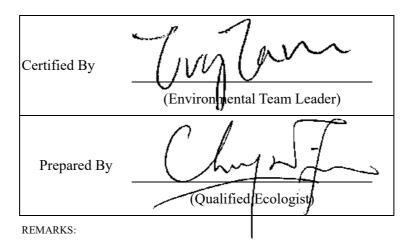
#### **Civil Engineering and Development Department**

#### Service Contract No. NDO 07/2019 Environmental Team for Site Formation and Infrastructure Works for Police Facilities in Kong Nga Po

#### **Transplantation Proposal**

(Version 3.0)



The information supplied and contained within this report is, to the best of our knowledge, correct at the time of printing.

WELLAB accepts no responsibility for changes made to this report by third parties.

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#### 1 INTRODUCTION

- 1.1 The Project consists of site formation works and building works for the co-location of various police facilities in the Project site at Kong Nga Po as well as road improvement works to a section of the existing Kong Nga Po Road between the police facilities and Man Kam To Road. The police facilities include:
  - Lo Wu Firing Range (LWFR) to be relocated from Lo Wu;
  - Ma Tso Lung Firing Range (MTLFR) to be relocated from Ma Tso Lung;
  - Weapons Training Facilities (WTF) and Police Driving and Traffic Training Facilities (PD&TTF) to be relocated from Fan Garden;
  - Helipad to be relocated from Lo Wu;
  - A Proposed Police Training Facility (PTF); and
  - A new internal access road network with underpass within the Project site.
- 1.2 The improvement works to Kong Nga Po Road between the police facilities and Man Kam To Road includes roadworks, viaduct of less than 100m between abutments, and associated works such as slopeworks and retaining walls.
- 1.3 In addition to the above, associated supporting infrastructure and utilities including an underground stormwater storage tank, sewage pumping station, petrol / diesel filling station, a multi-storey training complex associated with the PD&TFF, and other ancillary facilities will also be provided.
- 1.4 The Project is a Designated Project under the Environmental Impact Assessment Ordinance (EIAO). An Environmental Impact Assessment (EIA) Report for the Project was approved under EIAO in October 2016 in accordance with the EIA Study Brief (No. ESB-276/2014) and the Technical Memorandum on Environmental Impact Assessment Process (EIAO-TM). The corresponding Environmental Permit was issued (EP no.: EP-510/2016) by the Director of Environmental Protection (DEP) in November 2016.
- 1.5 Contract No. ND/2018/01 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 (hereinafter called "the Project"). The major construction activities of the Project are site formation and infrastructure works which will include site clearance, excavation and filling, construction of access road, utilities laying and landscaping works.
- 1.6 The EIA Report identified flora species of conservation importance within the works area of the Project. Section 8.3.1 of the Environmental Monitoring and Audit (EM&A) Manual and Condition 2.13(ii) of the EP specifies that a Transplantation Proposal for each species should be submitted no later than 1 month before commencement of plant transplantation. Wellab Limited was commissioned by the Civil Engineering Development Department (CEDD) to prepare a Transplantation Proposal. This proposal is prepared by a qualified ecologist with at least 5 years relevant experience in accordance with EP Condition 2.4 and 2.14 (Appendix C refers). Details of the proposal include:
  - the target species to be transplanted;
  - proposed receptor site;

- transplantation proposal including methodology, transplantation programme; a post-transplantation monitoring and maintenance programme; and
- protection measures for retained / transplanted individuals.

#### 2 TARGET SPECIES TO BE TRANSPLANTED

#### Summary of Findings of Detailed Vegetation Survey

- 2.1 A detailed vegetation survey was conducted from 28<sup>th</sup> February to 6<sup>th</sup> March 2020 to verify the findings in EIA, and to identify whether or not other species of conservation importance are present in the works boundary, including Kong Nga Po Road (Drawing No. 60534575/C1/1000A 60534575/C1//1001-1009). Definition of "species of conservation importance" follows the Technical Memorandum of Environmental Impact Assessment Ordinance (EIAO-TM) Annex 16: Guidelines for Ecological Assessment, criteria related to plants include:
  - 1. listed in IUCN Red Data Books or those of the South China region;
  - 2. listed in international conventions for conservation of wildlife;
  - 3. endemic to Hong Kong or South China;
  - 4. listed under local legislation :
    - (1) Forestry Regulation (under Forests and Countryside Ordinance Cap. 96);
    - (2) Protection of Endangered Species of Animals and Plants Ordinance (Cap. 586);
    - (3) Other relevant Ordinances or Regulations such as Marine Parks and Marine Reserves Regulation (under Marine Parks Ordinance Cap. 476); (References shall also be made to species protected by legislation in China, especially the Guangdong Province.)
  - 5. considered as rare in the territory or having special conservation importance by scientific studies other than those listed above.
- 2.2 Only plant species of conservation importance that naturally grows within the works boundary were counted. Species that are planted for landscape purpose or human consumption (e.g. fruit trees near village) were excluded.
- 2.3 Four plant species of conservation importance (*Aquilaria sinensis*, *Brainea insignis*, *Keteleeria fortunei* and *Spiranthes sinensis*) were recorded within and in the vicinity of the site boundary as shown in **Table 2.1**. All species have been reported in the EIA Report and Explanatory Statement for Revised Layout Plan of Kong Nga Po Road (Final) respectively.

Chinese Name (Species Name)	Conservation and Protection Status	Distribution in Hong Kong	No. of Individuals observed during Vegetation Survey	No. of Affected Individuals		
蘇鐵蕨 Cycad-fern ( <i>Brainea insignis)</i>	Listed as Category II protected species in Mainland China	Considered Common in Hong Kong <sup>(1)</sup> ; Listed in Rare and Precious Plants of Hong Kong <sup>(1)</sup>	71	71		
綬草 Ladies Tresses (Spiranthes sinensis)	Listed under Forestry Regulations (Cap. 96 sub. leg.) and Protection of Endangered Species of Animals and Plants Ordinance (Cap.586) in Hong Kong	This species is considered common and widespread in Hong Kong <sup>(3,4)</sup> ; Listed as "least concern" under IUCN Red List of Threatened Species <sup>(2)</sup>	41	41		
油杉 Fortune's Keteleeria ( <i>Keteleeria fortunei)</i>	Listed under Forestry Regulations (Cap. 96 sub. leg.)	This species has been propagated in the natural environment with promising results <sup>(6)</sup> ; Listed as Near Threatened under IUCN Red List of Threatened Species <sup>(2)</sup>	80	0		
土沉香 Incense Tree ( <i>Aquilaria sinensis</i> ) - Undersized Seedlings	Listed under Protection of Endangered Species of Animals and Plants Ordinance (Cap.586) in Hong Kong; listed as near threatened in mainland China <sup>(1)</sup> ; Category II protected species in Mainland China.	The species is common in Hong Kong <sup>(7)</sup> ; Listed as "vulnerable" under IUCN Red List of Threatened Species <sup>(2)</sup> .	7	0		
上沉香 上沉香 (Aquilaria sinensis) 上記ted under Protection of Endangered Species of Animals and Plants Ordinance (Cap.586) in Hong Kong; listed as near threatened in mainland China <sup>(1)</sup> ; Category II protected species in Mainland China.		The species is common in Hong Kong <sup>(7)</sup> ; Listed as "vulnerable" under IUCN Red List of Threatened Species <sup>(2)</sup> .	3	3		

# Table 2.1Flora Species of Conservation Importance Found within Survey Areas<br/>in the Current Study

Reference sources:

CEDD

- (1) Rare and Precious Plants of Hong Kong (AFCD, 2003)
- (2) IUCN Red List of Threatened Species (IUCN, 2015)
- (3) Flora of Hong Kong Volume 4 (Hong Kong Herbarium and South China Botanical Garden, 2011)
- (4) The Wild Orchids of Hong Kong (Baretto et al., 2011)
- (5) Flora of Hong Kong Volume 1 (Hong Kong Herbarium and South China Botanical Garden, 2007)
- (6) Hong Kong Biodiversity Issue No. 20 (Pang et al., 2011)
- (7) Hong Kong Vascular Plants: Distribution and Status (Corlett et al., 2000)

2.4 The location of all plant species are illustrated in **Figures 1A-1F**. A plant schedule showing survey summary and photographic record are shown in **Appendix A** and **B** respectively.

#### **Recommendations**

2.5 The proposed treatment and justification for each identified plant species are explained below:

#### Avoidance (Retain)

- 2.6 The works area has been refined in accordance with the Revised Layout Plan of Kong Nga Po Road to avoid the direct impact on the existing *Keteleeria fortunei* and *Aquilaria sinensis* (Undersized Seedlings). Therefore, *Keteleeria fortunei* and *Aquilaria sinensis* (Undersized Seedlings) along Kong Nga Po Road near Police Dog Unit and Force Search Unit Training School identified from the survey would be preserved. They will be protected in accordance with DBVE TC(W) 7/2015 on "Tree Preservation" and tree risk assessment in accordance with "Guidelines for Tree Risk Assessment and Management Arrangement" by DEVB shall be undertaken during the construction period. In addition, the construction works will comply with Section 26 of the General Specification for Civil Engineering Works (2006 Edition) for preservation and protection of trees as appropriate.
- 2.7 According to Section 9.7.1 of the EIA Report, erection and maintenance of a temporary protective fence enclosing the flora species of conservation interest identified under the detailed vegetation survey is recommended to avoid potential impact from construction activities such as materials storage during construction phase. Monthly monitoring of any other flora species of conservation interest identified in the detailed vegetation survey should be conducted during the construction phase to make sure that the flora species of conservation interest are not affected by the construction activities of the Project.
- 2.8 The details of the protection measures for the existing *Keteleeria fortunei* and *Aquilaria sinensis* are presented in Section 5.

#### Minimization (Transplant)

- 2.9 Plants that fall within the Project site are prone to damage during site clearance. If impact on the plant species of conservation importance cannot be avoided, the suitability and /or practicality of transplantation will be assessed according to Condition 2.13(i) of the EP. Considerations include health condition, site condition, transplantation feasibility, conservation value and availability of receptor site. With reference to the *Guidelines on Tree Transplanting* issued by the Development Bureau, the suitability of transplantation of affected individuals was reviewed based on the following considerations:
  - Health, form and structural condition Healthy individual has higher chance to survive the transplant shock and recover after transplantation. Plants with poor form or structure (e.g. inclining, multiple trunk) have imbalanced shape that is difficult to grow well in new environment. Therefore, only healthy individuals with good to fair form and structural conditions will be considered for transplantation.

- Formation of root ball A balanced root ball of suitable size is essential to support the transplanted plant and to re-grow for water and nutrient absorption. In general, the ratio between root ball diameter:trunk diameter is 8:1 to 10:1. Also, plants growing on steep slope develop roots that adapt to the existing gradient. If there is hindrance in the root growing direction (e.g. rocks and concrete structure), the root ball will be in unbalanced form and hard to support the plant in new environment. Mature plant needs larger root ball, implying that higher chance of imbalanced root ball formation on the sloped environment. Therefore, transplantation of herbs and young trees is recommended.
- Technical feasibility and cost effectiveness Unless the plant is located near road network, mobilization of powered mechanical equipment on the slope for large tree transplant is technical impractical and not cost-effective.
- **Conservation value** While all plants considered in this proposal have certain conservation statuses, the commonness of the species in Hong Kong should be considered in evaluating the impact of removing the affected plant in a wider perspective (population survival).
- Availability of Suitable Receptor Site Areas within the survey area but outside the development area will be the receptor site of the affected plants. Habitat similar to the existing growing environment will be chosen to enhance the survival rate after transplant.
- 2.10 Based on the above, transplantation of 3 individuals of *Aquilaria sinensis*, all *Brainea insignis* and *Spiranthes sinensis* identified in works areas are recommended. The exact numbers to be transplanted are subject to the actual site conditions.
- 2.11 It is proposed that all identified flora species of conservation interest within the works boundary, including Kong Nga Po Road, will be protected according to Section 5 prior to the commencement of any site clearance works adjacent to the flora species of conservation interest. No site clearance for site formation and infrastructure works will be started at the locations of flora species of conservation interest until the transplantation works completed.
- 2.12 A 2m buffer zone (including 1m protection zone as mentioned in Section 5) will be created to enhance the protection of flora species of conservation importance to be preserved / transplanted (inclusive of trees, shrubs and herbs) including the proposed location for transplantation of flora species of conservation importance when the site clearance works for site formation and infrastructure works at the area without flora species of conservation importance to species of conservation works completed.

#### **3 PROPOSED RECEPTOR SITE**

- 3.1 Pre-transplantation surveys were undertaken to identify the most suitable receptor site for the transplantation of the flora species of conservation interest. The selection of the suitable receptor site has generally been based on the following criteria:-
  - Area of similar habitat characteristics as the donor site and preferable with previous records of the species in the areas.
  - Area not affected by the construction activities and away from human disturbance.
  - Area adequately away from the project site but not difficult to access in order to minimize the transportation time as well as the impacts on the transplanted individuals.
- 3.2 The receptor site of the transplanted *Brainea insignis*, *Spiranthes sinensis* and *Aquilaria sinensis* is shown in **Figure 2** and **Figure 3** respectively.
- 3.3 The receptor site will be reassessed prior to the commencement of transplantation taking into account the latest site condition. Habitat characteristics, as mentioned in Section 3.1, of the alternative sites should be similar to that of their original locations. Should any changes in the location of receptor site be proposed afterwards, the Director of Environmental Protection (DEP) will be informed for prior consideration.

#### 4 TRANSPLANTATION PROPOSAL

#### **Transplantation Program**

- 4.1 The transplantation works should be completed before site clearance works at the location of flora species of conservation importance.
- 4.2 The transplantation of *Brainea insignis* and *Spiranthes sinensis* (including root ball preparation, uplifting and planting into the receptor sites) is scheduled to be carried out no later than the end of May 2020 to allow rapid regeneration of new roots from the cuts during the growing season of these two flora species.
- 4.3 According to the construction program in **Appendix E**, 3 of the affected individuals of *Aquilaria sinensis* would be required to be transplanted before the site clearance works at the location of *Aquilaria sinensis*. The transplantation of the 3 individuals of *Aquilaria sinensis* (including root ball preparation, uplifting and planting into the receptor sites) is scheduled to be completed in early October 2020.
- 4.4 After uplifting, these individuals would be transplanted immediately to the receptor sites on the same day as far as practicable. If the prepared receptor site is left unattended for too long, it may be changed by natural forces (e.g. rain). Therefore, the receptor site for each individual should be prepared about two weeks beforehand.
- 4.5 The process of transplantation would stress the plants. To maximize the survival rate and help plants resume their growth soon after transplantation, some specific techniques should be adopted as required during the transplantation process and posttransplantation maintenance and monitoring (e.g. The individuals should be watered properly and adequately or daily, if required, during the first three months after the transplantation as dry season approaches.)

#### **Transplantation Methodology**

#### Brainea insignis and Spiranthes sinensis

#### Preparation of Receptor sites

- 4.6 The proposed receptor site for the transplanted individuals should first be cleared of rubbish, weeds and stones over 25mm diameter that may interrupt plant growth. The soil should be ploughed/scarified to loosen the soil, introduce air and improve drainage. Planting holes 1.5 times greater than the root ball of the transplanted individuals. The depth should not be too deep that the root level should be below the surrounding ground level after transplanting. The prepared ground should be protected from being compacted, eroded, silted up or damaged.
- 4.7 Preparation of receptor site should be done carefully so that the root systems of the nearby vegetation are not damaged.

#### Preparation of root ball

4.8 Plants proposed to be transplanted are *Brainea insignis* and *Spiranthes sinensis*. As they do not have extensive root system, no root pruning is proposed and preparation of root

ball covering the entire root system is recommended. The plant should be well-watered before lifting. After digging up the plant, the root ball should be fully wrapped by damp Hessian and secured with a metal net or the like. As the plants are either not wooded or with weak stem, care should be taken to avoid damaging the plant during uprooting and movement. They should be picked up by their root balls but not the stem or leaves. The leaves should be softly wrapped with tarpaulin to protect from damage during transportation.

#### Soil-intact Transplantation

4.9 Uprooted plant should be transplanted to the receptor site as soon as possible, approximately two hours. Otherwise, they should be kept upright and watered at the nursery. At the receptor site, all wrappings should be removed before planting into the prepared pit. Soil excavated during pit preparation should be reused for backfilling. The soil should be slightly tamped to stabilize the plant. The plant should be well-watered once planted. Mulches can be added on soil surface to maintain moisture, as nutrients source and protection from sunlight and weed growth. As the receptor site is close to the construction area, robust and bright fencing should be erected to protect the plants.

#### Aquilaria sinensis

#### Preparation of Receptor site

- 4.10 The proposed receptor site for the transplanted individuals should first be cleared of rubbish, weeds and stones over 25mm diameter that may interrupt plant growth. The soil should be ploughed/scarified to loosen the soil, introduce air and improve drainage. Planting holes should be marked with individual tree numbers before the transplant and chosen to provide adequate growth space for future growth. A planting hole that is two to three times the width of the rootball. The prepared ground should be protected from being compacted, eroded, silted up or damaged.
- 4.11 Preparation of receptor site should be done carefully so that the root systems of the nearby vegetation are not damaged.

#### Preparation of root ball

- 4.12 As the transplanted trees are with medium size and healthy, the crown cleaning of any dead, diseased or damaged branches is considered not required.
- 4.13 Root pruning of tree to the specified size of root ball will be carried out before transplanting. The root ball diameter to tree diameter ranges from 8:1 to 10:1 according to international standards.
- 4.14 Sufficient time will be be allowed between preparation and final lifting for development of new roots capable of sustaining and continuing the growth of the transplanted tree.
- 4.15 The root of plants should be kept moist during the whole transplantation process. Plants should be watered two to three days before digging if the soil is dry. Prior to digging, the lower branches of the plant should be tied up to prevent damage during digging, transporting and planting operations. A sharp spade should be used for root pruning to assure root wounds are clean cut. Digging should be done by hand and special attention

should be paid so that no damage is done to the fine root systems of the individual or the roots of the existing trees in the vicinity.

- 4.16 The trees will be secured with guying prior to each root pruning process.
- 4.17 The root ball will be tapered on the sides and then slanting inwards towards the base.
- 4.18 The root ball will stand on a pedestal of soil for shaping and burlapping before it is undercut.
- 4.19 The stems and branches of the trees will be well padded to protect from injury during the transplant.

#### Uplifting / Moving the Root Balls of the Transplanted Trees

- 4.20 Before uplifting/ moving the root balls, damp hessian is placed on the sides and across the tip of the ball and pinned. The hessian should cover the full circumference of the root ball with bottom skirt hanging out. This skirt is pinned to the root ball later after the tree is taken out of the hole. The base of the root ball should also be properly wrapped. This hessian shall be kept moist throughout the time of uplifting until the uplifted tree is transplanted in its new location.
- 4.21 Once the root balls are undercut, the formed root balls will be burlapped and then wrapped by the wire mesh.
- 4.22 Wire rope slings will be slipped into the underside of the root balls and wrap around all four sides of the root balls for the uplift/move.
- 4.23 The root balls will be uplifted via the wire rope slings and the tree trunk/stem will not be used as the main anchorage point for the uplift/move.
- 4.24 The uplifted root balls will be transplanted and watered on the same day.
- 4.25 Lifting and transplanting operations will be carried out only following a thorough watering by the Contractor or a period of rainfall.
- 4.26 All uplifted root balls will be transplanted directly by crane to the proposed receptor sites that are not far from their original sites.
- 4.27 During the transplant, canopies of the existing trees if any next to the proposed receptor sites will be protected to avoid any mechanical damage.
- 4.28 Preparation of the receptor sites will be finished before transplanting the uplifted root balls.

Planting of the root balls

- 4.29 The uplifted root balls should be transported and planted in the prepared planting holes as soon as possible, approximately two hours, with appropriate planting orientation to suit the plants' original growth environment. All wrappings should be removed before planting into the prepared planting holes.
- 4.30 The bottom of the trunk flare/stem of the plants will be at or slightly above the finished grade to avoid suffocation of the trunk flare/stem.

- 4.31 The planting hole will be backfilled with soil mix, which will be compacted in layers around the root ball until level with the surrounding ground to limit future settling and prevent air pockets. The backfill will not be compacted to a density that inhibits root growth.
- 4.32 The transplanted trees will be well watered to soak the root balls and soil mix immediately after planting.
- 4.33 Mulch will be placed around the plants to retain moisture.
- 4.34 The trees will be securely supported by guying to the ground. Bamboo tripod staking may be required for stabilizing the transplanted in position. Such tree support system and bamboo tripod will be maintained at least for the first 6 months in establishment period.
- 4.35 Removal of these support systems after the 6-month establishment period will be subject to the tree stability and growth conditions.
- 4.36 Immediately following planting and where appropriate, a soil saucer can be formed on the soil surface around the edge of the root ball circumference to permit rain or irrigation water to be retained and slowly infiltrate into the root ball perimeter.
- 4.37 As the receptor site is close to the construction area, robust and bright fencing should be erected to protect the plants.

#### **Post-Transplanation Monitoring and Maintenance Programme**

#### Post-transplantation Monitoring

- 4.38 Post-transplantation monitoring is proposed in the first year of establishment to inspect the health condition of the plants. Regular monitoring allows early detection of the growth status of transplanted species, sign of construction activity within and nearby the receptor site, and any environmental change of the receptor site. The findings shall be supplemented with photographic record.
- 4.39 The frequency is proposed to be once per week in the first three months and reduced to once per month afterwards. Should the plant dies during the monitoring period due to negligence or non-compliance of the Transplantation Proposal, the contractor shall compensate the loss by planting the same or similar species, subject to approval by the Agriculture, Fisheries and Conservation Department.
- 4.40 Any post-transplantation monitoring findings should be included in the weekly inspection checklist/report and it should be submitted to the Engineer, Environmental Team Leader and Independent Environmental Checker for review and record. The template of post-transplantation monitoring checklist is shown in **Appendix D**.
- 4.41 Apart from the transplanted individuals, retained individuals of *Keteleeria fortunei and Aquilaria sinensis* (Undersized Seedlings) should be fenced off prior to the commencement of construction as they are located in close proximity to the proposed works. Monthly monitoring should also be carried out during the construction phase to make sure that the flora species of conservation interest are not affected by the

construction activities of the Project. Photographic record of the retained individuals should be taken during every monitoring visit.

- 4.42 The Contractor should submit a photographic record for the individuals to be transplanted during each of the following stages for record purpose:
  - Before transplantation recording the existing growth angle and compass orientation of the plant, in order to allow replication during transplanting;
  - During Transplantation recording each procedure, including digging, formation of root ball, preparation works at all receptor sites, transportation of uplifted individuals to the receptor sites, planting of individuals at the receptor sites and after transplanting into the receptor sites; and
  - Post-Transplantation Period recording the status of transplanted individuals during the 12-month establishment period and the post-establishment period until the end of construction phase.

#### Maintenance Programme

4.43 To allow health growth of the transplanted species, the following maintenance works are recommended in the first year of establishment:

#### Watering

4.44 The receptor sites should be thoroughly watered immediately after planting. During the establishment period, the soil should be regularly monitored to prevent drying out. The individuals should be watered properly and adequately or daily, if required, during the first three months after the transplantation as dry season approaches. After that, watering frequency should be conducted at least twice a week until the end of the establishment period. Frequency of watering should be adjusted accordingly so that the soil is kept moist.

#### Use of Mulch

4.45 Mulches help conserve moisture, maintain moderate soil temperature, and control weeds around plants. If required, organic mulches such as peat moss, thoroughly dried grass clippings or small wood chips could be placed on the soil surface over the plant root system.

#### Weeding

4.46 Insect/fungal infested stems, or those infected with disease would be removed after transplantation. Pruning may also be required after transplantation to remove any broken stems. The receptor sites should be kept free from weeds throughout 12-months establishment period. Any unwanted weeds found in these areas should be removed by the Contractor once identified and/or when instructed by Engineer. Weeding should be carried out by hand as much as possible and removed weeds should be disposed of appropriately by the Contractor.

#### 5 PROTECTION MEASURES FOR RETAINED / TRANSPLANTED INDIVIDUALS

- 5.1 During construction of the Project, the following guidelines should be followed to protect retained / transplanted trees and plant species of conservation importance within and in the vicinity of the work area:
  - All works should be confined within the site boundary.
  - Access of site staff should be controlled to avoid damage to the vegetation in surrounding areas.
  - Equipment or stockpile should be placed in the existing disturbed / urbanized land within the site boundary of the Project to minimize disturbance to vegetated areas.
  - Before the commencement of construction works, the Contractor must be aware which trees/plants are to be retained and which are to be transplanted.
  - Trees/plants which have been proposed to be transplanted should be clearly marked on the layout plan.
  - Trees/plants which are to be retained should be clearly marked on site prior to the commencement of site construction works, preferably by printed numbers consistent with the Tree Survey Report and Detailed Vegetation Survey Report for the Project. Trees/plants to be retained will also be marked with surveyor's flagging or ribbon.
  - As a general rule the majority of a tree's roots lies within an area just greater than the spread of its crown and are at a depth of approximately 600mm. This may be less on heavy soils and greater on drier soils. Therefore, the following precautions should be undertaken in order to prevent damage to the trunks, roots and crowns of trees during constructions.
  - A tree protection zone should be set below the drip line of the tree crown for trees near the edge of the works area. For plant species of conservation importance to be preserved (inclusive of trees, shrubs and herbs), the protection zone should be set 1m from the plant. Robust, bright-coloured fencing of 1.5m in height should be erected to remind workers not to trespass before site clearance.
  - Heavy equipment, supplies, ditches and underground utility lines should be placed outside the protection zone.
  - Care should be taken to prevent trees/plants being damaged by mechanical equipment both during site clearance works and construction works.
  - No fixings should be driven into trees/plants.
  - No workshop, canteens, or similar should be installed beneath trees/plants, nor will equipment maintenance etc. be carried out under trees/plants.
  - No excavation, including that for services or changes in ground level will take place within the spread of the crown of the trees/plants.
  - No change of ground level around preserved trees/plants is permitted.
  - No soil, debris or construction materials should be deposited around and against the trunk of a tree/plant as this causes bark damage and compaction of the soil.
  - No fire should be lit below the branches and no petrol, oil or caustic substances stored near the trees/plants.
  - No trees/plants should be used for anchoring or winching purposes or for the display of signs.
  - Regular inspection should be conducted to ensure the integrity of the protection zone and the plant condition.

- Any damage or injury to the retained / transplanted plants should be reported as soon as possible. The Contractor should be aware of any injured plants in order to monitor their recovery progress. Injuries to root and branches should be repaired immediately.
- 5.2 If trees are wounded or stressed during construction, they are more susceptible to insect and disease attack. Any wounds to the bark should be cleaned to sound wood by removing loose bark and wood, leaving a smooth edge around the wound. No application of a wound dressing is necessary.

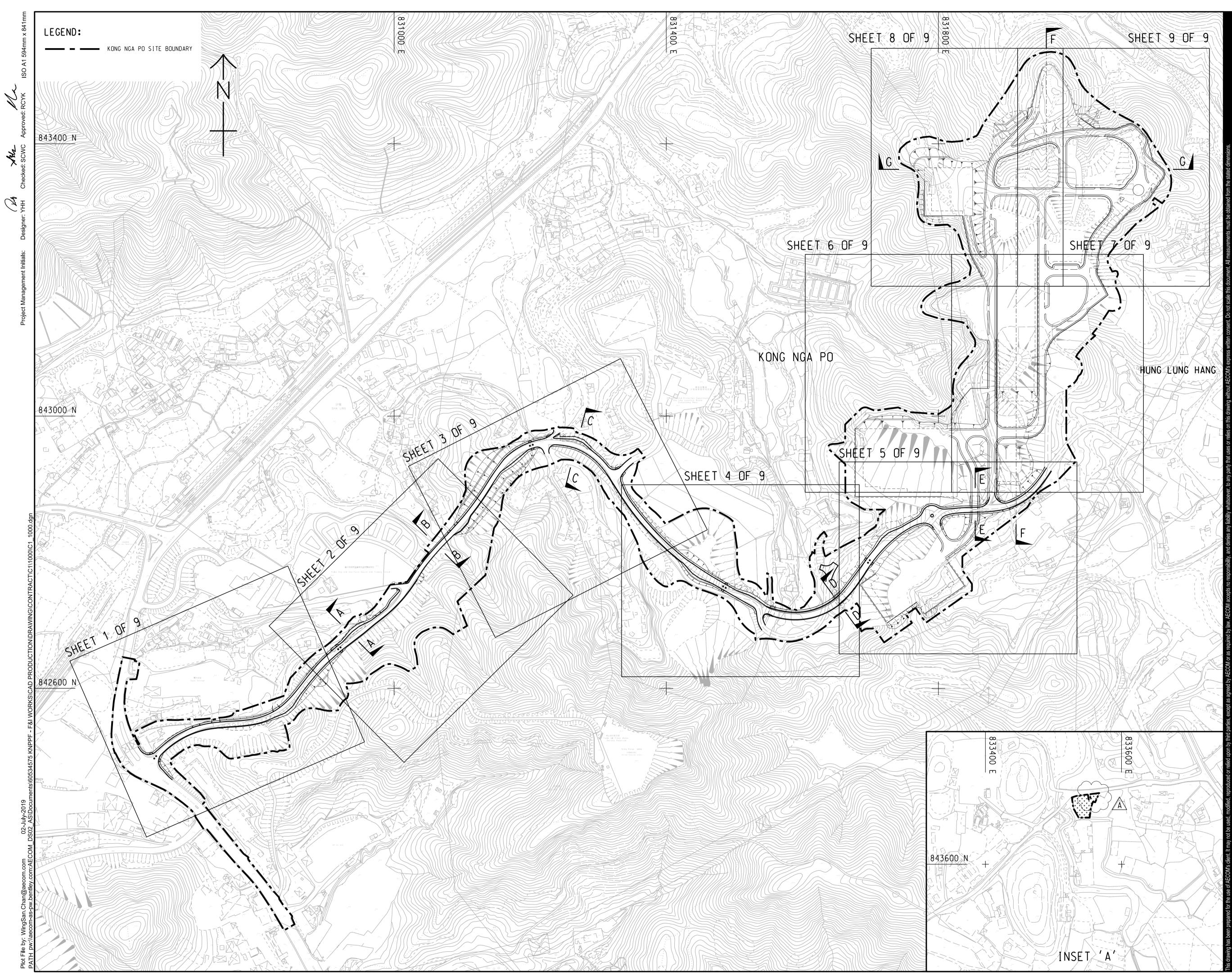
#### 6 IMPLEMENTATION SCHEDULE

6.1 An Implementation Schedule (IS) has been prepared and included in **Appendix F** to summarize all the required mitigation measures need to be implemented for the Project.

#### 7 CONCLUSION

- 7.1 To fulfill the requirement in Section 8.3.1 of the Environmental Monitoring and Audit (EM&A) Manual and Condition 2.13 & 2.14 of the EP, prior to the commencement of site clearance, detailed vegetation survey was conducted from 28 February to 6 March 2020, in order to confirm / update the exact locations, number and condition of individuals of any flora species of conservation interest within the works boundary, including Kong Nga Po Road.
- 7.2 During the vegetation survey, four plant species of conservation importance (i.e. Cycadfern *Brainea insignis*, Fortune's Keteleeria *Keteleeria fortunei*, Ladies Tresses *Spiranthes sinensis*, Incense Tree *Aquilaria sinensis*) were recorded within the site boundary, including Kong Nga Po Road.
- 7.3 The works area has been refined in accordance with the Revised Layout Plan of Kong Nga Po Road to avoid the direct impact on the existing *Keteleeria fortunei* and *Aquilaria sinensis* (Undersized Seedlings) identified along Kong Nga Po Road near Police Dog Unit and Force Search Unit Training School would be preserved and protected on-site.
- 7.4 3 individuals of *Aquilaria sinensis*, all *Brainea insignis* and *Spiranthes sinensis* affected directly by the project are considered to be suitable for transplantation, provided that appropriate transplanting procedures are adopted, and post-plantation care is provided. The exact numbers to be transplanted are subject to the actual site conditions.
- 7.5 To provide consistent habitat condition, receptor site would be located within the project boundary and would receive the all potentially affected individuals of *Aquilaria* sinensis, Brainea insignis and Spiranthes sinensis. Appropriate transplantation techniques, and post-transplantation care and monitoring are recommended and should be adopted as far as practicable. In addition, protective measures for the retained / transplanted individuals should also be adopted during the construction phase.

DRAWINGS





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 <sub>業主</sub>



住 木 工 程 拓 展 署

 Civil Engineering and

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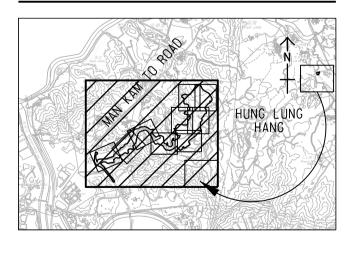
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SCALE 比例

### DIMENSION UNIT <sup>尺寸單位</sup>

A1 1 : 2500

**KEY PLAN** A1 1 : 50000 <sub>索引圖</sub>



## **PROJECT NO.** <sub>項目編號</sub>

# CONTRACT NO. <sub>合約編號</sub>

60534575

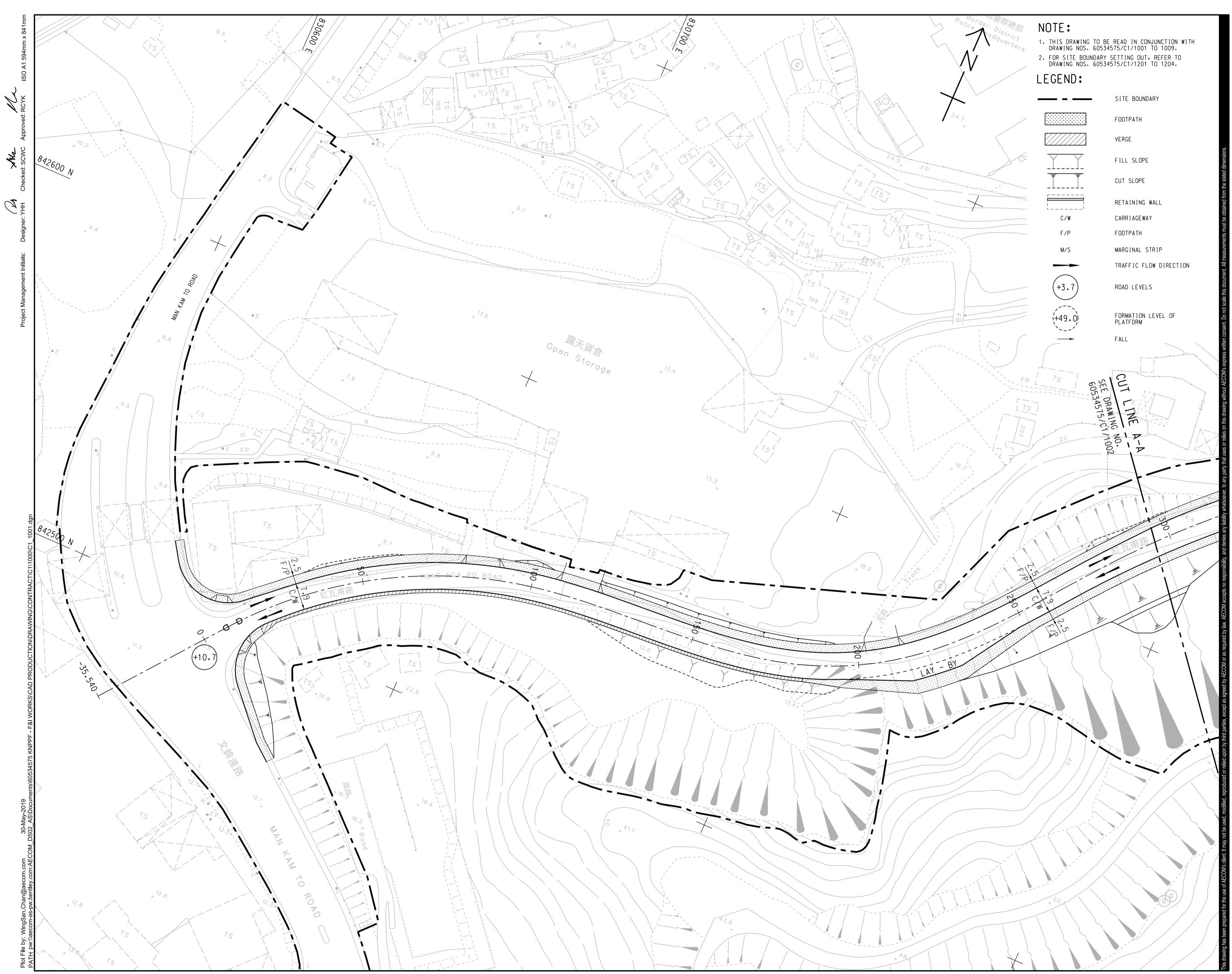
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SHEET TITLE 圖紙名稱

KEY PLAN AND LOCATION PLAN

## SHEET NUMBER 圖紙編號

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

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WORKS FOR POLICE FACILITIES IN KONG NGA PO



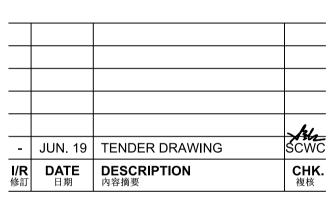


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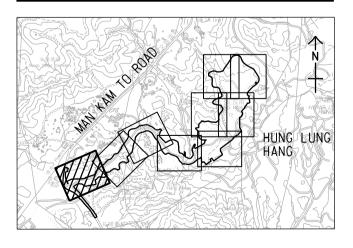
SCALE 比例

A1 1 : 500

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**KEY PLAN** A1 1:30000 <sup>索引圖</sup>



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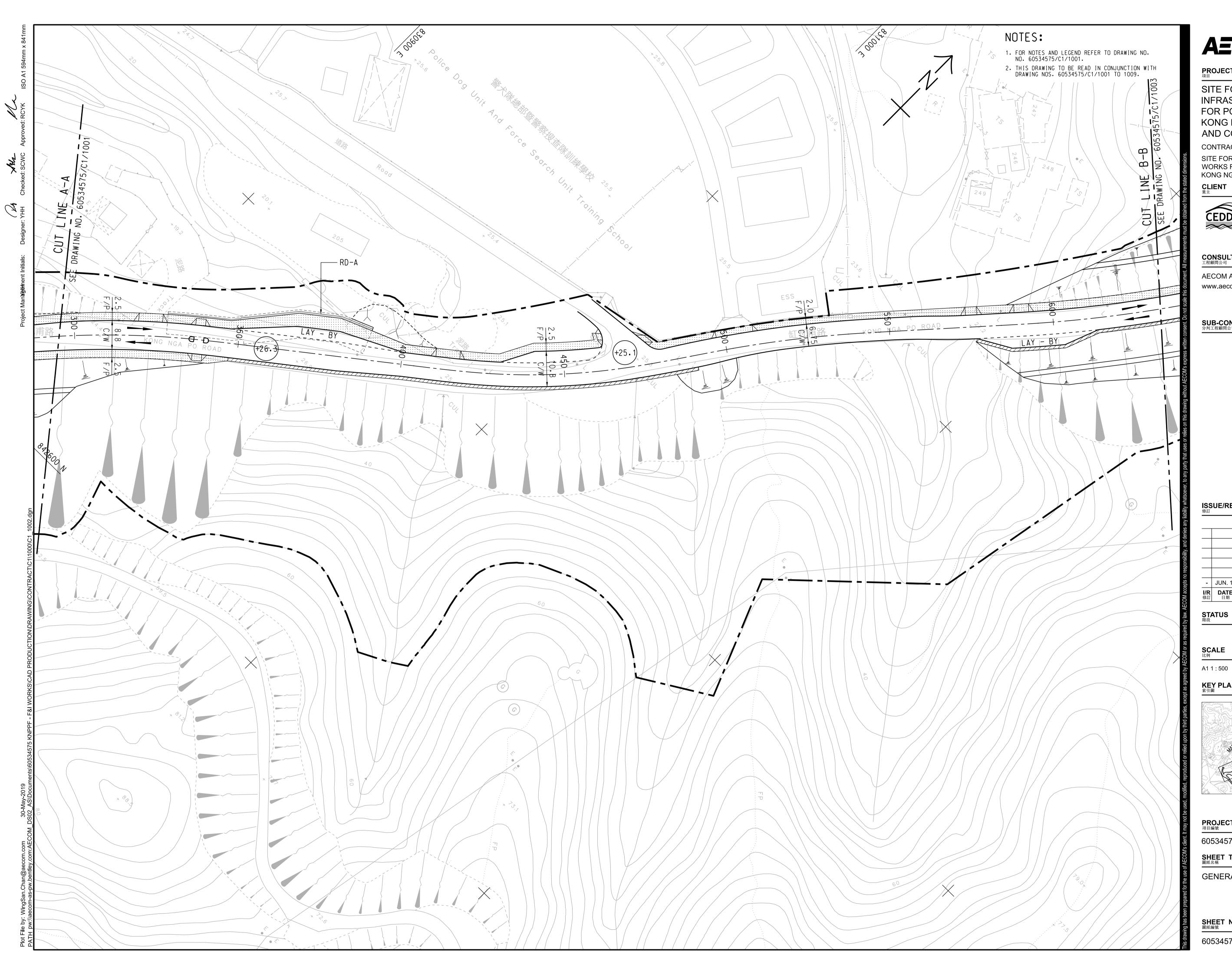
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SHEET TITLE 圖紙名稱

GENERAL LAYOUT

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SHEET 1 OF 9





#### 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 <sup>業主</sup>



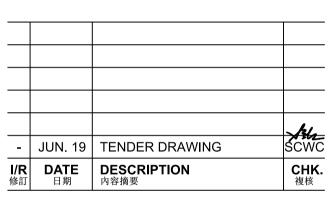
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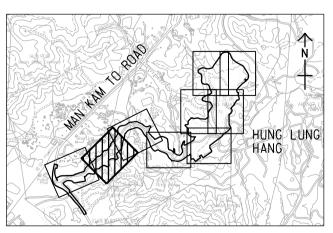
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**SCALE** 比例

### DIMENSION UNIT <sup>尺寸單位</sup>

METRES

**KEY PLAN** A1 1 : 30000 索引圖



## **PROJECT NO.** <sub>項目編號</sub>

60534575

SHEET 2 OF 9

ND/2018/01

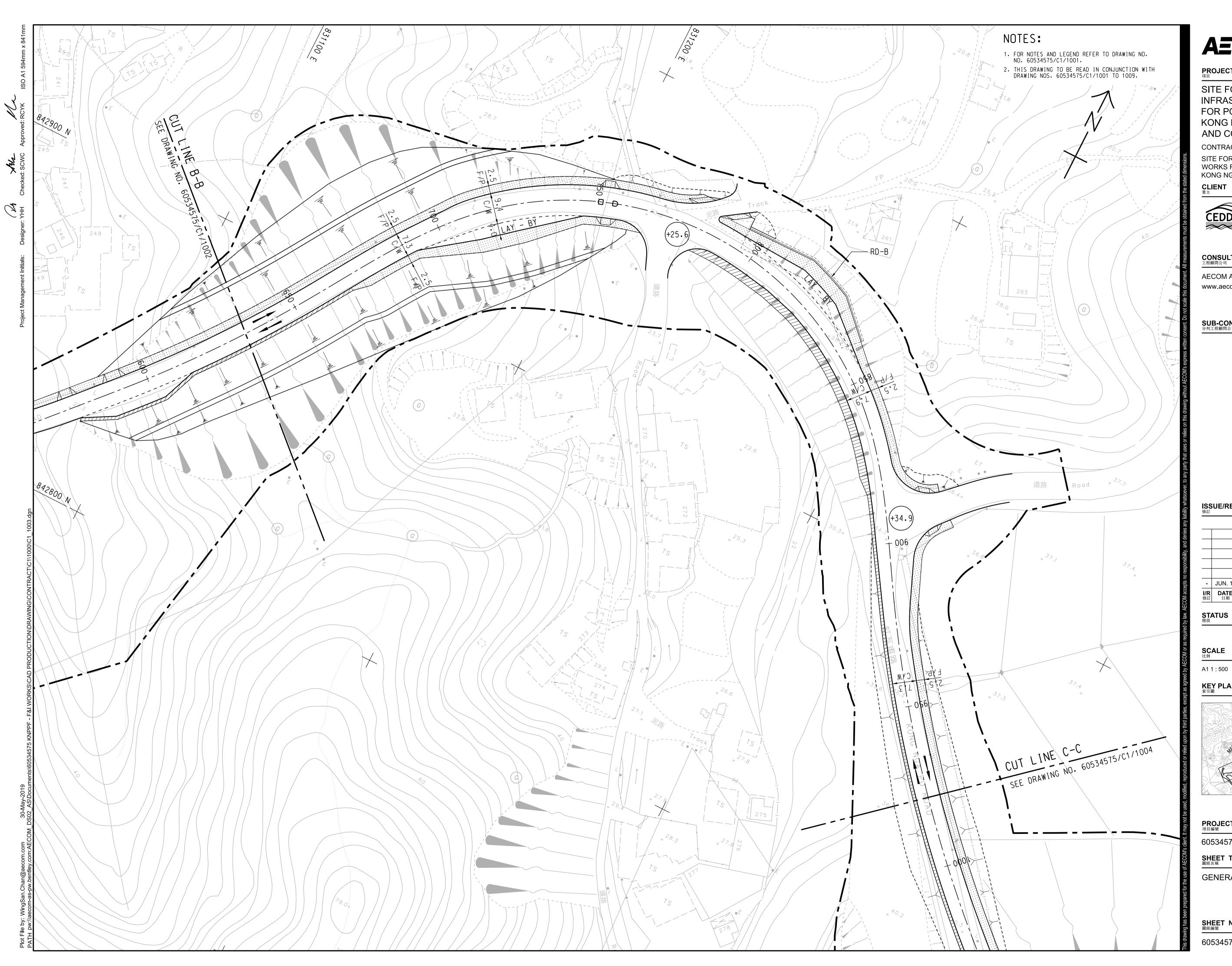
SHEET TITLE 圖紙名稱

GENERAL LAYOUT

# SHEET NUMBER 圖紙編號

60534575/C1/1002

CONTRACT NO. <sub>合約編號</sub>





#### 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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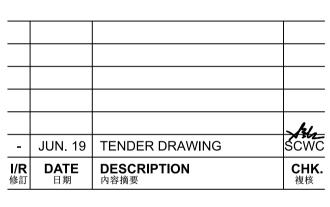
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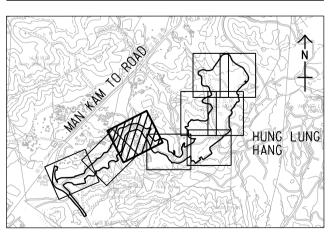
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# SCALE 比例

### DIMENSION UNIT <sup>尺寸單位</sup>

METRES

**KEY PLAN** A1 1 : 30000 <sub>索引圖</sub>



## **PROJECT NO.** <sub>項目編號</sub>

60534575

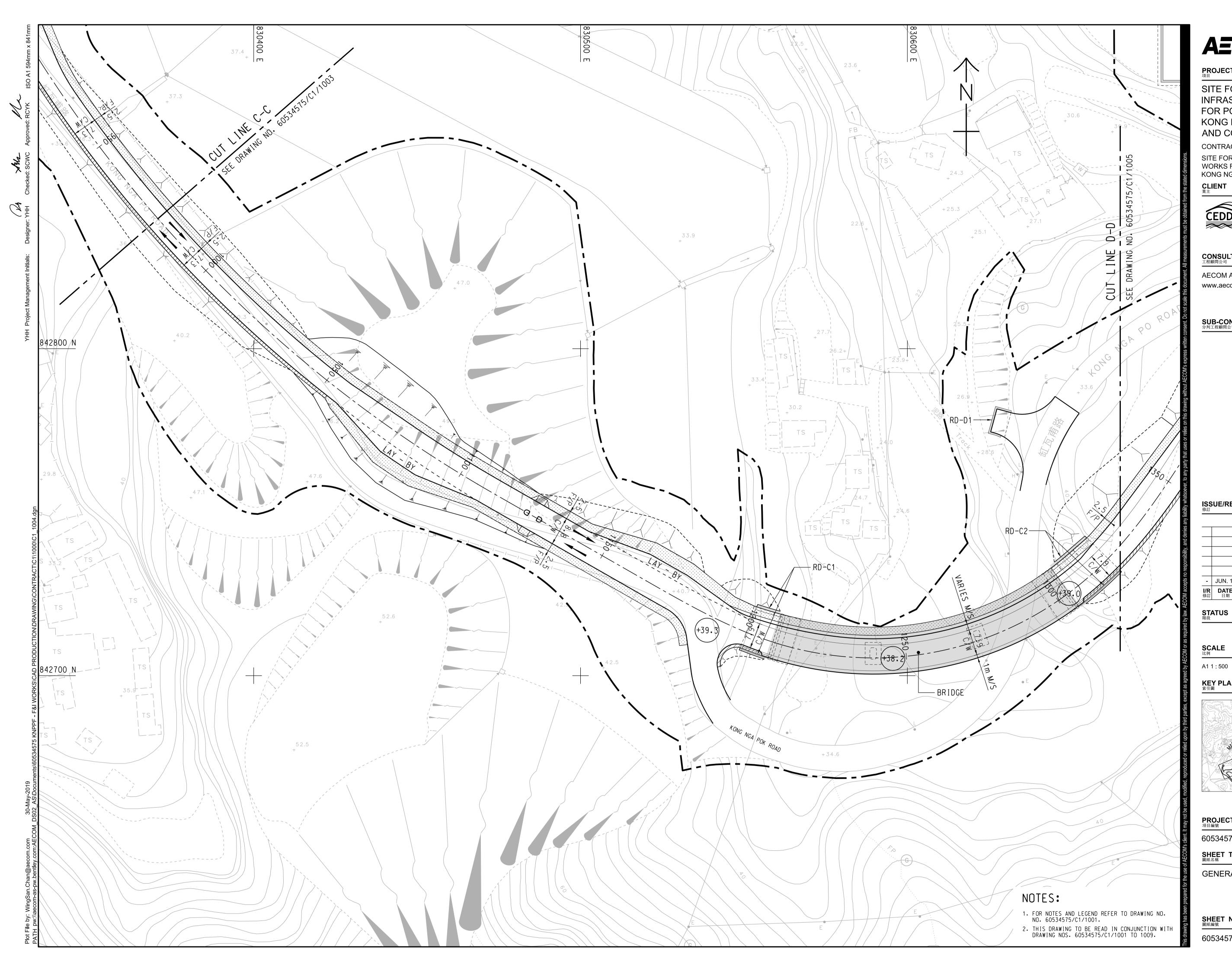
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SHEET TITLE 圖紙名稱

GENERAL LAYOUT

# SHEET NUMBER 圖紙編號

SHEET 3 OF 9





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

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

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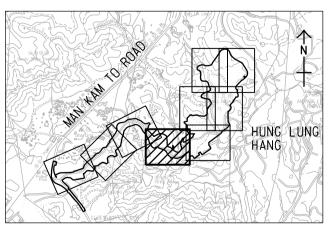
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# SCALE 比例

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**KEY PLAN** A1 1 : 30000 <sub>索引圖</sub>



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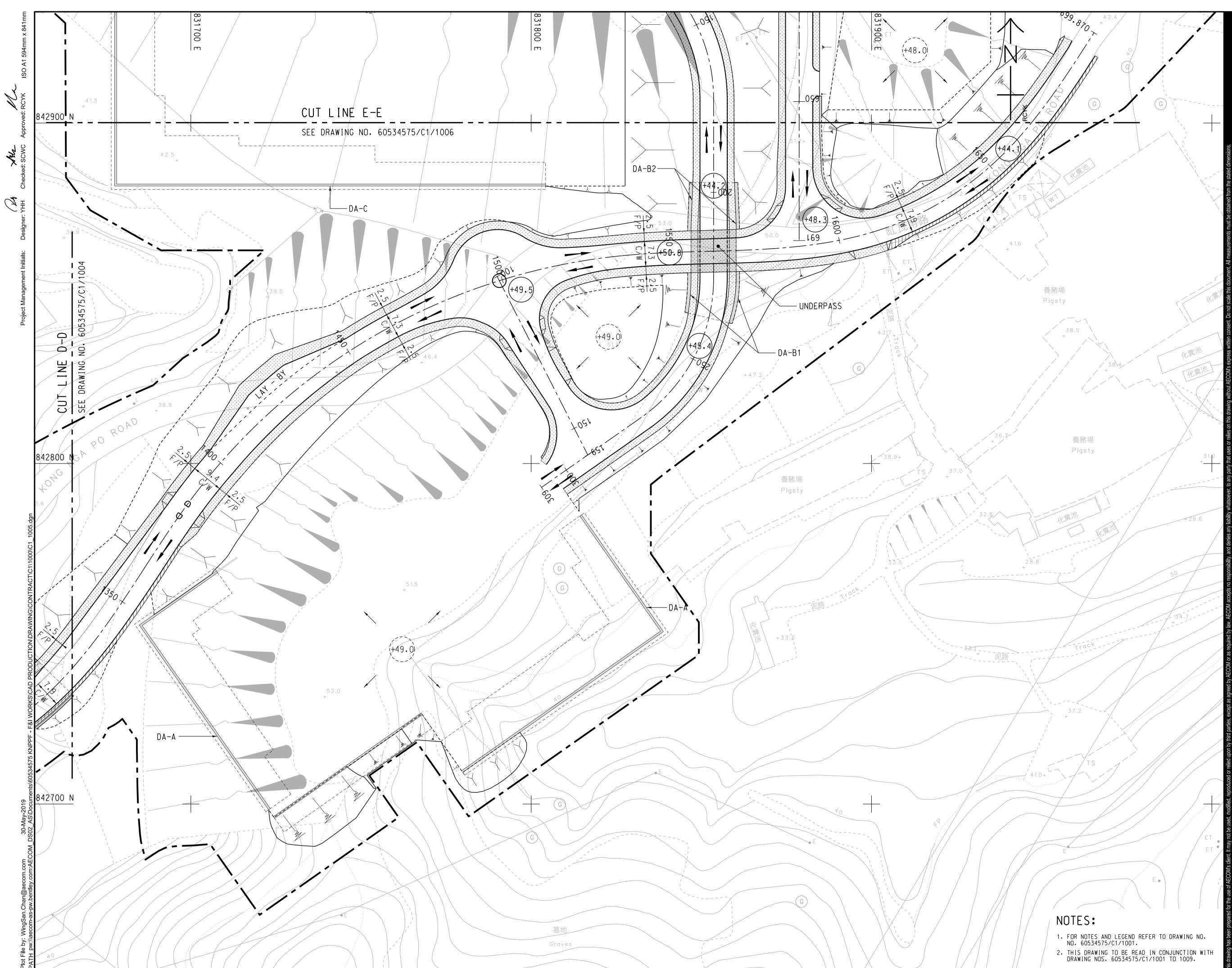
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SHEET 4 OF 9





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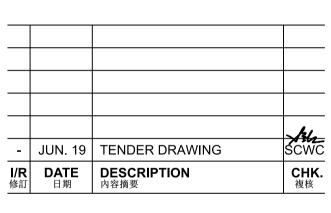
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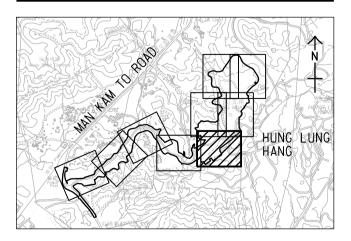
A1 1 : 500

SCALE 比例

## DIMENSION UNIT <sup>尺寸單位</sup>

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**KEY PLAN** A1 1 : 30000 索引圖



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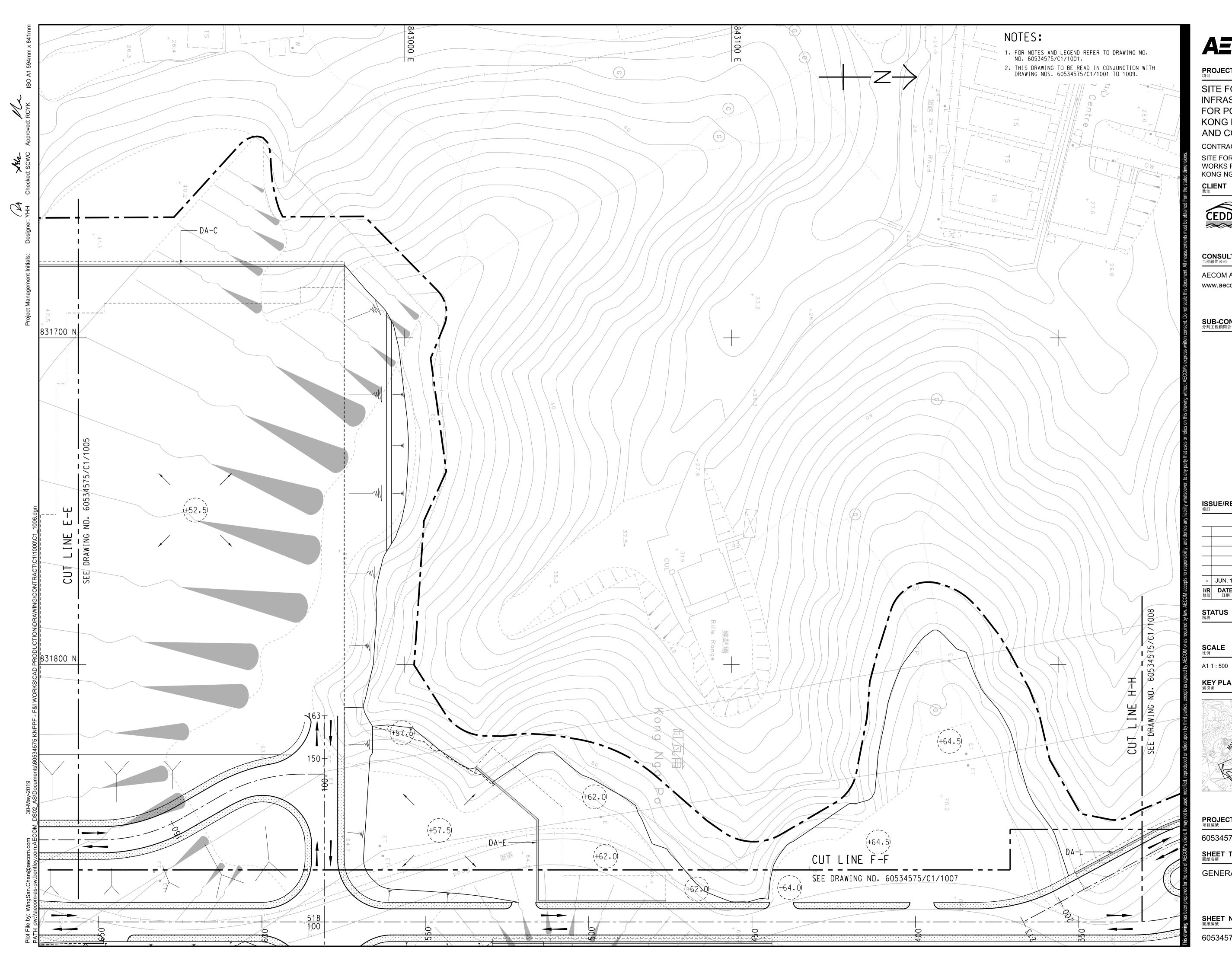
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SHEET TITLE 圖紙名稱

GENERAL LAYOUT

SHEET 5 OF 9

# SHEET NUMBER 圖紙編號





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CONTRACT TITLE

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

#### CLIENT <sup>業主</sup>



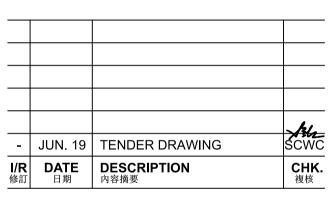
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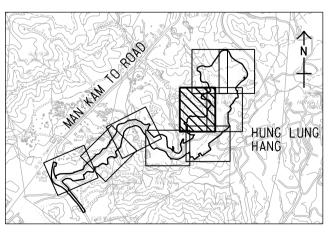
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SCALE 比例

# DIMENSION UNIT <sup>尺寸單位</sup>

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**KEY PLAN** A1 1 : 30000 <sub>家引圖</sub>



# **PROJECT NO.** <sub>項目編號</sub>

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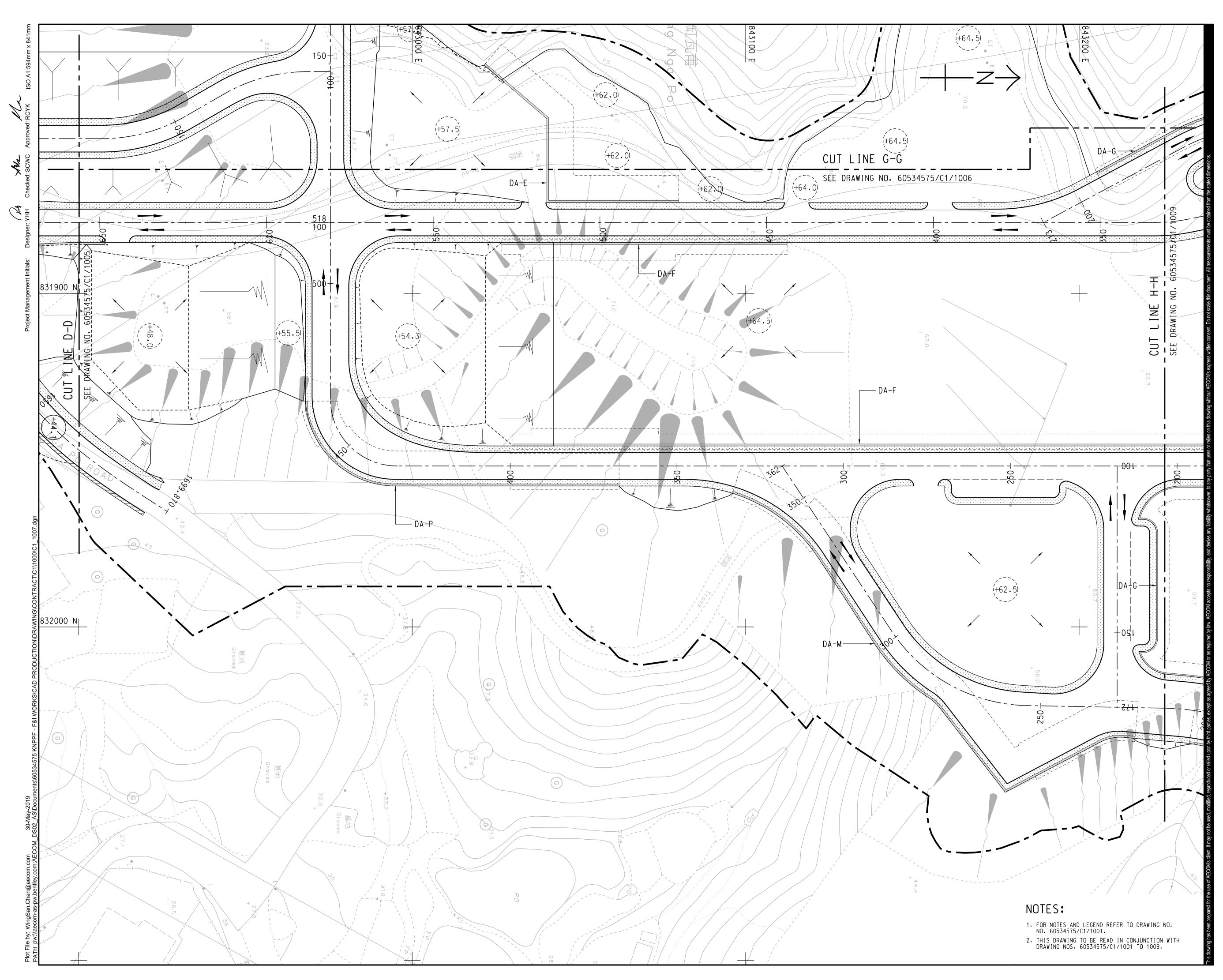
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GENERAL LAYOUT

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SHEET 6 OF 9

CONTRACT NO. <sub>合約編號</sub>





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CONTRACT TITLE

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#### CLIENT <sub>業主</sub>



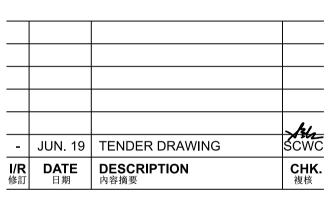
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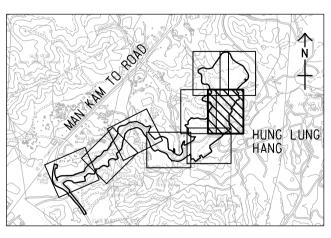
A1 1 : 500

# SCALE 比例

### DIMENSION UNIT <sub>尺寸單位</sub>

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# **PROJECT NO.** <sub>項目編號</sub>

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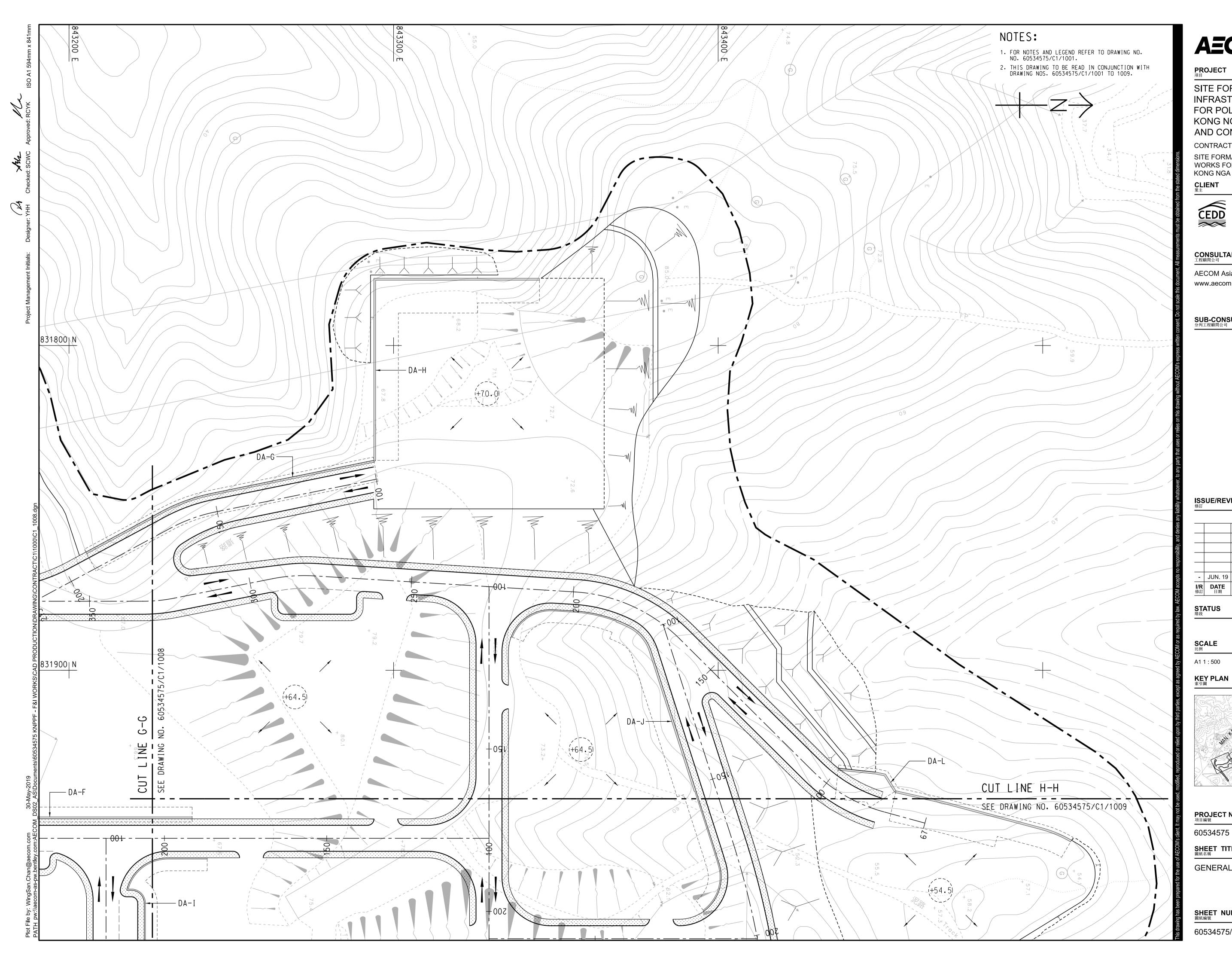
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SHEET 7 OF 9

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CONTRACT NO. <sub>合約編號</sub>





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CONTRACT TITLE

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#### CLIENT <sup>業主</sup>



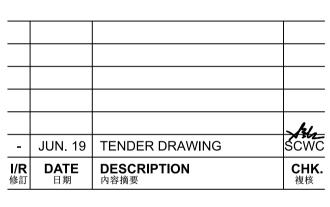
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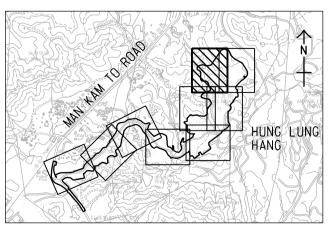
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# SCALE 比例

### DIMENSION UNIT <sup>尺寸單位</sup>

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## **PROJECT NO.** <sub>項目編號</sub>

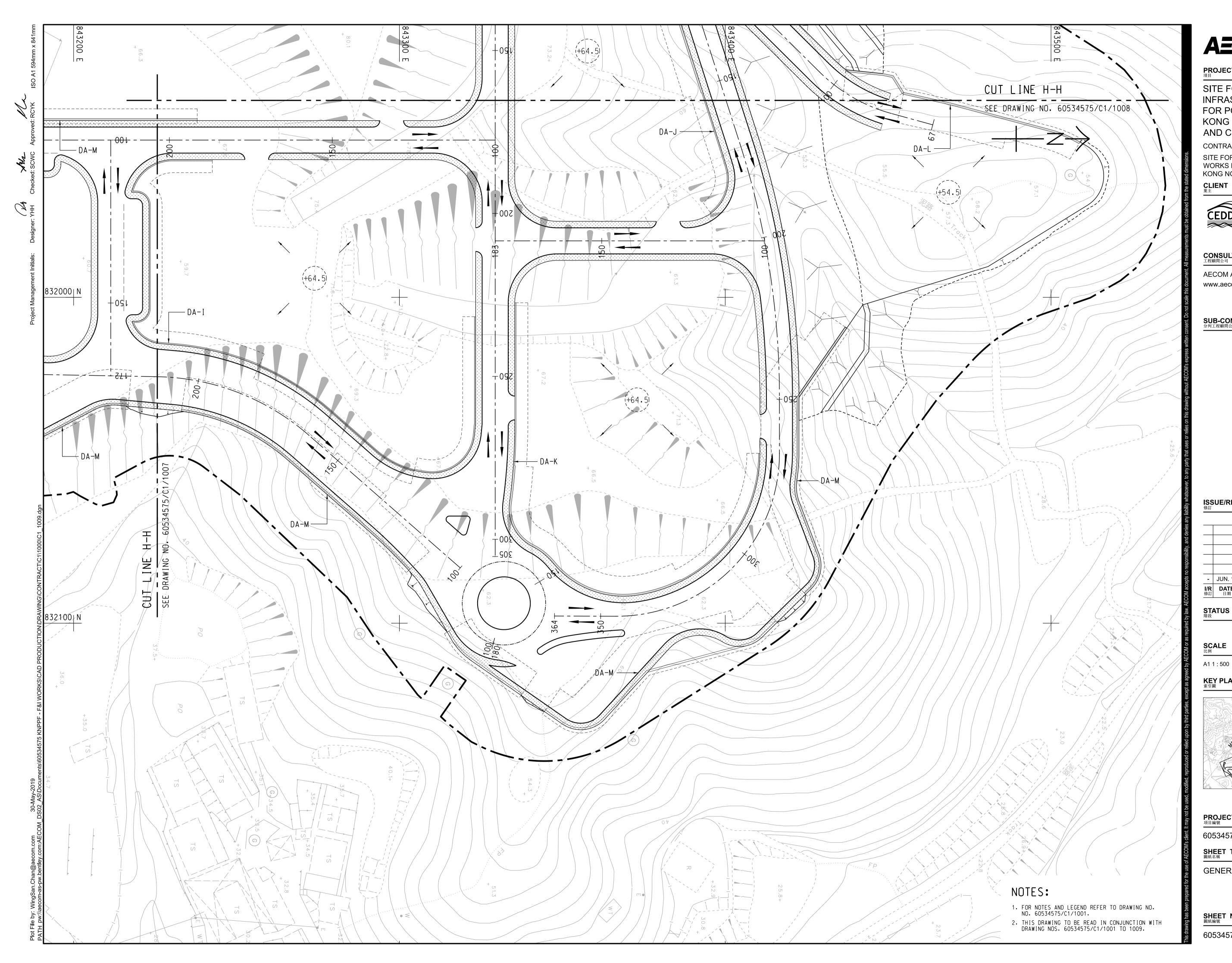
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SHEET TITLE 圖紙名稱

GENERAL LAYOUT

# SHEET NUMBER 圖紙編號

SHEET 8 OF 9





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

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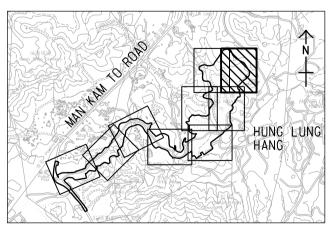
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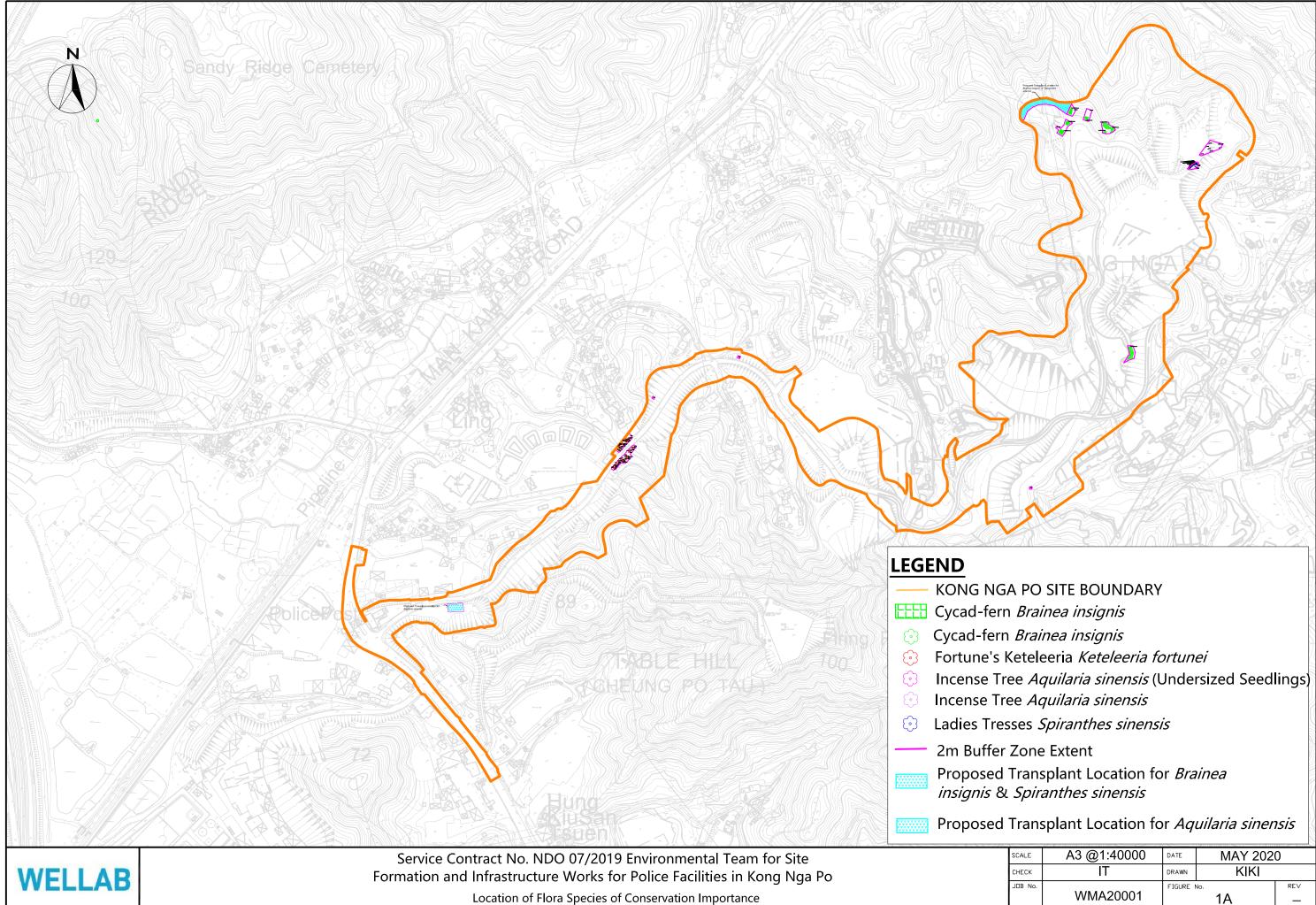
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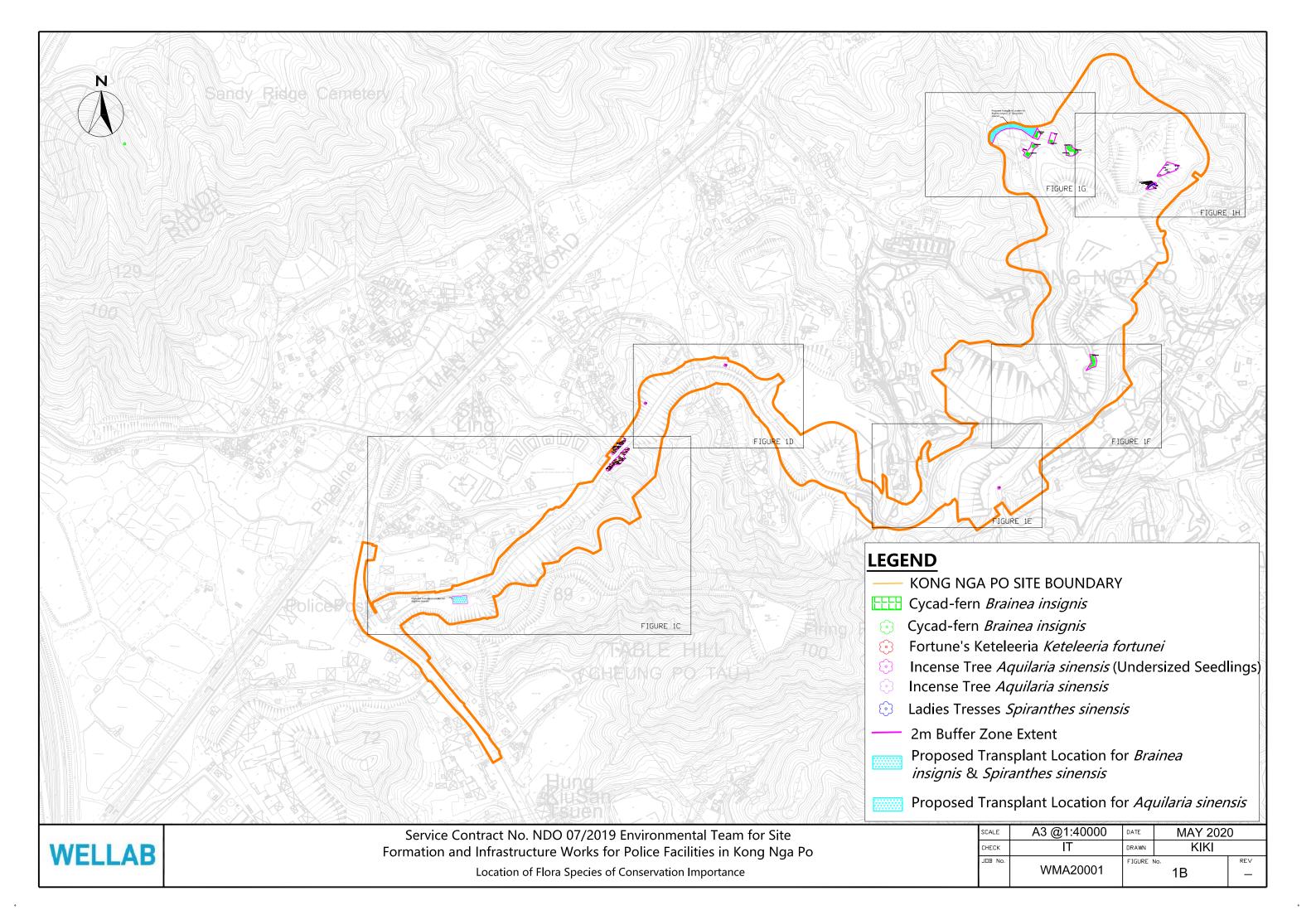
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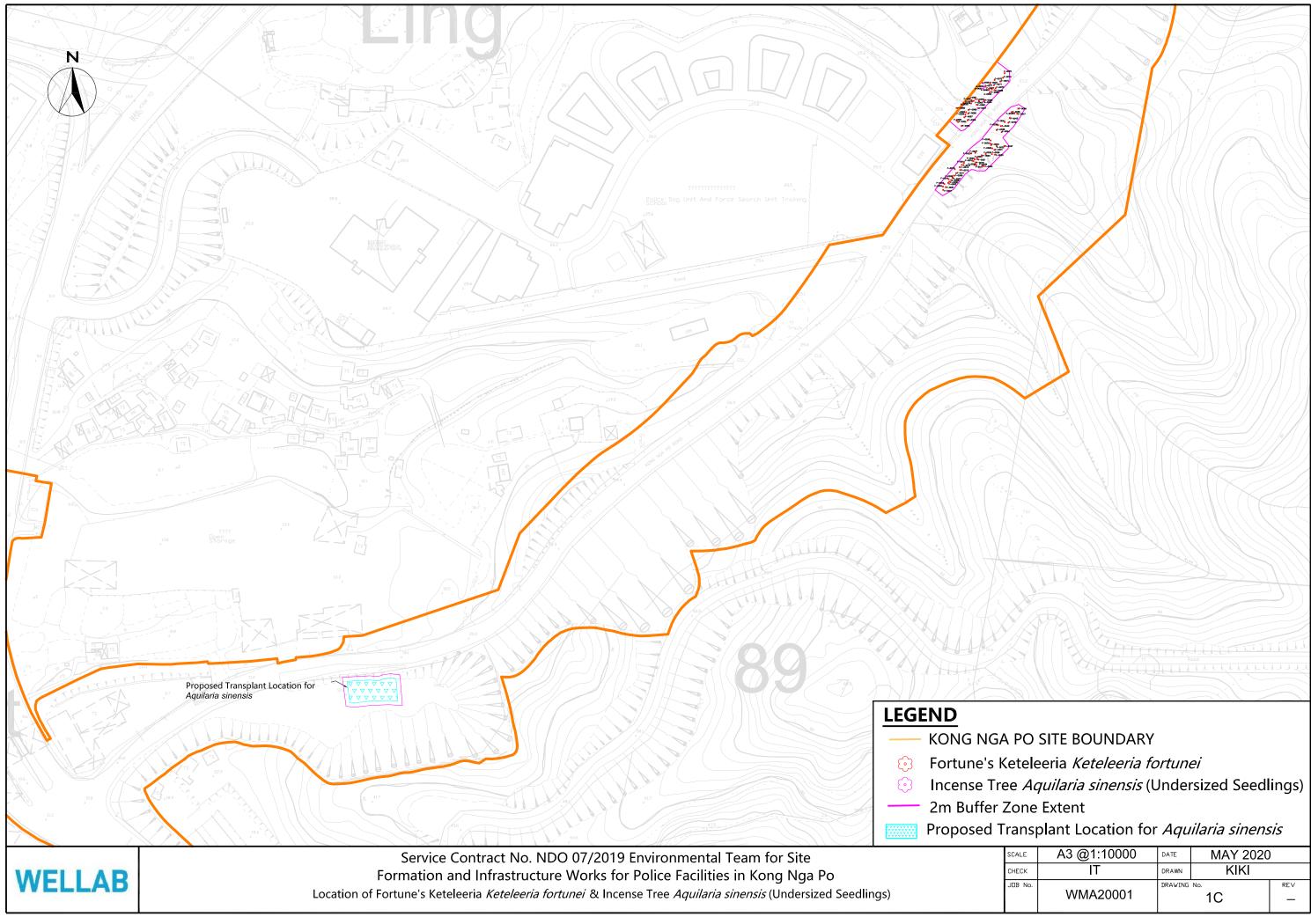
SHEET 9 OF 9

FIGURES

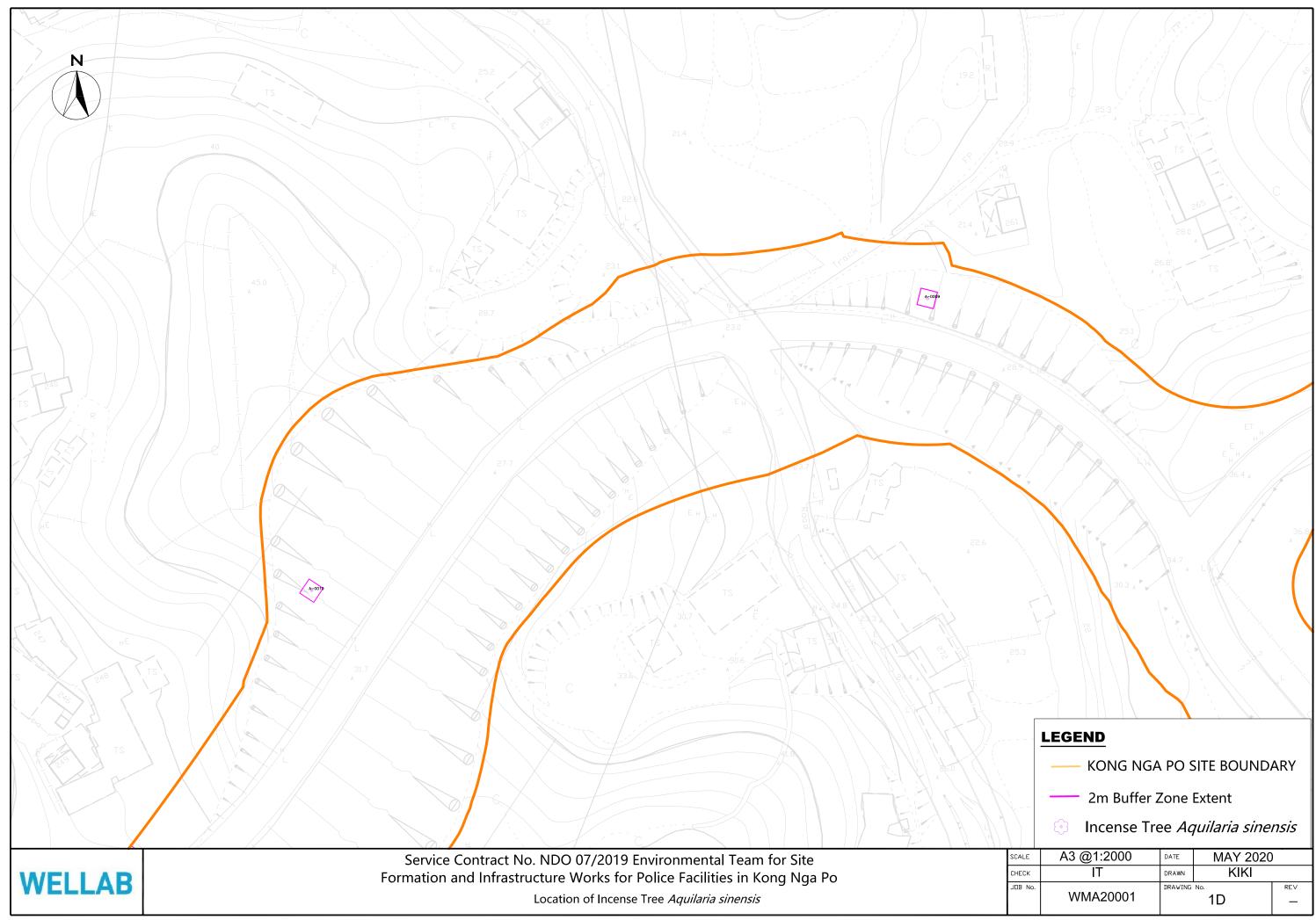


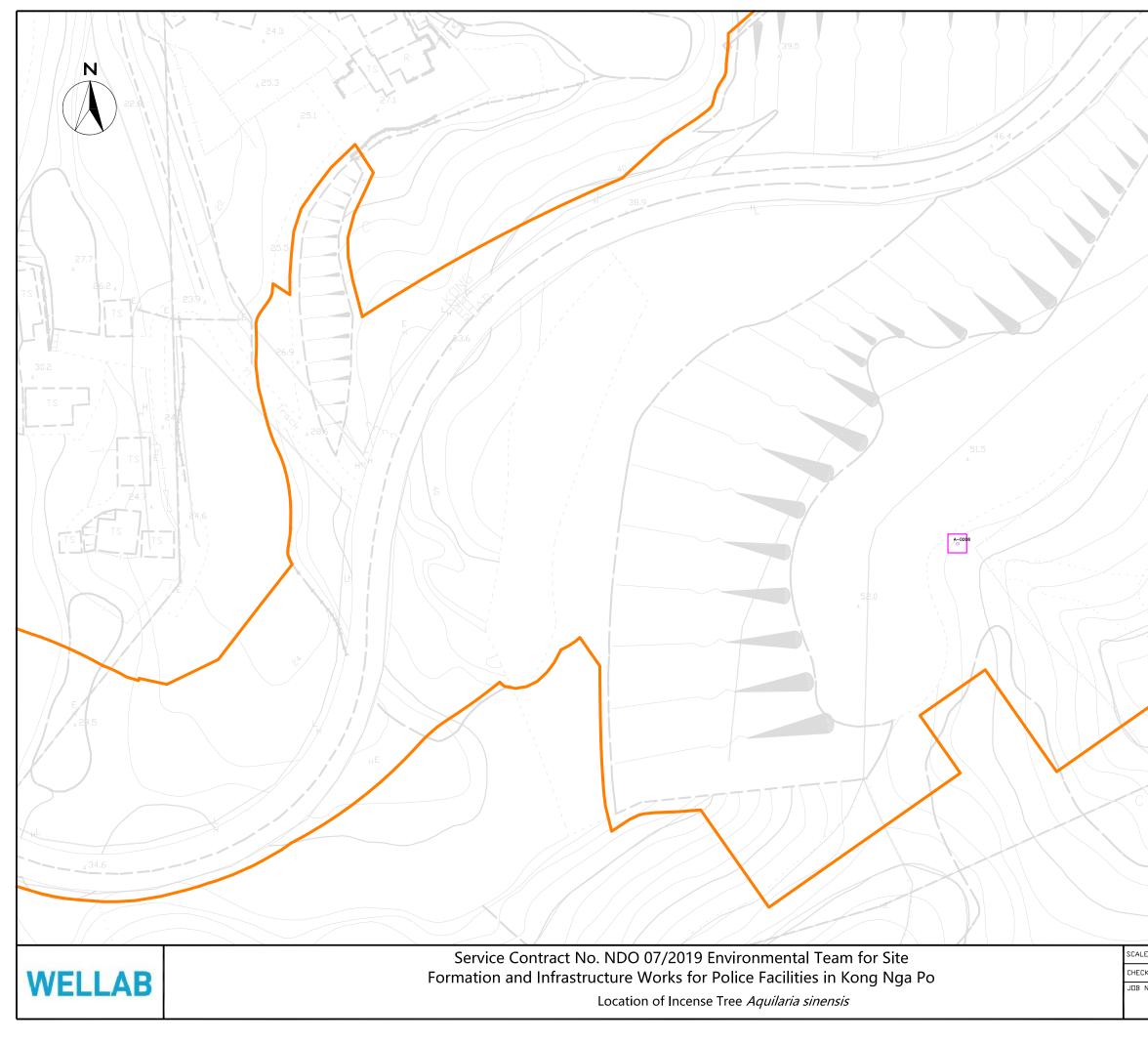
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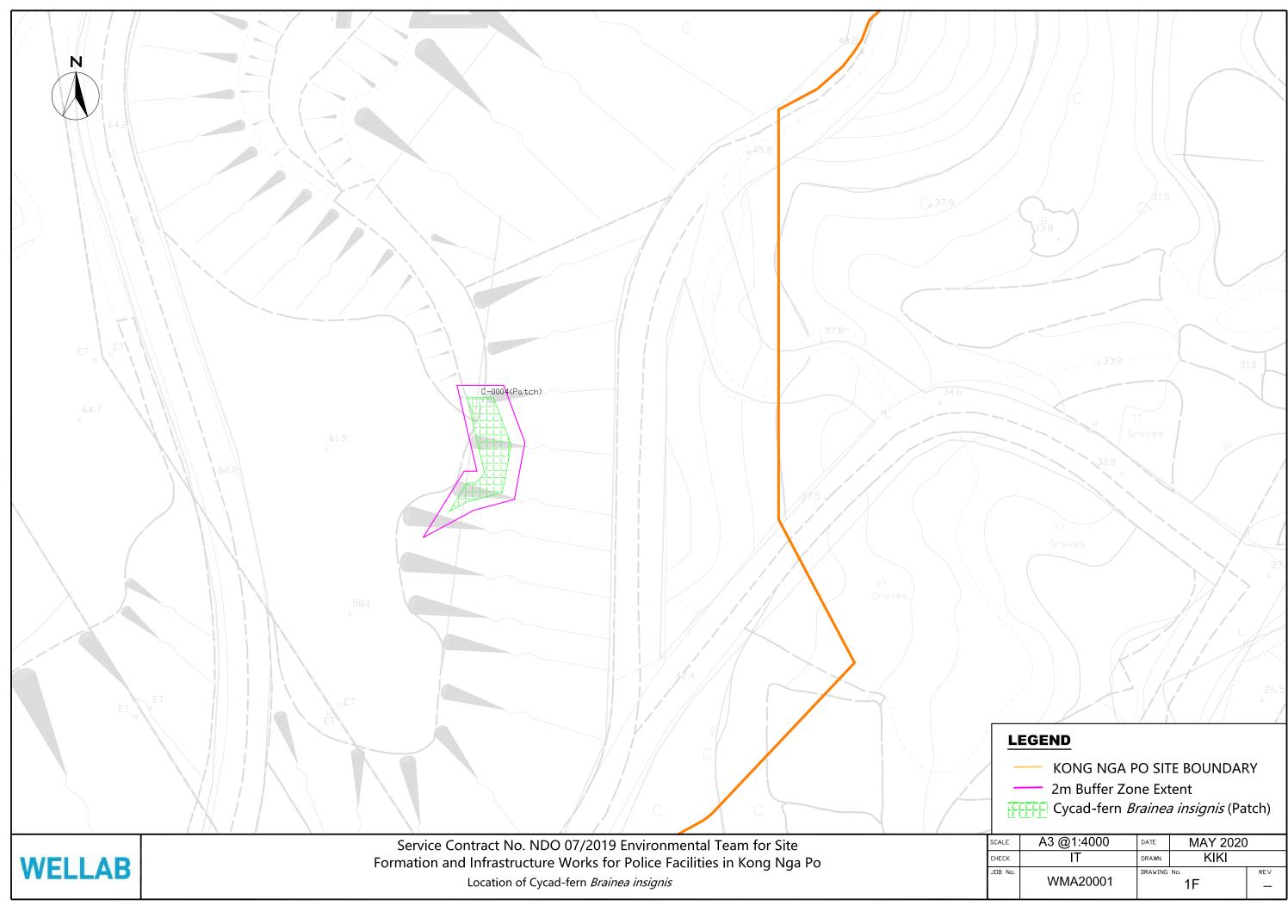
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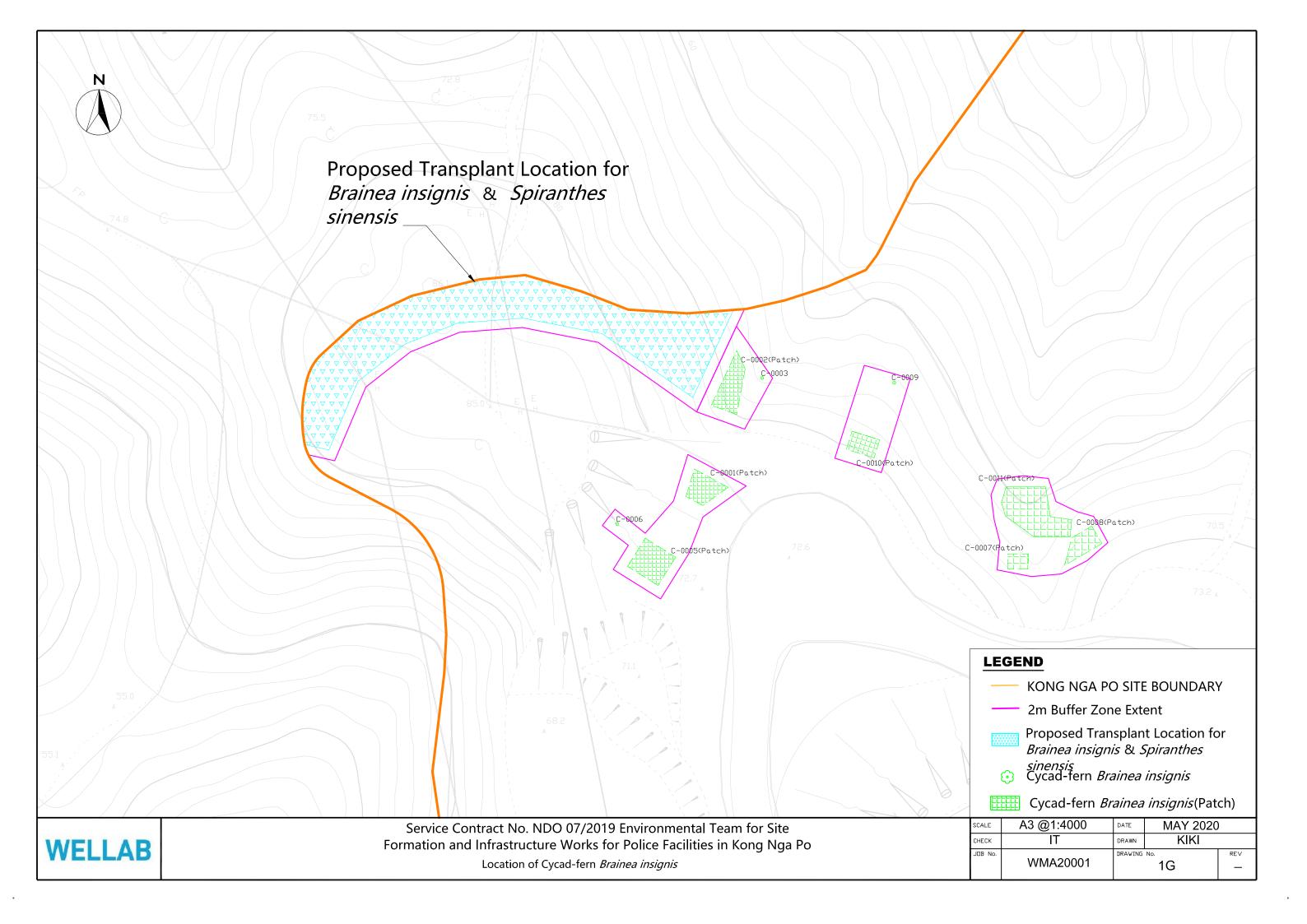


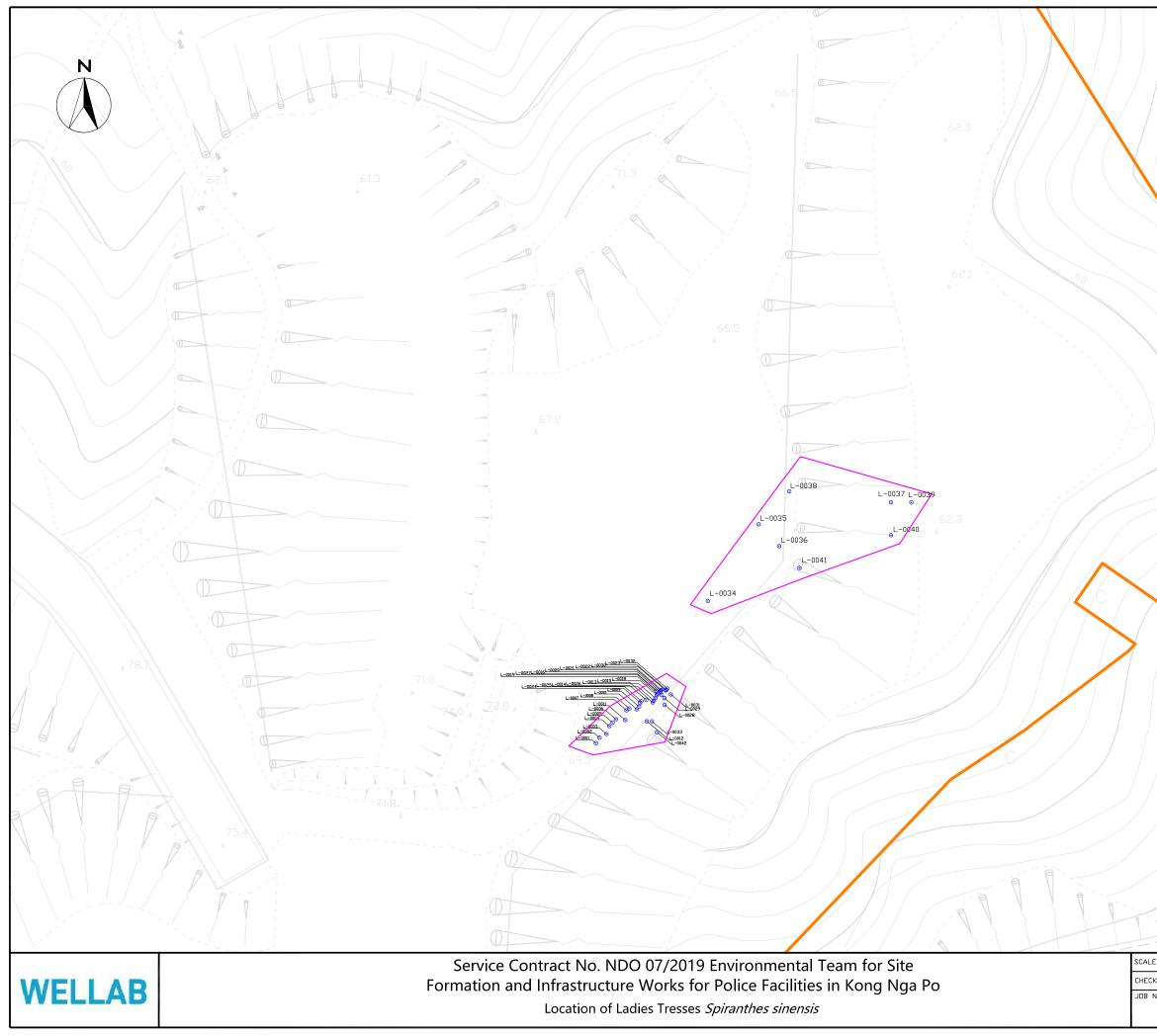
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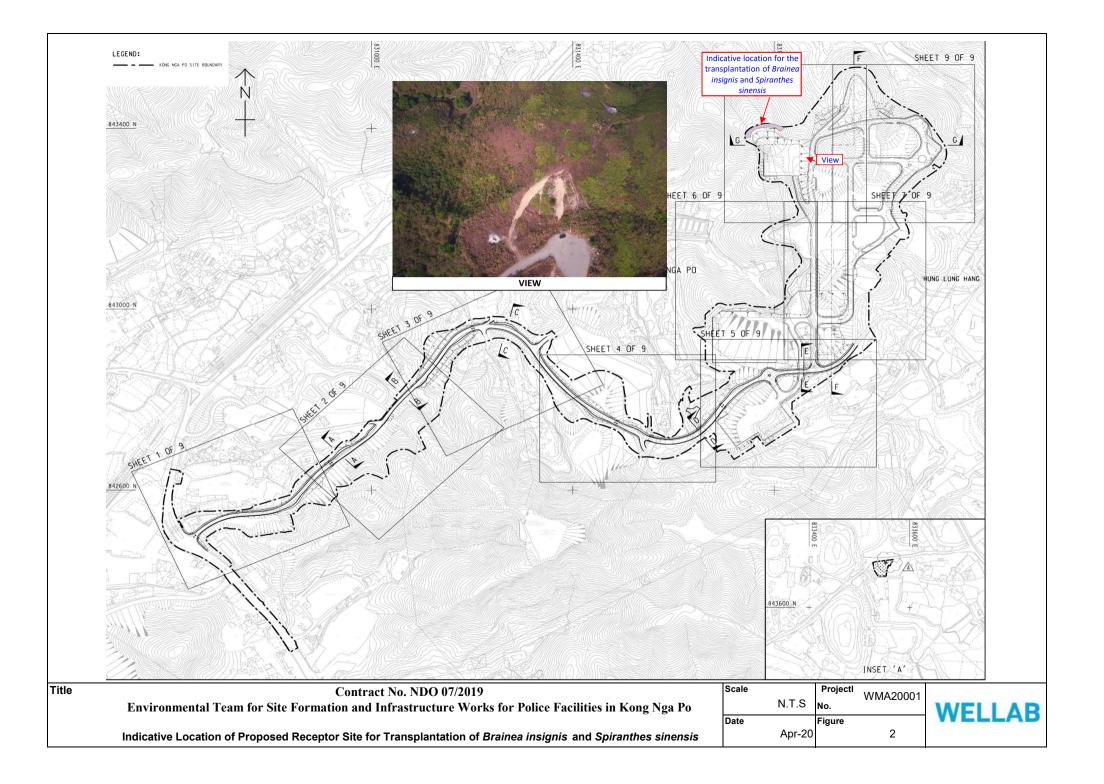


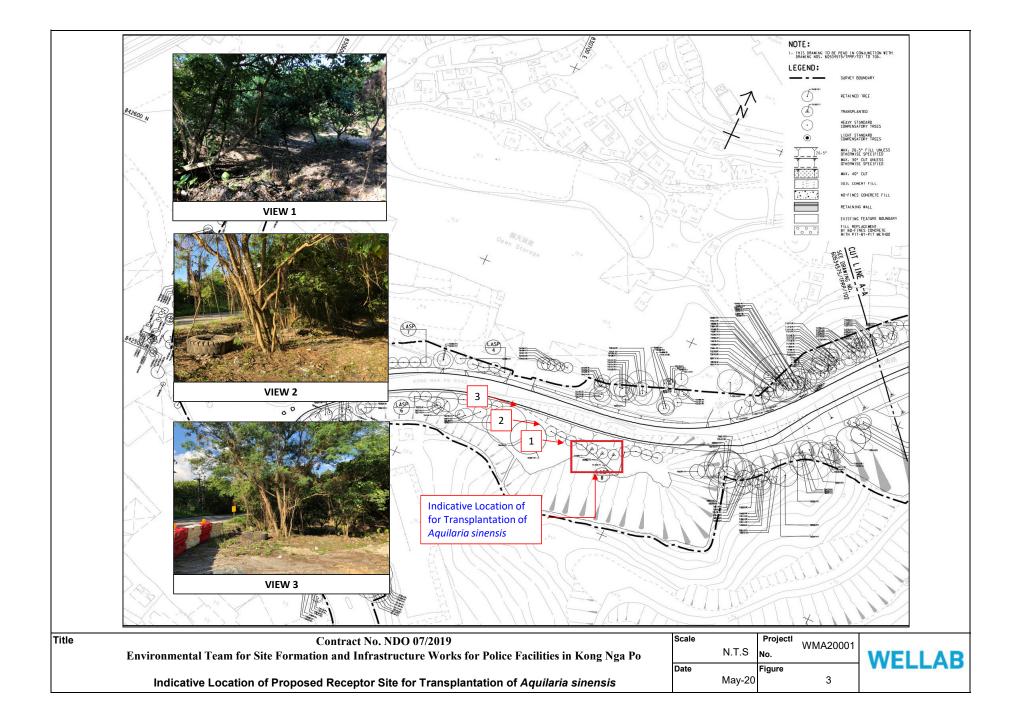
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APPENDIX A DETAILED VEGETATION SURVEY SCHEDULE

## Appendix A - Detailed Vegetation Survey Results

## - Cycad-fern Brainea insignis

Tree / Plant / Colony No.	No. of individuals	Species Name	Chinese Common Name	Height (m)	DBH (mm)	Crown Spread (m)	Form (G/F/P)*	Health (G/F/P)*	Amenity Value (H/M/L)^	Structural Condition (G/F/P)*	Suitability for Transplanting (H/M/L)^	Conservation Status	Recommendations (Retain/Transplant/F ell)	Justification	Remarks
C-0001	8	Brainea insignis	蘇鐵蕨	0.3 - 1.0	-	-	F	F	-	-	М	С	Transplant	1	-
C-0002	8	Brainea insignis	蘇鐵蕨	0.3 - 1.0	-	-	F	F	-	-	М	С	Transplant	1	-
C-0003	1	Brainea insignis	蘇鐵蕨	1.3	-	-	G	G	-	-	М	С	Transplant	1	-
C-0004	20	Brainea insignis	蘇鐵蕨	0.2 - 1.3	-	-	F	F	-	-	М	С	Transplant	1	-
C-0005	7	Brainea insignis	蘇鐵蕨	0.5 - 0.7	-	-	F	F	-	-	М	С	Transplant	1	-
C-0006	1	Brainea insignis	蘇鐵蕨	0.2	-	-	F	F	-	-	М	С	Transplant	1	-
C-0007	2	Brainea insignis	蘇鐵蕨	1.3 - 1.4	-	-	G	G	-	-	М	С	Transplant	1	-
C-0008	7	Brainea insignis	蘇鐵蕨	1.2 - 1.3	-	-	G	G	-	-	М	С	Transplant	1	-
C-0009	1	Brainea insignis	蘇鐵蕨	0.9	-	-	F	F	-	-	М	С	Transplant	1	-
C-0010	3	Brainea insignis	蘇鐵蕨	0.8 - 0.9	-	-	F	F	-	-	М	С	Transplant	1	-
C-0011	13	Brainea insignis	蘇鐵蕨	0.9 - 1.2	-	-	F	F	-	-	М	C	Transplant	1	-

-	Ladies	Tresses	Snira	athes	sin	ensi
	Laures	1103503	Spuru	unes	Sum	ensis

Ladies Tresses	Spiranthes si	nensis													
Tree / Plant / Colony No.	No. of individuals	Species Name	Chinese Common Name	Height (m)	DBH (mm)	Crown Spread (m)	Form (G/F/P)*	Health (G/F/P)*	Amenity Value (H/M/L)^	Structural Condition (G/F/P)*	Suitability for Transplanting (H/M/L)^	Conservation Status	Recommendations (Retain/Transplant/F ell)	Justification	Remarks
L-0001	1	Spiranthes sinensis	綬草	0.15	-	-	G	G	-	-	М	A, B	Transplant	1	-
L-0002	1	Spiranthes sinensis	綬草	0.1	-	-	G	G	-	-	М	A, B	Transplant	1	-
L-0003	1	Spiranthes sinensis	綬草	0.1	-	-	F	F	-	-	М	A, B	Transplant	1	-
L-0004	1	Spiranthes sinensis	綬草	0.2	-	-	G	G	-	-	М	A, B	Transplant	1	-
L-0005	1	Spiranthes sinensis	綬草	0.1	-	-	F	F	-	-	М	A, B	Transplant	1	-
L-0006	1	Spiranthes sinensis	綬草	0.15	-	-	G	G	-	-	М	A, B	Transplant	1	-
L-0007	1	Spiranthes sinensis	綬草	0.2	-	-	G	G	-	-	М	A, B	Transplant	1	-
L-0008	1	Spiranthes sinensis	綬草	0.2	-	-	G	G	-	-	М	A, B	Transplant	1	-
L-0009	1	Spiranthes sinensis	綬草	0.1	-	-	F	F	-	-	М	A, B	Transplant	1	-
L-0010	1	Spiranthes sinensis	綬草	0.15	-	-	G	G	-	-	М	A, B	Transplant	1	-
L-0011	1	Spiranthes sinensis	綬草	0.2	-	-	G	G	-	-	М	A, B	Transplant	1	-
L-0012	1	Spiranthes sinensis	綬草	0.2	-	-	G	G	-	-	М	A, B	Transplant	1	-
L-0013	1	Spiranthes sinensis	綬草	0.25	-	-	G	G	-	-	М	A, B	Transplant	1	-
L-0014	1	Spiranthes sinensis	綬草	0.2	-	-	G	G	-	-	М	A, B	Transplant	1	-
L-0015	1	Spiranthes sinensis	綬草	0.15	-	-	G	G	-	-	М	A, B	Transplant	1	-
L-0016	1	Spiranthes sinensis	綬草	0.15	-	-	G	G	-	-	М	A, B	Transplant	1	-
L-0018	1	Spiranthes sinensis	綬草	0.2	-	-	G	G	-	-	М	A, B	Transplant	1	-
L-0019	1	Spiranthes sinensis	綬草	0.15	-	-	G	G	-	-	М	A, B	Transplant	1	-
L-0020	1	Spiranthes sinensis	綬草	0.1	-	-	F	F	-	-	М	A, B	Transplant	1	-
L-0021	1	Spiranthes sinensis	綬草	0.1	-	-	F	F	-	-	М	A, B	Transplant	1	-
L-0022	1	Spiranthes sinensis	綬草	0.15	-	-	F	F	-	-	М	A, B	Transplant	1	-
L-0023	1	Spiranthes sinensis	綬草	0.2	-	-	G	G	-	-	М	A, B	Transplant	1	-
L-0024	1	Spiranthes sinensis	綬草	0.25	-	-	G	G	-	-	М	A, B	Transplant	1	-
L-0025	1	Spiranthes sinensis	綬草	0.2	-	-	G	G	-	-	М	A, B	Transplant	1	-
L-0026	1	Spiranthes sinensis	綬草	0.2	-	-	G	G	-	-	М	A, B	Transplant	1	-
L-0027	1	Spiranthes sinensis	綬草	0.15	-	-	G	G	-	-	М	A, B	Transplant	1	-
L-0028	1	Spiranthes sinensis	綬草	0.2	-	-	G	G	-	-	М	A, B	Transplant	1	-
L-0029	1	Spiranthes sinensis	綬草	0.15	-	-	F	F	-	-	М	A, B	Transplant	1	-
L-0030	1	Spiranthes sinensis	綬草	0.15	-	-	F	F	-	-	М	A, B	Transplant	1	-
L-0031	1	Spiranthes sinensis	綬草	0.2	-	-	G	G	-	-	М	A, B	Transplant	1	-
L-0032	1	Spiranthes sinensis	綬草	0.1	-	-	F	F	-	-	М	A, B	Transplant	1	-
L-0033	1	Spiranthes sinensis	綬草	0.2	-	-	G	G	-	-	М	A, B	Transplant	1	-
L-0034	1	Spiranthes sinensis	綬草	0.1	-	-	F	F	-	-	М	A, B	Transplant	1	-
L-0035	1	Spiranthes sinensis	綬草	0.25	-	-	G	G	-	-	М	A, B	Transplant	1	-
L-0036	1	Spiranthes sinensis	綬草	0.2	-	-	G	G	-	-	М	A, B	Transplant	1	-
L-0037	1	Spiranthes sinensis	綬草	0.2	-	-	G	G	-	-	М	A, B	Transplant	1	-
L-0038	1	Spiranthes sinensis	綬草	0.25	-	-	G	G	-	-	М	A, B	Transplant	1	-
L-0039	1	Spiranthes sinensis	綬草	0.2	-	-	G	G	-	-	М	A, B	Transplant	1	-
L-0040	1	Spiranthes sinensis	綬草	0.2	-	-	G	G	-	-	М	A, B	Transplant	1	-
L-0041	1	Spiranthes sinensis	綬草	0.2	-	-	G	G	-	-	М	A, B	Transplant	1	-
L-0042	1	Spiranthes sinensis	綬草	0.25	-	-	G	G	-	-	М	A, B	Transplant	1	-

## - Fortune's Keteleeria Keteleeria fortunei

Tree / Plant / Colony No.	No. of individuals	Species Name	Chinese Common Name	Height (m)	DBH (mm)	Crown Spread (m)	Form (G/F/P)*	Health (G/F/P)*	Amenity Value (H/M/L)^	Structural Condition (G/F/P)*	Suitability for Transplanting (H/M/L)^	Conservation Status	Recommendations ((Retain/Transplant/ Fell)	Justification	Remarks
F-0001	1	Keteleeria fortunei	油杉	5	115	4	F	F	М	F	L	В	Retain	2	-
F-0002	1	Keteleeria fortunei	油杉	9	220	4	F	Р	М	F	L	В	Retain	2	-
F-0003	1	Keteleeria fortunei	油杉	9	220	4.5	F	F	М	F	L	В	Retain	2	-
F-0004	1	Keteleeria fortunei	油杉	4	280	2	F	Р	М	F	L	В	Retain	2	Broken branches
F-0005	1	Keteleeria fortunei	油杉	3	80	1	F	Р	L	F	L	В	Retain	2	-
F-0006	1	Keteleeria fortunei	油杉	4	85	2	F	F	М	F	L	В	Retain	2	-
F-0007	1	Keteleeria fortunei	油杉	1.2	20	1	F	F	L	F	L	В	Retain	2	-
F-0008	1	Keteleeria fortunei	油杉	1.1	20	1.5	Р	Р	L	Р	L	В	Retain	2	-
F-0009	1	Keteleeria fortunei	油杉	9	240	4	F	F	М	F	L	В	Retain	2	-
F-0010	1	Keteleeria fortunei	油杉	9	220	4	F	Р	М	F	L	В	Retain	2	-
F-0011	1	Keteleeria fortunei	油杉	3	60	2	F	Р	L	F	L	В	Retain	2	Broken branches
F-0012	1	Keteleeria fortunei	油杉	4	120	2	F	F	М	F	L	В	Retain	2	-
F-0013	1	Keteleeria fortunei	油杉	5	150	3	F	F	М	F	L	В	Retain	2	-
F-0014	1	Keteleeria fortunei	油杉	5	140	3	F	F	L	F	L	В	Retain	2	Broken branches
F-0015	1	Keteleeria fortunei	油杉	3	92	-	Р	Р	L	Р	L	В	Retain	2	Leaning
F-0016	1	Keteleeria fortunei	油杉	2	41	1	Р	Р	L	Р	L	В	Retain	2	Leaning
F-0017	1	Keteleeria fortunei	油杉	4	108	2	Р	Р	L	Р	L	В	Fell	3	Broken branches, Leaning, Dead
F-0018	1	Keteleeria fortunei	油杉	2	89	1.5	Р	Р	L	Р	L	В	Retain	2	Broken branches
F-0019	1	Keteleeria fortunei	油杉	4	86	2	Р	Р	L	Р	L	В	Retain	2	Broken branches, Leaning
F-0020	- 1	Keteleeria fortunei	油杉	5	86	1.5	F	F	M	F	L	B	Retain	2	-
F-0021	1	Keteleeria fortunei	油杉	7	152	3	P	P	M	Р	L	B	Retain	2	-
F-0022	1	Keteleeria fortunei	油杉	5	76	2	F	F	L	F	L	B	Retain	2	-
F-0023	1	Keteleeria fortunei	油杉	8	181	4	F	F	M	F	L	B	Retain	2	-
F-0024	1	Keteleeria fortunei	油杉	8	296	6	F	F	M	F	L	В	Retain	2	
F-0025	1	Keteleeria fortunei	油杉	4	124	4	F	F	M	F	L	В	Retain	2	Pollarded
F-0027	1	Keteleeria fortunei	油杉	2.5	-	2	F	F	L	F	L I	B	Retain	2	Pollarded
F-0028	1	Keteleeria fortunei	油杉	3	80	2	F	F	L	F	L	B	Retain	2	Broken branches, Leaning
F-0029	1	Keteleeria fortunei	油杉	7	190	3	F	F	M	F	L	B	Retain	2	-
F-0030	1	Keteleeria fortunei	油杉	7	203	5	F	F	M	F	L	B	Retain	2	
F-0031	1	Keteleeria fortunei	油杉	3	76	1.5	F	F	L	F	L	B	Retain	2	-
F-0031	1	Keteleeria fortunei	油杉	3	140	3	F	F	L	F	L	В	Retain	2	-
F-0034	1	Keteleeria fortunei	油杉	13	430	6	F	F	M	F	I	B	Retain	2	<u>_</u>
F-0035	1	Keteleeria fortunei	油杉	5	105	1.5	P	P	L	P	L	B	Retain	2	Leaning
F-0035 F-0036	1	Keteleeria fortunei	<u> 油杉</u> 油杉	7	162	4	F	F	M	F	L	В	Retain	2	
F-0038 F-0037	1	Keteleeria fortunei	油杉	4	102	2	F	F	M	F	L	В	Retain	2	-
F-0037 F-0038	1	Keteleeria fortunei	油杉	6	103	3	F	г F	M	F	L I	В	Retain	2	-
F-0039	1	Keteleeria fortunei	油杉	7	210	5	F	F	M	F	L	В	Retain	2	
F-0039 F-0040	1	Keteleeria fortunei	油杉	8	210	5	F	F	M	F	L	В	Retain	2	-
F-0040 F-0041	1	Keteleeria fortunei	<u> 油杉</u> 油杉	8 9	190	6	F	F	L	F	L	В	Retain	2	-
F-0041 F-0042	1	Keteleeria fortunei Keteleeria fortunei	<u>油杉</u> 油杉	6	60	2	F P	F P	L	P	L	В	Retain	2	
F-0042 F-0043	1	<i>,</i>	油杉		241	2	P F	P F	L M	P F	L	B		2	-
F-0043 F-0044	-	Keteleeria fortunei Katalaania fortunai		11	35	-	-	F P		P	-	В	Retain Fell	3	
	1	Keteleeria fortunei	油杉	1.5		-	P	r' F	L	P F	L			3	Dead
F-0045		Keteleeria fortunei	油杉	11	248	5		r r	M	F	L	B	Retain	2	-
F-0046	1	Keteleeria fortunei	油杉	_	45	2	F	F	L		L	B	Retain		-
F-0047	1	Keteleeria fortunei	油杉	5	108	3	F	F	M	F	L	B	Retain	2	-
F-0048	1	Keteleeria fortunei	油杉	7	184	4	F	F	M	F	L	B	Retain	2	-
F-0049	1	Keteleeria fortunei	油杉	1	20	-	P	P	L	P	L	B	Fell	3	Leaning, Dead
F-0050	1	Keteleeria fortunei	油杉	0.8	44	-	P	P	L	Р	L	В	Retain	2	Pollarded
F-0051	1	Keteleeria fortunei	油杉	2	63	-	Р	Р	L	Р	L	В	Retain	2	Leaning

Tree / Plant / Colony No.	No. of individuals	Species Name	Chinese Common Name	Height (m)	DBH (mm)	Crown Spread (m)	Form (G/F/P)*	Health (G/F/P)*	Amenity Value (H/M/L)^	Structural Condition (G/F/P)*	Suitability for Transplanting (H/M/L)^	Conservation Status	Recommendations ((Retain/Transplant/ Fell)	Justification	Remarks
F-0052	1	Keteleeria fortunei	油杉	1	31	-	Р	Р	L	Р	L	В	Retain	2	Leaning
F-0053	1	Keteleeria fortunei	油杉	14	460	7	G	G	Н	G	L	В	Retain	2	-
F-0054	1	Keteleeria fortunei	油杉	11	274	5	F	F	Н	G	L	В	Retain	2	-
F-0055	1	Keteleeria fortunei	油杉	11	274	4	F	F	Н	F	L	В	Retain	2	-
F-0056	1	Keteleeria fortunei	油杉	10	223	5	F	F	М	Р	L	В	Retain	2	-
F-0057	1	Keteleeria fortunei	油杉	7	99	3	F	F	М	F	L	В	Retain	2	-
F-0058	1	Keteleeria fortunei	油杉	4	140	4	Р	Р	L	Р	L	В	Retain	2	Pollarded
F-0059	1	Keteleeria fortunei	油杉	9	175	6	Р	Р	М	F	L	В	Retain	2	-
F-0060	1	Keteleeria fortunei	油杉	8	127	2	F	F	М	F	L	В	Retain	2	-
F-0061	1	Keteleeria fortunei	油杉	9	162	3	F	F	М	F	L	В	Retain	2	-
F-0062	1	Keteleeria fortunei	油杉	10	175	3	F	F	М	F	L	В	Retain	2	-
F-0063	1	Keteleeria fortunei	油杉	7	105	3	F	F	М	F	L	В	Retain	2	-
F-0064	1	Keteleeria fortunei	油杉	8	171	3	F	F	М	F	L	В	Retain	2	-
F-0065	1	Keteleeria fortunei	油杉	3	92	5	F	F	L	F	L	В	Retain	2	-
F-0066	1	Keteleeria fortunei	油杉	7	184	5	F	F	М	F	L	В	Retain	2	-
F-0067	1	Keteleeria fortunei	油杉	7	111	2	F	F	М	F	L	В	Retain	2	-
F-0068	1	Keteleeria fortunei	油杉	6	101	3	F	F	М	F	L	В	Retain	2	-
F-0069	1	Keteleeria fortunei	油杉	4	76	2	F	F	М	F	L	В	Retain	2	-
F-0070	1	Keteleeria fortunei	油杉	6	95	3	F	F	М	F	L	В	Retain	2	-
F-0071	1	Keteleeria fortunei	油杉	5	67	1	F	F	L	F	L	В	Retain	2	-
F-0072	1	Keteleeria fortunei	油杉	8	156	2	Р	Р	L	Р	L	В	Retain	2	Leaning, Broken branches
F-0073	1	Keteleeria fortunei	油杉	7	134	3	F	F	М	F	L	В	Retain	2	-
F-0074	1	Keteleeria fortunei	油杉	8	181	5	F	F	М	F	L	В	Retain	2	-
F-0075	1	Keteleeria fortunei	油杉	5	102	5	F	F	М	F	L	В	Retain	2	-
F-0076	1	Keteleeria fortunei	油杉	8	159	3	F	F	М	F	L	В	Retain	2	-
F-0077	1	Keteleeria fortunei	油杉	4	80	2	F	F	L	F	L	В	Retain	2	-
F-0078	1	Keteleeria fortunei	油杉	7	70	1.5	F	F	L	F	L	В	Retain	2	-
F-0079	1	Keteleeria fortunei	油杉	7	137	3	F	F	М	F	L	В	Retain	2	-
F-0080	1	Keteleeria fortunei	油杉	10	290	5	F	F	М	F	L	В	Retain	2	-
F-0081	1	Keteleeria fortunei	油杉	8	80	1.5	Р	Р	L	Р	L	В	Retain	2	Leaning
F-0082	1	Keteleeria fortunei	油杉	1.1	-	1	Р	Р	L	Р	L	В	Retain	2	-

## - Incense Trees Aquilaria sinensis

Tree / Plant / Colony No.	No. of individuals	Species Name	Chinese Common Name	Height (m)	DBH (mm)	Crown Spread (m)	Form (G/F/P)*	Health (G/F/P)*	Amenity Value (H/M/L)^	Structural Condition (G/F/P)*	Suitability for Transplanting (H/M/L)^	Conservation Status	Recommendations ((Retain/Transplant/ Fell)	Justification	Remarks
A-0001	1	Aquilaria sinensis	土沉香	2.7	-	-	F	F	-	-	L	A, C, D	Retain	2	-
A-0002	1	Aquilaria sinensis	土沉香	2	-	-	F	F	-	-	L	A, C, D	Retain	2	-
A-0003	1	Aquilaria sinensis	土沉香	3	-	-	F	F	-	-	L	A, C, D	Retain	2	-
A-0004	1	Aquilaria sinensis	土沉香	3.5	-	-	F	F	-	-	L	A, C, D	Retain	2	-
A-0005	1	Aquilaria sinensis	土沉香	2	-	-	F	F	-	-	L	A, C, D	Retain	2	-
A-0006	1	Aquilaria sinensis	土沉香	1.7	-	-	F	F	-	-	L	A, C, D	Retain	2	-
A-0007	1	Aquilaria sinensis	土沉香	0.5	-	-	Р	Р	-	-	L	A, C, D	Retain	2	-
A-0008	1	Aquilaria sinensis	土沉香	7	324	4	F	F	М	F	L	A, C, D	Transplant	1	Wounded, on slope
A-0009	1	Aquilaria sinensis	土沉香	6	120	3	F	G	М	G	L	A, C, D	Transplant	1	On slope
A-0010	1	Aquilaria sinensis	土沉香	6	159	3	F	F	F	F	L	A, C, D	Transplant	1	On slope

\* Good (G), Fair (F), Poor (P)

^ High (H), Medium (M), Low (L)

Conservation status

(A) The Protection of Endangered Species of Animals and Plants Ordinance (Cap. 586)
(B) Forests and Countryside Ordinance (Cap. 96)
(C) Category II protected species in Mainland China
(D) Near threatened in mainland

Justification

1. Species located within and affected by the development area of Kong Nga Po Police Facilities

2. No conflict with proposed works

3. Dead tree

APPENDIX B PHOTOGRAPHIC RECORD OF SURVEYED FLORA SPECIES OF CONSERVATION IMPORTANCE











		SCALE	DATE
WELLAB 匯力	Service Contract No. NDO 07/2019 Environmental Team for Site Formation and Infrastructure Works for Police Facilities in Kong Nga Po	N.T.S.	Mar-20
consulting . testing . research	Photographic Records for Cycad-fern Brainea Insignis	Project No. WMA20001	Appendix B









WELLAB匯力	Service Contract No. NDO 07/2019 Environmental Team for Site Formation and Infrastructure Works for Police Facilities in Kong Nga Po	SCALE	N.T.S.	<sup>DATE</sup> Mar-20
consulting . testing . research	Photographic Records for Cycad-fern Brainea Insignis	Project No.	WMA20001	Appendix B













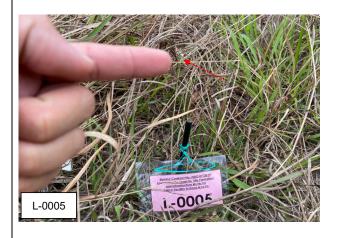








	Service Contract No. NDO 07/2019 Environmental Team for Site Formation and	SCALE		DATE	
WELLAB 匯力	Infrastructure Works for Police Facilities in Kong Nga Po		N.T.S.		Mar-20
consulting . testing . research	Photographic Records for the Ladies Tressess Spiranthes Sinensis	Project No.	WMA20001	Appendix	В





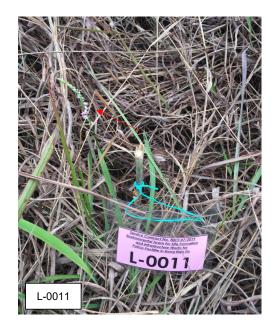




WELLAB匯力	Service Contract No. NDO 07/2019 Environmental Team for Site Formation and Infrastructure Works for Police Facilities in Kong Nga Po	SCALE	N.T.S.	date Mar-2	20
consulting . testing . research	Photographic Records for the Ladies Tressess Spiranthes Sinensis	Project No.	WMA20001	Appendix B	3





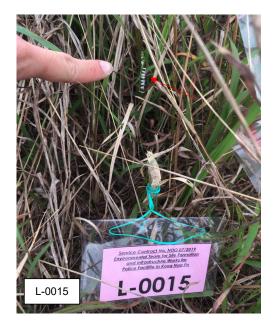




WELLAB匯力	Service Contract No. NDO 07/2019 Environmental Team for Site Formation and Infrastructure Works for Police Facilities in Kong Nga Po	SCALE	N.T.S.	<sup>DATE</sup> Mar-20
consulting . testing . research	Photographic Records for the Ladies Tressess Spiranthes Sinensis	Project No.	WMA20001	Appendix









WELLAB 匯力 consulting . testing . research	Service Contract No. NDO 07/2019 Environmental Team for Site Formation and Infrastructure Works for Police Facilities in Kong Nga Po	SCALE	N.T.S.	date Mar-20
	Photographic Records for the Ladies Tressess Spiranthes Sinensis	Project No.	WMA20001	Appendix B



WELLAB 匯力 consulting . testing . research	Service Contract No. NDO 07/2019 Environmental Team for Site Formation and Infrastructure Works for Police Facilities in Kong Nga Po	SCALE N.T.S.	date Mar-20
	Photographic Records for the Ladies Tressess Spiranthes Sinensis	Project No. WMA20001	Appendix B









WELLAB 匯力 consulting . testing . research	Service Contract No. NDO 07/2019 Environmental Team for Site Formation and Infrastructure Works for Police Facilities in Kong Nga Po	SCALE	N.T.S.	<sub>DATE</sub> Mar-20
	Photographic Records for the Ladies Tressess Spiranthes Sinensis	Project No.	WMA20001	Appendix B



 WELLAB Image: Consulting . testing . research
 Service Contract No. NDO 07/2019 Environmental Team for Site Formation and Infrastructure Works for Police Facilities in Kong Nga Po
 SCALE
 DATE

 Very consulting . testing . research
 Photographic Records for the Ladies Tressess Spiranthes Sinensis
 Project No.
 Appendix

 B



WELLAB 匯力 consulting . testing . research	Service Contract No. NDO 07/2019 Environmental Team for Site Formation and Infrastructure Works for Police Facilities in Kong Nga Po	SCALE N.T.S.	<sub>DATE</sub> Mar-20
	Photographic Records for the Ladies Tressess Spiranthes Sinensis	Project No. WMA20001	Appendix B









WELLAB 匯力 consulting . testing . research	Service Contract No. NDO 07/2019 Environmental Team for Site Formation and Infrastructure Works for Police Facilities in Kong Nga Po	scale N.T.S.	<sub>DATE</sub> Mar-20
	Photographic Records for the Ladies Tressess Spiranthes Sinensis	Project No. WMA20001	Appendix B







		SCALE	DATE
WELLAB 匯力 consulting . testing . research	Service Contract No. NDO 07/2019 Environmental Team for Site Formation and Infrastructure Works for Police Facilities in Kong Nga Po	N.T.S.	Mar-20
	Photographic Records for the Ladies Tressess Spiranthes Sinensis	Project No. WMA20001	Appendix B

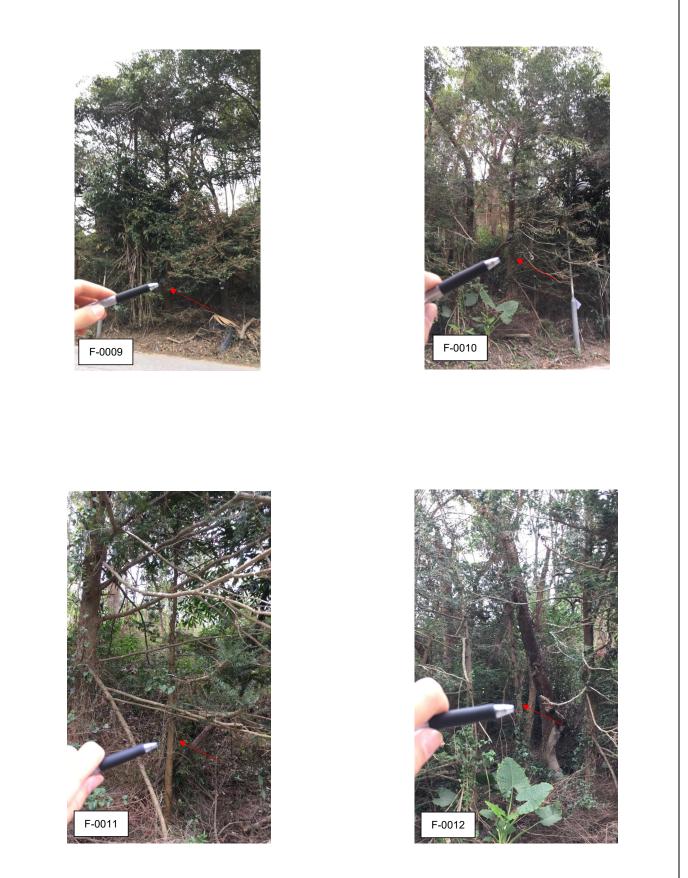






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Service Contract No. NDO 07/2019 Environmental Team for Site Formation and Infrastructure Works for Police Facilities in Kong Nga Po	N.T.S.	Mar-20	
Photographic Records for Fortune's Keteleeria Keteleeria fortunei	Project No. WMA20001	Appendix B	



WELLAB 匯力 consulting . testing . research	Service Contract No. NDO 07/2019 Environmental Team for Site Formation and Infrastructure Works for Police Facilities in Kong Nga Po	scale N.T.S.	DATE Mar-20
	Photographic Records for Fortune's Keteleeria Keteleeria fortunei	Project No. WMA20001	Appendix B









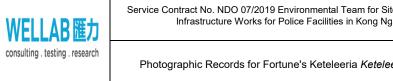
WELLAB 匯力 consulting . testing . research	Service Contract No. NDO 07/2019 Environmental Team for Site Formation and Infrastructure Works for Police Facilities in Kong Nga Po	SCALE	N.T.S.	<sup>DATE</sup> Mar-20
	Photographic Records for Fortune's Keteleeria Keteleeria fortunei	Project No.	WMA20001	Appendix



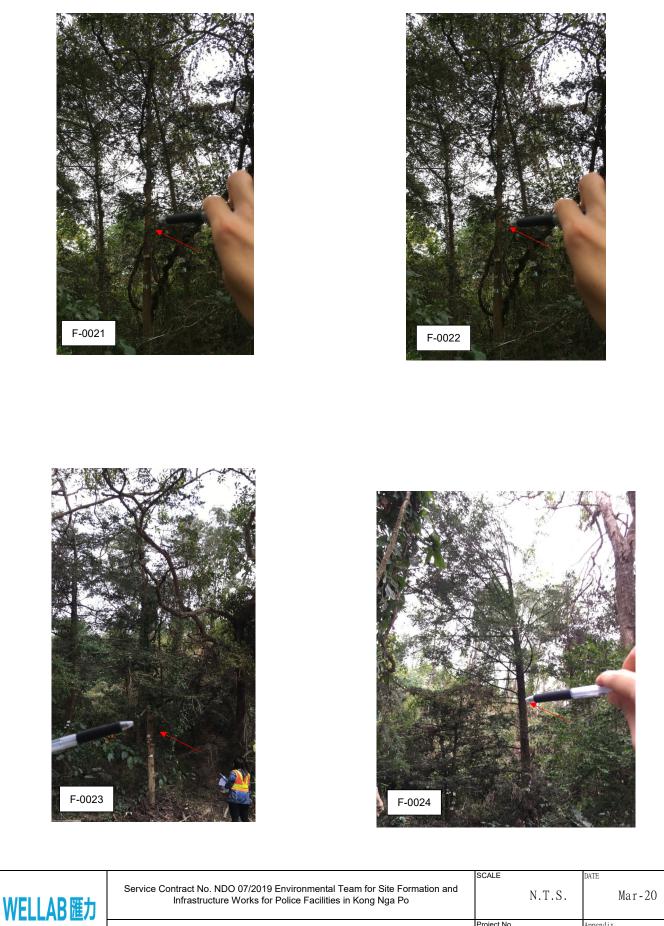








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Project No.		Appendix
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Infrastructure Works for Police Facilities in Kong Nga Po	N.1.5.	Mar-20
Photographic Records for Fortune's Keteleeria Keteleeria fortunei	Project No. WMA20001	Appendix B



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Infrastructure Works for Police Facilities in Kong Nga Po	N.T.S.	Mar-20
Photographic Records for Fortune's Keteleeria Keteleeria fortunei	Project No. WMA20001	Appendix B



consulting . testing . research

Infrastructure Works for Police Facilities in Kong Nga Po	N.T.S.	Mar-20
Photographic Records for Fortune's Keteleeria Keteleeria fortunei	Project No. WMA20001	Appendix B



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Service Contract No. NDO 07/2019 Environmental Team for Site Formation and Infrastructure Works for Police Facilities in Kong Nga Po	scale N.T.S.	<sup>DATE</sup> Mar-20
Photographic Records for Fortune's Keteleeria Keteleeria fortunei	Project No. WMA20001	Appendix B







WELLAB匯力	Service Contract No. NDO 07/2019 Environmental Team for Site Formation and	scale	DATE
	Infrastructure Works for Police Facilities in Kong Nga Po	N.T.S.	Mar-20
consulting . testing . research	Photographic Records for Fortune's Keteleeria Keteleeria fortunei	Project No. WMA20001	Appendix B

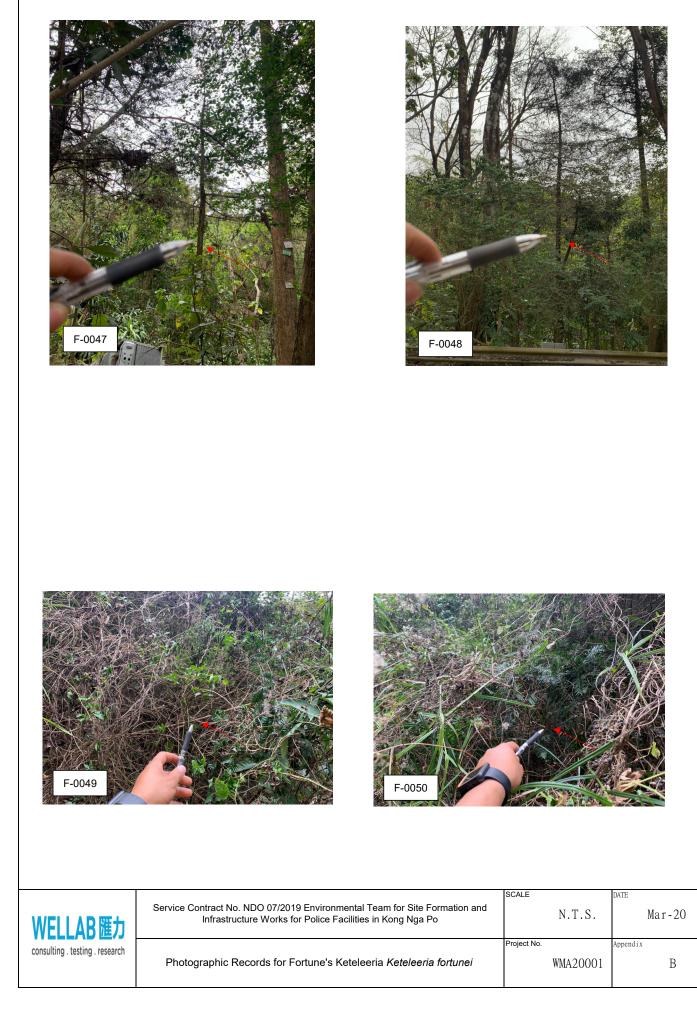








WELLAB匯力	Service Contract No. NDO 07/2019 Environmental Team for Site Formation and	scale	DATE
	Infrastructure Works for Police Facilities in Kong Nga Po	N.T.S.	Mar-20
consulting . testing . research	Photographic Records for Fortune's Keteleeria Keteleeria fortunei	Project No. WMA20001	Appendix B





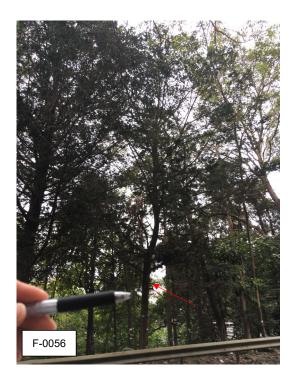






		SCALE	DATE
WELLAB匯力	Service Contract No. NDO 07/2019 Environmental Team for Site Formation and Infrastructure Works for Police Facilities in Kong Nga Po	N.T.S.	Mar-20
consulting . testing . research	Photographic Records for Fortune's Keteleeria Keteleeria fortunei	Project No. WMA20001	Appendix P
		WMA20001	D



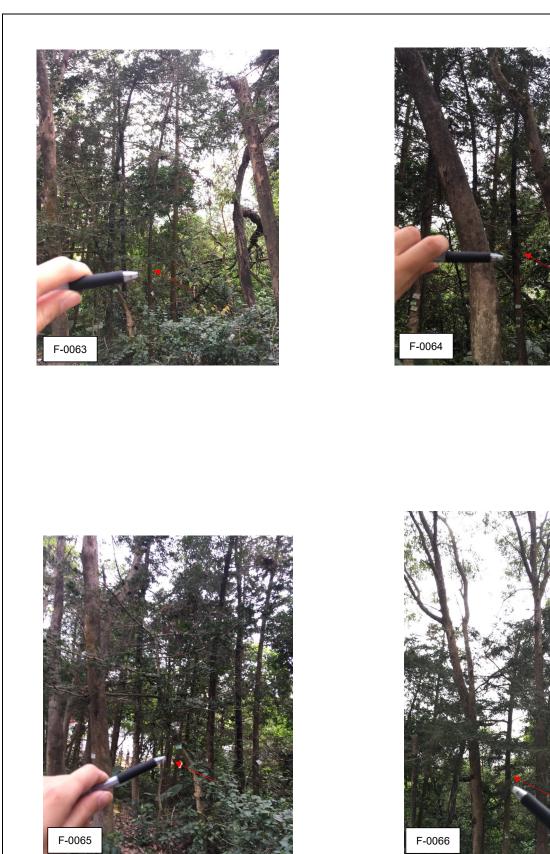


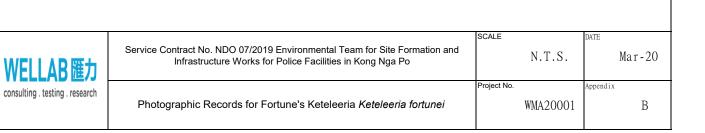




WELLAB 匯力	Service Contract No. NDO 07/2019 Environmental Team for Site Formation and Infrastructure Works for Police Facilities in Kong Nga Po	SCALE N.T.S.	date Mar-20
consulting . testing . research	Photographic Records for Fortune's Keteleeria Keteleeria fortunei	Project No. WMA20001	Appendix B









WELLAB匯力	Service Contract No. NDO 07/2019 Environmental Team for Site Formation and	scale	DATE
	Infrastructure Works for Police Facilities in Kong Nga Po	N.T.S.	Mar-20
consulting . testing . research	Photographic Records for Fortune's Keteleeria Keteleeria fortunei	Project No. WMA20001	Appendix B



WELLAB匯力	Service Contract No. NDO 07/2019 Environmental Team for Site Formation and Infrastructure Works for Police Facilities in Kong Nga Po	scale N.T.S.	<sup>DATE</sup> Mar-20
consulting . testing . research	Photographic Records for Fortune's Keteleeria Keteleeria fortunei	Project No. WMA20001	Appendix B



		SCALE	DATE
WELLAB匯力	Service Contract No. NDO 07/2019 Environmental Team for Site Formation and Infrastructure Works for Police Facilities in Kong Nga Po	N.T.S.	Mar-20
consulting . testing . research	Photographic Records for Fortune's Keteleeria Keteleeria fortunei	Project No. WMA20001	Appendix



WELLAB 匯力 consulting . testing . research

Service Contract No. NDO 07/2019 Environmental Team for Site Formation and Infrastructure Works for Police Facilities in Kong Nga Po	N.T.S.	Mar-20
Photographic Records for Fortune's Keteleeria Keteleeria fortunei	Project No. WMA20001	Appendix B







APPENDIX C CURRICULUM VITAE OF QUALIFIED ECOLOGIST AND ARBORIST

COMPANY	WELLAB LIMITED
POSITION	MANAGING DIRECTOR
PROFESSION	ECOLOGIST AND ARBORIST
NATIONALITY	CHINESE

DR PRISCILLA W F CHOY

#### **PROFESSIONAL QUALIFICATIONS & AFFILIATIONS**

- Ph.D., Microbiology, University of Hong Kong, Hong Kong. 1992.
- B.Sc., Biology, National Taiwan Normal University, Taipei, Taiwan, Republic of China. 1983
- Hong Kong Institute of Qualified Environmental Professionals Limited (HKIQEP), 2017
- Member, Hong Kong Institution of Engineers, 2015
- Fellow, Hong Kong Institute of Environmental Impact Assessment, 2015
- Accredited Monitoring Professional, Hong Kong Institute of Environmental Impact Assessment, 2010
- Member, Hong Kong Waste Management Association, 1998
- Member, Sustainable Fisheries Development Fund Advisory Committee (2020-present)
- Member, the Advisory Committee on Agriculture and Fisheries (2013-2019)
- Member, Research Projects Vetting Subcommittee under the Environment and Conservation Fund (ECF) Committee (2018-present)
- Member, the Innovation and Technology Fund Research Projects Assessment Panel (Environmental Technology) (2017-present)
- ISA Certified Arborist (CertificationID:HK-0361A) (2009 present)
- ISA Tree Risk Assessment Qualification (2012-2015)
- PNW-ISA Certified Tree Risk Assessor

#### **KEY EXPERIENCE**

**Dr. Priscilla Choy** has over 35 year experience in in scientific research, ecological conservation, ecological surveys and assessment, tree survey, tree risk assessment, environmental monitoring & audit, environmental management studies, environmental testing and laboratory analysis. In the past 23 years, she has managed many ecological surveys and assessment studies, numerous environmental monitoring & audit for infrastructure projects and tree survey projects / tree risk assessment projects.

Dr. Choy is an Ecologist (PNW-ISA Certified Tree Risk Assessor and ISA Certified Arborist) specialized in the evaluation of vegetation, wildlife and habitat values of brackish and freshwater. She has supervised and undertaken many ecological projects involving ecological survey, monitoring and assessment, involving wetland recreation, rare/protected plant species transplantation and fish translocation works. She has also conducted extensive surveys on different habitats and the associated vegetation and wildlife for development projects, including Improvement to Tung Chung Road Between Lung Tseng Tau and Cheung Sha, Drainage Improvement, Stage 1, Phase 2A – Kam Tin and Ngau Tam Mei; and many others.

#### **PROFESSIONAL HISTORY**

2019 - Present	Managing Director, Wellab Limited
2005 - 2018	Director, Wellab Limited
2002 - 2018	Director, Cinotech Consultants Limited
1998 - 2002	Director, Maunsell Environmental Management Consultants Ltd.
1997 - 1998	Director, ENPAC Ltd. (An Environmental Consultancy Company)

1996 - 1998	Laboratory Director, Wellab Limited
1996 - 1997	Project Manager, ENPAC Ltd. (An Environmental Consultancy Company)

#### **PROFESSIONAL EXPERIENCE AND RECORDS**

#### Tree Survey, Risk Assessment, Protection and Monitoring (Partial List)

Project	Scope	Period
Contract No. GE/2018/03	- Tree Survey	2018-present
Landslip Prevention and Mitigation	- Vegetation Survey	1
Programme, 2012, Package C		
Landslip Prevention and Mitigation		
Works in Lantau and Hong Kong		
Island		
CEDD Operation and Maintenance of	Tree group inspection and detailed tree risk	2018-present
Public Fill Reception Facilities at	assessment of trees	1
Chai Wan and Mui Wo (2018 – 2023)		
SPW09/2018 Baseline Surveys for	- Vegetation Survey	2018 - 2019
Shatin Cavern Sewage Treatment	6 5	2010 2019
Works		
Proposed Residential Development At	- Tree compensation proposal	2015
21, 23 & 25 Borrett Road	- Tree health monitoring	
Provision of Lifts/Ramps to Four	Tree survey in Sheung Shui area	2015
Footbridges across Aberdeen Praya Road		
and Yue Shi Cheung Road, across Tsuen		
Wan MTR Depot near Mega Trade		
Centre, across Castle Peak Road near Fou		
Wah Centre and across Choi Yuen Road		
and San Wan Road at Pak Wo Road, and Two Subways across Ching Hong Road		
near Mayfair Gardens and across Tai Po		
Road near Fo Tan Road		
CEDD Maintenance Contract for	Tree group inspection and detailed tree risk	2014
Seawalls and Navigation Channels (2013	assessment of trees at Cha Kwo Ling Depot	
-2016)		
Main Contract for Footbridge at Tuen	Tree survey at Portions A and B	2014
Mun River		
Tree Survey and Compensation Report	Tree survey at the proposed centre and along the	2011
for Hong Kong Vipassana Meditation	access road	
Centre		2010 2011
Agreement No. CE 64/2009 (HY)	Tree survey within and about 5 m outside the	2010 - 2011
Improvement to Fan Kam Road	work site boundary	
Feasibility Study Tenancy Agreement No. SHX-1241 Tin	Tree survey	2010
Wan Concrete Batching Plant		2010
Contract No: ST/2008/02 Ma On Shan	Tree transplanting site assessment	2010
Development - Roads, Drainage and	······ <b>r</b> ······· <b>o</b> ···· · ··· <b>o</b> ·····	
Sewerage Works at Whitehead and Lok		
Wo Sha Phase 1		

ProjectScopePeriodContract No. DC/2007/19 Drainage Improvement in Northern Hong Kong Island - Western Lower Catchment WorksTree survey at the following locations: - Cotton Path2009 2009, 2013 2009, 2012 2009, 2012 - Shouson Hill Road West2009, 2013 2009, 2012 2009, 2012 2010 Tree risk assessment at the following location: - Nullah next to Queen's College 20132009, 2012 2009, 2012 2010Cycle Tracks Connecting North West New Territories with North East New Territories (Extension), Minor Sections Investigation, Design and Construction Construction of Hong Kong WestTree survey report for at the Eastern and Western Portals of the Project2008 2008Slope Upgrading Works for Feature No. ISW-B/FR211 & 11SW-B/F247 at Kowloon ParkTree survey in Pokfulam & Wah Fu Tree survey in Pokfulam & Wah Fu Areas2007Contract No. DC/2003/02 Yuen Long, Kam Tin, Ngau Tam Mei and Tin Shui Wai Drainage Improvement, Stage 1, Phase 2A – Kam Tin and Ngau Tam Mei Trunk Road T4, ShatinTree survey within and about 5 m outside the work site boundary2004Agreement No. CE 57/2002 (HY) Provision of Access Facilities for the Eld for High Pressure Gas Pipeline Inside Ma On Shan Country ParkTree survey within and about 5 m outside the work site boundary2003 2003Agreement No. CE 61/90 Tolo Harbour Tree survey within and about 5 m outside the work site boundary20032003Agreement No. CE 61/90 Tolo Harbour Tree survey within and about 5 m outside the work site boundary20032003Agreement No. CE 61/90 Tolo Harbour Tree survey within and about 5 m outside the work site boundary<			
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	Catchment Stage I Phase ID Sewerage	the work boundary	
Contract 1D – Yung Shue O	Contract 1D – Yung Shue O		

#### Ecological Impact Assessment / Monitoring (Partial list)

Project	Scope	Period
Development of Lok Ma Chau Loop:	- Avifauna flight line survey	2018 - 2019
Land Decontamination and Advance	- Herpetofauna monitoring of species	
Engineering Works – Environmental	of conservation significant – Chinese	
Team	Bull Frog	
	- Use of remote sensing camera for	
	monitoring of mammals	
Deep Cement Mixing Works for Three	Dolphin monitoring	2016 - 2019
Runway System		
Contract P553 Deep Cement Mixing	Dolphin monitoring	2015
Trial Works (By Multiple Rigs)		
AA Contract P560(R) - Aviation Fuel	Ecological survey for terrestrial habitats	2015
Pipeline Diversion Works		
-		

Project	Scope	Period
Consultancy for Environmental	Review of impact on avifauna due to laser show	2014
Assessment for Laser and Light Shows at	review of impact of avriating due to faster show	2011
Galaxy Cotai Macau Phase 1 & 2		
Development		
Hong Kong-Zhuhai-Macao Bridge Hong	Dolphin monitoring	2013 - 2018
Kong Link Road-Section between		2013 2010
HKSAR Boundary and Scenic Hill		
Contract No. CV/2012/01 Sediment	Monitoring for ardeids, white-bellied sea eagles	2013 - 2014
Removal at Yim Tin Tsai (East) Fish	and coral	
Culture Zone		
Port Shelter Sewerage, Stage 3 -	Ecological impact assessment (terrestrial, coastal	2013 - 2014
Sewerage Works at Po Toi O	and benthic)	
Environmental Impact Assessment		
Studies – Investigation		
Discovery Bay Maintenance Dredging	Ecological appraisal (terrestrial, coastal, benthic)	2013
2012		
Maintenance Contract for Seawalls and	Waterbird monitoring	2012
Navigation Channels (2010-2013) Kam		
Tin River – Waterbird Monitoring		
Harbour Area Treatment Scheme Stage	Benthic survey	2012
2A – Construction of Advance		
Disinfection Facilities at Stonecutters		
Island Sewage Treatment Works		
Baseline Environmental Monitoring for	Dolphin monitoring	2011
Hong Kong - Zhuhai - Macao Bridge		
Hong Kong Projects – Investigation		
Deep Cement Mixing Trial Works	Dolphin monitoring	2011
Construction of a Secondary	Egretry Survey	2011
Boundary Fence from Mai Po to Lok		
Ma Chau Control Point		
Consultancy Service for Ecological	Ecological impact assessment (bat)	2010 - 2011
Impact Assessment at Yan Tun Kong		
Study Hall, Hang Tau Tsuen, Ping Shan,		
Hong Kong		
Agreement No. CE 64/2009 (HY)	Ecological impact assessment (terrestrial and	2010 - 2011
Improvement to Fan Kam Road	stream)	
Feasibility Study		2010 2011
Improvement Work for Mui Wo Facelift	Ecological impact assessment for opening of	2010 - 2011
- Design and Construction	Silvermine Cave (terrestrial and stream)	2010
Consultancy for Environmental	Ecological impact assessment (terrestrial and	2010
Monitoring on the Major Restoration of	stream)	
the Residence of Ip Ting-Sz, Lin Ma		
Hang Tsuen, Sha Tau Kok Contract No: ST/2008/02 Ma On Shan	Shup anyou for Hone Vare De-	2010
	- Shrub survey for Hong Kong Pavetta ( <i>Pavetta hongkongensis</i> ) and Small	2010
Development - Roads, Drainage and Sewerage Works at Whitehead and Lok	( <i>Pavetta hongkongensis</i> ) and Small Persimmon ( <i>Diospyros vacciniodies</i> )	
Wo Sha Phase 1	<ul> <li>Transplantation monitoring</li> </ul>	
Contract No. DC/2008/09 Harbour Area	Monitoring of Coral	2009
Treatment Scheme Stage 2A		2007
Construction of Sewage Conveyance		
System From Ap Lei Chau to Aberdeen		
CE39/2006 (DS) Rehabilitation of Yuen	Ecological impact assessment (terrestrial and	2008 - 2009
Long Town Nullahs	stream)	2000 2007
	54.5411)	

Project	Scope	Period
Contract No. DC/2007/10 Design and	Amphibian Survey and Translocation	2008
Construction of Hong Kong West		
Drainage Tun		
Environmental Audit and Review on the	Review of effectiveness of ecological mitigation	2007
Effectiveness of Mitigation Measures for	measures (vegetation, stream and coral	
Projects in Sai Kung and on Lantau	transplant)	
Island		
Agreement No. CE18/2006(DS)	Ecological impact assessment (terrestrial and	2007
Reconstruction & Improvement of	stream)	
Staunton Creek Nullah in Wong Chuk		
Hang and Fuk Man Road Nullah in Sai		
Kung, Investigation, Design and		
Construction		
Agreement No. CE 27/2005 (CE) Ping	Ecological impact assessment (terrestrial and	2005 - 2006
Ha Road Improvement and Hung Shui	stream)	
Kiu Development, Stage 2 – Remaining		
Works		
Trunk Road T4, Shatin	Ecological impact assessment (terrestrial)	2003 - 2005
Tonggu Channel of Shenzhen Port	Ecological impact assessment (intertidal,	2003 - 2005
	benthic)	

APPENDIX D TEMPLATE OF POST-TRANSPLANTATION MONITORING CHECKLIST

#### Template of Post-transplantation Monitoring Checklist Site Formation and Infrastructure Works for Police Facilities in Kong Nga Po

					Audit Ref. No	)
Contra	act					
Inspect	ed By	Inspection Date				
		Time Period				
Part A	Weather					
Condit T		Rain	St	orm	Hazy	
Tempe Humid		Low (R	H<50%)			
Wind	Calm Light Breeze Strong	·				
Part B	N/A	A or not observed	Yes	No	Follow-up N/C	Remarks
1.	Cycadfern Brainea insignis					
1.1	Are the plants' health conditions satisfactory?					]
1.2	Are transplanted plants on site protected carefully?					]
1.3	Are the temporary protective fence properly erected and maintained?					]
1.4	Are the plant protection zone set 1m from the plants?					]
1.5	Are all grassed and planted area kept free from weeds/unwanted plants?					]
1.6	Is compaction of the soil avoided for the plants?					]
1.7	Are litter/ unwanted material removed within the planting area?					]
1.8	Are equipment or stockpile placed outside the protection zone?					]
1.9	Are soil, debris or construction materials deposited around and against the trunk of a plant as this causes bark damage avoided?					]
1.10	Are fixings driven into plants avoided?					]
1.11	Are the plants used for anchoring or winching purposes or for the display of signs avoided?					]
1.12	Are the fire lit below the branches and petrol, oil or caustic substances store near the plants avoided?	d				]
1.13	Are all plants kept free from pest, disease or fungal infection?					]
1.14	Are there enough area for growth and development of plant roots?					]
1.15a	Is exposure of plant roots avoided?					]
1.15b	If not, were broken off or rotting of roots avoided?					]
2.	Ladies Tresses Spiranthes sinensis	A or not observed	Yes	No	Follow-up N/C	Remarks
2.1	Are the plants' health conditions satisfactory?					]
2.2	Are transplanted plants on site protected carefully?					]
2.3	Are the temporary protective fence properly erected and maintained?					]
2.4	Are the plant protection zone set 1m from the plants?					]
2.5	Are all grassed and planted area kept free from weeds/unwanted plants?					]
2.6	Is compaction of the soil avoided for the plants?					]
2.7	Are litter/ unwanted material removed within the planting area?					]

#### Template of Post-transplantation Monitoring Checklist Site Formation and Infrastructure Works for Police Facilities in Kong Nga Po

		N/A or not observed	Yes	No	Follow-up N	N/C	Remarks
2.8	Are equipment or stockpile placed outside the protection zone?						
2.9	Are soil, debris or construction materials deposited around and against trunk of a plant as this causes bark damage avoided?	the					
2.10	Are fixings driven into plants avoided?						
2.11	Are the plants used for anchoring or winching purposes or for the disp signs avoided?	ay of					
2.12	Are the fire lit below the branches and petrol, oil or caustic substances near the plants avoided?	stored					
2.13	Are all plants kept free from pest, disease or fungal infection?						
2.14	Are there enough area for growth and development of plant roots?						
2.15a	Is exposure of plant roots avoided?						
2.15b	If not, were broken off or rotting of roots avoided?						
3.	Incense Trees Aquilaria sinesis	N/A or not observed	Yes	No	Follow-up N	N/C	Remarks
3.1	Are the trees's health conditions satisfactory?						
3.2	Are transplanted trees on site protected carefully?						
3.3	Are the temporary protective fence properly erected and maintained?						
3.4	Are the tree protection zone set 1m from the trees?						
3.5	Are all grassed and planted area kept free from weeds/unwanted plants	?					
3.6	Is compaction of the soil avoided for the trees						
3.7	Are litter/ unwanted material removed within the planting area?						
3.8	Are equipment or stockpile placed outside the protection zone?						
3.9	Are soil, debris or construction materials deposited around and against trunk of a tree as this causes bark damage avoided?	the					
3.10	Are fixings driven into trees avoided?						
3.11	Are the trees used for anchoring or winching purposes or for the displa signs avoided?	y of					
3.12	Are the fire lit below the branches and petrol, oil or caustic substances near the trees avoided?	stored					
3.13	Are all trees kept free from pest, disease or fungal infection?						
3.14	Are there enough area for growth and development of tree roots?						
3.15a	Is exposure of tree roots avoided?						
3.15b	If not, were broken off or rotting of roots avoided?						
3.16	Are wounds/mechanical injuries avoided on tree trunk?						
3.17	Are leaning of trees avoided?						
3.18	Are dead/detached branches avoided?						
3.19	Are decay/cavity avoided on tree trunks?						

#### Template of Post-transplantation Monitoring Checklist Site Formation and Infrastructure Works for Police Facilities in Kong Nga Po

Part C	Follow-up for the Previo	ous Site Audit on Date:	(Ref. No	)				
	-		N/A or not observed	Yes	No	Follow-up	N/C	Remarks
1.	Is the situation in item	improved/rectified?						
2.	Is the situation in item	improved/rectified?						
3.	Is the situation in item	improved/rectified?						
4.	Is the situation in item	improved/rectified?						
5.	Is the situation in item	improved/rectified?						
6.	Is the situation in item	improved/rectified?						
7.	Is the situation in item	improved/rectified?						
8.	Is the situation in item	improved/rectified?						
9.	Is the situation in item	improved/rectified?						
10.	Is the situation in item	improved/rectified?						

Remarks/Observations

Signatures:

Contractor's Representative

)

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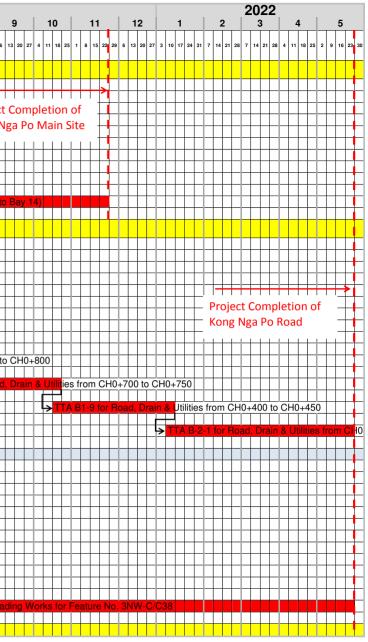
Supervisor's Rep.

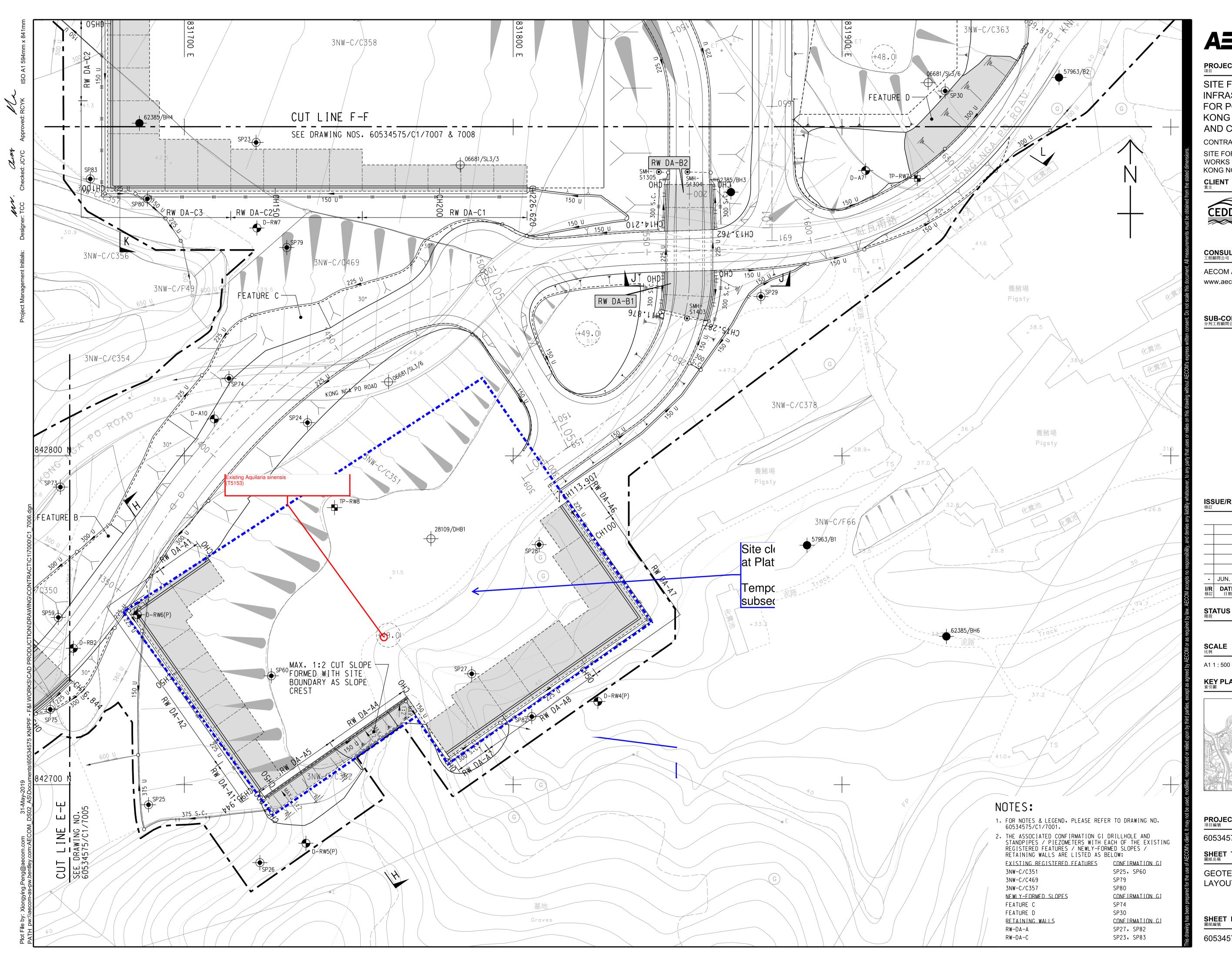
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APPENDIX E CONSTRUCTION PROGRAMME

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Task Name	Start	Finish	Duratio n (Days)	4 11	18 25 1	8 15 2	22 29 6	13 20	27 3 1	10 17 2	94 31 7	7 14 2	21 28	5 12	19 26	2 9	16 23	30 7	14 2	1 28	4 11	18 25	5 1	3 15 2	22 1	8 15	22 29	9 5 1	2 19	26 3	10 17	7 24 3	31 7	14 21	28 5	12 1	9 26	2 9	16 23	30 E	13
Platform A (+49.0mPD)			(Davs)																	Π									Ħ				T				Ħ				Π
Site Clearance and Tree Felling at Platform A	26-May-2020	12-Oct-2020	139		Site	Clea	rance	and	Tree	Fellir	ig at	Plat	form	A																										╓	
Transplantation of Aquilaria sinensis (T5153)	14-Jul-2020	12-Oct-2020	90	$\left  \right $		$\left  \right $		Tran	Isplar	Itatio	n of	Aqui	ilaria	sine	ensis	(T5	(53)	+	$\vdash$	┼┼	-		+	++	╈	$\vdash$	$\left  \right $	$\left  \right $	++	+		++	++	+	┿	+	++	+	Prc	i i Diect	t I t C
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Trim Slope to +49.0mPD	13-Oct-2020	15-Dec-2020	63			$\left  \right $				++	++	++		> <mark>⊺r</mark>	im S	lope	to +4	<u>19.0</u>	mPl III				$\left  \right $	+	+	$\left  \right $	$\left  \right $		++	-					+		++	+		י פי ו ו	1.1
Construct Retaining Wall DA-A (Bay 20 to Bay 22)	16-Dec-2020	6-Mar-2021	80															╞	Со	nstr	uct I	Reta	inin	g W	all [	DA-A	(Ba	y 20	) to E	Bay	22)										
Filling up 3NW-C/C351 for Retaining Wall Construction	8 Mar 2021	8-May-2021	61								++							_		+			$\square$	+	F						251	for	Pota	ining	- W/		Cons			$\vdash$	+
	0-11/12/2021	0-iviay-202 i	01								+	++	+					+		+				+	1										<u> </u>					$\vdash$	$\square$
Construct Retaining Wall DA-A (Bay 1 to Bay 14)	10-May-2021	26-Nov-2021	200																						_					4	Со	nstru	uct P	etai	ning	y Wa	<u>II D</u>	A-A	(Ba	11	bΒ
Kong Nga Po Road																		-		H					+										+		t	┢	H	H	
Site Clearance and Tree Felling for 3NW-C/F16	26-May-2020	22-Sep-2020	119	_	Site	Clear	rance	and	Tree	Fellir		r 3NI	W-C	/F16	;			_							-							-			_		++	₽	⊢⊢		
													Ĩ																								$\square$				
Transplantation of Aquilaria sinensis (T2298)	6-Jul-2020	4-Oct-2020					╷╷╹	ransp	olanta	tion	of Ac	q <mark>uila</mark> r	ria si	inen	sis (1	T229	B)			$\left  \right $			$\left  \right $	++	+					-					+	$\left  \right $	++	+	$\vdash$	$\vdash$	+
TTA B-2-6L for Road, Drain & Utilities from CH0+800 to CH0+850	22-Sep-2020	23-Dec-2020	92									<b>b</b>	TTA	B-2-	6L fo	or Ro	ad, I	Drai	n &	Utili	ities	fron	n Cł	10+8	800	to C	H0+	850		+		+			╈		++	+	H		+
and Retaining Wall RD-B Construction																																					$\square$	卫	F	F	
TTA B-2-7L for Road, Drain & Utilities from CH0+850 to CH0+900	24-Dec-2020	30-Mar-2021	96	$\left  \right $		$\left  \right $	++-			++	++	++	+	+	+	++	++	-+-{	5	TA	B-2	-71	for F	l	1. D	rain	& Ut	itie	s fro	m C	L   2H0-	 ⊦850	) to (		+90	0	++	┯	$\vdash$	⊢⊢	+
and Retaining Wall RD-B Construction																																				Ī		卫	Ē		
TTA B-2-5 for Road, Drain & Utilities from CH0+750 to CH0+800	31-Mar-2021	12-Jul-2021	103			$\left  \right $				++	++	++	+	+	+	++	+			+	_		$\left  + \right $	++	╋	$\square$	╘╸	TA	B-2-	5 fo	r Bo		Drai	n &	Itili	lies	fron		  0+7	/50 t	
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TTA B-2-4 for Road, Drain & Utilities from CH0+700 to CH0+750	13-Jul-2021	19-Oct-2021	98																						_					_					┝	T	A B-	2-4	for I	loag	, D
TTA B1-9 for Road, Drain & Utilities from CH0+400 to CH0+450	20-Oct-2021	14-Jan-2022	86															-		+					┢					-					+		++	+	⊢⊢		+
	45 1	00.14.0000	405																																		$\square$	卫	F		$\square$
TTA B-2-1 for Road, Drain & Utilities from CH0+450 to CH0+500	15-Jan-2022	30-May-2022	135			$\left  \right $	++-			++	+	++	+	+	+	+	+	+	$\vdash$	+	+		$\left  + \right $	++	╈	$\vdash$	++	$\left  \right $	++	+	$\left  \right $	++	++	+	┿	++	++	┦	$\vdash$	⊢⊢	+
Site Clearance and Tree Felling for 3NW-C/C38	26-May-2020	30-Aug-2020	96		Site	Clea	rance	and	Tree	Fellir	ng foi	r 3N\	<u>W-C</u>	/C38	3			_		+					+					-					_		++-	+	$\vdash$	⊢-	+
Ground Investigation Field Works for 3NW-C/C38	31-Aug-2020	5-Oct-2020	35							┼╞	> Gro	ound	i Inye	estig	atior	n Fiel	d W	orks	for	3N\	W-C	/C3	8	++	╈	$\square$	$\vdash$		++			++			+	++	++	+	$\vdash$	$\vdash$	$\square$
	0.1.1.0000	0.0.1.0000											Р			T470				$\square$			$\square$														$\square$	₽	$\square$	<u> </u>	
Transplantation of Aquilaria sinensis (T1700)	8-Jui-2020	6-Oct-2020	90					ransp	Dianta				ria si	nens		T170	)			┼┼			$\left  \right $	++	+			$\vdash$	+	-			++		+	++	++	+	⊢⊢	$\vdash$	+
Formation of Access to 3NW-C/C38	6-Oct-2020	5-Dec-2020	60										4	Forn	natio	n of	Acce	ss t	o 31	w-	C/C	38																⋣			
Scaffolding Works for Equipment	16-Nov-2020	20-Mar-2021	124								+	++					Scaf	foldi	ng	Wor	'ks f	or F	quir	mer	at			$\left  \right $	++	+		$\left  \right $		+	+	$\left  \right $	++	+	$\vdash$	–−	+
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Cut Slope in 3NW-C/C38	22-Mar-2021	24-Aug-2021	146	$ \top $						$\square$			$\square$	$\square$	$\square$	$\square$	П			П				П	T	⊳	Cut	Slo	pe ir	131	JW-(		38				P	▰		Æ	$\square$
Upgrading Works for Feature No. 3NW-C/C38	25-Aug-2021	30-May-2022	278			$\left  \right $		$\left  \right $	$\left  + \right $		+	++	+	+	+		+	+	$\vdash$	╞┼			+	+	┢	$\vdash$	$\left  \right $	+	+			+	+	+	+	$\square$	++	┦	→∎	pgr	udir
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#### PROJECT

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 <sub>業主</sub>



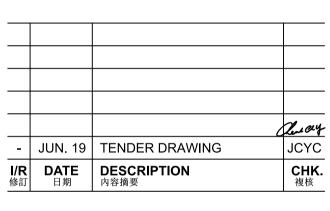
🗲 土木工程拓展署 CEDD Civil Engineering and Development Department

## **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**



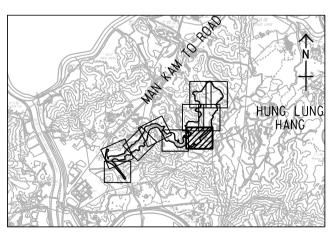
### STATUS <sub>階段</sub>

SCALE 比例

## DIMENSION UNIT <sub>尺寸單位</sub>

METRES

**KEY PLAN** A1 1 : 100000 <sub>索引圖</sub>



## **PROJECT NO.** <sup>項目編號</sup> 60534575

ND/2018/01

SHEET TITLE 圖紙名稱

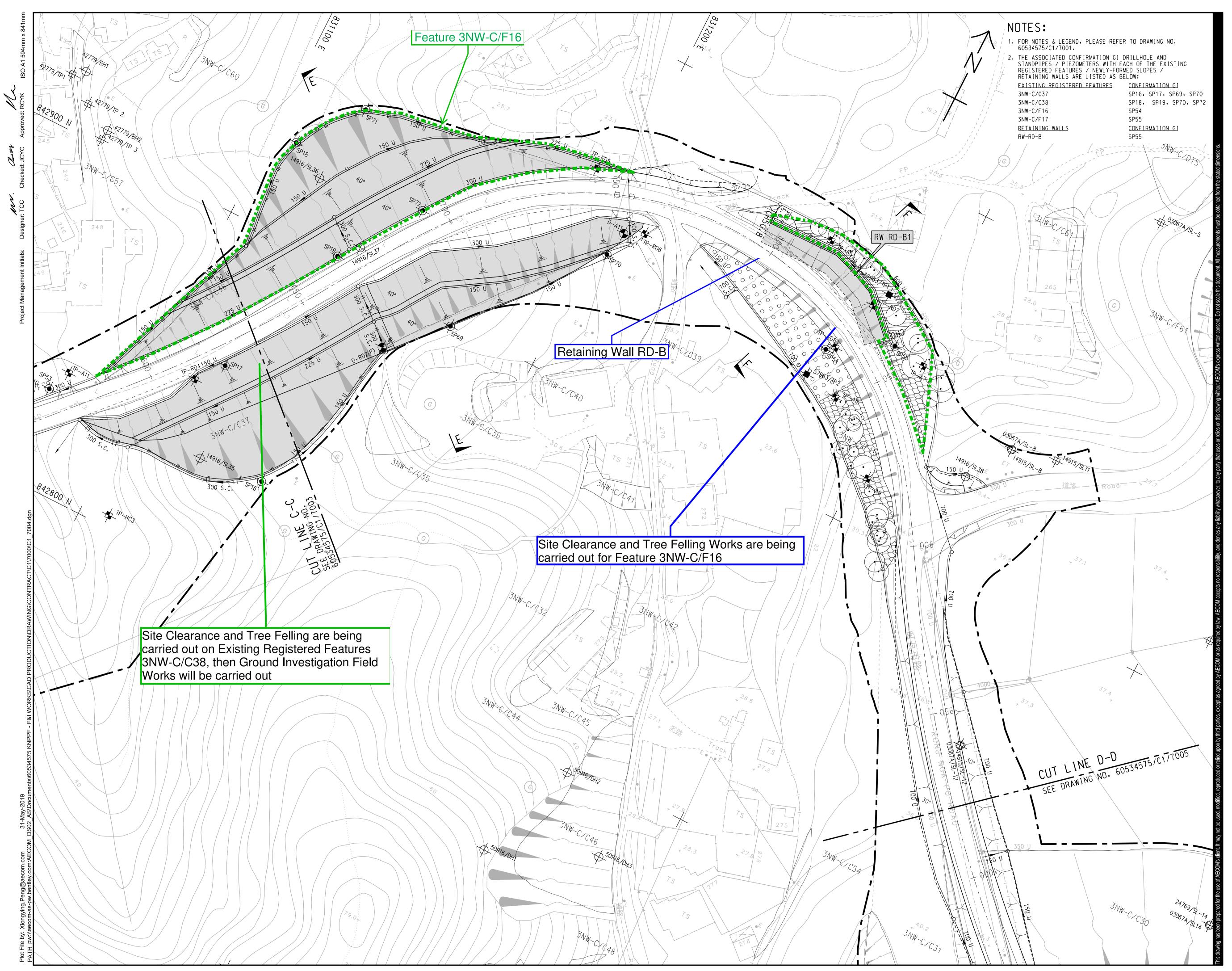
GEOTECHNICAL WORKS LAYOUT PLAN

# SHEET NUMBER <sup>圖紙編號</sup>

60534575/C1/7006

## CONTRACT NO. <sub>合約編號</sub>

SHEET 6 OF 10





#### PROJECT

#### 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



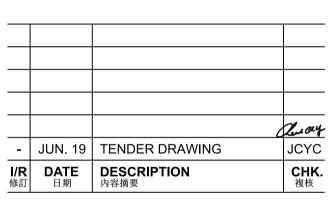
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#### **ISSUE/REVISION**



### STATUS <sub>階段</sub>

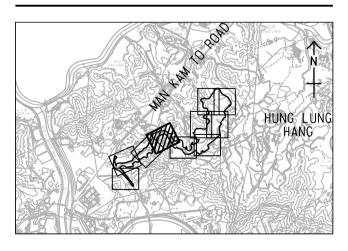
A1 1 : 500

SCALE 比例

## DIMENSION UNIT <sub>尺寸單位</sub>

METRES

**KEY PLAN** A1 1 : 100000 <sub>索引圖</sub>



## **PROJECT NO.** <sub>項目編號</sub>

60534575

SHEET 4 OF 10

ND/2018/01

SHEET TITLE 圖紙名稱

GEOTECHNICAL WORKS LAYOUT PLAN

## SHEET NUMBER <sup>圖紙編號</sup>

60534575/C1/7004

## CONTRACT NO. <sub>合約編號</sub>

APPENDIX F IMPLEMENTATION SCHEDULE

Recommended Mitigation Measures	Objective of the Measures	Who to Implement / Maintain the Measures?	Location of the Measures	When to Implement the Measures?	Reference to paragraph(s) in this Transplantation Proposal
Identification of Plant Species ofConservation Importance to be Retained/ TransplantedTo mark trees/plants proposed to be retainedand to be transplanted on the layout planprior to commencement of site constructionworks.	To identify the plant species of conservation importance and ensure no plant species of conservation importance / retained tree will be affected.	Resident Site	Project Site Area(s)	During design stage / throughout construction stage / Until completion of all construction activities	Refers to para(s) 5.1 of the Transplantation Proposal
<ul> <li>Protection of Plant Species of Conservation Importance prior to Site</li> <li>Clearance / Transplantation Works <ul> <li>a) No site clearance shall be started at the locations of flora species of conservation interest until the transplantation works completed.</li> <li>b) Set up buffer zone to enhance the protection of flora species of</li> </ul></li></ul>	To make sure that the flora species of conservation interest are not affected by the site clearance works of the Project	Contractor / Resident Site Engineer / ET / IEC	Location(s) of Plant Species of Conservation Importance and Transplantation Area(s) for Plant Species of Conservation Importance	Prior to Site Clearance / Transplantation Works	Refers to para(s) 2.11 and 2.12 of the Transplantation Proposal

Recommended Mitigation Measures	Objective of the Measures	Who to Implement / Maintain the Measures?	Location of the Measures	When to Implement the Measures?	Reference to paragraph(s) in this Transplantation Proposal
conservation importance to be preserved / transplanted including the proposed location for transplantation when the site clearance works shall commence before the transplantation works completed.					
<ul> <li>Temporary Protective Fence for Flora</li> <li>Species of Conservation Interest /</li> <li>Retained Tree <ul> <li>a) To erect a temporary protective fence</li> <li>enclosing the flora species of</li> <li>conservation interest identified under the</li> <li>detailed vegetation survey.</li> </ul> </li> <li>b) To set up a protection zone at least 1m from the plant / retained tree and erect</li> <li>robust, bright-coloured fencing of 1.5m in height.</li> </ul>	make sure that the flora species of conservation interest / retained tree are not affected by the construction		Location(s) of Plant Species of Conservation Importance / Retained Tree	Throughout construction stage / Until completion of all construction activities	Refers to para(s) 2.7, 4.41 and 5.1 of the Transplantation Proposal

Recommended Mitigation Measures	Objective of the Measures	Who to Implement / Maintain the Measures?	Location of the Measures	When to Implement the Measures?	Reference to paragraph(s) in this Transplantation Proposal
Maintenance of the Protection Zone for	To avoid potential impact on	Contractor /	Location(s) of	Throughout	Refers to para(s)
Flora Species of Conservation Interest /	flora species of conservation	Resident Site	Plant Species of	construction stage /	2.7, 4.41 and 5.1
Retained Tree	importance / retained tree	Engineer / ET /	Conservation	Until completion of	of the
a) Monthly monitoring of flora species of	from construction activities	IEC	Importance /	all construction	Transplantation
conservation interest identified in the	such as materials storage; To		Retained Tree	activities	Proposal
detailed vegetation survey should be	make sure that the flora				-
conducted.	species of conservation				
b) To inspect the temporary protective	interest / retained tree are not				
fence whether it is properly erected and	affected by the construction				
maintained during construction.	activities of the Project				
Post-transplantation Monitoring	To allow early detection of	Contractor /	Location(s) of	The first year of	Refers to para(s)
a) Weekly post-transplantation monitoring	the growth status of	Resident Site	transplanted	establishment	4.38 to 4.40 and
of transplanted species in the first three	transplanted species, sign of	Engineer / ET /	species	period after	4.42 of the
months and monthly afterwards.	construction activity within	IEC		transplantation	Transplantation
	and nearby the receptor site,				Proposal
	and any environmental				1
	change of the receptor site.				

Recommended Mitigation Measures	Objective of the Measures	Who to Implement / Maintain the Measures?	Location of the Measures	When to Implement the Measures?	Reference to paragraph(s) in this Transplantation Proposal
<ul> <li>Maintenance of Transplanted Species</li> <li>a) To keep the soil moist by watering the receptor sites properly and adequately.</li> <li>b) To apply mulches on the soil surface over the plant root system, if required.</li> <li>c) To remove unwanted weeds found in receptor sites.</li> </ul>	To allow health growth of the transplanted species.	Contractor / Resident Site Engineer / ET / IEC	Location(s) of transplanted species	The first year of establishment period after transplantation	Refers to para(s) 4.43 to 4.46 of the Transplantation Proposal
Other Protection Measures for Flora         Species of Conservation Interest /         Retained Tree / Vegetated Areas         a) All works should be confined within the site boundary.         b) Access of site staff should be controlled.         c) Care should be taken to prevent trees/plants being damaged by mechanical equipment or stockpile both during site clearance works and	To avoid potential impact on Flora Species of Conservation Interest / Retained Tree / Vegetated Areas from construction activities of the Project	Contractor / Resident Site Engineer / ET / IEC	Project Site Area(s)	Throughout construction stage / Until completion of all construction activities	Refers to para(s) 5.1 of the Transplantation Proposal

Recommended Mitigation Measures	Objective of the Measures	Who to Implement / Maintain the Measures?	Location of the Measures	When to Implement the Measures?	Reference to paragraph(s) in this Transplantation Proposal
construction works.					
d) No fixings should be driven into					
trees/plants.					
e) No workshop, canteens, or similar					
should be installed beneath trees/plants,					
nor will equipment maintenance etc. be					
carried out under trees/plants.					
f) No excavation, including that for					
services or changes in ground level will					
take place within the spread of the crown					
of the trees / plants.					
g) No soil, debris or construction materials					
should be deposited around and against					
the trunk of a tree/plant as this causes					
bark damage and compaction of the soil.					
h) No fire should be lit below the branches					
and no petrol, oil or caustic substances					

<b>Recommended Mitigation Measures</b>	Objective of the Measures	Who to Implement /	Location of the Measures	When to Implement the	Reference to paragraph(s) in
		Maintain the		Measures?	this
		Measures?			Transplantation
					Proposal
stored near the trees/plants.					
i) No trees/plants should be used for					
anchoring or winching purposes or for					
the display of signs.					
j) Any damage or injury to the retained /					
transplanted plants should be reported as					
soon as possible for repair immediately.					