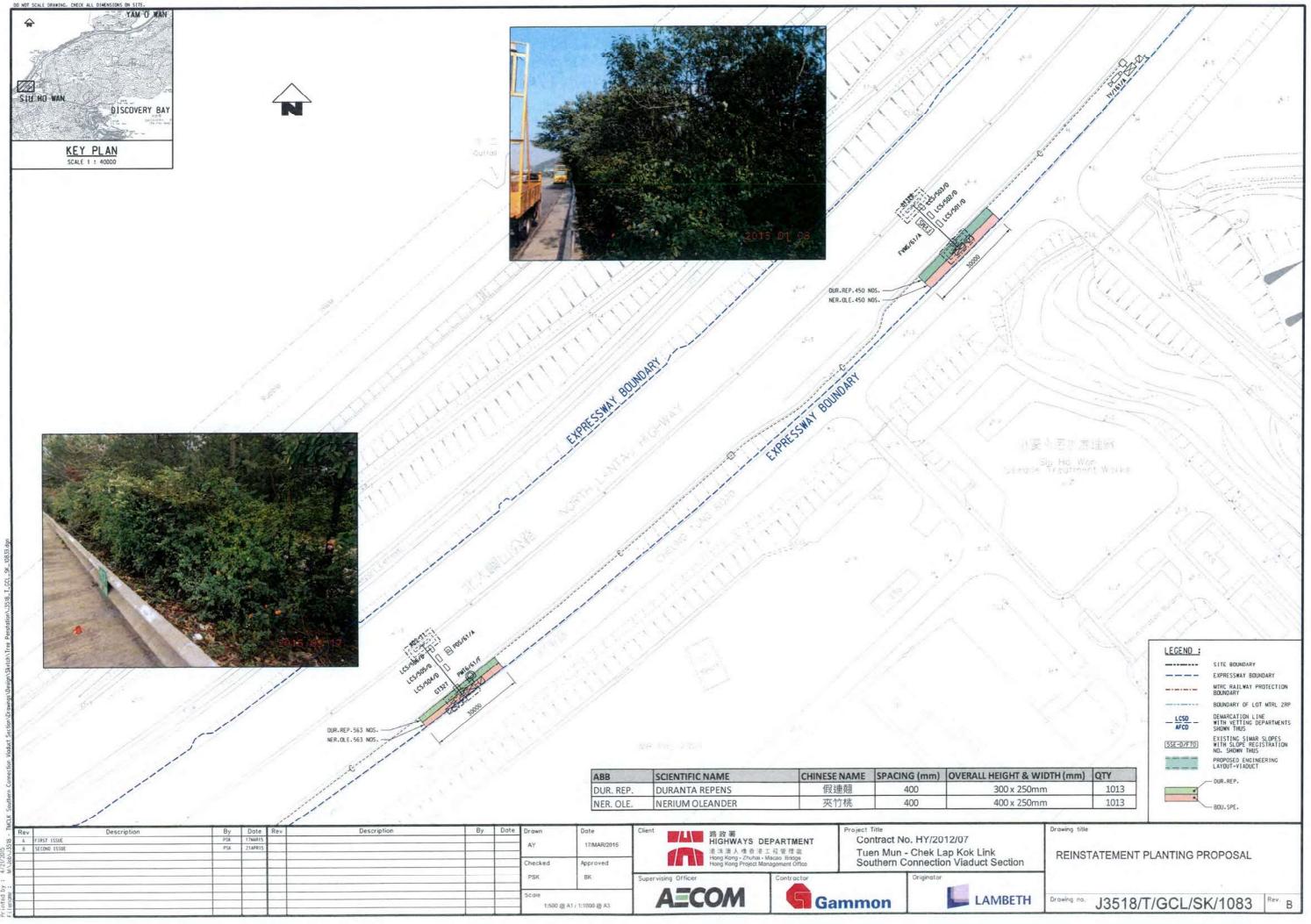




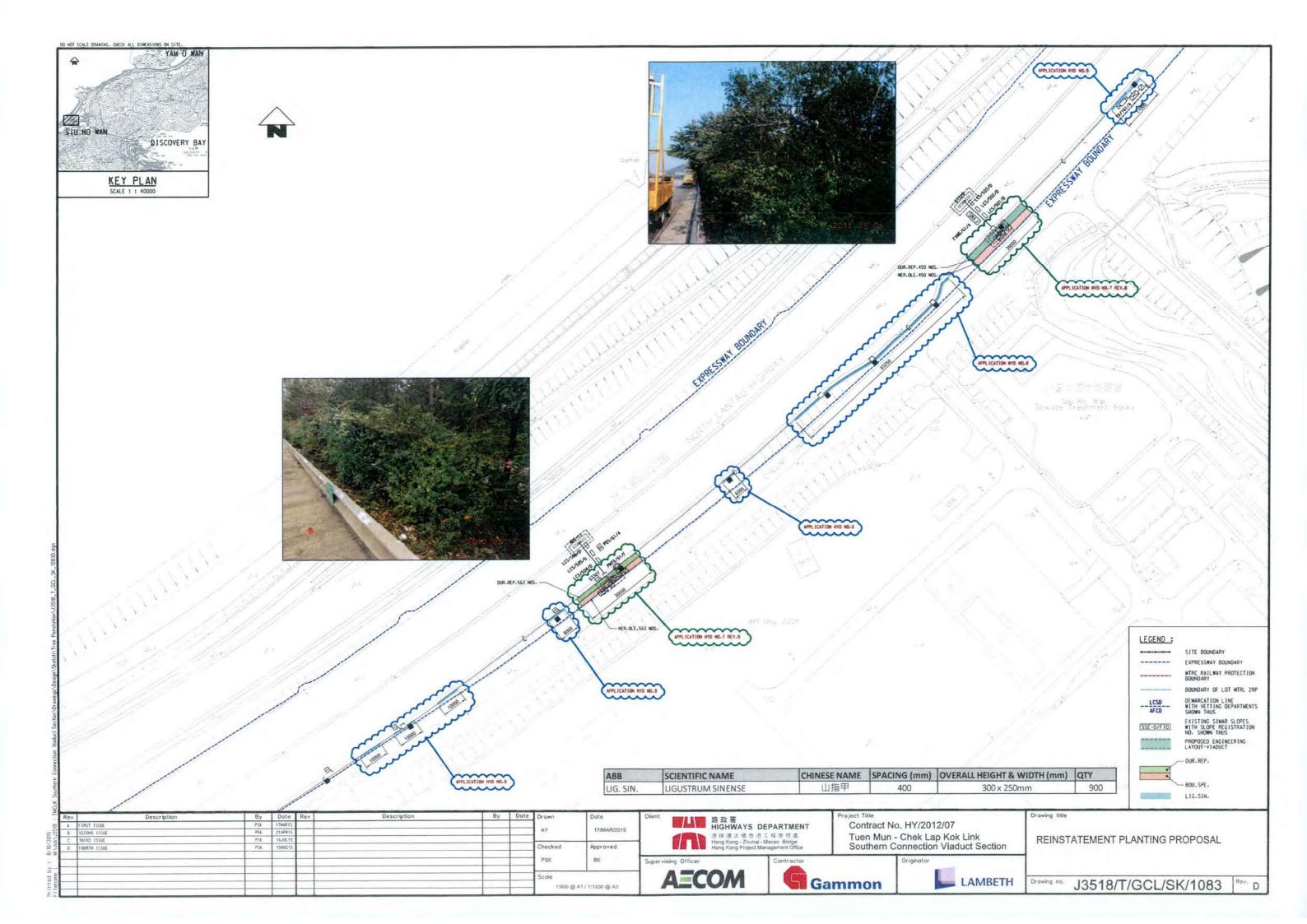


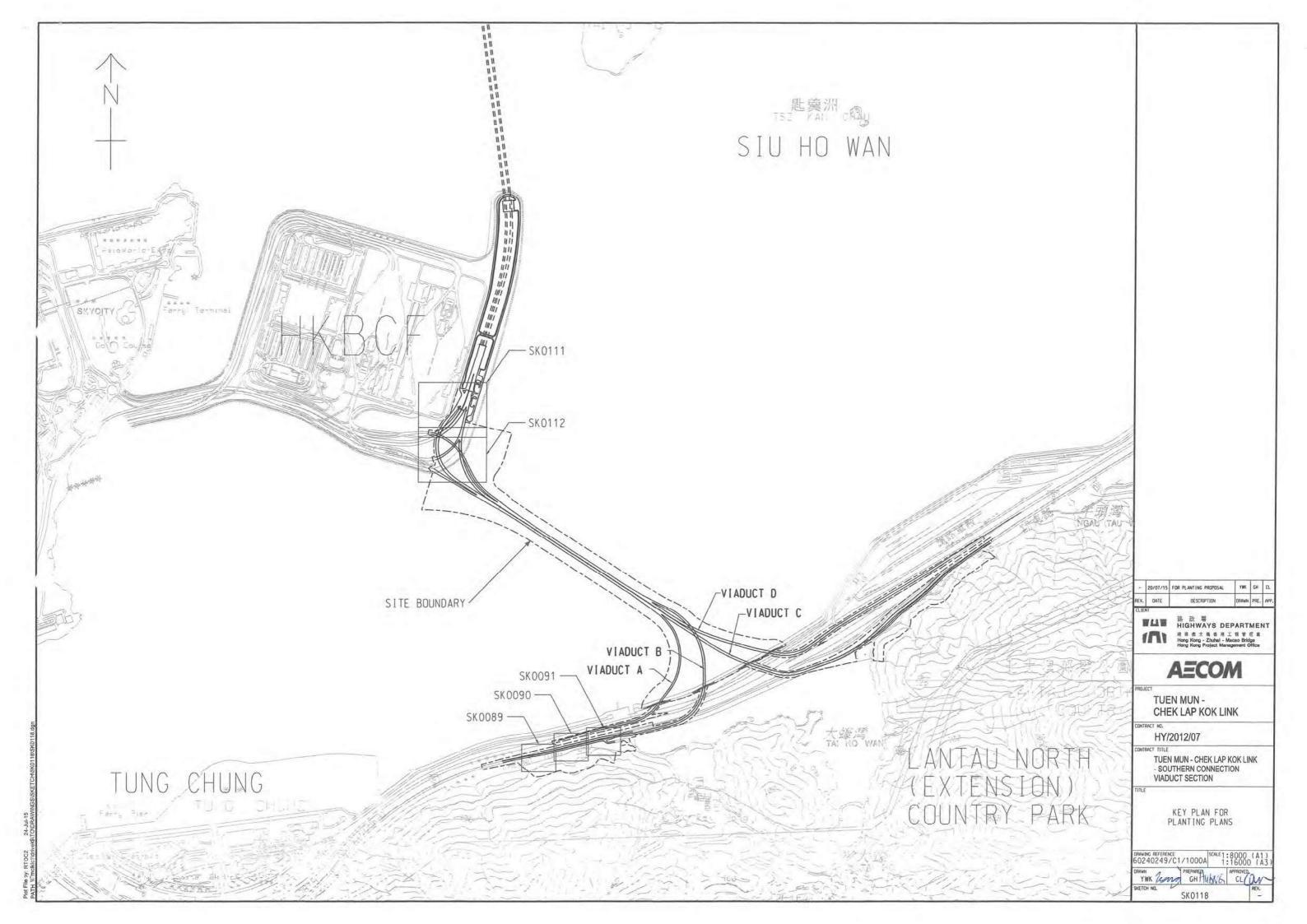
派7 5h21 SK0500 VGAU' TAU WAN 15/04/19 Little of Austing Pue ID atta DATE DESCRIPTIO 第改署 HIGHWAYS DEPARTMENT 代入 社会は大きまた工作でまま Hong Kong - Zhuhai - Manako Bridgo Hong Kong - Zhuhai - Manako Bridgo Hong Kong Project Management Office AECOM Imagine it. Delivered. TUEN MUN -CHEK LAP KOK LINK TRACT NO. HY/2012/07 TUEN MUN - CHEK LAP KOK LINK - SOUTHERN CONNECTION VIADUCT SECTION KEY PLAN OF PLANTING PLAN FOR NORTH LANTAU HIGHWAY (TUNG CHUNG BOUND) SIGN GANTRIES (HyD) SHEET 1 OF 3 SHEET 1 OF DRAWING REFERENCE SCALE 1:8000 (A1 60240249/C1/1000A 1:16000 (A3 KYL CHILLES CL an SK0499

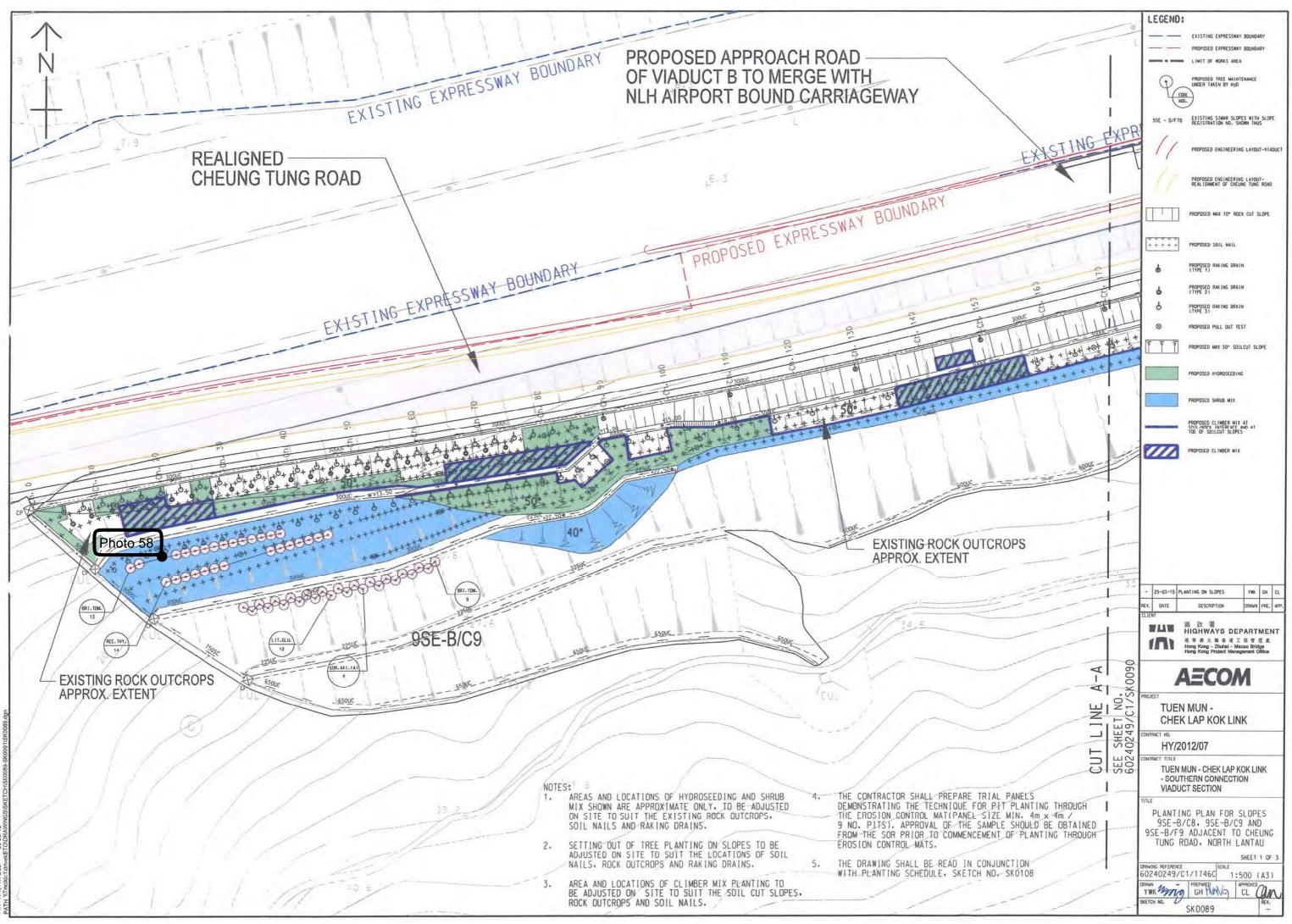


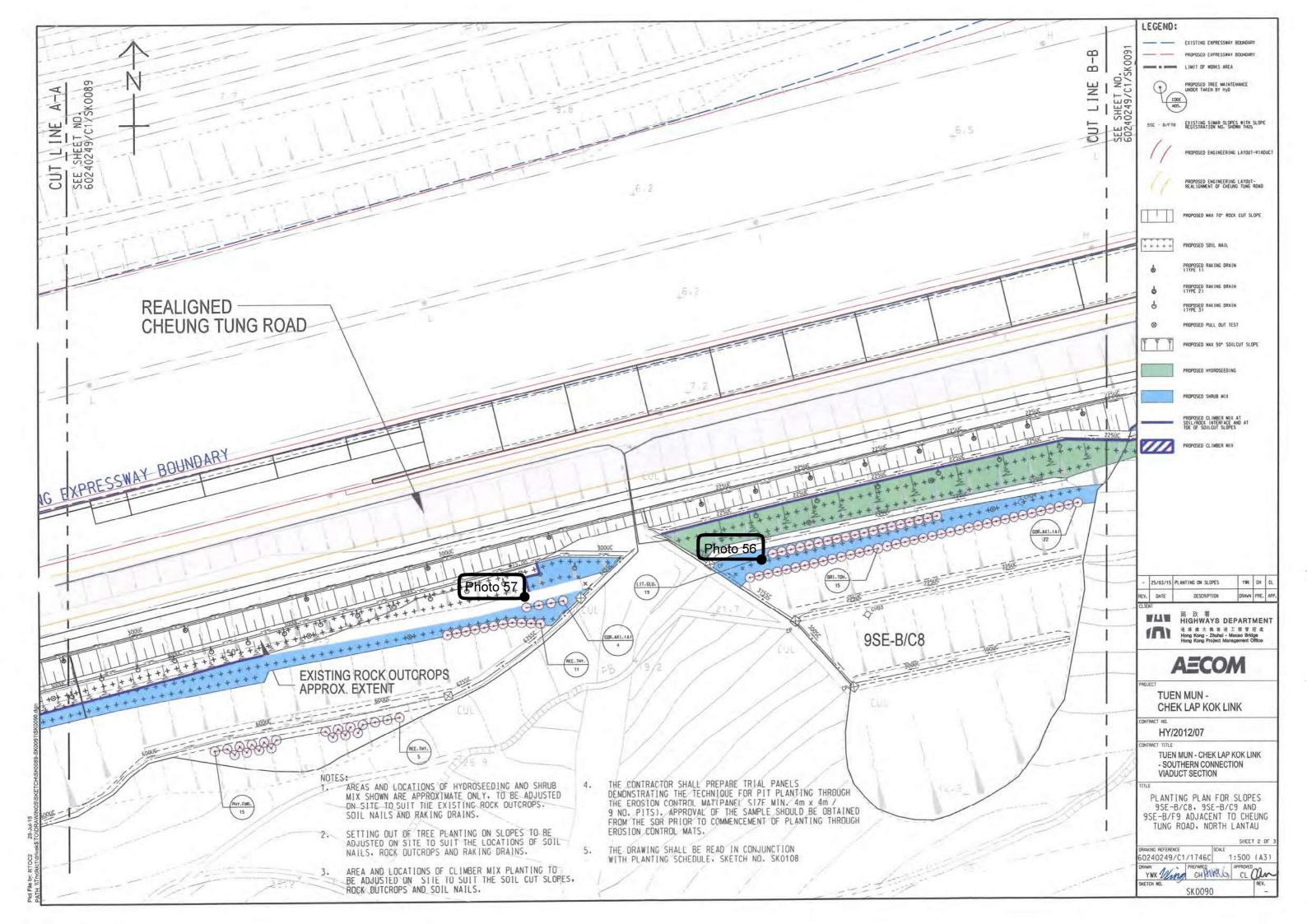


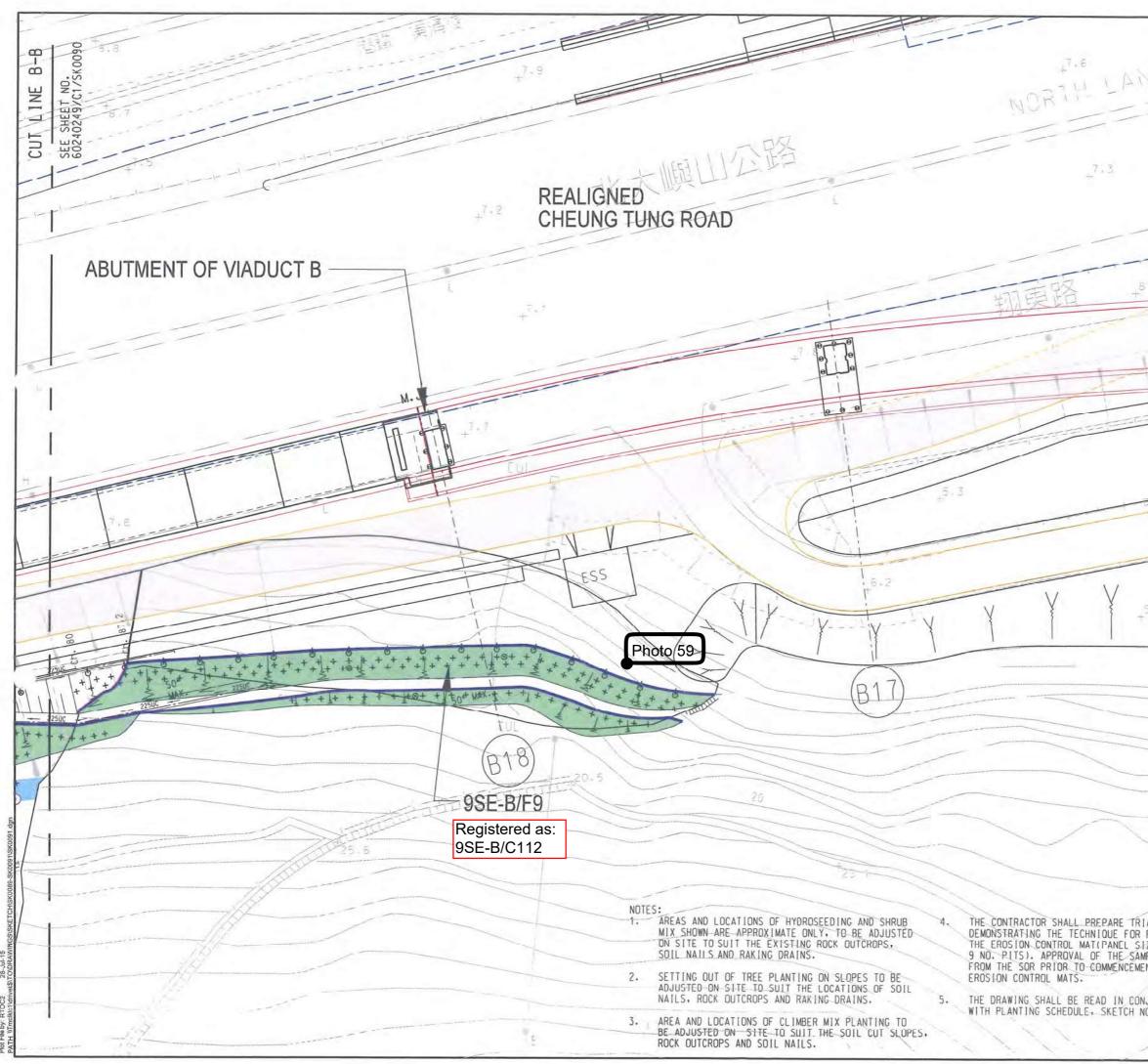
121 : 4/21











LEGEND:
LEGEND: EXISTING EXPRESSWAY BOUNDARY PROPOSED EXPRESSWAY BOUNDARY LIMIT DF WORKS AREA
LIMIT OF WORKS AREA
PROPOSED TREE MAINTENANCE
55E - D/FTO EXISTING SIMAR SLOPES WITH SLOPE REGISTRATION NO. SHOWN THUS
PROPOSED ENCINEERING LAYOUT-VIADUCT
PROPOSED ENGINEERING LAYOUT- REALIGNMENT OF CHELING TUNG ROAD
PROPOSED MAX 70" ROCK CUT SLOPE
PROPOSED SDIL NAIL
PROPOSED RAKING DRAIN
PROPOSED RAKING DRAIN
B PROPOSED RAKING DRAIN
S PROPOSED PULL OUT TEST
PROPOSED WAX 50° SOILCUT SLOPE
PROPOSED HYDROSEEDING
PROPOSED SHRUB MIX
PROPOSED CLIMBER WIX AT SOLL/ROCK INTERFACE AND AT TOE OF SDILCUT SLOPES
PROPOSED CLIMBER MIX
(E
- 25-03-15 PLANTING DN SLOPES YWK CH CL
REV. DATE DESCRIPTION DRAWN PRE. APP.
路 武 署 HIGHWAYS DEPARTMENT 使用 意志 大會 在 正 程 智 理 志 Hong Kong - Zhuhai - Macao Bridge Hong Kong Project Managament Office
AECOM
TUEN MUN - CHEK LAP KOK LINK
PROJECT TUEN MUN -
PROJECT TUEN MUN - CHEK LAP KOK LINK CONTRACT NO.
PROJECT TUEN MUN - CHEK LAP KOK LINK CONTRACT NOL HY/2012/07 CONTRACT TITLE TUEN MUN - CHEK LAP KOK LINK - SOUTHERN CONNECTION VIADUCT SECTION TITLE
PROJECT TUEN MUN - CHEK LAP KOK LINK CONTRACT NO. HY/2012/07 CONTRACT TITLE TUEN MUN - CHEK LAP KOK LINK - SOUTHERN CONNECTION VIADUCT SECTION
PROJECT TUEN MUN - CHEK LAP KOK LINK CONTRACT NOL HY/2012/07 CONTRACT TITLE TUEN MUN - CHEK LAP KOK LINK - SOUTHERN CONNECTION VIADUCT SECTION TITLE PLANTING PLAN FOR SLOPES 9SE-B/C8, 9SE-B/C9 AND 9SE-B/F9 ADJACENT TO CHEUNG TUNG ROAD, NORTH LANTAU SHEET 3 OF 3 DRIVING REFERENCE SCALE
PROJECT TUEN MUN - CHEK LAP KOK LINK CONTRACT NOL HY/2012/07 CONTRACT TITLE TUEN MUN - CHEK LAP KOK LINK - SOUTHERN CONNECTION VIADUCT SECTION TITLE PLANTING PLAN FOR SLOPES 9SE-B/C8, 9SE-B/C9 AND 9SE-B/F9 ADJACENT TO CHEUNG TUNG ROAD, NORTH LANTAU SHEET 3 OF 3

Contract No. HY/2012/07 (C1) Landscape Area Checking for EP Condition 2.9

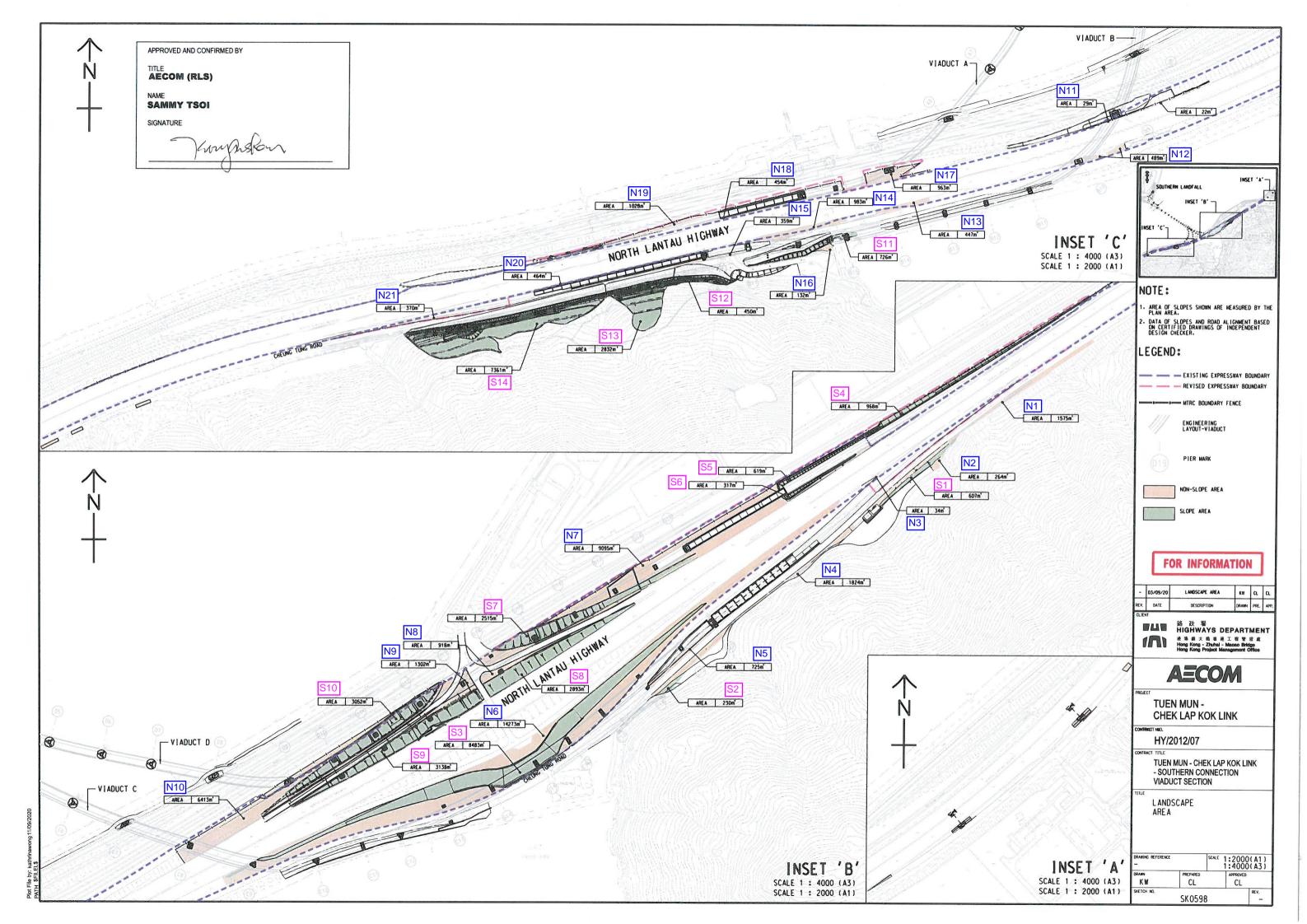
Area Code	Location	Plan Area (sq.m.) Approx.	Average Slope Angle	Plane Area (sq.m.) Approx.
N1	CTR	1580	0	1575
N2	CTR	266	0	264
N3	NLH	34	0	34
N4	NLH	30	0	1824
N5	CTR	1779	0	725
N6	CTR	725	0	14273
N7	NLH	14273	0	9095
N8	NLH	9095	0	918
N9	NLH	918	0	1302
N10	NLH	1302	0	6413
N11	NLH	6413	0	29
N12	NLH	489	0	489
N13	CTR and NLH	447	0	447
N14	CTR and NLH	969	0	983
N15	CTR	132	0	359
N16	CTR	132	0	132
N17	NLH	963	0	963
N18	NLH	454	0	454
N19	NLH	1028	0	1028
N20	NLH	450	0	
N21	NLH	609	0	
S1	CTR - PF2	607	27	681
S2	CTR - PF1	230	27	258
\$3	10NW-C/F13, C/F14, C/F15	8483	26	
S4	10NW-C/F50(de-registered)	968	20	
\$5	10NW-C/F52	619	27	695
S6	NLH - RD1	317	27	356
S7	10NW-C/F10	2515	27	2823
S8	10NW-C/F11	2893	27	3247
S9	10NW-C/F17	3138		
S10	10NW-C/F9	3052	26	
S11	9SE-B/F85	726	25	801
S12	9SE-B/C112	450	50	
S13	9SE-B/C8	2832	40	
S14	9SE-B/C9	7361	45	
-	Southern Landfall	47023	0	
Sub-total (A)				130315
DSD Project: DC/2016/01				
Entrusted Landscape Works	CTR	14097	0	13834
along Cheung Tung Road		1.007		1000-
Sub-total (B)				13834
Total (A) + (B)				144149

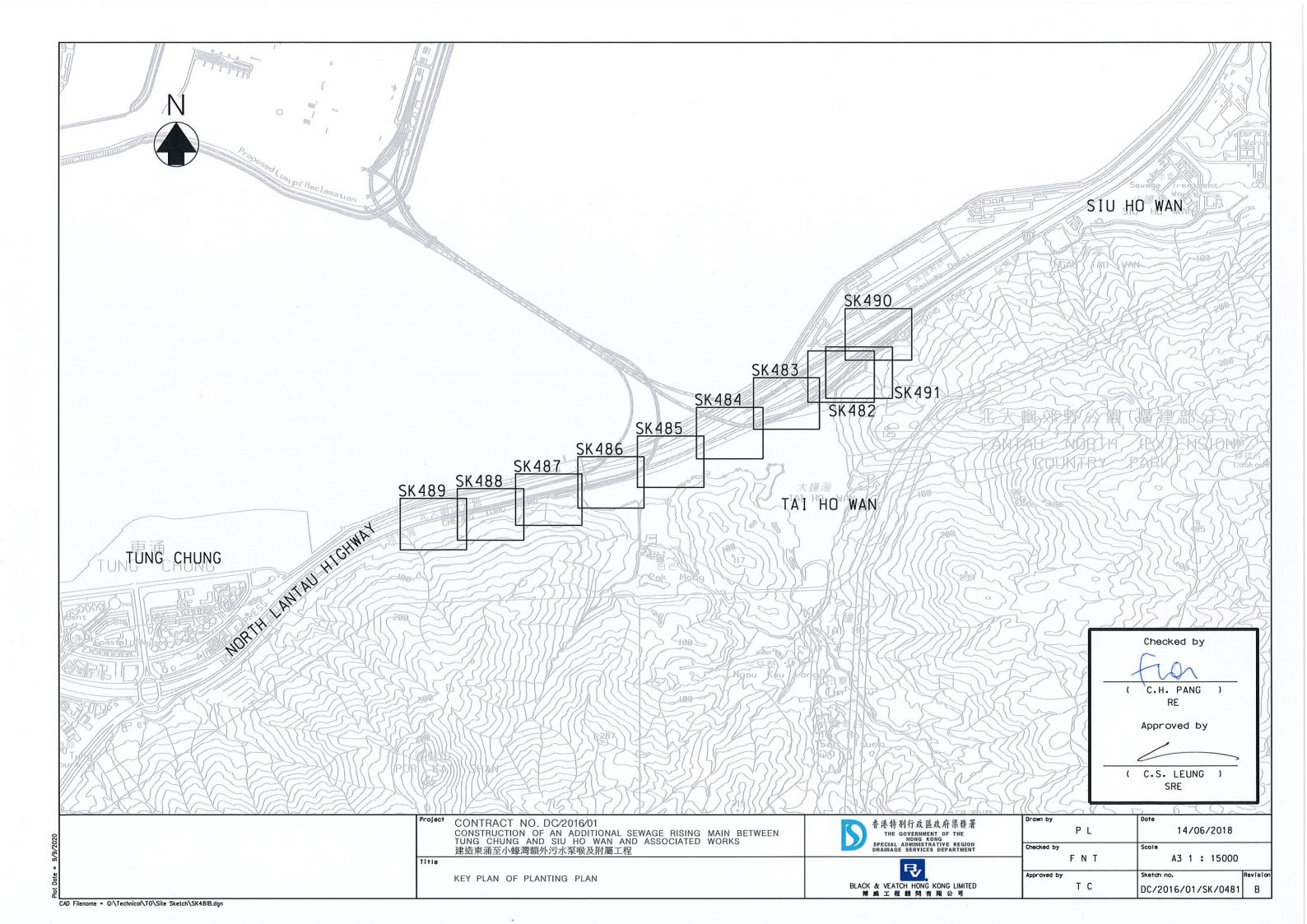
ABBREVIATIONS CTR NLH

Cheung Tung Road North Lantau Highway

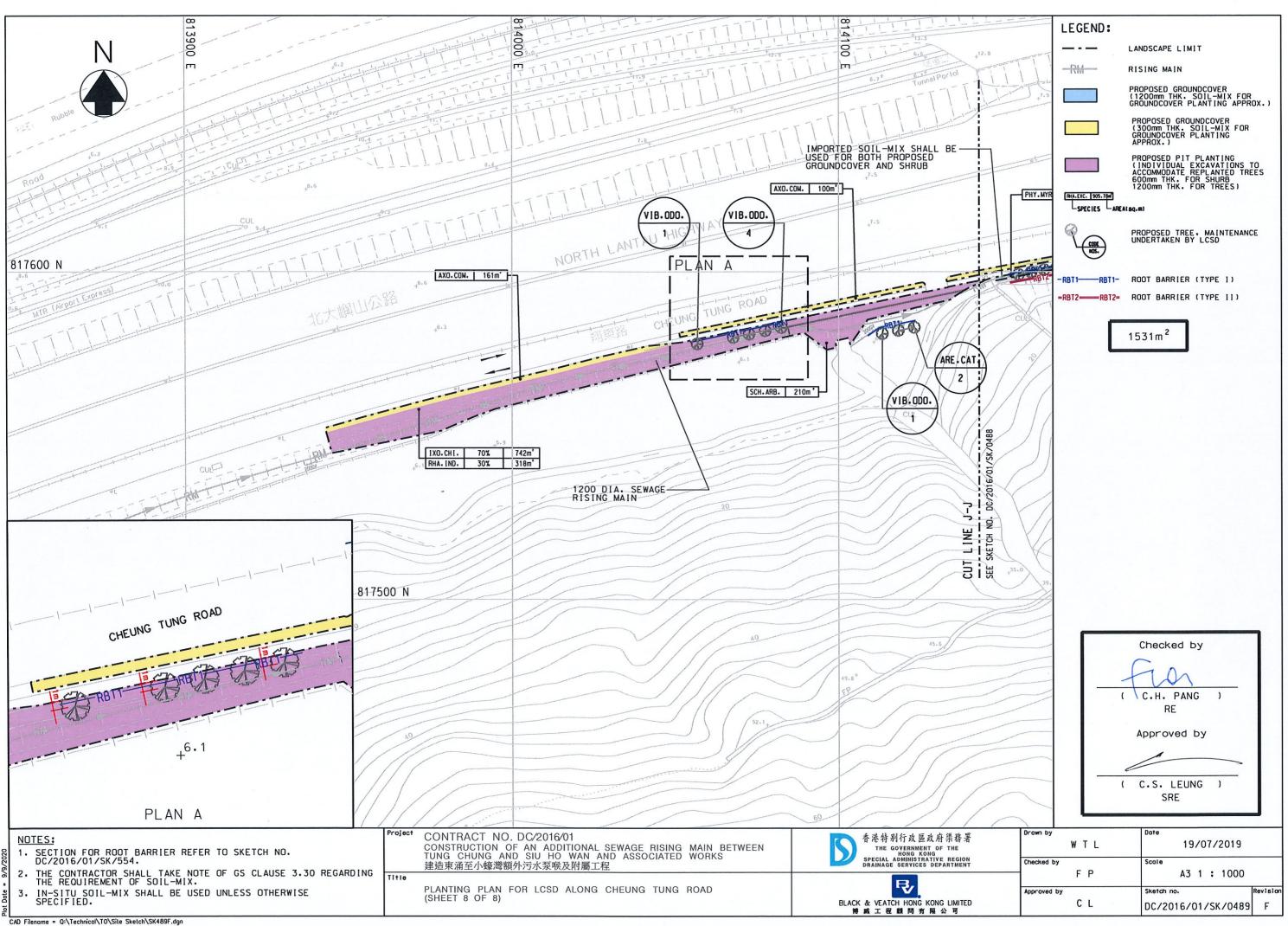


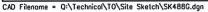
LEGEND: \uparrow SITE BOUNDARY N AS-BUILT U-Chonnel AS-BUILT MAINTENANCE ACCESS AS-BUILT MAINTENANCE FOOTPAT AS-BUILT PLANTING ENGINEERING LAYOUT-VIADUCT PIER MARK AREA BOUNDARY APPROVED AND CONFIRMED BY AECOM (RLS) NAME SAMMY TSOI SIGNATUR ampastar FOR INFORMATION EV. DATE DESCRIPTION DRAWN PRE. APP, ALAN 路 政業 HIGHWAYS DEPARTMENT 指GHWAYS DEPARTMENT そネルスキャスキャントロット そネルスキャントロット HIGH Kong - Zhuhai - Messes Bridge Hing Kong Project Management Office AECOM Imagine it. Delivered. TUEN MUN -CHEK LAP KOK LINK RACT NO. HY/2012/07 CT TITLE TUEN MUN - CHEK LAP KOK LINK - SOUTHERN CONNECTION VIADUCT SECTION LANDSCAPE AREA (SOUTHERN LANDFALL) DRAWING REFERENCE NEW DRAWING SCALE 1:1000 (A1) 1:2000 (A3) drawn KW PREPARED CL CL KETCH NO REV. SK-0600

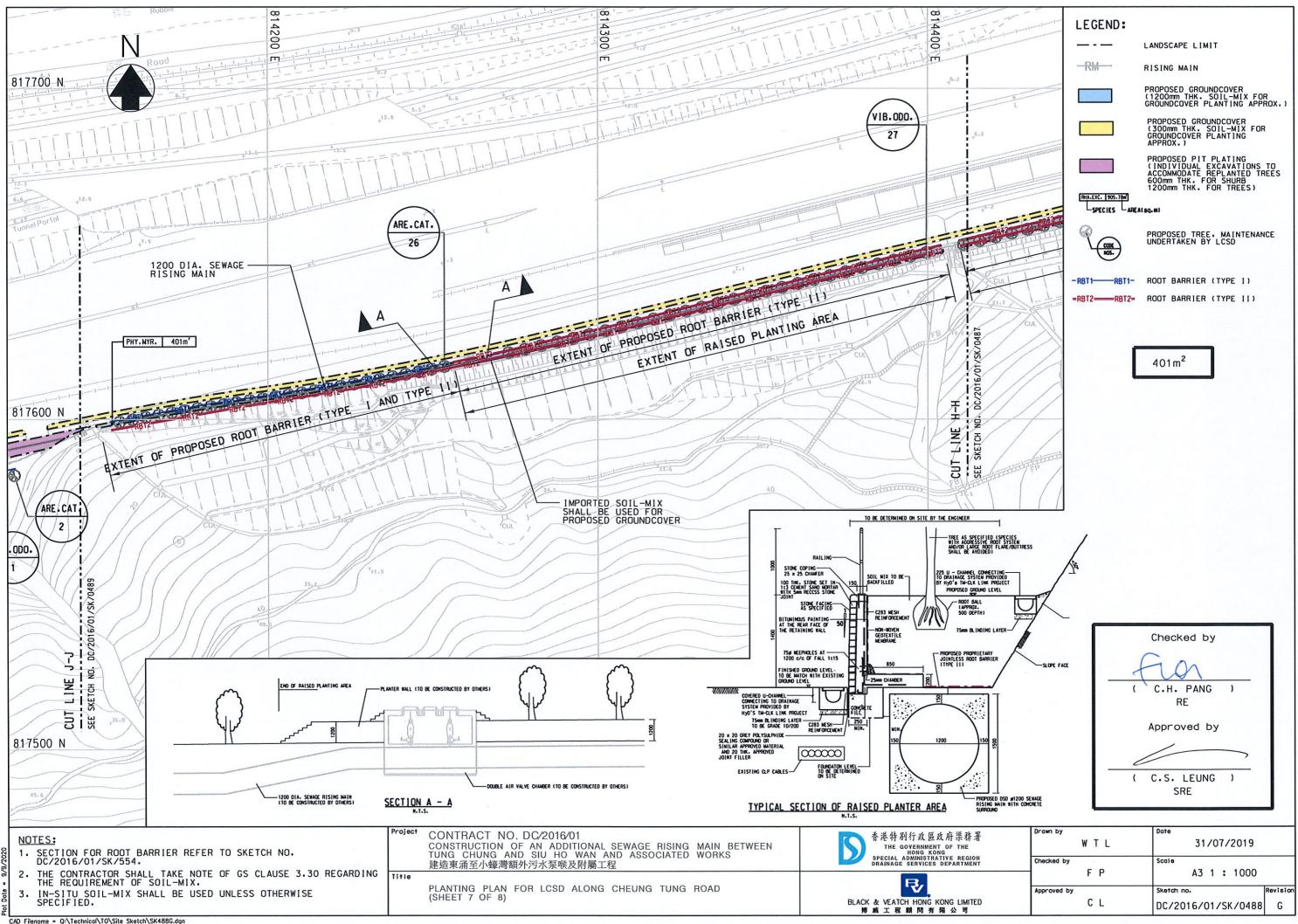


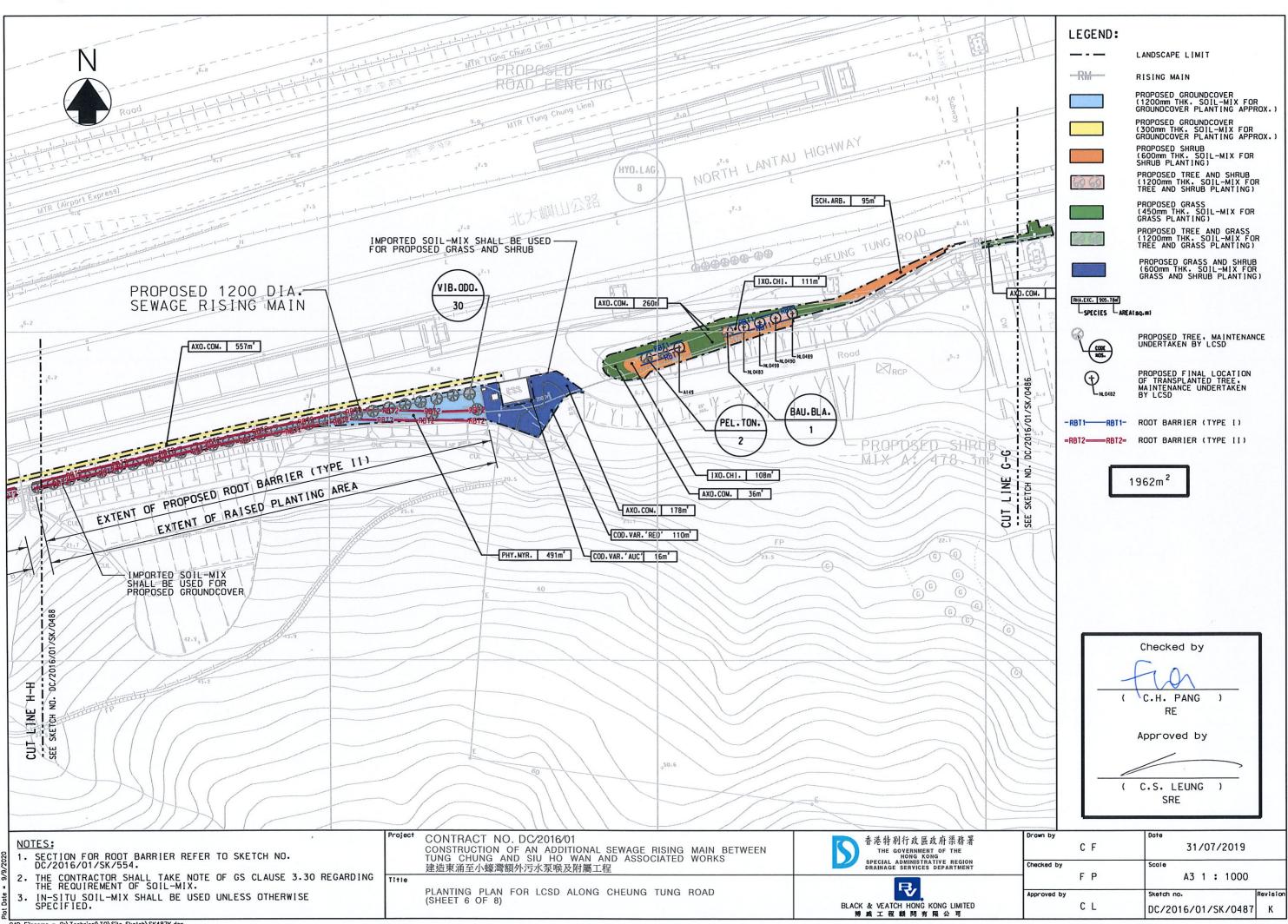




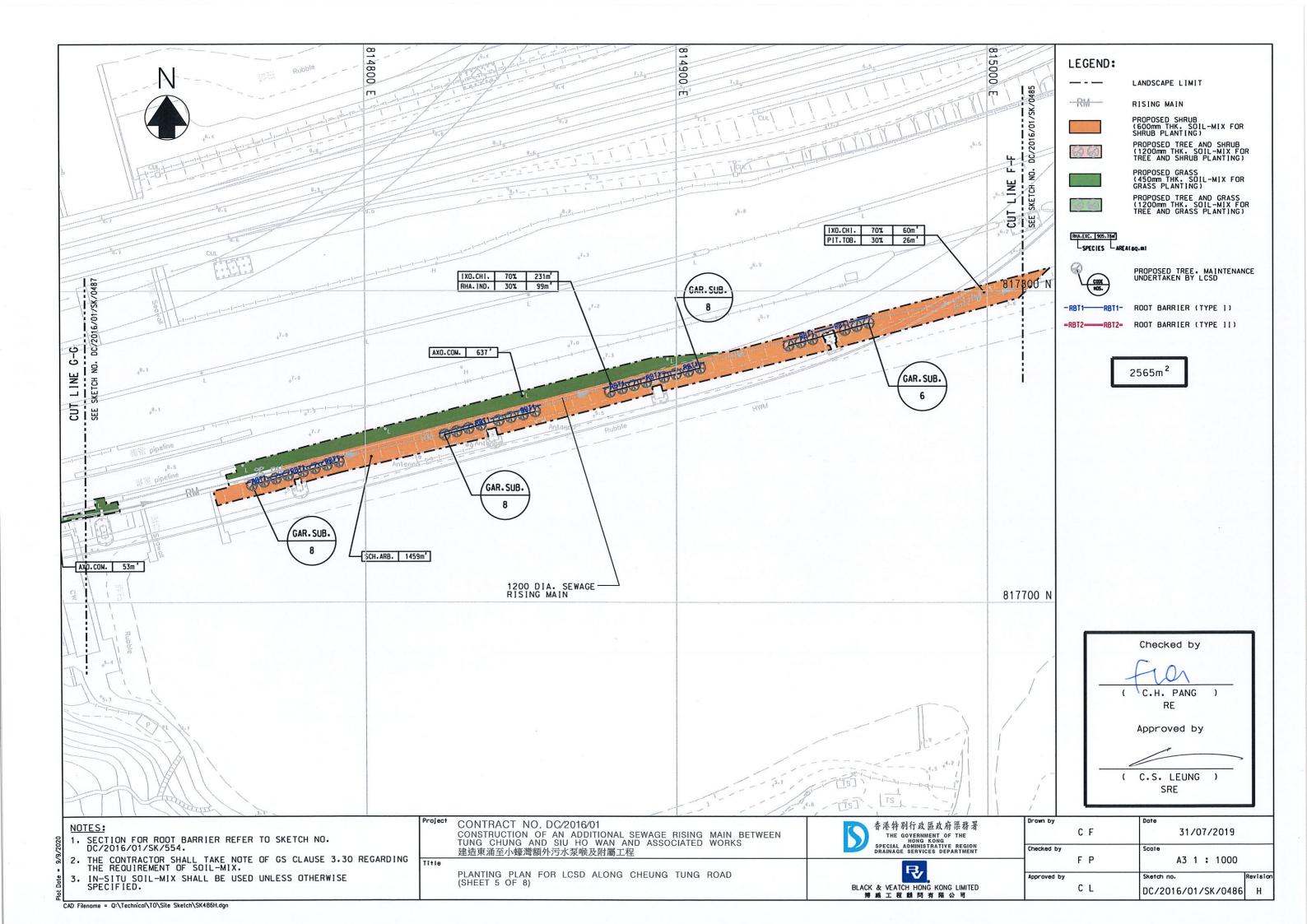


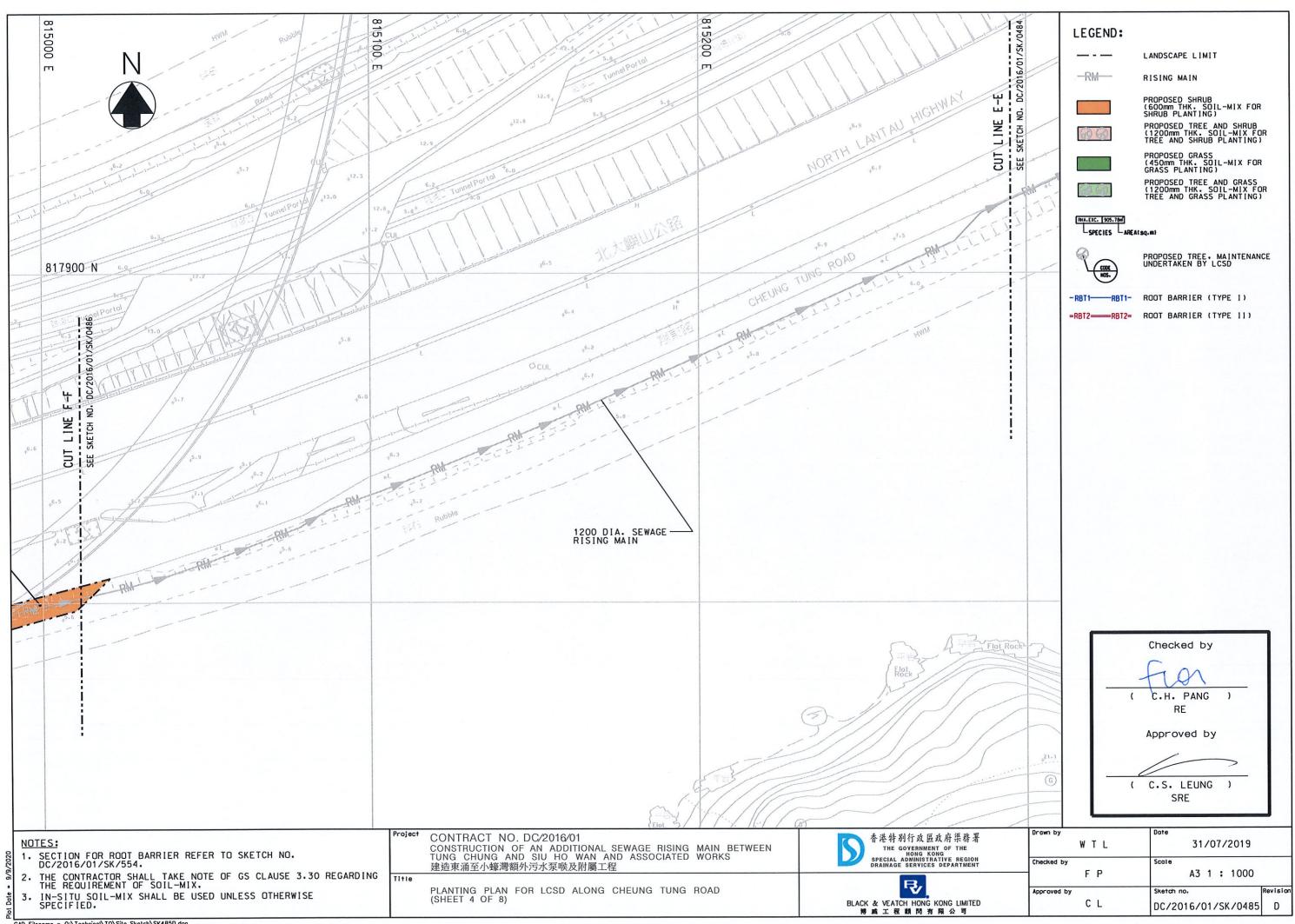




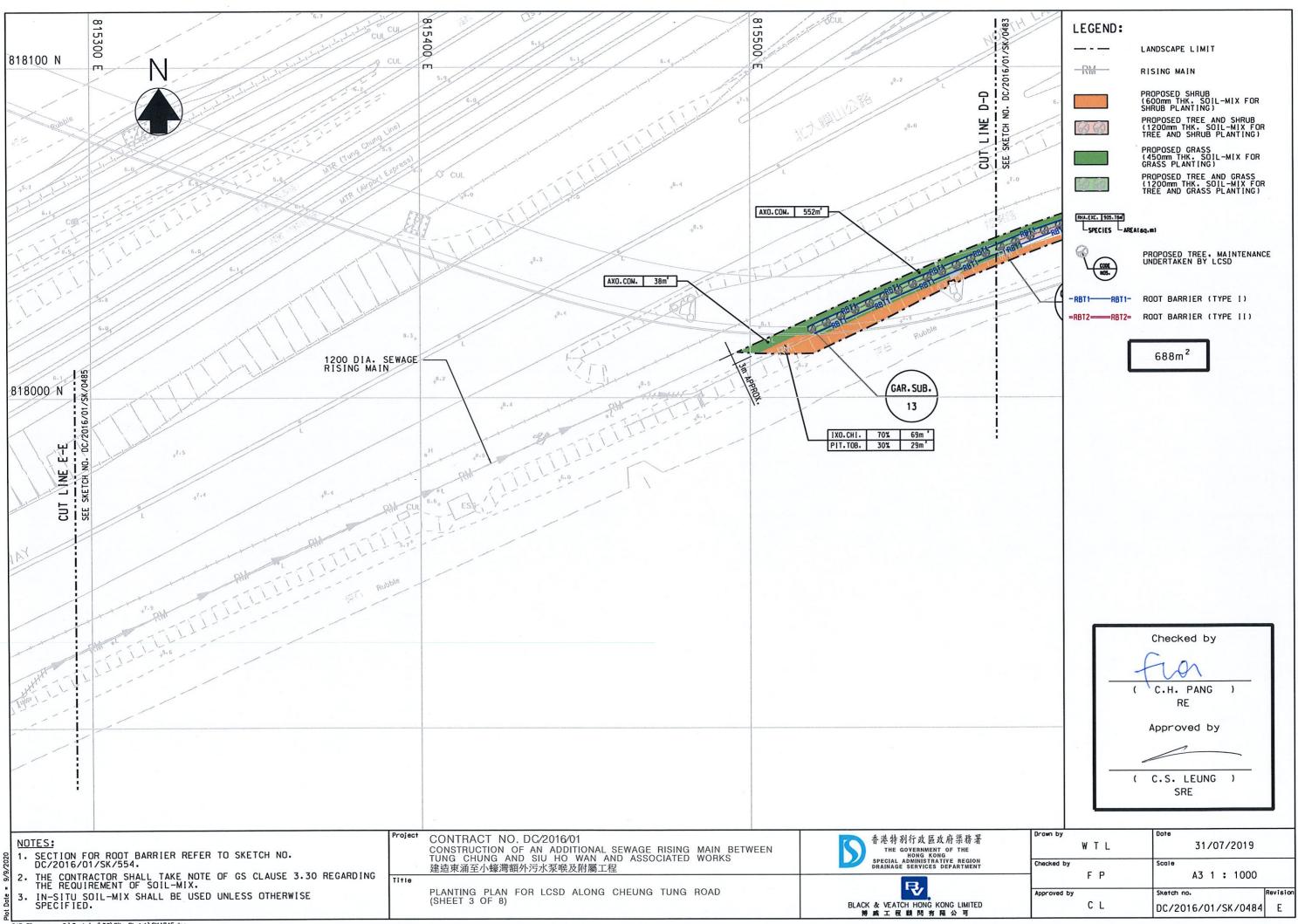


CAD Filenome = Q:\Technicol\TO\Site Sketch\SK487K.dgn

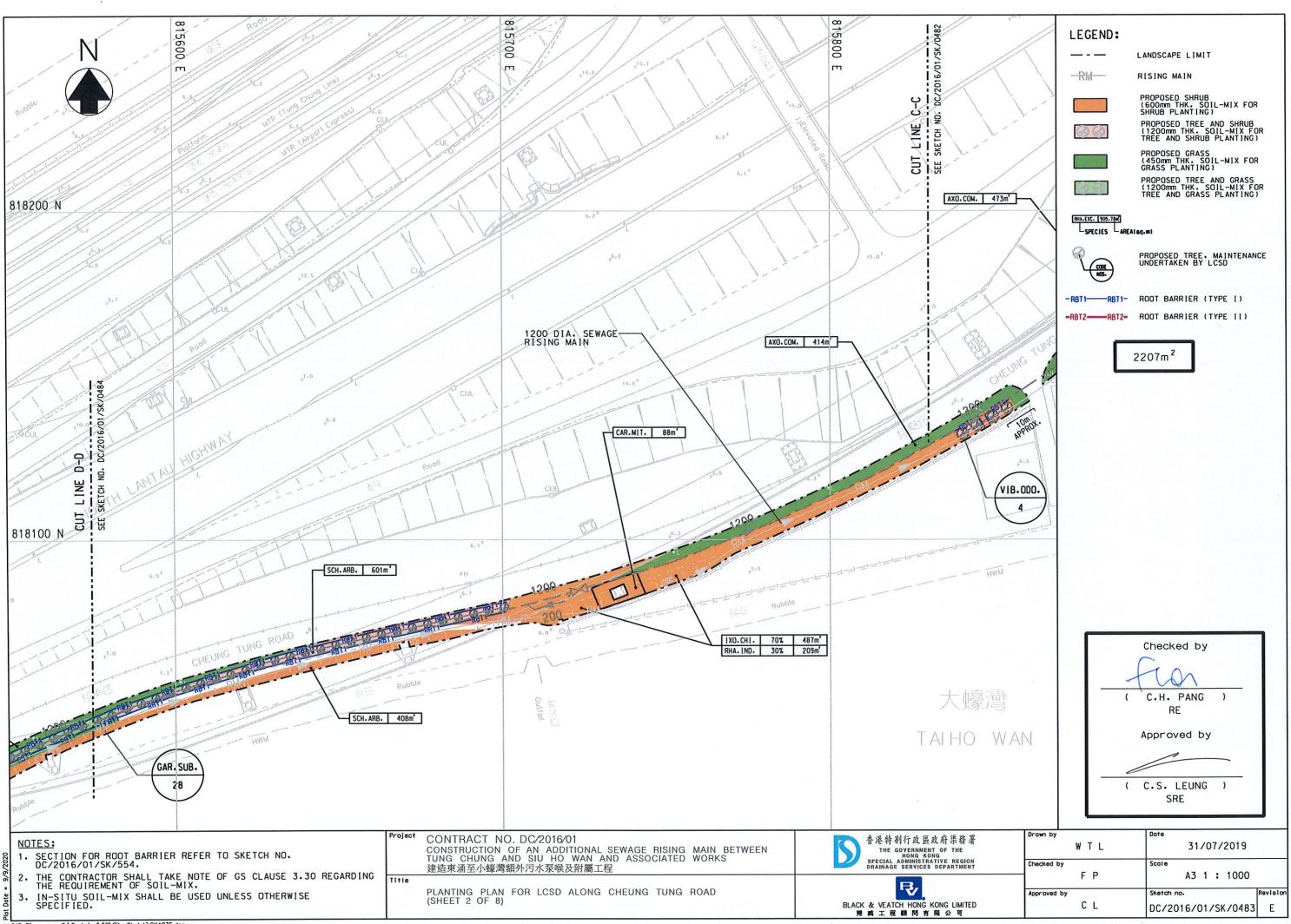




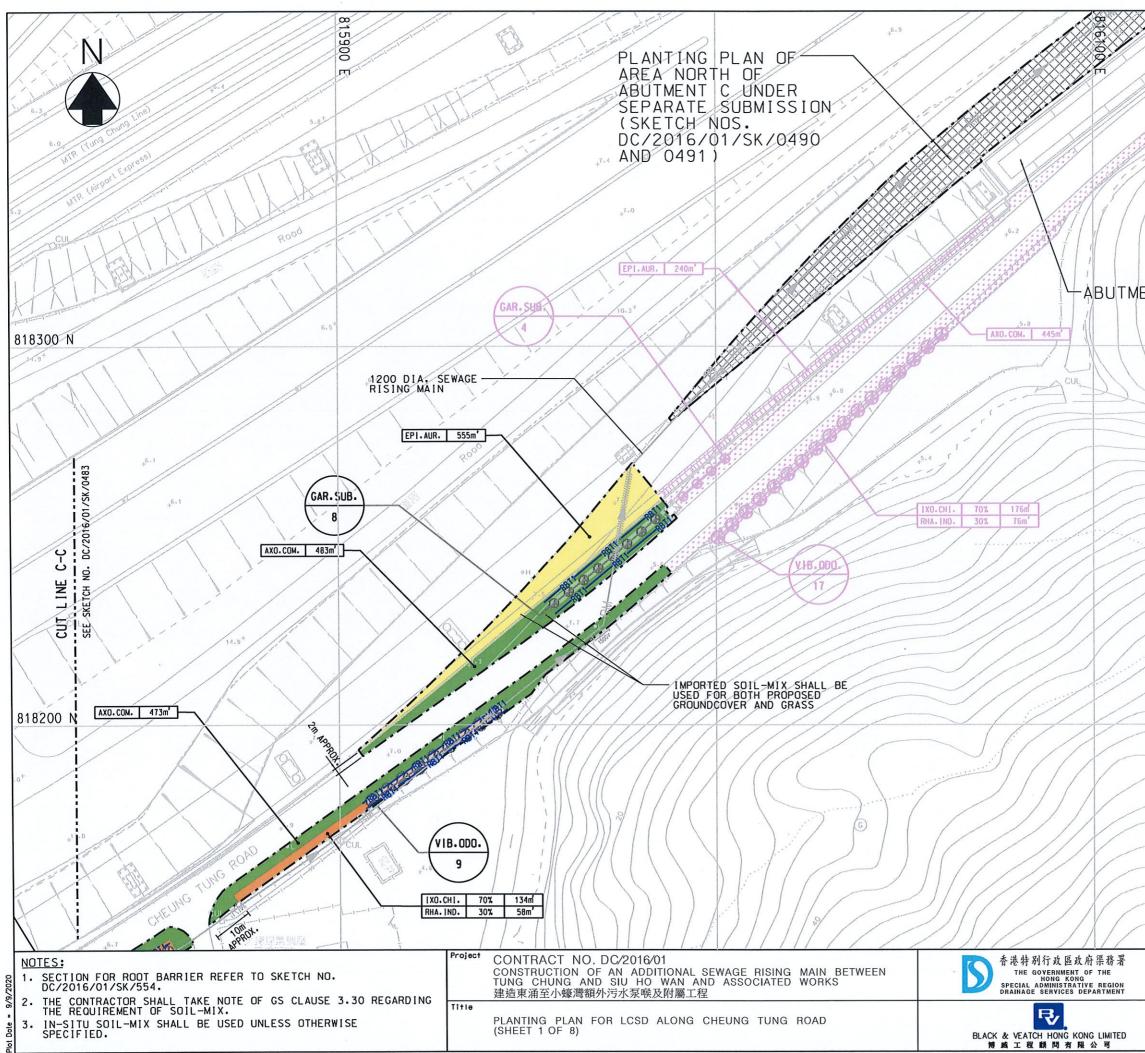
CAD Filenome = Q:\Technicol\TO\Site Sketch\SK485D.dgn



CAD Filenome = Q:\Technicol\TO\Site Sketch\SK484E.dgn

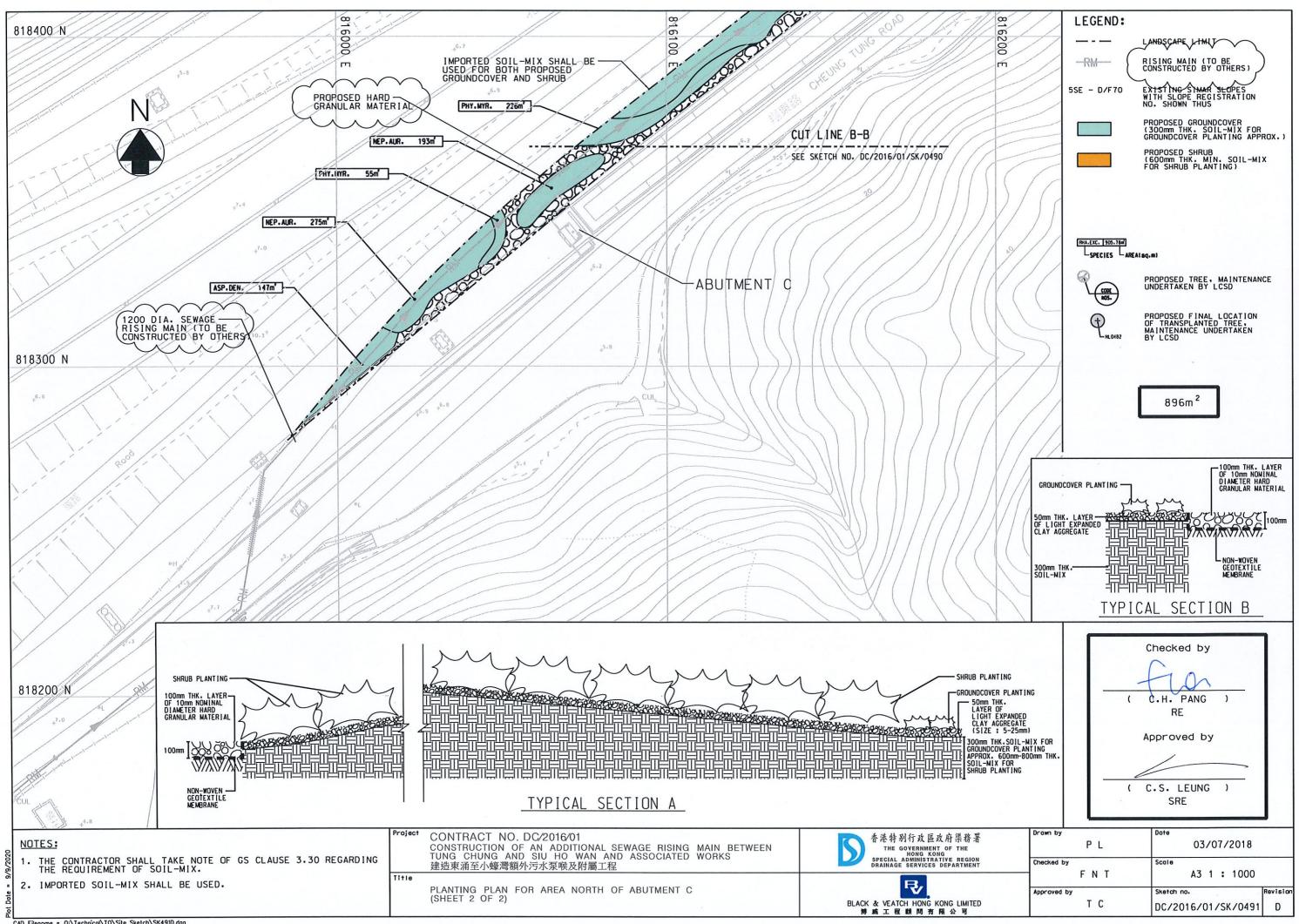


CAD Filenome = Q:\Technicol\TO\Site Sketch\SK483E.dgn

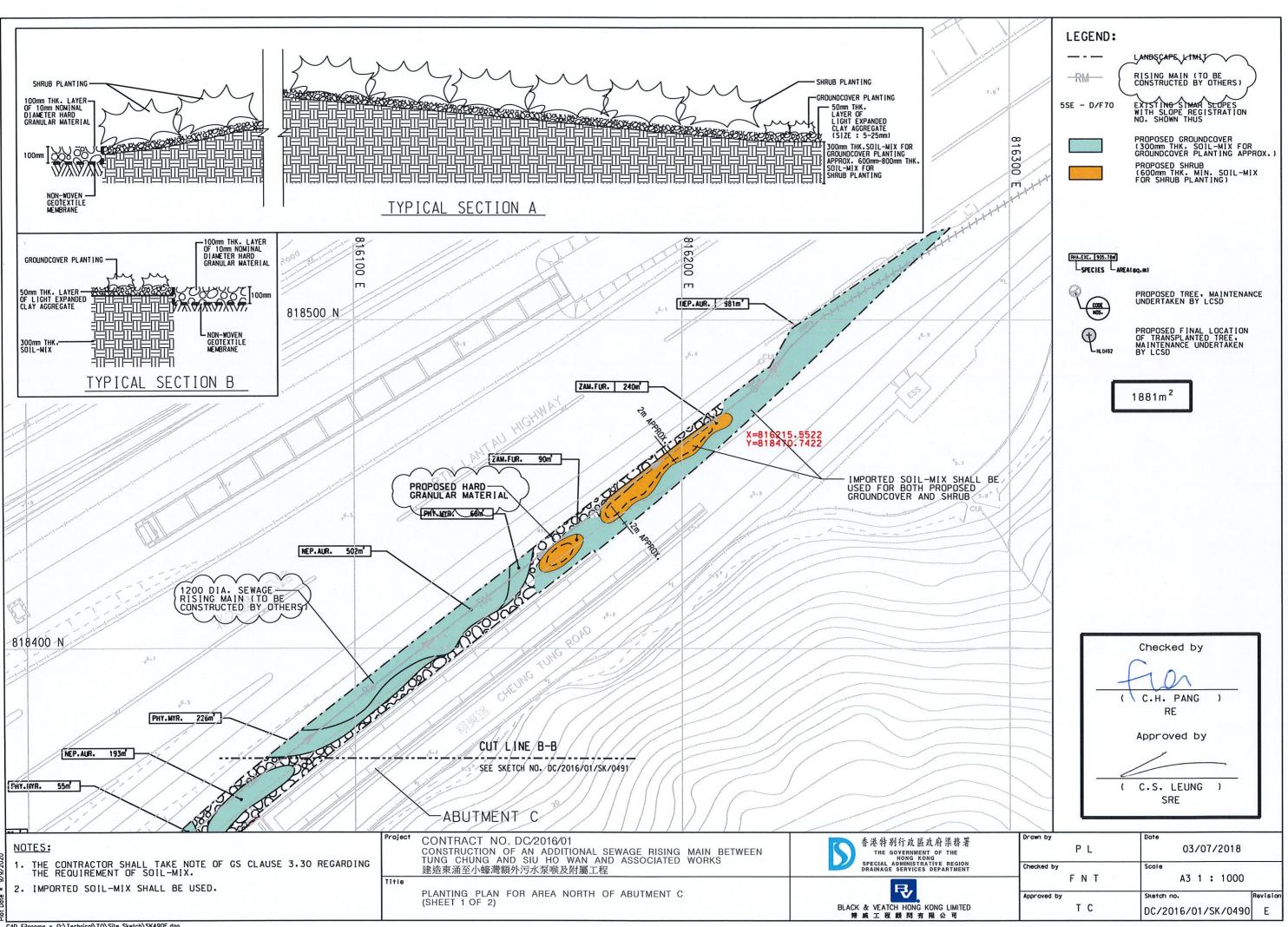


CAD Filenome = Q:\Technicol\TO\Site Sketch\SK482K.dgn

	LEGEND:	
//// 3		LANDSCAPE LIMIT
+6.2		PROPOSED DN1200 RISING MAIN
1001/1	-RBT1-RBT1-	ROOT BARRIER (TYPE 1)
1/1/	=RBT2==RBT2=	ROOT BARRIER (TYPE 11)
	P. N. O482	PROPOSED FINAL LOCATION OF TRANSPLANTED TREE, MAINTENANCE UNDERTAKEN BY LCSD
	HANDOVER B	Y DC/2016/01
		PROPOSED GROUNDCOVER (450mm THK, SOIL-MIX FOR GROUNDCOVER PLANTING APPROX.)
	69	PROPOSED TREE AND SHRUB (1200mm THK, SOIL-MIX FOR TREE AND SHRUB PLANTING)
ENTC		PROPOSED SHRUB (600mm THK. SOIL-MIX FOR SHRUB PLANTING)
	20 60	PROPOSED TREE AND GRASS (1200mm THK, SOIL-MIX FOR TREE AND GRASS PLANTING)
		TREE AND GRASS PLANTING) PROPOSED GRASS (450mm THK. SOIL-MIX FOR GRASS PLANTING)
27//	BULEIC, 1905.784	
2		PROPOSED TREE, MAINTENANCE UNDERTAKEN BY LCSD
		1703m ²
	HANDOVER B	Y HY/2012/07
		PROPOSED GROUNDCOVER
		PROPOSED SHRUB
		PROPOSED GRASS
	(RUA.EXC. 1905.70m) LSPECIES LARE	ti 6q. m)
		PROPOSED TREE, MAINTENANCE UNDERTAKEN BY LCSD (HANDOVER BY HY/2012/07)
		Checked by
		Fin
		C.H. PANG)
	· ·	RE
		Approved by
	(C.S. LEUNG)
		SRE
Drawn by		Date
	WTL	31/07/2019
Checked	_{Бу} FP	Scale A3 1 : 1000
Approved	by	Sketch no. Revision
	CL	DC/2016/01/SK/0482 K



CAD Filenome = Q:\Technical\TO\Site Sketch\SK491D.dgn



		P	LANTING SCHEDULE FOR CHEUNG	TUNG ROAD (UNDER	MAINTENANCE	OF LCSD)	
CODE	BOTANICAL NAME	CHINESE NAME	SIZE (mm) HEIGHT (H) x SPREAD (S)	SPACING (mm)	NO./m²	%MIX.	QUANT (APPROX
			TR	EE PLANTING			
GAR.SUB.	Garcinia subelliptica	非洲福木	Light Standard	4000-5000	-	-	79
BAU.BLA	Bauhinia x blakeana	洋紫荊	Heavy Standard	5000	-	-	1
PEL.TON.	Peltophorum tonkinense	銀珠	Heavy Standard	5000	-	-	2
VIB.ODO.	Viburnum odoratissimum	珊瑚樹	Heavy Standard	5000	-	-	76
			PALM P	LANTING - EXOTIC			
ARE.CAT	Areca catechu	檳榔	4000(H)	4000	-	-	28
			GROUNE	COVER PLANTING			
EPI.AUR.	Epipremnum aureum	綠蘿	200(H) x 300(S)	300	12.54	-	6264
			SHF	RUB PLANTING			
IXO.CHI.	Ixora chinensis	龍船花	300(H) x 300(S)	300	12.54	-	1948
PHY.MYR.	Phyllanthus myrtifolius	錫蘭葉下珠	300(H) x 300(S)	300	12.54	-	894
CAR.MIT.	Caryota mitis	短穗魚尾葵	2500(H),min 4 clumps pre plant	750	1.95	-	137
SCH.ARB.	Schefflera arboricola	八葉	300(H) x 300(S)	300	12.54	-	2781
COD.VAR.'AUC'	Codiaeum variegatum 'aucubaefolium'	灑金榕	300(H) x 300(S)	300	12.54	-	161
COD.VAR.'RED'	Codiaeum variegatum 'red'	灑金榕 (紅色)	300(H) x 300(S)	300	12.54	-	1104
PIT.TOB.	Pittosporum tobira	海桐花	300(H) x 300(S)	300	12.54	-	552
RHA.IND.	Rhaphlolepis indica	車輪梅	300(H) x 300(S)	300	12.54	-	686
				ASS PLANTING			
AXO.COM.	Axonopus compressus	地毯草(大葉草)	WHOLE PIECE TURF 300(L) x 300(W) x 50(H)	-	m²	-	354

NOTES:

1. THIS DRAWING SHOULD BE READ IN CONJUNCTION WITH DRAWING NOS. DC/2016/01/SK/0482 TO DC/2016/01/SK/0489.

Project	CONTRACT NO. DC/2016/01 CONSTRUCTION OF AN ADDITIONAL SEWAGE RISING MAIN BETWEEN TUNG CHUNG AND SIU HO WAN AND ASSOCIATED WORKS 建造東涌至小蠔灣額外污水泵喉及附屬工程	香港特别行政區政府渠務署 THE GOVERNMENT OF THE HONG KONG SPECIAL ADMINISTRATIVE REGION DRAINAGE SERVICES DEPARTMENT
Title	PLANTING SCHEDULE FOR CHEUNG TUNG ROAD (LCSD)	民ACK & VEATCH HONG KONG LIMITED 地成工程前間有限公司

ΓITY	DE	MARK			
. NOS.					
		-			
		-			
		-			
le de					
		-			
		-			
4		-			
32					
9					
	-				
	_				
9		L SPECIES IN			
	STAGGER	ED PATTERN.			
1					
<u>.</u>	-				
	-				
2					
	25mm HIGH S	WORD AND 25mm			
8		SE OF TURF			
		hecked by			
	t	101			
	((C.H. PANG)			
		RE			
	Ap	oproved by			
		1			
	(C	.S. LEUNG)			
		SRE			
	Drawn by	Date			
	WTL	28/11/2019			
	Checked by F P	Scale SCHEDULE			
H	Approved by	Sketch no. Revi			
	CL	DC/2016/01/SK/0343			

		PLANT	ING SCHEDULE FOR AREA NORTH	OF ABUTMENT C (UND	DER MAINTEN	ANCE OF LCS	SD)	
CODE	BOTANICAL NAME	CHINESE NAME	SIZE (mm) HEIGHT (H) x SPREAD (S)	SPACING (mm)	NO./m²	%MIX.	QUANTITY (APPROX. NOS.)	REMARK
			SHF	RUB PLANTING				
ZAM.FUR.	Zamia furfuracea	牙買加蘇鐵	400(H) x 500 (S)	500	4.6	-	1366	
PHY.MYR. Phyllanthus myrtifolius 錫蘭		錫蘭葉下珠	300(H) x 300 (S)	300	12.54	-	3939	PLANT IN STAGGERED PATTERN.
			GROUNI	DCOVER PLANTING		1		
ASP.DEN.	Asparagus densiflorus	非洲天門冬	200(H) x 300 (S)	200	29	-	3837	PLANT ALL SPECIES IN
NEP.AUR.	Nephrolepis auriculate	腎蕨	250(H) x 250 (S)	150	51.59	-	90587	STAGGERED PATTERN.

NOTES:

1. THIS DRAWING SHOULD BE READ IN CONJUNCTION WITH DRAWING NOS. DC/2016/01/SK/0490 TO DC/2016/01/SK/0491.

/9/2020				Project	CONTRACT NO. DC/2016/01 CONSTRUCTION OF AN ADDITIONAL SEWAGE RISING MAIN BETWEEN TUNG CHUNG AND SIU HO WAN AND ASSOCIATED WORKS 建造東涌至小蠔灣額外污水泵喉及附屬工程	香港特别行政區政府渠務署 THE GOVERNMENT OF THE HONG KONG SPECIAL ADMINISTRATIVE REGION DRAINAGE SERVICES DEPARTMENT
6 =	в	з	QUANTITY REVISED	Title		₽,
Date	A	Δ	NOTE REVISED]	PLANTING SCHEDULE FOR AREA NORTH OF ABUTMENT C (LCSD)	BLACK & VEATCH HONG KONG LIMITED
in the second	RE	EV	DESCRIPTION			伸减工程 帧 問 有 限 公 可



.

Drown by	Date				
WTL	28/11/2019				
Checked by	Scale				
 F P	SCHEDULE				
Approved by	Sketch no.	Revision			
CL	DC/2016/01/SK/0347	В			

Inspection Date:	17 & 26 August 2020	Inspected By:	AUES
Time:	10:00 – 17:00	Weather Condition:	Sunny

Participants: AECOM (RSS), Ramboll (IEC), AUES (ET) & CKJV (Contractor) Rep.

	Zone: Area along Lung Mun Road and Lung Fu Road	N/A or not observed	Yes	No	Remarks / Photo
.1	Is watering provided to plants to ensure satisfactory growth and health (manual and automatic irrigation)?		V		
2	Are tree stakes, guys and ties provided properly for safety and avoid chaffing of bark?		V		
3	Are trees or limb overhanging branches pruned?	\square			
4	Are pest and disease observed?			M	
5	Are litter and debris removed?		V		
ô	Are plants/ grasses overgrown?			\mathbf{N}	
7	After inclement weather conditions, are proper action implemented to replace dead plants, repair damaged plants, bed in all plants that have blown over, firm up all other plants and immediately thereafter, remove dead plants and plant debris from the site?		Ŋ		
3	Are planting locations and tree spacing matched with the approved planting plans?		V		
)	Are the planting species on site matched with the approved planting schedules (Annex B)?		V		
		Good	Fair	Poor	
10	Overall health condition of the plants?		Ø		
	Zone: Area along cycling track near Butterfly Bay Beach and Raised Planter at Abutment Sides of Bridge H1 and G1	N/A or not observed	Yes	No	Remarks / Photo
	Is watering provided to plants to ensure satisfactory growth and health (manual and automatic irrigation)?		Ø		
	Are tree stakes, guys and ties provided properly for safety and avoid chaffing of bark?		Ø		
3	Are trees or limb overhanging branches pruned?				
ŀ	Are pest and disease observed?			$\mathbf{\overline{\mathbf{A}}}$	
5	Are litter and debris removed?		Ŋ		
5	Are litter and debris removed? Are plants/ grasses overgrown?		Ø	Ø	
5	Are plants/ grasses overgrown? After inclement weather conditions, are proper action implemented to replace dead plants, repair damaged plants, bed in all plants that have blown over, firm up all other plants and immediately thereafter, remove			Ø	
5	Are plants/ grasses overgrown? After inclement weather conditions, are proper action implemented to replace dead plants, repair damaged plants, bed in all plants that have blown over, firm up all other plants and immediately thereafter, remove dead plants and plant debris from the site? Are planting locations and tree spacing matched with the approved		Ø		

2.10 Overall health condition of the plants?

	_

 \checkmark

□ ____

}	Zone: Area on Toll Plaza	N/A or not observed	Yes	No	Remarks / Photo
5.1	Is watering provided to plants to ensure satisfactory growth and health (manual and automatic irrigation)?		V		
5.2	Are tree stakes, guys and ties provided properly for safety and avoid chaffing of bark?		$\mathbf{\overline{A}}$		
.3	Are trees or limb overhanging branches pruned?	$\mathbf{\nabla}$			
.4	Are pest and disease observed?			\square	
.5	Are litter and debris removed?		\mathbf{N}		
6	Are plants/ grasses overgrown?			$\mathbf{\nabla}$	
7	After inclement weather conditions, are proper action implemented to replace dead plants, repair damaged plants, bed in all plants that have blown over, firm up all other plants and immediately thereafter, remove dead plants and plant debris from the site?		Ø		
8	Are planting locations and tree spacing matched with the approved planting plans?		M		
9	Are the planting species on site matched with the approved planting schedules (Annex B)?		N		
		Good	Fair	Poor	
10	Overall health condition of the plants?	$\mathbf{\nabla}$			

ļ	Zone: Slopes on Toll Plaza near the East and West Portals	N/A or not observed	Yes	No	Remarks / Photo
.1	Is watering provided to plants to ensure satisfactory growth and health (manual and automatic irrigation)?		V		
.2	Are tree stakes, guys and ties provided properly for safety and avoid chaffing of bark?		V		
.3	Are trees or limb overhanging branches pruned?	$\mathbf{\nabla}$			
4	Are pest and disease observed?			V	
5	Are litter and debris removed?		V		
6	Are plants/ grasses overgrown?			V	
7	After inclement weather conditions, are proper action implemented to replace dead plants, repair damaged plants, bed in all plants that have blown over, firm up all other plants and immediately thereafter, remove dead plants and plant debris from the site?		Ø		
8	Are planting locations and tree spacing matched with the approved planting plans?		A		
9	Are the planting species on site matched with the approved planting schedules (Annex B)?		V		
		Good	Fair	Poor	
10	Overall health condition of the plants?		Z		

Establishment Inspection Checklist

5	Zone: Slopes along Lung Mun Road and Lung Fu Road	N/A or not observed	Yes	No	Remarks / Photo
5.1	Is watering provided to plants to ensure satisfactory growth and health (manual and automatic irrigation)?		V		
5.2	Are tree stakes, guys and ties provided properly for safety and avoid chaffing of bark?		V		
5.3	Are trees or limb overhanging branches pruned?	\square			
5.4	Are pest and disease observed?			$\mathbf{\nabla}$	
5.5	Are litter and debris removed?		$\mathbf{\nabla}$		
5.6	Are plants/ grasses overgrown?			$\mathbf{\nabla}$	
5.7	After inclement weather conditions, are proper action implemented to replace dead plants, repair damaged plants, bed in all plants that have blown over, firm up all other plants and immediately thereafter, remove dead plants and plant debris from the site?		Ø		
5.8	Are planting locations and tree spacing matched with the approved planting plans?		V		
5.9	Are the planting species on site matched with the approved planting				Please refer to
	schedules (Annex B)?				the attached
					comment
		Good	Fair	Poor	
5.10	Overall health condition of the plants?		M		
6	General Document	N/A or not observed	Yes	No	Remarks / Photo
6.1	Are the records of watering, fertilizing, weeding, pruning and mowing kept for checking?		Ø		

Follow up	actions	for	previous	Site	Audit:

NA

Observations:

Refer to the attachment

Corrective Actions (if any):

1. Incorrect species of tree should be replaced according to the approved planting plan

2. Some missing or poor health condition planting should be replaced ASAP

General Conclusion:

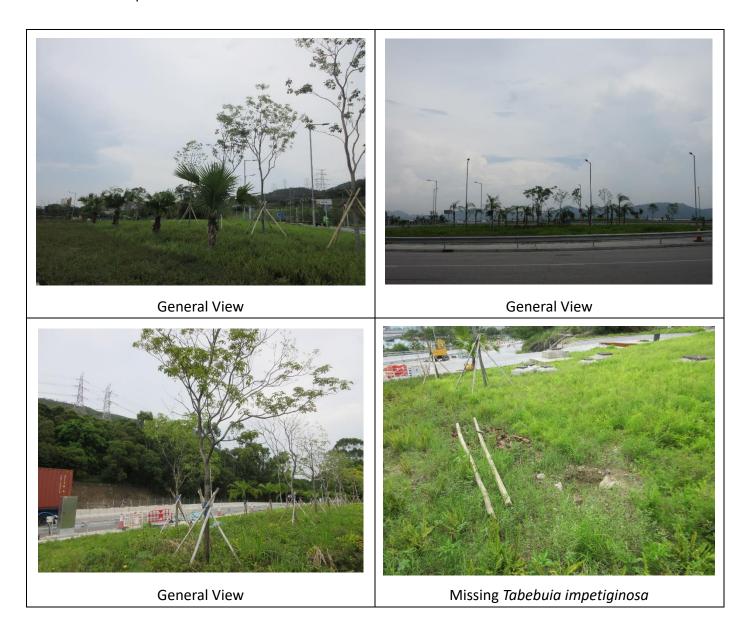
The establishment planting for the contract is generally in fair and good condition. Regularly watering, fertilizing, weeding, pruning and mowing had been provided by Contractor. Some tree planting species are different from the approved tree planting plan should be rectified.

Inspected by (ET's Representative):	Ben Tam	Title:	Environmental Consultant
Signature:	-36	Date:	26 August 2020
Reviewed by (RSS Landscape Representative):	Candy Lau	Title:	Senior Resident Landscape Architect
Signature:	Candy	Date:	11 September 2020
Contractor's Representative:	· Tommy Low	Title:	Environmartal Supervision
Signature:	- Cz	Date:	11 Sep 20
Checked by (IEC's Representative):	Mansin yeung	Title:	Tel
Signature:	L	Date:	LESey 20

Zone 1

Lung Mun Road/Lung Fu Road Roundabout area

One heavy standard *Tabebuia impetiginosa* was missing, Aecom said the tree was fallen and removed, and there will be a replacement.



Lung Mun Road

Two light standard *Garcinia subelliptica* was missing, Aecom said the tree was dead and removed, and there will be a replacement.



Zone 2 Lung Mun Road



Toe planter at Slope TP A and TP B

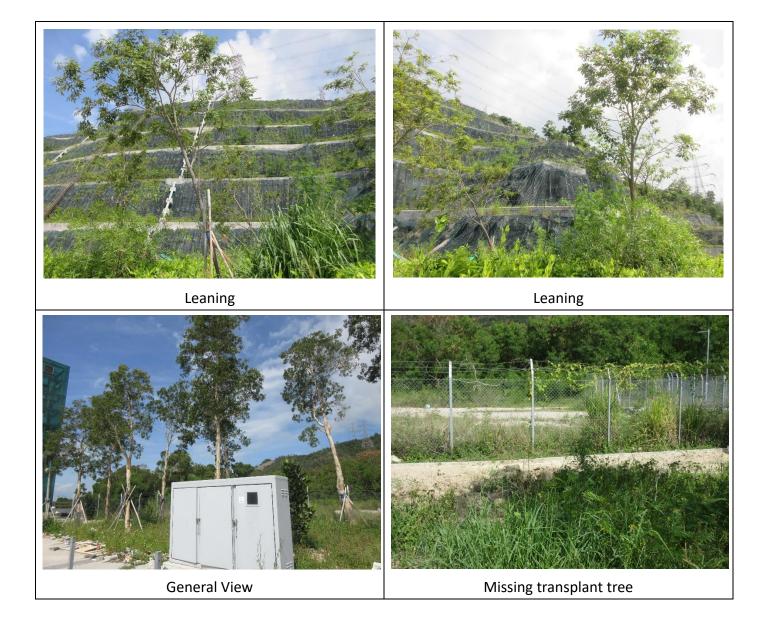


Toe planter and toll plaza

Some *Tabebuia chrysantha* were leaning, Aecom said it will be re-staked.

One transplanted *Melaleuca cajuputi* subsp. *Cumingiana* (T2820) was missing, Aecom said the tree was fallen and removed, and there will be a replacement.





Zone 4

Slope TP A and TP B

One light standard *Sterculia lanceolata* was missing. Accom said the tree was fallen and removed, and there will be a replacement.

Some trees were in poor health condition and dead and Aecom said there will be a replacement. Some whips were dead and Aecom said it will be replaced.



Slope TP D

Some whips (Gordonia axillaris) were dead and missing. Aecom said it will be replaced.



Zone 5

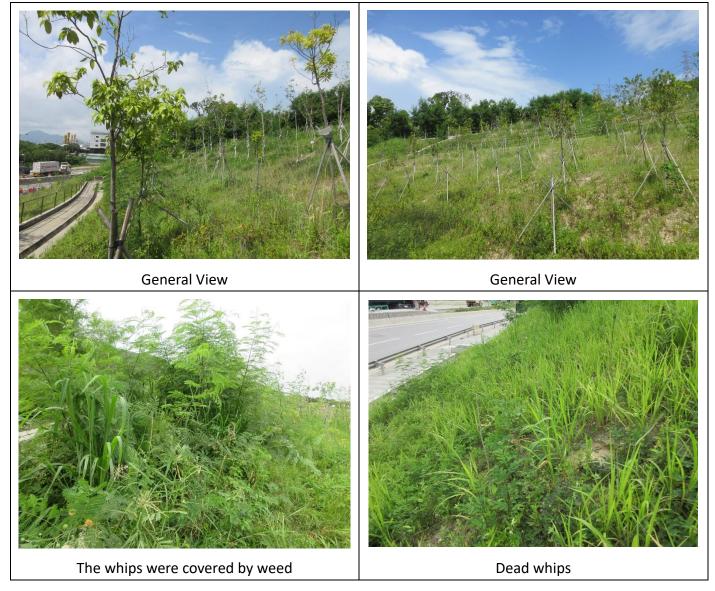
<u>55E-D/C170</u>

Four light standard *Bauhinia variegata* was missing. Accom said the trees were fallen and removed and there will be a replacement.

Fifteen *Schima superba* have been changed to *Sterculia lanceolata*, please review the planting plan and schedule.

Some trees were in poor health condition and dead and Aecom said there will be a replacement.

Some whips were dead and missing (Sapium discolor), Aecom said it will be replaced.









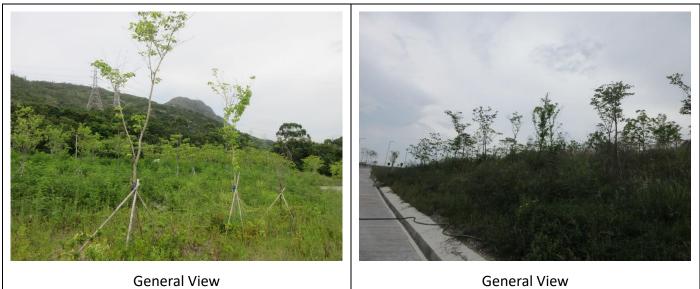
<u>55E-D/C171</u>



<u>55E-D/C21</u>



5SE-D/C215



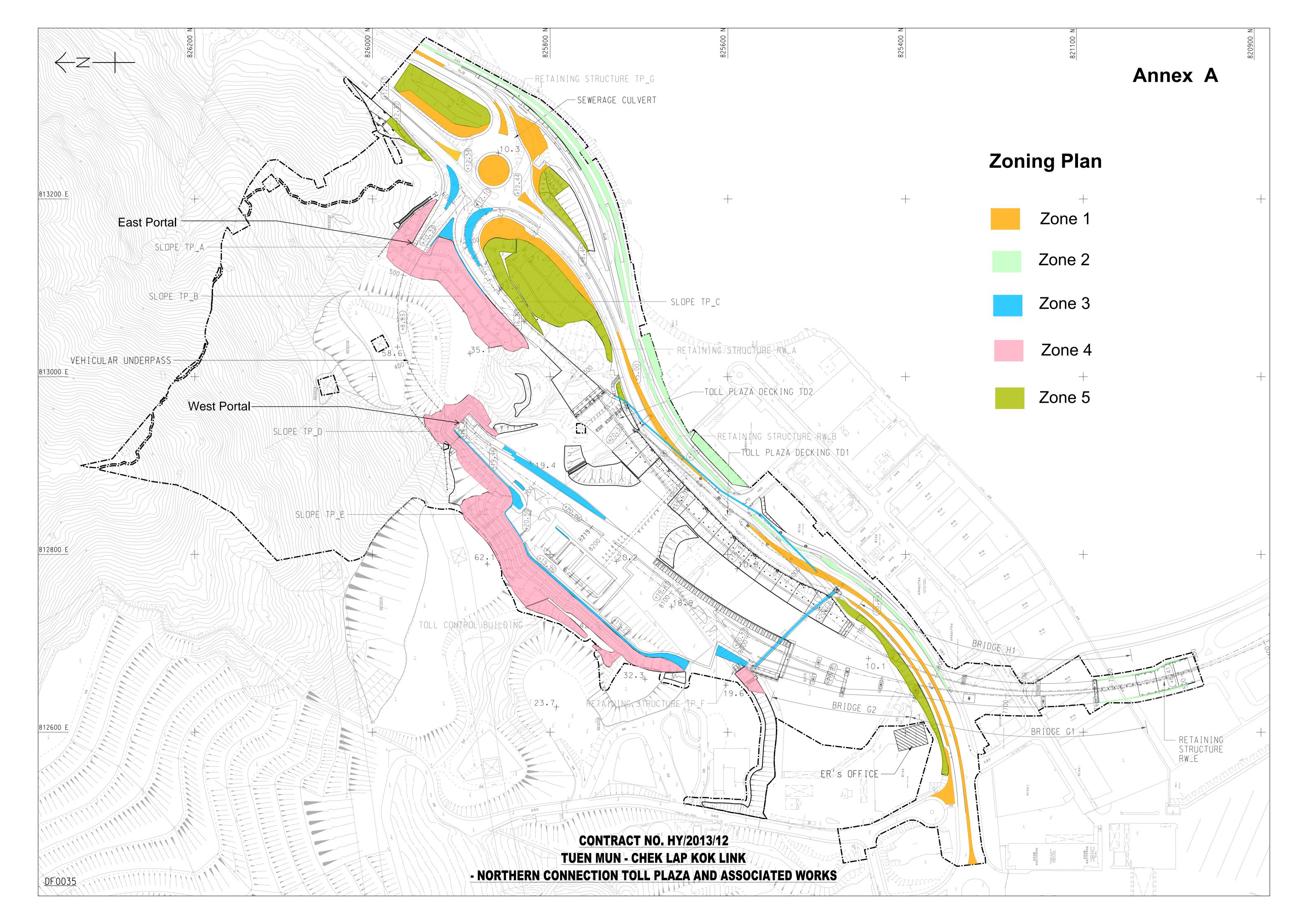
5SE-D/C16



5SE-D/C18



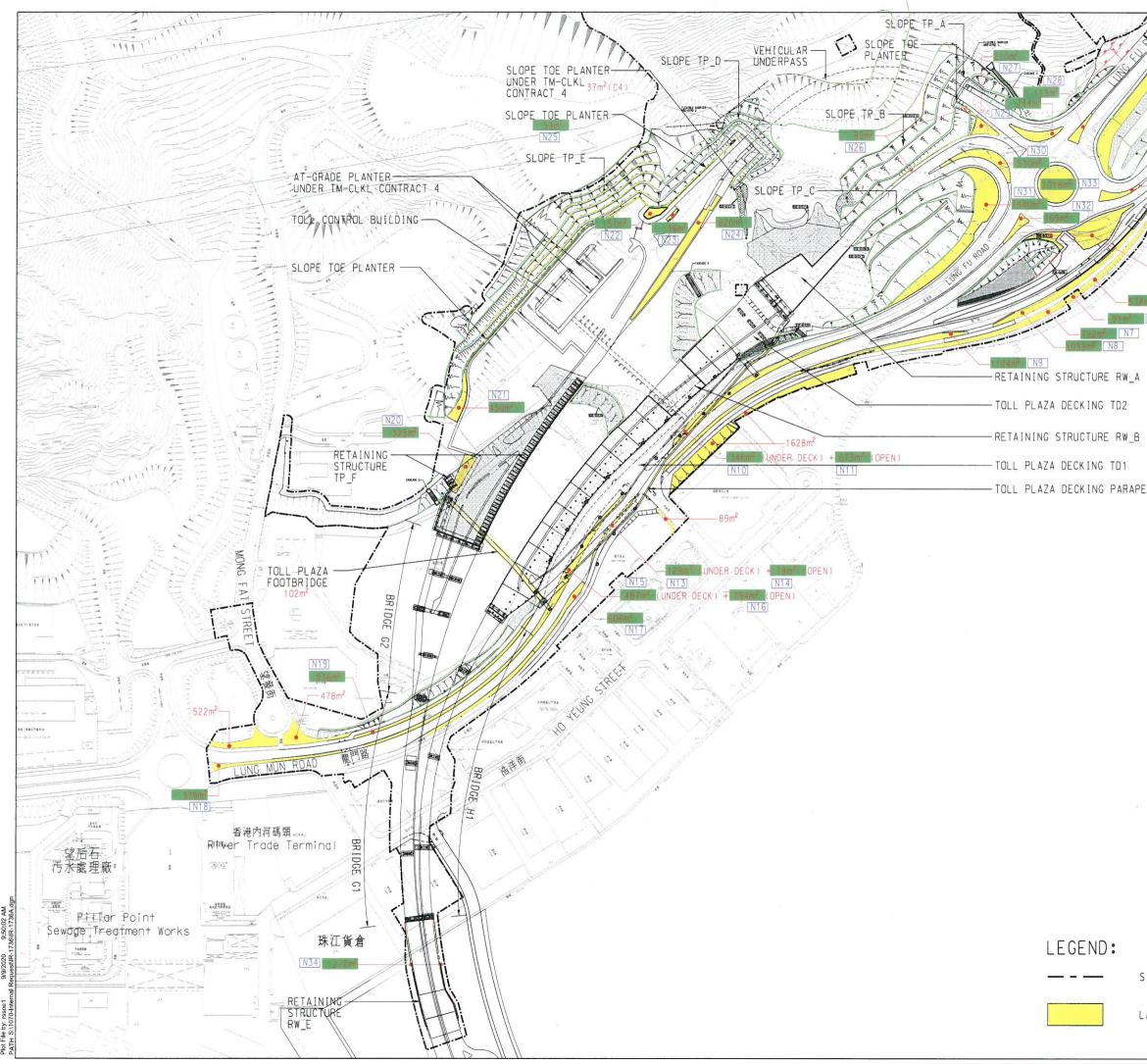
Appendix A Zoning Plan for Contract No. HY/2013/12



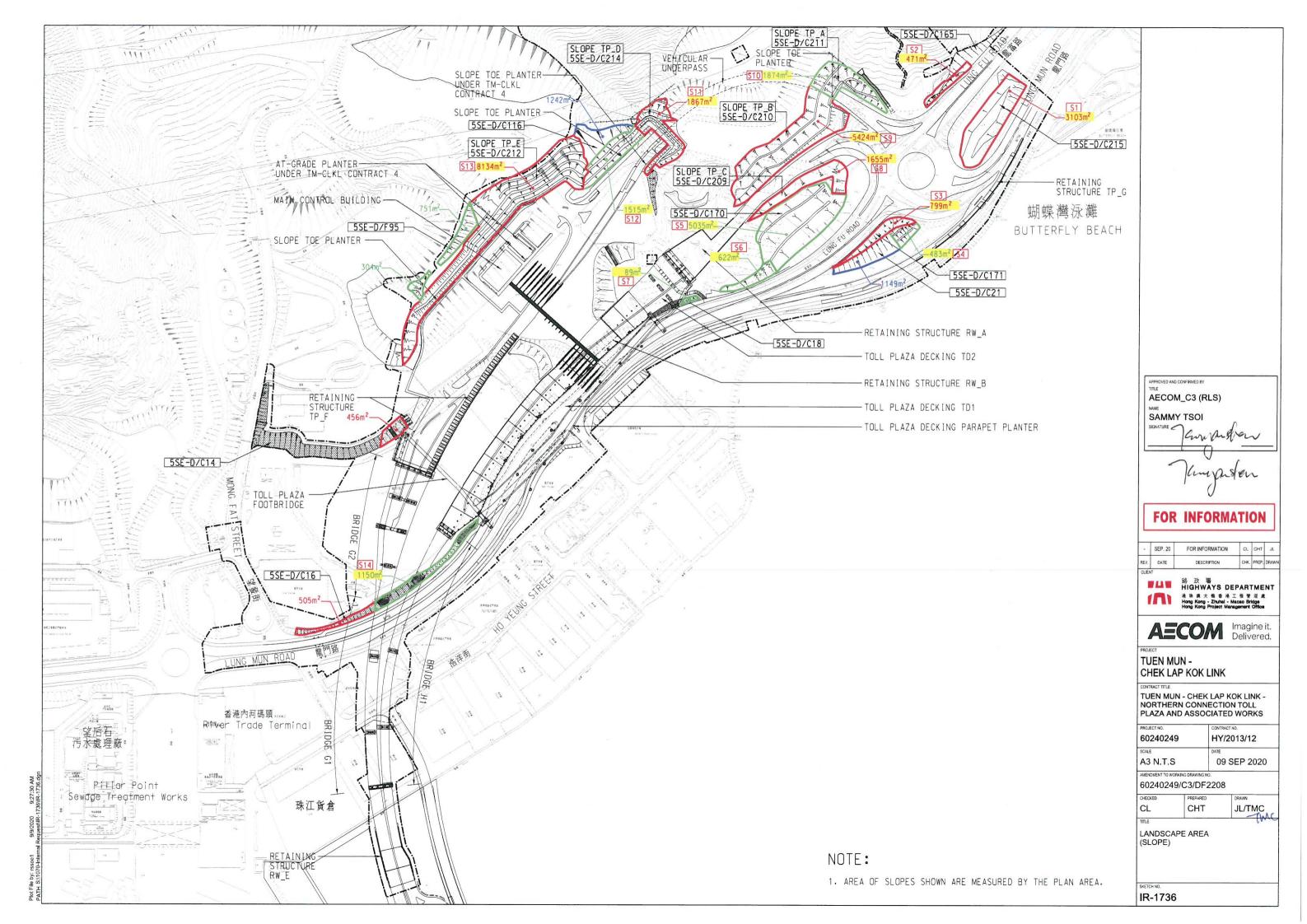
Appendix B Summary of Compensatory Planting Area for Contract No. HY/2013/12

Contract No. HY/2013/12 (C3) Landscape Area	Summary for EP Condition 2.9

Area Code	Location	Plan Area (sq.m.) Approx.	Average Slope Angle	Plane Area (sq.m.) Approx.
N1	Lung Fu Road	1276	0	
N2	Lung Mun Road	126	0	126
N3	Lung Mun Road	221	0	
N4	Lung Mun Road	1416	0	
N5	Lung Mun Road - cycle track	578	0	578
N6	Lung Mun Road - cycle track	91	0	91
N7	Lung Mun Road - cycle track	792	0	792
N8	Lung Mun Road	1059	0	1059
N9	Lung Mun Road/ Lung Fu Road	1124	0	1124
N10	Lung Mun Road - under deck	346	0	346
N11	Lung Mun Road	673	0	673
N12	Deck - Parapet Planter	300	0	300
N13	Lung Mun Road - under deck	129	0	129
N14	Lung Mun Road	79	0	
N15	Lung Mun Road - under deck	487	0	
N16	Lung Mun Road	794	0	
N17	Lung Mun Road - cycle track	606		
N18	Lung Mun Road	379	0	
N19	Lung Mun Road	536		
N20	Near Footbridge	325	0	
	Toe of Slope TP E	450	0	
N21	Toe of Slope TP_E (PDA)	-281	0	
N22	Toe of Slope TP E	151	0	
N23	Toll Plaza - roadside	36	-	Î
N24	Toll Plaza - roadside	820	0	
N25	Toe of 5SE-D/C116	53	0	
N26	Toe of Slope TP_A & Slope TP_B	89	0	
N27	Toe of Slope TP_B	210	0	
N28	Lung Fu Road	113	0	
N29	Island near Roundabout	334	0	
N30	Island near Roundabout	530		
N31	Toe of 5SE-D/C170	1940	0	
N32	Lung Fu Road	1940	0	
N33	Roundabout	105		
N34	Retaining Structure RW E	272	0	
S1	5SE-D/C215	3103	14	
S2	5SE-D/C215	471	30	
S2 S3	5SE-D/C105	799		
S4	5SE-D/C1/1	483		
S5	5SE-D/C21 5SE-D/C170 (PART 1)	5035		
<u>S6</u>	5SE-D/C170 (PART 1)	622	28	
<u>S7</u>	5SE-D/C170 (FART 2)	89		
S8	5SE-D/C18 5SE-D/C209 (Slope TP_C)	1655		
<u>58</u> S9		5424		
S10	5SE-D/C210 (Slope TP_B) 5SE-D/C211 (Slope TP_A)	1874		2347
		1874	50	
<u>S11</u>	5SE-D/C214 (Slope TP_D)			
S12	5SE-D/C116	1515		
S13	5SE-D/C212 (Slope TP_E)	8134		
C14	5SE-D/C212 (Slope TP_E) (PDA)	-4132		
S14 Sub-Total	5SE-D/C16 (Non-PDA)	1150	32	1356 53613



	2
J Trees	~
Baata Street	
221 ml N3	
RETAINING STRUCTURE TP_G	
蝴蝶灣泳灘	
BUTTERFLY BEACH	
NE	
N6	
	2
	APPROVED AND CONFIRMED BY
	AECOM_C3 (RLS)
T PLANTER 300m	SAMMY TSOI
[<u>N12</u>]	- ayphelien
	Tayachen Noupustern
	liveraster
	FOR INFORMATION
	- SEP. 20 FOR INFORMATION CL CHT JL
	REV. DATE DESCRIPTION CHK. PREP. DRAWN
	路政署 HIGHWAYS DEPARTMENT 德珠典大概香港工图管理或
	港京廣大橋香港工 医 管 浸点 Hong Kong - Zhuhai - Macao Bridge Hong Kong Project Management Office
	AECOM Imagine it. Delivered.
	PROJECT TUEN MUN - CHEK LAP KOK LINK
	CONTRACT TITLE TUEN MUN - CHEK LAP KOK LINK -
	NORTHERN CONNECTION TOLL PLAZA AND ASSOCIATED WORKS
	PROJECT NO. CONTRACT NO. 60240249 HY/2013/12
	A3 N.T.S DATE 09 SEP 2020
	AMENDMENT TO WORKING DRAWING NO. 60240249/C3/DF2210
	CHECKED PREPARED DRAWN CL CHT JL/TMC
ITE BOUNDARY	INDSCAPE AREA (NON-SLOPE)
ANDSCAPE AREA (NON-SLOPE)	
	SKETCH NO. IR-1736A
	IN-1730A



Appendix C Approved Planting Schedule for Contract No. HY/2013/12

Slope Planting

CODE	BOTANCIAL NAME	CHINESE NAME	SIZE (mm) HEIGHT (H) x SPREAD (S)	SPACING (mm)
WHIP				
BAU.VAR.	Bauhinia variegata	宮粉羊蹄甲	WHIP	1000
BRI.TOM.	Bridelia tomentosa *	土密樹	WHIP	1000
GOR.AXI.	Gordonia axillaris *	大頭茶	WHIP	1000
LIT.GLU.	Litsea glutinosa *	潺槁樹	WHIP	1000
MAL.PAN.	Mallotus paniculatus *	白楸	WHIP	1000
PHY.EMB.	Phyllanthus emblica *	餘甘子	WHIP	1000
SAP.DIS.	Sapium discolor *	山鳥桕	WHIP	1000
TREE				
BAU.VAR.(L)	Bauhinia variegata	宫粉羊蹄甲	LIGHT STANDARD	3000
BAU.VAR.(H)	Bauhinia variegata	宮粉羊蹄甲	HEAVY STANDARD	4000-450
BRI.TOM.	Bridelia tomentosa *	土密樹	LIGHT STANDARD	3000
BOM.CEI.(L)	Bombax ceiba	木棉	LIGHT STANDARD	3000
BOM.CEI.(H)	Bombax ceiba	木棉	HEAVY STANDARD	4500-500
CIN.BUR.	Cinnamomum burmannii *	陰香	LIGHT STANDARD	3000
CIN.BUR.	Cinnamomum burmannii *	陰香	HEAVY STANDARD	4500-50
LIQ.FOR.	Liquidambar formosana *	楓香	LIGHT STANDARD	3000
LIT.GLU.(L)	Litsea glutinosa *	漏槁木	LIGHT STANDARD	3000
MAC.CHE.	Machilus chekiangensis *	浙江澗楠	LIGHT STANDARD	3000
REE.THY.	Reevesia thyrsoidea *	梭羅樹	LIGHT STANDARD	3000
SCH.SUP.	Schima superba *	夜維団 木荷 (荷樹)	LIGHT STANDARD	3000
STE.LAN.	Sterculia lanceolata *		LIGHT STANDARD	3000
STE.LAN.	Sterculia lanceolata *	假 頻婆 (根) 一般 頻婆 (根) 一般 頻婆 (根) 一般 頻婆 (根) 一般	HEAVY STANDARD	4500-50
	Viburnum odoratissimum *			3000
VIB.ODO.	VIDUrnum odoratissimum *	珊瑚樹	LIGHT STANDARD	3000
SHRUB		inter a second		
DES. CHI.	Desmos chinensis *	假鷹爪	300(H) X 300(S)	500
ILE.ASP.	llex asprella *	梅葉冬青	300(H) X 300(S)	500
ILE.PUB.	Ilex pubescens *	毛冬青	300(H) X 300(S)	500
LIG.SIN.	Ligustrum sinense	山指甲	300(H) X 300(S)	350-50
MEL.CAN.	Melastoma candidum *	野牡丹	300(H) X 300(S)	500
MEL.SAN.	Melastoma sanguineum *	毛菍	300(H) X 300(S)	350-50
NER.OLE.	Nerium oleander	夾竹桃	300(H) X 300(S)	350
PSY.ASI.	Psychotria asiatica *	九節	300(H) X 300(S)	500
RHA.IND.	Rhaphiolepis indica *	車輪梅	300(H) X 300(S)	350-50
RHO.PUL.	Rhododendron pulchrum	紫杜鵑	300(H) X 300(S)	500
RHO.SIM.	Rhododendron simsii *	紅杜鵑	300(H) X 300(S)	500
SCH.ARB.	Schefflera arboricola	八葉木	300(H) X 300(S)	500
SCH.VAR.	Schefflera arboricola 'variegata'	花葉八葉木	300(H) X 300(S)	500
GROUNDCOVER				
NEP.AUR.	Nephrolepis auriculata *	腎蕨	300(H) X 300(S)	100-30
NEP.HIR.	Nephrolepis hirsutula *	毛葉腎蕨	300(H) X 300(S)	100-30
CLIMBER				
BAU.COR.	Bauhinia corymbosa	首冠藤	MIN. 5 SHOOTS PER PLANT, 600mm LONG	300-100
BOU.SPE.	Bougainvillea spectabilis	簕杜鵑	MIN. 5 SHOOTS PER PLANT, 600mm LONG	300-50
FIC.PUM.	Ficus pumila *	薜荔	MIN. 3 SHOOTS PER PLANT, 1000mm LONG	300
LON.JAP.	Lonicera japonica *	忍冬(金銀花)	MIN. 5 SHOOTS PER PLANT, 600mm LONG	300-100
PAR.DAL.	Parthenocissus dalzielii	爬墙虎	MIN. 3 SHOOTS PER PLANT, 1000mm LONG	300-100
WED. T RI.	Wedelia trilobata	蟛蜞菊	MIN. 5 SHOOTS PER PLANT, 600mm LONG	300

Roadside Planting

CODE	BOTANCIAL NAME	CHINESE NAME	SIZE (mm)	SPACING	
			HEIGHT (H) x SPREAD (S)	(mm)	
TREE	Design of the second se	6-4-95-7-56-2057	UP AIR/ CTANDADD	4500 5000	
BRA.ACE.	Brachychiton acerifolius	<u> </u>	HEAVY STANDARD	4500-5000	
DEL.REG.	Delonix regia	鳳凰木	HEAVY STANDARD	N/A	
GAR.SUB.	Garcinia subelliptica	福木	LIGHT STANDARD	3000	
MEL.CUM.	Melaleuca cajuputi subsp. cumingiana	白千層	HEAVY STANDARD	4000	
STE.LAN.	Sterculia lanceolata *	假蘋婆	HEAVY STANDARD	5000	
TAB.CHR.	Tabebuia chrysantha	黃花風鈴木	HEAVY STANDARD	5000	
TAB.IMP.	Tabebuia impetiginosa	風鈴木	HEAVY STANDARD	5000	
TER.MAN.	Terminalia mantaly	小葉欖仁	HEAVY STANDARD	5000	
PALM					
ARC.ALE.	Archontophoenix alexandrae	假檳榔	3500(H) x 1500(S)	4000	
CHR.LHT.	Chrysalidocarpus lutescens	散尾葵	1500(H)	2000	
LIV.CHI.	Livistona chinensis	蒲葵	2000(H) x 1500(S)	2500	
PHO.ROE.	Phoenix roebelenii	日本葵	2000(H) x 1500(S)	2500-3000	
WOD.BIF.	Wodyetia bifurcata	狐尾椰子	2500(H) x 1500(S)	3500	
SHRUB					
DUR.GOL.	Duranta repens 'goldern'	金連翹	300(H) X 300(S)	300	
IXO.CHI.	Ixora chinensis *	龍船花	300(H) X 300(S)	300	
IXO.COC.	Ixora coccinea	橙紅龍船花	300(H) X 300(S)	300	
IXO.LUT.	Ixora coccinea 'lutea'	黃花龍船花	300(H) X 300(S)	300	
RHA.IND.	Rhaphiolepis indica *	車輪梅	300(H) X 300(S)	300	
RHO.PUL.	Rhododendron pulchrum	紫杜鵑	300(H) X 300(S)	300	
RHO.SIM.	Rhododendron simsii *	紅杜鵑	300(H) X 300(S)	300	
SCH.ARB.	Schefflera arboricola	八葉木	300(H) X 300(S)	300	
SCH.VAR.	Schefflera arboricola 'variegata'	花葉八葉木	300(H) X 300(S)	300	
GROUNDCOVI	ER				
ASP.DEN.	Asparagus densiflorus 'myersii'	狐尾天冬	300(H) X 300(S)	250	
ARA.DUR.	Arachis duranensis	金花生	100(H) X 200(S)	200	
ASP.SPR.	Asparagus densiflorus 'sprengeri'	天冬	100(H) X 200(S)	200	
CUP.HYS.	Cuphea hyssopifolia	細葉雪茄花	250(H) X 300(S)	250-300	
DIA.VAR.	Dianella tasmanica 'variegata'	花葉山菅蘭	250(H) X 250(S)	250	
LAN.FLA.	Lantana camara 'flava'	黃花馬纓丹	200(H) X 200(S)	200	
LAN.MON.	Lantana montevidensis	小葉馬纓丹 (紫花)	200(H) X 200(S)	200	
NEP.AUR.	Nephrolepis auriculata *	腎蕨	300(H) X 300(S)	150-250	
OPH.JAP.	Ophiopogon japonicus *	沿階草	200(H) X 200(S)	200	

NOTE:

1. ALL PROPOSED PLANT SPECIES AND SPECIFICATIONS ARE SUBJECT TO CHANGE DURING CONSTRUCTION

TO SUIT THE SITE CONDITIONS.

2. SHRUB / GROUNDCOVER SHOULD BE PLANTED IN A STAGGERED PATTERN.

3. GRASS SEED AS CEDD GENERAL SPECIFICATION 3.26(3).

4.* SPECIES NATIVE TO HONG KONG ACCORDING TO THE HONG KONG HERBARIUM WEBSITE.

Status: Planting Schedule is a consolidated list of plant species based on the planting plans as commented/ approved by the relevant Government departments, i.e. LCSD or HyD/ Landscape Division.

AECOM Imagine it. Delivered.

Agreement No. CE 7/2011(HY) Tuen Mun – Chek Lap Kok Link – Design and Construction Planting Schedule (Contract 3 – HY/2013/12)

Drawing Title: Figure 6.2

Appendix D Summary of tree Quantity for Contract No. HY/2013/12

				Planting Plan Information							1st Quarter Site Checking					
									Total quantity to be planted						Total quantity observed on site	Remarks
	т	rees		Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	as required in contract	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Total quantity observed on site	Reliaiks
CODE	BOTANCIAL NAME	CHINESE NAME	SIZE (mm) HEIGHT (H) x SPREAD (S)													
Whip Tree																
BAU.VAR.(L)	Bauhinia variegata	宮粉羊蹄甲	WHIP	-	-	-	-	52	52	-	-	-	-	52	52	
BRI.TOM.	Bridelia tomentosa	土密樹	WHIP	-	-	-	68	25	93	-	-	-	68	25	93	
GOR.AXI	Gordonia axillaris	大頭茶	WHIP	-	-	-	88	52	140	-	-	-	68	52	120	20 missing
LIT.GLU.	Litsea glutinosa	漏稿樹	WHIP	-	-	-	-	38	38	-	-	-	-	38	38	
MAL.PAN.	Mallotus paniculatus	白楸	WHIP	-	-	-	-	38	38		-	-	-	38	38	
PHY.EMB.	Phyllanthus emblica	餘甘子	WHIP	-	-	-	-	38	38		-	-	-	38	38	
SAP.DIS.	Sapium discolor	山烏桕	WHIP	-	-	-	-	12	12		-	-	-	5	5	7 missing
Tree (Ligh	t Standard,	Heavy Stan	-													
BAU.VAR.(L)	Bauhinia variegata	宮粉羊蹄甲	LIGHT STANDARD	-	-	-	34	191	225	-	-	-	34	187	221	4 missing
BOM.CEI.(L)	Bombax ceiba	木棉	LIGHT STANDARD	-	-	-	-	32	32	-	-	-	-	32	32	
BRI.TOM.	Bridelia tomentosa	土密樹	LIGHT	-	-	-	15	66	81	-	-		15	66	81	
CIN.BUR.	Cinnamomum burmannii	陰香	LIGHT	-	-	-	-	51	51	-	-	-	-	51	51	
GAR.SUB	Garcinia subelliptica	福木	LIGHT	16	4	10	-	-	30	14	4	10	-	-	28	2 missing in zone 1
LIQ.FOR.	Liquidambar	楓香	LIGHT	-	-	-	-	32	32		_	-	-	32	32	Ŭ
LIT.GLU.(L)	Litsea glutinosa	漏槁木	LIGHT	-	-	-	19	-	19	-	-	-	19	<u> </u>	19	
MAC.CHE.	Machilus	浙江潤楠	STANDARD LIGHT	-	-	-	17	44	61	-	-	-	17	44	61	
REE.THY.	chekiangensis Reevesia	梭羅樹	STANDARD LIGHT	-	-	-	7	29	36	-	-	-	7	29	36	
SCH.SUP.	thyrsoidea Schima	¹⁽²⁾ 木荷 (荷樹)	STANDARD LIGHT		-	-	-	32	30			-	-	17	17	15 missing
-	superba Sterculia		STANDARD LIGHT	-						-						1 missing in zone 4 and 15
STE.LAN.	lanceolata Viburnum	假蘋婆	STANDARD	-	-	-	6	47	53	-	-	-	5	62	67	additional in zone 5
VIB.ODO.	odoratissimum	珊瑚樹	STANDARD	-	-	-	16	58	74	-	-	-	16	58	74	
BAU.VAR.(L)	variegata	宮粉羊蹄甲	STANDARD	-	-	-	-	41	41		-	-	-	41	41	
BOM.CEI.(L)	Bombax ceiba	木棉	HEAVY STANDARD	-	-	-	-	16	16		-	-	-	16	16	
BRA. ACE	Brachychiton acerifolius	槭葉蘋婆	HEAVY STANDARD	-	-	18	-	-	18		-	18	-	-	18	
CIN.BUR.	Cinnamomum burmannii	陰香	HEAVY STANDARD	-	-	-	-	23	23	-	-	-	-	23	23	
STE.LAN.	Sterculia lanceolata	假蘋婆	HEAVY STANDARD	-	-	3	-	10	13	-	-	3	-	10	13	
DEL.REG	Delonix regia	鳳凰木	HEAVY STANDARD	1	-	-	-	-	1	1	-	-	-	-	1	
MEL.CUM	Melaleuca cajuputi Subsp.	白千層	HEAVY	35	16	-	-	-	51	35	16	-	-	-	51	
TAB.CHR	Tabebuia chrysantha	黃花風鈴木	HEAVY	-	-	4	-	-	4	-	-	4	-	-	4	
TAB.IMP	Tabebuia impetiginosa	風鈴木	HEAVY STANDARD	66	-	3	-	-	69	65	-	3	-	-	68	1 missing in zone 1
TER.MAN	Terminalia	小葉欖仁	HEAVY	-	8	-	-	-	8		8	-	-	-	8	
Palm	mantaly		STANDARD													
ARC.ALE	Archontophoeni	假檳榔	3500(H) x	-	58	-	-	-	58		58	-	-	-	58	
LIV.CHI	x alexandrae Livistona	蒲葵	1500(S) 2000(H) x	24	-	-	-	-	24	24	-	-	-		24	
PHO.ROE	chinensis Phoenix	日本葵	1500(S) 2000(H) x	50	-	4	-	-	54	50	-	4	-		54	
WOD.BIF	roebelenii Wodyetia bifurcata	狐尾椰子	1500(S) 2500(H) x 1500(S)	-	-	26	-	-	26	-	-	26	-	-	26	
1	proroata		1000(8)	100												
				192	86	68	270	927	1543	189	86	68	249	916	1508	

Summary of tree Quantity for Contract No. HY/2013/12