Environmental Permit No. EP-510/2016

Landscape and Visual Mitigation Plan

ET Certification Letter

Agreement No. CE 60/2016 (CE)

Site Formation and Infrastructure Works for Police Facilities in Kong Nga Po - Design and Construction

Detailed Landscape Design Report (Revised Final Rev. 4)

Certified By

(**Environmental Team Leader:** Ms. Ivy Tam)

Certified By

(**Registered Landscape Architect:**

Mr. LAM Kwong-Leung, Ted)

IEC Verification Letter

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CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT
NORTH DEVELOPMENT OFFICE
UNIT 2320, LEVEL 23, TOWER 1, METROPLAZA,
223 HING FONG ROAD,
KWAI FONG, NEW TERRITORIES,
HONG KONG

Attention: Mr. William WONG

28 September 2020

Dear William,

Contract No. NDO/02/2018
Site Formation and Infrastructure Works for Police Facilities in Kong Nga Po
Landscape and Visual Mitigation Plan

I refer to the Detailed Landscape Design Report (Revised Final Rev.4) which serve as the submission of the Landscape and Visual Mitigation Plan for the Environmental Permit Condition EP-510/2016 Conditions 2.18 and 2.19.

In accordance with the Environmental Permit Condition 1.9, I hereby verify this report has conformed to the information and recommendations contained in the EIA Report (Register No. AEIAR-201/2016).

Yours faithfully,

Kevin W.M. Li
Independent Environmental Checker

cc. CEDD - Andrew CHEUNG
AECOM - Gloria TANG
ET Leader – Ivy TAM

RtoC Table (PlanD)

Environmental Permit No. EP-510/2016
Site Formation and Infrastructure Works for Police Facilities in Kong Nga Po

Response to Comments

No.	Comments (Received on 4 May 2020)	Response to Comment (Reply on 21 May 2020)
PlanD (Landscape)		
1.	Approved plans under AEIAR-201/2016 showing relevant mitigation measures (e.g. OM 06,07,08, ect) to be included for easy reference.	The plans have been incorporated into Appendix IX for your easy reference.
2.	Proposed Landscape Planting (i.e.Tree planting plans, shrub planting plans, planting schedules) indicating extent/quantities/areas of relevant mitigation measures (e.g.OM 06, 07, 08, etc) to be provided.	Please refer to Appendix III for the tree planting plans and schedule and Appendix IV for proposed whip tree & shrub planting plans indicating the quantities of the respective shrubs and whip trees to be planted with corresponding planting schedule. Please also note that the quantities of the vegetation and trees as supplemented in the above two appendices only cover the mitigation measures to be enforced under this CEDD contract and the remaining parts would be subject to the design by ArchSD.
3.	According to EP Condition 2.19, details of the plant species as larval food plants of butterflies as required under EP Condition 2.21 should be specified. However, it is noted the planting proposal does not provide details in terms of planting plans and planting schedule for OM08.	Please note that ArchSD is responsible for the details of the plant species as larval food plants of butterflies including design and implementation arrangement. Such information shall be further submitted by ArchSD once available before such plantation under ArchSD's building works contract.

PlanD (Visual)		
1.	The consultant is reminded to ensure PlanD's previous comments on Urban Design and his proposed mitigation measures have been properly reflected in the current submission. Other than this, the Urban Design unit of PlanD has no further comment on the current report.	Understanding that PlanD's previous comments given have been duly incorporated in the EIA for KNP Project, please note that mitigation measures and design requirements as specified in the EIA Report and EP for KNP Project in relation to CEDD's site formation works contract have been properly reflected. On the other hand, ArchSD / HKPF shall be responsible for the proposal of mitigation measures as specified in the EIA Report and EP for KNP Project in relation to building works contract in order to fulfil relevant requirement as appropriate.

RtoC Table (AFCD)

Environmental Permit No. EP-510/2016
Site Formation and Infrastructure Works for Police Facilities in Kong Nga Po

Response to Comments

No.	Comments (Received on 13 August 2020)	Response to Comment (Reply on 13 August 2020)
AFCD (For Landscaping and Greening Design Report (Revised Final Rev. 4) as the submission of Landscape and Visual Mitigation Plan)		
1.	It is noted from S.5.4.2 that common grass species *Ischaemum barbatum* and *Tetradium glabrifolium* will be planted as larval food plants for butterfly species. This is different from the recommendation made in Table 3.2a of Appendix V, the approved EIA report and EP condition 2.21, in which common grass species *Ischaemum barbatum* and *Zanthoxylum nitidum* were proposed as the larval food plants for butterfly species. Please review.	Please note that the *Tetradium glabrifolium* was proposed during the design stage to replace *Zanthoxylum nitidum* after the receipt of comments from CEDD Landscape Unit (LU) concerning the thorny nature of the proposed *Zanthoxylum nitidum* under the EIA report. (For details of the our response to CEDD LU's comment can refer to Attachment A for this RtoC) No further comment was received from both CEDD and AFCD to the proposed arrangement. (Records of no comment on the report can refer to revised Appendix VIII of the report) Furthermore, please note that ArchSD is responsible for the details of the plant species as larval food plants of butterflies including design and implementation arrangement. Such information shall be further submitted by ArchSD once available before such plantation under ArchSD's building works contract.

Attachment A

Item	Comments	Responses
	l) The proposed *Zanthoxylum nitidum* is a thorny species. Please review whether it is suitable for project site.	Noted. Section 5.3.2 is updated. *Tetradium glabrifolium* is proposed to replace *Zanthoxylum nitidum* for your consideration. Also, it is understood that the detailed design and plantation of the glassland area in the north-most platform area of the Police Facilities Site within the Police Facilities Site shall be undertaken by ArchSD. Therefore, the above mentioned species would not be reflected in the Appendix III and IV.
	m) The hard landscape treatments are inconsistent to the ACABAS submission. Updated hard landscape treatment should be submitted for comment.	Noted and updated. The updated treatment is shown in Appendix II.
	2. Based on the above, the draft submission is not acceptable from landscape point of view. Re-submission is required.	
3.	**Lands Department** **Lands Administration Office** **District Lands Office, North**	
	I refer to your letter dated 19.3.2018 regarding the subject matter. This office has no comment on the technical aspect of the Detailed Landscape Design Report (Draft). Should you have any enquiry, please feel free to contact the undersigned at 2675 1744.	Noted.
4.	**Leisure and Cultural Services Department** **Administration Division** **Planning Section**	
	(nil comment received at the set deadline)	
5.	**Agriculture, Fisheries and Conservation Department** **Headquarters** **Conservation Branch** **Nature Conservation (North) Division**	
	I refer to your letter dated 19 March 2018 regarding the subject report. Please find my comment below:	

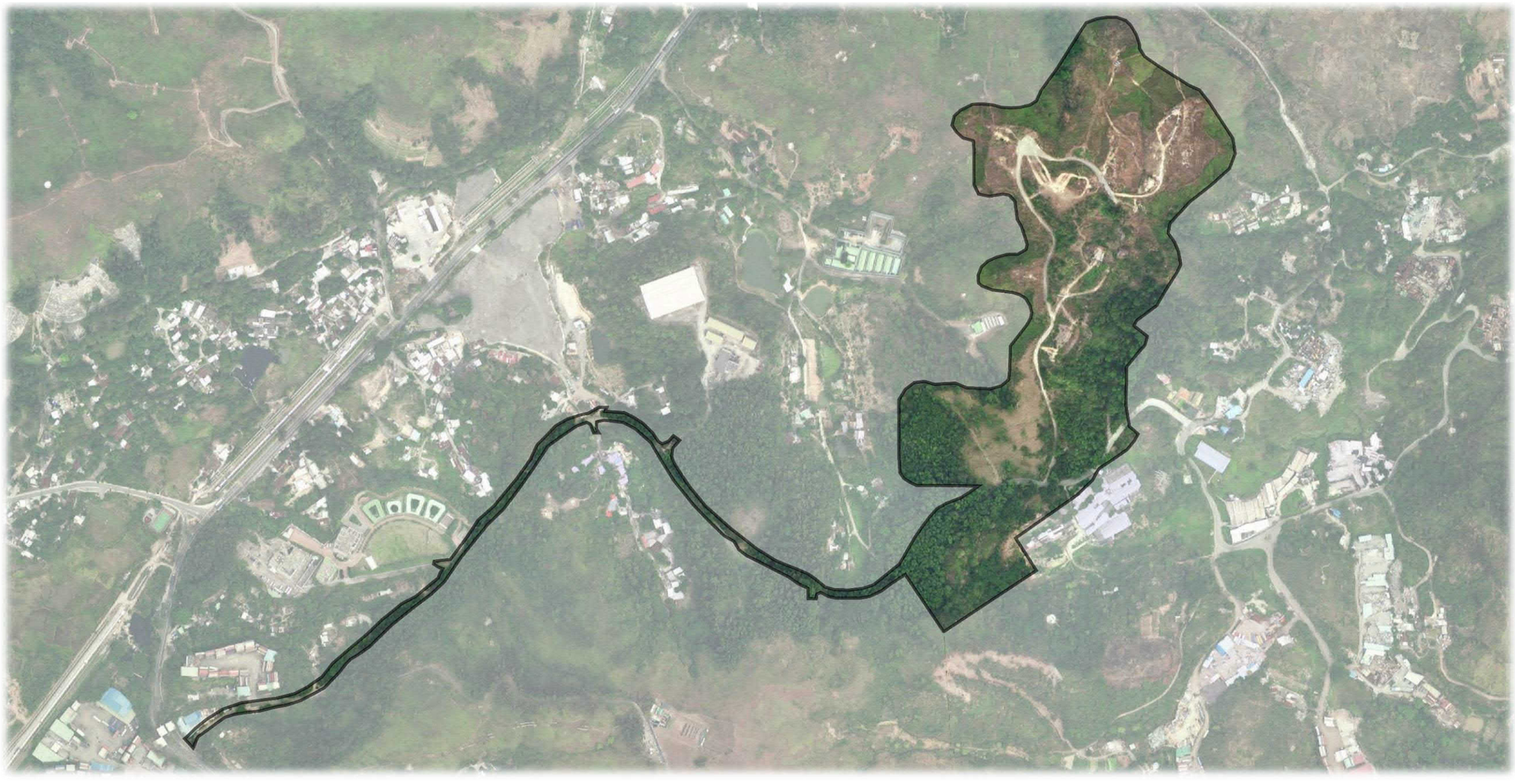
Landscape and Visual Mitigation Plan

THE GOVERNMENT OF THE HONG KONG SPECIAL ADMINSTRATIVE REGION

CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT

Agreement No. CE 60/2016 (CE)

Site Formation and Infrastructure Works for Police Facilities in Kong Nga Po - Design and Construction



Agreement CE 60/2016 (CE)
Site Formation and Infrastructural Works for
Police Facilities at Kong Nga Po
- Design and Construction

Landscaping and Greening Design Report (Revised Final Rev. 4)

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1 INTRODUCTION

1.1 Project Background

1.1.1 Kong Nga Po in the North District is a rural area with very limited existing developments. Part of the Development Area fell within the then Frontier Closed Area, which was released in 2016. There are villages lying at the far north and east. The major vehicular access to the Development Area is a sub-standard rural track namely Kong Nga Po road leading from Man Kam To Road. The Development Area can also be accessed from the east through a local access road from Ping Che Road.

1.1.2 In 2010, a "Study on the Land Use Planning for the Closed Area" was completed and an area in Kong Nga Po with approximately 19ha in size was identified as a potential housing site for low density residential development upon its release from the Frontier Closed Area.

1.1.3 Subsequently, CEDD has commissioned a study under Agreement No. CE 16/2012 (CE) – "Engineering Feasibility Study for Kong Nga Po – Feasibility Study" to confirm the feasibility of the proposed residential development. The study was originally scheduled for completion in April 2014, but was decided not to proceed further in January 2014 because of reasons stated in paragraph 1.1.4 below.

1.1.4 One of the constraints to the proposed residential development is SULFR, which needs to be relocated because of its possible adverse environmental impacts on the development. However, owning to the difficulties encountered in identifying a suitable relocation site for SULFR, it is considered that instead of having residential development at the KNP site, an alternative option of having the SULFR retained in-situ and using the KNP site for co-locating various existing police facilities including LWFR, MTLFR, PD&TTF, WTF and a helipad, and a proposed PTF ("the alternative option") could be explored. The proposed layout satisfies the major site requirements provided by HKPF and GFS.

1.1.5 Preliminary feasibility assessments based on the preliminary layout have been conducted by CEDD taking into account the site constraints and the operation requirements of the various police facilities and the helipad. The findings of the preliminary feasibility assessments indicate that there should be no insurmountable technical issues on the alternative option, subject to the provision of necessary infrastructure, such as improvement of KNP Road to the standard of Transport Planning and Design Manual (TPDM), provision of drainage and sewerage facilities, and utility services, etc.

1.1.6 In the third quarter of 2014, the Ta Kwu Ling District Rural Committee (TKLDRC), the Sheung Shui District Rural Committee (SSDRC) and District Minor Works and Environmental Improvement Committee (DMW&EIC) of the North District Council (NDC) were consulted regarding the proposed co-location of police facilities in Kong Nga Po.

1.1.7 In December 2014, CEDD commissioned consultants to carry out the engineering feasibility study for the police facilities in KNP under Agreement no. CE 31/2014(CE). The objectives of the study were (i) to determine the environmental acceptability of co-locating police facilities in KNP site; (ii) to determine the scope of the necessary infrastructure to support the co-locating police facilities; and (iii) to study the geotechnical engineering aspects before the proposed co-location of existing police facilities in Kong Nga Po could proceed. The study has confirmed, among others, that the co-location of the police facilities at the KNP Site is environmentally acceptable and technically feasible with no insurmountable problems on the surrounding areas. Besides, the study has also recommended an indicative layout plan for various police facilities with a total gross floor area of about 35,000m2, a plot ratio of about 0.18 (based on gross site area) and a maximum building height of 5 storeys. The development parameters for the KNP development would be reviewed and subject to change at the detailed design stage.

1.1.8 The police facilities for co-location in the Development Area at Kong Nga Po mainly include:

a) Lo Wu Firing Range (LWFR) to be relocated from Lo Wu;

b) Ma Tso Lung Firing Range (MTLFR) to be relocated from Ma Tso Lung;

c) Weapons Training Facilities (WTF) to be relocated from Fan Garden;

d) Police Driving and Traffic Training Facilities (PD&TTF), including a multi-storey training complex, to be relocated from Fan garden;

e) Helipad to be relocated from Lo Wu; and

f) A Proposed Police Training Facility (PTF)

1.1.9 Assessments of various technical issues have been completed including the environmental impact assessment (EIA). The EIA and technical assessments on various aspects and including traffic, geotechnical, site formation, drainage, sewerage, water supply, and utilities carried out under the engineering feasibility study have demonstrated that the proposed co-location of police facilities in Kong Nga Po is environmentally acceptable and technically feasible with no insurmountable problem.

1.1.10 The Project consists of two Designated Project (DPs) under Part I, Schedule 2 of the EIAO namely (a) a helipad within 300m of existing or planned residential development (Item B.2, Part I, Schedule 2); and (b) an open firing range (Item O.5, Part I, Schedule 2). The EIA Report was approved by DEP under EIAO on 20 October 2016 and the Environmental Permit No. EP-510/2016 for the helipad and the open firing range was issued on 1 November 2016.

1.1.11 The SSDRC, TKLDRC and the DMW&EIC of the NDC were consulted on 14, 17 and 21 November 2016 respectively on the key findings of the engineering feasibility study.

1.2 The Project

1.2.1 On 26 January 2017, the Civil Engineering and Development Department (CEDD) commissioned AECOM Asia Co. Ltd. (AECOM) to undertake the Assignment of this Agreement No. CE 60/2016 (CE) – Site Formation and Infrastructure Works for Police Facilities in Kong Nga Po –Design and Construction.

1.2.2 The Project generally consists of site formation & infrastructure works for the co-location of various police facilities at Kong Nga Po as well as upgrading works to a section of the existing Kong Nga Po Road between the police facilities and Man Kam To Road.

1.2.3 The scope of the Project mainly includes:

a. Earthworks, slopes works and retaining structures;
b. Underground stormwater storage tank and stormwater drainage system;
c. Temporary underground sewage storage tank and sewerage system;
d. Water supply system;
e. An internal access road network with underpass within the Development Area;
f. Other utilities and services;
g. Upgrading works to the section of existing Kong Nga Po Road between the Development Areas and Man Kam To Road including roadworks, viaduct, and associated works such as slopeworks, retaining walls and drainage works;
h. Landscaping works;
i. Environmental mitigation measures and monitoring & auditing; and
j. Other associated works

1.2.4 Upon completion of the site formation and infrastructure works by CEDD, the Development Area and the relevant completed works will then be handed over, in phases if necessary, to ArchSD whom will be responsible for the building works. HKPF will be the end user of the police facilities and both HKPF and GFS will be the end users of the Helipad.

1.2.5 The schematic layout of the major works elements is shown in **Figure No. 60534575/FIGURE 01**. The final scope of infrastructural works shall be ascertained under this Assignment in order to fully address the main objective of the Assignment, which is to enable the site formation works, the infrastructure works, the Kong Nga Po Road upgrading works and road / junction improvement works of the Project to be satisfactorily designed, constructed and commissioned in a cost-effective manner, on time and within budget and handover the relevant works, in phases, if necessary, to ArchSD for subsequent building works and the other works to relevant department / agents for maintenance and operation.

1.2.6 The assignment shall not cover the building works, which shall be the responsibility of ArchSD.

1.2.7 Off-site junction improvement works, where necessary, are being considered to be implemented under other projects. Details will be discussed under separate report.

1.3 Scope of this Report

1.3.1 The scope of this Report provides landscaping and greening design for the Project. The landscape designs include planting proposal and hard landscape proposal.

1.3.2 Following this introductory section, the remainder of the Report is arranged as follows:

- Section 2 describes environmental legislations, standards and guidelines related to Landscaping and Greening Design;
- Section 3 presents the Landscape Design Objectives and Guidelines;
- Section 4 presents the Tree Preservation, Transplanting, Felling and Compensation Proposals;
- Section 5 presents the Landscape and Greening Design Proposals
- Section 6 proposes the Management and Maintenance Authorities for Landscape Works; and
- Section 7 summarizes the Findings and recommends the Way Forwards of the Project.

2 LEGISLATIONS, STANDARDS AND GUIDLEINES

2.1 Government Publications, Guidelines and Reports

2.1.1 Government Publications, Guidelines and Reports related to Landscape Design include:

- Agriculture, Fisheries and Conservation Department – AFCD Nature Conservation Practice Note No. 1 – Clearing Mikania.
- Agriculture, Fisheries and Conservation Department – AFCD Nature Conservation Practice Note No. 2 – Measurement of Diameter at Breast Height (DBH).
- Agriculture, Fisheries and Conservation Department – AFCD Nature Conservation Practice Note No. 3 – The Use of Plant Names.
- Civil Engineering and Development Department (2006) – General Specifications for Civil Engineering Works, Sections 3 and 26.
- Civil Engineering and Development Department (2008) – Chapter 1 and 4 of Project Administration Handbook for Civil Engineering Works, 2016 Edition (PAH) of the Government of the Hong Kong Special Administrative Region.
- Development Bureau – Latest Guidelines for Tree Risk Management and Assessment Arrangement on an Area Basis and on a Tree Basis.
- GEO Publication (2000) – Highway Slope Manual, Chapters 6 and 8.
- GEO Publication No. 1/2011 – Technical Guidelines on Landscape Treatment for Slopes
- GEO Technical Guidance Note No. 20 – Updating of GEO Publication No. 1/2000.
- GEO Report No. 56 (1999) – Application of Prescriptive Measures to Slopes and Retaining Walls, 2nd Edition.
- GEO Report No. 116 (2001) – Review of Effective Methods of Integrating Man made Slopes and Retaining Walls (Particularly for Roadside Slopes) into Their Surroundings.

- GEO Report No. 136 (2003) – Guidelines on Safe Access for Slope Maintenance.
- GEO Report No. 183 (2006) – Performance Assessment of Greening Techniques on Slopes.
- GEO Report No. 248 (2009) – Planting Trial at Yuen Tun and Performance Assessment of Vegetation Species on 44 Man-Made Slopes.
- GEO Special Project Report No. SPR 7/2004 (2004) – Identification of Suitable Vegetation Species for Use on Man-made Slopes.
- Highways Department (2006) – Structures Design Manual for Highways and Railways, Third Edition, Chapter 17 – Aesthetics.
- Input Guideline – HyD Slope Vegetation (SVI) Records.
- HyD Standard Drawings, Sections 5 and 6.
- HyD TC No. 10/2001 – Visibility of Directional Signs.
- HyD TC No. 2/2010 – Control in the Use of Shotcrete (Sprayed Concrete) in Slope Works.
- HyD HQ/GN/13 – Interim Guidelines for Tree Transplanting Works under Highways Department's Vegetation Maintenance Ambit.
- HyD HQ/GN/15 – Guidelines for Greening Works along Highways.
- HyD Requirements for Handover of Vegetation to Highways Department.
- Lands Department, Lands Administration Office Instructions (LAOI) Section D-12 – Tree Preservation.
- Planning Department – Hong Kong Planning Standard and Guideline.
- Transport Department – Transport Planning & Design Manual (TPDM).
- General Standards and Maintenance Requirements for Roadside Landscape Works to be Handed Over to LCSD for Maintenance.

2.2 Technical Circulars

2.2.1 Technical Circulars related to Landscape Design include:

- DEVB TCW No. 5/2017– Community Involvement in Planting Works.
- ETWB TCW No. 6/2015 – Maintenance of Vegetation and Hard Landscape Features.
- ETWB TCW No. 11/2004 – Cyber Manual for Greening.
- ETWB TCW No. 29/2004 – Registration of Old and Valuable Trees, and Guidelines for their Preservation.
- ETWB TCW No. 36/2004 – The Advisory Committee on the Appearance of Bridges and Associated Structures (ACABAS).
- DEVB TCW No. 1/2018 – Soft Landscape Provisions for Highway Structures.
- WBTC No. 25/93 – Control of Visual Impact of Slopes.
- WBTC No. 17/2000 – Improvement to the Appearance of Slopes in connection with WBTC 23/93.
- DevB TCW No. 3/2012 - Site Coverage of Greenery for Government Building Projects.
- DevB TCW No. 2/2012 - Allocation of Space for Quality Greening on Roads.
- DEVB TC (W) No. 7/2015 – Tree Preservation.
- Guidelines on Tree Transplanting issued by GLTM Section of DevB.
- Proper Planting Practices and other relevant guidelines issued by GLTM Section of DevB.
- RD/GN/044A – Guidance Notes on Design and Construction of Pavements with Paving Units.

2.3 Ordinances and Regulations

2.3.1 Ordinances and Regulations related to Landscape Design include:

- Forests and Countryside Ordinance (Cap. 96) and its subsidiary legislations
- Plant Varieties Protection Ordinance (Cap. 490)
- Protection of Endangered Species of Animals and Plants Ordinance (Cap. 586)
- Environmental Impact Assessment Ordinance (Cap. 499)
- Town Planning Ordinance (Cap. 131)

3 LANDSCAPE DESIGN OBJECTIVES AND GUIDELINES

3.1 Landscape Design Objectives

3.1.1 Landscaping and Greening Design Objectives for Site Formation and Infrastructure Works for the Police Facilities in Kong Nga Po include the following:

- To provide measures to mitigate the potential landscape and visual impact of the project during the construction and operation phase of the project (Please refer to Appendix IX for the approved plans showing the below relevant mitigation measures) :-

- **Table 3.1 Construction Phase Mitigation Measures (For details, please refer to Table 3.1a under Appendix V)**

ID No.	Construction Phase Mitigation Measures	Implementation Department
CM01	Tree protection and preservation	CEDD/ArchSD
CM02	Tree transplantation	CEDD
CM03	Work area and temporary works area	CEDD/ArchSD
CM04	Advance implementation of mitigation planting	CEDD/ArchSD
CM05	Decorative screen hoarding	CEDD/ArchSD

- **Table 3.2 Operation Phase Mitigation Measures (For details, please refer to Table 3.2a under Appendix V)**

ID No.	Operation Phase Mitigation Measures	Implementation Department
OM01	Detail design considerations	CEDD (along KNP Road where applicable and slopes within KNP Police Facilitate Site) / ArchSD (within KNP Police Facilitate Site)
OM02	Aesthetically pleasing design and responsive design of buildings and structures	ArchSD
OM03	Design of engineering structure	CEDD
OM04	Design of retaining walls and slopes	CEDD
OM05	Compensatory planting proposal	CEDD
OM06	Landscape buffer tree planting	CEDD (along KNP Road where applicable and slopes within KNP Police Facilitate Site) / ArchSD (within KNP Police Facilitate Site)
OM07	Roadside and amenity planting (within KNP Police Facilitate Site)	ArchSD
OM08	Grassland (ecological mitigation)	CEDD (along KNP Road where applicable and slopes within KNP Police Facilitate Site) / ArchSD (within KNP Police Facilitate Site)
OM09	Green roof (within KNP Police Facilitate Site)	ArchSD
OM10	Vertical greening	CEDD (along KNP Road where applicable) / ArchSD (within KNP Police Facilitate Site)
OM11	Green paving (within KNP Police Facilitate Site)	ArchSD
OM12	Light control (operation)	HKPF (within Project Site) / HyD (along KNP Road)

- To beautify the proposed site formation and infrastructure works and to integrate the proposed works with the adjacent hard and soft landscape settings within the project boundary; and

- To minimize the impact on existing trees and provide tree transplanting and compensatory planting proposals in accordance with DEVB TC(W) No. 7/2015.

3.2 Design Guidelines for Hard and Soft landscape Works

3.2.1 Proposed Hard Landscape Works shall be selected using the following guidelines:

- Durable – utilizing long lasting or permanent materials and finishes.

- Low maintenance – easy to clean and repair.

- Reasonable Cost – reasonable cost range providing the greatest value for expense.

- Visual compatibility with existing developments and blend with existing development.

- Recyclable and Environmental Friendly Materials – utilizing recyclable and environmental friendly materials where possible.

3.2.2 Proposed Soft Landscape Works shall be selected using the following guidelines:

- Adaptive – able to relatively quickly provide the desired landscape design intent as appropriate to the area.

- Wind tolerance – able to withstand windy conditions at exposed areas.

- Seasonal interest – providing seasonal variety or seasonal flowers, fruit or foliage colour.

- Low maintenance and self-sustainability – easy to grow without special treatments or maintenance operations.

- Non-toxic – relatively safe and non-poisonous materials and/or biodegradable.

- Poisonous plants should not be planted at areas accessible to public.

4 TREE SURVEY RESULTS

4.1 Summary

4.1.1 The engineering layout has been designed to minimize the impact on existing trees based on the tree survey conducted in early 2017. Any trees surveyed which are in conflict with the proposed works are proposed to be transplanted or felled. Detailed tree survey result, tree treatment and justification have been detailed under separated submission of Tree Removal and Preservation Proposal.

4.1.2 No registered OVT is identified within the Project Boundary. All the species identified are exotic species commonly used for engineering scheme and common Hong Kong native species. They are generally in poor to fair form, poor to fair health and low to medium amenity value. Dominant species include *Acacia auriculiformis*, *Acacia confusa*, *Acacia mangium, Bauhinia purpurea, Celtis sinensis, Cinnamomum camphora, Casuarina equisetifolia, Ficus benjamina, Ficus hispida, Leucaena leucocephala, Macaranga tanarius* var *tomentosa, Rhus succedanea, Pinus elliottii, Senna siamea, Tetradium glabrifolium, Lophostemon confertus.*

4.1.3 Two species of conservation concern, namely *Aquilaria Sinensis* and *Keteleeria fortunei* have been surveyed. The road layout had been revised as required in Environmental Permit No. EP-510/2016 and accepted by relevant authorities to avoid affecting the trees mentioned above and therefore the species with conservation concern will be retained.

4.1.4 Tree compensatory planting is proposed under separated Tree Removal and Preservation Proposal with detailed information available from the Tree Survey in accordance with DEVB TC/W No. 7/2015.

4.1.5 Retained Trees that are not affected by proposed works will be preserved in-situ. During construction period, retained trees will be protected from impact from construction activity as per General Specification for Civil Engineering Works (2006 Edition), Section 26 – Preservation and Protection of Trees and Guidelines on Tree Preservation during Development.

4.1.6 Among the trees affected by proposed works, 3 *Aquilaria sinensis* are required to be transplanted to avoid being affected by proposed Kong Nga Po road upgrading works and site formation works. Tree Transplanting Works shall be carried out in accordance with Guidelines on Tree Transplanting issued by GLTM Section of DevB.

4.1.7 Summary of tree survey and treatment are summarized in the table below:-

Table 4.1 Summary of Tree Survey and Treatment Recommendation

Trees surveyed	**Trees to be retained**	**Trees to be transplanted**	**Living Trees to be felled**	**Dead Trees to be felled**
6,856	2,418	3	4,141	294
		Total Tree to be Felled	4,435 (under which approx. 2,544 due to slope works)	

4.1.8 It is affirmed that a large number of existing trees within site will be affected by the Project. Implementation of compensatory planting in a ratio not less than 1:1 in terms of quality and quantity within the site, i.e. the number of compensatory tree not lower than that the number of trees felled, including dead tree and trees of undesirable species have been provided in accordance with DEVB TCW No. 7/2015 – Tree Preservation.

4.1.9 Compensatory tree planting are generally be of heavy standard size with trunk diameter at breast height (DBH) of a minimum 75mm, and whips planting along slope area.

4.1.10 Sufficient space have been provided for the planting of compensatory trees taking into the account the adequate space required to cater for the establishment and healthy growth of the trees up to maturity.

4.1.11 Summary of on-site compensatory and tree transplanting proposed for the Project is summarized in below:-

Summary of Compensatory Trees

	No. of Tree
Light/Heavy Standard trees	286
Whips planting	8,165
TOTAL	8,451

Summary of Transplanted Trees

	No. of Tree
Tree Transplanting	3

5 LANDSCAPE DESIGN

5.1 Introduction

5.1.1 Based on the available space for the provision of landscape works, landscape design has been proposed for 1) the proposed Kong Nga Po Road improvement works, 2) the site formation and infrastructure works within the Kong Nga Po Development Area and 3) the building works within the Kong Nga Po Development Area (to be implemented by ArchSD). The landscape design is illustrated in Appendix II – Landscape Design Plans and Section, Appendix III – Tree Planting Plan (Heavy/Light Standard Trees and Transplanted Trees) and Appendix IV – Shrubs Planting Plan (with Existing and Proposed Slope Boundary Overlaid). The implementation programme for the landscape works is also illustrated in Appendix VI - Implementation Programme of the proposed landscaping works.

5.2 Greening Design Proposal for the Proposed Kong Nga Po Road Improvement Works

5.2.1 Roadside and Amenity Planting

Having considered various factors including environmental impact and cost effectiveness, allocation of greening zones on roads with reference to DEVB TC(W) No. 2/2012 is not proposed on the improved Kong Nga Po Road for the following reasons:-

(a) Reserving such greening zones as planting space will increase total width of the future road which will lead to a substantial amount of site formation works on the existing roadside slopes where density of tree is high. The construction will unavoidably induce additional earthworks, waste, more massive retaining structures and tree felling works which are undesirable from environmental impact point of view;

(b) Having reviewed the approved EIA report, minimizing total width of the future Kong Nga Po Road was also one of the key requirements/considerations to minimize the adverse environmental impact. Taking this into consideration, allocation of at-grade planting strip at the future footpath is not recommended in order not to increase the total road width;

(c) Instead, alternative mitigation measures including OM04 - the design of retaining walls and slopes in accordance with GEO Publication No. 1/2011 "Technical Guidelines on Landscape Treatment and Bio-engineering for Man-made Slopes and Retaining Walls" and OM10 - the use of vertical greening (climbing and trailing plants) are recommended for the retaining walls to improve their landscape and visual appearances and provide a greening effect with reference to the recommendations in the approved EIA report. Hanging plant from top of retaining walls would be provided as recommended in the approved EIA report;

(d) In addition, tree planting is proposed at the reinstated area behind the retaining walls which, coupled with the existing trees, can provide a greening effect adjacent to the improved Kong Nga Po Road. Hence, the guideline in DEVB TC (W) No. 2/2012 on “Allocation of Space for Quality Greening on Roads” is observed with the current design.

In accordance with DEVB TC (W) no 2/2013, greening on new footbridges and flyovers is only required for built-up areas such as metro areas and new town areas in Hong Kong. Since the proposed viaduct in the Project is not located within the built-up areas, therefore, greening on the viaduct is not mandatory. Besides, addition of planters along the viaduct would limits the space for the woodland compensatory planting under the viaducts and produce no significant beneficial greening effect for the area, therefore, greening on the viaduct is not recommended (refer to Figure Nos. 10-57 at the approved EIA report). Besides, shade tolerant shrub planting will be provided under the viaduct and climbers will be planted to provide vertical greening on the abutment.
Above discussions and recommendations had been incorporated in relevant submissions and working paper (e.g. ACABAS submission and Application for Exemption of Allocation of Space for Quality Greening on Roads) and submitted to relevant parties with no objection received (to be updated). The record of no objection for the above submissions can refer to Appendix VII – Record of No Comments from the Authorities on Relevant Submissions.

5.2.2 Compensatory Planting and Landscape Buffer Tree Planting

Woodland compensation is proposed for the Project. Approximate 174 nos. of light/heavy standard trees and 1,420 nos. of whips sized trees will be planted on man-made slopes and natural terrain along the improved Kong Nga Po Road. The planting proposal will utilize native species in accordance with GLTM/DEVB Guiding Principles on Use Native Plant Species in Public Works Projects. Shrubs and ground cover planting will also be provided within the compensatory woodland area to create a more structurally diverse woodland. Planting species shall refer to Indicative Planting Schedule at **Table 5.1**.

5.2.3 Vertical Greening

Vertical greening will be provided to soften the hard and vertical surface of the proposed engineering structure such as retaining walls and buildings. Minimum 300mm proper soil and self-clinging climbers will be provided.

5.3 Greening Design Proposal for Site Formation and Infrastructure Works within the Kong Nga Po Development Area

5.3.1 Compensatory Tree Planting and Landscape Buffer Tree Planting

Woodland compensation is proposed within the Kong Nga Po Development Area. Approximate 112 nos. of light/heavy standard trees and 6,745 nos. of whips sized trees will be planted on man-made slopes and natural terrain within the site. The planting proposal will utilize native species in accordance with GLTM/DEVB Guiding Principles on Use Native Plant Species in Public Works Projects. Shrubs and ground cover planting will also be provided within the compensatory woodland area to create a more structurally diverse woodland. Planting species shall refer to Indicative Planting Schedule at **Table 5.1**.

For woodland area where requires screening effect, a combination of large sized trees (include heavy standard trees) and whips sized trees will be adopted to create a more naturalistic effect and screen views of the proposed structures and associate facilities.

Subject to further liaison with ArchSD, the above tree planting within the Kong Nga Po Development Area is designed by CEDD and incorporated this report and may be carried out in the Building Works Contract in order not to form a physical constraints on site during the construction of the building works.

5.4 Other Greening Design to be designed and constructed in the Building Works Contract by ArchSD

5.4.1 Compensatory Tree Planting and Landscape Buffer Tree Planting

Beyond compensation of tree felling, trees shall be planted as landscape buffer planting and roadside and amenity trees within the KNP Police Facilitate Site. Native species shall be selected.

5.4.2 Grassland

New grassland areas will be created at north-most platform area of the Police Facilities Site. Common grass species *Ischaemum barbatum* and *Tetradium glabrifolium* will be planted as larval food plants for butterfly species. The detailed design and plantation of above mentioned grassland area within the Police Facilities Site shall be designed and constructed by ArchSD.

5.4.3 Vertical Greening

Vertical greening will be designed and provided under the ArchSD's building works contract to soften the hard and vertical surface of the proposed engineering structure such as retaining walls and buildings. Native species will be adopted.

5.4.4 Other Greening Measures

Green roof and green paving shall be provided under building works contract where technically feasible to maximize the area for green coverage and to reduce the hard concrete surface.

In addition, others greening design such as landscape buffer tree planting, creation of grassland (on platform at the North of the Project Site) and vertical greening will also be provided within the areas demarcated for Building Works Contract. Detailed design for these greening measures will be provided under the Building Works Contract, implemented by ArchSD.

5.5 Hard Landscape Materials

5.5.1 Block paving will be proposed for the pavement along Kong Nga Po Road and the associate junctions as appropriated. Paving design should be cost effective and low-maintenance and the paving pattern design shall be aligned with HyD Standard Drawings Section 5: Landscape Hard Works and HyD Guidance Notes RD/GN/044A.

5.5.2 Textured formwork liner will be proposed to create a random stone pattern for the proposed retaining walls besides being covered by climbers and screened landscape buffer tree planting. A warm earth tone colour will also be proposed for the retaining walls. GMS hand railing shall be provided at the top of the retaining wall where is accessible by pedestrians. Detailed landscape treatment of the retaining wall please refer to **Appendix II**.

5.5.3 Textured formwork liner will be proposed to create a random stone pattern for the abutment of the proposed viaduct at Kong Nga Po Road whilst the viaduct will be screened by the adjacent woodland planting and compensatory tree planting under the viaduct.

5.5.4 Since the available space at the both sides of the Kong Nga Po Roads for greening and streetscape design is limited, no street furniture will be proposed, except those which are necessary for traffic and safety purposes, such as signage, lamp post and railing, which relevant standard details will be adopted and further developed in the detailed design stage.

5.5.5 Irrigation points will be provided along the Kong Nga Po Road. However, no irrigation point will be provided in the non-platform area within the Project Main Site, where woodland planting is anticipated to be self-sustainable in long run. Irrigation points within the platform area will be implemented under the Building Works Contract (by ArchSD).

5.5.6 The design of street lighting shall comply with the Public Lighting Design Manual 3rd Edition issued by HyD, which will be further designed in the detailed design phase and will be covered in the detailed design report under separate submission.

5.6 Soft Landscape Materials

5.6.1 Detailed landscape plan of trees and shrubs please refer to **Appendix III** and **Appendix IV**.

5.6.2 An indicative planting schedule for the landscape and greening design is shown in **Table 5.1**.

Table 5.1 Indicative Planting Schedule

Species	Chinese Name	Spacing	Size
Trees			
Koelreuteria bipinnata	複羽葉欒樹	5000	Heavy Standard
*Cinnamomum camphora**	樟	5000	Heavy Standard
Melia azedarach	苦楝	5000	Heavy Standard
*Celtis sinensis**	朴樹	5000	Heavy Standard
Bauhinia variegata	宮粉洋蹄甲	5000	Heavy Standard
Crateva unilocularis	樹頭菜	5000	Heavy Standard
*Cinnamomum burmannii**	陰香	5000	Heavy Standard
Lagerstroemia speciosa	大葉紫薇	5000	Heavy Standard
*Liquidambar formosana**	楓香	5000	Heavy Standard
Michelia x alba	白蘭	5000	Heavy Standard
Cassia fistula	豬腸豆	5000	Heavy Standard
*Sterculia lanceolata**	假蘋婆	5000	Heavy Standard
*Viburnum odoratissimum**	珊瑚樹	3000	Light Standard
Woodland Mix Planting Tree Whips			
Woodland Mix Planting WMP1			
*Bridelia tomentosa**	土密樹	2000	whip tree
*Phyllanthus emblica **	餘甘子	2000	whip tree
*Ficus hispida**	對葉榕	2000	whip tree
*Polyspora axillaris**	大頭茶	2000	whip tree
*Rhus succedanea**	野漆	2000	whip tree
*Rhododendron simsii**	紅杜鵑	500	400 height x 400 spread
*Melastoma sanguineum**	毛蒽	500	400 height x 400 spread
*Rhodomyrtus tomentosa**	桃金娘/崗棯	500	400 height x 400 spread
*Psychotria asiatica**	九節	500	400 height x 400 spread
Woodland Mix Planting WMP2			
*Machilus breviflora**	短序潤楠	2000	whip tree
*Polyspora axillaris**	大頭茶	2000	whip tree
*Reevesia thyrsoidea**	梭羅樹	2000	whip tree
*Viburnum odoratissimum**	珊瑚樹	2000	whip tree
*Cratoxylum cochinchinense**	黃牛木	2000	whip tree
*Polyspora axillaris**	大頭茶	500	400 height x 400 spread
Ligustrum sinense	山指甲	500	400 height x 400 spread
*Gardenia jasminoides**	梔子	500	400 height x 400 spread
*Rhaphiolepis indica**	石斑木	500	400 height x 400 spread
Shrubs Mix Planting			
Shrubs Mix Planting SMP1[#]			
*Rhododendron simsii**	紅杜鵑	500	400 height x 400 spread
*Melastoma sanguineum**	毛蒽	500	400 height x 400 spread
*Rhodomyrtus tomentosa**	桃金娘/崗棯	500	400 height x 400 spread
*Psychotria asiatica**	九節	500	400 height x 400 spread
Shrubs Mix Planting SMP2[#]			
*Polyspora axillaris**	大頭茶	500	400 height x 400 spread
Ligustrum sinense	山指甲	500	400 height x 400 spread
*Gardenia jasminoides**	梔子	500	400 height x 400 spread
*Rhaphiolepis indica**	石斑木	500	400 height x 400 spread
Shrubs Mix Planting SMP3[#]			
*Ixora chinensis**	龍船花	500	450 height x 300 spread
*Rhododendron simsii**	紅杜鵑	500	250 height x 200 spread
Climbers			
Parthenocissus dalzielii	爬牆虎	300	1000 height / min. 3 shoots

*Native species
[#]plant each species in groups of 10-20 in random. Plant all species in staggered pattern.

6 MANAGEMENT AND MAINTENANCE OF LANDSCAPE WORKS

6.1 Maintenance Authorities of Landscape Works

The landscape design proposals has been carefully considered and taken into the requirements from stipulated from relevant Management and Maintenance Authorities. Landscape Management and Maintenance Authorities for landscape works are identified in accordance with ETWB TCW No. 6/2015 - Maintenance of Vegetation and Hard Landscape Features and tabled in **Table 6.1**. **Table 6.2** summarized demarcation of the responsibility of design stage, construction stage and maintenance period. The record of no objection from Management and Maintenance Authorities can refer to Appendix VIII – Record of No Comments from the Management and Maintenance Authorities

Table 6.1 Management and Maintenance Authorities of Landscape Works

Landscape Areas	Management Department	Maintenance Department
Landscape Works along the Improvement Works along improved Kong Nga Po Road		
Hard Landscape Works		
Paving	NTE/HyD	NTE/HyD
Slopes	NTE/HyD	NTE/HyD
Retaining Walls	NTE/HyD	NTE/HyD
Soft Landscape Works		
SIMAR slopes	respective SIMAR slope owner	
Roadside Amenity Planting	LCSD	LCSD
Landscape Works within the Kong Nga Po Development Area		
Hard Landscape Works		
Paving	HKPF	HKPF's Agent
Slopes	HKPF	HKPF's Agent
Retaining Walls	HKPF	HKPF's Agent
Soft Landscape Works		
SIMAR slopes	HKPF	HKPF's Agent
Roadside Amenity Planting	HKPF	HKPF's Agent
Within platform area (within allocated government land)	HKPF	HKPF's Agent
Within undisturbed area (within allocated government land)	HKPF	HKPF's Agent
Retaining wall and associated soft landscape (within allocated government land)	HKPF	HKPF's Agent

Table 6.2 Responsible Authorities of Soft Landscape Works

Location	Landscape Features	(1) Responsible for Design and relevant Submission	(2) Responsible for Planting in Construction Stage	(3) Responsible for Maintenance
KNP Road	Tree	CEDD	CEDD	HyD/LCSD/SIMIAR SLOPE OWNER
	Shrub			
	Hydroseeding			
KNP Police Facilities (Slope and adjacent bare ground)	Tree	CEDD	ArchSD	HKPF's Agent
	Shrub	CEDD	ArchSD	HKPF's Agent
	Hydroseeding	CEDD	CEDD	HKPF's Agent
KNP Police Facilities (training ground)	Tree	ArchSD	ArchSD	HKPF's Agent
	Shrub			
	Hydroseeding			

7 SUMMARY AND WAY FORWARD

7.1 Conclusion

7.1.1 According to the conducted tree survey and latest engineering design, there are approximately 4,435 nos. of trees is recommended to be fell due to the project, under which approximately 294 nos. of dead trees recommended to be removed. Compensatory tree planting of whip size trees and light/heavy standard size trees have been proposed within the Project Boundary along upgraded KNP Road, including proposed slopes, and around the police facilities site as woodland compensatory tree planting as well as buffer landscape planting with whip size trees and heavy/light standard size trees according to the approved EIA Report and in accordance with DEVB TC/W no. 7/2015 and the compensatory ratio has fulfilled the ratio of 1:1.

7.1.2 Tree compensatory planting is proposed separately in accordance with the approved EIA Report and DEVB TC/W no. 7/2015. There are 8,451 nos. of compensatory whip size trees and light/heavy standard size trees proposed on proposed landscaping areas i.e. flat landscape area along upgraded Kong Nga Po Road and proposed slopes equal or less than 35 degree.

Table 7.1 Compensatory Tree Summary

Location	**Along Upgraded KNP Road (approx.)**			**Within KNP Police Facilities (approx.)**
Department responsible for the maintenance of vegetation	**HyD**	**LCSD**	**LandsD**	**HKPF**
No. of Heavy Standard Trees to be compensated	0	145	0	112
No. of Light Standard Trees to be compensated	29	0	0	0
No. of Whip Trees to be planted within Woodland Mix Planting Area	1,420 (~4,700m^2 Woodland Mix Planting Area)	0	0	6,745 (~22,500 m^2 Woodland Mix Planting Area)
Sub-total	1,594			6,857
Total	**8,451**			

Table 7.2 Compensatory Tree Summary Maintained by LCSD

Code	Botanical Name	Chinese Name	Size (mm)	Spacing (mm)	Quantity
Trees					
KOBI	Koelreuteria bipinnata	複羽葉欒樹	Heavy Standard	5000	8
CICA	Cinnamomum camphora*	樟	Heavy Standard	5000	5
MEAZ	Melia azedarach	苦楝	Heavy Standard	5000	14
CESI	Celtis sinensis*	朴樹	Heavy Standard	5000	5
BAVA	Bauhinia variegata	宮粉洋蹄甲	Heavy Standard	5000	35
CRAT	Crateva unilocularis	樹頭菜	Heavy Standard	5000	3
CIBU	Cinnamomum burmannii*	陰香	Heavy Standard	5000	3
LASP	Lagerstroemia speciosa	大葉紫薇	Heavy Standard	5000	37
LIFO	Liquidambar formosana*	楓香	Heavy Standard	5000	14
MICH	Michelia x alba	白蘭	Heavy Standard	5000	5
CAFI	Cassia fistula	豬腸豆	Heavy Standard	5000	10
STER	Sterculia lanceolata*	假蘋婆	Heavy Standard	5000	6
TOTAL					145

7.1.3 According to the proposal as presented above, there is **8451,** nos. of compensatory heavy standard, light standard and whip trees to be planted within the project boundary. The above proposal has incorporated the latest site formation layout for the purpose of retention of 2 existing graves in close proximity to the future KNP Police Facilities site.

7.1.4 Other than tree compensatory planting, shrubs and ground cover planting will also be provided within the compensatory woodland area along KNP Road, including proposed slopes, and police facilities site in accordance with the approved EIA Report. Vertical greening will be provided to soften the hard and vertical surface of the proposed engineering structure such as retaining walls and abutments. Native species will be adopted.

7.1.5 The designed landscaping works presented in this Report along KNP road and around police facilities site will be implemented separately under CEDD's site formation works project and ArchSD's building works project respectively. On the other hand, landscaping works within the platform of police facilities will be designed and implemented under ArchSD's building works project.

Appendix I

General Layout of the Project

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Project Management Initials:
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Checked:
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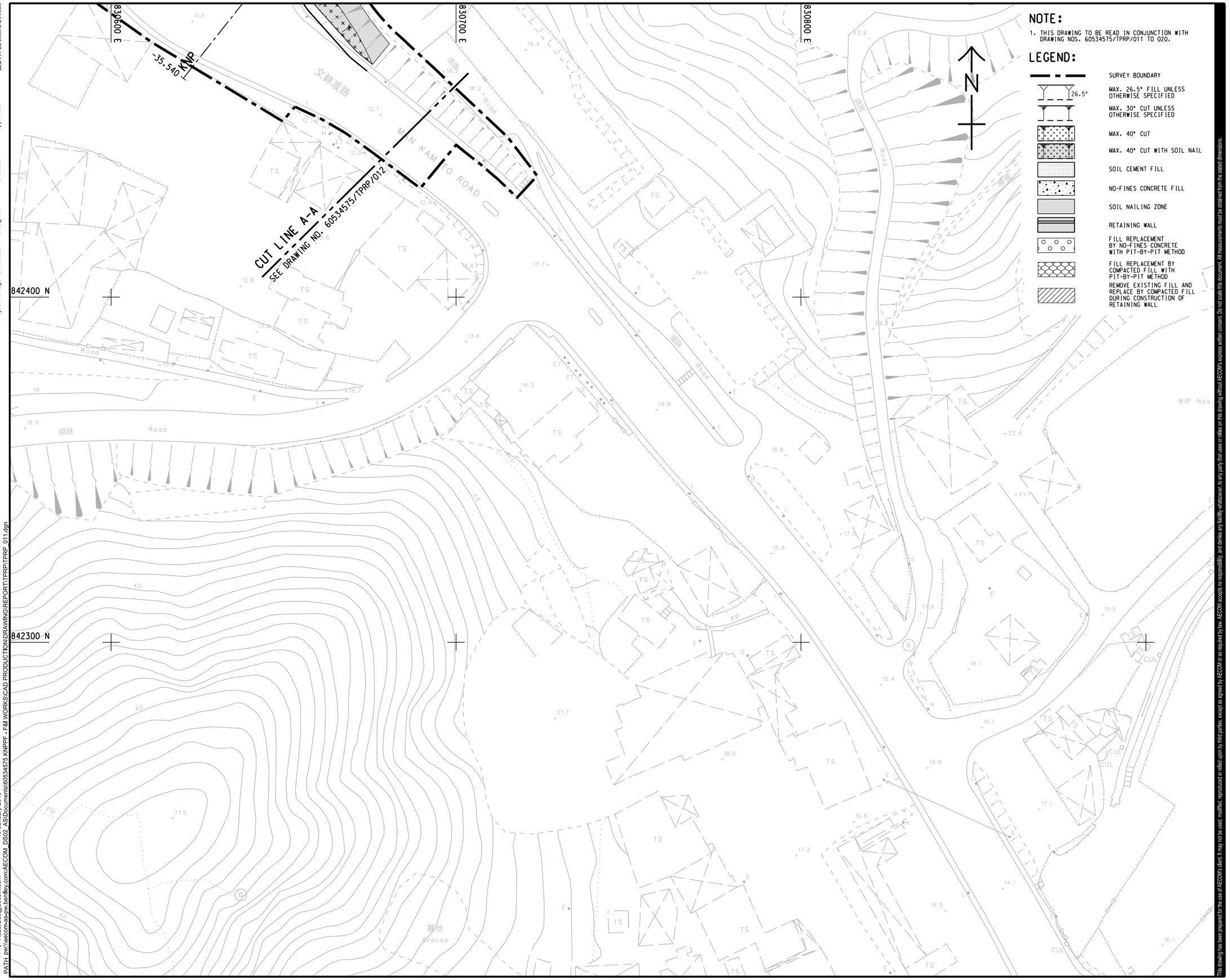

NOTE:

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LEGEND:

- SURVEY BOUNDARY
- MAX. 26.5° FILL UNLESS OTHERWISE SPECIFIED
- MAX. 30° CUT UNLESS OTHERWISE SPECIFIED
- MAX. 40° CUT
- MAX. 40° CUT WITH SOIL NAIL
- SOIL CEMENT FILL
- NO-FINES CONCRETE FILL
- SOIL NAILING ZONE
- RETAINING WALL
- FILL REPLACEMENT BY NO-FINES CONCRETE WITH PIT-BY-PIT METHOD
- FILL REPLACEMENT BY COMPACTED FILL WITH PIT-BY-PIT METHOD
- REMOVE EXISTING FILL AND REPLACE BY COMPACTED FILL DURING CONSTRUCTION OF RETAINING WALL

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SITE FORMATION AND INFRASTRUCTURE WORKS FOR POLICE FACILITIES IN KONG NGA PO - DESIGN AND CONSTRUCTION

CLIENT 業主

土木工程拓展署
Civil Engineering and Development Department

CONSULTANT 工程顧問公司

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METRES

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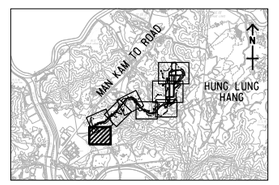

PROJECT NO. 項目編號
60534575

CONTRACT NO. 合約編號
CE 60/2016 (CE)

SHEET TITLE 圖紙名稱
GENERAL LAYOUT

SHEET 1 OF 10

SHEET NUMBER 圖紙編號
60534575/TPRP/011

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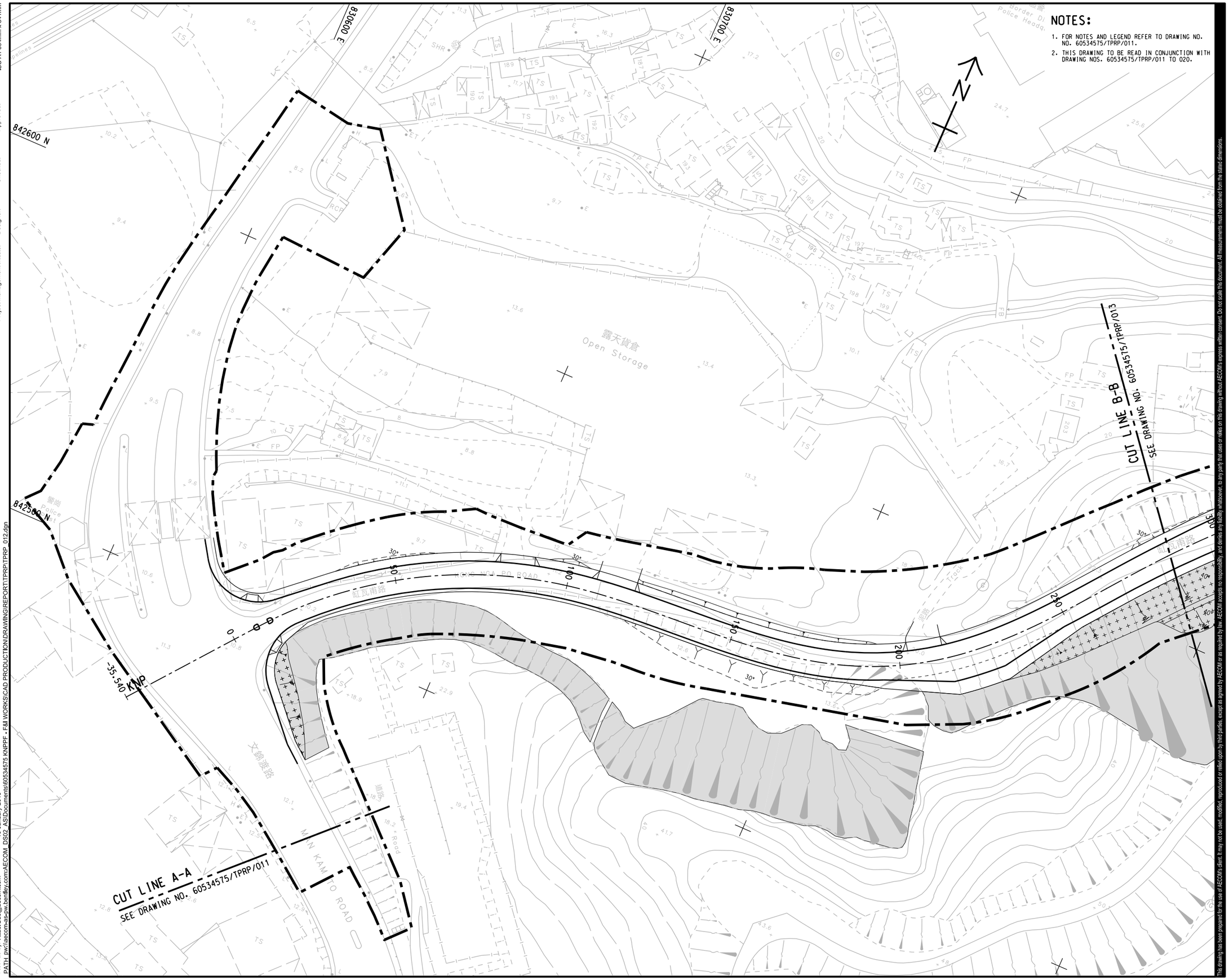

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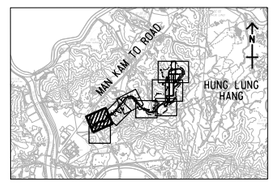

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SHEET 2 OF 10

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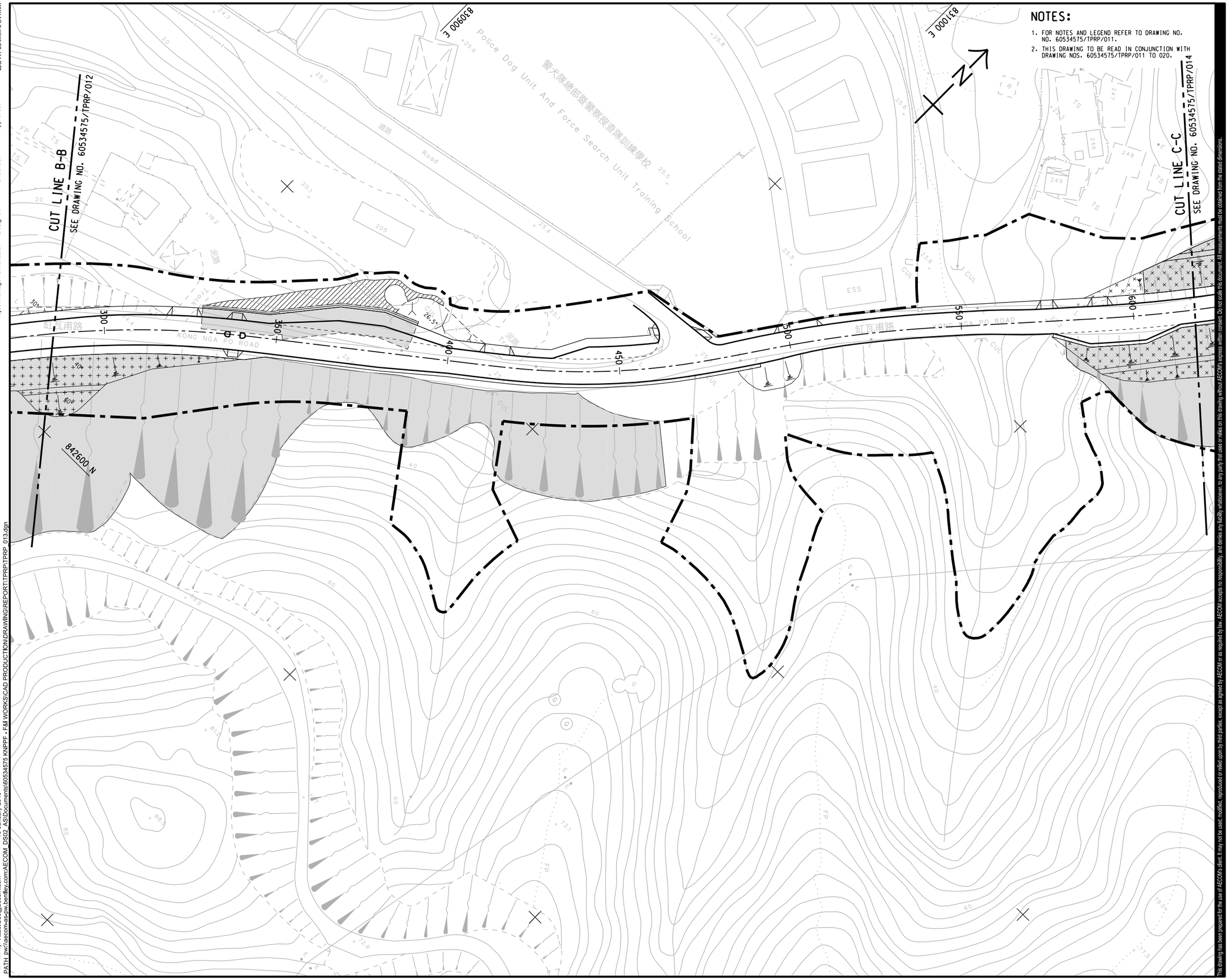

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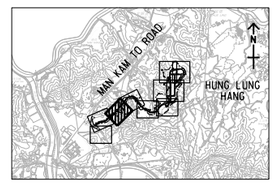

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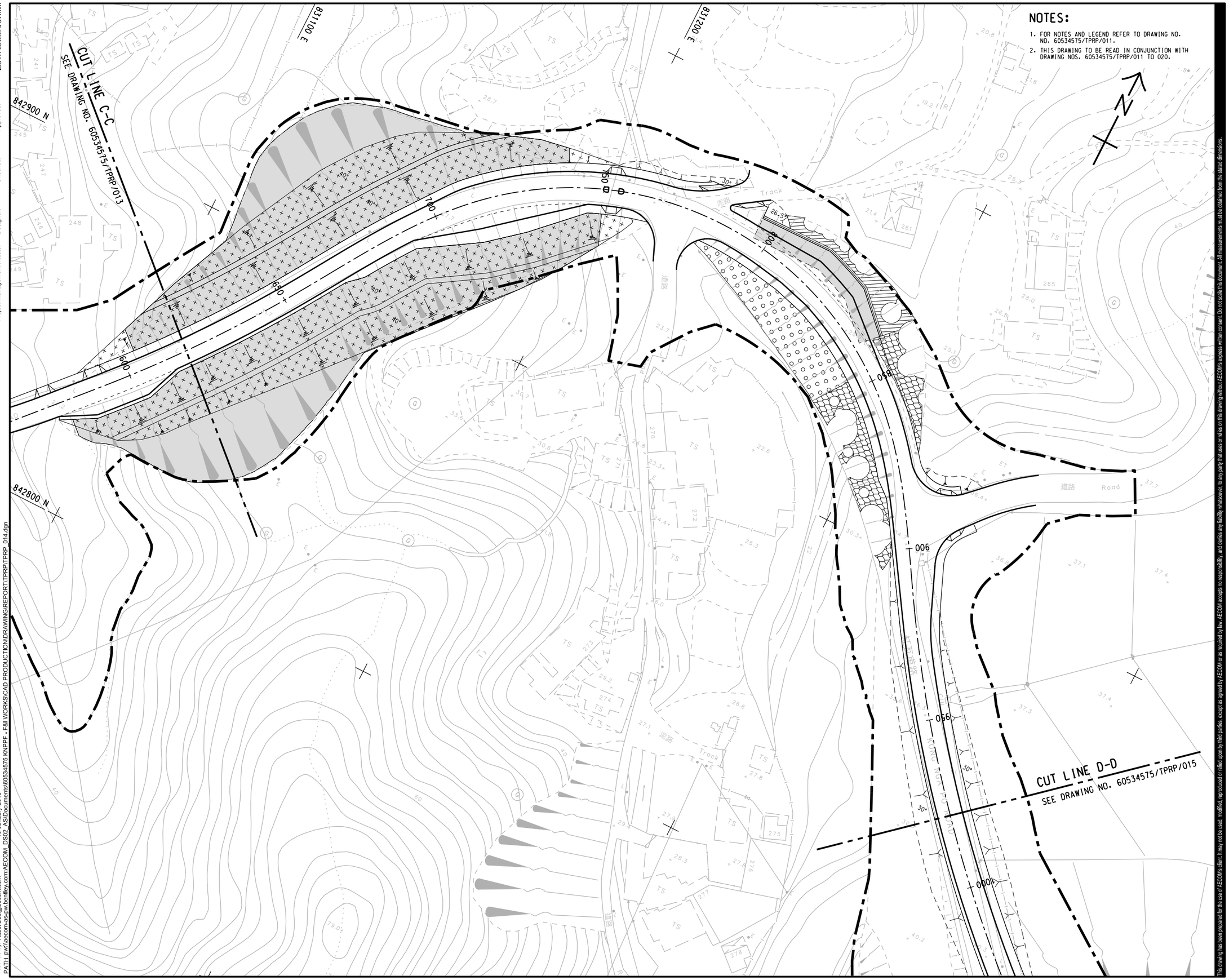

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ISSUE/REVISION 修訂

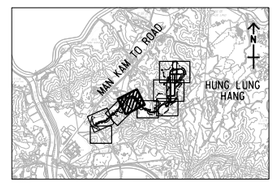
I/R 修訂	DATE 日期	DESCRIPTION 內容摘要	CHK. 複核

STATUS 階段

SCALE 比例
A1 1 : 500

DIMENSION UNIT 尺寸單位
METRES

KEY PLAN 索引圖 A1 1 : 50000



PROJECT NO. 項目編號
60534575

CONTRACT NO. 合約編號
CE 60/2016 (CE)

SHEET TITLE 圖紙名稱
GENERAL LAYOUT

SHEET 4 OF 10

SHEET NUMBER 圖紙編號
60534575/TPRP/014

ISO A1 594mm x 841mm
Project Management Initials: Designer: Checked: Approved:
Plot File by: Xitao.Guo@aecom.com 16-January-2019
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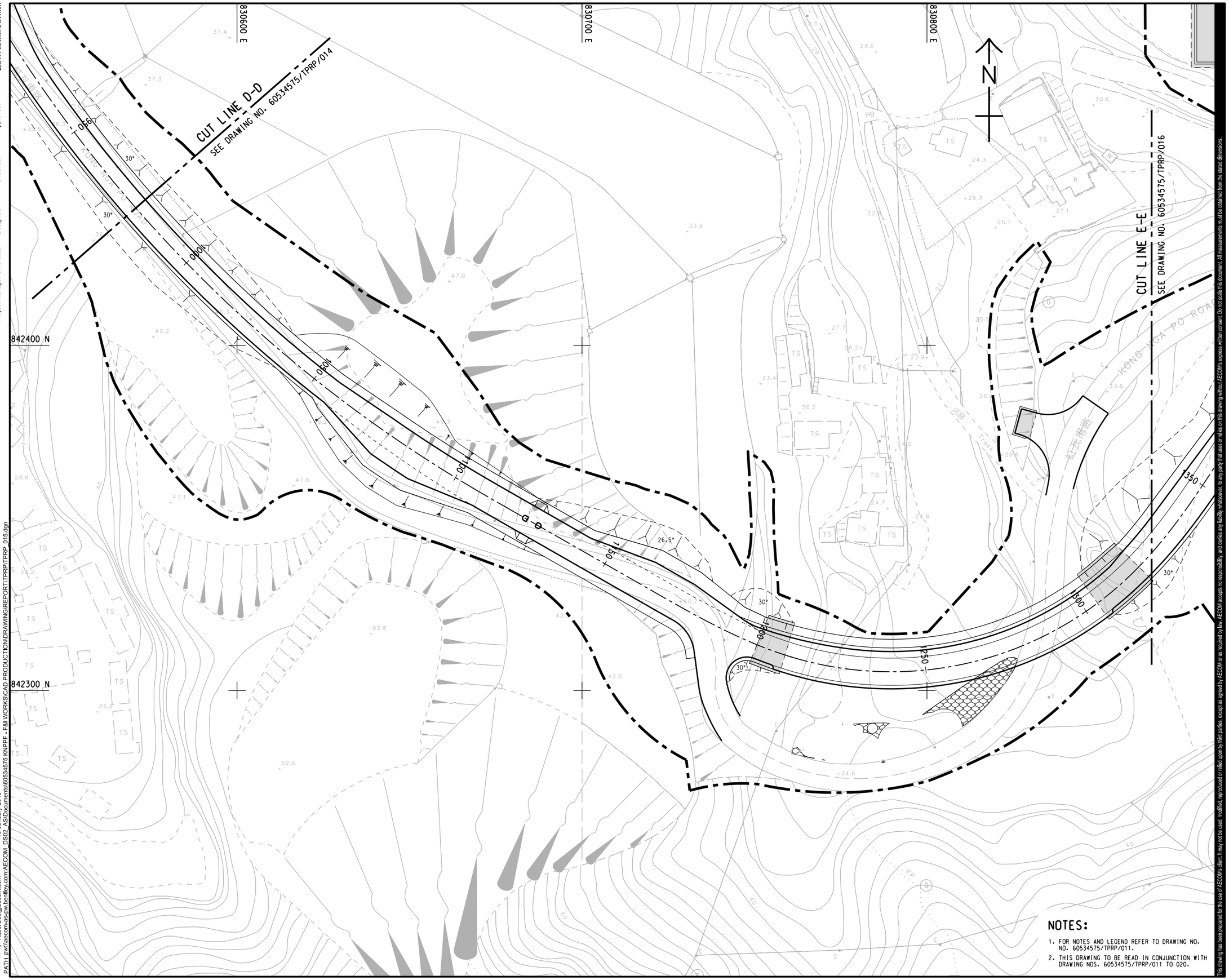

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PROJECT 項目

SITE FORMATION AND INFRASTRUCTURE WORKS FOR POLICE FACILITIES IN KONG NGA PO - DESIGN AND CONSTRUCTION

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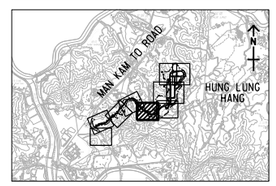
SCALE 比例
A1 1 : 500

DIMENSION UNIT 尺寸單位
METRES

KEY PLAN 索引圖 A1 1 : 50000



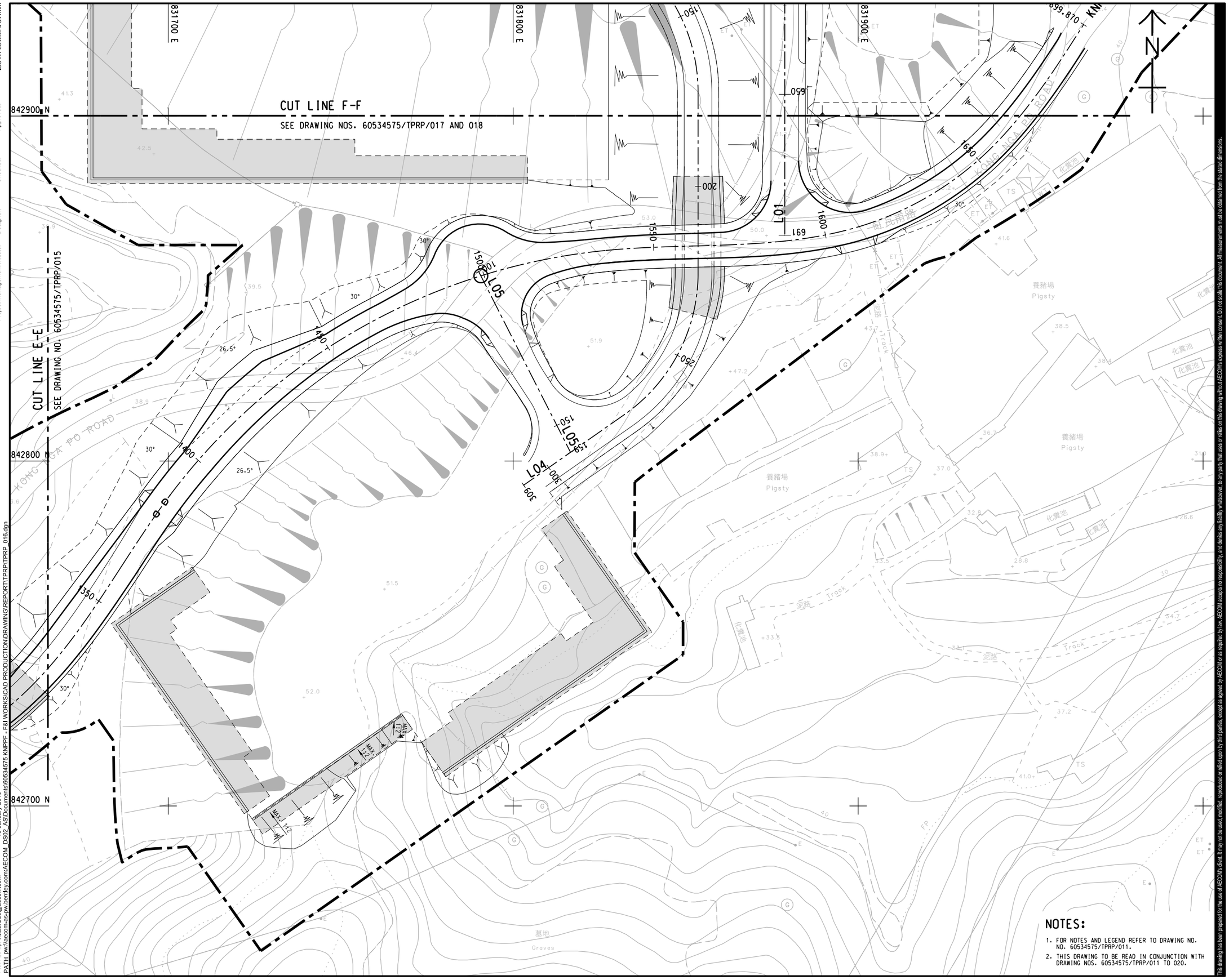
PROJECT NO. 項目編號
60534575

CONTRACT NO. 合約編號
CE 60/2016 (CE)

SHEET TITLE 圖紙名稱
GENERAL LAYOUT

SHEET 5 OF 10

SHEET NUMBER 圖紙編號
60534575/TPRP/015



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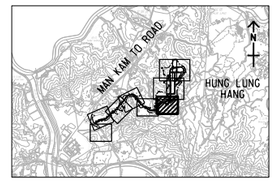
SCALE 比例: A1 1 : 500

DIMENSION UNIT 尺寸單位: METRES

KEY PLAN 索引圖 A1 1 : 50000



PROJECT NO. 項目編號: 60534575

CONTRACT NO. 合約編號: CE 60/2016 (CE)

SHEET TITLE 圖紙名稱

GENERAL LAYOUT

SHEET 6 OF 10

SHEET NUMBER 圖紙編號

60534575/TPRP/016

ISO A1 594mm x 841mm
Approved:
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Designer:
Project Management Initials:
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16-January-2019

ISO A1 594mm x 841mm

Approved:

Checked:

Designer:

Project Management Initials:

843000 E

843100 E

831700 N

831800 N

CUT LINE F-F
SEE DRAWING NO. 60534575/TPRP/016

CUT LINE G-G
SEE DRAWING NO. 60534575/TPRP/109

CUT LINE H-H
SEE DRAWING NO. 60534575/TPRP/018

L03

L04

L17

163

150

518
100

NOTES:

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2. THIS DRAWING TO BE READ IN CONJUNCTION WITH DRAWING NOS. 60534575/TPRP/011 TO 020.

Kong Nga Po 仙乃雅

Rifle Range 練靶場

Cut

Fill

Hung Hing Centre

Man Kam To Road

Hung Lung Hang

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STATUS
階段

SCALE
比例

A1 1 : 500

DIMENSION UNIT
尺寸單位

METRES

KEY PLAN
索引圖 A1 1 : 50000

PROJECT NO.
項目編號

60534575

CONTRACT NO.
合約編號

CE 60/2016 (CE)

SHEET TITLE
圖紙名稱

GENERAL LAYOUT

SHEET 7 OF 10

SHEET NUMBER
圖紙編號

60534575/TPRP/017

ISO A1 594mm x 841mm

Approved:

Checked:

Designer:

Project Management Initials:

CUT LINE H-H
SEE DRAWING NO. 60534575/TPRP/017

CUT LINE F-F
SEE DRAWING NO. 60534575/TPRP/016

CUT LINE G-G
SEE DRAWING NOS. 60534575/TPRP/019 AND 020

843000 E
843100 E
843200 E
831900 N
832000 N
1699.870
KNP
L01
L02
L03
L04
L07
L08
L17
518
100
362
172
KWAN TO ROAD
HUNG LUNG HANG

NOTES:

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PROJECT 項目

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SCALE 比例
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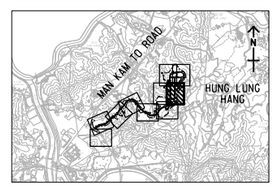
DIMENSION UNIT 尺寸單位
METRES

KEY PLAN 索引圖 A1 1 : 50000



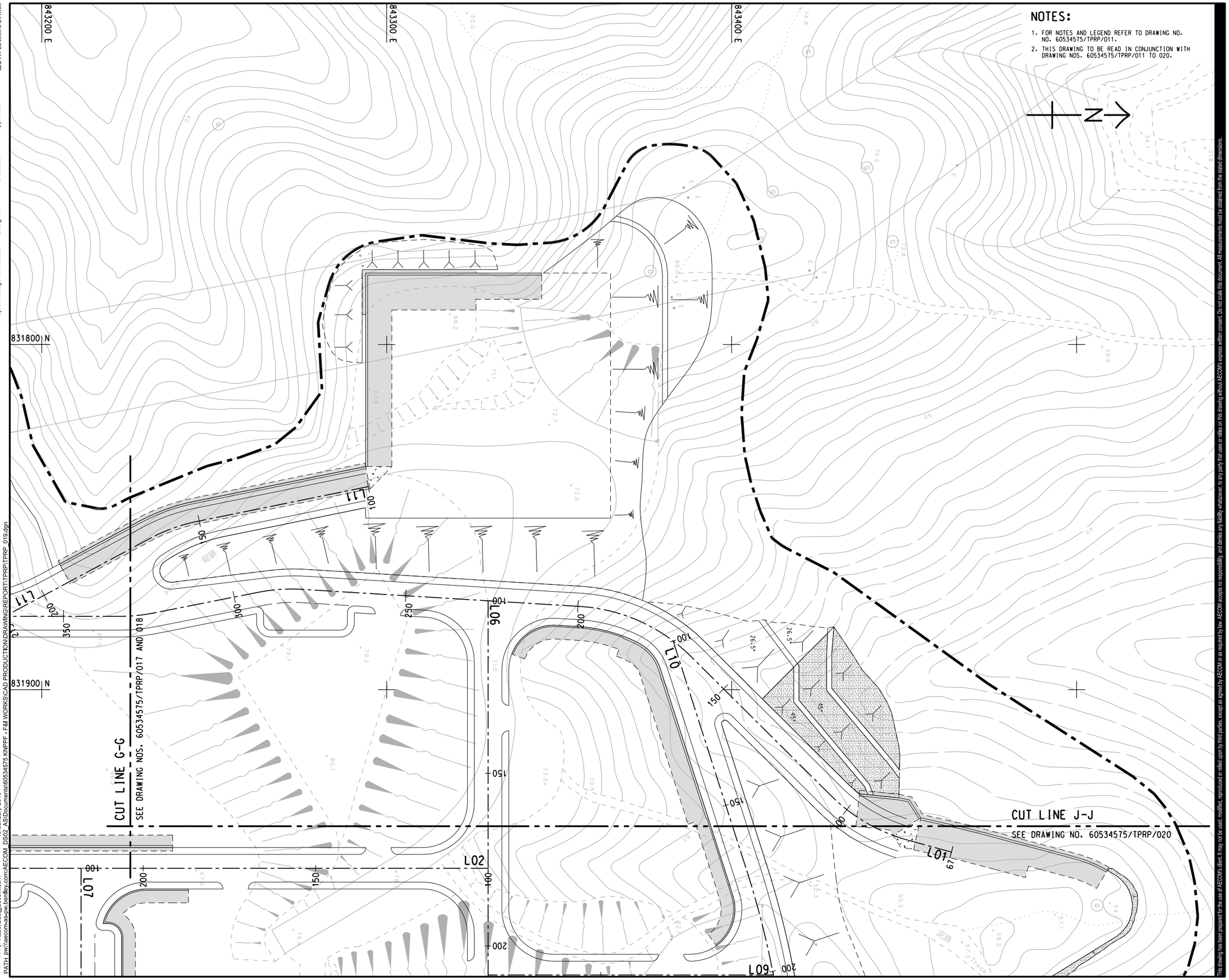
PROJECT NO. 項目編號
60534575

CONTRACT NO. 合約編號
CE 60/2016 (CE)

SHEET TITLE 圖紙名稱
GENERAL LAYOUT

SHEET 8 OF 10

SHEET NUMBER 圖紙編號
60534575/TPRP/018



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PROJECT
項目

SITE FORMATION AND INFRASTRUCTURE WORKS FOR POLICE FACILITIES IN KONG NGA PO - DESIGN AND CONSTRUCTION

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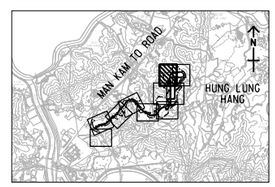
STATUS
階段

SCALE 比例: A1 1 : 500

DIMENSION UNIT 尺寸單位: METRES

KEY PLAN 索引圖 A1 1 : 50000



PROJECT NO. 項目編號: 60534575

CONTRACT NO. 合約編號: CE 60/2016 (CE)

SHEET TITLE 圖紙名稱

GENERAL LAYOUT

SHEET 9 OF 10

SHEET NUMBER 圖紙編號

60534575/TPRP/019

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Project Management Initials:
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16-January-2019

ISO A1 594mm x 841mm

Approved:

Checked:

Designer:

Project Management Initials:

843200 E

843300 E

843400 E

843500 E

832000 N

832100 N

CUT LINE J-J
SEE DRAWING NO. 60534575/TPRP/019

CUT LINE G-G
SEE DRAWING NO. 60534575/TPRP/018

L01

L02

L06

L07

L08

L09

L10

L12

NOTES:

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PROJECT
項目

SITE FORMATION AND INFRASTRUCTURE WORKS FOR POLICE FACILITIES IN KONG NGA PO - DESIGN AND CONSTRUCTION

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STATUS
階段

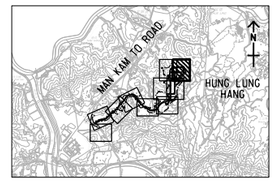
SCALE
比例

A1 1 : 500

DIMENSION UNIT
尺寸單位

METRES

KEY PLAN
索引圖 A1 1 : 50000



PROJECT NO.
項目編號

60534575

CONTRACT NO.
合約編號

CE 60/2016 (CE)

SHEET TITLE
圖紙名稱

GENERAL LAYOUT

SHEET 10 OF 10

SHEET NUMBER
圖紙編號

60534575/TPRP/020

Appendix II

Landscape Design Plans and Section

ISO A1 594mm x 841mm
Approved:
Checked:
Designer:
Project Management Initials:
Plot File by: huiwww
3/28/2017
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LEGEND:

- PROPOSED KONG NGA PO DEVELOPMENT AREA
- PROPOSED KONG NGA PO ROAD IMPROVEMENT WORKS
- NEW CUT SLOPES
- PRESERVED WOODLAND
- PROPOSED WOODLAND BUFFER PLANTING (OM 06)
- PROPOSED SHRUB-GRASSLAND (OM 08)
- PROPOSED AMENITY TREE AND SHRUB PLANTING (OM 07)
- PROPOSED LAWN AREA
- Building associated landscape works within platforms to be implemented by ARCHSD under building contract which includes:
  1. Pavement
  2. Lawn
  3. OM01: Detailed Design Considerations;
     OM02: Aesthetically Pleasing Design and Responsive Design of Buildings and Structures;
     OM07: Roadside and Amenity Planting;
     OM08: Grassland (Ecological Mitigation);
     OM09: Green Roof;
     OM10: Vertical Greening;
     OM11: Green Paving
- Landscape works including buffer planting are designed by CEDD and to be constructed by ArchSD under building contract

SITE BOUNDARY FOR PROJECT MAIN SITE
(All tree planting within project main site to be implemented under ARCHSD building works contract)

SITE BOUNDARY FOR IMPROVEMENT WORKS AT KONG NGA PO ROAD

VIADUCT

HEIGHT OF RETAINING STRUCTURE:
(OUTSIDE THE DEVELOPMENT AREA AND ALONG KONG NGA PO ROAD)

- RETAINING WALL

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ned.

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STATUS
狀態

SCALE 比例: 1 : 2000

DIMENSION UNIT 尺寸單位: METERS

KEY PLAN
索引圖

PROJECT NO. 項目編號: 60534575

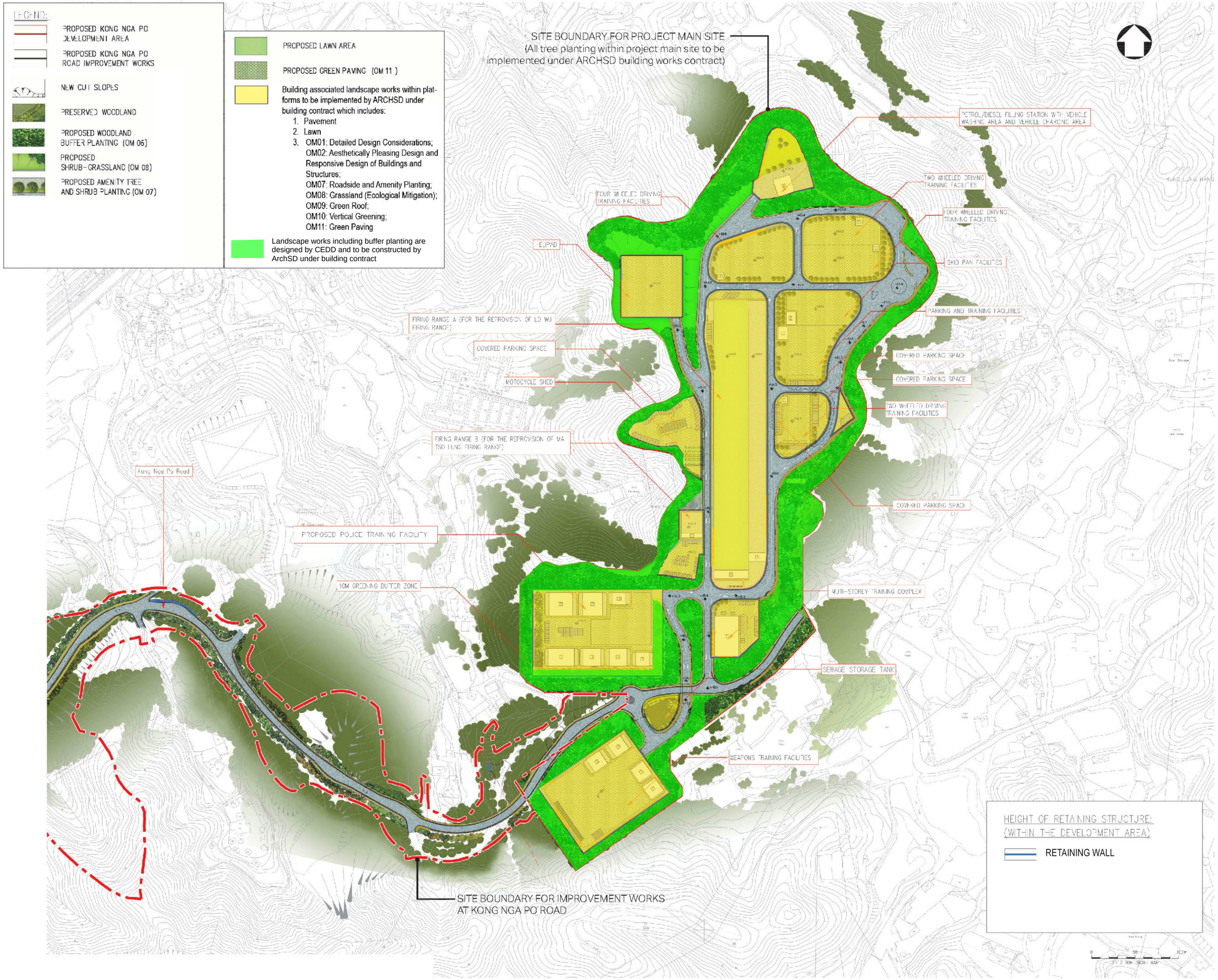
CONTRACT NO. 合約編號: CE 60/2016 (CE)

SHEET TITLE
圖紙名稱

PRELIMINARY LANDSCAPE MASTER PLAN

SHEET NUMBER
圖紙編號

60534575/PDR/L002



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STATUS
階段

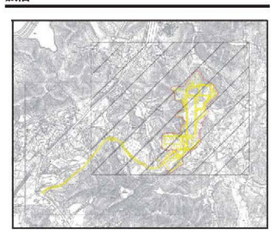
SCALE
比例

1 : 2000

DIMENSION UNIT
尺寸單位

METERS

KEY PLAN
索引圖



PROJECT NO.
項目編號

60534575

CONTRACT NO.
合約編號

CE 60/2016 (CE)

SHEET TITLE
圖紙名稱

PRELIMINARY LANDSCAPE MASTER PLAN

SHEET NUMBER
圖紙編號

60534575/PDR/L001

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Checked:
Designer:
Project Management Initials:
Plot File by: huiwaw
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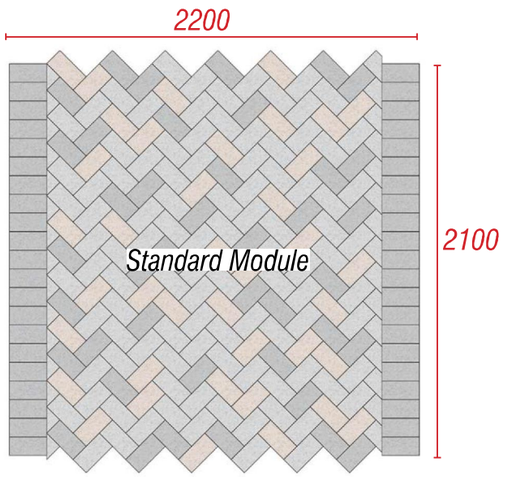
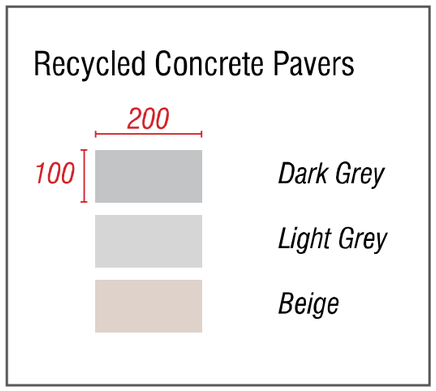
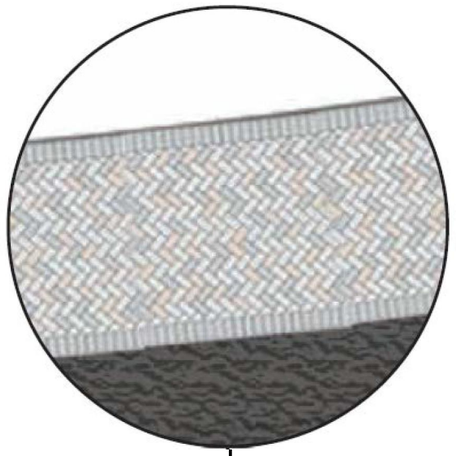
3/28/2017

PAVING PATTERN - TYPICAL





Blow up Paving Details

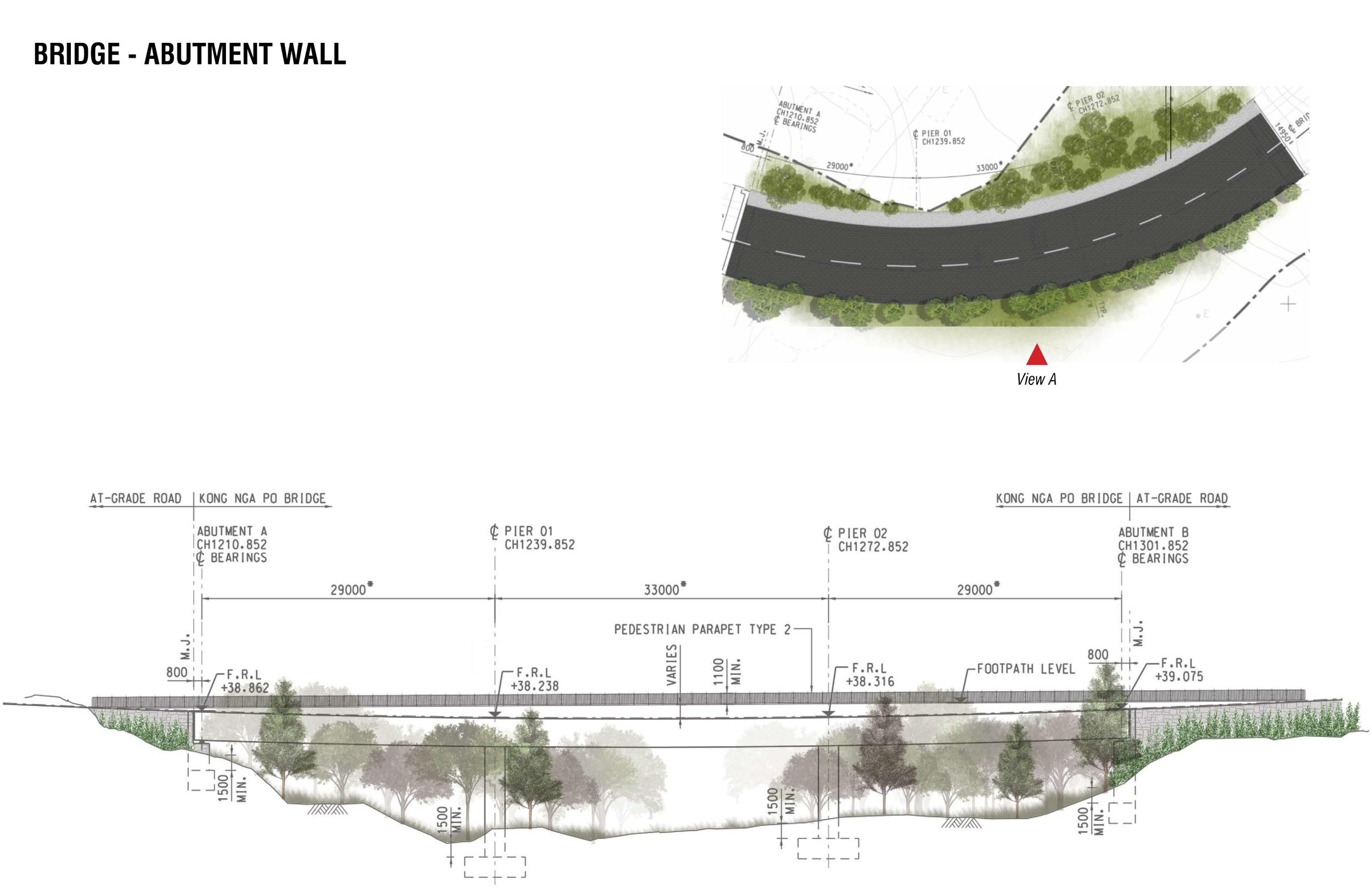


Drawing No.: 60534575/ACABAS/014

Paving Plan 1:250

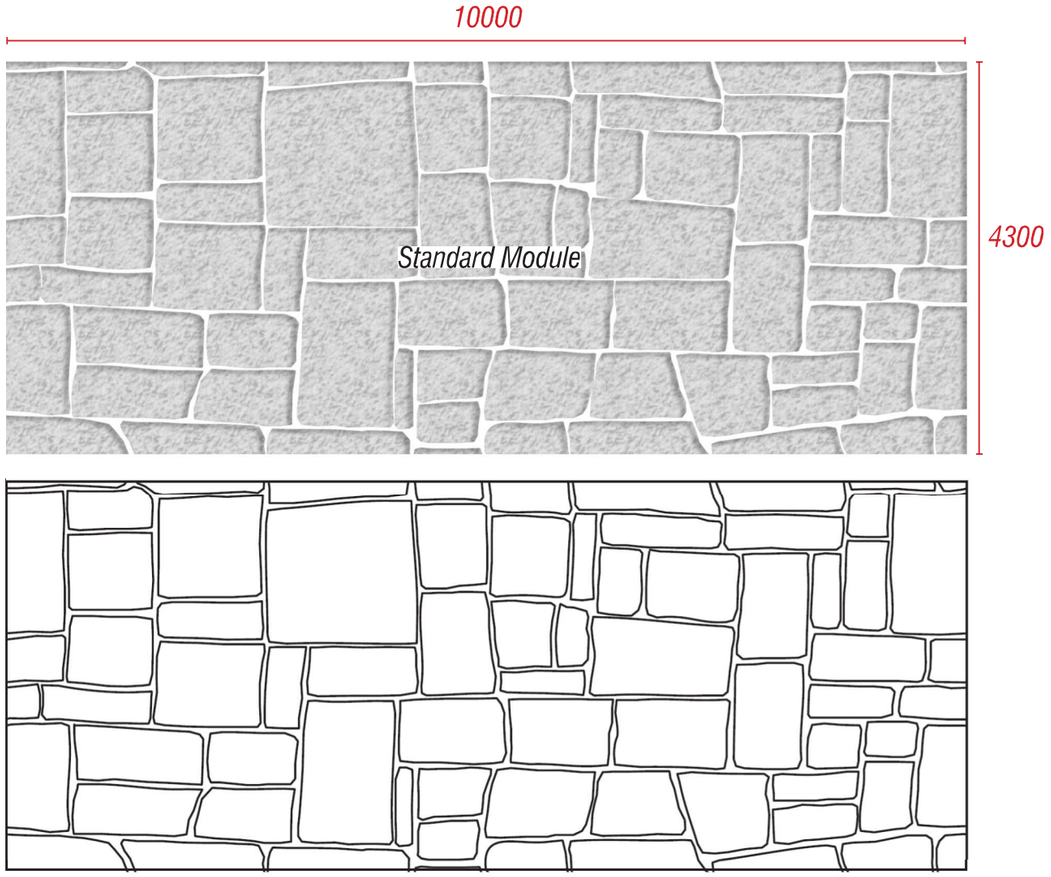
BRIDGE - ABUTMENT WALL

View A



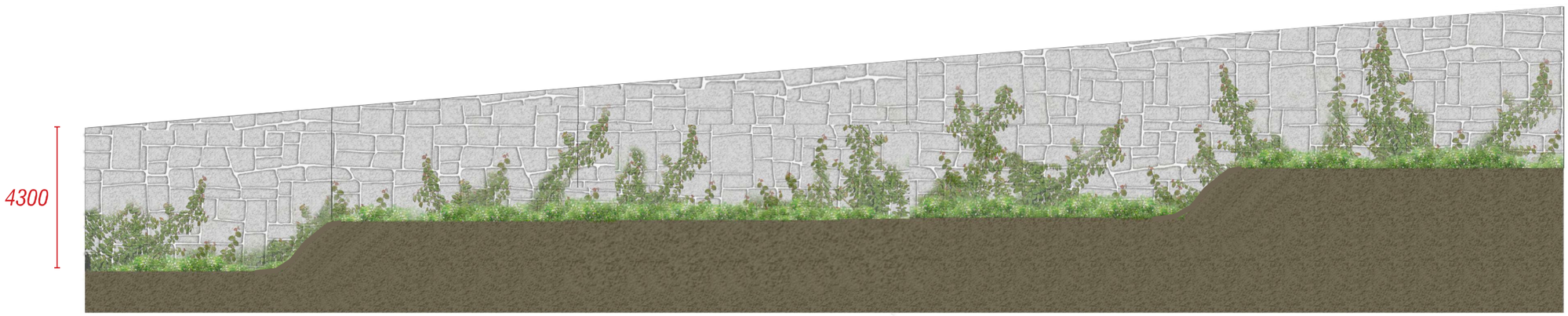
Elevation - View A | 1:300

RETAINING WALL - WALL PATTERN



Textured Formwork Liner (Concrete) - Drystack Random Stone Pattern
Profile Depth: 20mm

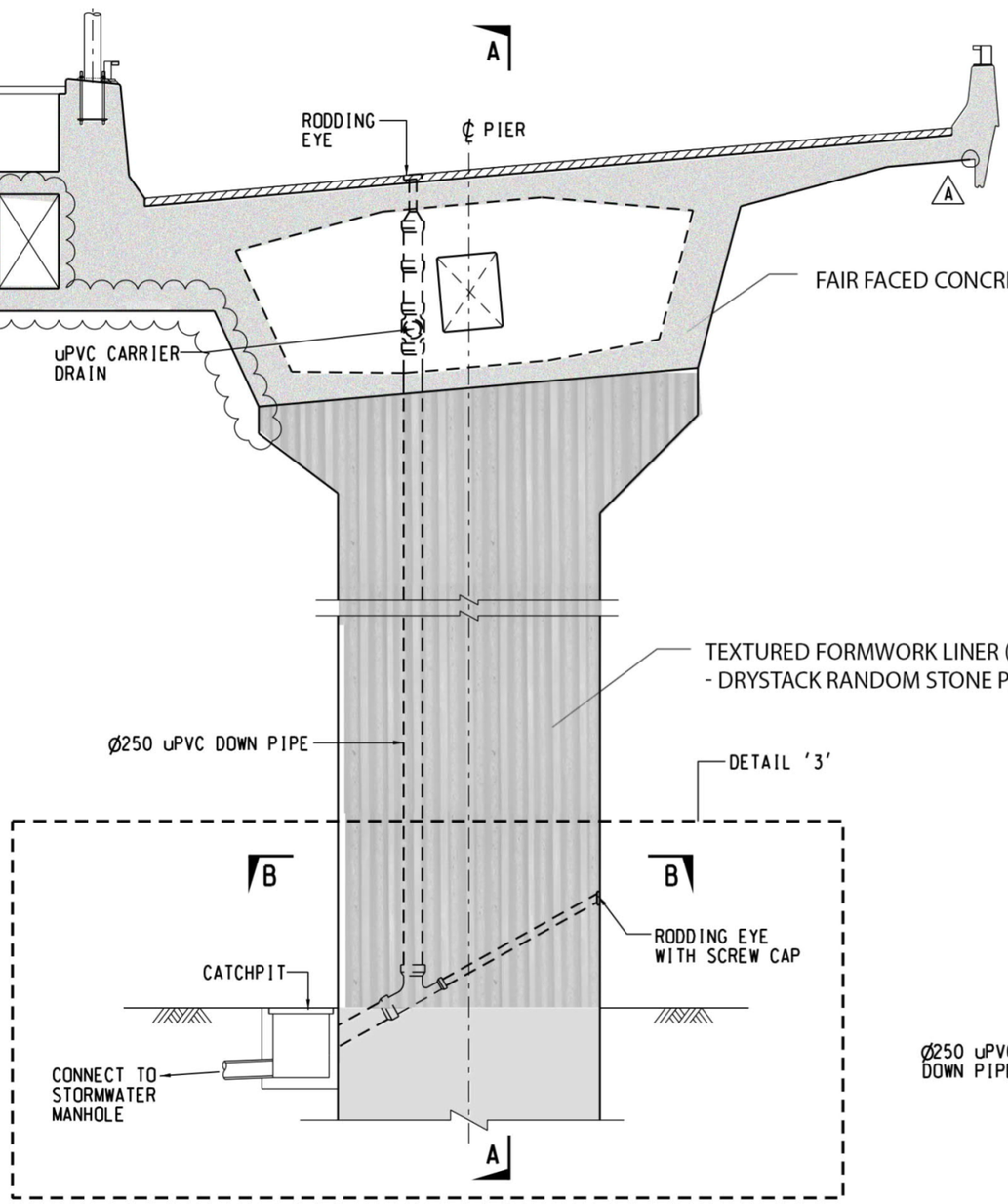
Retaining Wall Section - 1:100



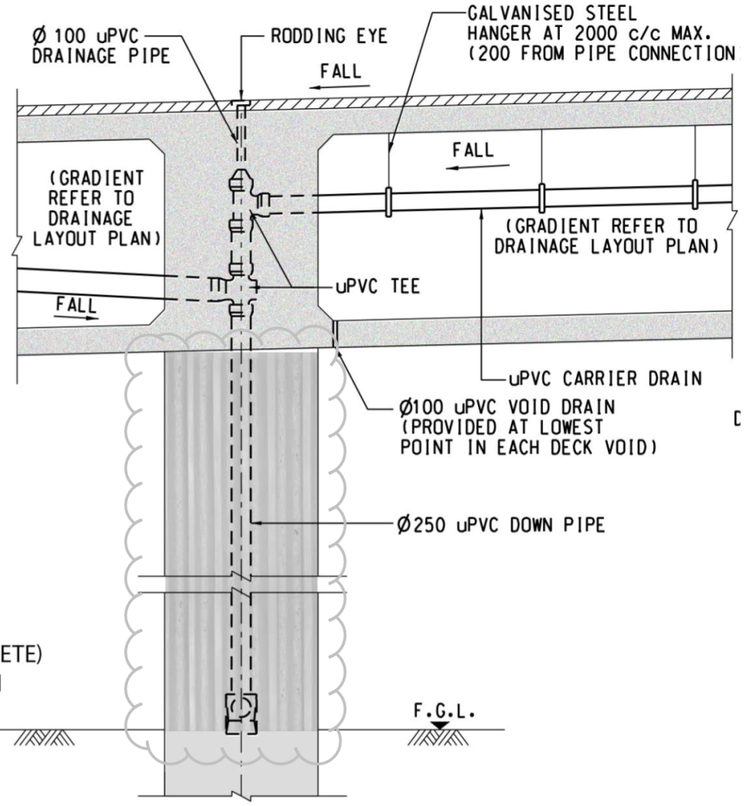
Retaining Wall Pattern Section (with Climber) - 1:150

Drawing No.: 60534575/ACABAS/017

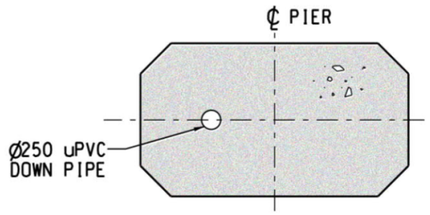
PIER - WALL PATTERN



DRAINAGE DETAILS AT PIER
SCALE 1 : 50



SECTION A - A



SECTION B - B
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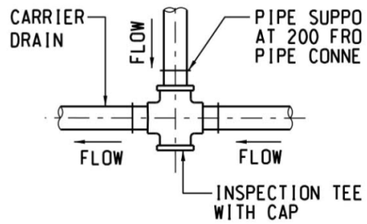

DETAIL '1'
SCALE 1 : 10

SAMPLE PHOTO

PLANTING PALETTE

A. Climbers

Parthenocissus dalzielii | 爬牆虎, 異葉爬山虎

Planting Schedule							
No.	Botanical Name	Chinese Name	Size(mm)		Spacing (mm)	Native	Location
			Height	Spread			
Shrub							
1	*Dichroa febrifuga*	常山	400	350	300	Native	Next to the viaduct section and retaining wall
2	*Ixora chinensis (Red)*	龍船花（紅花）	450	300	250	Native	
3	*Rhaphiolepis indica*	石斑木，車輪梅，春花	400	350	300	Native	
4	*Rhododendron simsii*	紅杜鵑	250	200	150	Native	
5	*Rhodomyrtus tomentosa*	桃金娘，崗棯	300	250	200	Native	
Climber							
1	*Parthenocissus dalzielii*	爬牆虎，異葉爬山虎	/	/	/	Exotic	surface of retaining wall and abutment

B. Shrubs

Dichroa febrifug | 常山

Ixora chinensis (Red) | 龍船花 (紅花)

Rhaphiolepis indica | 石斑木, 車輪梅, 春花

Rhododendron simsii | 紅杜鵑

Rhodomyrtus tomentosa | 桃金娘, 崗棯

PLANTING PALETTE

C. Trees

Machilus breviflora | 短序潤楠

Gordonia axillaris |大頭茶

Reevesia thyrsoidea| 梭羅樹

Viburnum odoratissimum | 珊瑚樹

Melia azedarach| 苦楝

Species	Chinese Name	Spacing (mm)	Size	Location
Woodland and Landscape Buffer Planting				
Tree Planting				
*Machilus breviflora**	短序潤楠	2000 / 5000	Whips / Heavy Standard	Next to the retaining wall and viaduct sections
*Polyspora axillaris**	大頭茶	2000 / 5000	Whips / Heavy Standard	
*Reevesia thyrsoidea**	梭羅樹	2000 / 5000	Whips / Heavy Standard	
*Viburnum odoratissimum**	珊瑚樹	2000 / 5000	Whips / Heavy Standard	
Melia azedarach	苦楝	2000 / 5000	Whips / Heavy Standard	

Location Plan

Figure C1: Kong Nga Po Road – Retaining Wall No.2 (Before Construction Works)

Location Plan

Figure C2: Photomontage of Proposed Retaining Wall No.2 (Without Mitigation Measures)

Location Plan

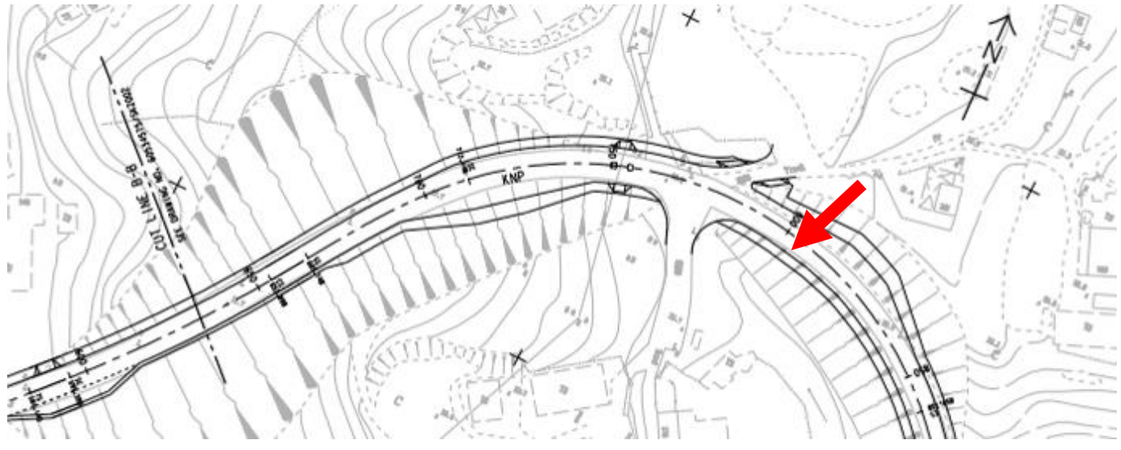

Figure C3: Photomontage of Proposed Retaining Wall No.2 (With Mitigation Measures)

Location Plan

Figure C4: Photomontage of Proposed Retaining Wall No.2 (Without Mitigation Measures)

Location Plan

Figure C5: Photomontage of Proposed Retaining Wall No.2 (With Mitigation Measures)

Location Plan

Figure C6: Photomontage of Proposed Retaining Wall No.2 (Pedestrian's View)

Location Plan

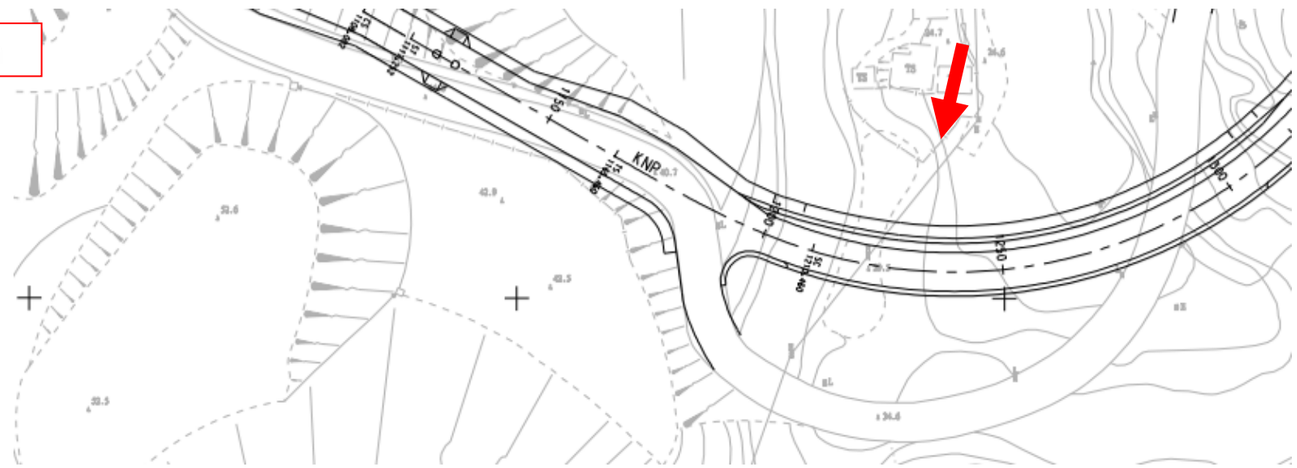

Figure C7: Kong Nga Po Road – Viaduct Section (Before Construction Works)

Location Plan

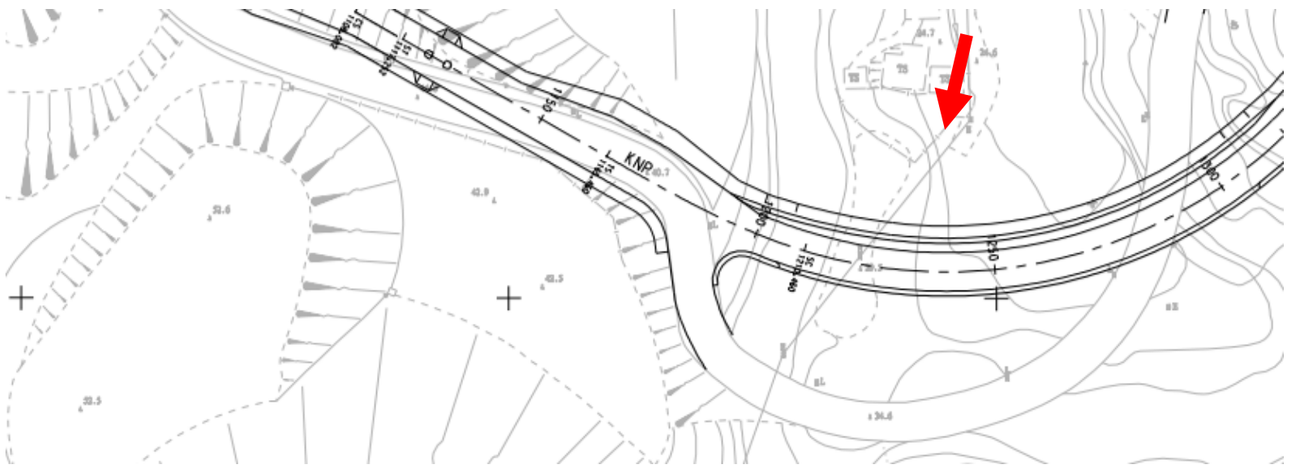

Figure C8: Photomontage of Proposed Viaduct Section (Without Mitigation Measures)

Location Plan

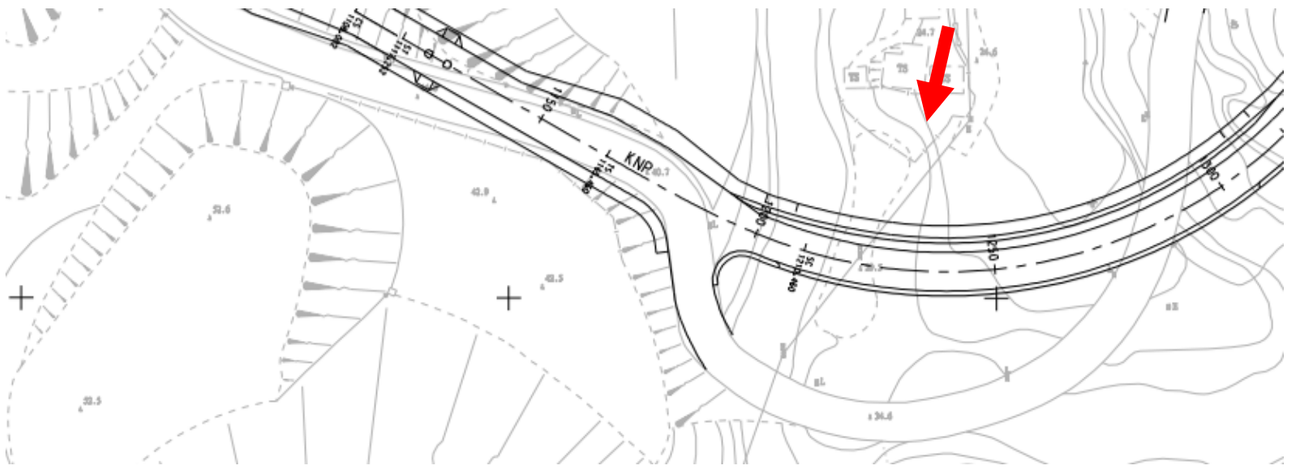

Figure C9: Photomontage of Proposed Viaduct Section (With Mitigation Measures)

Location Plan

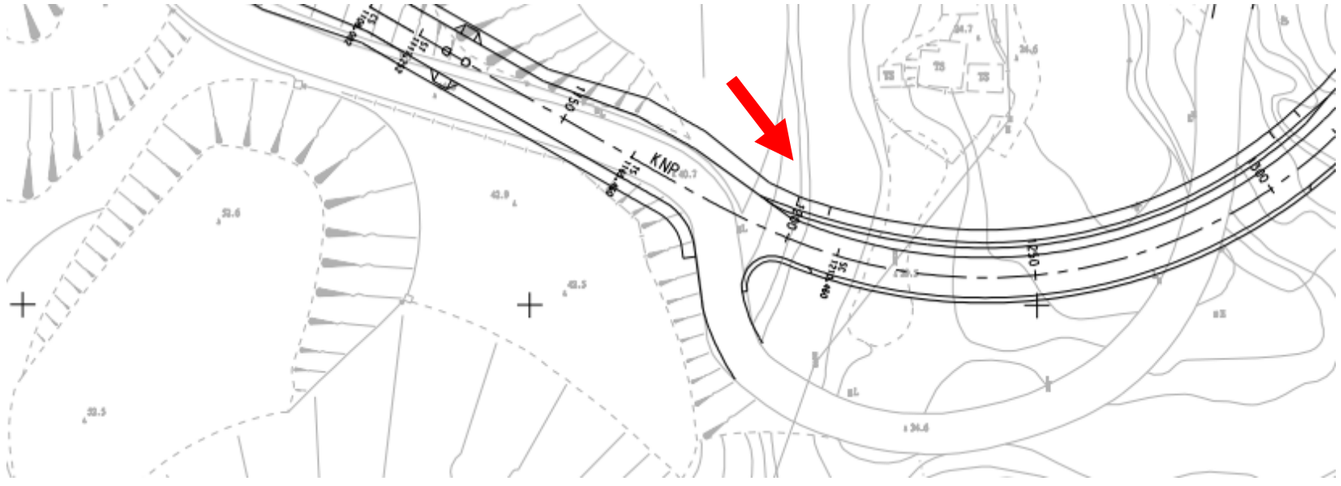

Figure C10: Photomontage of Proposed Viaduct Section (Without Mitigation Measures)

Location Plan

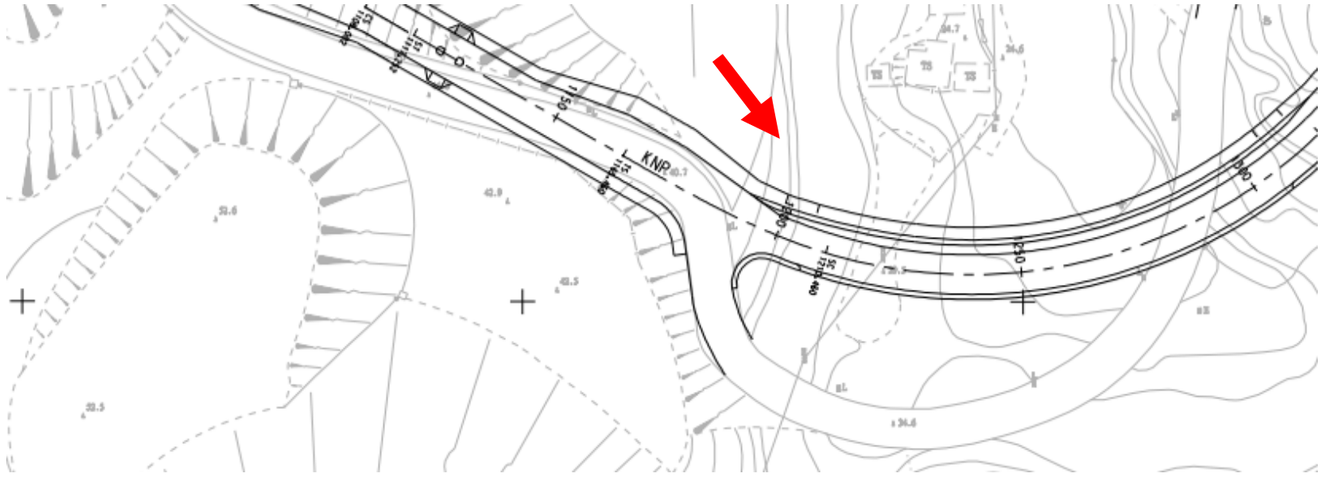

Figure C11: Photomontage of Proposed Viaduct Section (With Mitigation Measures)

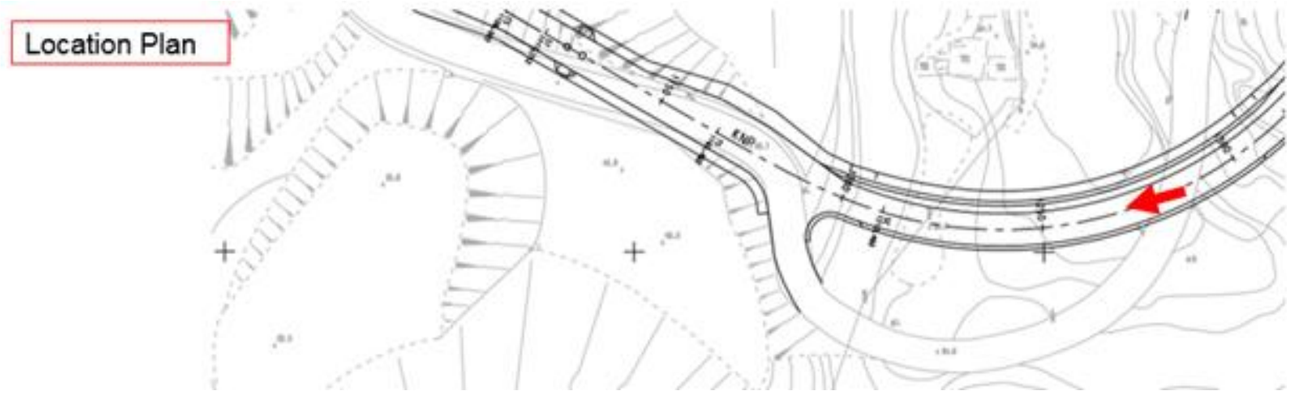

Figure C12: Photomontage of Proposed Viaduct Section (Driver's View)

Appendix III

Tree Planting Plan (Heavy/Light Standard Trees and Transplanted Trees)

Combined Tree Treatment and Planting Plan for both CEDD and ArchSD Contract

ISO A1 594mm x 841mm

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Checked:

Designer:

Project Management Initials:

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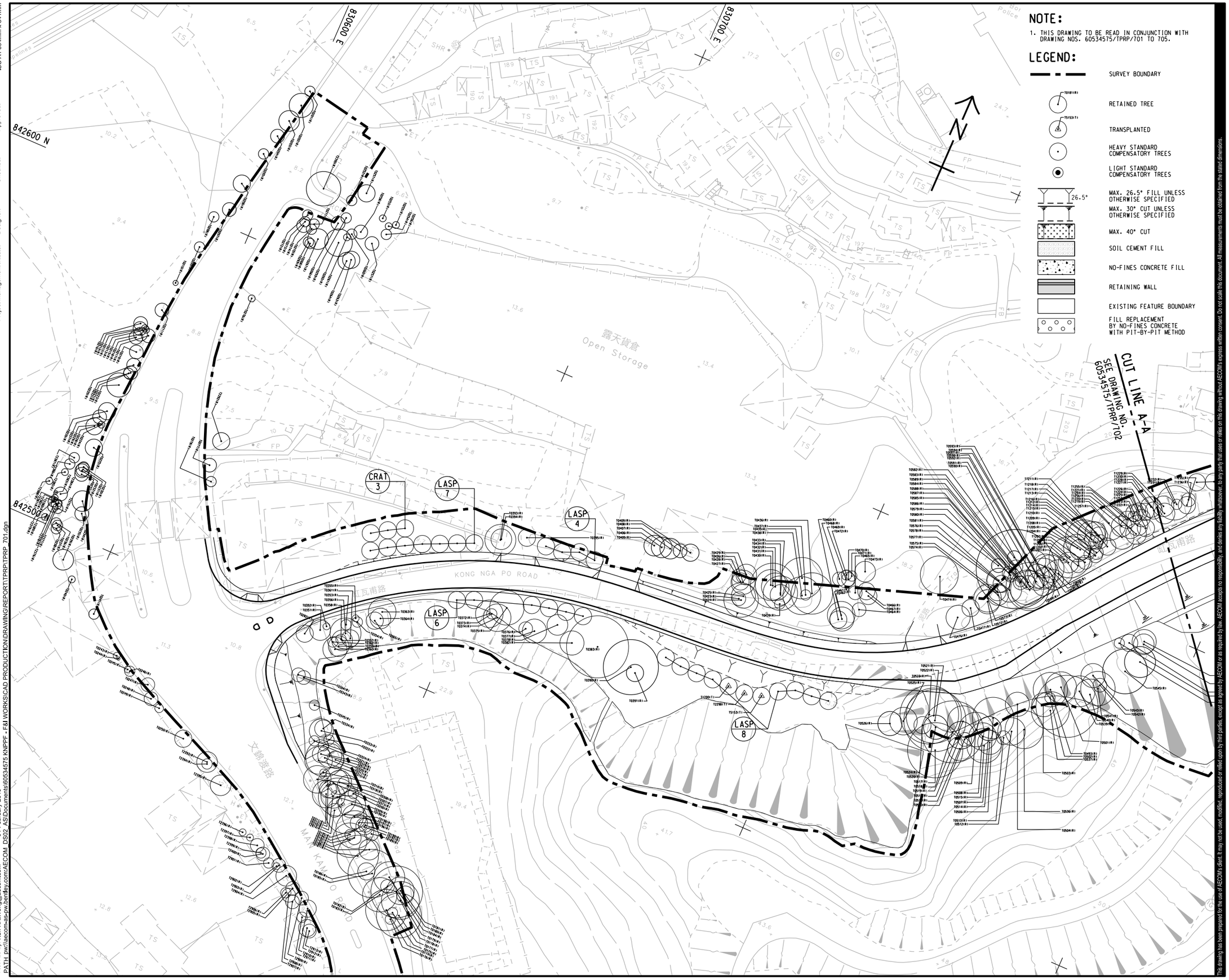

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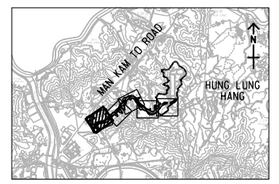

PROJECT NO. 項目編號
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CONTRACT NO. 合約編號
CE 60/2016 (CE)

SHEET TITLE 圖紙名稱
TREE PLANTING PLAN

SHEET 1 OF 5

SHEET NUMBER 圖紙編號
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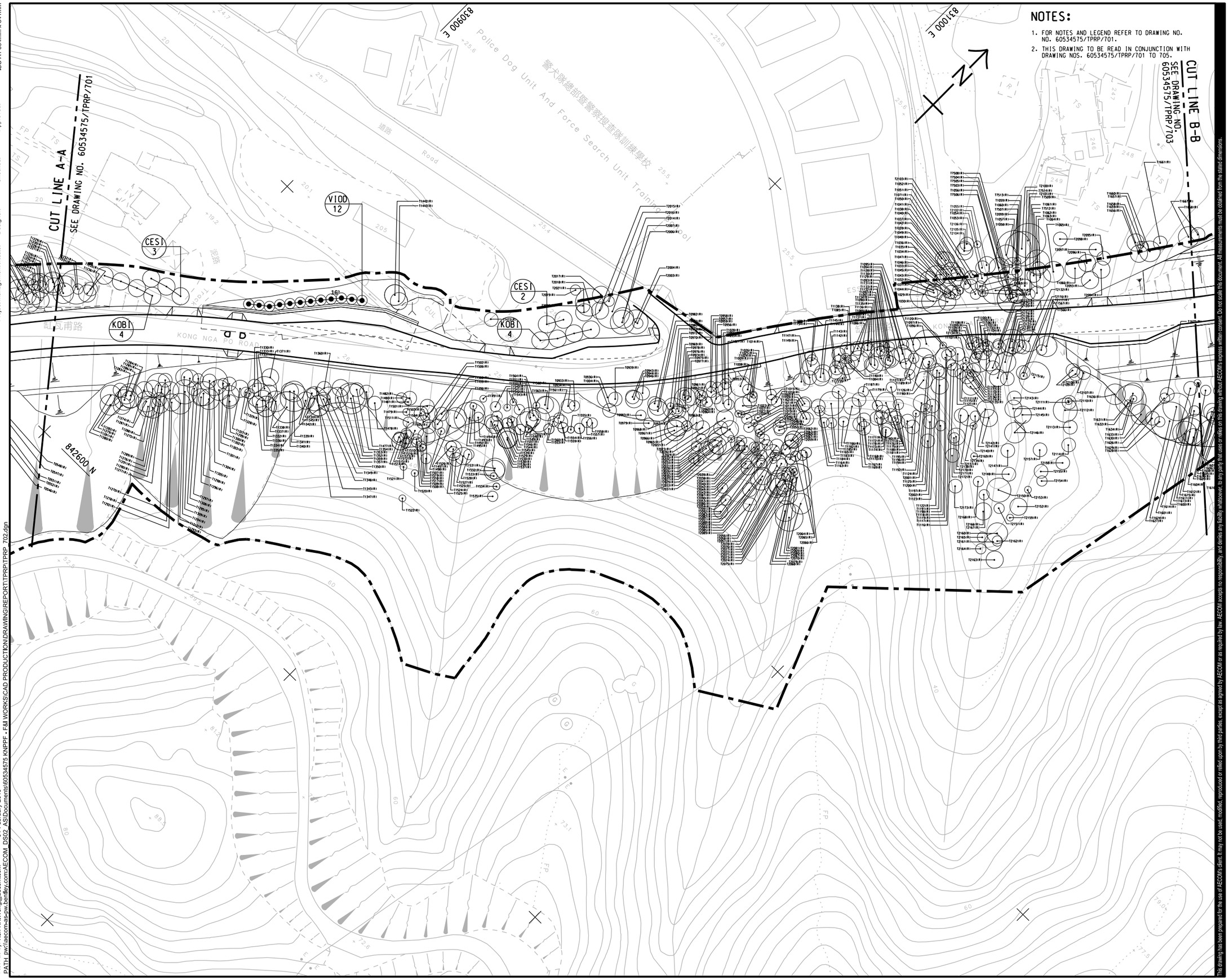

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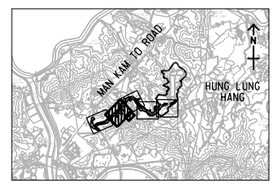

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SHEET TITLE 圖紙名稱

TREE PLANTING PLAN

SHEET 2 OF 5

SHEET NUMBER 圖紙編號

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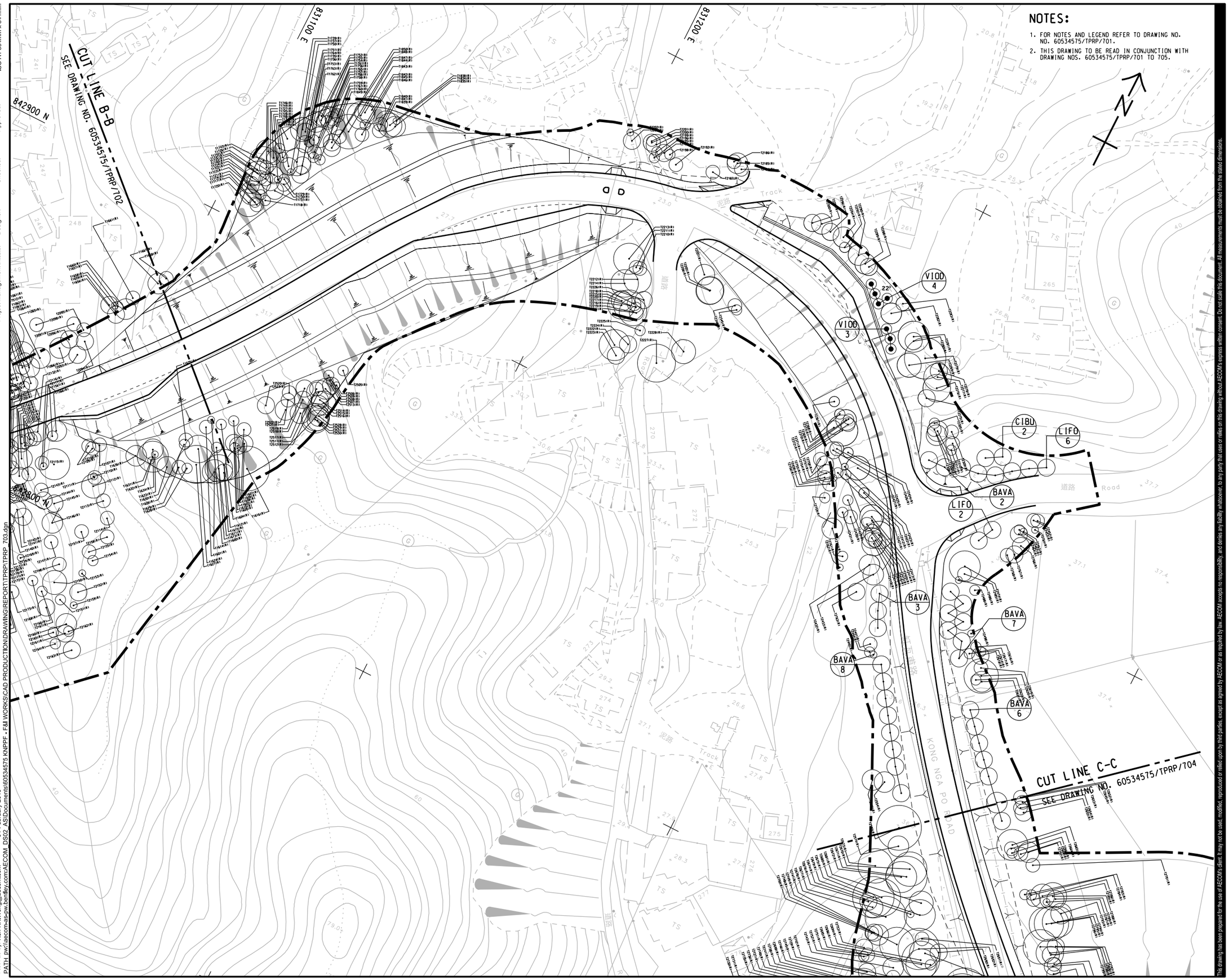

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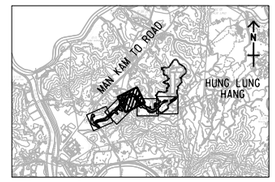

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SHEET 3 OF 5

SHEET NUMBER
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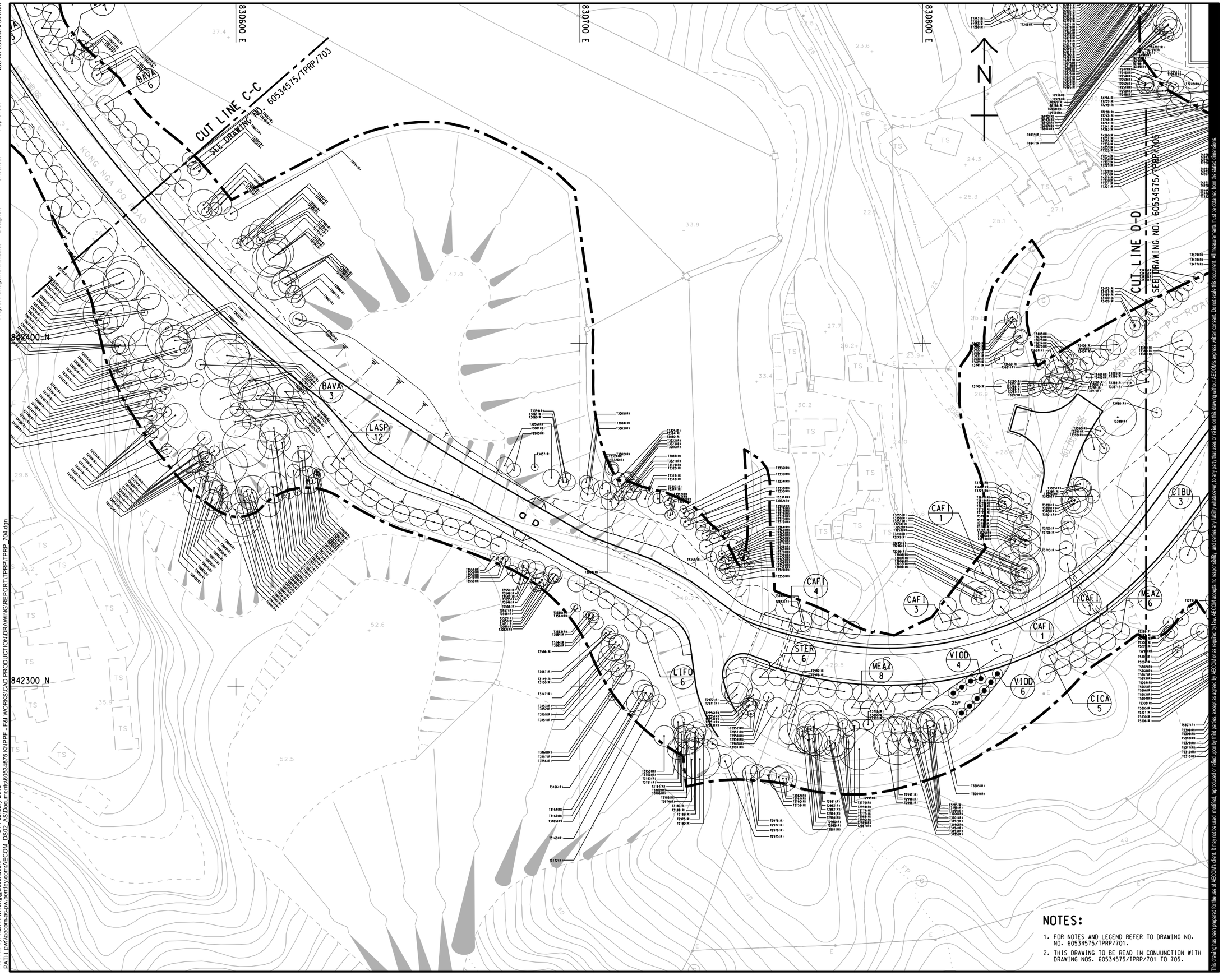

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DIMENSION UNIT 尺寸單位
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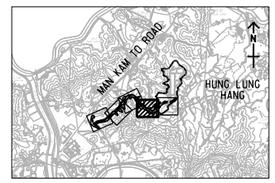

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SHEET 4 OF 5

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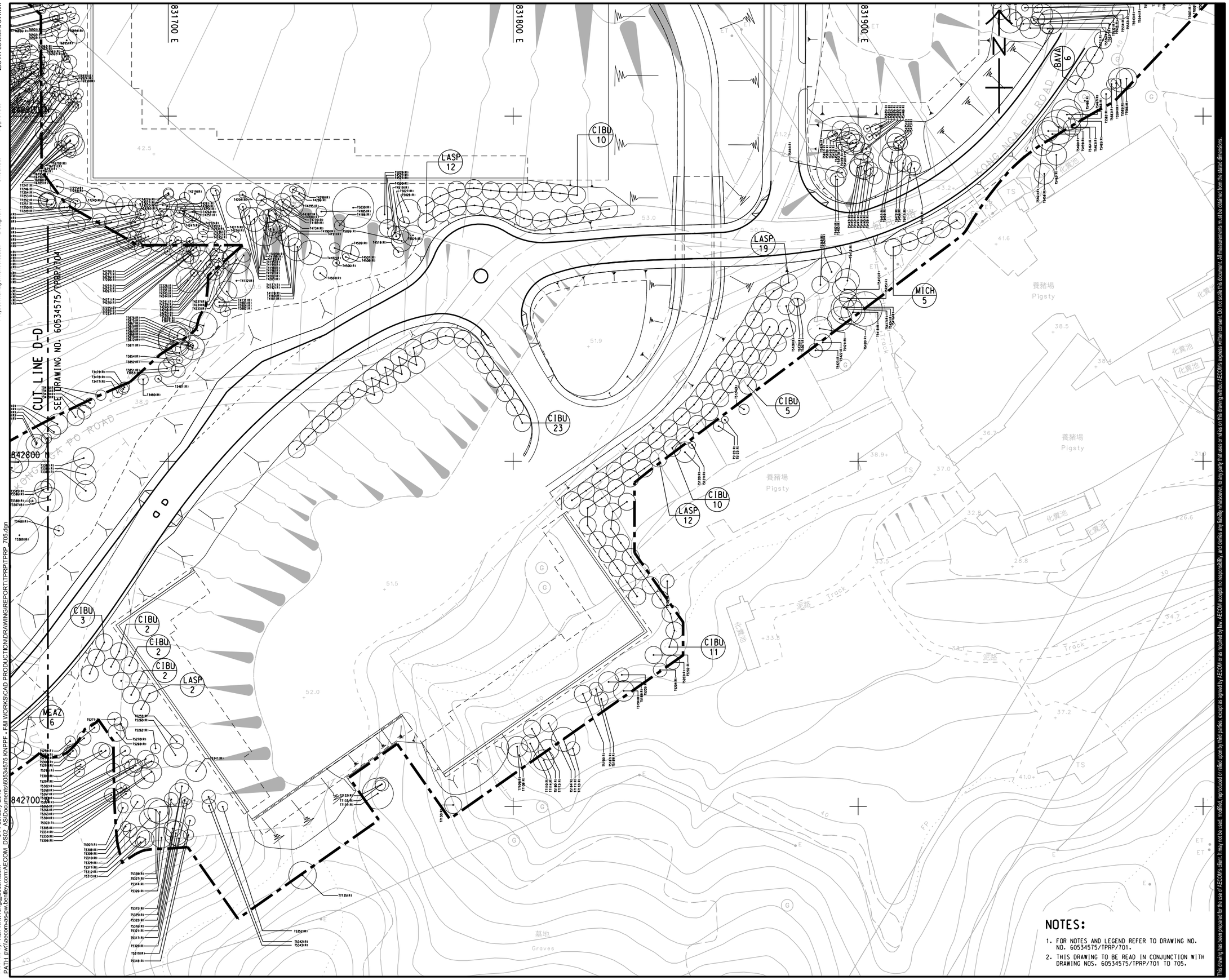

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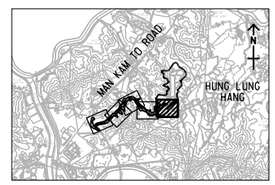

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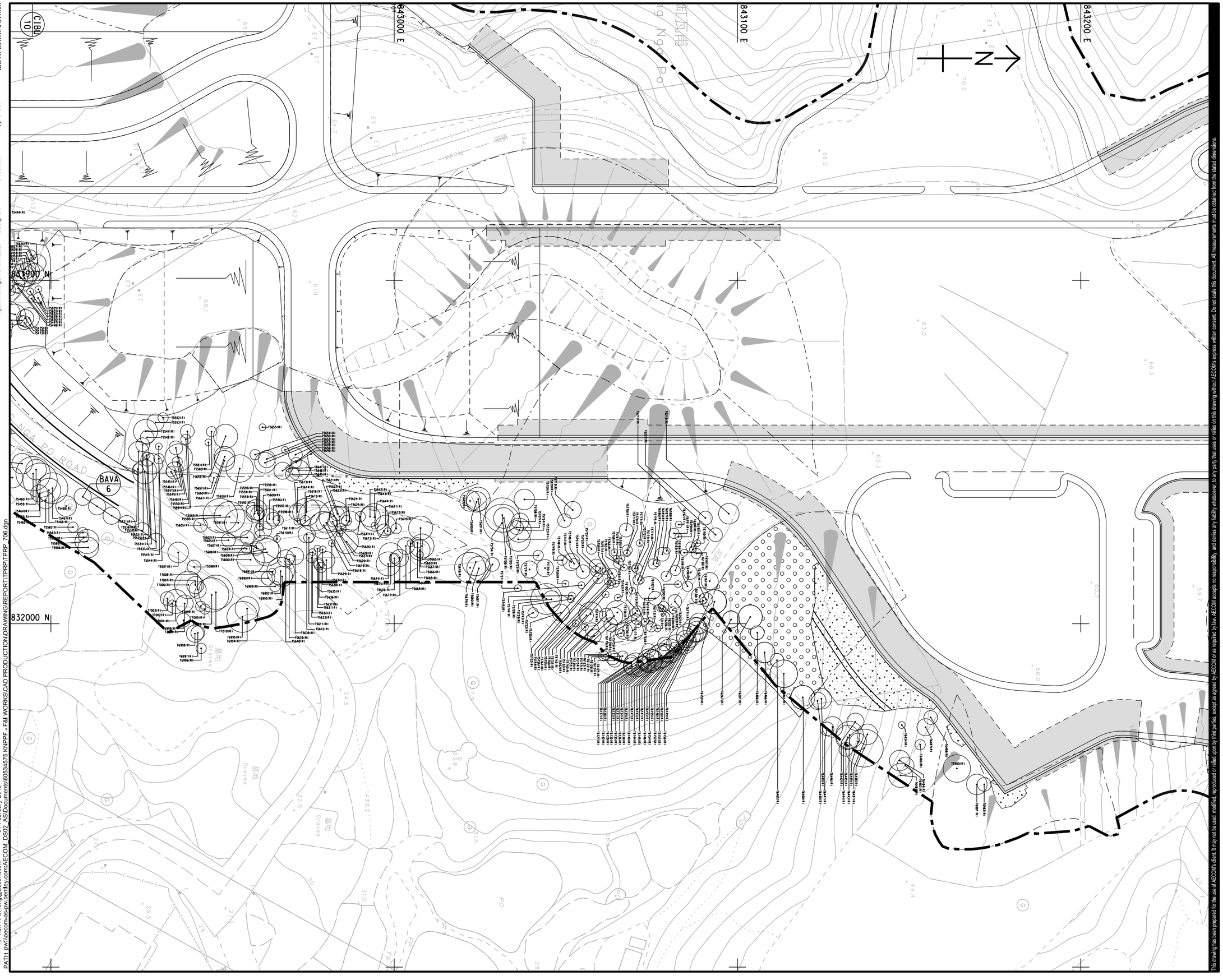
843000 E
843100 E
843200 E
832100 N
832000 N
BAVA 6
KONG NGA PO ROAD
Grass
Road
Grass
Grass
Grass

Code	Botanical Name	Chinese Name	Size (mm) Height(H) x Spread (S)	Spacing (mm)	Quantity
Trees					
KOBI	*Koelreuteria bipinnata*	複羽葉欒樹	Heavy Standard	5000	8
CICA	*Cinnamomum camphora**	樟	Heavy Standard	5000	5
MEAZ	*Melia azedarach*	苦楝	Heavy Standard	5000	14
CESI	*Celtis sinensis**	朴樹	Heavy Standard	5000	5
BAVA	*Bauhinia variegata*	宮粉洋蹄甲	Heavy Standard	5000	35
CRAT	*Crateva unilocularis*	樹頭菜	Heavy Standard	5000	3
CIBU	*Cinnamomum burmannii**	陰香	Heavy Standard	5000	70
LASP	*Lagerstroemia speciosa*	大葉紫薇	Heavy Standard	5000	82
LIFO	*Liquidambar formosana**	楓香	Heavy Standard	5000	14
MICH	*Michelia x alba*	白蘭	Heavy Standard	5000	5
CAFI	*Cassia fistula*	豬腸豆	Heavy Standard	5000	10
STER	*Sterculia lanceolata**	假蘋婆	Heavy Standard	5000	6
VIOD	*Viburnum odoratissimum**	珊瑚樹	Light Standard	3000	29

* native species

Woodland Mix Planting

WMP1

Key	Code	Botanical Name	Chinese Name	Size (mm) Height(H) x Spread (S)	Spacing (mm)	% mix	Quantity
•	BRI	*Bridelia tomentosa**	土密樹	whip tree	2000	20	914
•	PHY	*Phyllanthus emblica **	餘甘子	whip tree	2000	20	914
•	FIC	*Ficus hispida**	對葉榕	whip tree	2000	20	914
•	POL	*Polyspora axillaris**	大頭茶	whip tree	2000	20	914
•	RHU	*Rhus succedanea**	野漆	whip tree	2000	20	914
x	RHS	*Rhododendron simsii**	紅杜鵑	400(H) x 400(S)	500	25	11430
x	MEL	*Melastoma sanguineum*	毛蕊	400(H) x 400(S)	500	25	11430
x	RHT	*Rhodomyrtus tomentosa**	桃金娘/崗棯	400(H) x 400(S)	500	25	11430
x	PSY	*Psychotria asiatica*	九節	400(H) x 400(S)	500	25	11430
WMP2							
•	MAC	*Machilus breviflora*	短序潤楠	whip tree	2000	20	719
•	POL	*Polyspora axillaris**	大頭茶	whip tree	2000	20	719
•	REE	*Reevesia thyrsoidea**	梭羅樹	whip tree	2000	20	719
•	VIB	*Viburnum odoratissimum**	珊瑚樹	whip tree	2000	20	719
•	CRA	*Cratoxylum cochinchinense**	黃牛木	whip tree	2000	20	719
x	POA	*Polyspora axillaris**	大頭茶	400(H) x 400(S)	500	25	8992
x	LIG	*Ligustrum sinense*	山指甲	400(H) x 400(S)	500	25	8992
x	GAR	*Gardenia jasminoides**	梔子	400(H) x 400(S)	500	25	8992
x	RHA	*Rhaphiolepis indica**	石斑木	400(H) x 400(S)	500	25	8992

* native species

ISO A1 594mm x 841mm
Approved:
Checked:
Designer:
Project Management Initials:
Plot File by: Ken-KK.Wong@aecom.com 30-January-2019
PATH: pw:\aecom-as-pw.bentley.com:AECOM_DS02_ASIDocuments\60534575 KNPPF - F&I WORKS\CAD PRODUCTION\DRAWING\REPORT\TPRP\TPRP_707.dgn

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SITE FORMATION AND INFRASTRUCTURE WORKS FOR POLICE FACILITIES IN KONG NGA PO - DESIGN AND CONSTRUCTION

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I/R 修訂	DATE 日期	DESCRIPTION 內容摘要	CHK. 複核

STATUS
階段

SCALE
比例

A1 1 : 200

DIMENSION UNIT
尺寸單位

METRES

KEY PLAN
索引圖

PROJECT NO.
項目編號

60534575

CONTRACT NO.
合約編號

CE 60/2016 (CE)

SHEET TITLE
圖紙名稱

COMPENSATORY PLANTING SCHEDULE

SHEET NUMBER
圖紙編號

60534575/TPRP/707

Tree Planting Plan for CEDD Contract Only

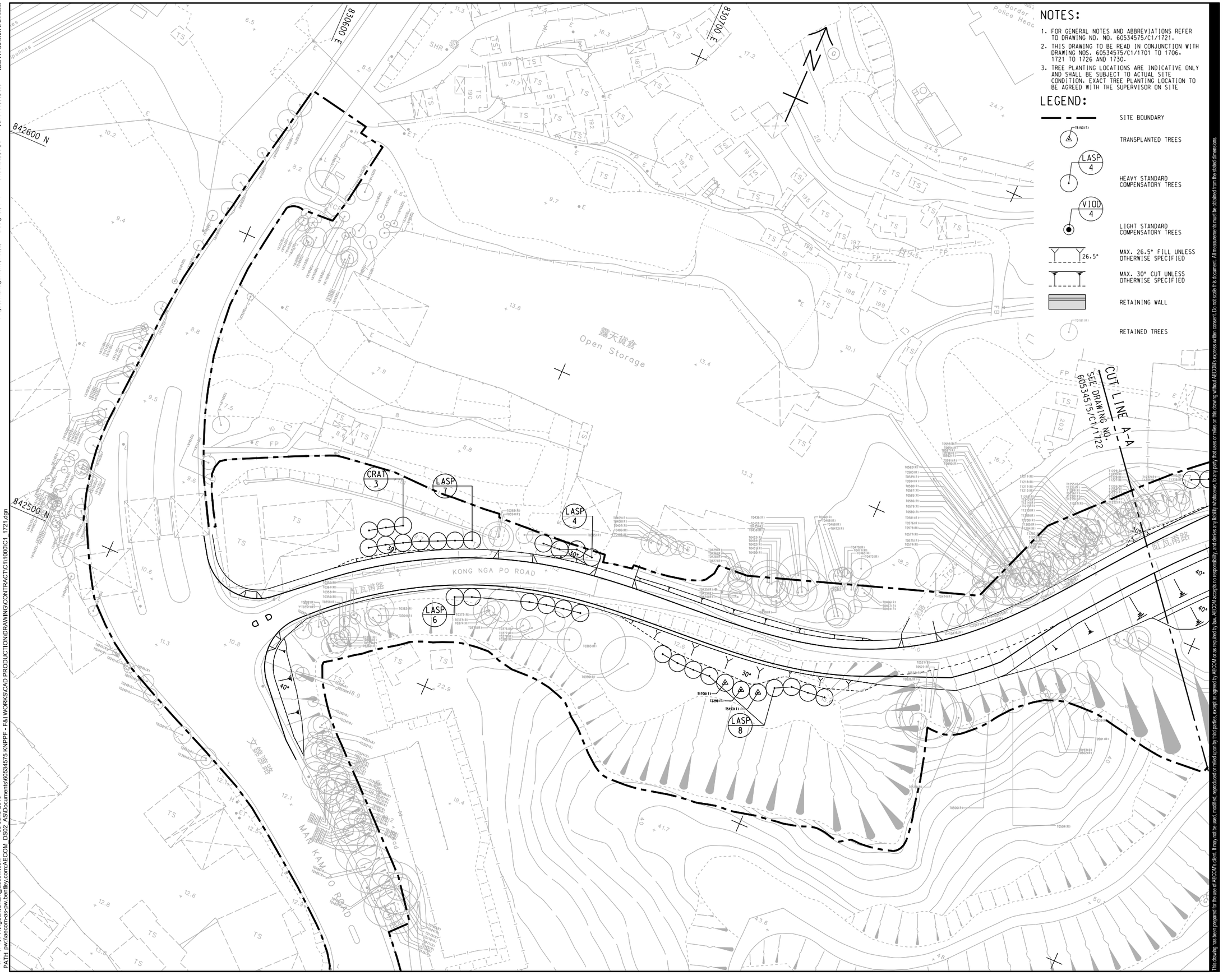
ISO A1 594mm x 841mm

Approved: RCYK

Checked: JTCY

Designer: JLSL

Project Management Initials:



NOTES:

1. FOR GENERAL NOTES AND ABBREVIATIONS REFER TO DRAWING NO. NO. 60534575/C1/1721.
2. THIS DRAWING TO BE READ IN CONJUNCTION WITH DRAWING NOS. 60534575/C1/1701 TO 1706, 1721 TO 1726 AND 1730.
3. TREE PLANTING LOCATIONS ARE INDICATIVE ONLY AND SHALL BE SUBJECT TO ACTUAL SITE CONDITION. EXACT TREE PLANTING LOCATION TO BE AGREED WITH THE SUPERVISOR ON SITE

LEGEND:

- SITE BOUNDARY
- TRANSPLANTED TREES
- HEAVY STANDARD COMPENSATORY TREES (LASP 4)
- LIGHT STANDARD COMPENSATORY TREES (VIOD 4)
- MAX. 26.5° FILL UNLESS OTHERWISE SPECIFIED (26.5°)
- MAX. 30° CUT UNLESS OTHERWISE SPECIFIED
- RETAINING WALL
- RETAINED TREES

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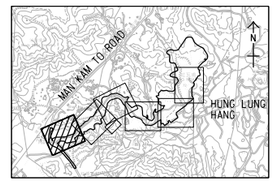
-	JUN. 19	TENDER DRAWING	JTCY

STATUS 階段

SCALE 比例: A1 1 : 500

DIMENSION UNIT 尺寸單位: METRES

KEY PLAN 索引圖 A1 1 : 30000



PROJECT NO. 項目編號: 60534575

CONTRACT NO. 合約編號: ND/2018/01

SHEET TITLE 圖紙名稱

TREE PLANTING PLAN

SHEET 1 OF 6

SHEET NUMBER 圖紙編號

60534575/C1/1721

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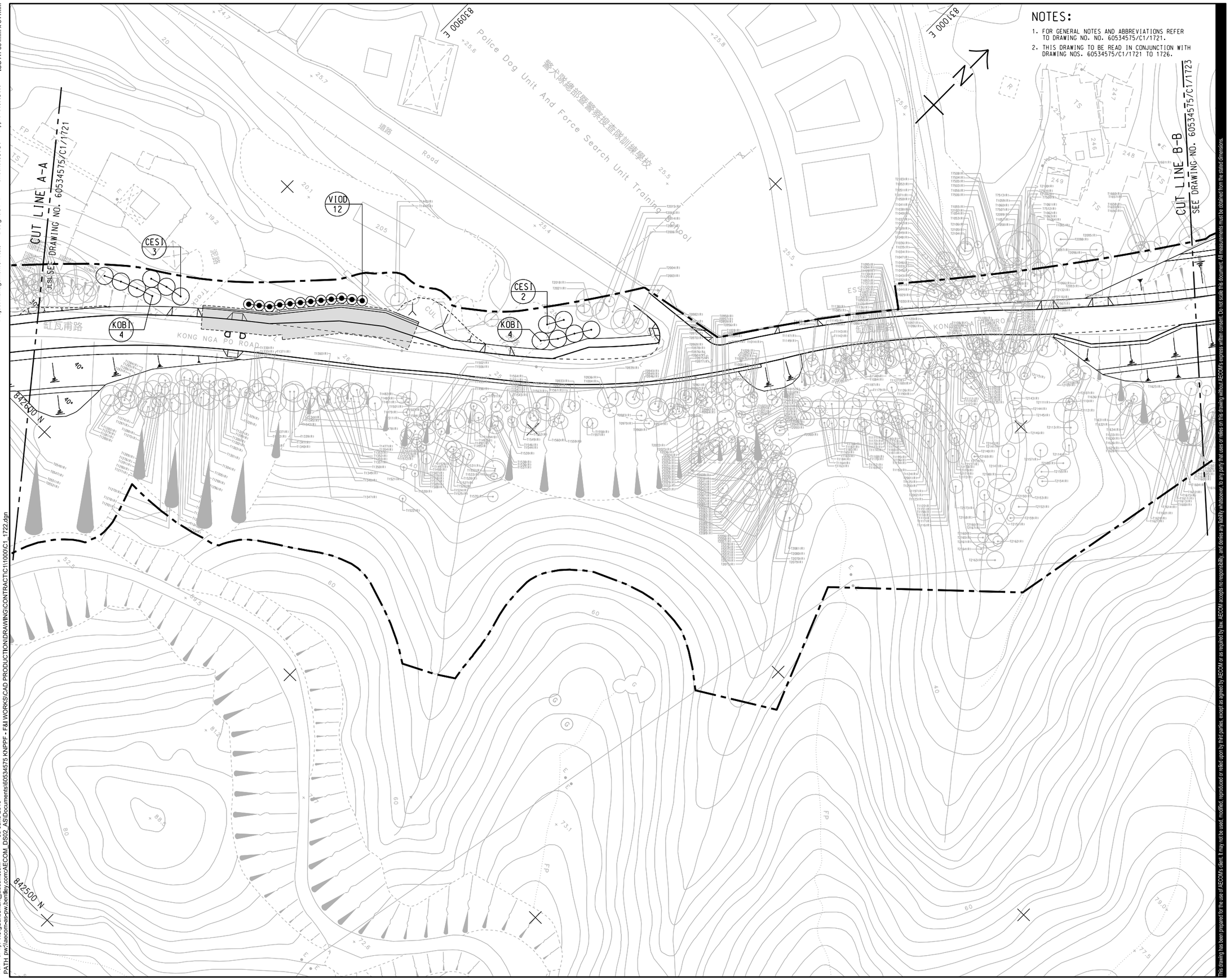

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2. THIS DRAWING TO BE READ IN CONJUNCTION WITH DRAWING NOS. 60534575/C1/1721 TO 1726.

Project Management Initials: Designer: JLSL Checked: JTCY Approved: RCYK ISO A1 594mm x 841mm

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SITE FORMATION AND INFRASTRUCTURE WORKS FOR POLICE FACILITIES IN KONG NGA PO - DESIGN AND CONSTRUCTION

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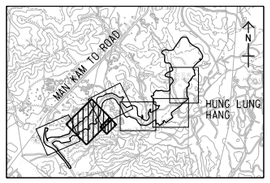
STATUS
階段

SCALE 比例: A1 1 : 500

DIMENSION UNIT 尺寸單位: METRES

KEY PLAN 索引圖 A1 1 : 30000



PROJECT NO. 項目編號: 60534575

CONTRACT NO. 合約編號: ND/2018/01

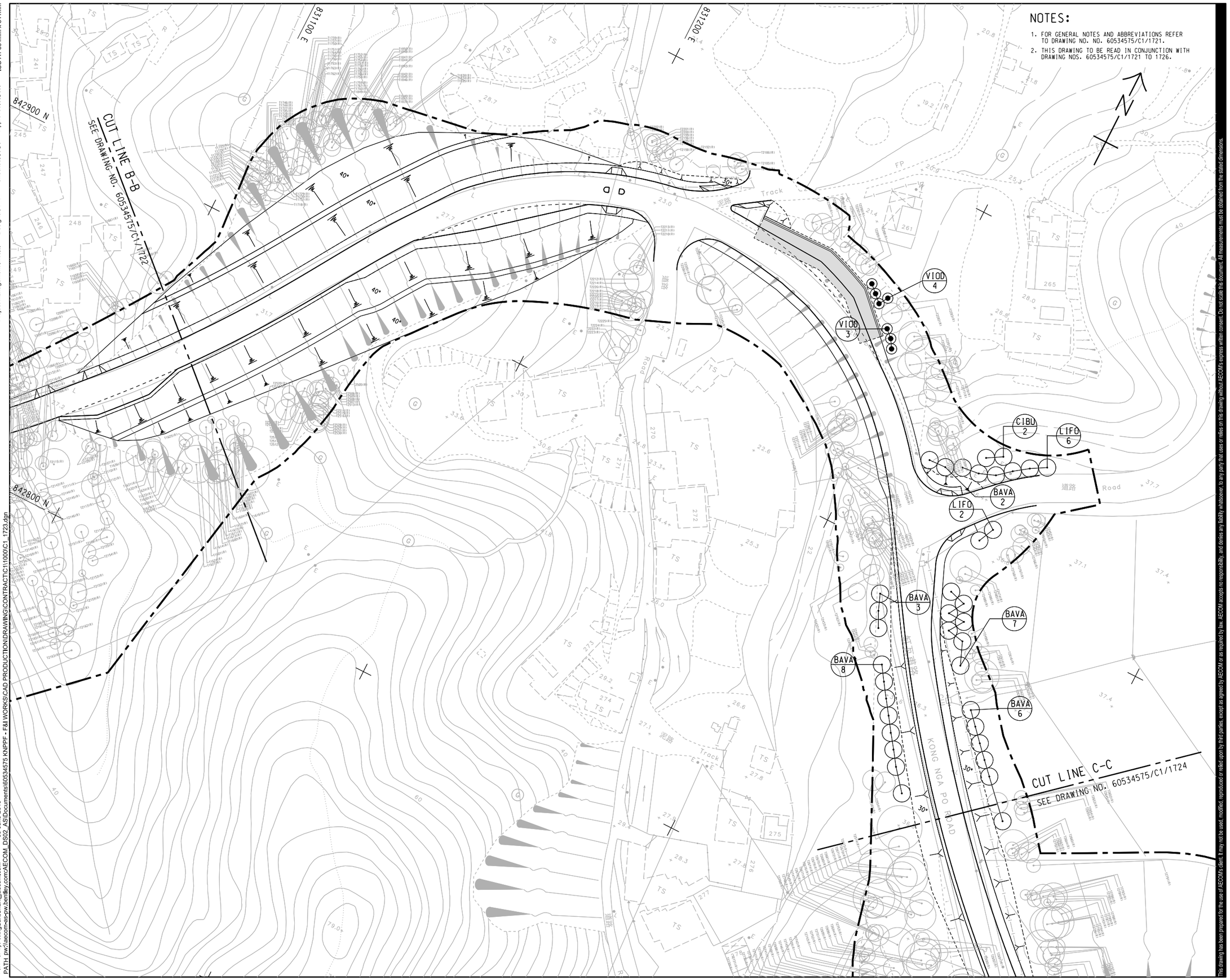
SHEET TITLE
圖紙名稱

TREE PLANTING PLAN

SHEET 2 OF 6

SHEET NUMBER
圖紙編號

60534575/C1/1722



NOTES:

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2. THIS DRAWING TO BE READ IN CONJUNCTION WITH DRAWING NOS. 60534575/C1/1721 TO 1726.

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SITE FORMATION AND INFRASTRUCTURE WORKS FOR POLICE FACILITIES IN KONG NGA PO - DESIGN AND CONSTRUCTION

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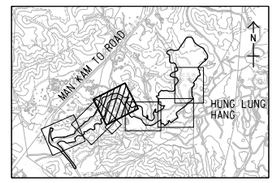
SCALE 比例: A1 1 : 500

DIMENSION UNIT 尺寸單位: METRES

KEY PLAN 索引圖 A1 1 : 30000



PROJECT NO. 項目編號: 60534575

CONTRACT NO. 合約編號: ND/2018/01

SHEET TITLE 圖紙名稱

TREE PLANTING PLAN

SHEET 3 OF 6

SHEET NUMBER 圖紙編號

60534575/C1/1723

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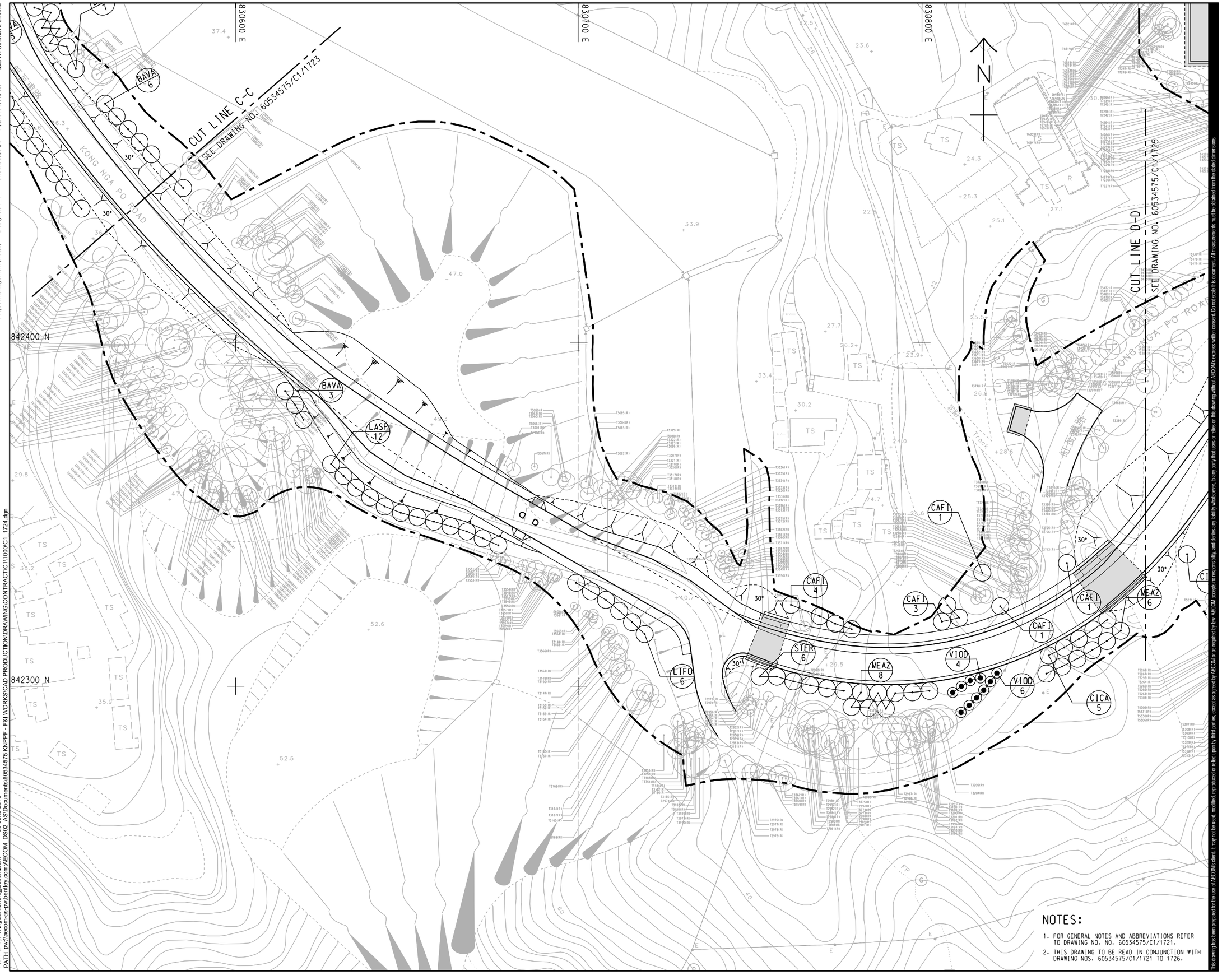
Approved: RCYK

Checked: JTCY

Designer: JLSL

Project Management Initials:



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SITE FORMATION AND INFRASTRUCTURE WORKS FOR POLICE FACILITIES IN KONG NGA PO - DESIGN AND CONSTRUCTION

CONTRACT TITLE

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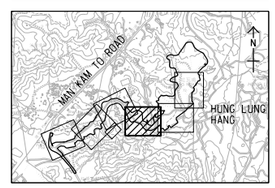
STATUS
階段

SCALE 比例
A1 1 : 500

DIMENSION UNIT 尺寸單位
METRES

KEY PLAN 索引圖 A1 1 : 30000



PROJECT NO. 項目編號
60534575

CONTRACT NO. 合約編號
ND/2018/01

SHEET TITLE 圖紙名稱
TREE PLANTING PLAN

SHEET 4 OF 6

SHEET NUMBER 圖紙編號
60534575/C1/1724

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ISO A1 594mm x 841mm
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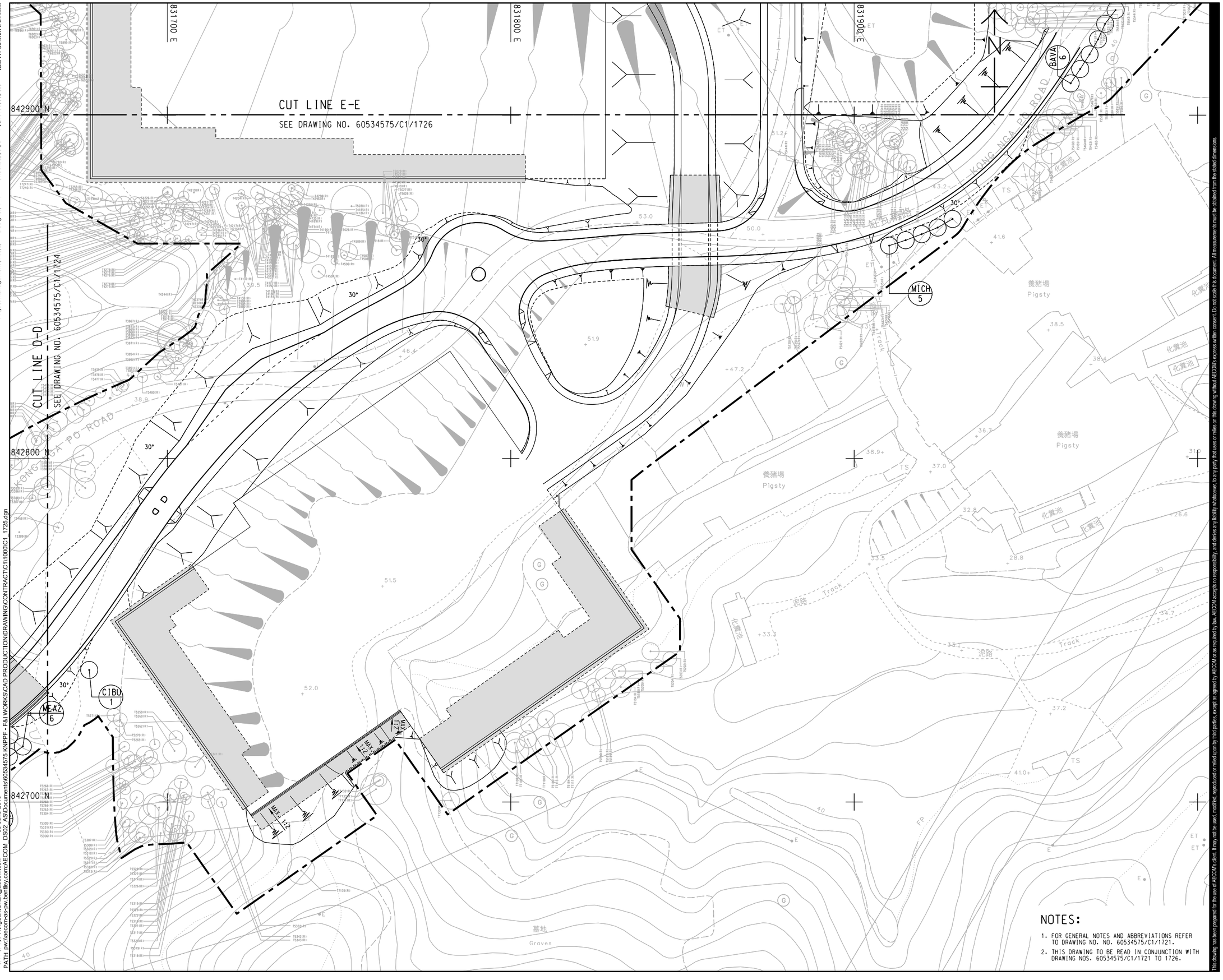
Checked: JTCY
Designer: JLSL
Project Management Initials:



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CONTRACT TITLE

SITE FORMATION AND INFRASTRUCTURE WORKS FOR POLICE FACILITIES IN KONG NGA PO

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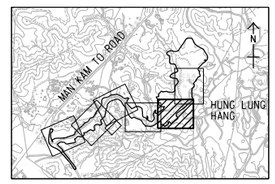
STATUS 階段

SCALE 比例
A1 1 : 500

DIMENSION UNIT 尺寸單位
METRES

KEY PLAN 索引圖 A1 1 : 30000



PROJECT NO. 項目編號
60534575

CONTRACT NO. 合約編號
ND/2018/01

SHEET TITLE 圖紙名稱
TREE PLANTING PLAN

SHEET 5 OF 6

SHEET NUMBER 圖紙編號
60534575/C1/1725

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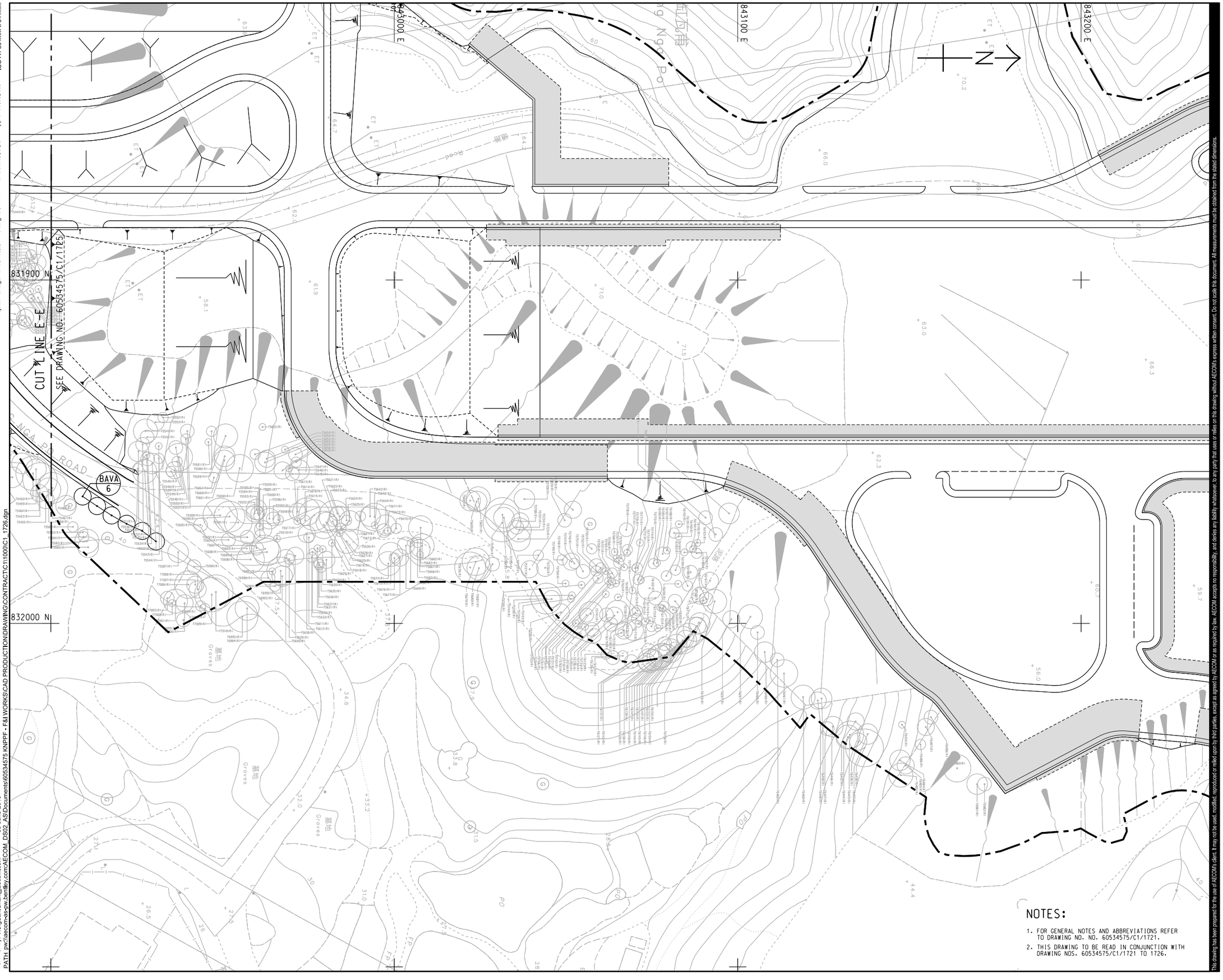

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Project Management Initials: Designer: JLSL Checked: JTCY Approved: RCYK ISO A1 594mm x 841mm

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CONTRACT TITLE

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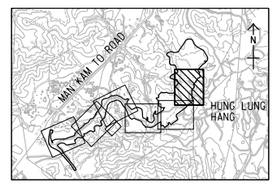
STATUS
階段

SCALE 比例: A1 1 : 500

DIMENSION UNIT 尺寸單位: METRES

KEY PLAN 索引圖 A1 1 : 30000



PROJECT NO. 項目編號: 60534575

CONTRACT NO. 合約編號: ND/2018/01

SHEET TITLE
圖紙名稱

TREE PLANTING PLAN

SHEET 6 OF 6

SHEET NUMBER
圖紙編號

60534575/C1/1726

ISO A1 594mm x 841mm
Approved: RCYK
Checked: JTCY
Designer: JLSL
Project Management Initials:

HEAVY & LIGHT STANDARD TREE PLANTING SCHEDULE

CODE	BOTANICAL NAME	CHINESE NAME	SIZE (mm)	SPACING (mm)	QUANTITY
TREES					
BAVA	*Bauhinia variegata*	宮粉洋蹄甲	HEAVY STANDARD	5000	35
CAFI	*Cassia fistula*	豬腸豆	HEAVY STANDARD	5000	10
CESI	*Celtis sinensis*	朴樹	HEAVY STANDARD	5000	5
CIBU	*Cinnamomum burmannii*	陰香	HEAVY STANDARD	5000	3
CICA	*Cinnamomum camphora*	樟	HEAVY STANDARD	5000	6
CRAT	*Crateva unilocularis*	樹頭菜	HEAVY STANDARD	5000	3
KOBI	*Koelreuteria bipinnata*	複羽葉欒樹	HEAVY STANDARD	5000	8
LASP	*Lagerstroemia speciosa*	大葉紫薇	HEAVY STANDARD	5000	37
LIFO	*Liquidambar formosana*	楓香	HEAVY STANDARD	5000	14
MEAZ	*Melia azedarach*	苦楝	HEAVY STANDARD	5000	14
MICH	*Michelia x alba*	白蘭	HEAVY STANDARD	5000	5
STER	*Sterculia lanceolata*	假蘋婆	HEAVY STANDARD	5000	6
VIOD	*Viburnum odoratissimum*	珊瑚樹	LIGHT STANDARD	3000	29

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STATUS 階段

SCALE 比例

DIMENSION UNIT 尺寸單位

KEY PLAN 索引圖

PROJECT NO. 項目編號: 60534575

CONTRACT NO. 合約編號: ND/2018/01

SHEET TITLE 圖紙名稱

HEAVY & LIGHT STANDARD TREE PLANTING SCHEDULE

SHEET NUMBER 圖紙編號

60534575/C1/1730

Plot File by: WingSan.Chan@aecom.com 05-June-2019
PATH: pw://aecom-eis-pw.bentley.com:AECOM_DS02_ASDocuments\60534575.KNPPF - F&I WORKS\CAD PRODUCTION\DRAWING\CONTRACT\C1\11000\C1_1730.dgn

Appendix IV

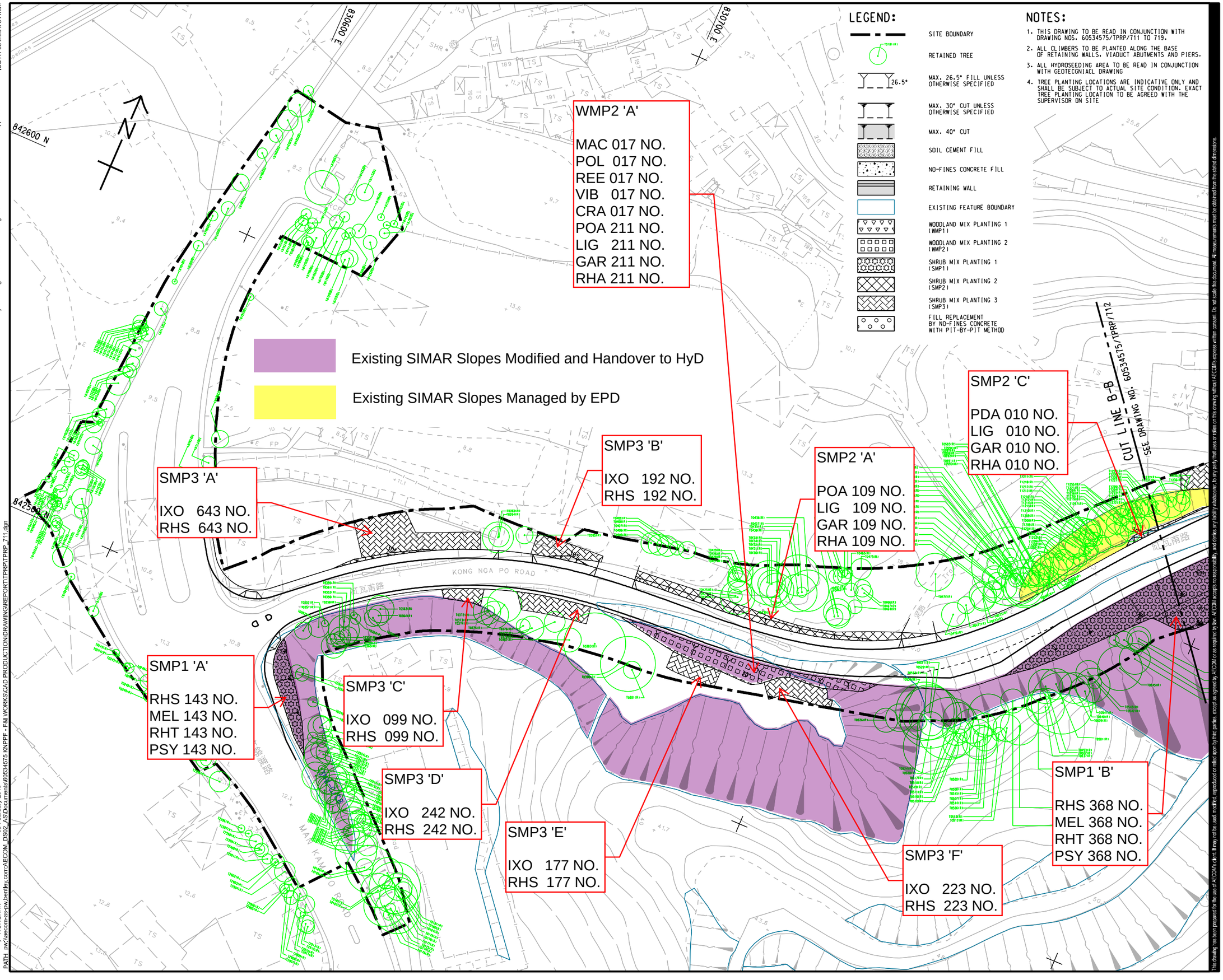
Shrubs Planting Plan (with Existing and Proposed Slope Boundary Overlaid)

ISO A1 594mm x 841mm

Project Management Initials:
Designer:
Checked:
Approved:

Plot File by: WONGKKK
PATH: pw://aecom-asiapw.bentley.com:AECOM_DS02_ASDocuments\60534575 KNPPF - F&I WORKS\CAD PRODUCTION\DRAWING\REPORT\TPRP\TPRP_711.dgn

08-February-2019



LEGEND:

- SITE BOUNDARY
- RETAINED TREE
- MAX. 26.5° FILL UNLESS OTHERWISE SPECIFIED
- MAX. 30° CUT UNLESS OTHERWISE SPECIFIED
- MAX. 40° CUT
- SOIL CEMENT FILL
- NO-FINES CONCRETE FILL
- RETAINING WALL
- EXISTING FEATURE BOUNDARY
- WOODLAND MIX PLANTING 1 (WMP1)
- WOODLAND MIX PLANTING 2 (WMP2)
- SHRUB MIX PLANTING 1 (SMP1)
- SHRUB MIX PLANTING 2 (SMP2)
- SHRUB MIX PLANTING 3 (SMP3)
- FILL REPLACEMENT BY NO-FINES CONCRETE WITH PIT-BY-PIT METHOD

NOTES:

1. THIS DRAWING TO BE READ IN CONJUNCTION WITH DRAWING NOS. 60534575/TPRP/711 TO 719.
2. ALL CLIMBERS TO BE PLANTED ALONG THE BASE OF RETAINING WALLS, VIADUCT ABUTMENTS AND PIERS.
3. ALL HYDROSEEDING AREA TO BE READ IN CONJUNCTION WITH GEOTECGNIACL DRAWING
4. TREE PLANTING LOCATIONS ARE INDICATIVE ONLY AND SHALL BE SUBJECT TO ACTUAL SITE CONDITION. EXACT TREE PLANTING LOCATION TO BE AGREED WITH THE SUPERVISOR ON SITE

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SITE FORMATION AND INFRASTRUCTURE WORKS FOR POLICE FACILITIES IN KONG NGA PO - DESIGN AND CONSTRUCTION

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Civil Engineering and Development Department

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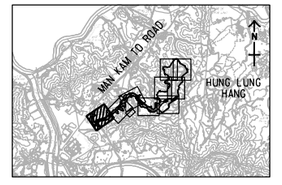
I/R 修訂	DATE 計劃	DESCRIPTION 內容摘要	CHK. 核查

STATUS
階段

SCALE 比例
A1 1 : 500

DIMENSION UNIT 尺寸單位
METRES

KEY PLAN 索引圖 A1 1 : 50000



PROJECT NO. 項目編號
60534575

CONTRACT NO. 合約編號
CE 60/2016 (CE)

SHEET TITLE 圖紙名稱
SHRUBS PLANTING PLAN

SHEET 1 OF 9

SHEET NUMBER 圖紙編號
60534575/TPRP/711

ISO A1 594mm x 841mm

Approved:

Checked:

Designer:

Project Management Initials:

SMP2 'H'

POA 016 NO.
LIG 016 NO.
GAR 016 NO.
RHA 016 NO.

RW 'A'

PAR 218 NO.

SMP3 'H'

IXO 493 NO.
RHS 493 NO.

SMP3 'G'

IXO 515 NO.
RHS 515 NO.

WMP2 'B'

MAC 009 NO.
POL 009 NO.
REE 009 NO.
VIB 009 NO.
CRA 009 NO.
POA 112 NO.
LIG 112 NO.
GAR 112 NO.
RHA 112 NO.

SMP3 'I'

IXO 379 NO.
RHS 379 NO.

WMP2 'C'

MAC 007 NO.
POL 007 NO.
REE 007 NO.
VIB 007 NO.
CRA 007 NO.
POA 083 NO.
LIG 083 NO.
GAR 083 NO.
RHA 083 NO.

SMP2 'B'

POA 212 NO.
LIG 212 NO.
GAR 212 NO.
RHA 212 NO.

SMP2 'C'

POA 387 NO.
LIG 387 NO.
GAR 387 NO.
RHA 387 NO.

SMP1 'C'

RHS 540 NO.
MEL 540 NO.
RHT 540 NO.
PSY 540 NO.

CUT LINE B-B
SEE DRAWING NO. 60534575/TPRP/711

CUT LINE C-C
SEE DRAWING NO. 60534575/TPRP/713

NOTES:

1. FOR NOTES AND LEGEND REFER TO DRAWING NO. NO. 60534575/TPRP/711.
2. THIS DRAWING TO BE READ IN CONJUNCTION WITH DRAWING NOS. 60534575/TPRP/711 TO 719.

KONG NGA PO ROAD

Existing SIMAR Slopes Modified and Handover to HyD

Existing SIMAR Slopes Managed by EPD

Existing SIMAR Slopes Managed by LandsD

Plot File by: KenKK.Wong@aecom.com
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30-January-2019

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階段

SCALE 比例
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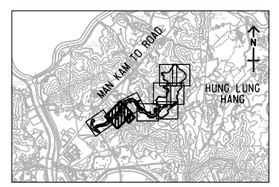
DIMENSION UNIT 尺寸單位
METRES

KEY PLAN 索引圖 A1 1 : 50000



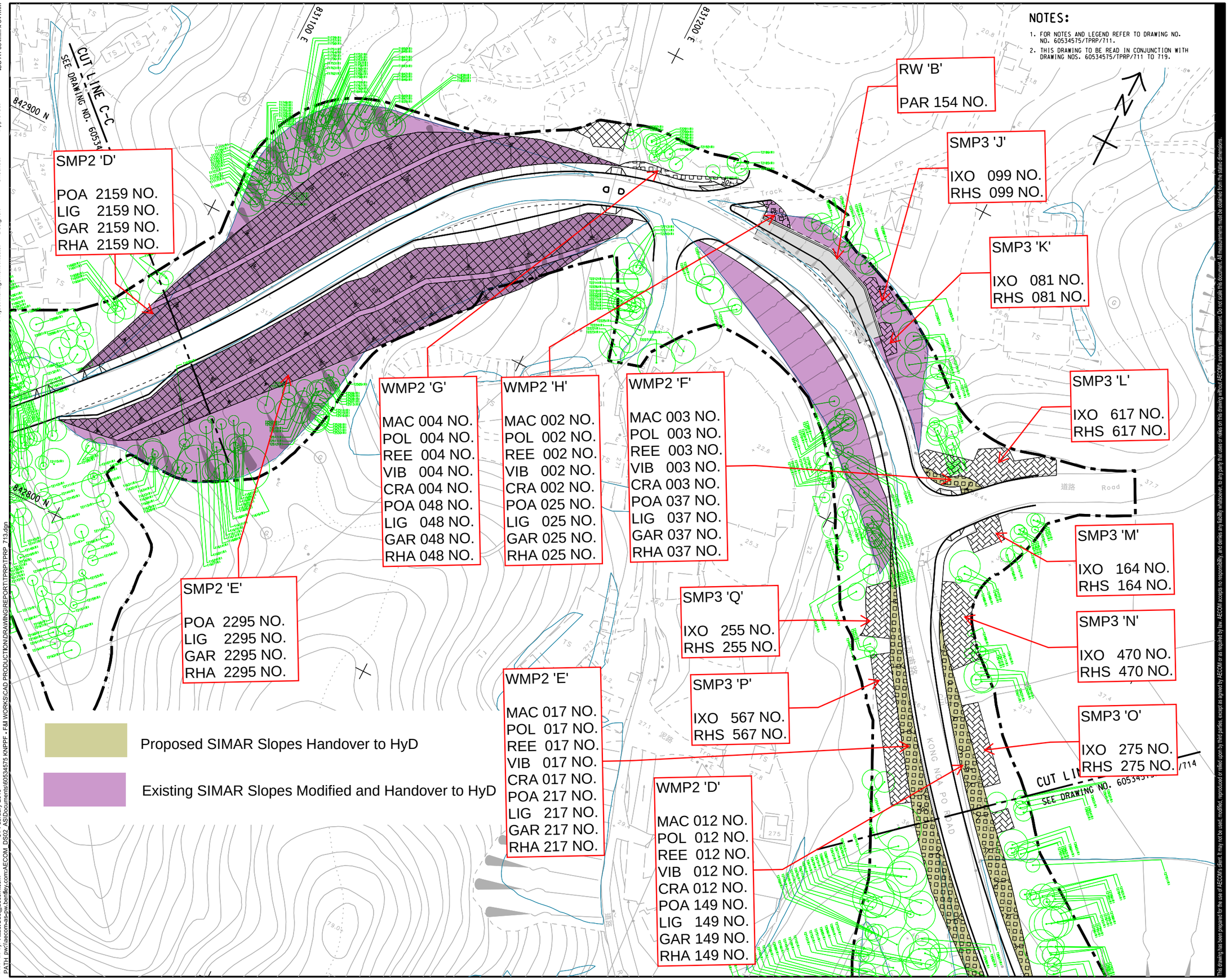
PROJECT NO. 項目編號
60534575

CONTRACT NO. 合約編號
CE 60/2016 (CE)

SHEET TITLE 圖紙名稱
SHRUBS PLANTING PLAN

SHEET 2 OF 9

SHEET NUMBER 圖紙編號
60534575/TPRP/712



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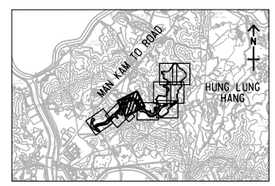
階段

SCALE 比例: A1 1 : 500
DIMENSION UNIT 尺寸單位: METRES

KEY PLAN 索引圖 A1 1 : 50000



PROJECT NO. 項目編號: 60534575
CONTRACT NO. 合約編號: CE 60/2016 (CE)

SHEET TITLE
圖紙名稱

SHRUBS PLANTING PLAN

SHEET 3 OF 9

SHEET NUMBER
圖紙編號

60534575/TPRP/713

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Project Management Initials:
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01-February-2019

ISO A1 594mm x 841mm

Approved:

Checked:

Designer:

Project Management Initials:

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30-January-2019

SMP3 'Z'

IXO 072 NO.
RHS 072 NO.

WMP2 'I'

MAC 015 NO.
POL 015 NO.
REE 015 NO.
VIB 015 NO.
CRA 015 NO.
POA 183 NO.
LIG 183 NO.
GAR 183 NO.
RHA 183 NO.

WMP1 'B'

BRI 017 NO.
PHY 017 NO.
FIC 017 NO.
POL 017 NO.
RHU 017 NO.
RHS 214 NO.
MEL 214 NO.
RHT 214 NO.
PSY 214 NO.

WMP2 'N'

MAC 002 NO.
POL 002 NO.
REE 002 NO.
VIB 002 NO.
CRA 002 NO.
POA 023 NO.
LIG 023 NO.
GAR 023 NO.
RHA 023 NO.

SMP1 'E'

RHS 235 NO.
MEL 235 NO.
RHT 235 NO.
PSY 235 NO.

WMP1 'A'

BRI 027 NO.
PHY 027 NO.
FIC 027 NO.
POL 027 NO.
RHU 027 NO.
RHS 339 NO.
MEL 339 NO.
RHT 339 NO.
PSY 339 NO.

WMP2 'L'

MAC 019 NO.
POL 019 NO.
REE 019 NO.
VIB 019 NO.
CRA 019 NO.
POA 237 NO.
LIG 237 NO.
GAR 237 NO.
RHA 237 NO.

WMP2 'J'

MAC 018 NO.
POL 018 NO.
REE 018 NO.
VIB 018 NO.
CRA 018 NO.
POA 222 NO.
LIG 222 NO.
GAR 222 NO.
RHA 222 NO.

WMP1 'C'

BRI 018 NO.
PHY 018 NO.
FIC 018 NO.
POL 018 NO.
RHU 018 NO.
RHS 222 NO.
MEL 222 NO.
RHT 222 NO.
PSY 222 NO.

SMP3 'Y'

IXO 1231 NO.
RHS 1231 NO.

SMP3 'X'

IXO 415 NO.
RHS 415 NO.

SMP3 'T'

IXO 553 NO.
RHS 553 NO.

SMP3 'U'

IXO 301 NO.
RHS 301 NO.

RW 'C'

PAR 021 NO.

RW 'D'

PAR 024 NO.

RW 'E'

PAR 038 NO.

RW 'F'

PAR 045 NO.

RW 'H'

PAR 040 NO.

SMP3 'V'

IXO 747 NO.
RHS 747 NO.

WMP2 'K'

MAC 006 NO.
POL 006 NO.
REE 006 NO.
VIB 006 NO.
CRA 006 NO.
POA 071 NO.
LIG 071 NO.
GAR 071 NO.
RHA 071 NO.

WMP2 'M'

MAC 002 NO.
POL 002 NO.
REE 002 NO.
VIB 002 NO.
CRA 002 NO.
POA 019 NO.
LIG 019 NO.
GAR 019 NO.
RHA 019 NO.

SMP3 'S'

IXO 073 NO.
RHS 073 NO.

RW 'G'

PAR 040 NO.

SMP3 'W'

IXO 1209 NO.
RHS 1209 NO.

Proposed SIMAR Slopes Handover to HyD

Existing SIMAR Slopes Modified and Handover to HyD

Existing SIMAR Slopes Managed by LandsD

NOTES:

1. FOR NOTES AND LEGEND REFER TO DRAWING NO. NO. 60534575/TPRP/711.
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SITE FORMATION AND INFRASTRUCTURE WORKS FOR POLICE FACILITIES IN KONG NGA PO - DESIGN AND CONSTRUCTION

CLIENT
業主

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Civil Engineering and Development Department

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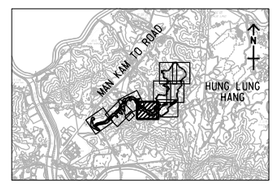
STATUS
階段

SCALE 比例: A1 1 : 500
DIMENSION UNIT 尺寸單位: METRES

KEY PLAN 索引圖 A1 1 : 50000



PROJECT NO. 項目編號: 60534575
CONTRACT NO. 合約編號: CE 60/2016 (CE)

SHEET TITLE 圖紙名稱

SHRUBS PLANTING PLAN

SHEET 4 OF 9

SHEET NUMBER 圖紙編號

60534575/TPRP/714

ISO A1 594mm x 841mm

Approved:

Checked:

Designer:

Project Management Initials:

SMP1 'F'

RHS 388 NO.
MEL 388 NO.
RHT 388 NO.
PSY 388 NO.

WMP2 'P'

MAC 074 NO.
POL 074 NO.
REE 074 NO.
VIB 074 NO.
CRA 074 NO.
POA 928 NO.
LIG 928 NO.
GAR 928 NO.
RHA 928 NO.

WMP2 '0'

MAC 004 NO.
POL 004 NO.
REE 004 NO.
VIB 004 NO.
CRA 004 NO.
POA 051 NO.
LIG 051 NO.
GAR 051 NO.
RHA 051 NO.

SMP3 'AB'

IXO 332 NO.
RHS 332 NO.

SMP3 'AC'

IXO 396 NO.
RHS 396 NO.

WMP1 'D'

BRI 008 NO.
PHY 008 NO.
FIC 008 NO.
POL 008 NO.
RHU 008 NO.
RHS 105 NO.
MEL 105 NO.
RHT 105 NO.
PSY 105 NO.

CUT LINE F-F
SEE DRAWING NOS. 60534575/TPRP/716 AND 717

831700 E
831800 E
831900 E
842900 N
842800 N
842700 N

KONG NGA PO ROAD

Existing SIMAR Slopes Modified and Handover to HyD

Existing SIMAR Slopes Managed by LandsD

Proposed SIMAR Slopes Handover to HKPF

Existing SIMAR Slopes Modified and Handover to HKPF

NOTES:

1. FOR NOTES AND LEGEND REFER TO DRAWING NO. NO. 60534575/TPRP/711.
2. THIS DRAWING TO BE READ IN CONJUNCTION WITH DRAWING NOS. 60534575/TPRP/711 TO 719.

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02-February-2019

AECOM

PROJECT
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SITE FORMATION AND INFRASTRUCTURE WORKS FOR POLICE FACILITIES IN KONG NGA PO - DESIGN AND CONSTRUCTION

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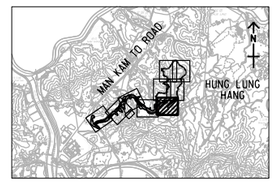
階段

SCALE 比例: A1 1 : 500
DIMENSION UNIT 尺寸單位: METRES

KEY PLAN 索引圖 A1 1 : 50000



PROJECT NO. 項目編號: 60534575
CONTRACT NO. 合約編號: CE 60/2016 (CE)

SHEET TITLE 圖紙名稱

SHRUBS PLANTING PLAN

SHEET 5 OF 9

SHEET NUMBER 圖紙編號

60534575/TPRP/715

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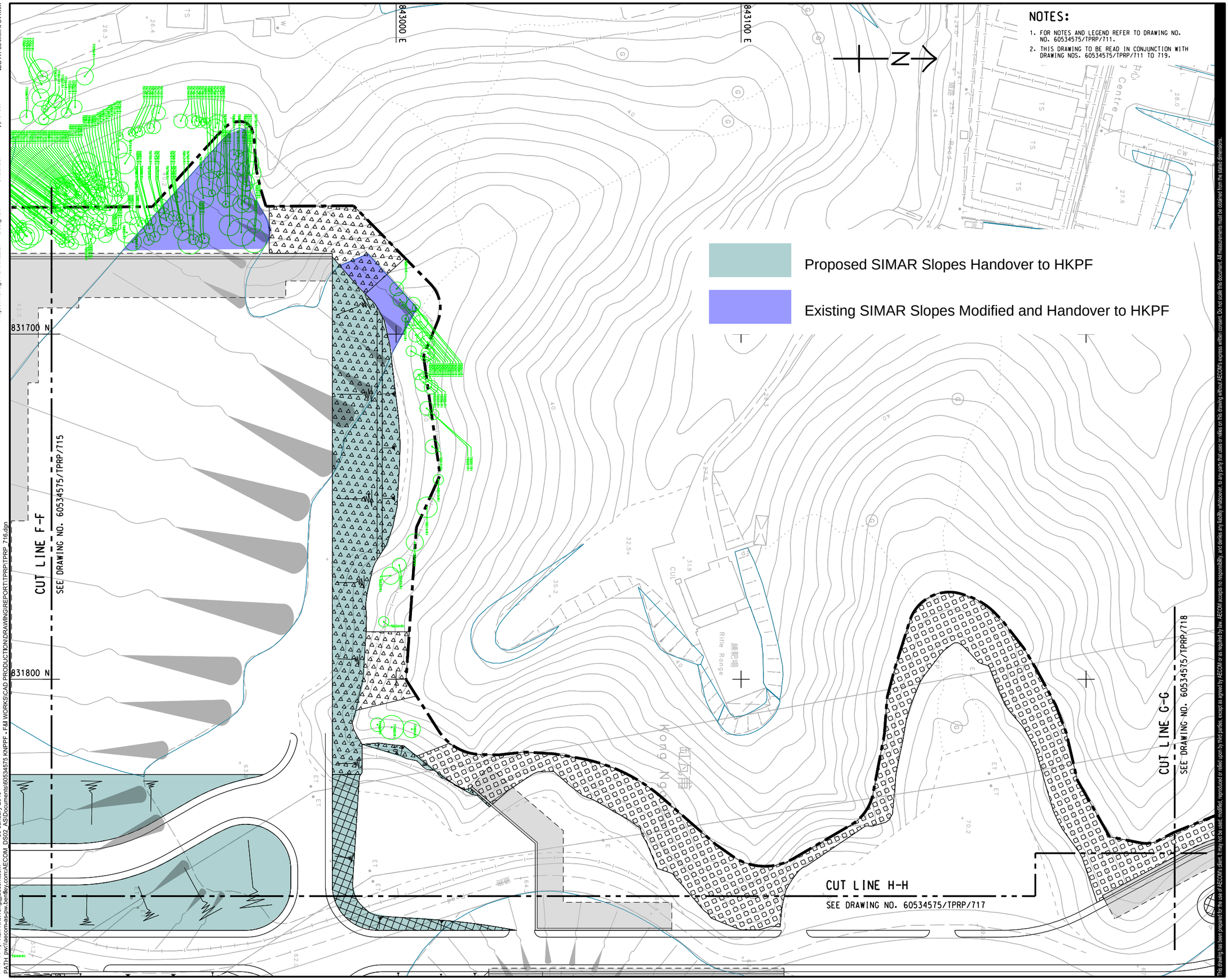
Approved:
Checked:
Designer:
Project Management Initials:



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30-January-2019

AECOM

PROJECT 項目

SITE FORMATION AND INFRASTRUCTURE WORKS FOR POLICE FACILITIES IN KONG NGA PO - DESIGN AND CONSTRUCTION

CLIENT 業主

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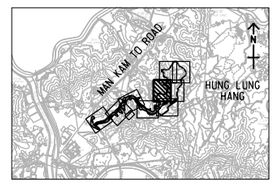
STATUS 階段

SCALE 比例 A1 1 : 500

DIMENSION UNIT 尺寸單位 METRES

KEY PLAN 索引圖 A1 1 : 50000



PROJECT NO. 項目編號 60534575

CONTRACT NO. 合約編號 CE 60/2016 (CE)

SHEET TITLE 圖紙名稱

SHRUBS PLANTING PLAN

SHEET 6 OF 9

SHEET NUMBER 圖紙編號

60534575/TPRP/716

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ISO A1 594mm x 841mm

Approved:

Checked:

Designer:

Project Management Initials:

CUT LINE H-H
SEE DRAWING NO. 60534575/TPRP/716

CUT LINE G-G
SEE DRAWING NOS. 60534575/TPRP/718 AND 719

CUT LINE F-F
SEE DRAWING NO. 60534575/TPRP/715

833000 E

843100 E

843200 E

831900 N

832000 N

KONG NGA PO ROAD

Proposed SIMAR Slopes Handover to HKPF

Existing SIMAR Slopes Modified and Handover to HKPF

Temporary Slopes

Existing SIMAR Slopes Modified and Handover to HyD

NOTES:

1. FOR NOTES AND LEGEND REFER TO DRAWING NO. NO. 60534575/TPRP/711.
2. THIS DRAWING TO BE READ IN CONJUNCTION WITH DRAWING NOS. 60534575/TPRP/711 TO 719.

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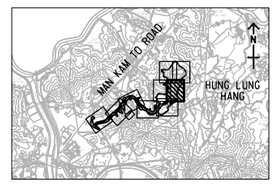
STATUS 階段

SCALE 比例
A1 1 : 500

DIMENSION UNIT 尺寸單位
METRES

KEY PLAN 索引圖 A1 1 : 50000



PROJECT NO. 項目編號
60534575

CONTRACT NO. 合約編號
CE 60/2016 (CE)

SHEET TITLE 圖紙名稱
SHRUBS PLANTING PLAN

SHEET 7 OF 9

SHEET NUMBER 圖紙編號
60534575/TPRP/717

ISO A1 594mm x 841mm

Approved:

Checked:

Designer:

Project Management Initials:

Proposed SIMAR Slopes Handover to HKPF

Existing SIMAR Slopes Modified and Handover to HKPF

843200 E

843300 E

843400 E

831800 N

831900 N

CUT LINE G-G
SEE DRAWING NOS. 60534575/TPRP/716 AND 717

CUT LINE J-J
SEE DRAWING NO. 60534575/TPRP/719

NOTES:

1. FOR NOTES AND LEGEND REFER TO DRAWING NO. NO. 60534575/TPRP/711.
2. THIS DRAWING TO BE READ IN CONJUNCTION WITH DRAWING NOS. 60534575/TPRP/711 TO 719.

N

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30-January-2019

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PROJECT
項目

SITE FORMATION AND INFRASTRUCTURE WORKS FOR POLICE FACILITIES IN KONG NGA PO - DESIGN AND CONSTRUCTION

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Civil Engineering and Development Department

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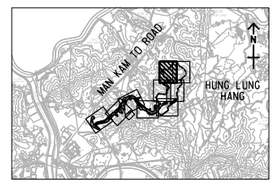
I/R 修訂	DATE 日期	DESCRIPTION 內容摘要	CHK. 複核

STATUS
階段

SCALE 比例
A1 1 : 500

DIMENSION UNIT 尺寸單位
METRES

KEY PLAN 索引圖 A1 1 : 50000



PROJECT NO. 項目編號
60534575

CONTRACT NO. 合約編號
CE 60/2016 (CE)

SHEET TITLE 圖紙名稱
SHRUBS PLANTING PLAN

SHEET 8 OF 9

SHEET NUMBER 圖紙編號
60534575/TPRP/718

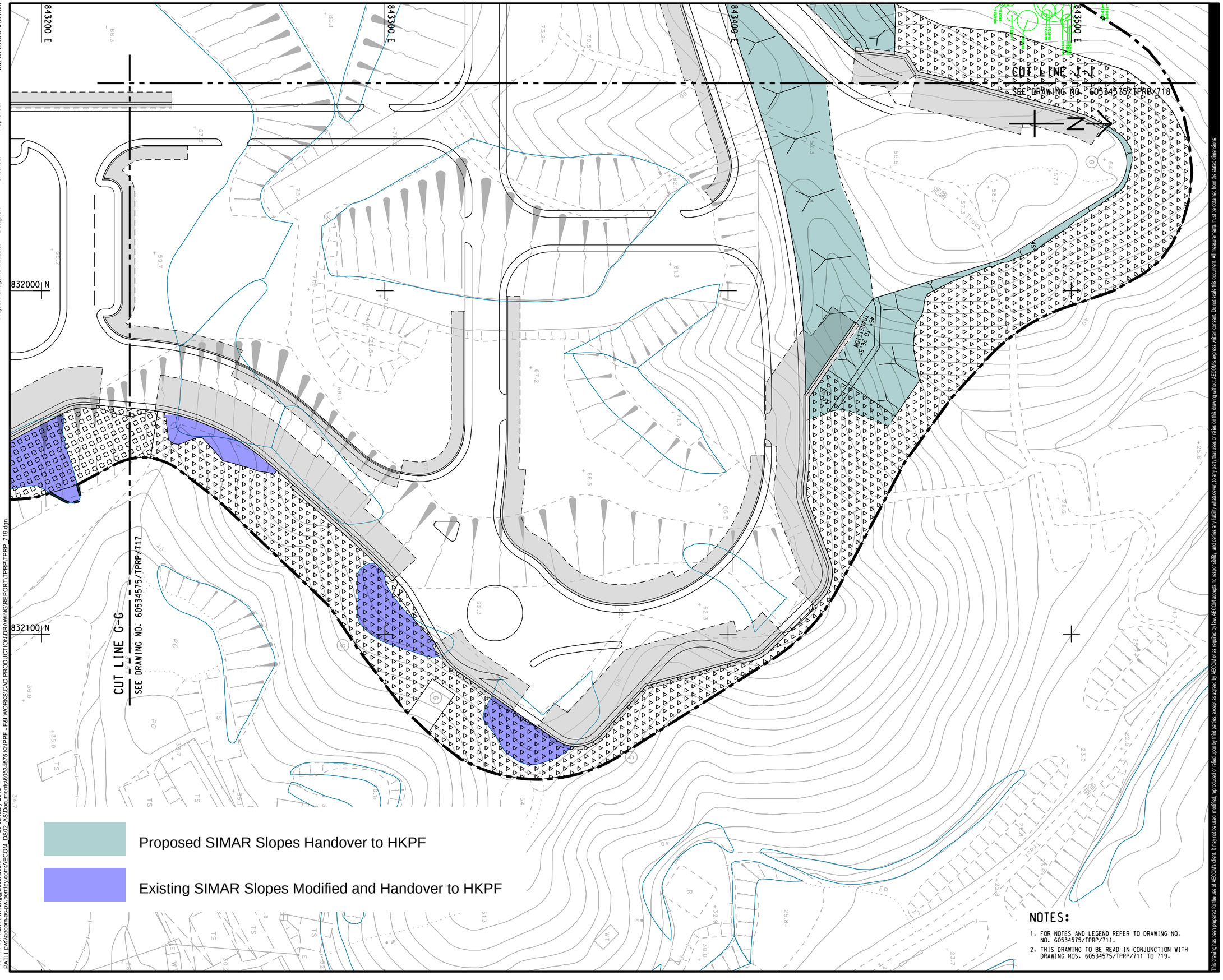
ISO A1 594mm x 841mm

Approved:

Checked:

Designer:

Project Management Initials:



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AECOM

PROJECT 項目

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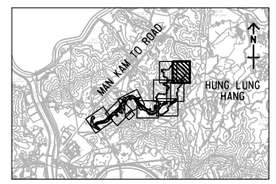
I/R 修訂	DATE 日期	DESCRIPTION 內容摘要	CHK. 複核

STATUS 階段

SCALE 比例 A1 1 : 500

DIMENSION UNIT 尺寸單位 METRES

KEY PLAN 索引圖 A1 1 : 50000



PROJECT NO. 項目編號 60534575

CONTRACT NO. 合約編號 CE 60/2016 (CE)

SHEET TITLE 圖紙名稱

SHRUBS PLANTING PLAN

SHEET 9 OF 9

SHEET NUMBER 圖紙編號

60534575/TPRP/719

Combined Shrub Planting Schedule for CEDD and ArchSD Contract

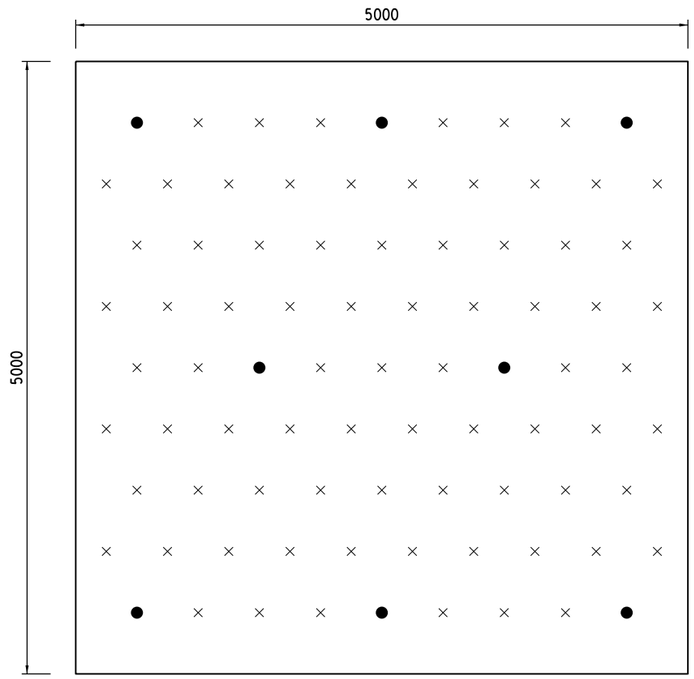
Woodland Mix Planting								
WMP1								
Key	Code	Botanical Name	Chinese Name	Size (mm) Height(H) x Spread (S)	Spacing (mm)	% mix	Quantity	Remark
●	BRI	*Bridelia tomentosa**	土密樹	whip tree	2000	20	914	Plant each species in groups of 10-20 in ramdom. Plant all species in staggered pattern
●	PHY	*Phyllanthus emblica **	餘甘子	whip tree	2000	20	914	
●	FIC	*Ficus hispida**	對葉榕	whip tree	2000	20	914	
●	POL	*Polyspora axillaris**	大頭茶	whip tree	2000	20	914	
●	RHU	*Rhus succedanea**	野漆	whip tree	2000	20	914	
x	RHS	*Rhododendron simsii**	紅杜鵑	400(H) x 400(S)	500	25	11430	
x	MEL	*Melastoma sanguineum*	毛菝	400(H) x 400(S)	500	25	11430	
x	RHT	*Rhodomyrtus tomentosa**	桃金娘/崗棯	400(H) x 400(S)	500	25	11430	
x	PSY	*Psychotria asiatica*	九節	400(H) x 400(S)	500	25	11430	
WMP2								
●	MAC	*Machilus breviflora*	短序潤楠	whip tree	2000	20	719	
●	POL	*Polyspora axillaris**	大頭茶	whip tree	2000	20	719	
●	REE	*Reevesia thyrsoidea**	梭羅樹	whip tree	2000	20	719	
●	VIB	*Viburnum odoratissimum**	珊瑚樹	whip tree	2000	20	719	
●	CRA	*Cratoxylum cochinchinense**	黃牛木	whip tree	2000	20	719	
x	POA	*Polyspora axillaris**	大頭茶	400(H) x 400(S)	500	25	8992	
x	LIG	*Ligustrum sinense*	山指甲	400(H) x 400(S)	500	25	8992	
x	GAR	*Gardenia jasminoides**	梔子	400(H) x 400(S)	500	25	8992	
x	RHA	*Rhaphiolepis indica**	石斑木	400(H) x 400(S)	500	25	8992	

* native species

Shrubs Mix Planting							
SMP1							
Botanical Name	Code	Chinese Name	Size (mm) Height(H) x Spread (S)	Spacing (mm)	% mix	Quantity	Remark
*Rhododendron simsii**	RHS	紅杜鵑	400(H) x 400(S)	500	25	1949	Plant each species in groups of 10-20 in ramdom. Plant all species in staggered pattern
Melastoma sanguineum	MEL	毛菝	400(H) x 400(S)	500	25	1949	
*Rhodomyrtus tomentosa**	RHT	桃金娘/崗棯	400(H) x 400(S)	500	25	1949	
Psychotria asiatica	PSY	九節	400(H) x 400(S)	500	25	1949	
SMP2							
*Polyspora axillaris**	POA	大頭茶	400(H) x 400(S)	500	25	14354	Plant each species in groups of 10-20 in ramdom. Plant all species in staggered pattern
Ligustrum sinense	LIG	山指甲	400(H) x 400(S)	500	25	14354	
*Gardenia jasminoides**	GAR	梔子	400(H) x 400(S)	500	25	14354	
*Rhaphiolepis indica**	RHA	石斑木	400(H) x 400(S)	500	25	14354	
SMP3							
*Ixora chinensis**	IXO	龍船花	450(H) x 300(S)	500	50	16639	Plant each species in groups of 10-20 in ramdom. Plant all species in staggered pattern
*Rhododendron simsii**	RHS	紅杜鵑	400(H) x 400(S)	500	50	16639	

Climbers							
Parthenocissus dalzielii	PAR	爬牆虎	Min. 3 shoots per plant, 1000mm long	300	100	53	Plant all species along the abutment and wall

* native species



INDICATIVE LAYOUT OF PLANTING MATRIX FOR WOODLAND MIX PLANTING FOR KEY TO CODE, SEE PLANTING SCHEDULE
SCALE 1 : 50

ISO A1 594mm x 841mm
Approved:
Checked:
Designer:
Project Management Initials:

Plot File by: Dan.He@aecom.com 28-December-2018
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PROJECT
項目
SITE FORMATION AND INFRASTRUCTURE WORKS FOR POLICE FACILITIES IN KONG NGA PO - DESIGN AND CONSTRUCTION

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I/R 修訂	DATE 日期	DESCRIPTION 內容摘要	CHK. 複核

STATUS
階段

SCALE 比例: A1 1 : 200
DIMENSION UNIT 尺寸單位: METRES

KEY PLAN
索引圖

PROJECT NO. 項目編號: 60534575
CONTRACT NO. 合約編號: CE 60/2016 (CE)

SHEET TITLE
圖紙名稱
SHRUBS PLANTING PLAN

SHEET NUMBER
圖紙編號
60534575/TPRP/720

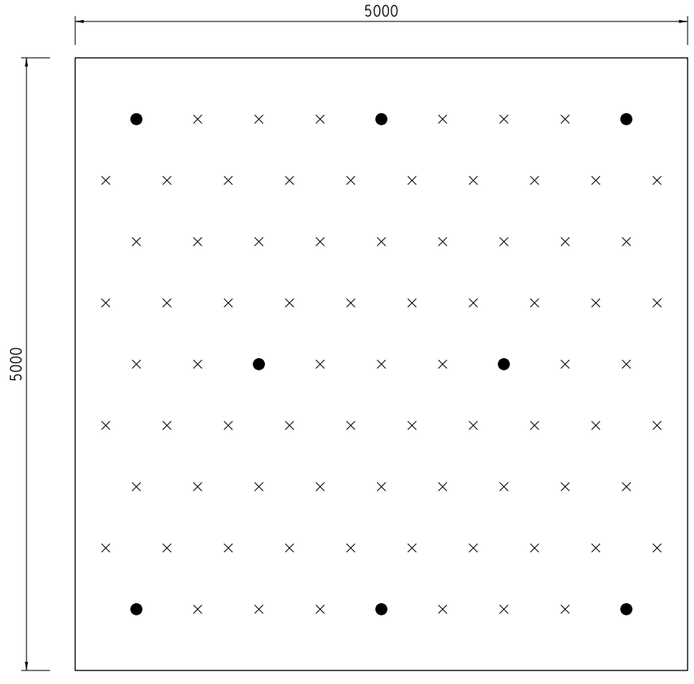
Shrub Planting Schedule for CEDD Contract Only

WOODLAND MIX PLANTING

WMP1							
KEY	CODE	BOTANICAL NAME	CHINESE NAME	SIZE (mm) HEIGHT(H) x SPREAD (S)	SPACING (mm)	QUATITY(NO)	REMARK
•	BRI	*Bridelia tomentosa*	土密樹	WHIP TREE	2000	70	PLANT EACH SPECIES IN GROUPS OF 10-20 IN RAMDOM. PLANT ALL SPECIES IN STAGGERED PATTERN
•	PHY	*Phyllanthus emblica*	餘甘子	WHIP TREE	2000	70	
•	FIC	*Ficus hispida*	對葉榕	WHIP TREE	2000	70	
•	POL	*Polyspora axillaris*	大頭茶	WHIP TREE	2000	70	
•	RHU	*Rhus succedanea*	野漆	WHIP TREE	2000	70	
x	RHS	*Rhododendron simsii*	紅杜鵑	400(H) x 400(S)	500	880	
x	MEL	*Melastoma sanguineum*	毛菝	400(H) x 400(S)	500	880	
x	RHT	*Rhodomyrtus tomentosa*	桃金娘/崗稔	400(H) x 400(S)	500	880	
x	PSY	*Psychotria asiatica*	九節	400(H) x 400(S)	500	880	
WMP2							
•	MAC	*Machilus breviflora*	短序潤楠	WHIP TREE	2000	209	
•	POL	*Polyspora axillaris*	大頭茶	WHIP TREE	2000	209	
•	REE	*Reevesia thyrsoidea*	梭羅樹	WHIP TREE	2000	209	
•	VIB	*Viburnum odoratissimum*	珊瑚樹	WHIP TREE	2000	209	
•	CRA	*Cratoxylum cochinchinense*	黃牛木	WHIP TREE	2000	209	
x	POA	*Polyspora axillaris*	大頭茶	400(H) x 400(S)	500	2614	
x	LIG	*Ligustrum sinense*	山指甲	400(H) x 400(S)	500	2614	
x	GAR	*Gardenia jasminoides*	梔子	400(H) x 400(S)	500	2614	
x	RHA	*Rhaphiolepis indica*	石班木	400(H) x 400(S)	500	2614	

SHRUBS MIX PLANTING

SMP1						
CODE	BOTANICAL Name	CHINESE NAME	SIZE (mm) HEIGHT(H) x SPREAD (S)	SPACING (mm)	QUANTITY(NO)	REMARK
RHS	*Rhododendron simsii*	紅杜鵑	400(H) x 400(S)	500	1,674	PLANT EACH SPECIES IN GROUPS OF 10-20 IN RAMDOM. PLANT ALL SPECIES IN STAGGERED PATTERN
MEL	*Melastoma sanguineum*	毛菝	400(H) x 400(S)	500	1,674	
RHT	*Rhodomyrtus tomentosa*	桃金娘/崗稔	400(H) x 400(S)	500	1,674	
PSY	*Psychotria asiatica*	九節	400(H) x 400(S)	500	1,674	
SMP2						
POA	*Polyspora axillaris*	大頭茶	400(H) x 400(S)	500	5,187	
LIG	*Ligustrum sinense*	山指甲	400(H) x 400(S)	500	5,187	
GAR	*Gardenia jasminoides*	梔子	400(H) x 400(S)	500	5,187	
RHA	*Rhaphiolepis indica*	石班木	400(H) x 400(S)	500	5,187	
SMP3						
IXO	*Ixora chinensis*	龍船花	450(H) x 300(S)	500	10,822	
RHS	*Rhododendron simsii*	紅杜鵑	400(H) x 400(S)	500	10,822	
CLIMBERS (RW : RETAINING WALL AND GREEN WALL)						
CODE	BOTANICAL Name	CHINESE NAME	SIZE (mm) HEIGHT(H) x SPREAD (S)	SPACING (mm)	QUANTITY(NO)	REMARK
PAR	*Parthenocissus dalzielii*	爬牆虎	MIN. 4 SHOOTS PER PLANT, 1000mm LONG	300	580	PLANT ALL SPECIES ALONG THE ABUTMENT AND WALL



INDICATIVE LAYOUT OF PLANTING MATRIX FOR WOODLAND MIX PLANTING FOR KEY TO CODE, SEE PLANTING SCHEDULE
SCALE 1 : 25

ISO A1 594mm x 841mm
Approved: RCYK
Checked: JTCY
Designer: JLSL
Project Management Initials:

Plot File by: WingSan.Chan@aecom.com 05-June-2019
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PROJECT
項目
SITE FORMATION AND INFRASTRUCTURE WORKS FOR POLICE FACILITIES IN KONG NGA PO - DESIGN AND CONSTRUCTION

CONTRACT TITLE
SITE FORMATION AND INFRASTRUCTURE WORKS FOR POLICE FACILITIES IN KONG NGA PO

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I/R 修訂	DATE 日期	DESCRIPTION 內容摘要	CHK. 複核
-	JUN. 19	TENDER DRAWING	JTCY

STATUS
階段

SCALE 比例
A1 AS SHOWN

DIMENSION UNIT 尺寸單位
MILLIMETRES

KEY PLAN
索引圖

PROJECT NO. 項目編號
60534575

CONTRACT NO. 合約編號
ND/2018/01

SHEET TITLE
圖紙名稱
WHIPS & SHRUB PLANTING SCHEDULE

SHEET NUMBER
圖紙編號
60534575/C1/1750

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Appendix V

Detailed Summary Table for Visual Enhancement and Landscape Mitigation Measures

Table 3.1a: Construction Phase Mitigation Measures (Supplementary)

ID No.	Construction Phase Mitigation Measures	Mitigation Landscape Impacts	Mitigation Visual Impacts	Implementation Department	Implementation Agency	Management Agency	Maintenance Agency
CM01	**Tree protection and preservation** Trees / woodland within the Project Site which are unaffected by the works shall be protected and preserved during the detailed design stage and construction phase. The tree preservation proposals shall be coordinated with the layout and design of the engineering and architectural works at the detailed design stage for further retention of individual trees. The preservation of existing tree shall provide instant greening and screening effect for proposed works. Tree protection works will be undertaken in accordance with DEVB TC(W) 7/2015 on "Tree Preservation" and tree risk assessment in accordance with "Guidelines for Tree Risk Assessment and Management Arrangement" by DEVB.	√		CEDD/ArchSD	Contractor	Contractors during construction	Contractors during construction
CM02	**Tree transplantation** If removal of trees unavoidable due to construction impacts, trees will be transplanted where technically feasible in accordance with "Guidelines on Tree Transplanting" by DEVB and HQ/GN/13 and HQ/GN/13 – Interim Guidelines for Tree Transplanting Works under Highways Department's Vegetation Maintenance Ambit where applicable.	√	√	CEDD	Contractor	Contractors during construction	Contractors during construction

CM03	**Work area and temporary works area** Construction area control, where possible, to ensure that the landscape and visual impacts arising from the construction activities are minimised. This includes the reduction of the extent and location of working areas to avoid sensitive LRs, siting of offices or temporary structures so that they are not visually prominent, and consideration of detailed schedules to shorten the construction period. Temporary landscape treatments are considered to be adopted such as applying hydro-seeding on temporary stockpiles and areas of earthworks to alleviate the potential impacts and minimise soil erosion.	√	√	CEDD/ArchSD	Contractor	Contractors during construction	Contractors during construction
CM04	**Advance implementation of mitigation planting** Replanting of existing / disturbed vegetation shall be undertaken as soon astechnically feasible during the construction phase. The priority shall be areas at the periphery of the site to ensure that proposed planting fulfils its role in mitigating the predicted impacts including screening views of the proposals as early as possible during the operation phase.	√	√	CEDD/ArchSD	Contractor	Contractors during construction	Contractors during construction
CM05	**Decorative screen hoarding** Decorative screen hoarding will be erected along areas of the construction works site boundary where the works site borders publically accessible routes and/or is close to visually sensitive receivers (VSRs) to screen undesirable views of the works site. It is proposed that the screening be compatible with the surrounding environment and where possible, non-reflective, recessive colours be used.		√	CEDD/ArchSD	Contractor	Contractors during construction	Contractors during construction

Table 3.2a: Operation Phase Mitigation Measures (Supplementary)

ID No.	Operation Phase Mitigation Measures	Mitigation Landscape Impacts	Mitigation Visual Impacts	Implementation Department	Implementation Agency	Management Agency	Maintenance Agency
OM01	**Detail design considerations** Detailed design of development components should reduce landscape footprint and visibility of structures. The area allowed for any development components should be reduced to a practical minimum.	√	√	CEDD (along KNP Road where applicable and slopes within KNP Police Facilitate Site) / ArchSD (within KNP Police Facilitate Site)	Detailed Designers / Consultants	N/A	N/A
OM02	**Aesthetically pleasing design and responsive design of buildings and structures** The form, textures, finishes and colours of the proposed development components should be compatible with the existing surroundings. Light earthy tone colours such as shades of green, grey, brown and off-white may be utilised where technically feasible to reduce the visibility of the development components, including all roadwork, buildings and noise barriers etc. To further improve visual amenity, natural building materials such as stone and timber, should be preferably adopted for architectural features, where technically feasible. The proposed use of a responsive design for the disposition of the main elements of the proposed scheme including the locations of buildings and utility structures. Grouping of utilities and infrastructure components into proposed buildings as far as technically feasible to reduce the mass of development. The disposition and height profile of the developments and above ground utilities structures to respond to the existing context	√	√	ArchSD	Detailed Designers / Consultants	N/A	N/A

	particularly the existing landform and preserved trees. Proposals designed to minimise the 'wall effects' and create a subtle transition at the edges of the site where it meets the rural landscape. Measures may include the creation of setbacks, articulating the development frontage and maintenance of view corridors to enhance the sense of visual integration with the existing context, avoid abrupt transitions between the existing and proposed built environment and reduce the apparent visual mass of the proposed developments.						
OM03	**Design of engineering structure** The design of the proposed Engineering Structures such as the proposed road layout and any ancillary structures including the sewage pumping station and the Ma Tso Lung Firing Range should pay particular attention to the appearance and construction methods. The detailed design landscape consultants shall work in unison with the engineers on the aesthetic aspects of the structures and their relationship with the landscape. The design of engineering structures shall avoid any unnecessary visual clutter achieved through the co-ordination of the various engineering disciplines involved to arrive at integrated design solutions.	√	√	CEDD	Detailed Designers / Consultants	N/A	N/A
OM04	**Design of retaining walls and slopes** The proposed treatment of Retaining Wall and Slopes will be undertaken in accordance with GEO Publication No. 1/2011 "Technical Guidelines on Landscape Treatment and Bioengineering for Man-made Slopes and Retaining Walls". These engineering structures will be aesthetically enhanced through the use of soft landscape works including tree and shrub planting to give man-made slopes a	√	√	CEDD	Detailed Designers / Consultants	N/A	N/A

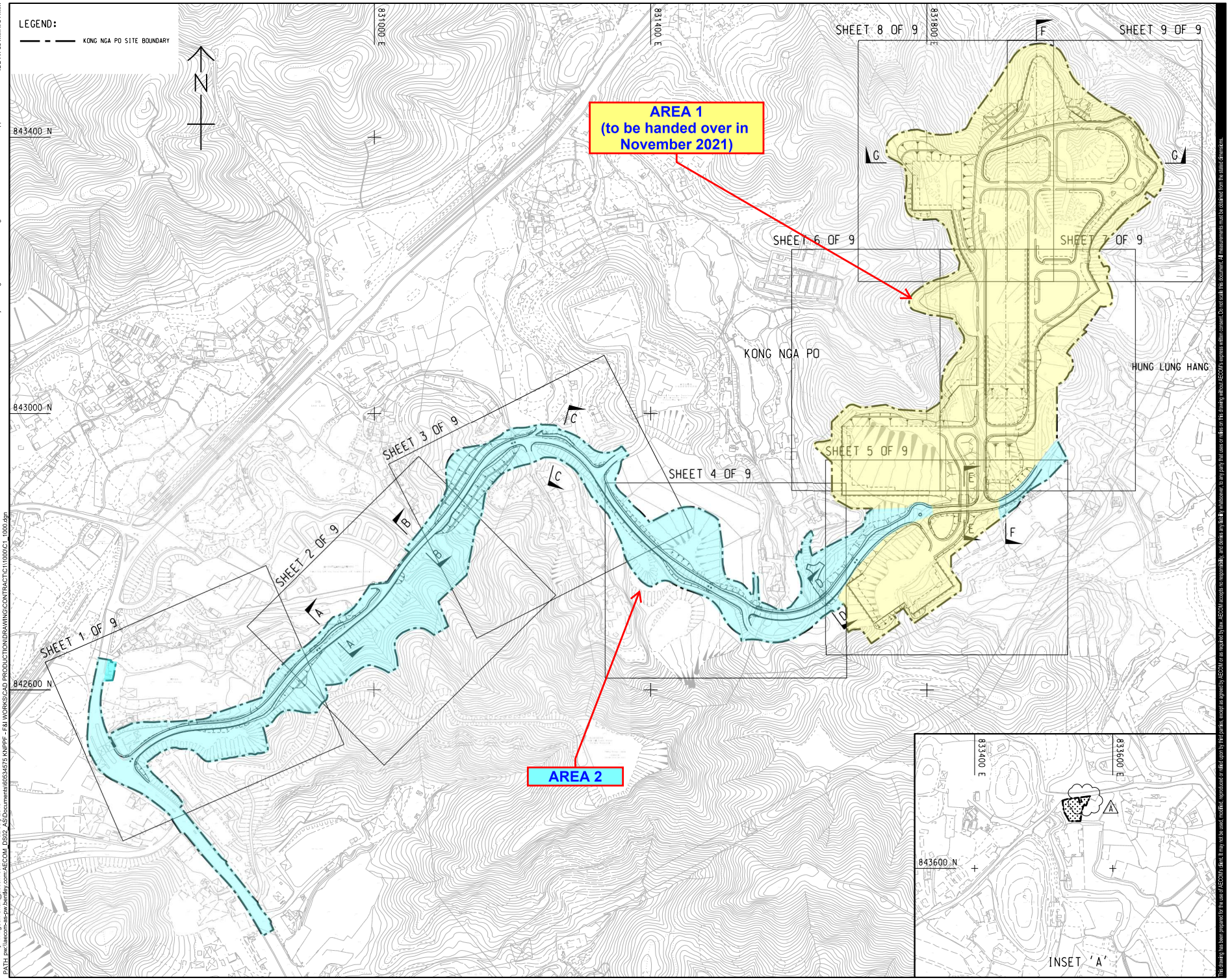
	more natural appearance blending into the local rural landscape.						
OM05	**Compensatory planting proposal** All compensatory planting of trees is to be carried out in accordance with DEVB TCW No. 7/2015. A total woodland compensation area of 5.54 ha is proposed. The planting proposals will utilise largely native species in accordance with GLTM/DEVB's - Guiding Principles on Use of Native Plant Species in Public Works Projects, Some compensatory shrub and ground cover planting will also be provided within the woodland area to create a more structurally diverse woodland. 5,869 nos. new trees will be planted as compensation including some 4,317 nos. will be planted within the Project site, 1,400 nos. alongside KNP Road, and 152 nos. to compensate for the existing dead trees to be removed. Woodland areas will utilise a combination of large sized tree stock (including heavy standard sized trees) and whip sized trees to create a more naturalistic effect and screen views of the new structures and buildings. Whip sized tree planting is preferred on the face of soil cut slopes and for general woodland areas where screening is not a priority. The smaller, younger plant stock will adapt to their new growing conditions more quickly than larger sized stock and establish a naturalistic effect more rapidly. Roadside and amenity planting will utilise largely heavy standard sized trees.	√		CEDD	Contractors	Project site: HKPF Kong Nga Po Road: HyD	Project site: Term contractor employed by HKPF Kong Nga Po Road: LCSD / HyD

OM06	**Landscape buffer tree planting** Tree planting using larger sized tree stock shall be provided to screen the proposed structures and associated facilities. Wherever possible the planting will utilise native species. This measure will form part of the compensatory planting and will improve compatibility with the surrounding environment and create a pleasant pedestrian environment.	√	√	CEDD (along KNP Road where applicable and slopes within KNP Police Facilitate Site) / ArchSD (within KNP Police Facilitate Site)	Contractors	Project site: HKPF Kong Nga Po Road: HyD	Project site: Term contractor employed by HKPF Kong Nga Po Road: LCSD / HyD
OM07	**Roadside and amenity planting (within KNP Police Facilitate Site)** Roadside and amenity planting using predominantly native species shall be provided, to enhance the landscape and visual quality of the existing and proposed transport routes and car parks.	√	√	ArchSD	Contractors	HKPF	Term contractor employed by HKPF
OM08	**Grassland (ecological mitigation)** Creation of new grassland areas approximately 1.02 ha in size. Inclusion of common grass species Ischaemum barbatum and Tetradium glabrifolium (the larval food plants for butterfly species).	√	√	CEDD (along KNP Road where applicable and slopes within KNP Police Facilitate Site) / ArchSD (within KNP Police Facilitate Site)	Contractors	HKPF	Term contractor employed by HKPF
OM09	**Green roof (within KNP Police Facilitate Site)** Green roofs predominantly using native species shall be introduced where technically feasible on proposed buildings to reduce exposure of untreated concrete surfaces; enhance the sustainability of the design and mitigate visual impact to VSRs at high levels. Location and extent of green roof subject to detailed design.	√	√	ArchSD	Contractors	HKPF	Term contractor employed by HKPF

OM10	**Vertical greening** Vertical planting shall be introduced using predominantly native species to soften the hard, vertical surfaces of the proposed development components including the walls of the proposed buildings and retaining walls. Planting to utilise climbing and trailing plants. Location and extent of vertical greening subject to detailed design.	√	√	CEDD (along KNP Road where applicable) / ArchSD (within KNP Police Facilitate Site)	Contractors	Project site: HKPF Along Kong Nga Po Road: HyD	Term contractor employed by HKPF Kong Nga Po Road: LCSD / HyD
OM11	**Green paving (within KNP Police Facilitate Site)** Where technically feasible utilise a green paving approach such as grass-crete or grass-grid to maximise the area of planting and reduce the area of hard paving. Location and extent of green paving subject to detailed design. This includes the use of permeable paving where grass-crete / grass grid is not practicable.	√		ArchSD	Contractors	HKPF	Term contractor employed by HKPF
OM12	**Light control (operation)** Street and night time lighting glare will be controlled to minimize glare impact to adjacent VSRs during the operation stage.		√	HKPF (within Project Site) / HyD (along KNP Road)	Contractors	For buildings, structures and internal roads – HKPF For external roads – HyD	For buildings, structures and internal roads – Contractor / ArchSD For external roads – HyD

Appendix VI

Implementation Programme of the Landscaping Works



ISO A1 594mm x 841mm
Approved: RCYK
Checked: SCWC
Designer: YHH
Project Management Initials:

Plot File by: WingSan Chan@aecom.com 02-July-2019
PATH: pw:\\aecom-as-pw.bentley.com:AECOM_DS02_AS\Documents\60534575 KNPPF - F&I WORKS\CAD PRODUCTION\DRAWING\CONTRACT\C1\1000\C1_1000.dgn

AECOM

PROJECT
項目

SITE FORMATION AND INFRASTRUCTURE WORKS FOR POLICE FACILITIES IN KONG NGA PO - DESIGN AND CONSTRUCTION

CONTRACT TITLE

SITE FORMATION AND INFRASTRUCTURE WORKS FOR POLICE FACILITIES IN KONG NGA PO

CLIENT
業主

CEDD 土木工程拓展署 Civil Engineering and Development Department

CONSULTANT
工程顧問公司

AECOM Asia Company Ltd.
www.aecom.com

SUB-CONSULTANTS
分判工程顧問公司

ISSUE/REVISION
修訂

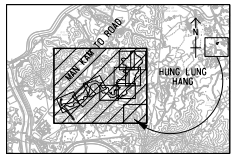
I/R 修訂	DATE 日期	DESCRIPTION 內容摘要	CHK. 核對
A	JUL. 19	TENDER ADDENDUM NO.1	SCWC
-	JUN. 19	TENDER DRAWING	SCWC

STATUS
階段

SCALE 比例
A1 1 : 2500

DIMENSION UNIT 尺寸單位

KEY PLAN 索引圖 A1 1 : 50000



PROJECT NO. 項目編號
60534575

CONTRACT NO. 合約編號
ND/2018/01

SHEET TITLE 圖紙名稱
KEY PLAN AND LOCATION PLAN

SHEET NUMBER 圖紙編號
60534575/C1/1000A

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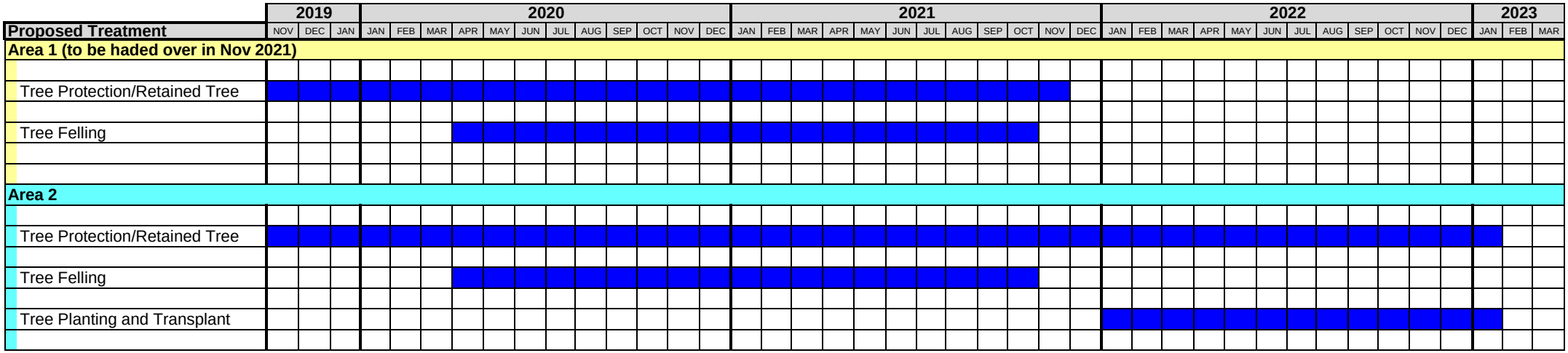
ND/2018/01 - Site Formation and Infrastructure Works for Police Facilities in Kong Nga Po

Implementation for Proposed Treatment for Landscape Works



Appendix VII

Record of No Comments from the Authorities on Relevant Submissions

Record of Acceptance for the ACABAS Submission

By Fax

MEMO

From	Secretary of ACABAS, HyD	*To*	Distribution
Ref.	(5WK6) *in* HyD LU/14-1/2	*(Attn.:*	)
Tel. No.	3903 6665	*Your Ref.*	
Fax. No.	2310 8438	*Dated*	
Email.	sladu.lu@hyd.gov.hk	*Fax No.*	
Date	3 July 2018	*Total Pages*	2 + Encl.

Advisory Committee on the Appearance of Bridges and Associated Structures (ACABAS)
Minutes of the 413th ACABAS Meeting

Attached please find the Minutes of the 413th ACABAS Meeting held on **19 June 2018 (Tuesday)** for your record and necessary action.

2 For any future submissions/ re-submission, I would like to draw your attention to **Appendix A "Guidelines for Submission to ACABAS" of ETWB TC (W) No. 36/2004**. Please also note the following:

(i) Re-submissions should quote the date, meeting number and item number of the previous submission.

(ii) A **summary of responses to comments** should be provided and amendments on drawings should be **highlighted**.

(iii) **10 sets** of documents with **10 copies** of the covering letter/ memo of your submission (**no larger than A3 size format of a simple stapled package**) for responses through correspondence/ resubmission should be forwarded to the Secretary for distribution to ACABAS members.

(iv) For ease of filing and minimizing the storage space, **a CD containing the soft copy of your documents in PDF/ JPG format** should also be submitted for record.

(v) Project Proponents are encouraged to make use of power point and our visual facilities for presentation.

(vi) To conserve our environment, submission/ re-submissions must be printed in double-sided format. Ring binding, transparent cover sheets, front covers, dividing sheets and/or back covers should also be **avoided** for minimizing the use of materials.

(vii) Information to be submitted should be concisely selected with a view to enable the Committee to understand the design.

(viii) Where a colour scheme is proposed, true colour samples should be submitted and presented at the meeting.

(Helen NGAI)
Secretary of ACABAS, HyD

HN/GL/gl

413th Meeting of the Advisory Committee
on the Appearance of Bridges and Associated Structures

Distribution:

ACABAS Committee Members

Mr. Aaron BOK (RHE/NT, HyD)	(Fax: 2714 5228)
Mr. Patrick LEUNG (SE/P2, B&S Division, HyD)	(Fax: 2714 5219)
Ms. Shirley CHAN (SLA/HQ1, CEDD)	(Fax: 2760 9401)
Mr. Jacen LO (SA/21, ArchSD)	(Fax: 2524 8194)
Mr. Clarence FUNG (SA/4, HD)	(Fax: 3152 2053)
Mr. Kelly CHOW (Academic Representative)	(Fax: 3942 0982)
HKIA – (Committee Member)	(Fax: 2519 6011)
HKIE – (Committee Member)	(Fax: 2540 1580)
HKIP – Mr. LI Cho Ming (Committee Member)	(Fax: 2915 7616)

Project Officers / Proponents

Wong Tung & Partners Limited (YUEN Cheuk Yiu - re: 3.0)	(Fax: 2513 1728)
AGC Design Ltd. (CHENG Yan Ying, Grace - re: 4.0) (NG Wing Shun, Anthony Vincent – re: 5.0)	(Fax: 2219 7133)
CHE/Bridges & Structures, HyD (WONG Chun Pong, James - re: 6.0)	(Fax: 2714 5219)
KLS International Architects & Planners Co. Ltd. (KONG Kai Cheung - re: 7.0)	(Fax: 2815 9804)
Hong Kong Tramways Limited (Antonie Sambin - re: 8.0)	(Fax: 2118 6038)
WSP (Asia) Ltd. (Emeric WAN – re: 9.0, 10.0, 11.0 & 12.0) (YEUNG Yiu Wing – re: 20.2)	(Fax: 2856 9902)
AECOM Asia Co. Ltd. (Igor HO - re: 13.0 & 14.0) (Ivan TSANG – re: 15.0) (Albert YU – re: 20.3) (Ruby YEW – re: 20.4)	(Fax: 3922 9797) (Fax: 3922 9797) (Fax: 2218 7299) (Fax: 3922 9797)
Kwan On Construction Co. Ltd. (Anthony KWOK - re: 16.0)	(Fax: 2558 6900)
Mannings (Asia) Consultants Limited (Simon CHAN - re: 17.0, 18.0 & 19.0)	(Fax: 3168 2022)
Hyder- Meinhardt Joint Venture (James Penny - re: 20.1)	(Fax: 2805 5028)

c.c.: (for information) - CHE/HK, CHE/K, CHE/NTE, CHE/NTW, CE/Lighting

20.4 Agreement No. CE60/2016 Site Formation and Infrastructure Works for Police Facilities in Kong Nga Po - Design and Construction
ACABAS Final Submission for Viaduct and Retaining Walls
- Ref: item 16.0 of 411th meeting
(Letter from AECOM Asia Co. Ltd. - ref. YHH:RYLH:kchy:60534575/03.10-2018005140W dated 21.05.2018 refers.)

The Secretary briefly explained the latest design of the project team as follows:

(i) Heavy standard trees and light standard trees were proposed on rather flat area and the slopes in front of proposed retaining walls to enhance the greening/ screening effect of greening. Also, climber species, *Parthenocissus dalzielii* was proposed due to its fast-growing habits.

CONCLUSION: Based on the information submitted, the Committee considered the submission **acceptable**.

(LEE Wai-ping)
Chairman, ACABAS

21.0 Any Other Business

21.1 As there was no other business, the meeting was adjourned at 17:45.

(LEE Wai-ping)
Chairman, ACABAS

Record of Approval for the Application for Exemption of Allocation of Space for Quality Greening on Roads

By Fax

MEMO

From	Secretary, Works and Maintenance Committee on Greening	*To*	PM(NTE), CEDD
Ref	( ) *in* DEVB(GLTM)102/2/1	*(Attn :*	Mr. Vincent LI, SE/8(N) *)*
Tel. No.	3509 7377	*Your Ref.*	( ) in NTE-NTN 2/2/3-3
Fax No.	2186 6932	*dated*	3 October 2017
Email		*Fax No.*	3743 0260
Date	4 May 2018	*Total Pages*	2

Works and Maintenance Committee on Greening (WMCG)

Application for Exemption from
Allocation of Space for Quality Greening on Roads

for Agreement No. CE 60/2016 (CE)
Site Formation and Associated Infrastructural Works for
Police Facilities in Kong Nga Po – Design and Construction

I write to advise that your application (refer to MUR) for exemption from provision of greening (i.e. planting) at concerned locations along the Kong Nga Po Road and associated road junction at Man Kam To Road of the captioned project has been approved subject to conditions:

a) This Project is a designated project under the Environmental Impact Assessment Ordinance (Cap. 499) and an Environmental Permit (EP) is required for construction and operation. The project proponent shall note that the approval of this exemption shall not relieve his or her responsibility to comply with the granted EP; and

b) The project proponent shall carry out all necessary measures during the construction stage to minimise the impact on existing trees to be retained.

2. It is also advisable for CEDD to improve the overall landscape detail design by considering: (i) maximising the vegetation diversity (in species mix); (ii) selecting appropriate, native tree and/or shrub species that would blend in ecologically with the surrounding environment; and (iii) provision of adequate space for sustainable growth of trees.

(Ms. Salina LEE)
for Secretary,
Works and Maintenance Committee on Greening

c.c.

PAS(PL)6, DEVB	(Attn: Ms Christina CHONG)
AD(C&MP), AFCD	(Attn: Mr Patrick LAI)
AD(A), ArchSD	(Attn: Ms Alice YEUNG)
AD(Tech), CEDD	(Attn: Mr Terence LAM)
AD/O&M, DSD	(Attn: Mr Fedrick KAN)
AD(Env Infrastructure), EPD	(Attn: Ms Betty CHEUNG)
AD(Adm), HAD	(Attn: Ms Magdalen TSE)

File ref: DEVB(GLTM) 102/2/1

AD(DP), HD	(Attn: Mr MW WONG)
AD/Tech, HyD	(Attn: Mr YK HO)
AD(S1), LandsD	(Attn: Ms Rita LAI)
AD(LS)3, LCSD	(Attn: Mr Simon LIU)
AD/T, PlanD	(Attn: Ms Amy CHEUNG)
Ch Traffic Eng/NTE, TD	(Attn: Mr Ricky HO)
AD/U, WSD	(Attn: Mr CM LAM)

Internal – H/GLO

Appendix VIII

Record of No Comments from the Management and Maintenance Authorities

Civil Engineering and Development Department

土木工程拓展署
CEDD Civil Engineering and Development Department

北拓展處
North Development Office

Web site 網址 : http://www.cedd.gov.hk
E-mail 電子郵件 : zorroyuen@cedd.gov.hk
Telephone 電話 : (852) 3152 3399
Facsimile 傳真 : (852) 3743 0260

葵芳興芳路 223 號
新都會廣場第一座辦公大樓 15 樓 1501 室
Unit 1501, Level 15, Tower I, Metroplaza
223 Hing Fong Road,
Kwai Fong, N.T.
Hong Kong.

Our reference 本署檔號 : ( ) inNDO-30-4160-(CE60/2016)-3, NDO-30-4160-(CE60/2016)-10, & NDO-30-4160-(CE60/2016)-12

Your reference 來函檔號 : YHH:RYLH:kchy:60534575/06.15-2019001564W, YHH:RYLH:NCTY:kchy:60534575/06.21-2019001634W, YHH:RYLH:kchy:60534575/06.15-2019001799W, YHH:RYLH:cmyw:60534575/06.15-2019001907W

Date 日期 : 27 February 2019

By Fax

(3922 9797)

AECOM Asia Company Limited
8/F, Grand Central Plaza, Tower 2,
138 Shatin Rural Committee Road,
Shatin, New Territories,
Hong Kong
(Attn.: Mr. Robert CHAN)

Dear Sirs,

Agreement No. CE 60/2016 (CE)
Site Formation and Infrastructure Works for Police Facilities in Kong Nga Po
– Design and Construction

Deliverable B3 – Tree Removal Application
Deliverable B8 – Buildability Assessment Report
Deliverable B9 – Project Estimate and Pre-tender Estimate
Deliverable B13 – Detailed Landscape Design Report

I refer to the captioned submissions enclosed in your above reference letters dated 13, 15, 19 and 20 February 2019 respectively.

This is to inform you that the above deliverables are accepted.

Yours faithfully,

(YUEN Tat-yung, Zorro)
For Project Manager (N)

Architectural Services Departments

From: Yeung, Ling Hei Ray
Sent: Wednesday, February 27, 2019 10:15 AM
To: Yeung, Ching Hei (Anthony)
Subject: FW: KNP - Detailed Landscape Design Report (Revised Final Rev.2)

Please record and action, thanks.

Regards,

Ray Yeung
3922 8886

From: sowt@archsd.gov.hk [mailto:sowt@archsd.gov.hk]
Sent: Wednesday, February 27, 2019 9:28 AM
To: Yew, Heung Hung Ruby <ruby.yew@aecom.com>
Cc: leekwj@archsd.gov.hk; Yeung, Ling Hei Ray <Ray.Yeung@aecom.com>; williamwong@cedd.gov.hk; chanmy@archsd.gov.hk
Subject: KNP - Detailed Landscape Design Report (Revised Final Rev.2)

Dear Ruby,

With reference to your letter dated 8 February 2019 (your ref. YHH:RYLH:AYCH:kchy:60534575/06.25-2019001506W) regarding the captioned submission, please note that we have no further comment on the report.

Please provide a full set of the submission for our record.

Regards,
Ada

Lands Department

電 話 Tel: 2675 1744
圖文傳真 Fax: 2675 9224
電郵地址 Email:
本署檔號 Our Ref: (10) in L/M (2) in DLON 4/61/07 Pt.11
來函檔號 Your Ref: YHH: RYLH: AYCH:kchy:60534575/06.26-2019002480W

來函請註明本署檔號
Please quote our reference in your reply

地政總署
北區地政處
DISTRICT LANDS OFFICE, NORTH
LANDS DEPARTMENT

我們矢志努力不懈，提供盡善盡美的土地行政服務。
We strive to achieve excellence in land administration.

新界粉嶺皇崗路三號北區政府合署六樓
6/F., NORTH DISTRICT GOVERNMENT OFFICES
3 PIK FUNG ROAD, FANLING NEW TERRITORIES

網址 Website : www.landsd.gov.hk

AECOM
8/F, Grand Central Plaza, Tower 2
138 Shatin Rural Committee Road,
Shatin
Hong Kong
(Attn: Ms Ruby Yew)

By Fax (3922 9797) & Post

8 March 2019

Dear Sir,

Agreement No. CE 60/2016(CE)

Site Formation and Infrastructure Works for Police Facilities in Kong Nga Po-Design and Construction

Detailed Landscape Design Report (Revised Final Rev.2)

I refer to you letter dated 8.2.2019.

2. We have no further comment on the subject report.

Yours faithfully,

(CHAN Wing-chun, Anthony)
for District Lands Officer, North

c.c.

Ch Engr/N2, CEDD (Attn: Mr. LI Kwok Keung, Vincent) (Fax: 3743 0260)

Leisure and Cultural Services Department

From: Anita SUNG <asung@lcsd.gov.hk>
Sent: Friday, March 15, 2019 6:12 PM
To: Yeung, Ling Hei Ray
Cc: Yeung, Ching Hei (Anthony); Lo, Siu Ling Joan; Angel LAU; kwokkeungli@cedd.gov.hk; williamwong@cedd.gov.hk; Yew, Heung Hung Ruby; Sau Han LAM
Subject: RE: CE 60/2016 (CE) - KNP Project - RtC on Detailed Landscape Design Report (Revised Final Rev. 2) - Second Reminder
Attachments: 2018011901W.pdf

Dear Ray,

Thank you for your supplementary information. I have no further comment, please.

Regards
Anita SUNG
LM(T)NTN1
LCSD

From: "Yeung, Ling Hei Ray" <Ray.Yeung@aecom.com>
To: "asung@lcsd.gov.hk" <asung@lcsd.gov.hk>
Cc: "Yeung, Ching Hei (Anthony)" <Anthony.Yeung1@aecom.com>, "Lo, Siu Ling Joan" <Joan.Lo@aecom.com>, Angel LAU <angellau@lcsd.gov.hk>, "kwokkeungli@cedd.gov.hk" <kwokkeungli@cedd.gov.hk>, "williamwong@cedd.gov.hk" <williamwong@cedd.gov.hk>, "Yew, Heung Hung Ruby" <ruby.yew@aecom.com>
Date: 15/03/2019 17:45
Subject: RE: CE 60/2016 (CE) - KNP Project - RtC on Detailed Landscape Design Report (Revised Final Rev. 2) - Second Reminder

Dear Ms. Sung,

We spoke. As discussed, please kindly be advised that RC allocation to LCSD had been agreed and fixed. Please see attached for the breakdown of the agreed RC i.e. $3.4M for your info. Please note that under this agreed RC, horticulture maintenance for 825 nos. of roadside tree planting is considered. FYI, about 145 nos. of newly planted tree would be handed over to LCSD for future maintenance.

As discussed, it is understood that some existing retained tree would require LCSD's future maintenance, and above RC has considered such kind of tree. We have also incorporated in our tender requirement that the contractor is obligated for routine inspection and maintenance of the concerned existing retained tree and carry out yearly tree risk assessment and necessary remedial works to ensure the condition of existing trees.

Hope the above could ease your concern as stated in your below comment. If so, your no further comment by 18 Mar 2019 would be highly appreciated.

Thanks.

Regards,

Ray Yeung
3922 8886

From: Angel LAU <angellau@lcsd.gov.hk>
Sent: Thursday, 14 March 2019 6:14 PM
To: Yeung, Ching Hei (Anthony) <Anthony.Yeung1@aecom.com>
Cc: Ray YW CHENG <rywcheng@lcsd.gov.hk>; CH YIP <chyip@lcsd.gov.hk>; Anita SUNG <asung@lcsd.gov.hk>; Sau Han LAM <sauhanlam@lcsd.gov.hk>; Calvin C YU <ccyu@lcsd.gov.hk>
Subject: RE: CE 60/2016 (CE) - KNP Project - RtC on Detailed Landscape Design Report (Revised Final Rev. 2) - Second Reminder

Dear Anthony,

Regarding to the captioned subject, please find the comments of LCSD as follow:

NDLSO

- No further comment on the response from AECOM on the R-to-C table.

NTNTT
For the existing retained trees and new trees that will be handed over to LCSD, we insist to request project proponent to provide recurrent consequence for subsequent tree maintenance.

Regards,
Angel LAU
EA(P)3 /LCSD
Tel: 2601 8681

From: "Yeung, Ching Hei (Anthony)" <Anthony.Yeung1@aecom.com>
To: "eap3@lcsd.gov.hk" <eap3@lcsd.gov.hk>
Cc: "Yeung, Ling Hei Ray" <Ray.Yeung@aecom.com>, "Yew, Heung Hung Ruby" <ruby.yew@aecom.com>, "kwokkeungli@cedd.gov.hk" <kwokkeungli@cedd.gov.hk>, "williamwong@cedd.gov.hk" <williamwong@cedd.gov.hk>, "adlmn3@lcsd.gov.hk" <adlmn3@lcsd.gov.hk>
Date: 13/03/2019 22:47
Subject: RE: CE 60/2016 (CE) - KNP Project - RtC on Detailed Landscape Design Report (Revised Final Rev. 2) - Second Reminder

---

Dear Angel,

Grateful if you could provide your comments / nil comment as soon as possible. Thanks.

Please feel free to contact me if you need any further information.

Thank you

Best regards,
Anthony
3922 9332

From: Yeung, Ching Hei (Anthony)

Sent: Tuesday, 12 March 2019 11:50 AM
To: eap3@lcsd.gov.hk
Cc: Yeung, Ling Hei Ray <Ray.Yeung@aecom.com>; Yew, Heung Hung Ruby <ruby.yew@aecom.com>; kwokkeungli@cedd.gov.hk; williamwong@cedd.gov.hk; adlmn3@lcsd.gov.hk
Subject: RE: CE 60/2016 (CE) - KNP Project - RtC on Detailed Landscape Design Report (Revised Final Rev. 2) - Reminder

Dear Angel,

Further to our tele-conversation just now, grateful if you could provide your comments / nil comment as soon as possible. Thanks.

Please fell free to contact me if you need any further information.

Thank you

Best regards,
Anthony
3922 9332

From: Yeung, Ling Hei Ray
Sent: Thursday, March 07, 2019 5:06 PM
To: eap3@lcsd.gov.hk
Cc: Yew, Heung Hung Ruby <Ruby.Yew@aecom.com>; Yeung, Ching Hei (Anthony) <Anthony.Yeung1@aecom.com>; kwokkeungli@cedd.gov.hk; 'williamwong@cedd.gov.hk' <williamwong@cedd.gov.hk>; adlmn3@lcsd.gov.hk
Subject: CE 60/2016 (CE) - KNP Project - RtC on Detailed Landscape Design Report (Revised Final Rev. 2)

Dear Angel,

Agreement No. CE 60/2016 (CE)
Site Formation and Infrastructure Works for Police Facilities in Kong Nga Po –
Design and Construction

Detailed Landscape Design Report (Revised Final Rev. 2)

Further to our previous correspondence (Our Ref.: YHH:RYLH:AYCH:kchy:60534575/06.25-2019001506W) dated 8 February 2019 circulating the captioned report. We would like to provide herewith our responses to comments for your acceptance.

In view of the very tight timeframe for tendering of this project, your urgent assistance on this issue **by 11 March** would be very much appreciated. Sorry for the rush.

Response-to Comment:

Comment From LCSD	
I refer to your letter dated 8 February 2019. Please note the following comments from LCSD:	
New Territories North Tree Team (NTNTT)	
2. According to the previous information provided by the project proponent. the improved Kong Nga Po Road will be handed over to HyD in December 2022 tentatively. NTNTT has no in—principle objection to take up the subsequent trees maintenance responsibility provided that satisfactory completion of establishment period is fulfilled. However, please note the following comments for the trees to be handed over to LCSD:	
Discrepancy of tree count of heavy standard tree to be compensated and handed to LCSD on page 10 of the report (145 nos.) and sheet number 60534575/TPRP/707 (257 nos.) is noted. Please clarify and provide the individual figures of tree compensated, transplanted and retained on site in respect of their tree species;	Please be advised that the number of tree planted in the site. Meanwhile, in the page HKPF. Therefore, a total of 257 – 112 =14 discrepancy between the Sheet Number 7

	As per your concern, please noted that inc presented in the approved TPRP and reca Trees Surveyed Trees to be Retained Trees to be Transplanted Trees to be Felled Total Trees Compensated
Clarify the site condition for the LCSD roadside trees situated behind the HyD SIMAR slope. Sheet no. 60534575/1'PRP/704 refers;	The concerned location is flat land which h transformed for planting or existing nature
For the existing retained trees and new trees will be handed over to LCSD, we request project proponent to provide -	
• one-off tree maintenance work for the existing trees before handover	Noted and have been included in the tend
• tree risk assessment according to the guidelines of TMO/DEVB • recurrent consequence for subsequent tree maintenance	Noted and have been included in the tend The recurrent consequences is circulated
Clear and remove weed trees, i.e. Leucaena leucoeephala before handover arrangement to LCSD.	Noted.
North District Leisure Services (NDLSO)	
3. Refer to the R-to-C page 4 item 3, please note that LCSD is insisted that proper automatic irrigation Systems and lockable water points should be provided. Project proponent should identify a maintenance agent for irrigation systems, otherwise, LCSD would not take up the maintenance of the irrigation system for the above items.	Noted. Irrigation point would be provided f usually engage EMSD as the maintenance
4. General Standards and Maintenance Requirements for Roadside Landscape Works to be Handed Over to LCSD for Maintenance is attached for reference.	Noted.

Please feel free to contact me if you have any question. Thanks.

Regards,

Ray Yeung
3922 8886

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Hong Kong Police Force

From: lizachau@police.gov.hk
Sent: Thursday, February 28, 2019 6:32 PM
To: Yeung, Ling Hei Ray; Yeung, Ching Hei (Anthony)
Subject: Fw: [RESTRICTED] Letters from AECOM

Dear Ray / Anthony,

Please note a nil comment for the following:

Dated 8 FEB 19 on Agreement no. CE 60/2016(CE), Site Formation and Infrastructure Works for Police Facilities in Kong Nga Po - Design and Construction (Detailed Landscape Design Report (Revised Final Rev.2) (Ref: YHH:RYLH:AYCH:kchy:60534575/06.25-2019001506W);
Dated 13 FEB 19 on Agreement no. CE 60/2016(CE), Site Formation and Infrastructure Works for Police Facilities in Kong Nga Po - Design and Construction (Design of Sewerage Works (Final) (Ref: YHH:RYLH:NCTY:kchy:60534575/06.26-2019001541W);
Dated 14 FEB 19 on Agreement no. CE 60/2016(CE), Site Formation and Infrastructure Works for Police Facilities in Kong Nga Po - Design and Construction (Submission of Systematic Risk Management Plan (Final) (Ref: YHH:RYLH:JCYK:kchy:60534575/06.36-2019001618W);
Dated 14 FEB 19 on Agreement no. CE 60/2016(CE), Site Formation and Infrastructure Works for Police Facilities in Kong Nga Po - Design and Construction (Design of Waterworks (Final) (Ref: YHH:RYLH:JCYK:kpky:60534575/06.26-2019001504W);
Dated 18 FEB 19 on Agreement no. CE 60/2016(CE), Site Formation and Infrastructure Works for Police Facilities in Kong Nga Po - Design and Construction (Design of Drainage Works (Final) (Ref: YHH:RYLH:JLN:kchy:60534575/06.26-2019001752W);
Dated 17 JAN 19 on Agreement no. CE 60/2016(CE), Site Formation and Infrastructure Works for Police Facilities in Kong Nga Po - Design and Construction (Submission of Management and Maintenance Schedule (Draft)) (Ref: YHH:RYLH:JCYK:kchy:60534575/06.38-2019000659W);
Dated 17 JAN 19 on Agreement no. CE 60/2016(CE), Site Formation and Infrastructure Works for Police Facilities in Kong Nga Po - Design and Construction (Submission of Draft Tender Drawings and Control Philosophy of Proposed E&M Works at Sewage Storage Tank) (Ref: YHH:NCTY:kchy:60534575/06.26-2019000699W);
Dated 28 JAN 19 on Agreement no. CE 60/2016(CE), Site Formation and Infrastructure Works for Police Facilities in Kong Nga Po - Design and Construction (Amendment on Tree Preservation and Removal Proposal (Revised Final Rev. 3) (Ref: YHH:RYLH:KCYK:AYCH:kchy:60534575/06.15-2019001072W);
Dated 30 JAN 19 on Agreement no. CE 60/2016(CE), Site Formation and Infrastructure Works for Police Facilities in Kong Nga Po - Design and

Construction (Submission of management and Maintenance Schedule (Final)) (Ref: YHH:RYLH:JLN:kchy:60534575/06.38-2019001191W).

Best regards,

Liza CHAU
Chief Inspector of Police
CIP 2B P&D
Tel : 2860 2712
Fax : 2200 4374

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Highways Department

HIGHWAYS DEPARTMENT
NEW TERRITORIES REGION
2nd floor Ho Man Tin Government Offices,
88, Chung Hau Street, Ho Man Tin, Kowloon.
Web Site : http://www.hyd.gov.hk

By Fax
3922 9797

路 政 署
新 界 區
九龍何文田忠孝街 88 號
何文田政府合署二樓
網址： http://www.hyd.gov.hk

[13KTA]

本署檔號 Our Ref.: (13M1D) in HyD NT/13-8/1/21-N
來函檔號 Your Ref.: YHH:RYLH:AYCH:kchy:60534575/06.25-2019001506W
電 話 Tel. No.: 2762 3995
圖文傳真 Fax No.: 2714 5228

21 February 2019

AECOM
8/F Grand Central Plaza, Tower 2
138 Shatin Rural Committee Road
Shatin, Hong Kong
(Attn: Ruby Yew)

Dear Sirs/Madams,

Agreement No. CE 60/2016 (CE)
Site Formation and Infrastructure Works for Police Facilities in Kong Nga Po –
Design and Construction

Design Landscape Design Report (Revised Final Rev. 2)

I have no further comment on the captioned report.

Yours faithfully,

(Wilson C S LAM)
for Chief Highway Engineer/NT East
Highways Department

cc.
PM(N), NDO, CEDD (Attn. Vincent K. K. LI) Fax: 3743 0260

Internal PC3/NTE, ME/Slopes(E)

ISO 9001 : 2015 Certificate No.: CC 1881
ISO 14001 : 2015 Certificate No.: CC 2634

Urgent by Fax

MEMO

From	CLA / Landscape Division, HyD	To	SE/8(N), NDO, CEDD
Ref.	(66H6) in HyD LSC/14-7/28/1	(Attn.:	Mr. LI Kwok Keung, Vincent)
Tel. No.	3903 6658	Your Ref.	
Fax. No.	2310 8438	Dated	
Email.	ladnte.lsc@hyd.gov.hk	Fax No.	3743 0260 /
Date	27 February 2019	Total Pages	1

Agreement No. CE 60/2016 (CE)
Site Formation and Infrastructure Works for Police Facilities in Kong Nga Po – Design and Construction

Detailed Landscape Design Report (Revised Final Rev. 2)

I refer to the submission under the Consultant – AECOM Asia Co. Ltd.'s letter ref. YHH:RYLH:AYCH:kchy:60534575/06.25-2019001506W dated 8.2.2019 (received on 14.2.2019) distributed to us amongst others, with responses-to-comments and the captioned report. I also refer to the Consultant's email dated 27.2.2019 [11:34] with replacement drawings nos. 60534575/TPRP/703, 707 & 720 to fully address our previous comments.

2. Please note that I have no further comment on this submission from the highways landscape point of view.

(CHAN Tai-fung Sandy)
for Chief Landscape Architect
Landscape Division, Highways Department

cc CHE/NT East, HyD Attn.: Mr. Wilson LAM Fax: 2714 5228 /
AECOM Attn.: Ms. Ruby YEW Fax: 3922 9797

YTC/SC/sc

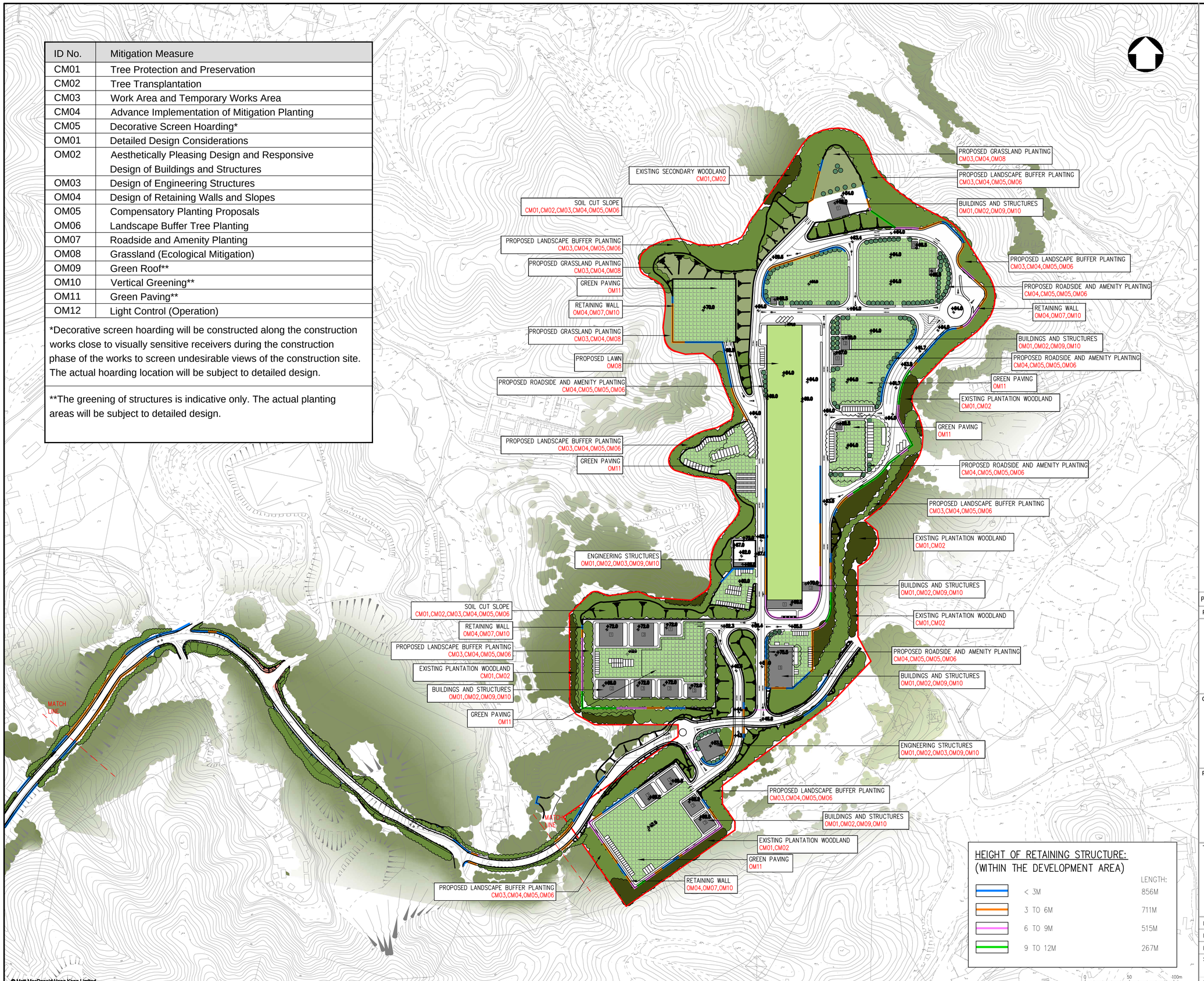
Appendix IX

Approved Plans of Mitigation Measures

ID No.	Mitigation Measure
CM01	Tree Protection and Preservation
CM02	Tree Transplantation
CM03	Work Area and Temporary Works Area
CM04	Advance Implementation of Mitigation Planting
CM05	Decorative Screen Hoarding*
OM01	Detailed Design Considerations
OM02	Aesthetically Pleasing Design and Responsive Design of Buildings and Structures
OM03	Design of Engineering Structures
OM04	Design of Retaining Walls and Slopes
OM05	Compensatory Planting Proposals
OM06	Landscape Buffer Tree Planting
OM07	Roadside and Amenity Planting
OM08	Grassland (Ecological Mitigation)
OM09	Green Roof**
OM10	Vertical Greening**
OM11	Green Paving**
OM12	Light Control (Operation)

*Decorative screen hoarding will be constructed along the construction works close to visually sensitive receivers during the construction phase of the works to screen undesirable views of the construction site. The actual hoarding location will be subject to detailed design.

**The greening of structures is indicative only. The actual planting areas will be subject to detailed design.



LEGEND:

- PROPOSED KONG NGA PO DEVELOPMENT AREA
- PROPOSED KONG NGA PO ROAD IMPROVEMENT WORKS
- PROPOSED BUILDINGS AND STRUCTURES
- HEIGHT OF PROPOSED BUILDINGS (NUMBER OF STOREYS)
- INTERNAL CIRCULATION ROADS
- PARKING PROVISION
- NEW CUT SLOPES
- PROPOSED CUTTING SLOPE
- PROPOSED FILLING SLOPE
- EXISTING PLANTATION AND SECONDARY WOODLAND WITHIN THE PROJECT BOUNDARY
- EXISTING PLANTATION AND SECONDARY WOODLAND OUTSIDE THE PROJECT BOUNDARY
- PROPOSED LANDSCAPE BUFFER PLANTING
- PROPOSED SHRUB–GRASSLAND PLANTING
- PROPOSED LAWN
- PROPOSED ROADSIDE AND AMENITY PLANTING
- PROPOSED BUILDING AND STRUCTURES
- PROPOSED GREEN PAVING

NOTE:
THE LEVEL OF THE BUILDINGS/STRUCTURES SHOWN IN THE FIGURE IS INDICATIVE ONLY AND SUBJECT TO FURTHER REVISION DURING DETAILED DESIGN.

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CEDD
CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT

Project

AGREEMENT NO. CE31 / 2014(CE)
ENGINEERING STUDY FOR POLICE FACILITIES IN KONG NGA PO - FEASIBILITY STUDY

Title

LANDSCAPE AND VISUAL MITIGATION MEASURES - PLAN

Designed	KC		Eng check	MT	
Drawn	CCH		Coordination	LL	
Dwg check	KC		Approved	SHC	
Scale at A1	1:2000	Status	PRE	Rev	P1

Drawing Number

FIGURE 10-21

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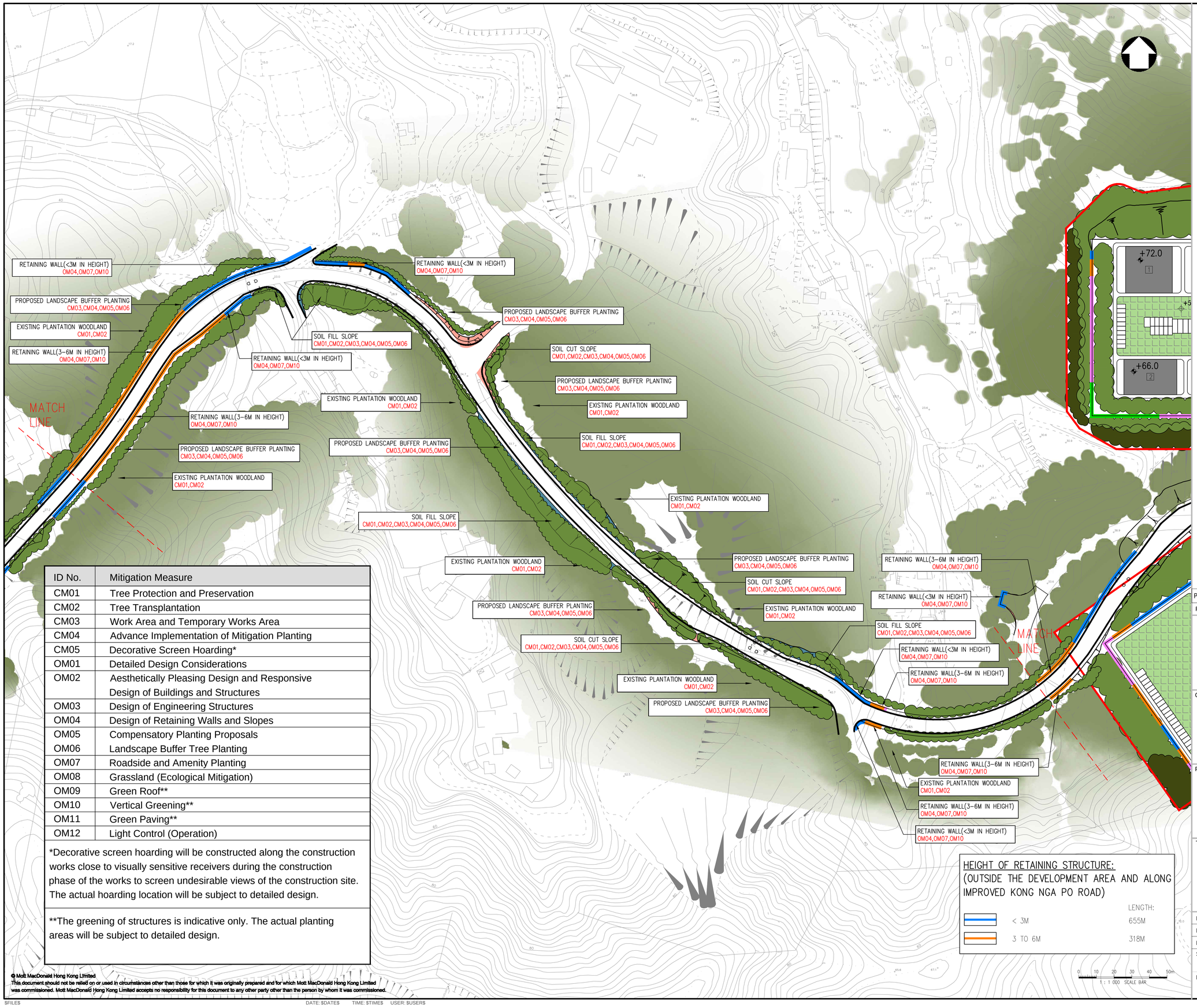

ID No.	Mitigation Measure
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OM10	Vertical Greening**
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OM12	Light Control (Operation)

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**The greening of structures is indicative only. The actual planting areas will be subject to detailed design.

HEIGHT OF RETAINING STRUCTURE:
(OUTSIDE THE DEVELOPMENT AREA AND ALONG IMPROVED KONG NGA PO ROAD)

	LENGTH:
< 3M	655M
3 TO 6M	318M

0 10 20 30 40 50m
1 : 1 000 SCALE BAR

LEGEND:

- PROPOSED KONG NGA PO DEVELOPMENT AREA
- PROPOSED KONG NGA PO ROAD IMPROVEMENT WORKS
- PROPOSED BUILDINGS AND STRUCTURES
- HEIGHT OF PROPOSED BUILDINGS (NUMBER OF STOREYS)
- INTERNAL CIRCULATION ROADS
- PARKING PROVISION
- NEW CUT SLOPES
- PROPOSED CUTTING SLOPE
- PROPOSED FILLING SLOPE
- EXISTING PLANTATION AND SECONDARY WOODLAND WITHIN THE PROJECT BOUNDARY
- EXISTING PLANTATION AND SECONDARY WOODLAND OUTSIDE THE PROJECT BOUNDARY
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- PROPOSED SHRUB-GRASSLAND PLANTING
- PROPOSED LAWN
- PROPOSED ROADSIDE AND AMENITY PLANTING
- PROPOSED BUILDING AND STRUCTURES
- PROPOSED GREEN PAVING

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Title

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Drawn	CCH		Coordination	LL	
Dwg check	KC		Approved	SHC	

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1:1000	PRE	P1

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FIGURE 10-22

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ID No.	Mitigation Measure
CM01	Tree Protection and Preservation
CM02	Tree Transplantation
CM03	Work Area and Temporary Works Area
CM04	Advance Implementation of Mitigation Planting
CM05	Decorative Screen Hoarding*
OM01	Detailed Design Considerations
OM02	Aesthetically Pleasing Design and Responsive Design of Buildings and Structures
OM03	Design of Engineering Structures
OM04	Design of Retaining Walls and Slopes
OM05	Compensatory Planting Proposals
OM06	Landscape Buffer Tree Planting
OM07	Roadside and Amenity Planting
OM08	Grassland (Ecological Mitigation)
OM09	Green Roof**
OM10	Vertical Greening**
OM11	Green Paving**
OM12	Light Control (Operation)

*Decorative screen hoarding will be constructed along the construction works close to visually sensitive receivers during the construction phase of the works to screen undesirable views of the construction site. The actual hoarding location will be subject to detailed design.

**The greening of structures is indicative only. The actual planting areas will be subject to detailed design.

MATCH LINE

EXISTING PLANTATION WOODLAND CM01,CM02

SOIL CUT SLOPE CM01,CM02,CM03,CM04,OM05,OM06

RETAINING WALL(<3M IN HEIGHT) OM04,OM07,OM10

PROPOSED LANDSCAPE BUFFER PLANTING CM03,CM04,OM05,OM06

RETAINING WALL(3-6M IN HEIGHT) OM04,OM07,OM10

SOIL FILL SLOPE CM01,CM02,CM03,CM04,OM05,OM06

HEIGHT OF RETAINING STRUCTURE:
(OUTSIDE THE DEVELOPMENT AREA AND ALONG IMPROVED KONG NGA PO ROAD)

	LENGTH:
< 3M	655M
3 TO 6M	318M

0 10 20 30 40 50m
1 : 1 000 SCALE BAR

LEGEND:

- PROPOSED KONG NGA PO DEVELOPMENT AREA
- PROPOSED KONG NGA PO ROAD IMPROVEMENT WORKS
- PROPOSED BUILDINGS AND STRUCTURES
- HEIGHT OF PROPOSED BUILDINGS (NUMBER OF STOREYS)
- INTERNAL CIRCULATION ROADS
- PARKING PROVISION
- NEW CUT SLOPES
- PROPOSED CUTTING SLOPE
- PROPOSED FILLING SLOPE
- EXISTING PLANTATION AND SECONDARY WOODLAND WITHIN THE PROJECT BOUNDARY
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- PROPOSED LANDSCAPE BUFFER PLANTING
- PROPOSED SHRUB-GRASSLAND PLANTING
- PROPOSED LAWN
- PROPOSED ROADSIDE AND AMENITY PLANTING
- PROPOSED BUILDING AND STRUCTURES
- PROPOSED GREEN PAVING

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AGREEMENT NO. CE31 / 2014(CE) ENGINEERING STUDY FOR POLICE FACILITIES IN KONG NGA PO - FEASIBILITY STUDY

Title

LANDSCAPE AND VISUAL MITIGATION MEASURES - PLAN

Designed	KC		Eng check	MT	
Drawn	CCH		Coordination	LL	
Dwg check	KC		Approved	SHC	

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FIGURE 10-23

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ID No.	Mitigation Measure
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CM05	Decorative Screen Hoarding*
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OM03	Design of Engineering Structures
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OM05	Compensatory Planting Proposals
OM06	Landscape Buffer Tree Planting
OM07	Roadside and Amenity Planting
OM08	Grassland (Ecological Mitigation)
OM09	Green Roof**
OM10	Vertical Greening**
OM11	Green Paving**
OM12	Light Control (Operation)

*Decorative screen hoarding will be constructed along the construction works close to visually sensitive receivers during the construction phase of the works to screen undesirable views of the construction site. The actual hoarding location will be subject to detailed design.

**The greening of structures is indicative only. The actual extent of the planting will be subject to the detailed design of the structures.

WEAPONS TRAINING FACILITIES
20 NOS. PRIVATE CAR PARKING SPACE
4 NOS. LIGHT BUS PARKING SPACE
1 NO. ACCESSIBLE PARKING SPACE

10M GREENING BUFFER ZONE

SEWAGE PUMPING STATION

PROPOSED POLICE TRAINING FACILITY
20 NOS. PRIVATE CAR PARKING SPACE
4 NOS. LIGHT BUS PARKING SPACE
1 NO. ACCESSIBLE PARKING SPACE

MUTI-STOREY TRAINING COMPLEX
20 NOS. PRIVATE CAR PARKING SPACE,
1 NOS. LOADING/UNLOADING AREA

FIRING RANGE B (FOR THE REPROVISION OF MA TSO LUNG FIRING RANGE)
4 NOS. PRIVATE CAR PARKING SPACE
2 NOS. LIGHT BUS PARKING SPACE
1 NO. ACCESSIBLE PARKING SPACE

MOTOCYCLE SHED

COVERED PARKING SPACE
11 NOS. PRIVATE CAR PARKING SPACE

COVERED PARKING SPACE
3 NOS. PRIVATE CAR PARKING SPACE
2 NOS. LGV PARKING SPACE
16 NOS. LIGHT BUS PARKING SPACE

TWO WHEELED DRIVING TRAINING FACILITIES

FIRING RANGE A (FOR THE REPROVISION OF LO WU FIRING RANGE)
6 NOS. PRIVATE CAR PARKING SPACE
4 NOS. LIGHT BUS PARKING SPACE
1 NO. ACCESSIBLE PARKING SPACE

COVERED PARKING SPACE
10 NOS. LGV PARKING SPACE,
1 NOS. TRAILER PARKING SPACE

HELIPAD

COVERED PARKING SPACE
12 NOS. PRIVATE CAR PARKING SPACE

PARKING AND TRAINING FACILITIES

SKID PAN FACILITIES

FOUR WHEELED DRIVING TRAINING FACILITIES

FOUR WHEELED DRIVING TRAINING FACILITIES

PETROL/DIESEL FILLING STATION WITH VEHICLE WASHING AREA AND VEHICLE CHARGING AREA

TWO WHEELED DRIVING TRAINING FACILITIES

LEGEND:

- PROPOSED BUILDINGS AND STRUCTURES
- INTERNAL CIRCULATION ROADS
- PARKING PROVISION

MITIGATION MEASURES:

- CM01, CM02
- CM04, OM08, OM05, OM06
- CM04, OM08
- CM04, CM08, OM10, OM11
- OM05, OM07
- OM01, OM02, OM03, OM09, OM10, OM12
- OM01, OM02, OM03, OM04, OM06, OM10
- OM01, OM02, OM11, OM12

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Project

AGREEMENT NO. CE31 / 2014(CE) ENGINEERING STUDY FOR POLICE FACILITIES IN KONG NGA PO - FEASIBILITY STUDY

Title

LANDSCAPE AND VISUAL MITIGATION MEASURES - OBLIQUE AERIAL VIEW

Designed	KC		Eng check	MT	
Drawn	CCH		Coordination	LL	
Dwg check	KC		Approved	SHC	
Scale at A1	N.T.S.	Status	PRE	Rev	P1

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FIGURE 10-24

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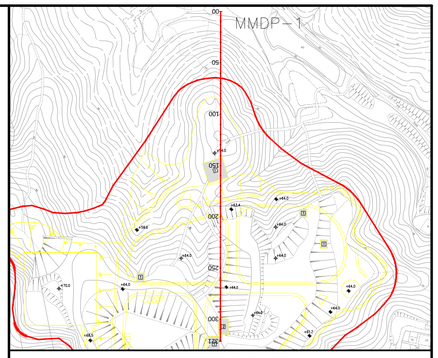

LOCATION PLAN
N.T.S.

LEGEND:

- PROPOSED BUILDINGS AND STRUCTURES
- PROPOSED ROAD
- RETAINING WALLS
- PRESERVED WOODLAND
- PROPOSED WOODLAND BUFFER PLANTING
- PROPOSED SHRUB PLANTING
- PROPOSED AMENITY TREE AND SHRUB PLANTING
- PROPOSED SHRUB-GRASSLAND
- PROPOSED GREEN PAVING
- PROPOSED GREEN ROOFS
- PROPOSED VERTICAL GREENING (CLIMBING PLANTS)

Rev	Date	Drawn	Description	Ch'k'd	App'd
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Project

AGREEMENT NO. CE31 / 2014(CE) ENGINEERING STUDY FOR POLICE FACILITIES IN KONG NGA PO - FEASIBILITY STUDY

Title

LANDSCAPE AND VISUAL MITIGATION MEASURES - SECTIONS

Designed	KC		Eng check	MT	
Drawn	CCH		Coordination	LL	
Dwg check	KC		Approved	SHC	
Scale at A1	1:400	Status	PRE	Rev	P1

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FIGURE 10-25

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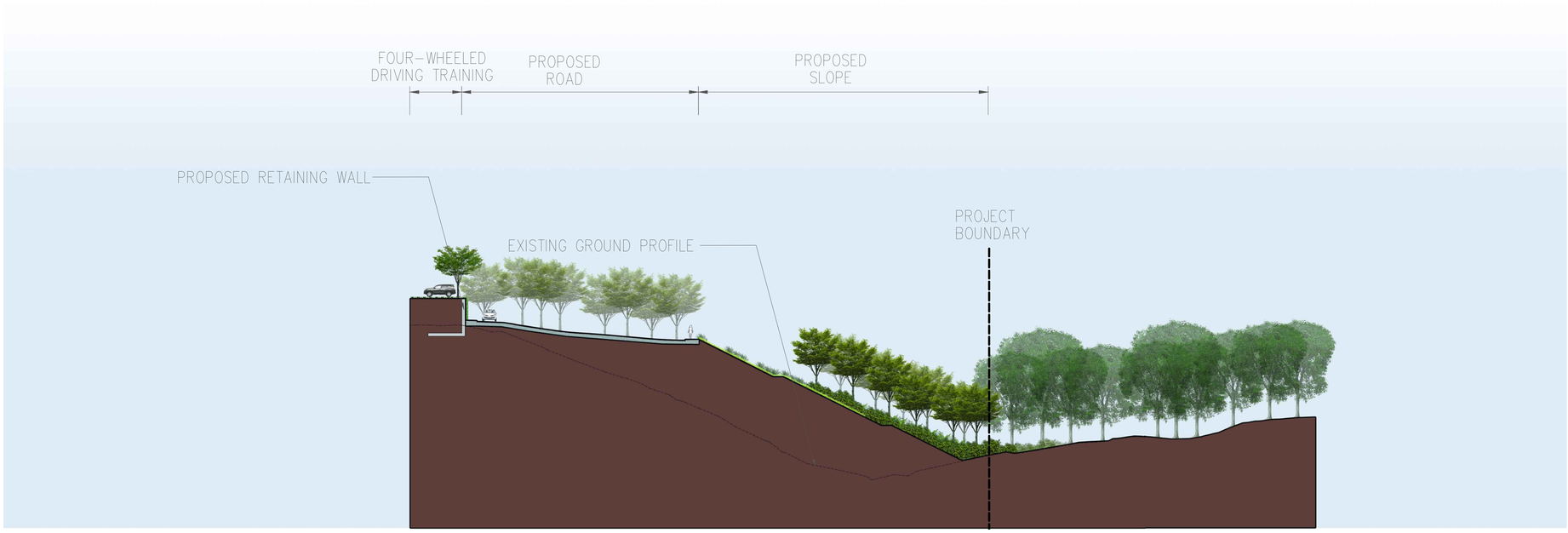

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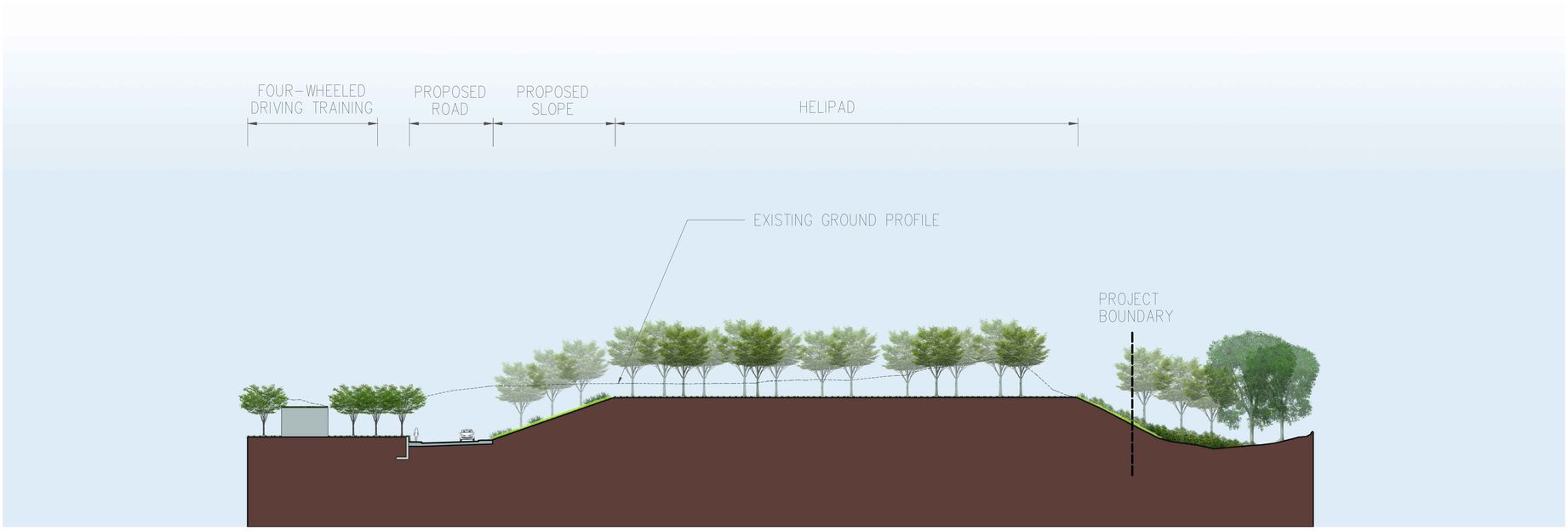

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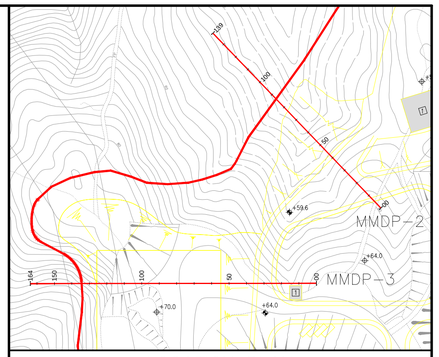

LOCATION PLAN
N.T.S.

LEGEND:

- PROPOSED BUILDINGS AND STRUCTURES
- PROPOSED ROAD
- RETAINING WALLS
- PRESERVED WOODLAND
- PROPOSED WOODLAND BUFFER PLANTING
- PROPOSED SHRUB PLANTING
- PROPOSED AMENITY TREE AND SHRUB PLANTING
- PROPOSED SHRUB–GRASSLAND
- PROPOSED GREEN PAVING
- PROPOSED GREEN ROOFS
- PROPOSED VERTICAL GREENING (CLIMBING PLANTS)

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LANDSCAPE AND VISUAL MITIGATION MEASURES - SECTIONS

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FIGURE 10-26

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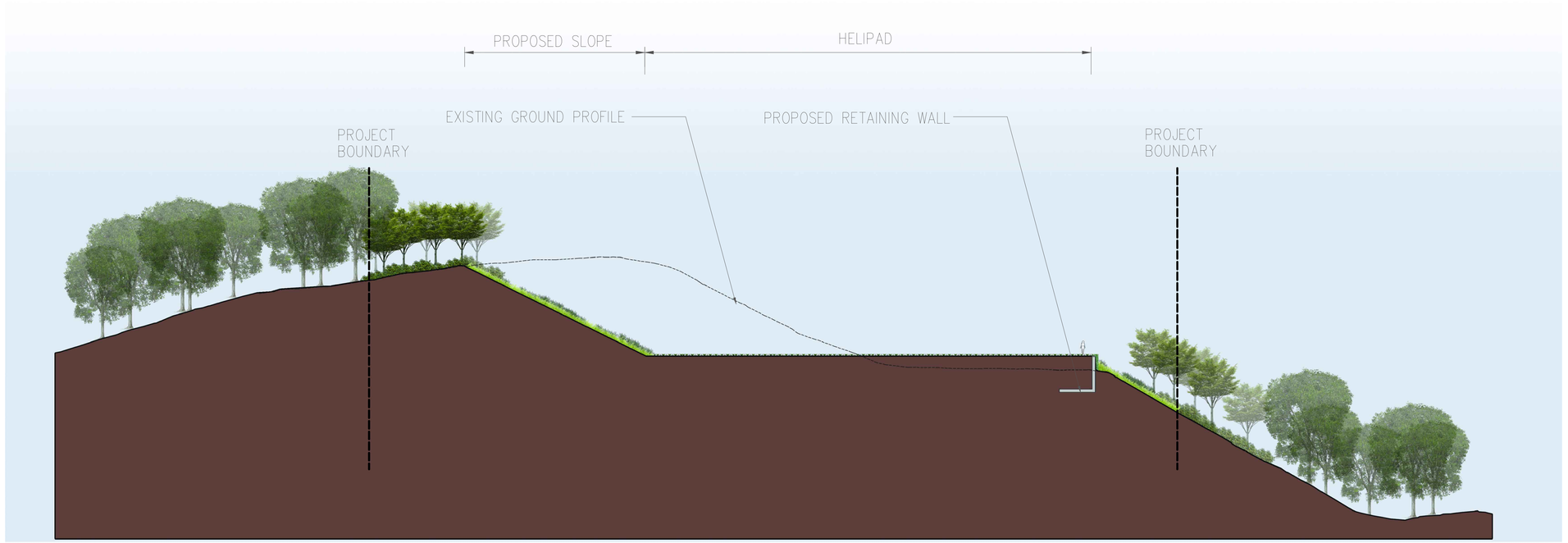

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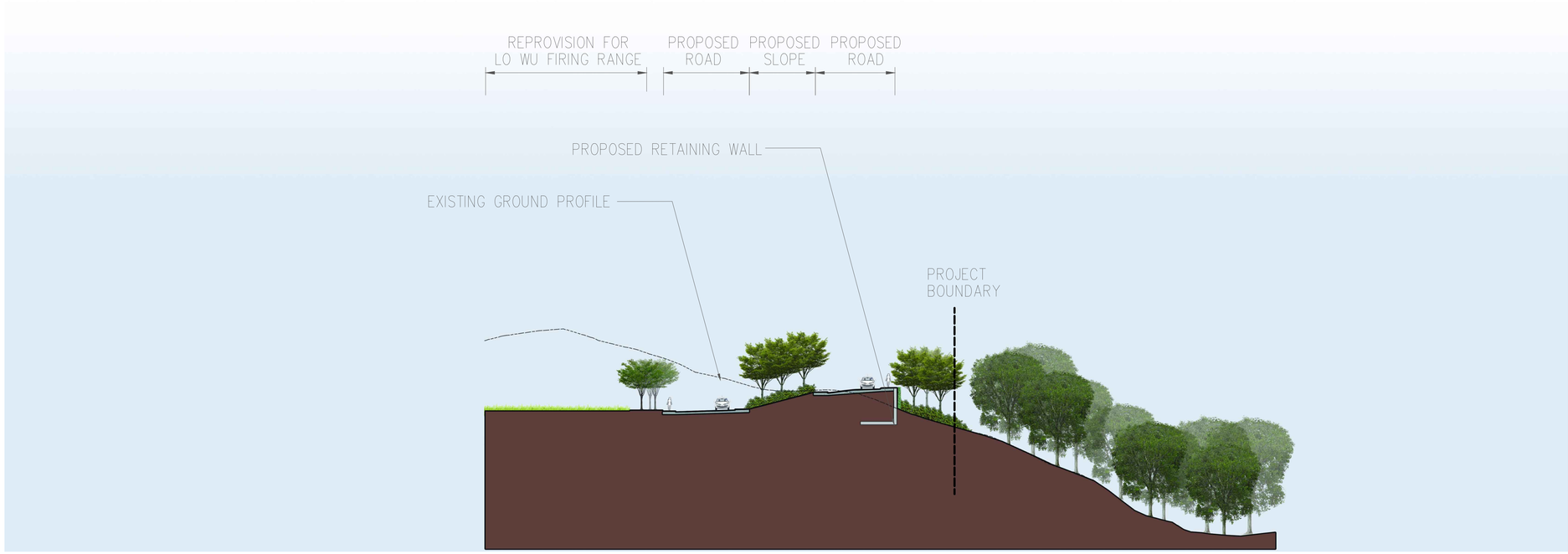

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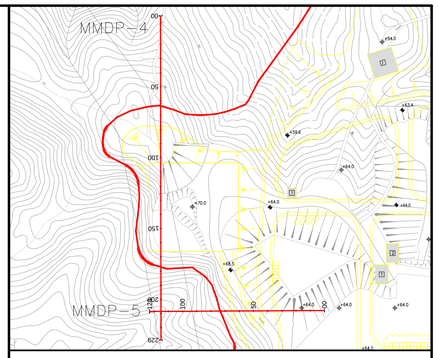

LOCATION PLAN
N.T.S.

LEGEND:

- PROPOSED BUILDINGS AND STRUCTURES
- PROPOSED ROAD
- RETAINING WALLS
- PRESERVED WOODLAND
- PROPOSED WOODLAND BUFFER PLANTING
- PROPOSED SHRUB PLANTING
- PROPOSED AMENITY TREE AND SHRUB PLANTING
- PROPOSED SHRUB–GRASSLAND
- PROPOSED GREEN PAVING
- PROPOSED GREEN ROOFS
- PROPOSED VERTICAL GREENING (CLIMBING PLANTS)

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FIGURE 10-27

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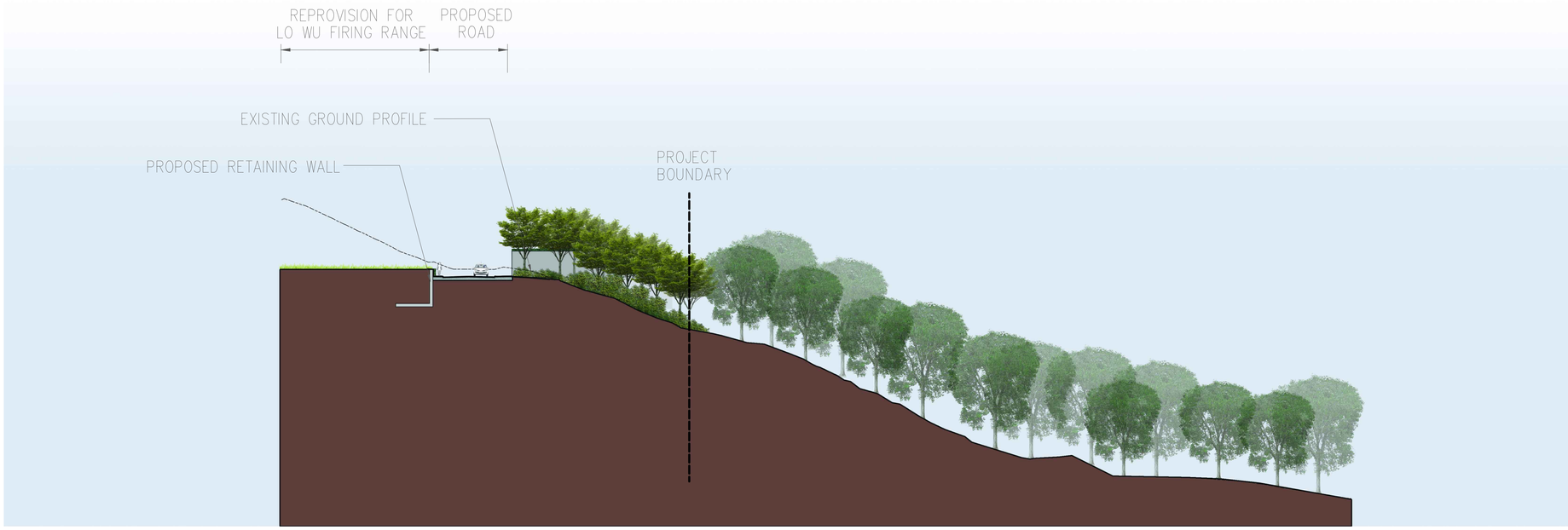

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Section MMDP-7

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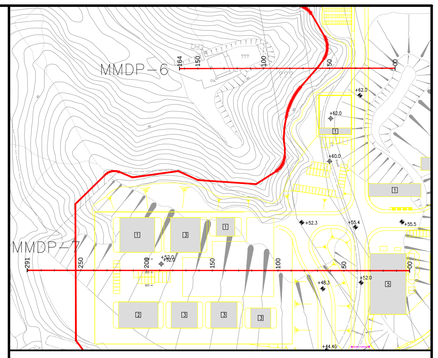

LOCATION PLAN
N.T.S.

LEGEND:

- PROPOSED BUILDINGS AND STRUCTURES
- PROPOSED ROAD
- RETAINING WALLS
- PRESERVED WOODLAND
- PROPOSED WOODLAND BUFFER PLANTING
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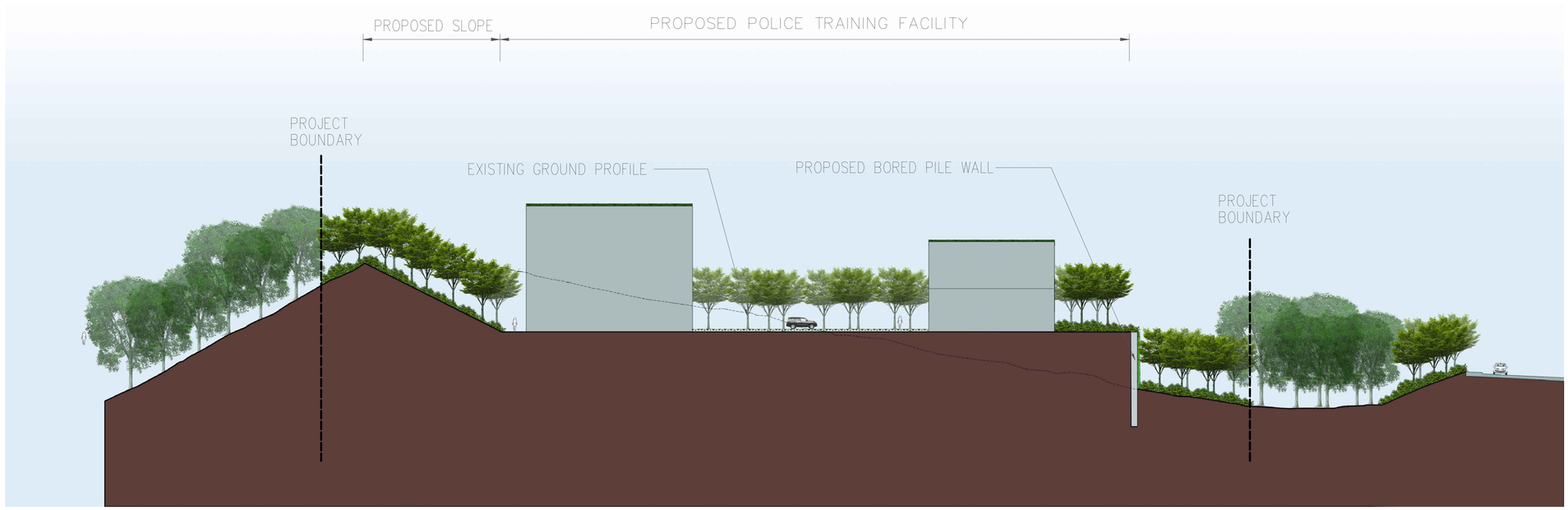
FIGURE 10-28



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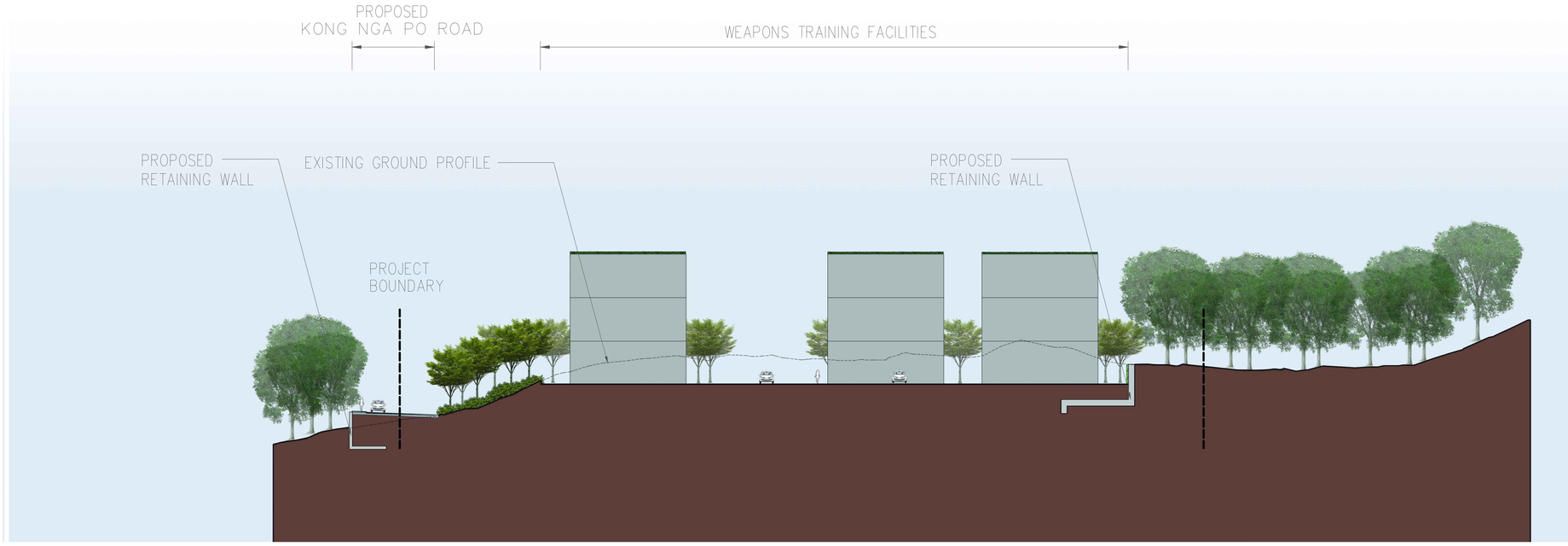

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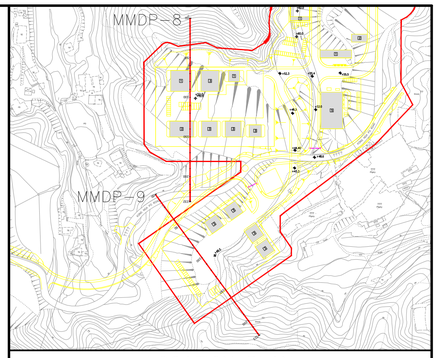

LOCATION PLAN
N.T.S.

LEGEND:

- PROPOSED BUILDINGS AND STRUCTURES
- PROPOSED ROAD
- RETAINING WALLS
- PRESERVED WOODLAND
- PROPOSED WOODLAND BUFFER PLANTING
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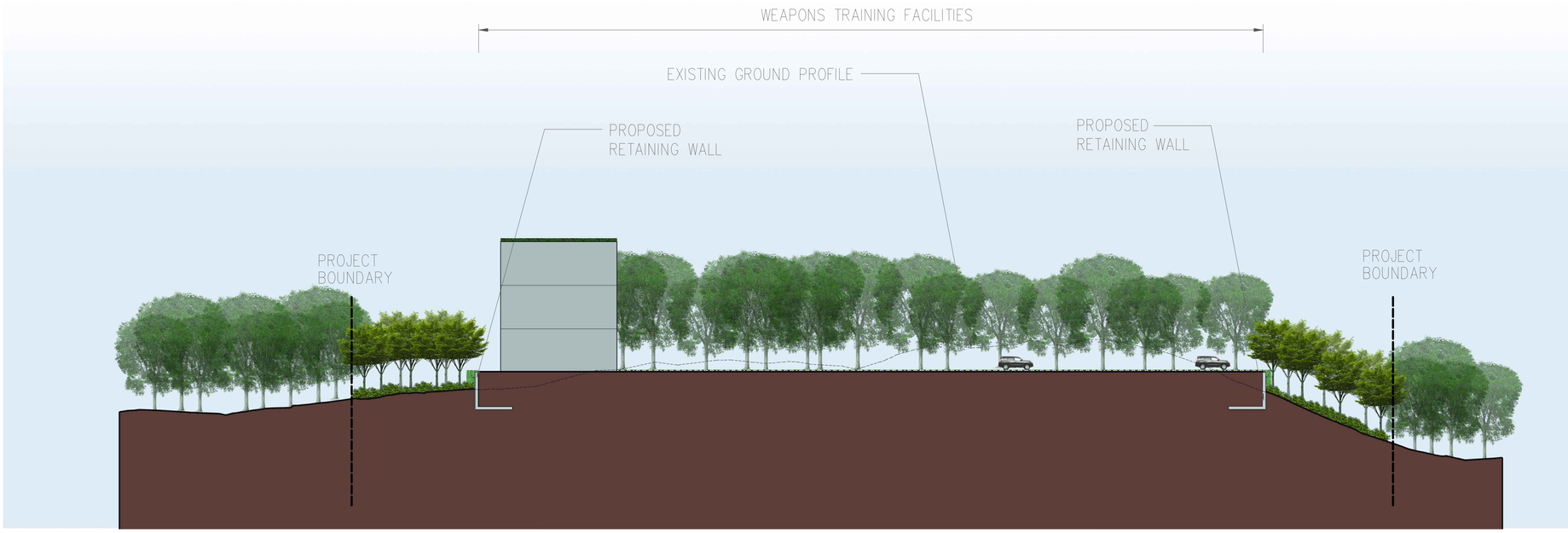
FIGURE 10-29



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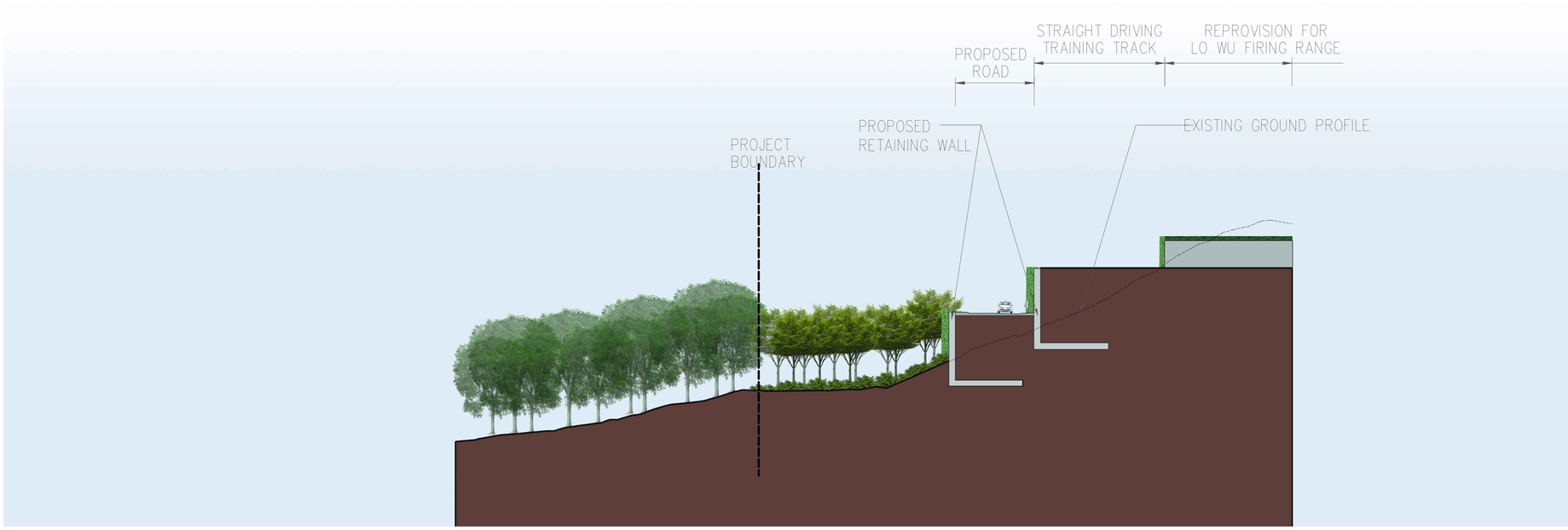

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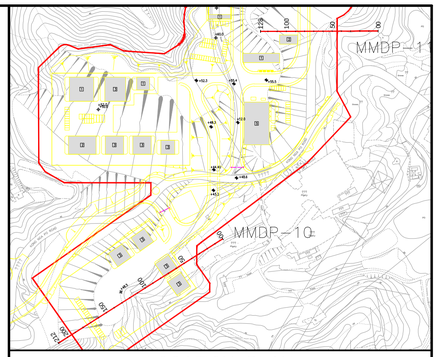

LOCATION PLAN
N.T.S.

LEGEND:

- PROPOSED BUILDINGS AND STRUCTURES
- PROPOSED ROAD
- RETAINING WALLS
- PRESERVED WOODLAND
- PROPOSED WOODLAND BUFFER PLANTING
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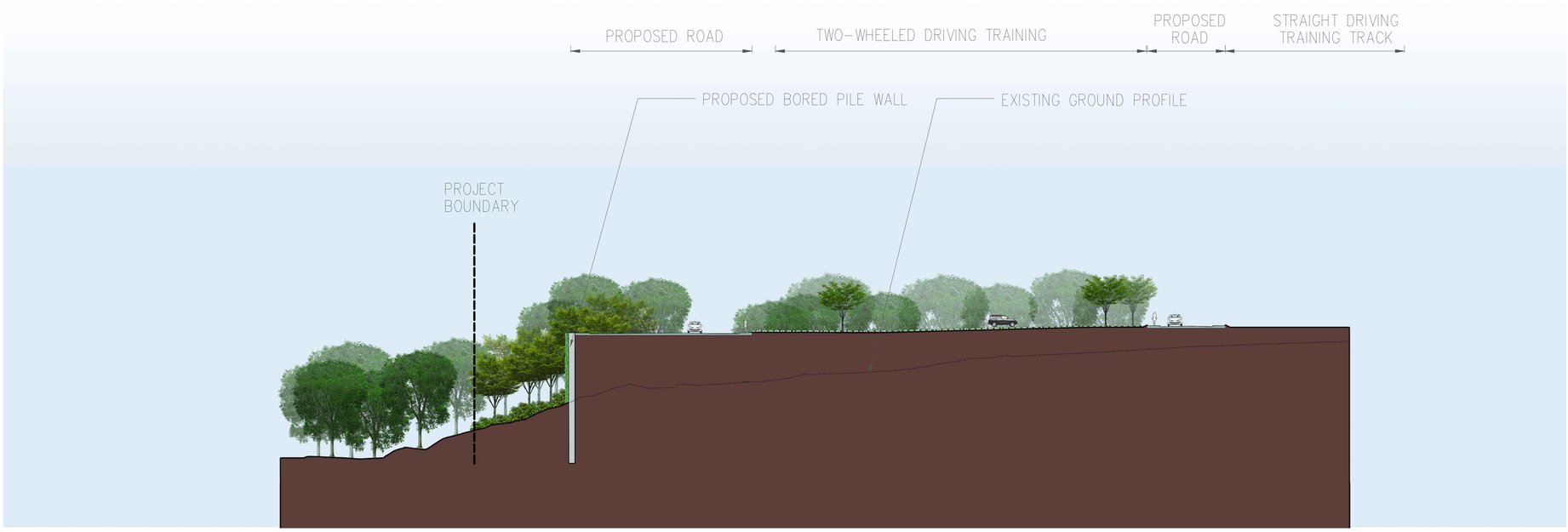
Drawing Number

FIGURE 10-30



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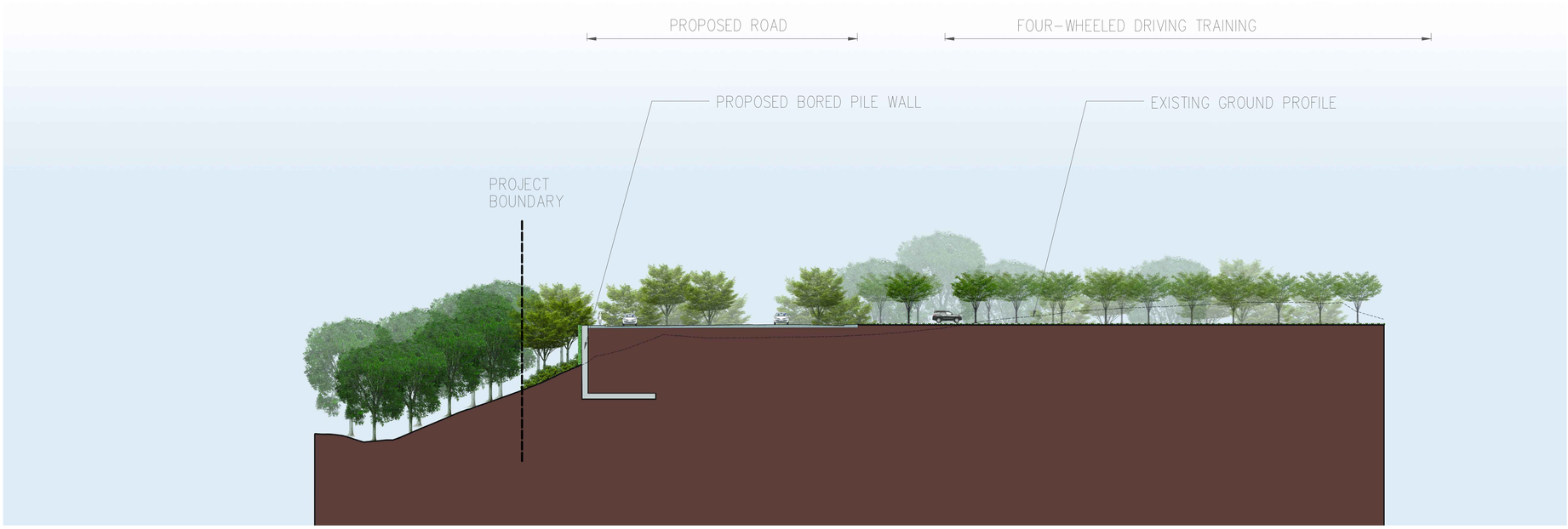

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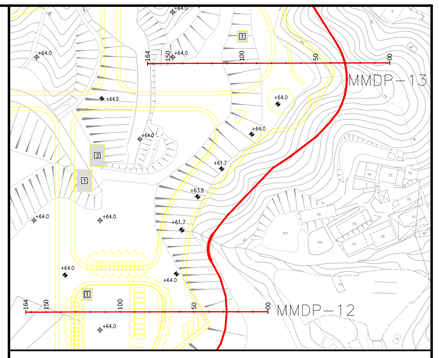

LOCATION PLAN
N.T.S.

LEGEND:

- PROPOSED BUILDINGS AND STRUCTURES
- PROPOSED ROAD
- RETAINING WALLS
- PRESERVED WOODLAND
- PROPOSED WOODLAND BUFFER PLANTING
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FIGURE 10-31

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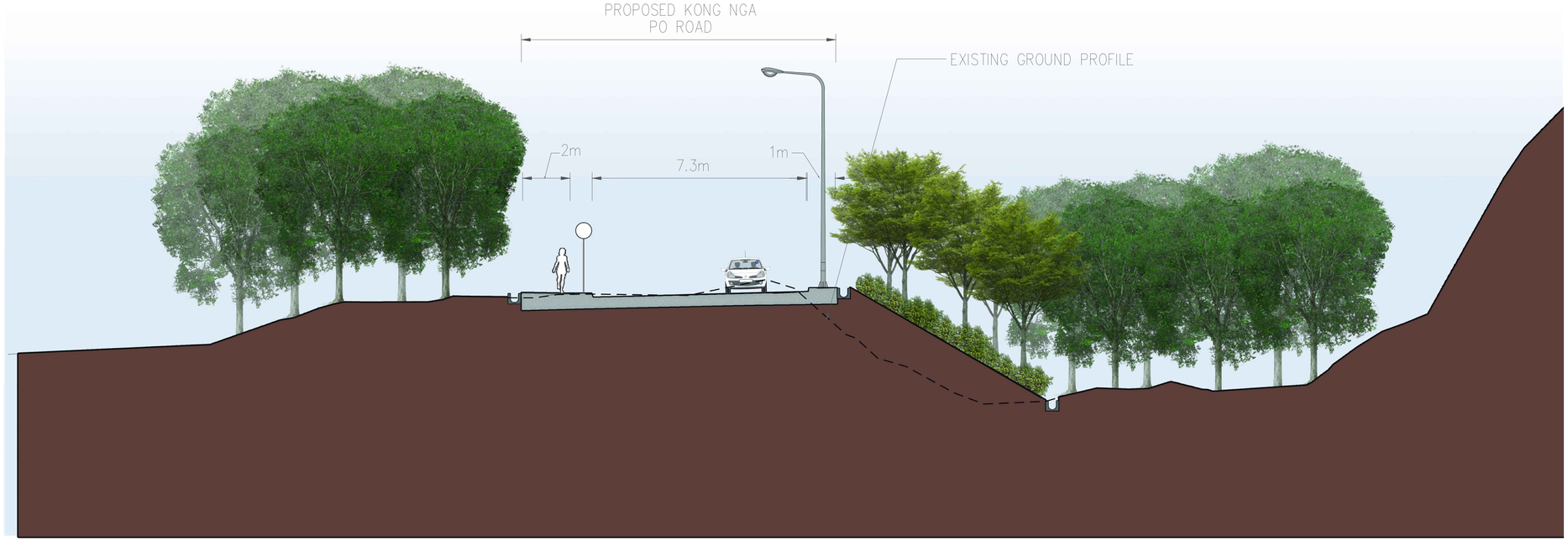

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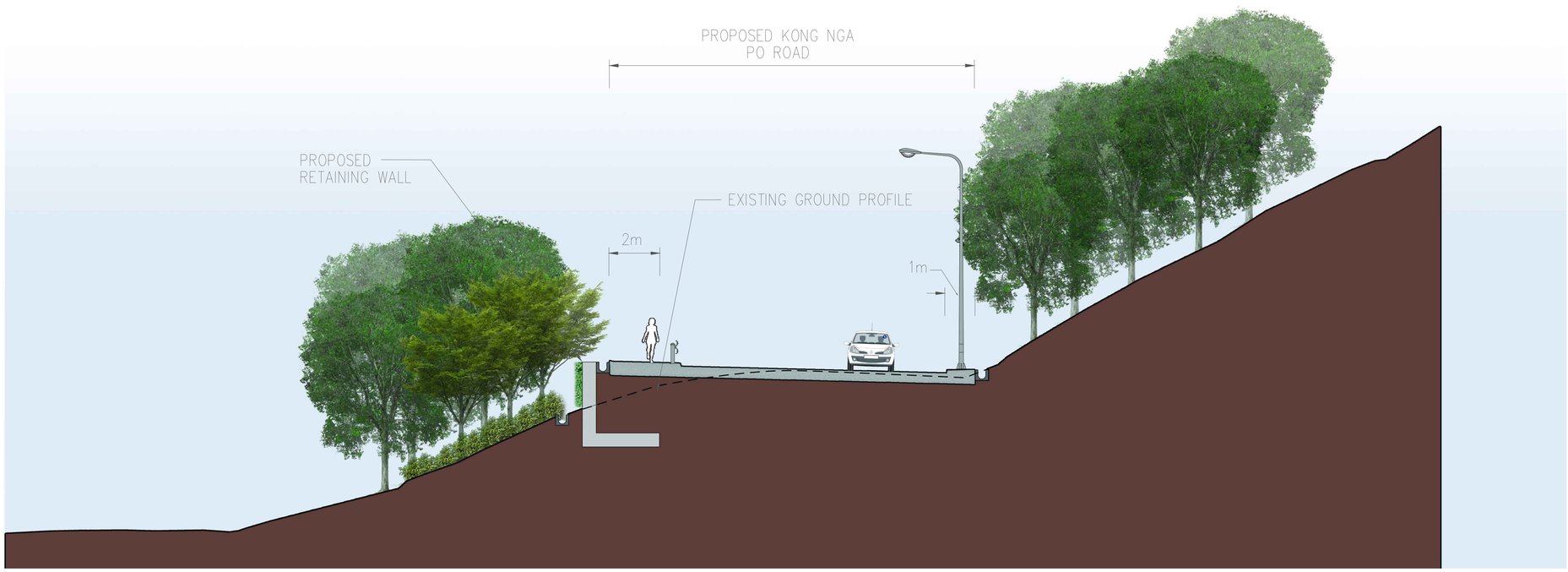

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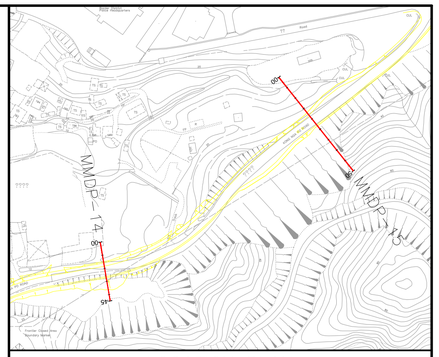

LOCATION PLAN
N.T.S.

LEGEND:

- PROPOSED KNP ROAD
- RETAINING WALLS
- PRESERVED WOODLAND
- PROPOSED WOODLAND BUFFER PLANTING
- PROPOSED SHRUB PLANTING
- PROPOSED VERTICAL GREENING (CLIMBING PLANTS)

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FIGURE 10-32

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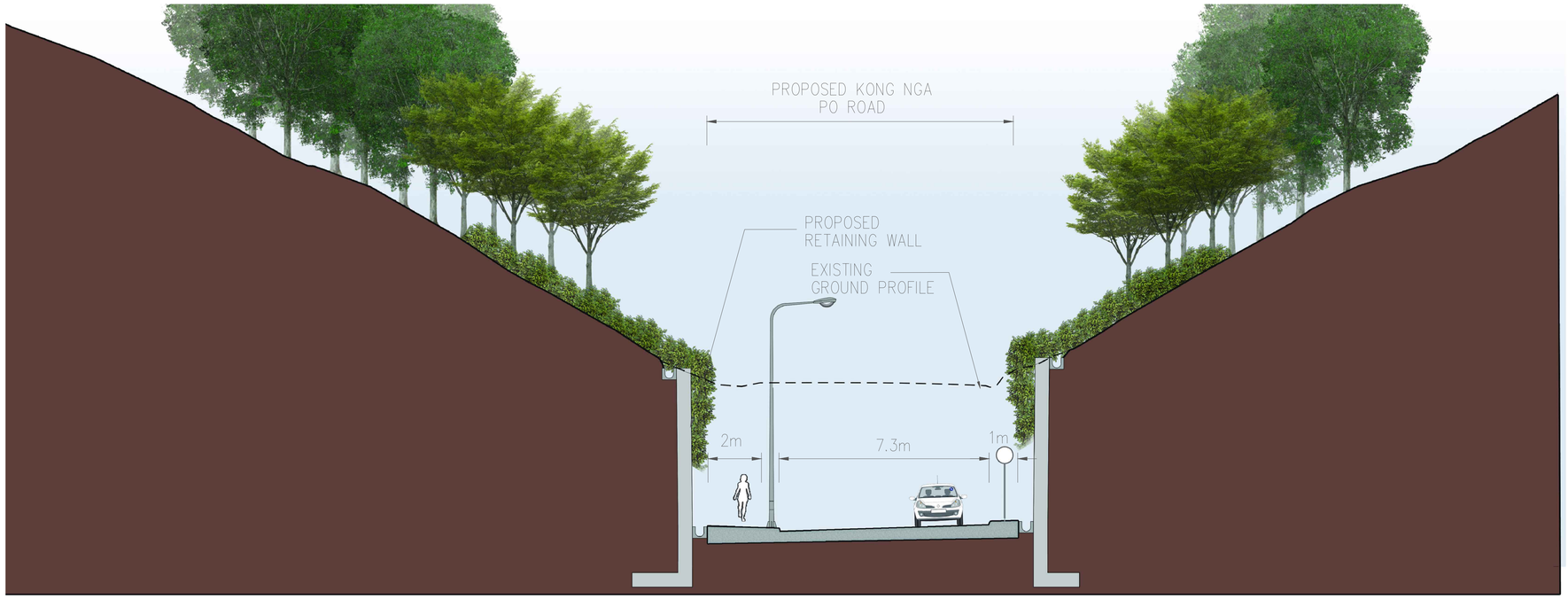

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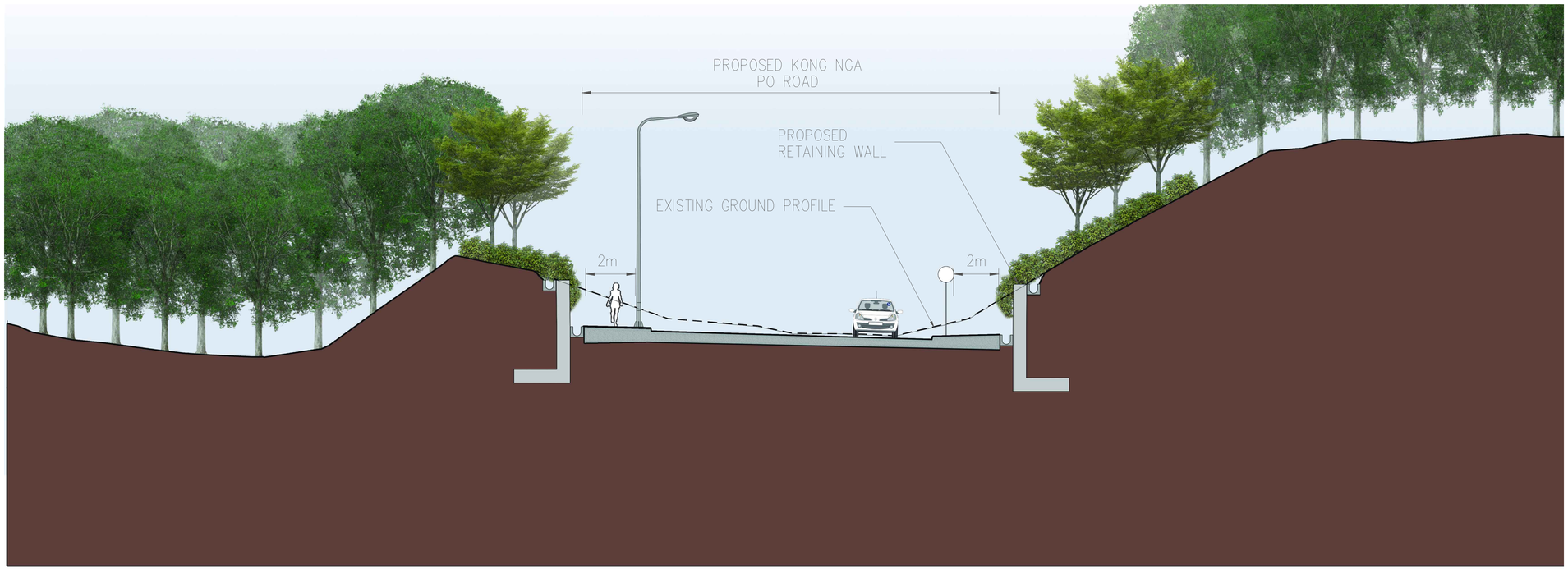

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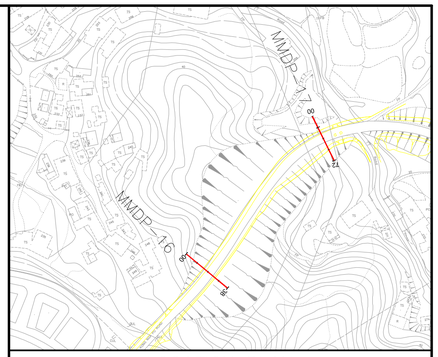

LOCATION PLAN
N.T.S.

LEGEND:

- PROPOSED KNP ROAD
- RETAINING WALLS
- PRESERVED WOODLAND
- PROPOSED WOODLAND BUFFER PLANTING
- PROPOSED SHRUB PLANTING
- PROPOSED VERTICAL GREENING (CLIMBING PLANTS)

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Dwg check	KC		Approved	SHC	
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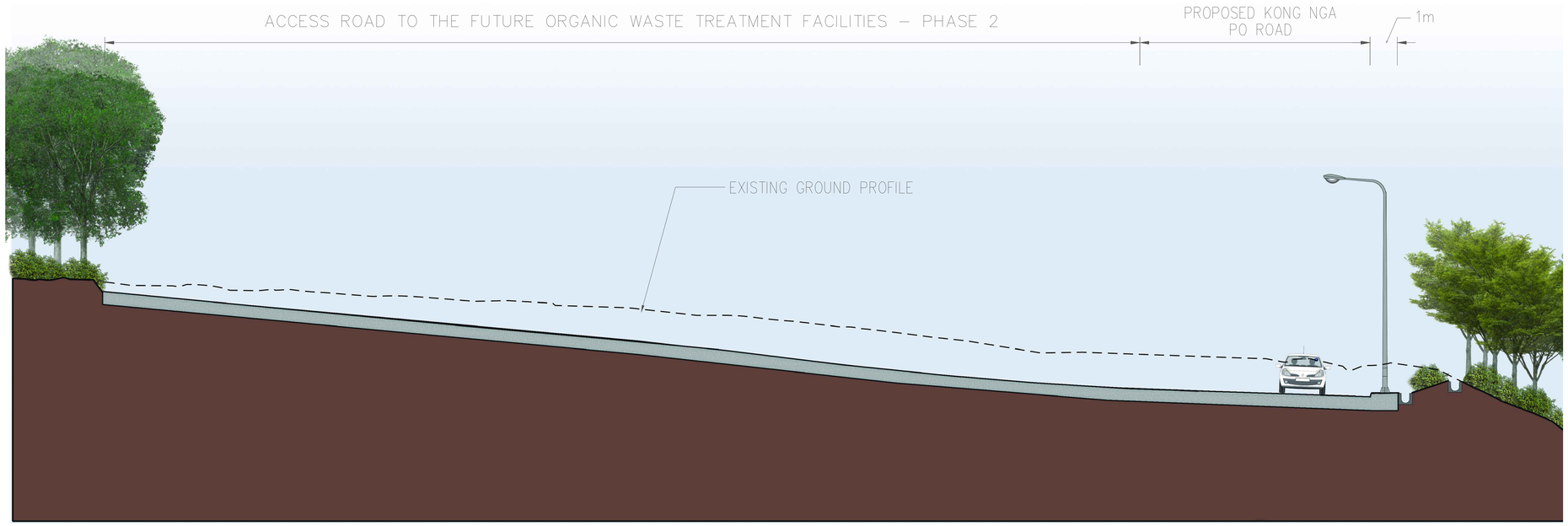
FIGURE 10-33



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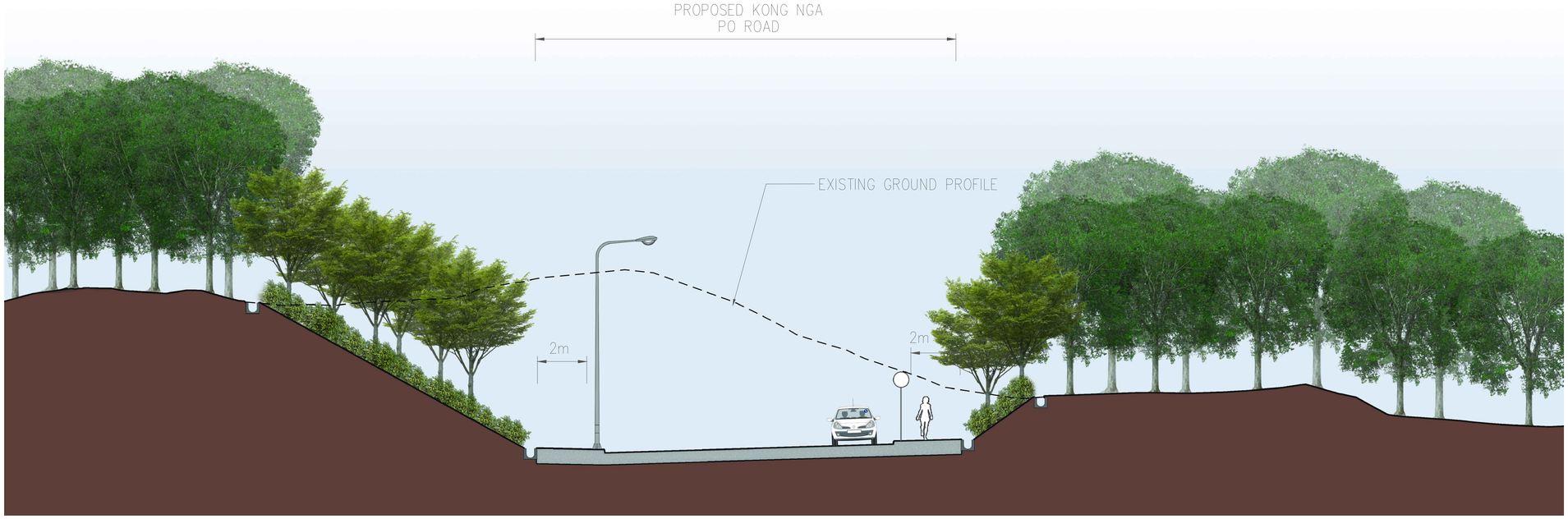

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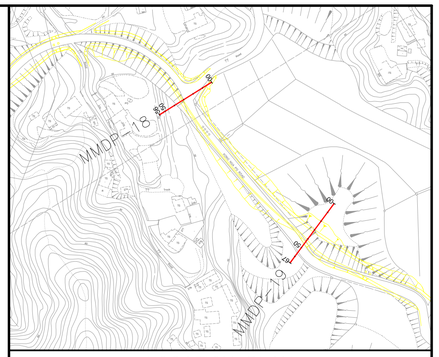

LOCATION PLAN
N.T.S.

LEGEND:

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- RETAINING WALLS
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AGREEMENT NO. CE31 / 2014(CE) ENGINEERING STUDY FOR POLICE FACILITIES IN KONG NGA PO - FEASIBILITY STUDY

Title

LANDSCAPE AND VISUAL MITIGATION MEASURES - SECTIONS

Designed	KC		Eng check	MT	
Drawn	CCH		Coordination	LL	
Dwg check	KC		Approved	SHC	
Scale at A1	1:100	Status	PRE	Rev	P1

Drawing Number

FIGURE 10-34

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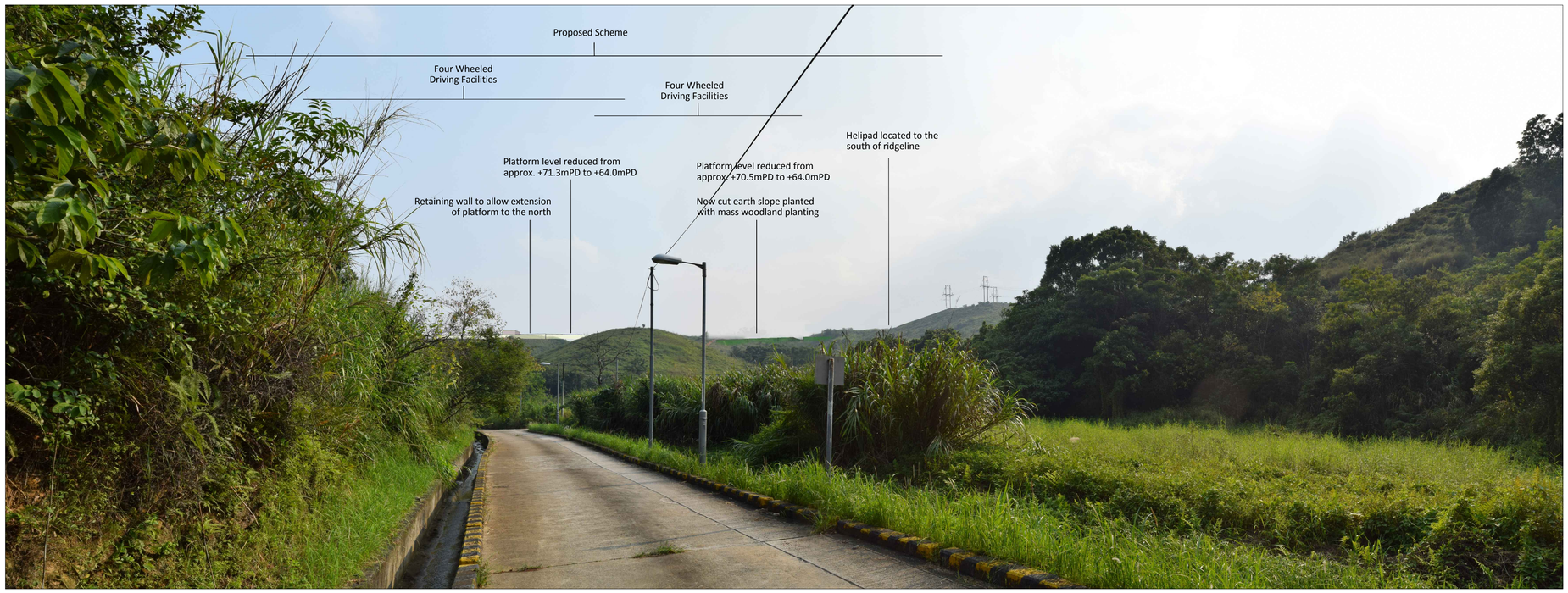
Vantage Point 01: View looking south for vehicle travellers and pedestrians on small rural road (VSR1.1) (Existing Situation)



Vantage Point 01: View looking south for vehicle travellers and pedestrians on small rural road (VSR1.1) (Day 1 with no mitigation measures)

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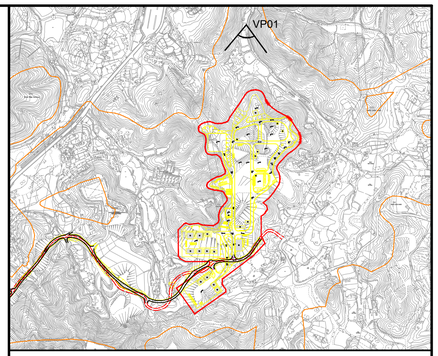

LOCATION PLAN
N.T.S.

Vantage Point 01 (VP01)

Vantage Point Elevation: +15.6mPD
Viewing distance: 180m
Maximum Height of Proposed Scheme: +75.5mPD

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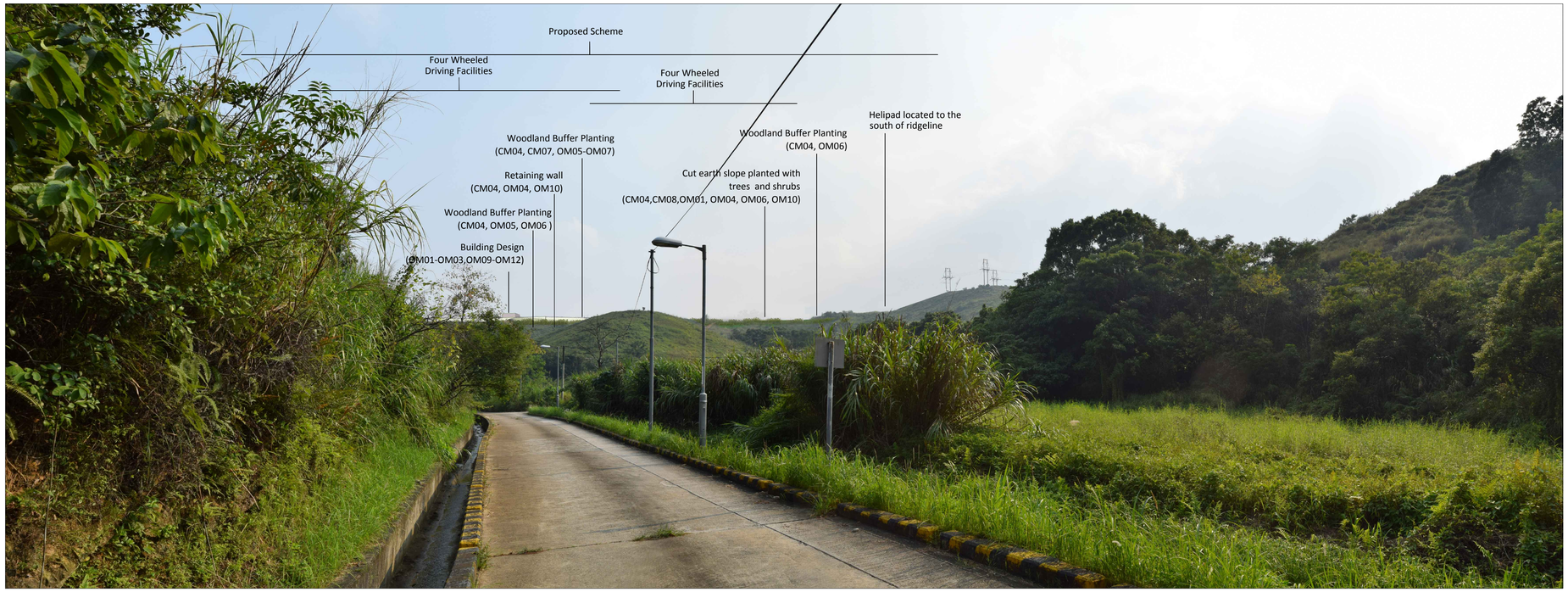
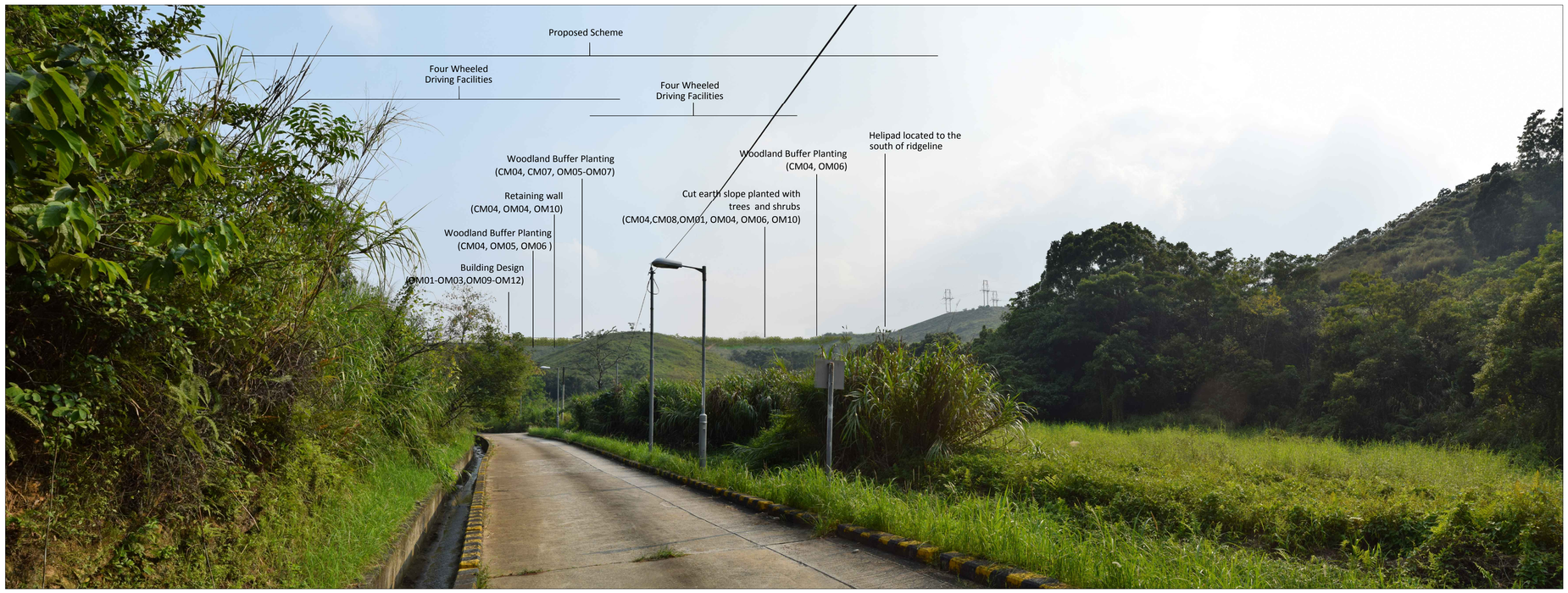
Title
LANDSCAPE AND VISUAL MITIGATION MEASURES - PHOTOMONTAGE

Designed	KC		Eng check	MT	
Drawn	CCH		Coordination	LL	
Dwg check	KC		Approved	SHC	
Scale at A1 N.T.S.		Status PRE		Rev P1	

Drawing Number
FIGURE 10-39



Vantage Point 01: View looking south for vehicle travellers and pedestrians on small rural road (VSR1.1) (Day 1 with mitigation measures)



Vantage Point 01: View looking south for vehicle travellers and pedestrians on small rural road (VSR1.1) (Year 10 with mitigation measures)

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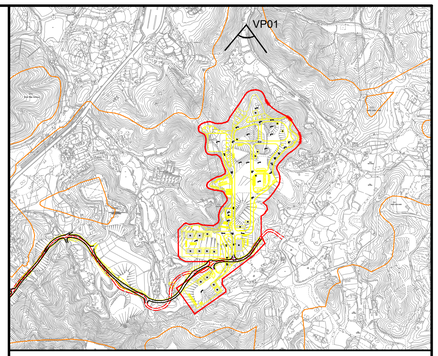

LOCATION PLAN
N.T.S.

Vantage Point 01 (VP01)

Vantage Point Elevation: +15.6mPD
Viewing distance: 180m
Maximum Height of Proposed Scheme: +75.5mPD

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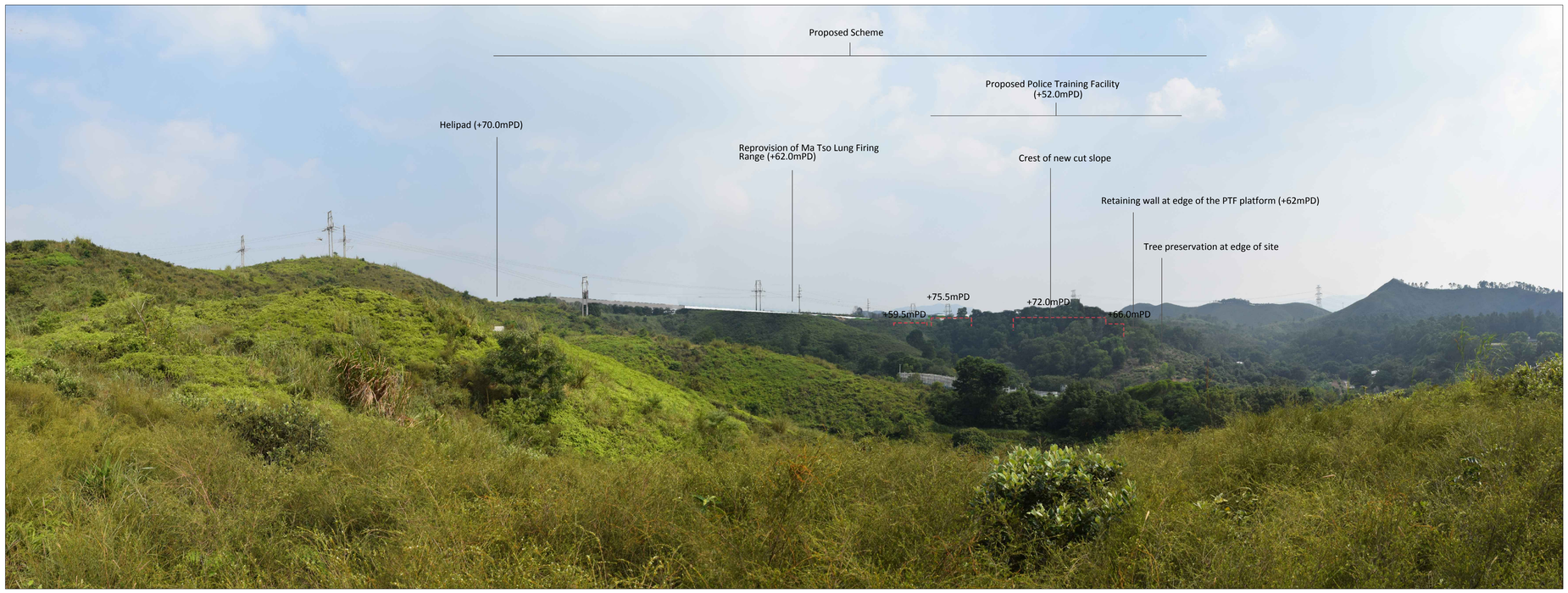
Dwg check	KC		Approved	SHC	
Scale at A1 N.T.S.		Status PRE		Rev P1	

Drawing Number
FIGURE 10-40

Vantage Point 02: View looking south east for pedestrians using hill top footpath by grave sites (VSR1.2) (Existing Situation)



Vantage Point 02: View looking south east for pedestrians using hill top footpath by grave sites (VSR1.2) (Day 1 with no mitigation measures)

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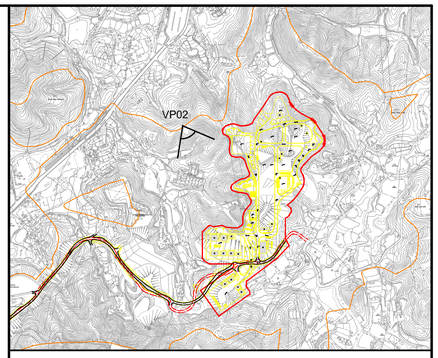

LOCATION PLAN
N.T.S.

Vantage Point 02 (VP02)

Vantage Point Elevation: +53.4mPD
Viewing distance: 100m
Maximum Height of Proposed Scheme: +75.5mPD

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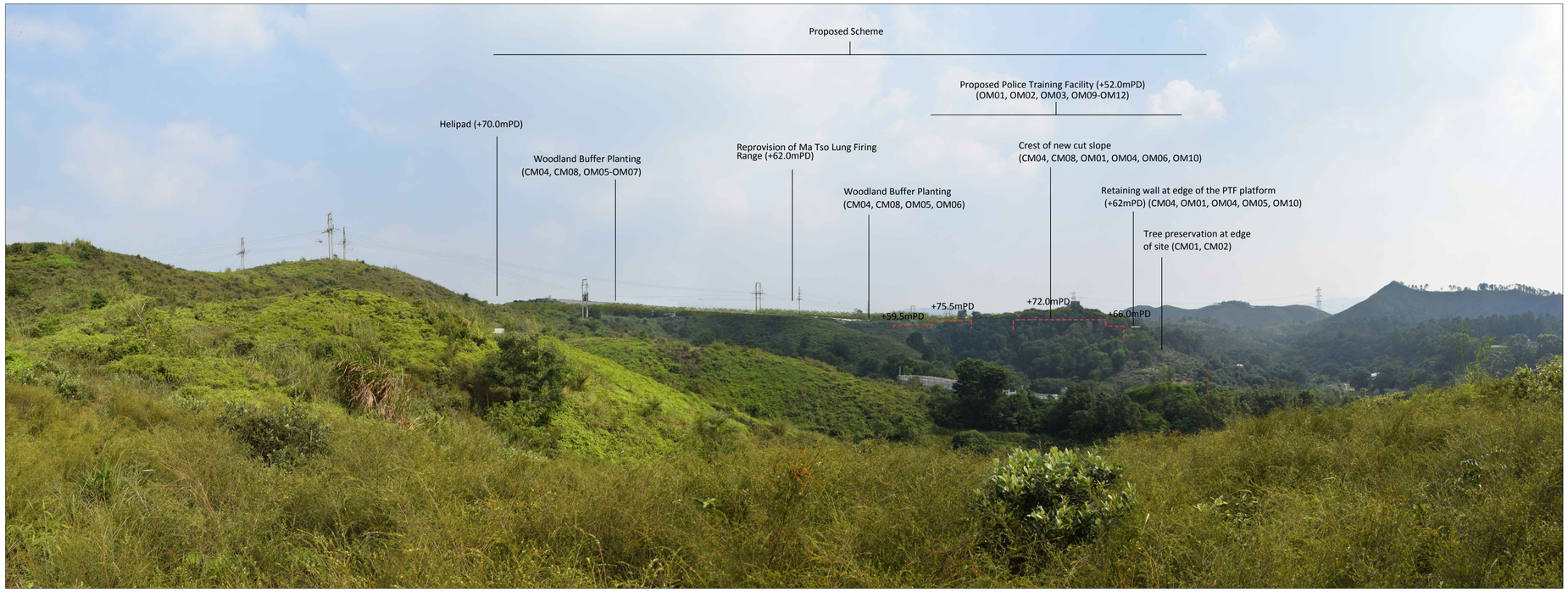
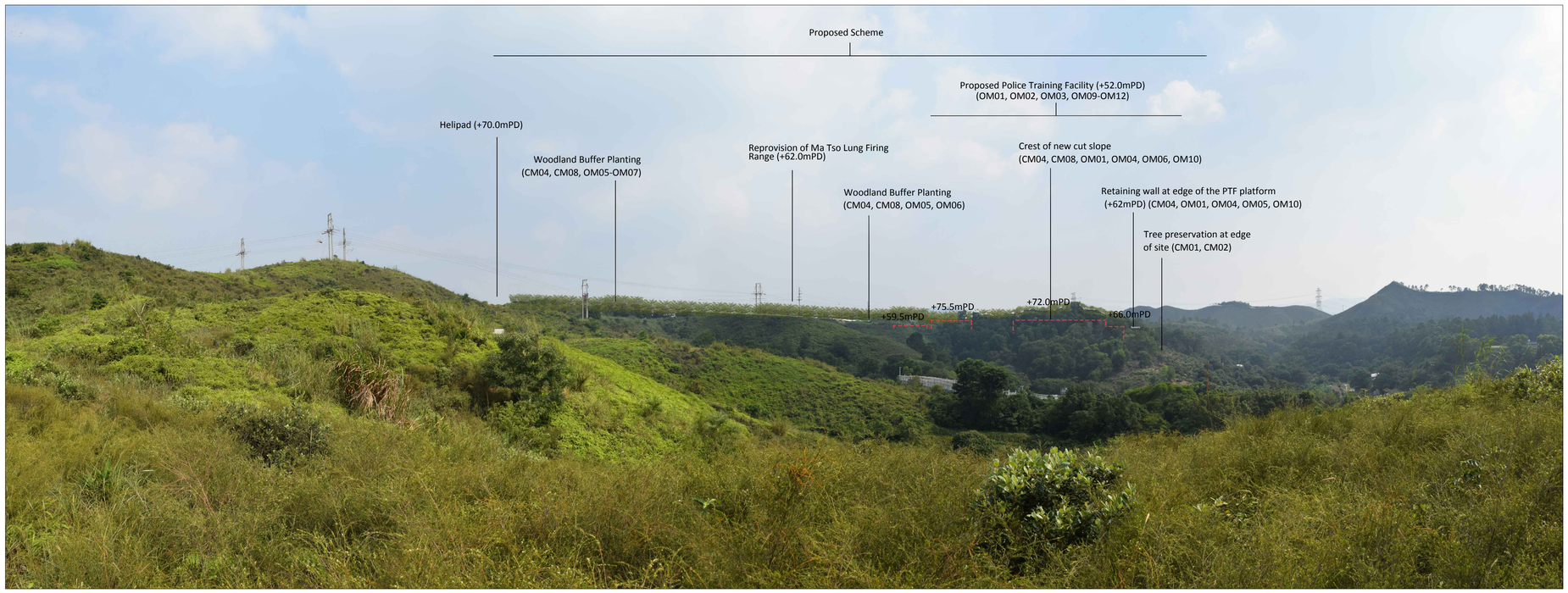
Dwg check	KC		Approved	SHC	
Scale at A1	N.T.S.	Status	PRE	Rev	P1

Drawing Number
FIGURE 10-41



Vantage Point 02: View looking south east for pedestrians using hill top footpath by grave sites (VSR1.2) (Day 1 with mitigation measures)



Vantage Point 02: View looking south east for pedestrians using hill top footpath by grave sites (VSR1.2) (Year 10 with mitigation measures)

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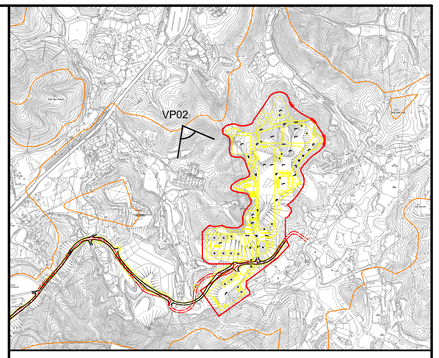

LOCATION PLAN
N.T.S.

Vantage Point 02 (VP02)

Vantage Point Elevation: +53.4mPD
Viewing distance: 100m
Maximum Height of Proposed Scheme: +75.5mPD

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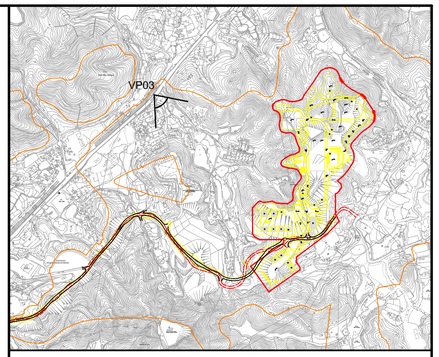
Drawing Number
FIGURE 10-42

Vantage Point 03: View looking south east for vehicle travellers on Man Kam To Road (North) (VSR1.3) (Existing Situation)

Vantage Point 03: View looking south east for vehicle travellers on Man Kam To Road (North) (VSR1.3) (Day 1 with no mitigation measures)



LOCATION PLAN
N.T.S.

Vantage Point 03 (VP03)

Vantage Point Elevation: +12.5mPD
Viewing distance: 1010m
Maximum Height of Proposed Scheme: +75.5mPD

Note:

Red dashed line shows position of proposed scheme.

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FIGURE 10-43

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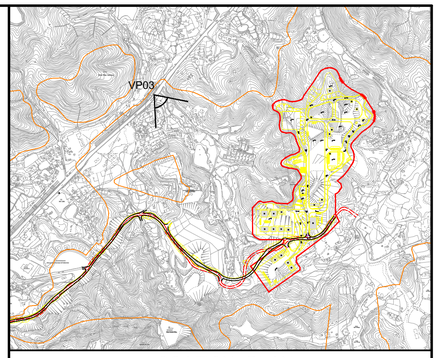
Vantage Point 03: View looking south east for vehicle travellers on Man Kam To Road (North) (VSR1.3) (Day 1 with mitigation measures)

Vantage Point 03: View looking south east for vehicle travellers on Man Kam To Road (North) (VSR1.3) (Year 10 with mitigation measures)



LOCATION PLAN
N.T.S.

Vantage Point 03 (VP03)

Vantage Point Elevation: +12.5mPD
Viewing distance: 1010m
Maximum Height of Proposed Scheme: +75.5mPD

Note:

Red dashed line shows position of proposed scheme.

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LANDSCAPE AND VISUAL MITIGATION MEASURES - PHOTOMONTAGE

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FIGURE 10-44

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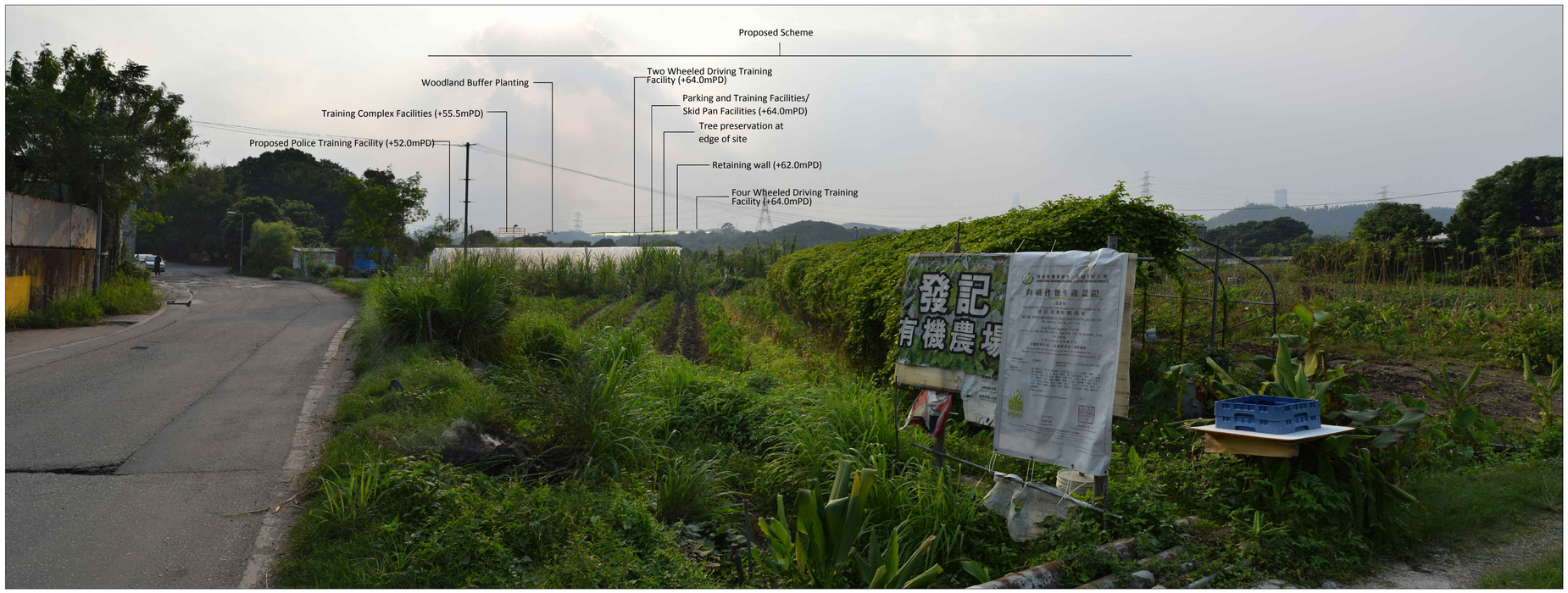
Vantage Point 04: View looking west for agricultural workers in fields of the Ping Yuen River Valley (VSR2.3) (Existing Situation)



Vantage Point 04: View looking west for agricultural workers in fields of the Ping Yuen River Valley (VSR2.3) (Day 1 with no mitigation measures)

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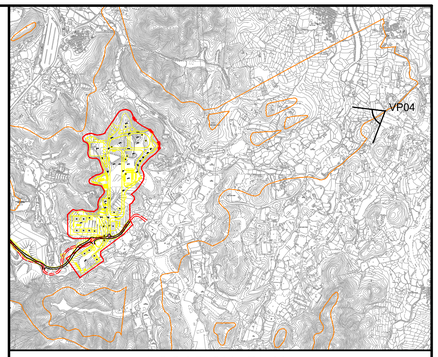

LOCATION PLAN
N.T.S.

Vantage Point 04 (VP04)

Vantage Point Elevation: +11.9mPD
Viewing distance: 1260m
Maximum Height of Proposed Scheme: +75.5mPD

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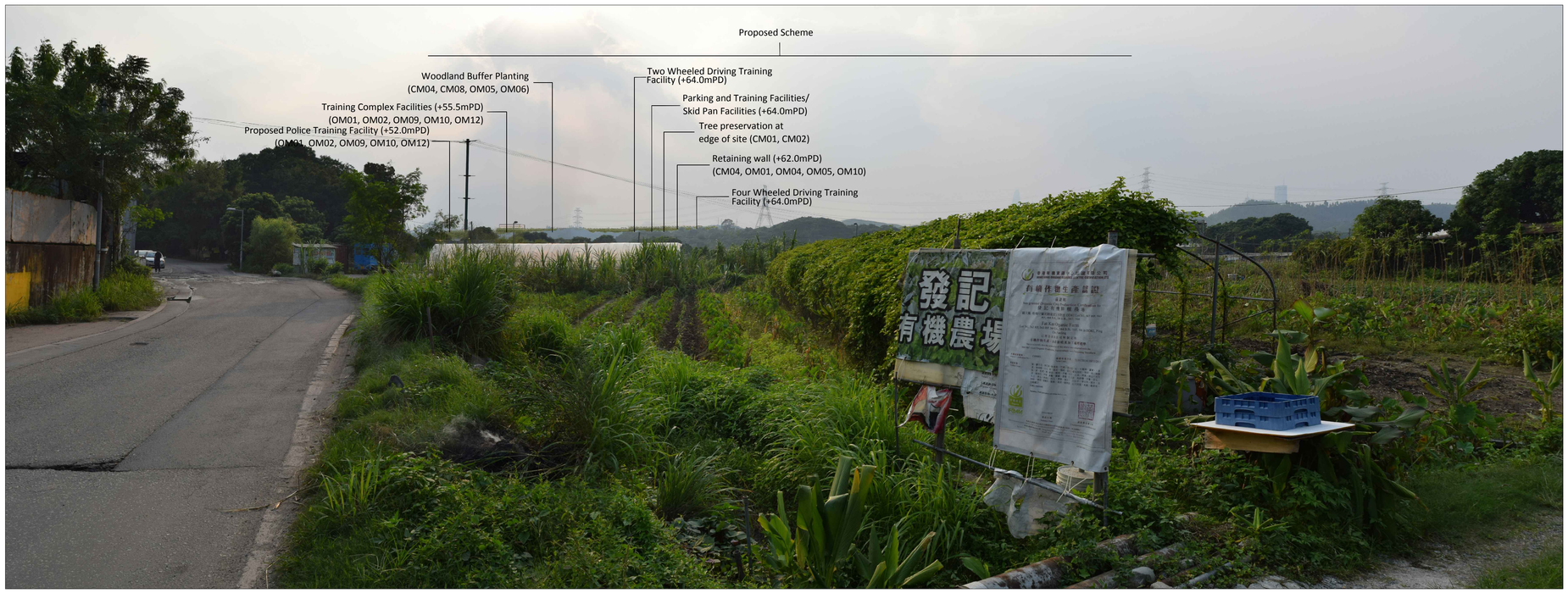
Drawn	CCH		Coordination	LL	
Dwg check	KC		Approved	SHC	
Scale at A1	N.T.S.	Status	PRE	Rev	P1

Drawing Number
FIGURE 10-45

Vantage Point 04: View looking west for agricultural workers in fields of the Ping Yuen River Valley (VSR2.3) (Day 1 with mitigation measures)



Vantage Point 04: View looking west for agricultural workers in fields of the Ping Yuen River Valley (VSR2.3) (Year 10 with mitigation measures)

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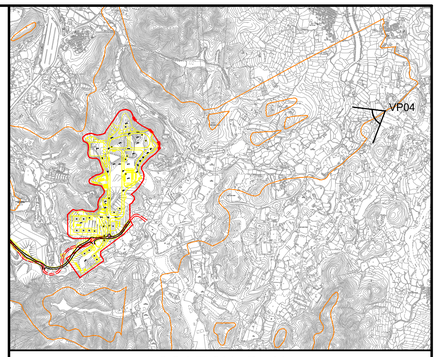

LOCATION PLAN
N.T.S.

Vantage Point 04 (VP04)

Vantage Point Elevation: +11.9mPD
Viewing distance: 1260m
Maximum Height of Proposed Scheme: +75.5mPD

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Drawn	CCH		Coordination	LL	
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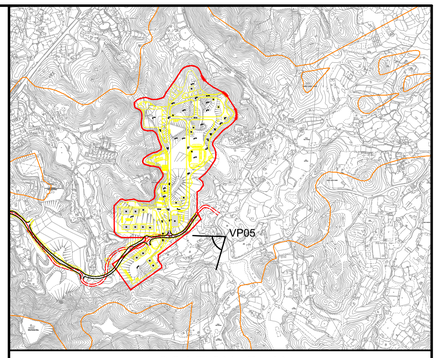
Drawing Number
FIGURE 10-46

Vantage Point 05: View looking west for vehicle travellers and pedestrians on Kong Nga Po Road (VSR2.4) (Existing Situation)

Vantage Point 05: View looking west for vehicle travellers and pedestrians on Kong Nga Po Road (VSR2.4) (Day 1 with no mitigation measures)



LOCATION PLAN
N.T.S.

Vantage Point 05 (VP05)

Vantage Point Elevation: +27.1mPD
Viewing distance: 302m
Maximum Height of Proposed Scheme: +75.5mPD

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FIGURE 10-47

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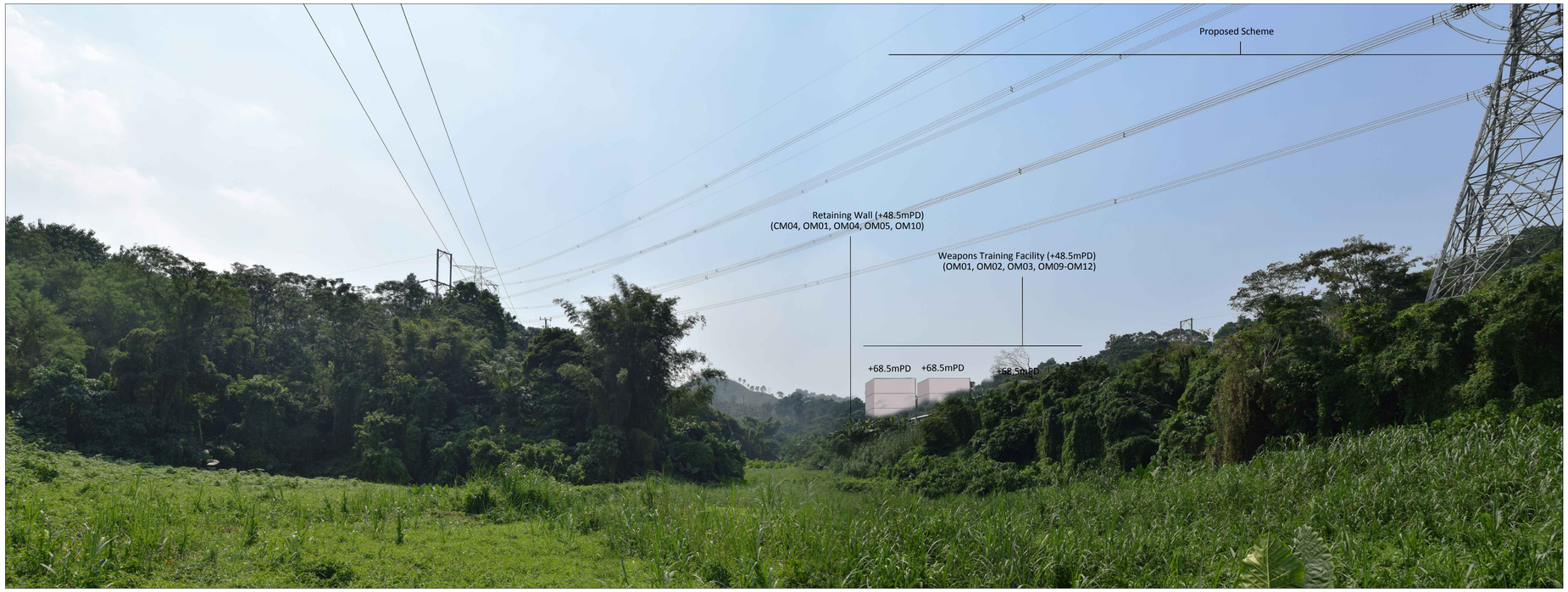
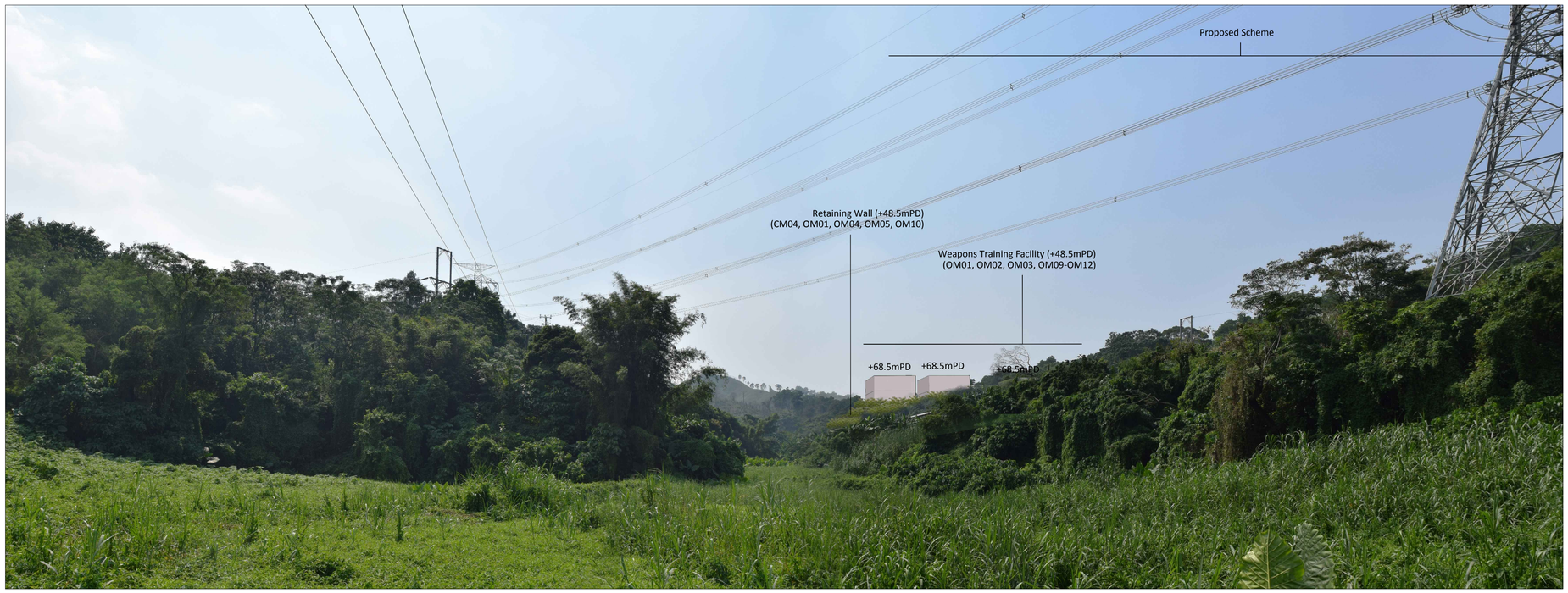


Vantage Point 05: View looking west for vehicle travellers and pedestrians on Kong Nga Po Road (VSR2.4) (Day 1 with mitigation measures)



Vantage Point 05: View looking west for vehicle travellers and pedestrians on Kong Nga Po Road (VSR2.4) (Year 10 with mitigation measures)

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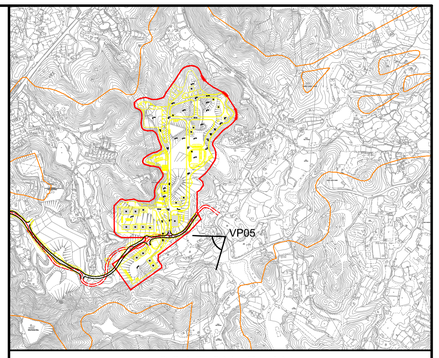

LOCATION PLAN
N.T.S.

Vantage Point 05 (VP05)

Vantage Point Elevation: +27.1mPD
Viewing distance: 302m
Maximum Height of Proposed Scheme: +75.5mPD

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Dwg check	KC		Approved	SHC	
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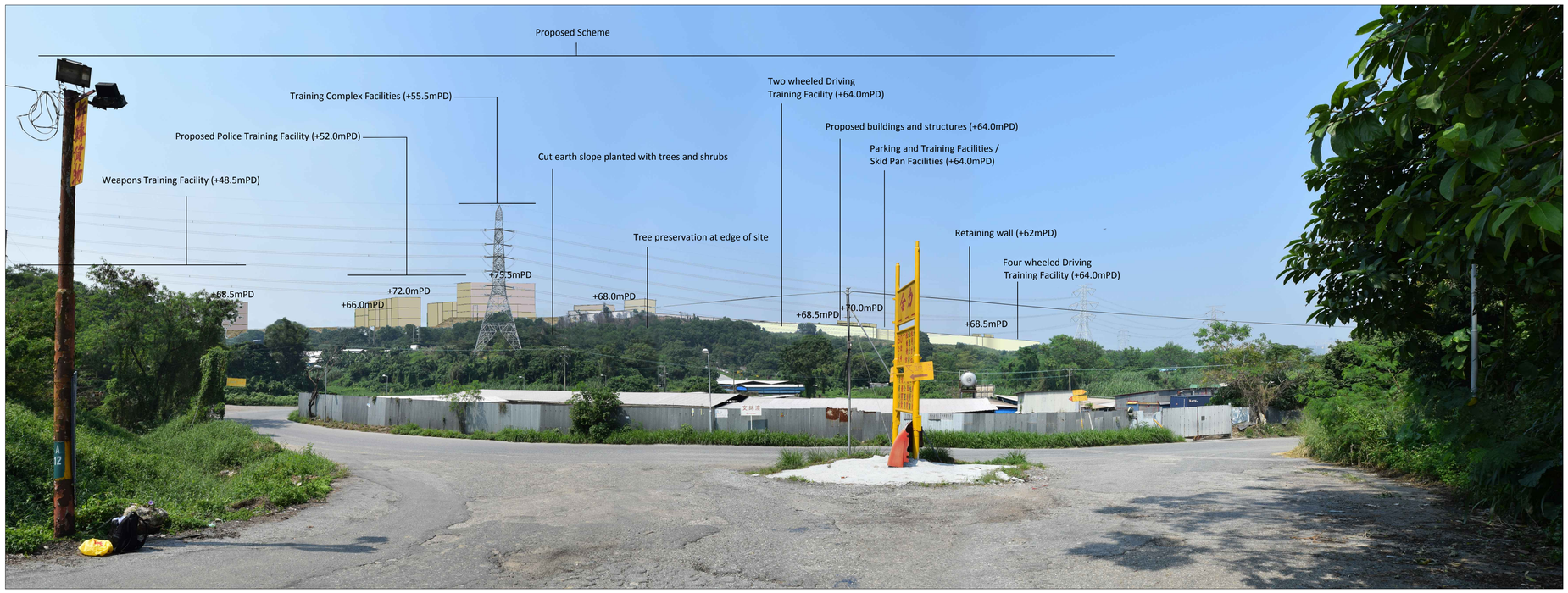
Drawing Number
FIGURE 10-48

Vantage Point 06: View looking north west for Vehicle travellers on road to south of Kong Nga Po Road (VSR2.5) (Existing Situation)



Vantage Point 06: View looking north west for Vehicle travellers on road to south of Kong Nga Po Road (VSR2.5) (Day 1 with no mitigation measures)

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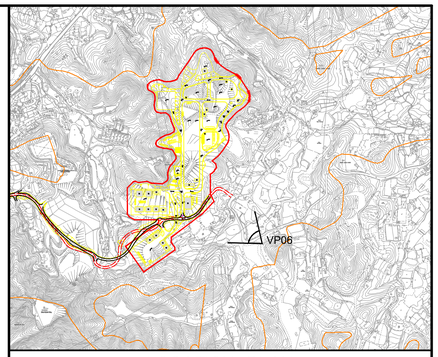

LOCATION PLAN
N.T.S.

Vantage Point 06 (VP06)

Vantage Point Elevation: +26.4mPD
Viewing distance: 200m
Maximum Height of Proposed Scheme: +75.5mPD

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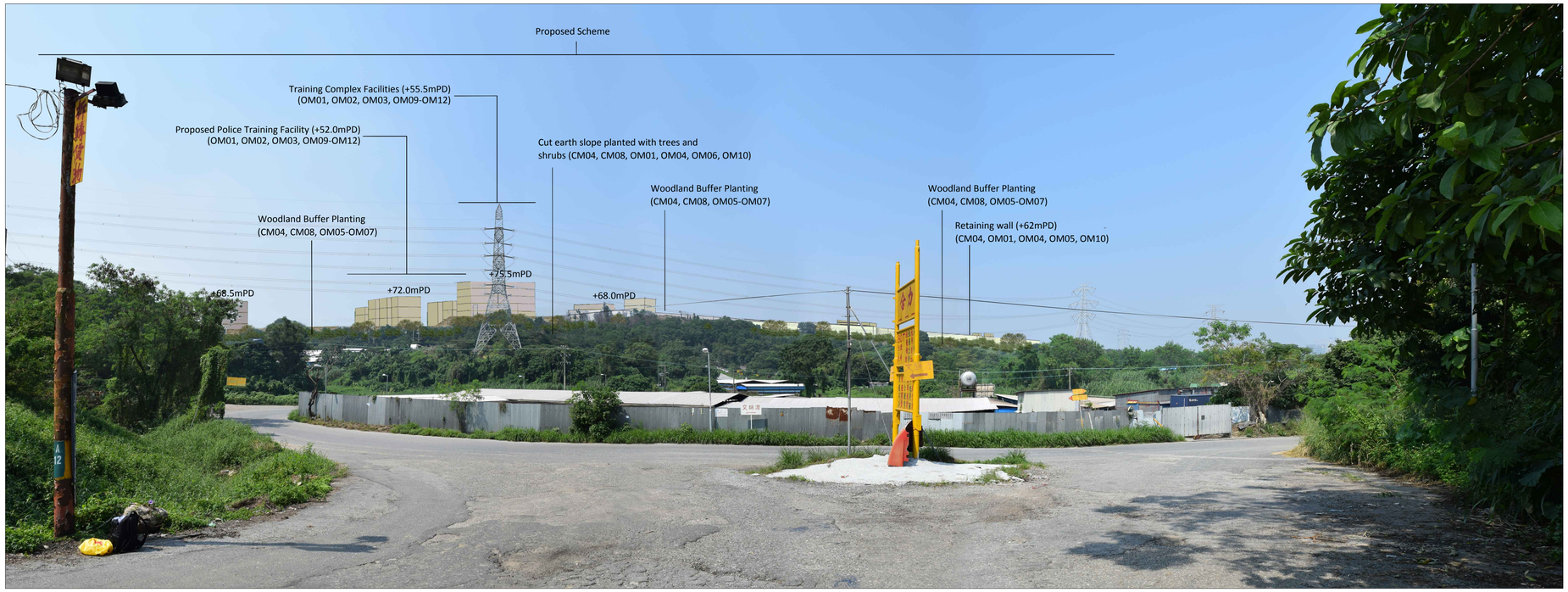
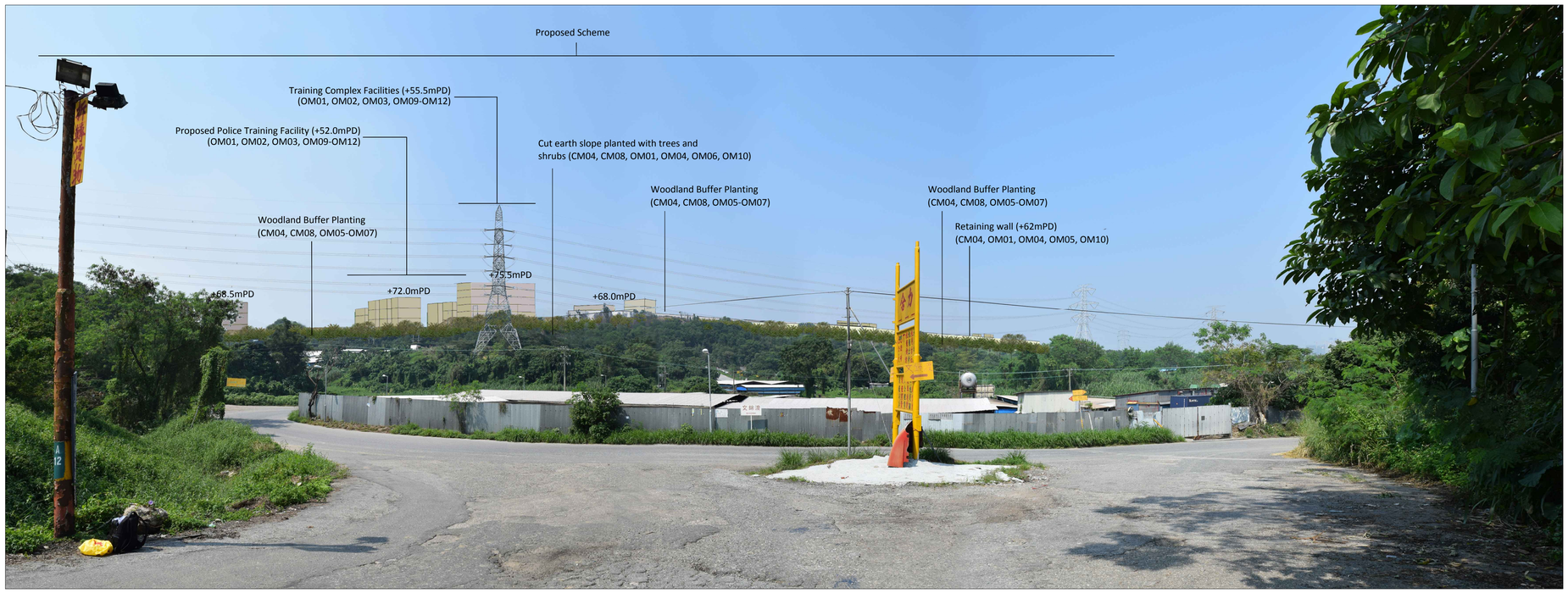
Drawing Number
FIGURE 10-49



Vantage Point 06: View looking north west for Vehicle travellers on road to south of Kong Nga Po Road (VSR2.5) (Day 1 with mitigation measures)



Vantage Point 06: View looking north west for Vehicle travellers on road to south of Kong Nga Po Road (VSR2.5) (Year 10 with mitigation measures)

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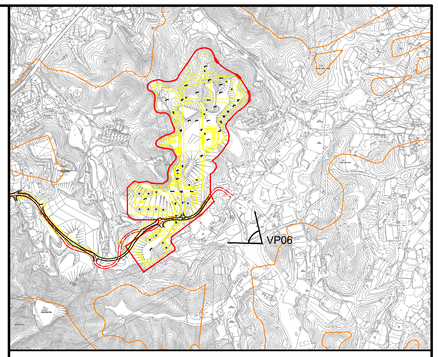

LOCATION PLAN
N.T.S.

Vantage Point 06 (VP06)

Vantage Point Elevation: +26.4mPD
Viewing distance: 200m
Maximum Height of Proposed Scheme: +75.5mPD

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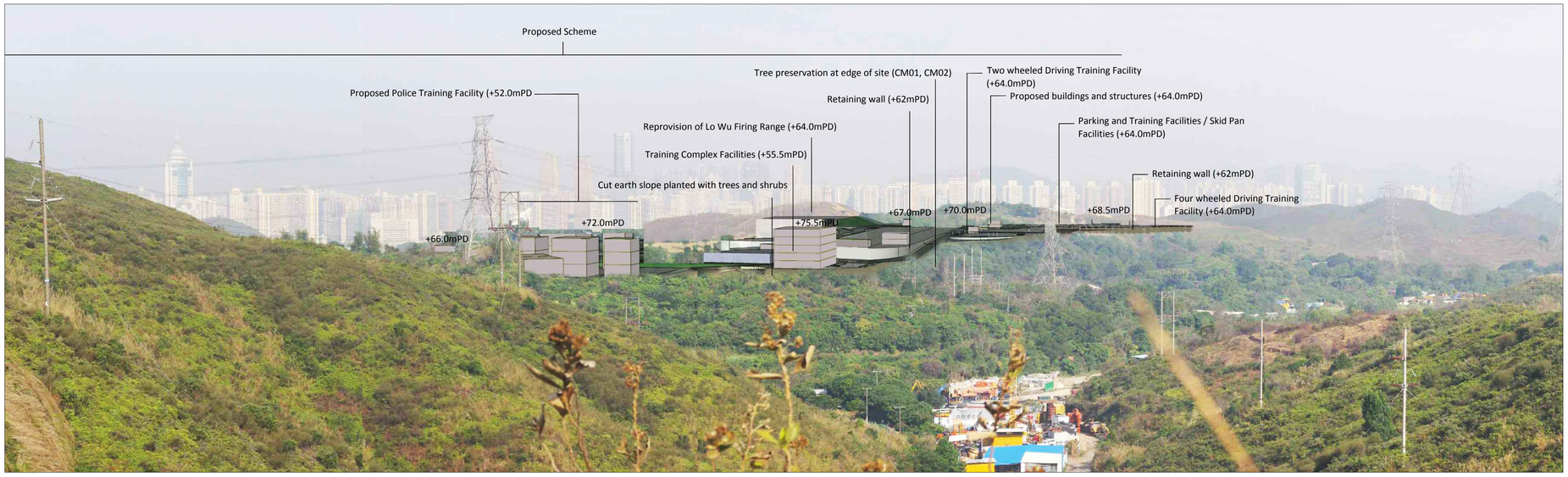
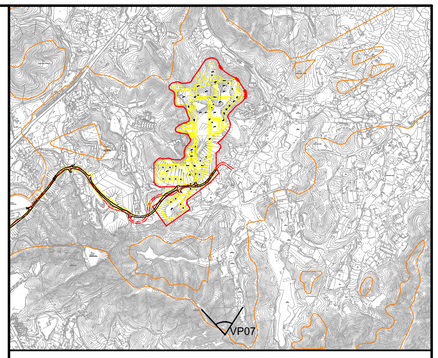
Drawing Number
FIGURE 10-50

Vantage Point 07: View looking north for trail walkers on ridgeline footpath (VSR 3.1) (Existing Situation)



Vantage Point 07: View looking north for trail walkers on ridgeline footpath (VSR 3.1) (Day 1 with no mitigation measures)



LOCATION PLAN
N.T.S.

Vantage Point 07 (VP07)

Vantage Point Elevation: +80.0mPD
Viewing distance: 890m
Maximum Height of Proposed Scheme: +75.5mPD

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FIGURE 10-51

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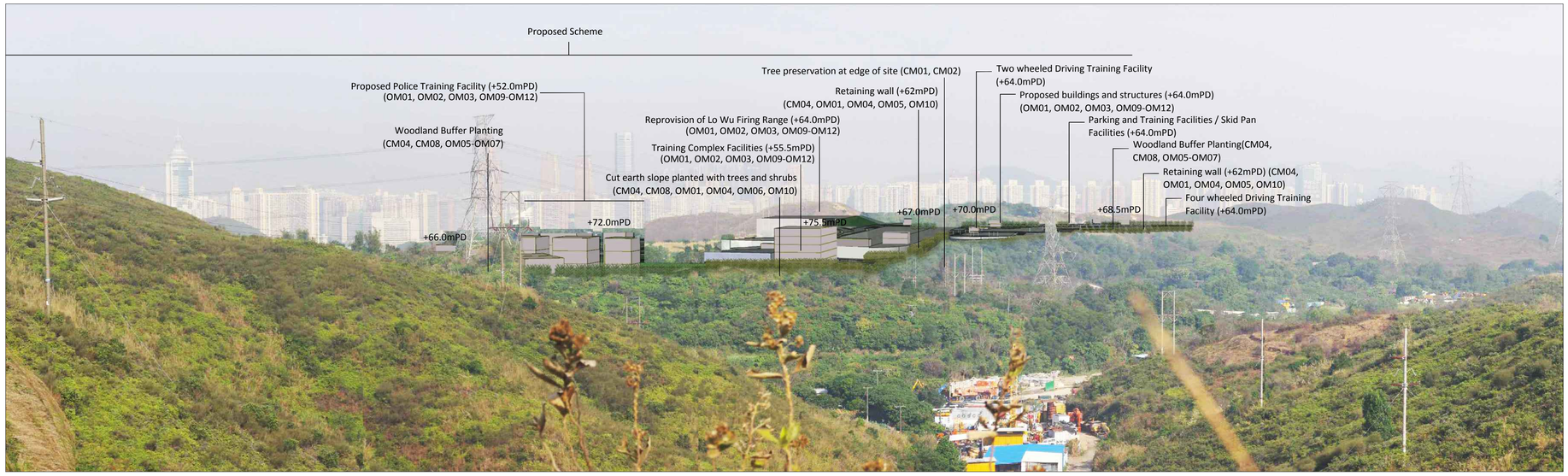
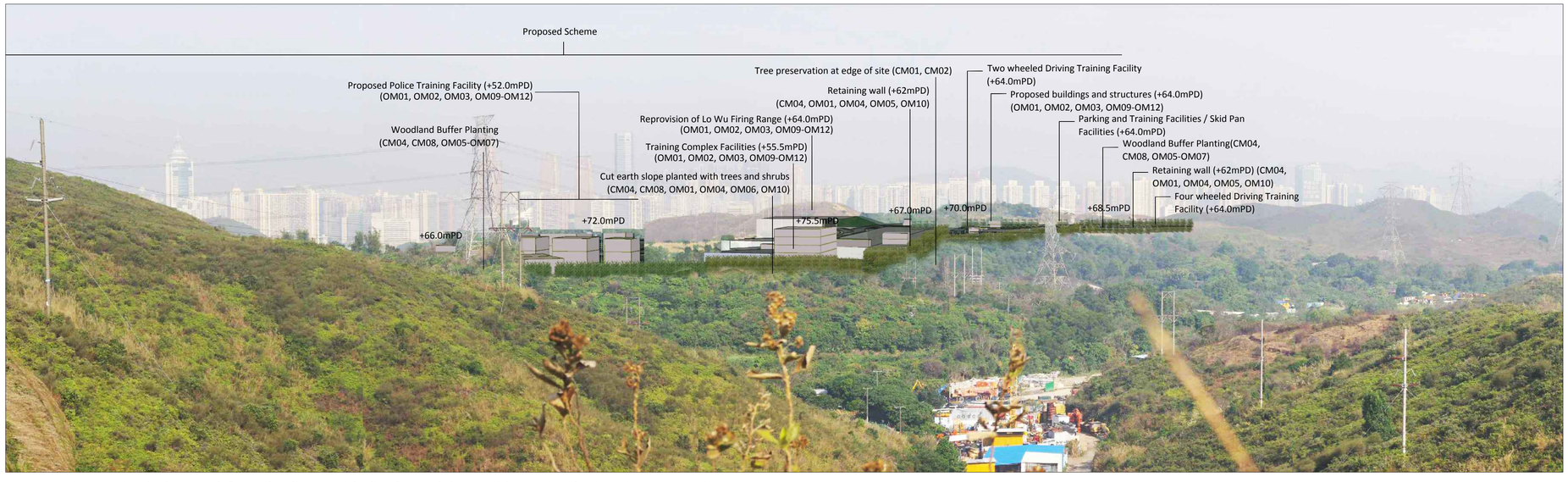


Vantage Point 07: View looking north for trail walkers on ridgeline footpath (VSR 3.1) (Day 1 with mitigation measures)



Vantage Point 07: View looking north for trail walkers on ridgeline footpath (VSR 3.1) (Year 10 with mitigation measures)

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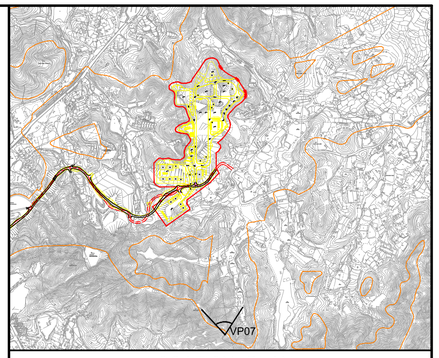

LOCATION PLAN
N.T.S.

Vantage Point 07 (VP07)

Vantage Point Elevation: +80.0mPD
Viewing distance: 890m
Maximum Height of Proposed Scheme: +75.5mPD

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Drawing Number
FIGURE 10-52

Vantage Point 08: View looking east for vehicle travellers and pedestrians on small rural road (San Uk Ling) (VSR4.3) (Existing Situation)

Vantage Point 08: View looking east for vehicle travellers and pedestrians on small rural road (San Uk Ling) (VSR4.3) (Day 1 with no mitigation measures)

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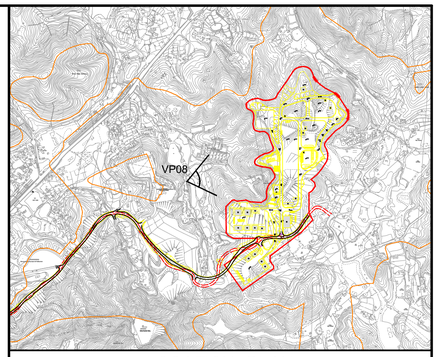

LOCATION PLAN
N.T.S.

Vantage Point 08 (VP08)

Vantage Point Elevation: +17.0mPD
Viewing distance: 290m
Maximum Height of Proposed Scheme: +75.5mPD

Note:

Red dashed line shows position of proposed scheme.

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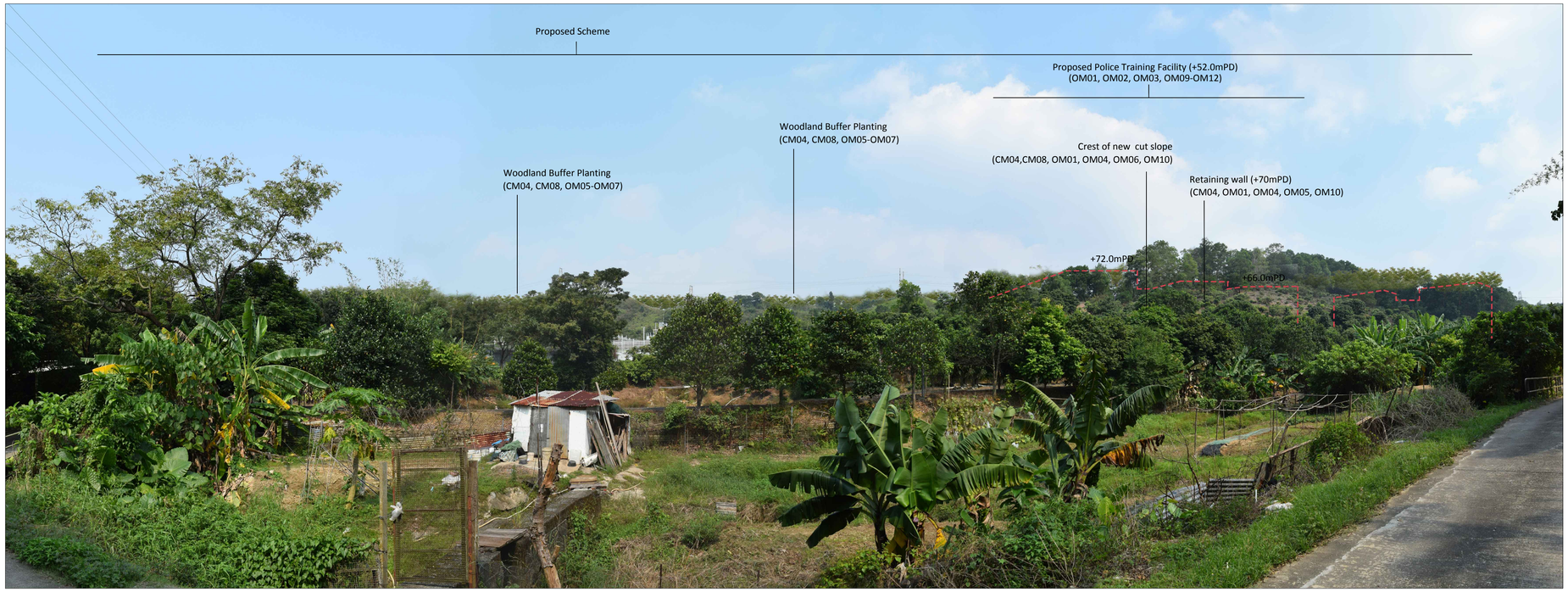
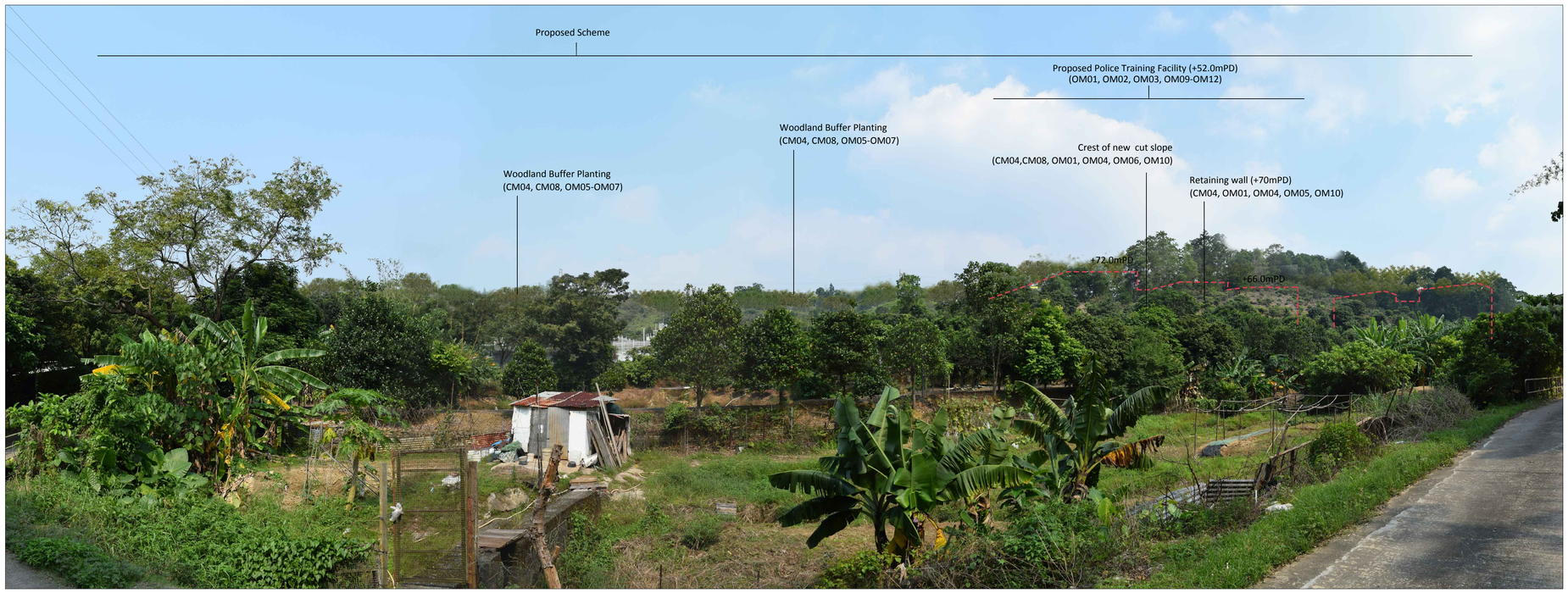
Drawing Number

FIGURE 10-53



Vantage Point 08: View looking east for vehicle travellers and pedestrians on small rural road (San Uk Ling) (VSR4.3) (Day 1 with mitigation measures)



Vantage Point 08: View looking east for vehicle travellers and pedestrians on small rural road (San Uk Ling) (VSR4.3) (Year 10 with mitigation measures)

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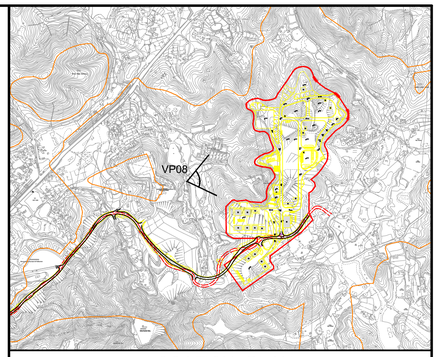

LOCATION PLAN
N.T.S.

Vantage Point 08 (VP08)

Vantage Point Elevation: +17.0mPD
Viewing distance: 290m
Maximum Height of Proposed Scheme: +75.5mPD

Note:

Red dashed line shows position of proposed scheme.

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Drawing Number
FIGURE 10-54

Vantage Point 09: View looking south for residents of agricultural holding north of Kong Nga Po Road (VSR 4.5) (Existing Situation)

Vantage Point 09: View looking south for residents of agricultural holding north of Kong Nga Po Road (VSR 4.5) (Day 1 with no mitigation measures)

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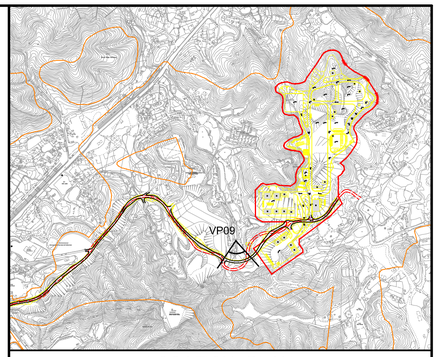

LOCATION PLAN
N.T.S.

Vantage Point 09 (VP09)

Vantage Point Elevation: +24.7mPD
Viewing distance: 50m
Maximum Height of Proposed Scheme: +75.5mPD

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Dwg check	KC		Approved	SHC	
Scale at A1	N.T.S.	Status	PRE	Rev	P1

Drawing Number
FIGURE 10-55

Vantage Point 09: View looking south for residents of agricultural holding north of Kong Nga Po Road (VSR 4.5) (Day 1 with mitigation measures)

Vantage Point 09: View looking south for residents of agricultural holding north of Kong Nga Po Road (VSR 4.5) (Year 10 with mitigation measures)

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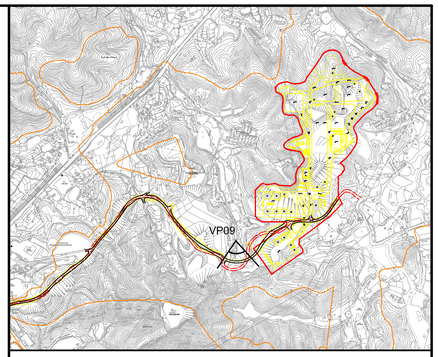

LOCATION PLAN
N.T.S.

Vantage Point 09 (VP09)

Vantage Point Elevation: +24.7mPD
Viewing distance: 50m
Maximum Height of Proposed Scheme: +75.5mPD

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Drawing Number
FIGURE 10-56

Appendix X

Landscape and Visual Mitigation Plan Implementation Schedule

Landscape and Visual Mitigation Plan Implementation Schedule

The Permit Holder and any person constructing (or "operating" as the case may be) the Project shall fully implement all mitigation measures in this Plan/Report. Key measures are included in the Implementation Schedule (IS) below for focusing on key issues and easier checking. However, all measures in this Plan/Report, whether included in the IS or not, shall be fully carried out.

Recommended Mitigation Measures (What Measures)	**Objective of the Measures (What Requirements)**	**Who to Implement / Maintain the Measures? (Who)**	**Location of the Measures (Where)**	**When to Implement the Measures? (When)**	**Reference to paragraph(s) in this Landscape and Visual Mitigation Plan**
Tree protection and preservation a. The tree preservation proposals shall be coordinated with the layout and design of the engineering and architectural works at the detailed design stage for further retention of individual trees. b. During construction period, retained trees will be protected from impact from construction activity as per General Specification for Civil Engineering Works (2006 Edition), Section 26 – Preservation and Protection of Trees and Guidelines on Tree Preservation during Development.	To avoid potential impact on retained tree from construction activities such as materials storage; To make sure that the retained tree are not affected by the construction activities of the Project	CEDD's and ArchSD's Contractor	CEDD: Along KNP Road where applicable and slopes within KNP Police Facilities Site ArchSD: Within KNP Police Facilities Site	Design and construction phase of CEDD's and ArchSD's Contracts	Refers to para 4.1.5 and Appendix III of this report

Recommended Mitigation Measures (What Measures)	Objective of the Measures (What Requirements)	Who to Implement / Maintain the Measures? (Who)	Location of the Measures (Where)	When to Implement the Measures? (When)	Reference to paragraph(s) in this Landscape and Visual Mitigation Plan
Tree transplantation a. If removal of trees unavoidable due to construction impacts, trees will be transplanted where technically feasible in accordance with "Guidelines on Tree Transplanting" by DEVB and HQ/GN/13 and HQ/GN/13 – Interim Guidelines for Tree Transplanting Works under Highways Department's Vegetation Maintenance Ambit where applicable.	To preserve the trees with conservation interest which are unavoidably affected by the construction activities.	CEDD's Contractors	The location of three *Aquilaria sinensis* at Site Portion B and D, and the receptor site for the transplanted trees opposite Portion B1 of the site.	Construction Stage of CEDD's Contracts	Refers to para(s). 4.1.6, 4.1.7 and Appendix III of this report
Work area and temporary works area a. Reduction of the extent and location of working areas to avoid sensitive LRs b. Siting of offices or temporary structures so that they are not visually prominent c. Consideration of detailed schedules to shorten the construction period d. Temporary landscape treatments are considered to be adopted such as applying hydro-seeding on temporary stockpiles and areas of earthworks to alleviate the potential impacts and minimise soil erosion.	To minimize the landscape and visual impacts by construction area control	CEDD's and ArchSD's Contractors	CEDD: Along KNP Road where applicable and slopes within KNP Police Facilities Site ArchSD: Within KNP Police Facilities Site	Construction Stage of CEDD's and ArchSD's Contracts	Refers to Appendix V of this report

Recommended Mitigation Measures (What Measures)	**Objective of the Measures (What Requirements)**	**Who to Implement / Maintain the Measures? (Who)**	**Location of the Measures (Where)**	**When to Implement the Measures? (When)**	**Reference to paragraph(s) in this Landscape and Visual Mitigation Plan**
Advance implementation of mitigation planting a. Replanting of existing / disturbed vegetation shall be undertaken as soon astechnically feasible during the construction phase.	To mitigate the predicted impacts including screening views of the proposals as early as possible during the operation phase.	CEDD's and ArchSD's Contractor	Whole project site area, priority given to periphery of the site	Construction Stage of CEDD's and ArchSD's Contracts	Refers to Appendix V of this report
Decorative screen hoarding a. Decorative screen hoarding will be erected along areas of the construction works site boundary where the works site borders publically accessible routes and/or is close to visually sensitive receivers (VSRs) b. It is proposed that the screening be compatible with the surrounding environment and where possible, non-reflective, recessive colours be used.	To screen undesirable views of the works site.	CEDD's and ArchSD's Contractors	Along areas of the construction works site boundary where the works site borders publically accessible routes and/or is close to visually sensitive receivers (VSRs)	Construction Phase CEDD's and ArchSD's Contracts	Refers to Appendix V of this report

Recommended Mitigation Measures (What Measures)	**Objective of the Measures (What Requirements)**	**Who to Implement / Maintain the Measures? (Who)**	**Location of the Measures (Where)**	**When to Implement the Measures? (When)**	**Reference to paragraph(s) in this Landscape and Visual Mitigation Plan**
Detail design considerations a. Detailed design of development components should reduce landscape footprint and visibility of structures.	To reduce the area allowed for any development to a practical minimum	CEDD's Detailed Designers / Consultants ArchSD's Detailed Designers / Consultants	CEDD: Along KNP Road where applicable and slopes within KNP Police Facilities Site ArchSD: Within KNP Police Facilities Site	Design Stage of CEDD's and ArchSD's Contracts	Refers to para(s). 5.2.1 of the report

Recommended Mitigation Measures (What Measures)	Objective of the Measures (What Requirements)	Who to Implement / Maintain the Measures? (Who)	Location of the Measures (Where)	When to Implement the Measures? (When)	Reference to paragraph(s) in this Landscape and Visual Mitigation Plan
Aesthetically pleasing design and responsive design of buildings and structures a. The form, textures, finishes and colours of the proposed development components should be compatible with the existing surroundings. Light earthy tone colours such as shades of green, grey, brown and off-white may be utilised where technically feasible to reduce the visibility of the development components, including all roadwork, buildings and noise barriers etc b. Adopting natural building materials such as stone and timber should be for architectural features, where technically feasible. c. Using responsive design for the disposition of the main elements of the proposed scheme including the locations of buildings and utility structures. d. Grouping of utilities and infrastructure components into proposed buildings as far as technically feasible to reduce the mass of development e. The disposition and height profile of the developments and above ground utilities structures to respond to the existing context particularly	a. To reduce the visibility of the development components b. To further improve visual amenity c. To reduce the mass of development d. To minimise the 'wall effects' and create a subtle transition at the edges of the site	ArchSD's Detailed Designers / Consultants	Within KNP Police Facilities Site	Design Stage ArchSD's Contract	Refers to para(s). 5.4.3 and 5.4.4 of the report

Recommended Mitigation Measures (What Measures)	Objective of the Measures (What Requirements)	Who to Implement / Maintain the Measures? (Who)	Location of the Measures (Where)	When to Implement the Measures? (When)	Reference to paragraph(s) in this Landscape and Visual Mitigation Plan
the existing landform and preserved trees, f. Creation of setbacks, articulating the development frontage and maintenance of view corridors when technically feasible	e. To enhance the sense of visual integration with the existing context, avoid abrupt transitions between the existing and proposed built environment and reduce the apparent visual mass of the proposed developments.				

Recommended Mitigation Measures (What Measures)	**Objective of the Measures (What Requirements)**	**Who to Implement / Maintain the Measures? (Who)**	**Location of the Measures (Where)**	**When to Implement the Measures? (When)**	**Reference to paragraph(s) in this Landscape and Visual Mitigation Plan**
Design of engineering structure a. The design of the proposed Engineering Structures such as the proposed road layout and any ancillary structures including the sewage pumping station and the Ma Tso Lung Firing Range should pay particular attention to the appearance and construction methods. b. The detailed design landscape consultants shall work in unison with the engineers on the aesthetic aspects of the structures and their relationship with the landscape. c. The design of engineering structures shall avoid any unnecessary visual clutter achieved through the co-ordination of the various engineering disciplines involved to arrive at integrated design solutions.	To give the engineering structures a more natural appearance that allows them to blend into the local rural landscape.	CEDD's Detailed Designers / Consultants	Whole project site area	Design Stage of CEDD's Contracts	Refers to para(s). 5.2.1 of the report

Recommended Mitigation Measures (What Measures)	Objective of the Measures (What Requirements)	Who to Implement / Maintain the Measures? (Who)	Location of the Measures (Where)	When to Implement the Measures? (When)	Reference to paragraph(s) in this Landscape and Visual Mitigation Plan
Design of retaining walls and slopes a. The proposed treatment of Retaining Wall and Slopes will be undertaken in accordance with GEO Publication No. 1/2011 "Technical Guidelines on Landscape Treatment and Bioengineering for Man-made Slopes and Retaining Walls". b. These engineering structures will be aesthetically enhanced through the use of soft landscape works including tree and shrub planting.	To give man-made slopes a more natural appearance blending into the local rural landscape.	CEDD's Detailed Designers / Consultants	Retaining walls and slopes within the whole site area	Design Stage of CEDD's Contracts	Refers to para(s). 5.2.1(c) of the report

Recommended Mitigation Measures (What Measures)	**Objective of the Measures (What Requirements)**	**Who to Implement / Maintain the Measures? (Who)**	**Location of the Measures (Where)**	**When to Implement the Measures? (When)**	**Reference to paragraph(s) in this Landscape and Visual Mitigation Plan**
Compensatory planting proposal a. All compensatory planting of trees is to be carried out in accordance with DEVB TCW No. 7/2015. A total woodland compensation area of 5.54 ha is proposed. b. The planting proposals will utilise largely native species in accordance with GLTM/DEVB's - Guiding Principles on Use of Native Plant Species in Public Works Projects, c. Some compensatory shrub and ground cover planting will also be provided within the woodland area to create a more structurally diverse woodland. d. Woodland areas will utilise a combination of large sized tree stock (including heavy standard sized trees) and whip sized trees to create a more naturalistic e. The smaller, younger plant stock will adapt to their new growing conditions more quickly than larger sized stock and establish a naturalistic effect more rapidly. f. Roadside and amenity planting will utilise largely heavy standard sized trees.	To compensate for the existing dead trees to be removed and create a more structurally diverse woodland.	CEDD's and ArchSD's Contractors	CEDD: Along KNP Road where applicable and slopes within KNP Police Facilities Site ArchSD: Within KNP Police Facilities Site	Construction Stage of CEDD's and ArchSD's Contract	Refers to para(s). 5.2.2, 5.3.1, 5.4.1 and Appendix III and IV of the report

Recommended Mitigation Measures (What Measures)	**Objective of the Measures (What Requirements)**	**Who to Implement / Maintain the Measures? (Who)**	**Location of the Measures (Where)**	**When to Implement the Measures? (When)**	**Reference to paragraph(s) in this Landscape and Visual Mitigation Plan**
Landscape buffer tree planting a. Tree planting using larger sized tree stock shall be provided to screen the proposed structures and associated facilities. b. The planting will utilise native species wherever possible.	To improve compatibility with the surrounding environment and create a pleasant pedestrian environment.	CEDD's and ArchSD's Contractors	CEDD: along KNP Road where applicable and slopes within KNP Police Facilities Site ArchSD : within KNP Police Facilities Site	Construction Stage of CEDD's and ArchSD's Contract	Refers to para(s). 5.2.2, 5.3.1 and 5.4.1 of the report
Roadside and amenity planting (within KNP Police Facilitate Site) a. Roadside and amenity planting using predominantly native species	To enhance the landscape and visual quality of the existing and proposed transport routes and car parks.	ArchSD's Contractor	KNP Police Facilities Site	Construction Stage of ArchSD's Contract	Refers to para(s). 5.3.1 and 5.4.1 of the report

Recommended Mitigation Measures (What Measures)	Objective of the Measures (What Requirements)	Who to Implement / Maintain the Measures? (Who)	Location of the Measures (Where)	When to Implement the Measures? (When)	Reference to paragraph(s) in this Landscape and Visual Mitigation Plan
Grassland (ecological mitigation) a. Creation of new grassland areas approximately 1.02 ha in size. Inclusion of common grass species *Ischaemum barbatum* and *Tetradium glabrifolium* (the larval food plants for butterfly species).	To provide larval food plants for the butterfly species.	ArchSD's Contractors	ArchSD : within KNP Police Facilities Site	Construction Stage of ArchSD's Contract	Refers to para(s). 5.4.2 of the report
Green roof (within KNP Police Facilitate Site) a. Green roofs predominantly using native species shall be introduced where technically feasible on proposed buildings to reduce exposure of untreated concrete surfaces b. Location and extent of green roof subject to detailed design.	To enhance the sustainability of the design and mitigate visual impact to VSRs at high levels	ArchSD's Contractor	Within KNP Police Facilitate Site	Construction stage of ArchSD's Contract	Refers to para(s). 5.4.4 of the report

Recommended Mitigation Measures (What Measures)	**Objective of the Measures (What Requirements)**	**Who to Implement / Maintain the Measures? (Who)**	**Location of the Measures (Where)**	**When to Implement the Measures? (When)**	**Reference to paragraph(s) in this Landscape and Visual Mitigation Plan**
Vertical greening a. Vertical planting shall be introduced using predominantly native species. b. Planting to utilise climbing and trailing plants. Location and extent of vertical greening subject to detailed design.	To soften the hard, vertical surfaces of the proposed development components including the walls of the proposed buildings and retaining walls.	CEDD's and ArchSD's Contractors	CEDD: along KNP Road where applicable and slopes within KNP Police Facilitate Site ArchSD : within KNP Police Facilitate Site	Construction Stage of CEDD's and ArchSD's Contracts	Refers to para(s). 5.2.3 and 5.4.3 of the report

Recommended Mitigation Measures (What Measures)	Objective of the Measures (What Requirements)	Who to Implement / Maintain the Measures? (Who)	Location of the Measures (Where)	When to Implement the Measures? (When)	Reference to paragraph(s) in this Landscape and Visual Mitigation Plan
Green paving (within KNP Police Facilitate Site) a. Green paving approach such as grass-crete or grass-grid to maximise the area of planting and reduce the area of hard paving b. Location and extent of green paving subject to detailed design of the ArchSD's contract. This includes the use of permeable paving where grass-crete / grass grid is not practicable.	To reduce the area of hard paving	ArchSD's Contractor	Within KNP Police Facilitate Site	Construction stage of ArchSD's Contracts	Refers to para(s). 5.4.4 of the report

Recommended Mitigation Measures (What Measures)	Objective of the Measures (What Requirements)	Who to Implement / Maintain the Measures? (Who)	Location of the Measures (Where)	When to Implement the Measures? (When)	Reference to paragraph(s) in this Landscape and Visual Mitigation Plan
Light control (operation) a. Street and night time lighting glare will be controlled	To minimize glare impact to adjacent VSRs during the operation stage.	HKPF and HyD	HKPF: Within KNP Police Facilitate Site HyD: Along Kong Nga Po Road	Operation Stage	Refers to para(s). 5.5.6 of the report