

**S16 Application for
Proposed Tai Po Kau Nature Academy at
Various Lots in D.D.33 and Adjoining Government Land, Tai Po Kau, Tai Po**

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July 2022

Executive Summary

This planning statement is prepared in support of a S16 Application for the proposed Tai Po Kau Nature Academy at Lots 1, 2, 4-8 in D.D.33 and adjoining Government land in Tai Po Kau, Tai Po.

The application site has a site area of about 0.9ha. It falls within land zoned “Green Belt” (“GB”) on the draft Tai Po Outline Zoning Plan (OZP) No. S/TP/29 gazetted on 17 September 2021. It is a piece of long-abandoned farmland covered with overgrown vegetation and weeds. Several single-storey structures are found on the site and they are left vacant and severely dilapidated.

In order to step forward to facilitate the promotion of environmental protection and conservation, Pine Garden Foundation Limited (the applicant), a charitable body, proposes to establish a field study/education/visitor centre with ancillary tent camping facilities known as “Tai Po Kau Nature Academy” at the application site for organising educational activities/programmes and conducting field study/research. The proposed Tai Po Kau Nature Academy will be operated in collaboration by Smiley Planet and Outdoor Wildlife Learning Hong Kong.

The proposed development will involve redevelopment of three existing structures within the application site into a visitor centre, an activity centre and a plant nursery with ancillary facilities. It will provide a tent camping ground for overnight educational activities. It will be compatible with the rural character of the surrounding environment and enhance the existing natural landscape of the area. With careful design and proper management, it will have no adverse traffic, ecological, environmental, sewerage, drainage or geotechnical impacts.

Since the application site is suitable for the proposed Tai Po Kau Nature Academy and will bring planning gains to promote nature conservation and tidy up the unsightly environment, we would be grateful that Members of the Board will give favorable consideration to approve this application.

行政摘要

本計劃書旨在支持根據城市規劃條例第 16 條於大埔滘第 33 約地段第 1, 2 及 4-8 號和毗連政府土地用作大埔滘自然學院的規劃許可申請。

申請地點面積約 0.9 公頃，位於已在 2021 年 9 月 17 日公佈的大埔分區計劃大綱草圖(圖則編號 S/TP/29)上的「綠化地帶」。申請地點為一片廢棄已久的農地，上面覆蓋著雜草叢生的植被，現時有幾座空置並殘破的單層建築物。

為進一步推動環境保育，慈善團體 Pine Garden Foundation Limited (申請人) 擬議於申請地點設立郊野學習／教育／遊客中心及附屬帳幕營地，名為“大埔滘自

然學院”，用以組織教育活動／計劃和進行實地考察／研究。擬議的大埔滘自然學院將由 **Smiley Planet** 與香港戶外生態教育協會合作經營。擬議發展包括將申請地點內的三個現有建築物重建為遊客中心、活動中心、植物苗圃和附屬設施，並將為夜間教育活動提供帳幕營地。擬議發展與周圍環境的鄉郊特色相協調，提高該地區現有的自然景觀質素。擬議發展採納精心設計和配合妥善管理，不會對交通、生態、環境、污水、排水或岩土結構造成不利影響。

由於申請地點適合發展擬議的大埔滘自然學院，並將帶來規劃增益，以促進自然環境保育和整理不悅目的環境，我們敬希城市規劃委員會及有關政府部門批准此申請。

1. INTRODUCTION

- 1.1** On behalf of Pine Garden Foundation Limited (Pine Garden Foundation), PlanArch Consultants Ltd. submits a planning application to the Town Planning Board (TPB) for the proposed field study/education/visitor centre with ancillary tent camping ground at Lots 1, 2, 4-8 in D.D.33 and adjoining Government Land in Tai Po Kau, Tai Po.
- 1.2** The Pine Garden Foundation is a charitable body registered for tax exemption under Section 88 of the Inland Revenue Ordinance, with the objectives to promote awareness and advances conservation, restoration and rehabilitation of the environment, ecosystem and areas with natural beauty and scientific interest. It proposes to establish a field study/education/visitor centre with ancillary camping facilities known as “Tai Po Kau Nature Academy” (TPK Nature Academy) at the application site for promotion of nature education through organising educational activities and programmes, as well as for conducting field study and research.
- 1.3** The application site has a site area of about 0.9ha and falls within land zoned as “Green Belt” (“GB”) on the draft Tai Po Outline Zoning Plan (OZP) No. S/TP/29 gazetted on 17 September 2021 (**Plan 1**). The proposed TPK Nature Academy will redevelop three existing structures within the application site into a visitor centre, an activity centre and a plant nursery with ancillary facilities. It will provide facilities for field study and a tent camping ground for overnight educational activities. Since the proposed ‘Field Study/Education/Visitor Centre’ and “Holiday Camp” (tent camping ground) are Column 2 uses in “GB” zone, approval from the Town Planning Board under S.16 of the Town Planning Ordinance is required.
- 1.4** In support of this application, this planning statement sets out the site background, outlines the development proposal and provides justifications for the proposed field study/education/visitor centre with tent camping ground. The structure of the planning statement is as follows:

- Section 2 : background of Pine Garden Foundation
- Section 3 : site context and surrounding land uses
- Section 4 : introduction on the development proposal
- Section 5 : justifications for the proposed development
- Section 6 : conclusion

2. THE PINE GARDEN FOUNDATION AND OUTDOOR WILDLIFE LEARNING HONG KONG

- 2.1** The applicant, Pine Garden Foundation, is a charitable body established and registered in Hong Kong. It is a non-profit making institution approved under Section 88 of the Inland Revenue Ordinance.
- 2.2** Pine Garden Foundation aims to conserve, restore and rehabilitate the natural environment, as well as to promote awareness towards the protection and appreciation of the environment, ecosystem and areas with natural beauty and scientific interest.
- 2.3** In order to promote environmental protection and conservation, the Pine Garden Foundation intends to establish the TPK Nature Academy at the application site for conducting educational activities and programmes, as well as field study and research under the theme of “forest biodiversity and ecosystem”. Smiley Planet will plan and manage the TPK Nature Academy. It is a non-government organization advocates for sustainable urban living lifestyle and urban farming, promotes upcycling and sets up urban farms.
- 2.4** In order to enhance the quality in future nature educational and field study/research programmes for the community, Outdoor Wildlife Learning Hong Kong (OWLHK) will be collaborated to operate the TPK Nature Academy and organise various educational programmes. OWLHK is a non-government environmental education organization established in 2016 and became a registered charity in Hong Kong. It aims at promoting conservation and environmental education in Hong Kong through outdoor education and relevant research works.

3. SITE CONTEXT

3.1 Location

The application site comprises Lots 1, 2, 4-8 in D.D. 33 and adjoining Government Land in Tai Po Kau, Tai Po. It has a site area of about 0.9ha. Please refer to **Plans 1 & 2** for details.

3.2 Land Use Zoning and Land Status

The application site falls within land zoned “Green Belt” (“GB”) on the draft Tai Po Outline Zoning Plan (OZP) No. S/TP/29 gazetted on 17 September 2021 (**Plan 1**).

According to the Notes of OZP, the planning intention of “GB” zone is to “define the limits of urban and sub-urban development areas by natural features and to contain urban sprawl as well as to provide passive recreational outlets.”. Under the “GB” zone, ‘Field Study/Education/Visitor Centre’ is a Column 2 use which requires permission from the Town Planning Board (TPB) under Section 16 of the Town Planning Ordinance. The proposed TPK Nature Academy will also provide camping facilities for arranging overnight educational programmes. Tent camping ground is subsumed under “Holiday Camp” which is also a Column 2 use.

The lots concerned are demised for agricultural use.

3.3 Existing Land Use

The application site is a piece of long-abandoned farmland covered with overgrown vegetation and weeds. Several single-storey structures are found on the site and they are left vacant and severely dilapidated. Please refer to **Photos 1-4** for the existing condition of the application site.

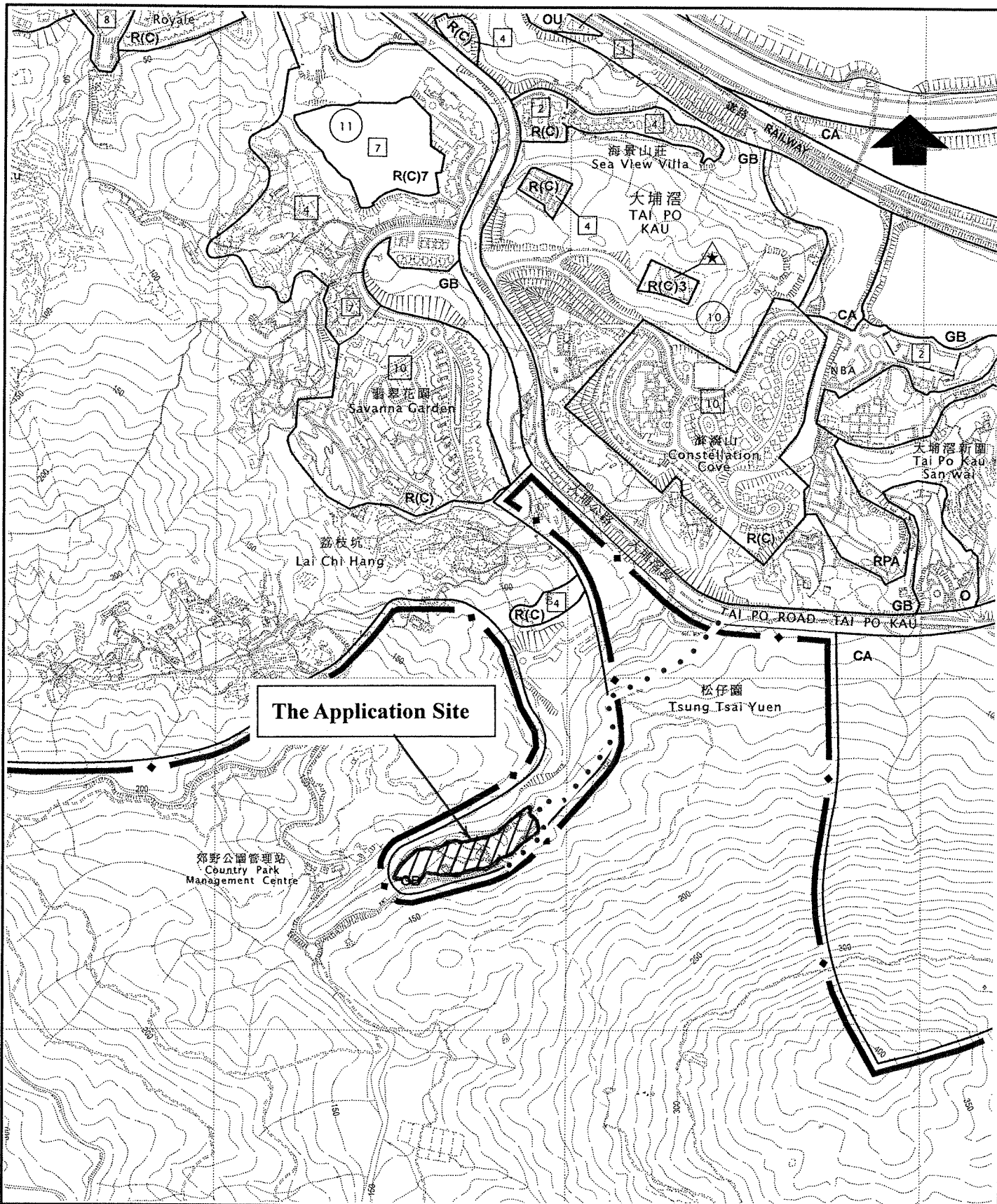
3.4 Adjacent Land Uses

The application site is adjacent to the Tai Po Kau Nature Reserve, bounded by a stream along the northern boundary, and Tai Po Kau Forest Track – Kau Lead Section along the southern/eastern boundary (**Photo 6**).

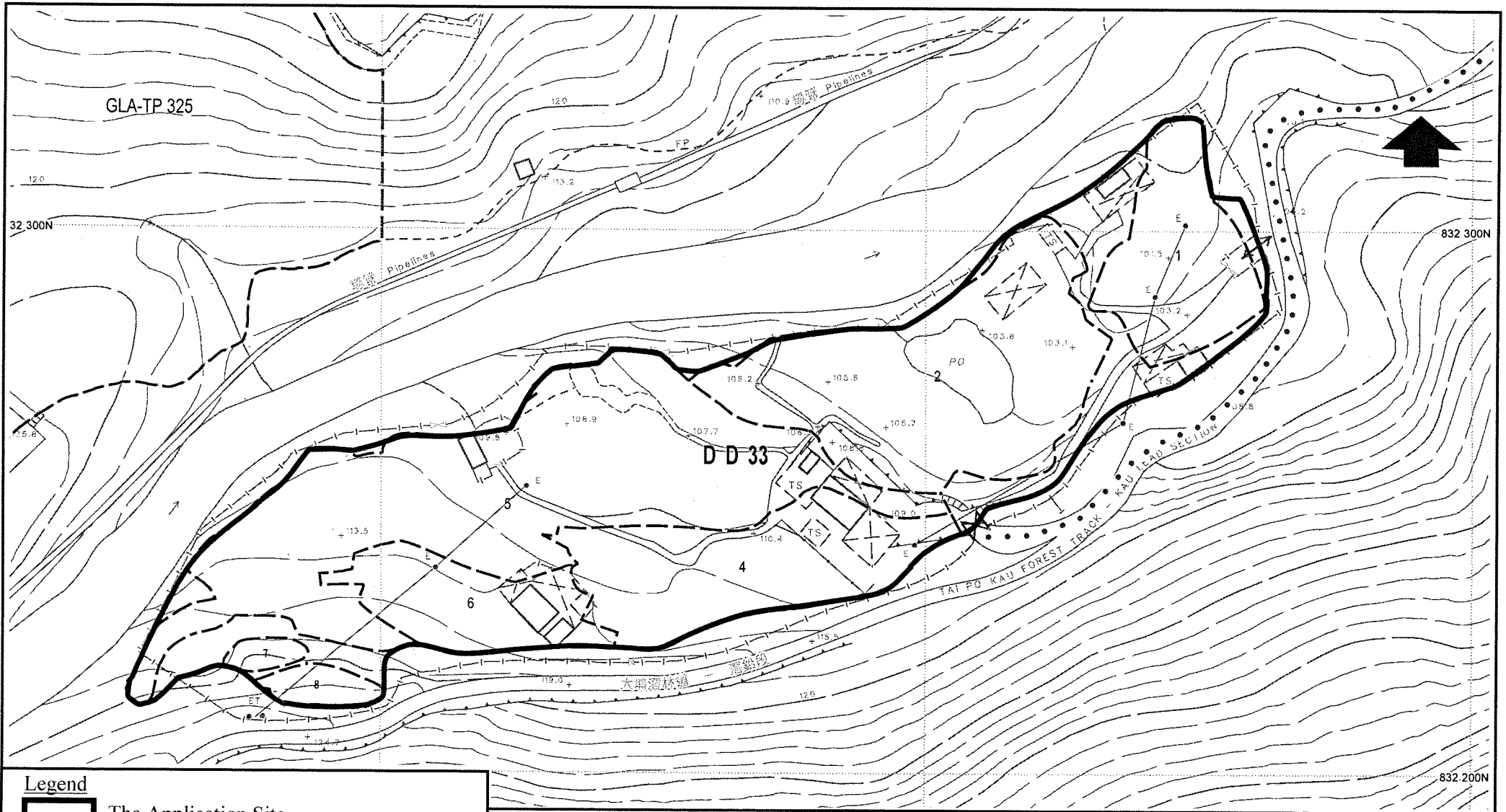
Tai Po Kau Nature Reserve is also known as Tai Po Kau Special Area. It comprises dense hilly woodlands and is rich in flora and fauna. It is one of the most popular places for bird watchers and hikers. Nature trails and forest walks are provided in the Nature Reserve. A country park management centre with an information post as well as public toilets operated by Agriculture, Fisheries and Conservation Department (AFCD) are found in the vicinity. Tai Po Kau Garden is located down the foothill to the further northeast of the application site.

3.5 Accessibility and Local Traffic

The application site is accessible via Tai Po Kau Forest Track – Kau Lead Section which is a restricted road off Tai Po Road – Tai Po Kau Section (**Photo 7**). Public transportation including buses and minibuses can be reached in the vicinity within 5 to 10 minutes walk from the application site (**Photo 8** and **Plan 1**). Some parking spaces for motor cycles, cars and coaches can be found down the foothill near Tai Po Kau Garden.



<p><u>Legend</u></p> <p>• • • • Access to the Site</p> <p>Plan Based on Tai Po Outline Zoning Plan No. S/TP/29 exhibited on 17.9.2021</p>	<p style="text-align: center;">Location Plan</p> <p style="text-align: center;">Proposed Tai Po Kau Nature Academy at Various Lots in D.D.33 and Adjoining Government Land, Tai Po Kau, Tai Po</p> <p style="text-align: center;">0 200 400 METRES</p>	<p style="text-align: center;">Plan 1</p> <p style="text-align: center;">PlanArch Consultants Ltd.</p> <p>Revision: Date: 7.7.2022</p>
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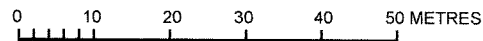
Legend

- The Application Site
- Access for Visitor
- Access for Plant Nursery Staff
- Access to the Site

Base Plan Extracted from Lot Index Plan
 No. ags_S00000094055_0001
 Prepared by the District Survey Land Information
 Centre on 18.5.2022

Site Plan

Proposed Tai Po Kau Nature Academy
 at Various Lots in D.D.33 and Adjoining Government Land,
 Tai Po Kau, Tai Po











Plan 2

PlanArch Consultants Ltd.

Revision:

Date: 19.7.2022

<p>Photos 1-4: Existing condition of the application site The application site has been left abandoned with overgrown vegetation over the years. There are several single-storey dilapidated structures within the application site. Some internal footpaths are also found.</p>	
<p>1</p> 	<p>2</p> 
<p>3</p> 	<p>4</p> 
<p>Photo 5 The Application Site is adjacent to the Tai Po Kau Nature Reserve where popular hiking trails are found.</p>	<p>Photo 6 A stream is running along the northern boundary outside the application site.</p>
<p>5</p> 	<p>6</p> 
<p>Photo 7 The application site is easily accessible by visitors. It is connected to the Tai Po Kau Forest Track – Kau Lead Section off Tai Po Road – Tai Po Kau Section.</p>	<p>Photo 8 Bus Stops are about 5 minutes walk from the application site at Tai Po Road – Tai Po Kau Section.</p>
<p>7</p> 	<p>8</p> 

4. THE PROPOSED TAI PO KAU NATURE ACADEMY – FIELD STUDY/EDUCATION/VISITOR CENTRE WITH ANCILLARY HOLIDAY CAMP (TENT CAMPING GROUND)

4.1. The Development Proposal

The proposed TPK Nature Academy mainly consists of three single-storey buildings which will be redeveloped from the existing structures. It will have a visitor centre, an activity centre and a plant nursery for nature education and field study purpose. Outdoor spaces will be reserved for activity ground, viewing deck, event lawn and plant nursery area for field study/research purpose. A camping ground will be provided for overnight educational activities/programme for about 18 persons.

The project adopts a sustainable design concept namely the “Three Zeros” indicating “Zero Carbon”, “Zero Waste Water” and “Zero Distance to Nature”. Elements from the existing structures will be preserved to reduce the carbon footprints in construction stage. Sustainable construction materials with CIC Green Product Certification will be adopted. The Visitor Centre and the Activity Centre will use split-levelled ceilings design to introduce natural lighting and reinforce natural ventilation. These buildings will provide flexible activity areas with folder walls, which can turn into a boundaryless space completely opened to the nature. An on-site sewage treatment plant will be installed in the Plant Nursery to minimize wastewater output for the Nature Academy.

Please refer to **Table 4.1** below on the development parameters and structure details, and **Appendix 1** for the master layout plans of the proposed development.

Table 4.1 Proposed Development Parameters

Development Parameters				
Site Area		About 0.9 ha		
Total GFA		About 560 m ²		
No. of Blocks		3		
Structure Details				
Structure No.	Use	Covered Area (approx.) (m ²)	Building Height (m)	No. of Storey
1	Visitor Centre	220	Not more than 4.7	1
2	Activity Centre	146	Not more than 4.5	1
3	Plant Nursery	194	Not more than 6.65	1
Total		560	/	/

The Visitor Centre

The visitor centre will be the main welcoming space located near the visitor entrance at the centre of the application site boundary abutting Tai Po Kau Forest Track. This area has been formed long ago, and the visitor centre will be redeveloped from the existing structure. Some elements from the existing dilapidated structure will be salvaged to be installed in the visitor centre. It will provide a multi-purpose activity area, storage, office and toilet. It will adopt a natural and green design with the walls openable to enjoy the nature. Flexibility in the use of the floor area will be allowed.

The Activity Centre

The activity centre will be located at an uphill location, about 3 minutes walk from the visitor centre. Activity area with ancillary storage, toilet and changing rooms will be provided. It will also be redeveloped from existing dilapidated structure on an existing platform. An existing rock will be retained to form a feature in the courtyard. It will also adopt a natural and green design with walls openable to enjoy the nature where flexibility use of floor area will be allowed.

The Plant Nursery

Another block to the northeast of the visitor centre will be the proposed plant nursery which will be equipped with storage, working area, toilets and changing room. It will serve as the working area for the native plant nursery and field study works which will not open to the general visitors. It will provide storage for equipment for handling plant specimens as well as processing and storage of seeds. Outdoor plant nursery areas and seed preparation areas will be provided and equipped with ecological-friendly facilities such as perches and nesting boxes. There will also be ancillary facilities including a sewage treatment plant and other E&M facilities. To allow materials/tools to be transported to and from the plant nursery, one private car parking space and one loading/unloading space for staff are proposed in this area.

Please refer to **Appendix 1** for the layout for the proposed uses.

4.2. Nature Education Activity

Suitable nature education activities will be conducted in both the visitor centre and activity centre where flexible design is adopted. Edge-to-edge folding wall will be used so that the activity spaces could be extended to the outdoor areas and connected with the nature.

The activity areas will be used to hold nature educational activities such as seminars, exhibitions and workshops for various organisations and different age groups. They could also function as briefing venue for guided tours.

4.3. Overnight Educational Programme

A maximum of 4 overnight programmes will be arranged each month during March to April and September to November, with maximum of 18 people including tutor and participants.

A tent camping ground will be provided within the proposed TPK Nature Academy to support overnight educational programmes. The participants can use the toilets and changing rooms in the activity centre, which is about 3 minutes walk from the camping ground. No cooking will be allowed, and all campers are required to pack their own food to the camp.

4.4. Plant Nursery and Field Study

The plant nursery will facilitate growing of different native species and allow for field study purpose to be conducted in Tai Po Kau Nature Reserve. Seminars and research work will be conducted at the plant nursery in collaboration with non-government organisations or institutions.

Vehicular access and drop-off area will be provided at the entrance of the plant nursery for transporting seeds or other materials to the nursery area.

4.5. Operation

The proposed TPK Nature Academy will open Mondays to Sundays including Public Holidays, from 9am to 6pm (except for overnight programmes and special activities such as morning bird watching).

The proposed development is anticipated to accommodate a maximum of 400 visitors daily in various sessions with about 10 site staff in full operation. The number of visitors will be controlled as advance registration before visiting will be required.

4.6. Landscaping

The proposed TPK Nature Academy will provide a tranquil environment and act as buffer to the surrounding rural setting. The applicant intends to preserve and enhance the existing natural landscape. All existing trees will be preserved and maintained, except two dead trees and one existing tree in direct conflict with the proposed access road, which is in poor form and not suitable for transplant. Lush additional planting will be provided all around the site. This includes a wide range of tree species commonly found in the Tai Po Kau Nature Reserve and those that provide food and habitat for wildlife. Large and robust shrubs are proposed within the

application site boundary along the Tai Po Kau Forest Track to offer protection against wild boars as well as visual enhancement. Existing invasive vegetation cover would be cleared and replaced by new plantings. The overall site coverage of greenery provided would be about 5,000 m² (55.2%). All greenery provision will be at primary zone. The landscaping at the TPK Nature Academy would be well-maintained by the applicant upon completion.

An existing water pond will be retained and enhanced as amenity as well as water retention for drainage purpose. Existing water depth would remain unchanged to retain the current habitat. Sandpits are introduced to pond edges to attract dragonfly and butterfly as ecological enhancement.

Simple paving materials including porous material or materials that allows runoff to pass through are proposed at the TPK Nature Academy to allow groundwater recharge. The three blocks and other facilities will be linked up by a universal access network which will be upgraded from existing footpath. Visitors will be able to walk along the paths and appreciate the natural environment in the application site and the surrounding areas.

Please refer to the Landscape Master Plan in **Appendix 2**.

4.7. Traffic

Vehicular access to the site could be made through existing Tai Po Kau Forest Track – Kau Lead Section, which is a restricted road off Tai Po Road – Tai Po Kau Section. At present, there are two vehicular accesses which are proposed to be retained at TPK Nature Academy.

The application site is proximate to different public transportation including buses and minibuses. The proposed TPK Nature Academy will be operating on a pre-book arrangement. All participants will be informed of the house rules to use public transport to arrive at the site. They could walk for about 10 minutes from the nearby stops at Tsung Tsai Yuen and Lai Chi Hang to the site. Group visitors are expected to set down from coach at the car parking area at the foothill. All visitors are expected to walk up from the entrance of the Tai Po Kau Nature Reserve.

2 nos. of private car parking spaces are provided within the site for staffs and handicapped visitors. There will also be a loading/unloading space at the plant nursery.

The Traffic Impact Assessment (TIA) concludes that the proposed TPK Nature Academy will not induce significant traffic impact to the area.

Please refer to **Appendix 3** for the TIA report.

4.8. Ecological

An ecological baseline study comprised of literature review and a 12-month ecological field surveys from January to December 2021 covering both the wet and dry seasons was carried out.

The application site is dominated by village / developed area of low or moderate ecological value. There would be very minor/ no direct impact to the loss of habitat as well as protected floral and faunal species with minimal construction works and carefully adjusted layout. With the implementation of the mitigation measures including the use of bird-friendly fritted glass window and nature-friendly lighting as well as good construction site practices, it is considered that the overall residual ecological impact will be reduced to an acceptable level. No significant impact during operation phase was anticipated. Regular review on the operation would be conducted by future operator to better control on potential ecological disturbance.

Please refer to **Appendix 4** for the EcoIA report.

4.9. Environmental

A Preliminary Environmental Review (PER) was conducted to appraise the potential environmental impact. As the application site is located at rural area with no vehicular or industrial emissions and noise sources nearby, the proposed development would not be subject to unacceptable air quality and noise impact.

With the implementation of the recommended maximum allowable sound power level for potential ventilation fan/louvre of the proposed MIC sewage treatment plant, adverse noise impact on the noise sensitive receivers in the vicinity is not anticipated. Sewage generated will be properly treated with the proposed MIC sewage treatment plant to the established standard. Adverse water quality impacts resulted from the proposed development are not anticipated. Proper odour control measures for the MIC sewage treatment plant will be designed and implemented to ensure no adverse odour impact would be imposed.

With the recommended control and mitigation measures in place, no adverse environmental impacts are anticipated from the construction and operation of the proposed development.

Please refer to the PER in **Appendix 5**.

4.10. Sewerage and Drainage

Since there are no existing public sewerage or sewage treatment facilities in the vicinity of the application site, an on-site Membrane Bioreactor (MBR) sewerage treatment plants would be provided. According to the Sewerage Impact Assessment (SIA) (**Appendix 6**), the effluent will be treated to suitable standard for discharging to the local streamcourse. The applicant will undertake operation and maintenance responsibilities of sewerage and sewage treatment facilities. As such, there will be no unacceptable sewerage impacts as a result of the proposed development.

According to the Drainage Impact Assessment (DIA) (**Appendix 7**), the proposed development will result in slightly greater runoff than the baseline scenario. With the introduction of rainwater retention and harvesting at the application site, insignificant increase in runoff will be resulted. There will be no potential flooding impacts as no nearby buildings or roads will be affected by runoff from the site. The application site will continue to accept runoff from the local upstream catchment. The applicant will undertake the construction and maintenance responsibilities of drainage facilities. As such, there will be no unacceptable drainage impacts as a result of the proposed development.

4.11. Geotechnical

A Geotechnical Planning Review Report (GPRR) was conducted pursuant to the GEO Advice Note for Planning Application under Town Planning Ordinance. The level of the application site varies from +123mPD in southwestern side and go downslope gently to the northeastern side at +99mPD. No registered features are found within the application site. Two registered cut slopes are observed in the vicinity. The GPRR concludes that the proposed development involving minor construction works is considered feasible from geotechnical point of view with no unacceptable impact on existing structures, utilities and slopes. Upgrading works for the slopes will be proposed at the detail design stage if necessary.

Please refer to the GPRR in **Appendix 8**.

4.12. Fire Safety

No cooking or campfire would be allowed in the TPK Nature Academy. The overnight visitors would be required to bring packed meal. Necessary fire service installations would be provided at the site complying with the prevailing statutory requirements, standards and guidelines. Emergency vehicles can access the plant nursery and visitor centre through the proposed vehicular access while the activity centre is located within 10m buffer from the Tai Po Kau Forest Track in case of a fire.

5. PLANNING JUSTIFICATIONS

5.1 The Proposed Development Echoes With the Sustainable Development Goals and Government's Policies to Promote Environmental Awareness

The Sustainable Development Goals (SDGs) 15 championed by the United Nations underlines that sustainable development is devoted to “protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss”.

With the international agenda on sustainable development, the Government has set out a series of green policies to advocate environmental protection as well as to strengthen environmental education to build a sustainable future for Hong Kong¹. The first city-level Biodiversity Strategy and Action Plan (BSAP) for Hong Kong was formulated by the Environment Bureau in 2016 to step up biodiversity conservation and support sustainable development. The Government also formulated initiatives to encourage non-governmental organisations to conduct educational, research, and other projects and activities in relation to environmental and conservation matters as well as the promotion of biodiversity to the general public and foster a sense of appreciation for nature.

The Pine Garden Foundation is a non-profit making organisation aims to establish the proposed TPK Nature Academy to provide a venue for carrying out learning and educational activities such as guided educational tours and overnight field study tours to promote environmental protection and nature biodiversity conservation to the local students and general public to arouse their interests and awareness in nature and environmental protection. The activities/programmes could supplement the public campaign organised by relevant government departments and bring benefits to the local community.

5.2 Strategic Location for the Proposed TPK Nature Academy

The location for the proposed Nature Academy is strategically selected. The application site is adjacent to the Tai Po Kau Nature Reserve. With a large coverage of 460 ha from the eastern slopes of Grassy Hill down to Tai Po Road and the long-established forestry plantations since the afforestation in 1926, the nature reserve consists of numerous interesting native species with more than 100 different tree species². It is one of the most popular nature reserves in Hong Kong for nature/biological investigation and on-site field study.

With high ecological value, Tai Po Kau Nature Reserve is designated as a special area

¹ Please see <https://www.bayarea.gov.hk/en/opportunities/environmental.html>

² Please see https://www.afcd.gov.hk/english/country/cou_vis/cou_vis_cou/cou_vis_tpk/cou_vis_cou_tpk.html

outside country parks with purpose of nature conservation. For better protection, there are currently limited provision of recreation and outdoor education facilities inside the special area. Therefore, the application site is considered as one of the most suitable sites for setting up the Nature Academy which in line with government's intention in conservation and to provide supplementary nature education facilities outside the special area. The proposed Nature Academy can operate with complementary function with the Tai Po Kau Nature Reserve where people can learn about ecological system and nature conservation. With its proximity to Tai Po Kau Nature Reserve, the TPK Nature Academy provides activity spaces and camping ground within the application site for conduction of various activities and overnight programmes for outdoor learning and field study.

As the application site is located in vicinity to the starting point of the Tai Po Kau Nature Trail/ Forest Walks. They would also be well-used for future guided tours and outdoor learning for the Nature Academy.

5.3 The Proposed Development is Compatible With the Surrounding Environment

The proposed TPK Nature Academy is compatible with the surrounding environment in the following aspects:

Use

The objective of the TPK Nature Academy is to raise awareness in nature and ecology, and will organise educational programmes within the application site and the adjoining Tai Po Kau Nature Reserve. The proposed TPK Nature Academy will provide nature educational facilities to support activities/programmes organised for visitors to learn about environmental and conservation, as well as to encourage appreciation on natural environment.

Design of the Structures

The proposed development is compatible with the surrounding rural context in terms of building massing and development intensity. It will only involve minor works with minimal structures which will not alter the existing rural nature of the application site. Three single-storey blocks will be redeveloped from existing dilapidated structures to accommodate educational activities/ programmes. Elements from the existing structures will be preserved to reduce the carbon footprints in construction stage. Materials with CIC Green Product Certificate will be adopted to reduce embodied carbon.

The proposed structures emphasize on the interactions with the surrounding rural context and minimize the disruption to the nature. Sustainable design concept namely the "Three Zeros" indicating "Zero Carbon", "Zero Waste Water" and "Zero Distance to Nature" will be adopted. To archive sustainability goal and provide immersive experience for visitors, the structures will adopt passive design, inviting natural

qualities such as the scenery, daylighting, and natural ventilation to the buildings. Split-levelled ceilings design will be adopted at the visitor centre and activity centre to introduce natural lighting and natural ventilation. The visitor centre and the activity centre will provide vast flexible activity area that can be enclosed or fully opened to the nature. The design of plant nursery will focus on practicality and provide sufficient outdoor and indoor working space.

Landscaping

Lush greening and tree planting will be provided to enhance the natural landscape of the application site which is compatible with the surrounding rural environment. Native plant species will be carefully selected and planted to integrate with the existing landscape profile at Tai Po Kau Nature Reserve. The applicant will undertake proper management of the site to ensure the environment is well-preserve and maintained.

5.4 The Proposed Development is In line With Planning Intention of the “Green Belt” Zone

According to the Notes of OZP, planning intention of “GB” zone is to “define the limits of urban and sub-urban development areas by natural features and to contain urban sprawl as well as to provide passive recreational outlets.”. The proposed development will retain and enhance the rural character of the site. Only 3 subtle structures will be provided. It will provide spaces and supporting facilities for educational activities/programmes including guided hiking tours and nature observation to promote passive recreation uses at Tai Po Kau.

The proposed development also complies with the main planning criteria underlined in the **Town Planning Board Guideline No. 10 (TPB PG- No. 10)** for Application for Development within Green Belt Zone under S16 of the Town Planning Ordinance:

Main planning criteria listed in TPB PG-No. 10	Fulfilled by the proposed development
a. There is a general presumption against development (other than redevelopment) in a "GB" zone.	The proposed development will only involve minor construction works for redevelopment of three existing dilapidated structures at the application site.
b. The scale and intensity of the proposed development including the plot ratio, site coverage and building height should be compatible with the character of surrounding areas.	The proposed development will comprise of three single-storey blocks with enhancement in landscaping. It will be highly compatible with the surrounding rural character.

<p>f. Passive recreational uses which are compatible with the character of surrounding areas may be given sympathetic consideration.</p>	<p>The proposed development provided spaces and supporting facilities for educational activities/programmes including guided hiking tours and nature observation to promote passive recreation uses at Tai Po Kau.</p>
<p>g. The design and layout of any proposed development should be compatible with the surrounding area. The development should not involve extensive clearance of existing natural vegetation, affect the existing natural landscape, or cause any adverse visual impact on the surrounding environment.</p>	<p>The proposed development will be comprised of minimal structures. Existing trees at the application site will largely be preserved and maintained. Lush landscaping with native species will be provided at the application site to upgrade the landscape and visual quality on the surrounding environment.</p>
<p>h. The vehicular access road and parking provision proposed should be appropriate to the scale of the development and comply with relevant standards. Access and parking should not adversely affect existing trees or other natural landscape features. Tree preservation and landscaping proposals should be provided.</p>	<p>The proposed development will not result in adverse impact in terms of landscape, traffic, sewerage, drainage, ecology, environment and geology as demonstrated in relevant technical assessments. Please refer to Appendices 2 – 8. With proper management and control on visitor numbers, it will not cause significant impact on the existing and planned infrastructure/facilities.</p>
<p>i. The proposed development should not overstrain the capacity of existing and planned infrastructure such as sewerage, roads and water supply. It should not adversely affect drainage or aggravate flooding in the area.</p>	
<p>j. The proposed development must comply with the development controls and restrictions of areas designated as water gathering grounds.</p>	
<p>k. The proposed development should not overstrain the overall provision of G/IC facilities in the general area.</p>	
<p>l. The proposed development should not be susceptible to adverse environmental effects from</p>	

<p>pollution sources nearby such as traffic noise, unless adequate mitigating measures are provided, and it should not itself be the source of pollution.</p>	
<p>m. Any proposed development on a slope or hillside should not adversely affect slope stability.</p>	

5.5 The Proposed Development Enhances the Landscape and Visual Quality of the Application Site

The application site is currently an abandoned farmland comprising several single-storey structures and overgrown exotic vegetations. The existing structures are dilapidated and the site is very untidy. According to the Master Landscape Plan (**Appendix 2**), the site will be tidied up. Existing trees at the site will largely be preserved and maintained. Lush additional landscaping will be provided at the application site with species carefully selected to include a wide range of native tree species commonly found in the Tai Po Kau Nature Reserve, extending the natural landscaping value of the nature reserve to the application site. An existing water pond will be retained with the same water depth to preserve the existing habitat. Sandpits are introduced to pond edges to attract dragonfly and butterfly. Conversion of the area for the proposed development will improve the natural landscaping quality and visual amenity at the application site by fading out the existing worn-out abandoned structures and overgrown exotic plant.

5.6 The Proposed Development Will Have No Adverse Traffic Impact

The 2 nos. of private car parking spaces provided within the site are only for staffs and handicapped visitors. All other visitors are expected to use public transport including bus or minibus to arrive at the site and walk from the nearby stops to the site. Group visitors are expected to set down from coach at the car parking area at the foothill. All visitors are expected to walk up to the TPK Nature Academy from the entrance of the Tai Po Kau Nature Reserve. According to the TIA result (**Appendix 3**), the proposed TPK Nature Academy will not induce significant traffic impact to the area.

5.7 The Proposed Development Will Have No Adverse Ecological Impact

The application site is located outside of the “Conservation Area” and Tai Po Kau Nature Reserve. According to the EcoIA (**Appendix 4**), the application site was dominated by village/developed area of low or moderate ecological value. The proposed development will be located within the boundary of the application site only where carefully designed layout is adopted. It will not encroach into any recognised

sites of conservation importance. Construction work is considered minimal with redevelopment of three existing structures. Therefore, there would be very minor/no direct impact to the loss of habitat as well as protected floral and faunal species. With the implementation of the mitigation measures including ecologically responsible building design such as bird-friendly window and lighting, it is considered that the overall residual ecological impact will be reduced to an acceptable level.

In addition, considering the proposed use as a nature academy, no significant impact during operation phase was anticipated. Regular review on the operation would be conducted by future operator to better control on potential ecological disturbance.

5.8 The Proposed Development Will Have No Adverse Environmental Impact

The potential environmental impacts arisen from the proposed development is assessed in the PER report with recommended mitigation measures (**Appendix 5**). It is concluded that the proposed development would not be subject to unacceptable air quality and noise impact. Also, adverse noise impact on the noise sensitive receivers in the vicinity is not anticipated. Sewage generated will be properly treated and adverse water quality impacts resulted from the proposed development are thus not anticipated. Proper odour control measures for the sewage treatment plant will be designed and implemented to ensure no adverse odour impact would be imposed.

With the recommended control and mitigation measures in place, no adverse environmental impacts are anticipated from the construction and operation of the proposed development.

5.9 The Proposed Development Will Have No Adverse Sewerage and Drainage Impact

Drainage and sewerage impacts are assessed in the SIA Report (**Appendix 6**) and DIA Report (**Appendix 7**). An on-site sewage treatment plant and rainwater harvesting will be introduced at the application site. The applicant will undertake construction/operation and maintenance responsibilities of sewage treatment and drainage facilities. It is concluded that no unacceptable drainage and sewerage impacts will be resulted from the proposed development.

5.10 The Proposed Development Will Have No Adverse Geotechnical Impact

A GPRR (**Appendix 8**) is conducted to assess the impact on existing structures, utilities and slopes affecting by the proposed development. The proposed development involving minor construction works would not cause any adverse geotechnical impact to the surrounding areas. Therefore, the proposed development is considered feasible from geotechnical point of view. Site-specific Ground

Investigation works and Natural Terrain Hazard Study will be carried out to ascertain the ground conditions and validate the geotechnical assumptions at detail design stage. Upgrading works for the slopes, retaining walls and foundation strengthening works will be proposed if found necessary.

5.11 The Proposed Development Will Have No Adverse Fire Safety Concern

With proper management through visitor manual and with prohibition in cooking and campfire or any other ignition on fire in the TPK Nature Academy, no adverse fire safety concern is anticipated. Necessary fire service installations and EVA arrangement would be equipped at the site complying with the prevailing statutory requirements, standards and guidelines.

5.12 The Proposed Development Will Bring Planning Gain to the Community

The proposed TPK Nature Academy intends to provide supporting facilities for organising nature educational activities and programmes for the community. It promotes nature and environmental protection as well as ecological conservation, shaping a more sustainable future. In order to enhance the quality in future nature educational and field study/research programmes for the community, TPK Nature Reserve will collaborate with OWLHK, which is a charitable organisation with rich experiences in conducting ecological-related research and organising environmental education programmes in Hong Kong. Future collaboration opportunities with AFCD and other institutions in organising activities such as guided tours will also be explored for maximise potential of Tai Po Kau Nature Reserve for nature education purpose.

The proposal will also upgrade visual and landscape quality of the area. It will involve redevelopment on the existing dilapidated structures with adoption of sustainable and green design. Overgrown vegetations and weeds will be cleaned and careful landscape design will be incorporated. The application site will undergo positive transformation and the site quality will be greatly enhanced.

5.13 The Approval of the Application Will Not Set an Undesirable Precedent

The proposed TPK Nature Academy is in line with the planning intention of the “GB” zone where the current application will involve minimal construction works with enriched landscaping and facilities. The current proposal is based on careful consideration for the existing environment and uses surrounding the application site. The proposed development will enhance the landscape and visual quality of the existing environment and transform the area for meaningful uses including educational and research activities for promotion of environmental protection/ nature conservation. Also, proactive mitigation measures to minimize nuisance and preservation of natural landscape will be implemented. It will be compatible with

surrounding land uses and will not cause any adverse traffic, ecological, environmental, sewerage, drainage or geotechnical impacts. As a result, the proposed uses will not set an undesirable precedent.

6. CONCLUSION

The proposed TPK Nature Academy will promote nature conservation and environmental awareness to the school children and general public. It is compatible with the surrounding environment and echoes with the international and local policy agenda in promoting environmental awareness, tally with the planning intention and has no adverse traffic, ecological, environmental, sewerage, drainage or geotechnical impacts. The proposed development will further enhance the existing natural landscape and rural character of the area. Therefore, members of the TPB are respectfully requested to give favourable consideration to the application.