

Agreement No. CE 32/2011 (CE) Planning and Engineering Study on the Remaining Development in Tung Chung – Feasibility Study – Broad Brush Tree Survey Broad Brush Tree Survey Report

Job Ref.: 14/892/332 ARUP-TC Date: July 2015





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Broad Brush Tree Survey Report

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1. INTRODUCTION

1.1 Background

1.1.1 AEC Limited has been appointed by Ove Arup & Partners Hong Kong Ltd. (hereinafter referred to as "the Client") to undertake a broad brush tree survey to summarize the locations and current conditions of the existing trees within the survey boundary for 'Agreement No. CE 32/2011 (CE) Planning and Engineering Study on the Remaining Development in Tung Chung – Feasibility Study' (hereinafter referred to as "the Project"). The Project location and survey boundary for the broad bush tree survey are displayed in **Appendix A**.

1.2 Objectives

1.2.1 The objectives of this Broad Brush Tree Survey Report are to record the baseline conditions of the existing tree groups within the tree survey boundary in Tung Chung East (TCE) and Tung Chung West (TCW).

2. DESCRIPTION OF SURVEY AREA

2.1.1 The Broad Brush Tree Survey covers approximately 66.8 ha of area including Tung Chung West (TCW) and a small section of Tung Chung East (TCE).

Tree Survey Area in TCE

2.1.2 The tree survey area in TCE covers a small section of roadside engineering slopes adjoining the North Lantau Highway (NLH) and the sea wall, and the coastal reclaimed land to the North and Northeast of Ying Hei Road (YHR) next to the existing construction sites.

Tree Survey Area in TCW

- 2.1.3 The tree survey area in TCW covers two small sections of coastal area in Tung Chung Bay (TCB), village areas with natural hillside slopes in Wong Nai Uk (WNU), engineering and natural slopes in Tung Chung Fresh Water Service Reservoir (FWSR) and a matrix of an extensive lowland area and hillside shrubby and wooded areas of Tung Chung Valley (TCV).
- 2.1.4 The coastal areas of TCB, including natural slope with retaining structures located at the end of Tung Chung Road North near the Tung Chung Battery and the village areas adjoining Yat Tung Estate (i.e. to the west of the Estate), are included in the tree survey area.
- 2.1.5 Wong Nai Uk (WNU) is located to the Northeast of Yat Tung Estate. The survey area in Wong Nai Uk comprises of village areas, vegetated natural slope, urbanized areas, (such as Tung Chung Community Services Complex and the associated road infrastructures in the urban area), and fenced off vacant land.
- 2.1.6 Tung Chung Fresh Water Service Reservoir (FWSR) is located to the West of Chek Lap Kok New Village. The survey area in FWSR comprises of roadside engineering slopes and natural slopes that are vegetated either by plantation or secondary woodland.
- 2.1.7 The lowland area of TCV is located to the Southwest of Yat Tung Estate covering a number of local villages. The TCV covers the villages including Shek Lau Po, Lam Che, Nim Yuen, Mok Ka, Chap Mun Kap, Fong Yuen, San Keng and village areas on both sides of the estuary of Tung Chung River (i.e. to the North and Northeast of Ngau Au). A section of Tung Chung River and its tributaries (including both channelised streams and more semi-natural streams) passes through the lowland area of TCV. Orchards of various sizes are dominant in these village environs and these orchards are usually planted with high density of common fruit tree species. To the west of the TCV, there are extensive natural hillside secondary woodland and shrubland areas forming the backdrop for

the villages in Nim Yuen and Mok Ka. Pieces of *Fung shui* woods are located behind the villages of Nim Yuen, Mok Ka and San Keng.

3. SURVEY METHODOLOGY

- 1.1 The Broad Brush Tree Survey is carried out for all existing trees with trunk base situated within the survey areas in the project. In accordance with Development Bureau Technical Circular (Works) No. 10/2013 Tree Preservation, all existing trees with a trunk diameter of 95mm or more at a height of 1.3m above ground level are included in the survey. The trees located in the contiguous areas of vegetation of similar character, e.g. natural slope, plantation slope, orchard, costal area, secondary woodland and *fung shui* wood, are grouped together for the survey. The trees are also grouped together for the survey based on the aboveground features, e.g. fencing, boundary wall and footpath/ road. Each tree group is assigned with a unique tree group reference number (in a systematic system).
- 3.1.2 The Broad Brush Tree Survey is in aid of the aerial photos (Digital Orthophoto DOP5000 series of Lands Department (April 2014 Release)) and the Ecology Impact Assessment (EIA) of the Project, and based on the topographical survey conducted prior to the tree survey, and site visits to accessible areas of the Project. For the inaccessible areas, e.g. private land and fenced off orchards or farmland, the tree survey information is described based on review of aerial photos, the EIA of the Project, and the topographical survey conducted by a separate land surveyor. No site visits were conducted in these village areas and in its immediate vicinity as the tree surveyors were precluded from access to these areas by local villagers/ parties. For the inaccessible areas without topographical survey data, the tree survey information is described based on the review of aerial photos and the EIA of the Project. The indicative locations of the tree groups and inaccessible areas are marked on the Tree Survey Plan in Appendix B. The indicative locations of the identified rare/ protected specimens are also marked and displayed in Appendix B. The site photos of the tree survey are shown in Appendix A. Results of the surveyed tree group information and characteristics are presented in the Tree Group Survey Schedule in Appendix C.
- 3.1.3 In preparing this Broad Brush Tree Survey Report, references for tree survey methodology and evaluation of each surveyed tree were made based on the following technical guidelines and publications:
 - Development Bureau Technical Circular (Works) No. 10/2013 Tree Preservation
 - Environment, Transport and Works Bureau Technical Circular (Works) No. 2/2004 Maintenance of Vegetation and Hard Landscape Features
 - Environment, Transport and Works Bureau Technical Circular (Works) No. 29/2004 Registration of Old and Valuable Trees, and Guidelines for their Preservation;
 - Agriculture, Fisheries and Conservation Department Check List of Hong Kong Plants 2012;
 - Agricultural, Fisheries and Conservation Department, Conservation Branch, Nature Conservation Practice
 Note No. 02/ June 2006 Measurement of Diameter at Breast Height (DBH);
 - Hu, Q., et al. 2003. Rare and Precious Plants of Hong Kong, AFCD, Hong Kong;
 - LCSD's Register of Old and Valuable Trees;
 - IUCN Red List of Threatened Species Version 2015.1.

4. TREE GROUP SURVEY CRITERIA

4.1.1 Each identified tree group was assigned a tree group reference number and surveyed individually in accordance with the tree group survey assessment criteria listed in **Table 1**.

Table 1 Tree Group Survey Criteria

Tree Survey Assessment Criteria		Explanation	
Tree Group Reference No.		The unique tree group reference number (in a systematic system).	
Estimated No. of Trees		Estimated quantity of trees within the tree group	
Density		The estimated no. of trees per meter square	
Main Tree Species	Scientific Name	Name Scientific name of the tree species.	
	Chinese Common Name	Chinese common name of the tree species.	
	Species Origin	The origin (native/exotic) of the tree species.	
	Range of height (m)	The range of tree height of the surveyed tree species within the tree group from the ground level to the top branch.	
Size of tree	Range of trunk diameter (mm)	The range of tree diameter of the surveyed tree species within the tree group in accordance with AFCD Nature Conservation Branch Practice Note. No. 02.	
	Range of crown spread (m)	The range of spread (diameter of canopy) of the surveyed tree species within the tree group.	
General Health Condition		Relative grading of the health condition (Good/ Fair/ Poor) of the surveyed trees within the tree group is evaluated. Good: Trees in good health condition without signs of visible defects and with good structural integrity. Fair: Trees of reasonable form and with few or no visible defects of health problems. Poor: Trees in poor health conditions (e.g. suffered from severe stress, disease, insect/pest infection, thin foliage density cover or dieback of canopy).	
Protected / Rare Tree Species		Protected tree species (under Forests and Countryside Ordinance (Cap. 96) and/or Protection and Endangered Species of Animals and Plants Ordinance (Cap. 586), or species listed in "Rare and Precious Plants of Hong Kong" (AFCD, 2003), or species included in the latest version of IUCN Red List of Threatened Species are marked in Appendix C.	

5. FINDINGS OF THE TREE SURVEY

5.1.1 A total of 9 and 64 tree groups were identified in the Survey Areas TCE and TCW respectively.

TCE - North Lantau Highway (NLH)

5.1.2 The trees in the survey area of NLH, i.e. Tree Group Reference No. NLH-1 to NLH-7, grow on the roadside engineering slopes adjoining the North Lantau Highway, forming a row of plantation trees for screening and ornamental purposes. Some of these engineering slopes are extensively covered by ornamental shrubs, e.g. Nerium oleander. The existing trees on the slopes are dominated by planted Bombax ceiba and Hibiscus tiliaceus. Some self-seeded exotic tree species Leucaena leucocephala were found to be scattered on the slopes.

TCE - Ying Hei Road (YHR)

5.1.3 The coastal area to the North and Northeast of YHR, i.e. Tree Group Reference No. YHR-1 to YHR-2, are the reclaimed areas. Some construction sites are operating on the reclaimed land near the survey boundary. The sea wall and coastal reclaimed land in this area are sparely vegetated by trees and herbaceous plants. The area is dominated by self-seeded, exotic and weedy tree species *Leucaena leucocephala*, with comparatively lower number of planted *Acacia auriculiformis* and *Casuarina equisetifolia*

TCW - Tung Chung Bay (TCB)

5.1.4 The slope near the Tung Chung Battery, i.e. Tree Group Reference No. TCB-1, is immediately next to the Tung Chung Road North. The retaining structure for the slope is mainly found at the southern part of the slope. The

- northern part of it is a natural slope located along the coast. This slope largely comprises of natural woodland with tree species that can tolerate the salty environment. The wooded slope is dominated by common native species *Celtis sinensis* and *Cerbera manghas*. Other tree species found on the wooded slope include *Mallotus paniculatus*, *Macaranga tanarius* var. *tomentosa* and *Melia azedarach*.
- 5.1.5 Another part of TCB's survey areas, i.e. Tree Group Reference No. TCB-2 to TCB-12, is located to the west of Yat Tung Estate. The village houses are mainly concentrated at the northern part. This area is dominated by orchards of densely planted fruit trees *Litchi chinensis*. Along the coast, it is dominated by native species *Celtis sinensis* and *Thespesia populnea*. At the southernmost part of this area, there are an engineering slope and a planter. The engineering slope is dominated by exotic species *Ficus altissima* and *Eucalyptus citriodora*, while the planter is dominated by planted native trees *Cinnamomum burmannii* and exotic palms *Phoenix roebelenii* for screening and ornamental purposes.

TCW - Wong Nai Uk (WNU)

5.1.6 Wong Nai Uk (WNU), i.e. Tree Group Reference No. WNU-1 to WNU-9, is located to the Northeast of Yat Tung Estate. The Tung Chung Road North is running through the middle of this area. At the eastern part, there are two small buildings and natural slope behind the buildings. This slope, i.e. WNU-1, is a matrix of plantation area and secondary woodland, with tree composition largely consists of planted common exotic trees *Acacia confusa* and self-seeded native trees *Aporusa dioica* and *Mallotus paniculatus*. The western part comprises of natural slope, orchards and a vacant land. The natural slope, i.e. WNU-2, at the northern part is a secondary woodland dominated by *Mallotus paniculatus* and *Microcos nervosa*. The engineering slope in WNU-3 is dominated by common native species *Celtis sinensis*. The orchards, i.e. WNU-8 and WNU-9, are dominated by fruit trees *Dimocarpus longan* and *Litchi chinensis* that are both planted in high density. The nearby orchard, i.e. WNU-5, is sparsely planted with fruit trees, mainly *Artocarpus heterophyllus*. Limited number of trees is located at the margin of the vacant land, i.e. WNU-4, as most area of it is concrete paved. Major tree species that could be found in this vacant land is *Macaranga tanarius* var. *tomentosa*. A small planter with two *Livistona chinensis*, i.e. WNU-6, is located in a roundabout of the Chung Yan Road.

TCW - Tung Chung Fresh Water Service Reservoir (FWSR)

- 5.1.7 The survey area in FWSR consists of a series of engineering slopes adjacent to the main access road leading to the FWSR and immediately next to the FWSR, and natural slopes as a backdrop behind these engineering slopes. The plantations on the engineering slopes, i.e. FWSR-2, FWSR-4 and FWSR-6, mainly consist of the pine trees *Pinus elliottii* and *Pinus massoniana* and some other common exotic plantation species, e.g. *Acacia confusa* and *Casuarina equisetifolia*.
- 5.1.8 The natural slopes, i.e. FWSR-1, FWSR-5 and FWSR-7, largely consist of wooded areas vegetated with native species. The tree groups, FWSR-1 and FWSR-7 are dominated by *Itea chinensis* and other tree species, including *Aporusa sinensis* and *Litsea cubeba*, were identified in this tree group. FWSR-5 is dominated by plantation trees *Pinus massoniana*, with a mixture of exotic tree *Lophostemon confertus* and native tree *Mallotus paniculatus*.

TCW - Tung Chung Valley (TCV)

- 5.1.9 The extensive lowland areas of TCV are mainly covering a number of local villages including Shek Lau Po, Lam Che, Nim Yuen, Mok Ka, Chap Mun Kap, Fong Yuen, San Keng and village areas on both sides of the estuary of Tung Chung River (i.e. to the North and Northeast of Ngau Au).
- 5.1.10 A total of 36 tree groups are identified in TCV. In the survey areas of TCV, there are extensive natural hillside secondary woodland and shrubland areas, i.e. TCV-13, TCV-14, TCV-17 and TCV-20, forming the backdrop for the villages. Another piece of secondary woods, i.e. TCV-22, is located to the west of San Keng. The wooded slope is dominated by common native species *Mallotus paniculatus, Schefflera heptaphylla* and *Sterculia lanceolata*. Other tree species, *Aporusa dioica*, *Celtis sinensis* and *Syzygium jambos*, are also found on the wooded slope.

- 5.1.11 Pieces of *fung shui* woods, TCV-16, TCV-18 and TCV-19 are located behind the villages of Nim Yuen and Mok Ka. A piece of *fung shui* woods, TCV-23 is located to the east of San Keng. These *fung shui* woods are dominated by the common native species *Aporusa dioica*, *Bischofia javanica*, *Cleistocalyx operculata* and *Syzygium jambos*, and with a mixture of other common native species, e.g. *Celtis sinensis* and *Mallotus paniculatus*.
- 5.1.12 A monastery under development covers the small sections of southern TCV-14 and northern TCV-17, and large section of TCV-16.
- 5.1.13 Orchards are extensively covering the village areas in TCV. Of the 36 tree groups in TCV, a total of 13 tree groups, TCV-6, TCV-8 to TCV-12, TCV-21, TCV-24, TCV-27, TCV-29, TCV-30, TCV-31 and TCV-33, are the orchards dominated by commonly planted fruit trees, *Litchi chinensis*. Other fruit trees found in these tree groups include *Artocarpus heterophyllus* and *Dimocarpus longan*. These orchards are densely planted with fruit trees, with no or limited secondary growth of herbaceous and native tree species in the understory of these planted fruit trees.
- 5.1.14 Plantation is mainly found on roadside engineering slopes and in planters. The tree groups, TCV-1 and TCV-5, on the engineering slopes are dominated by *Acacia auriculiformis*, *Bauhinia* sp. and *Eucalyptus* sp.. Other common exotic species, *Acacia confusa* and *Albizia lebbeck*, are also included in these tree groups. The tree group, TCV-34, located on the roadside slope is dominated by *Acacia confusa*. The tree groups, TCV-2 to TCV-4, in the roadside planters or along the planting strips next to Yu Tung Road and Chung Mun Road are dominated by trees *Acacia auriculiformis* and *Casuarina equisetifolia*, and palm *Livistona chinensis*. Other common native tree species, *Cinnamomum burmannii* and *Ficus microcarpa*, are included in these tree groups.
- 5.1.15 The vegetated slopes, TCV-35 and TCV-36, along Tung Chung Road comprise common native species, e.g. *Macaranga tanarius* var. *tomentosa* and *Mallotus paniculatus*, and some common exotic species, *Acacia auriculiformis* and *Acacia confusa*. These two tree groups are dominated by the common exotic tree *Acacia mangium* and TCV-36 is also dominated by exotic tree *Eucalyptus robusta* commonly planted in local plantations.
- 5.1.16 A small section of a disturbed land, TCV-7, consists of a mixture of coastal vegetation and a wooded area with weedy vegetation. It is dominated by weedy, exotic tree *Leucaena leucocephala* and native *Cerbera manghas* commonly found in coastal vegetation. Other planted fruit trees found in this tree group include *Dimocarpus longan*, *Litchi chinensis* and *Psidium quajava*.
- 5.1.17 Some tree groups, TCV-15 and TCV-25, are located on fenced agricultural lands close to the village environs. The planting density of these tree groups is much lower than other orchards, however, sign of active human management was still noted. Common fruits trees, *Dimocarpus longan* and *Litchi chinensis*, are sparsely planted surrounding or within these tree groups.
- 5.1.18 The fenced-off vegetated land, TCV-32, is located next to the channelized section of Tung Chung River and opposite to Caritas Charles Vath College. This area is dominated by the common exotic species *Acacia confusa*. Other common native species, *Celtis sinensis* and *Macaranga tanarius* var. *tomentosa*, are also included in this tree group.
- 5.1.19 The tree group TCV-26 exists as riparian vegetation located along the tributary of Tung Chung River near Fong Yuen. The trees are concentrated along the river and dominated by planted trees *Acacia mangium*. Other trees such as *Acacia auriculiformis*, *Acacia mangium*, *Celtis sinensis* and *Macaranga tanarius* var. *tomentosa* were sometimes found within this tree group.

Rare/ Protected Species

5.1.20 The protected species *Aquilaria sinensis* was recorded in the survey areas, including WNU, FWSR and TCV. A total of 43 *A. sinensis* were recorded in the survey areas. Nine *A. sinensis* were recorded in FWSR. Of these nine *A. sinensis*, five are located in the Tree Group FWSR-1 and four are located within the Tree Group FWSR-7. Four

- A. sinensis were found on the natural slope, Tree Group WNU-1. The remaining 30 A. sinensis were recorded in TCV. They are mainly located in the hillside behind the villages and natural slopes.
- 5.1.21 *Gmelina chinensis* is not protected in Hong Kong. However, this species is considered Vulnerable (VU) in China and recorded in Illustration of Rare & Endangered Plant in Guangdong Province. A total of 20 and 4 *G. chinensis* were recorded in FWSR and TCV respectively. Of the 20 *G. chinensis* in FWSR, 13 are located in natural slope, i.e. Tree Group FWSR-1, 3 were recorded in Tree Group FWSR-5 and 4 were found in the Tree Group FWSR-7. Four *G. chinensis* were recorded in the natural slope, Tree Group TCV-22, located to the west of San Keng.
- 5.1.22 The indicative locations of the identified rare/ protected specimens are marked and displayed in **Appendix B**.

Potentially Registrable OVTs

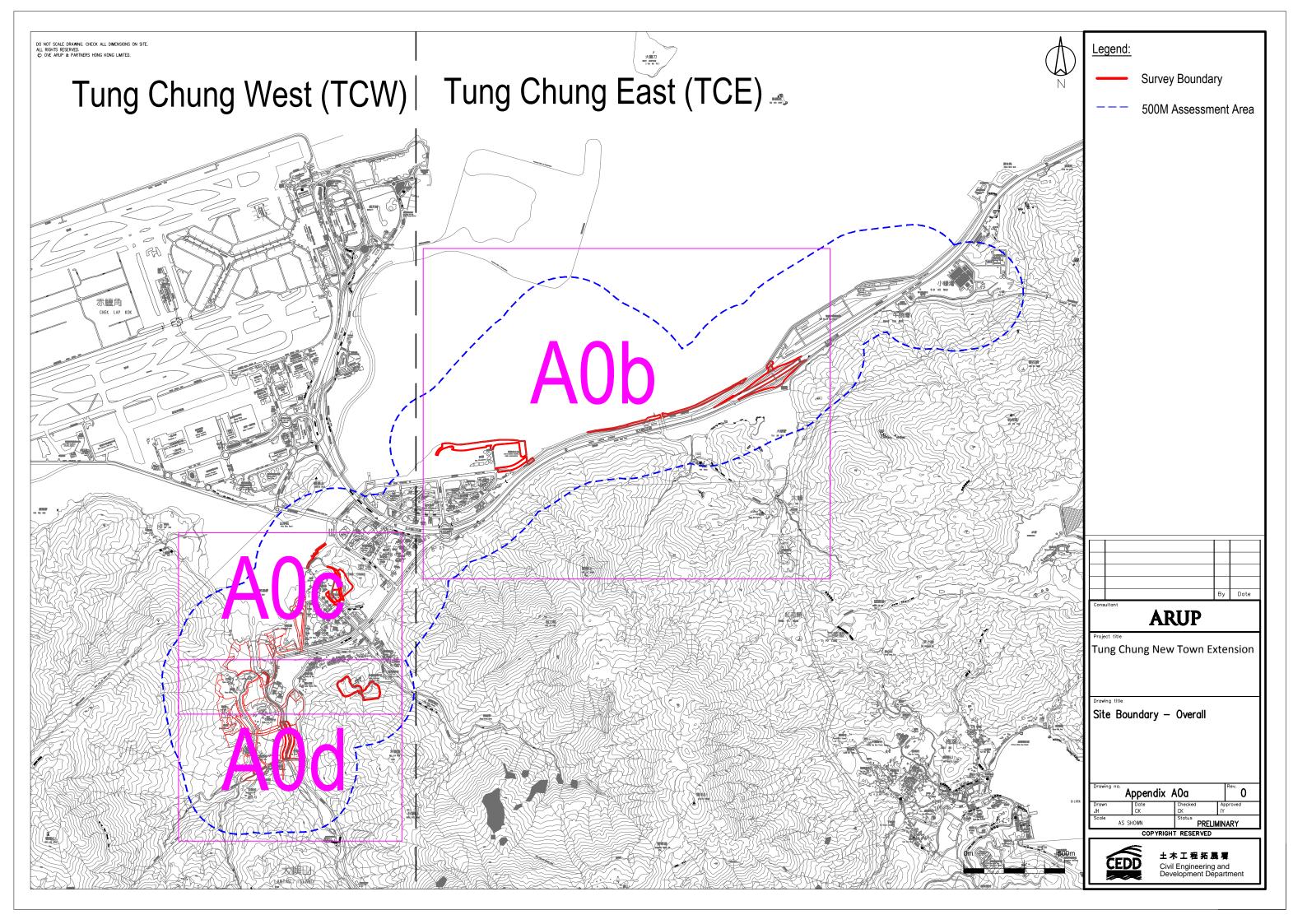
5.1.23 No registered Old and Valuable Trees (OVT) were recorded during the tree survey. However, eight trees located on TCV-8, TCV-10, TCV-20, TCV-22, TCV-23, TCV-24 and TCV-29 fulfill one of the criteria (i.e. tree with trunk diameter ≥ 1 m measured at 1.3m above ground level) as specified in *ETWB Technical Circular (Works)* No.29/2004 − Registration of Old and Valuable Trees, and Guidelines for their Preservation. The indicative locations of these seven trees are marked in **Appendix B**.

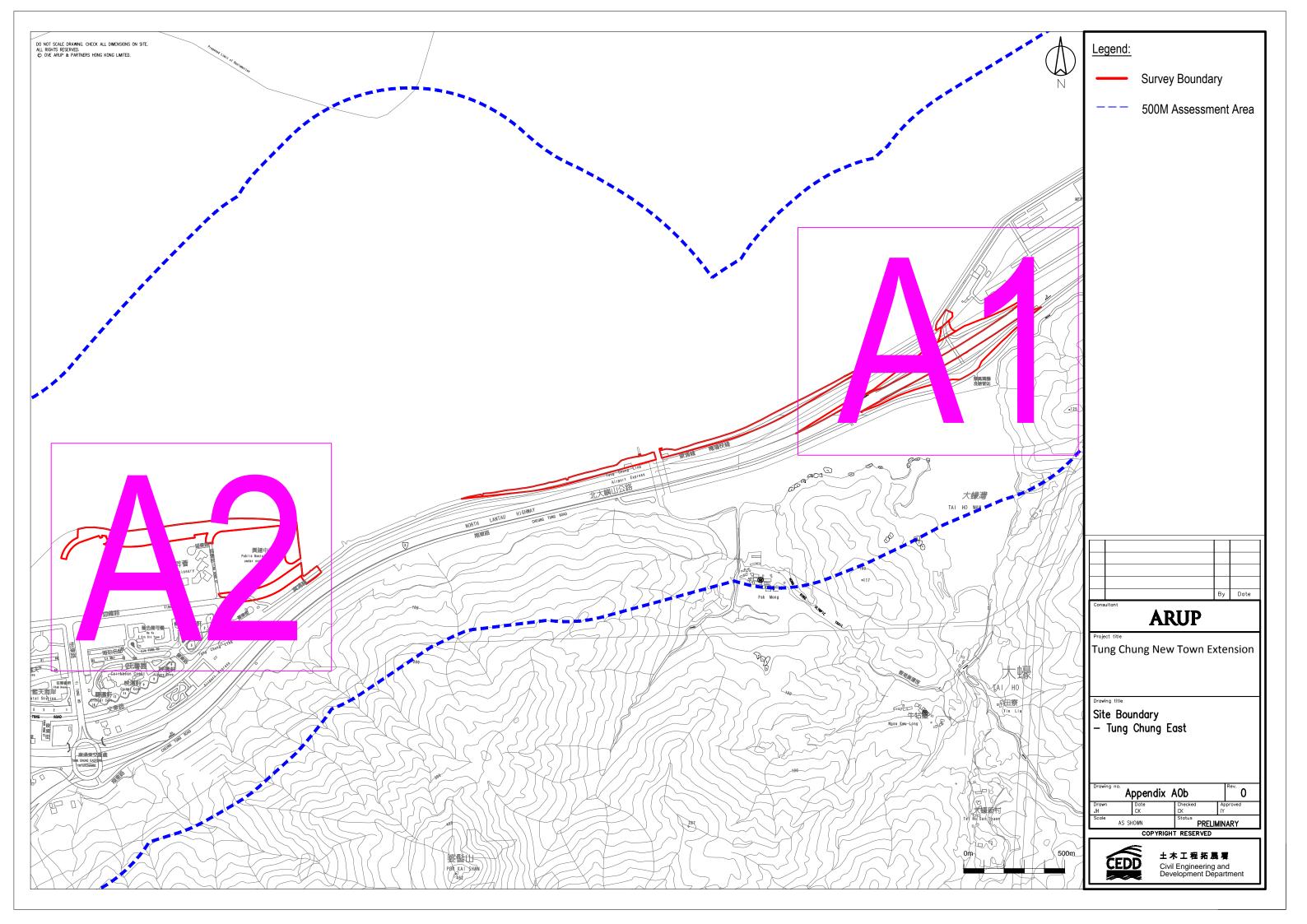
6. CONCLUSION

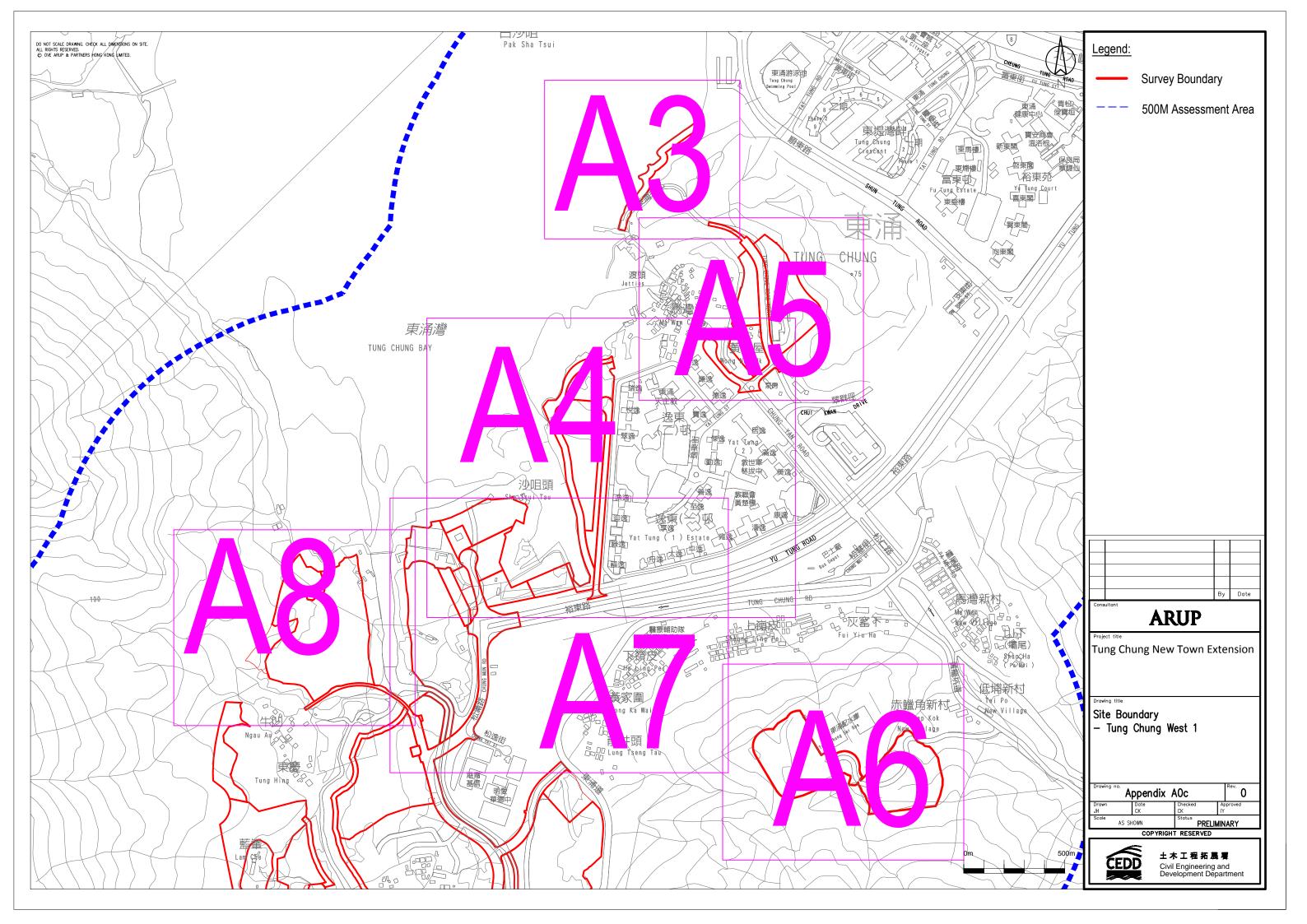
- 6.1.1 A total of 73 tree groups were identified in the Survey Areas of the Project. A total of 43 rare/ protected *Aquilaria sinensis* were recorded in the Survey Areas. *Gmelina chinensis* is not protected in Hong Kong. However, this species is considered Vulnerable (VU) in China and recorded in Illustration of Rare & Endangered Plant in Guangdong Province. A total of 24 *G. chinensis* were recorded in Survey Areas.
- 6.1.2 No registered Old and Valuable Trees (OVT) were recorded during the tree survey. However, 8 tree specimens fulfill one of the criteria (i.e. tree of large size (e.g. tree with trunk diameter ≥ 1 m measured at 1.3m above ground level) as specified in ETWB Technical Circular (Works) No.29/2004 − Registration of Old and Valuable Trees, and Guidelines for their Preservation.
- 6.1.3 The main tree species of each surveyed tree groups are detailed in **Appendix C**, the Tree Survey Schedule. The locations of all identified tree groups are shown in **Appendix B**. The indicative locations of the identified rare/protected specimens are also marked and displayed in **Appendix B**. Photographs of the site environs are displayed in **Appendix A**.

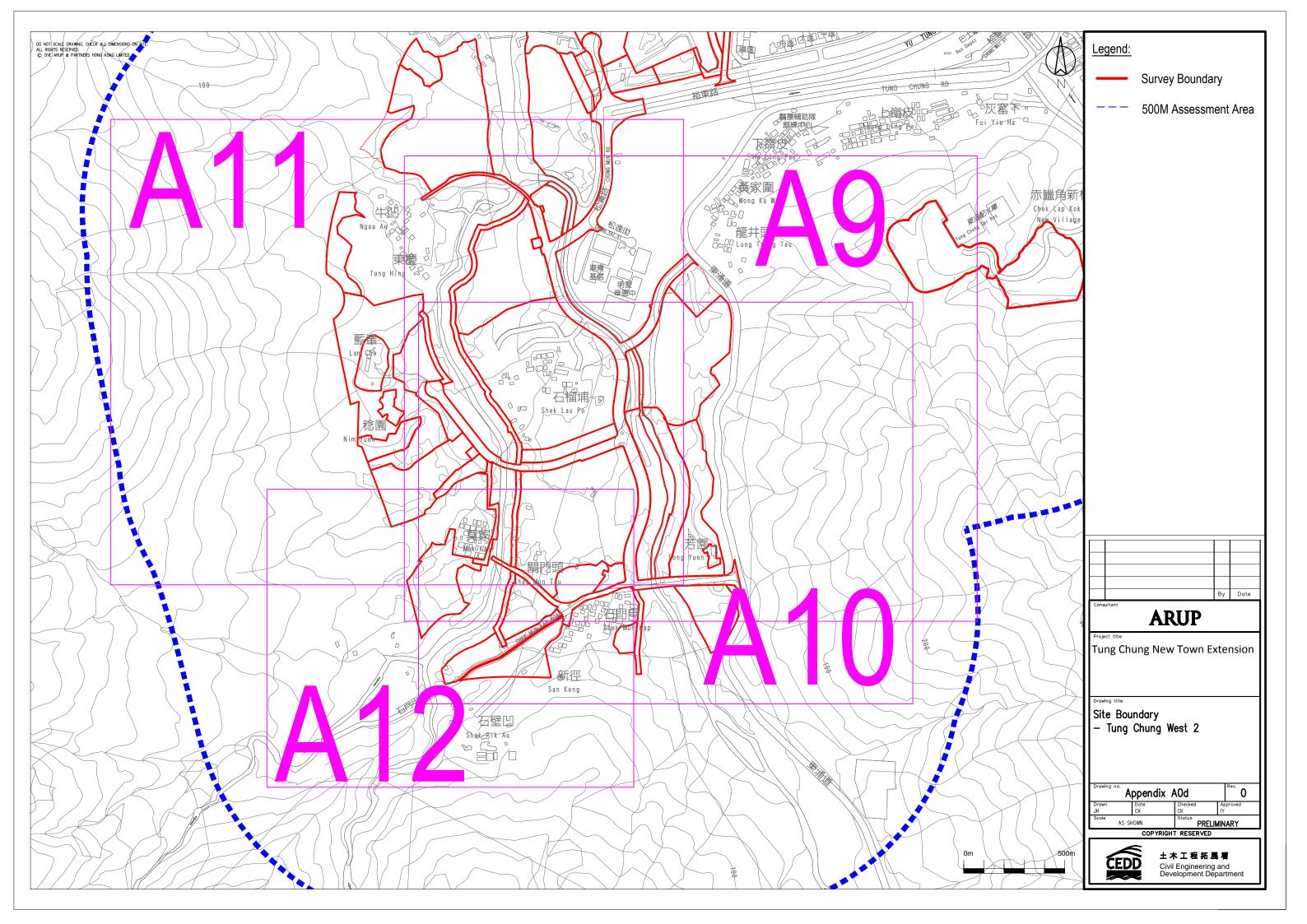
Appendix A

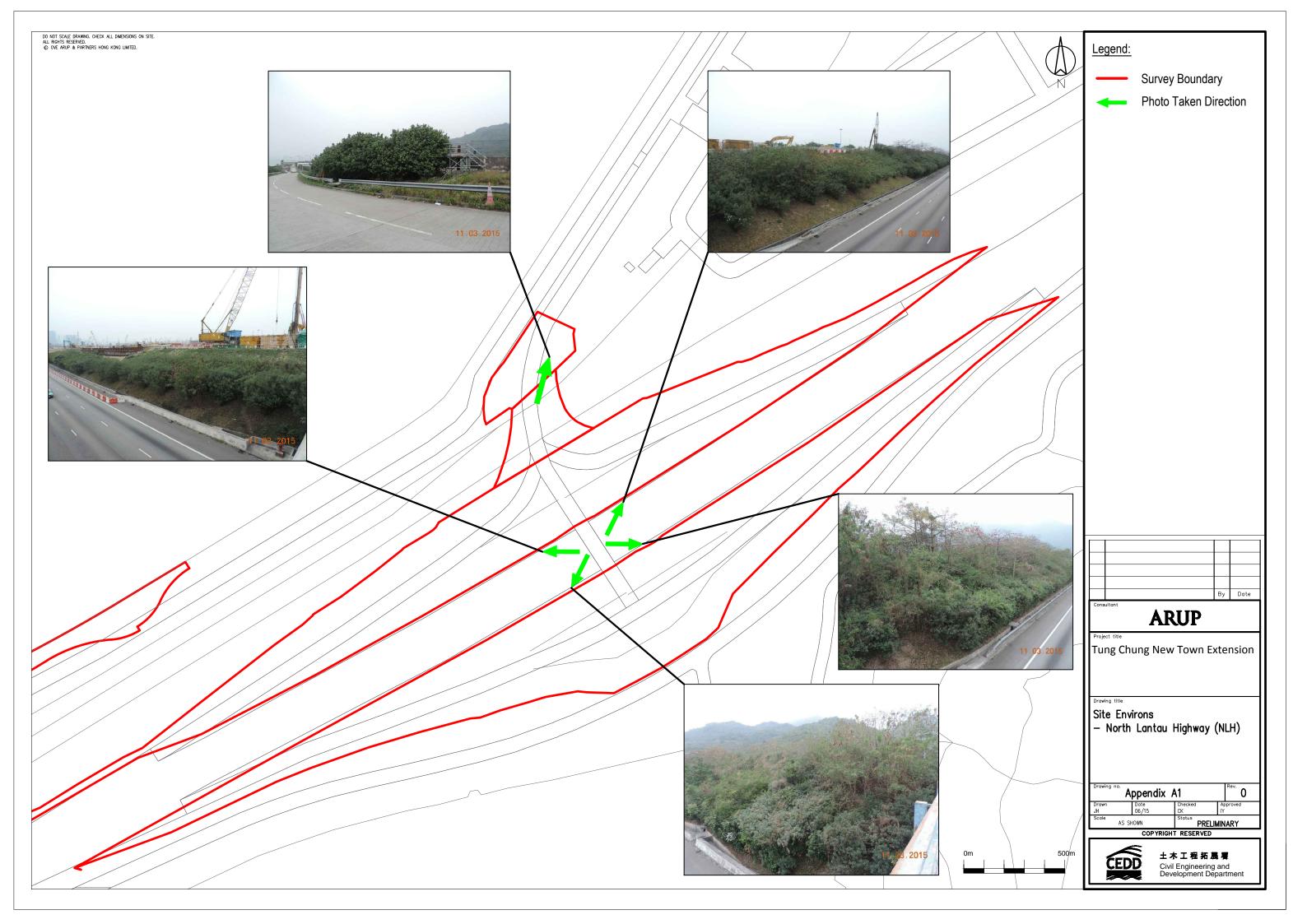
Tree Survey Areas and Site Environs

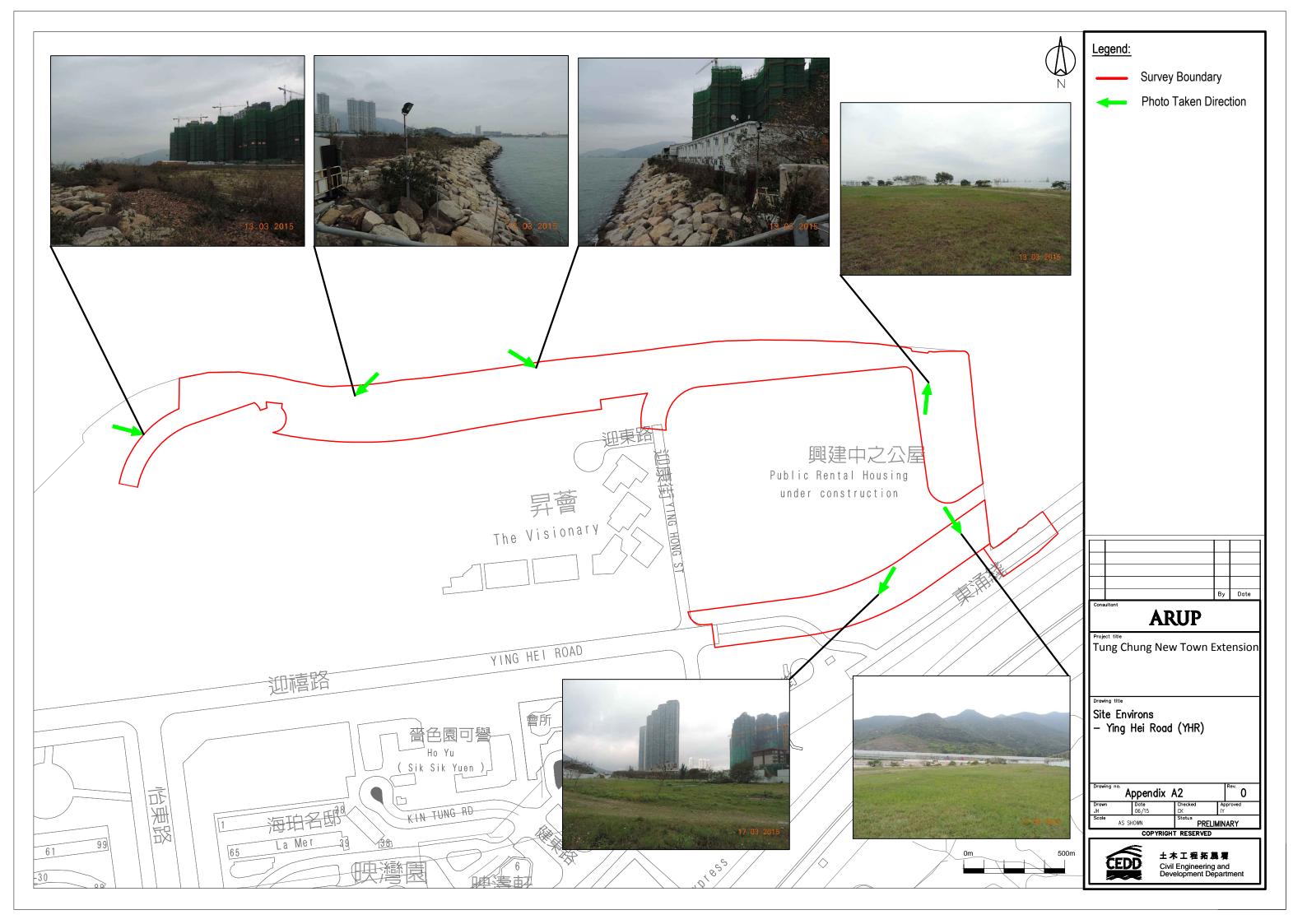


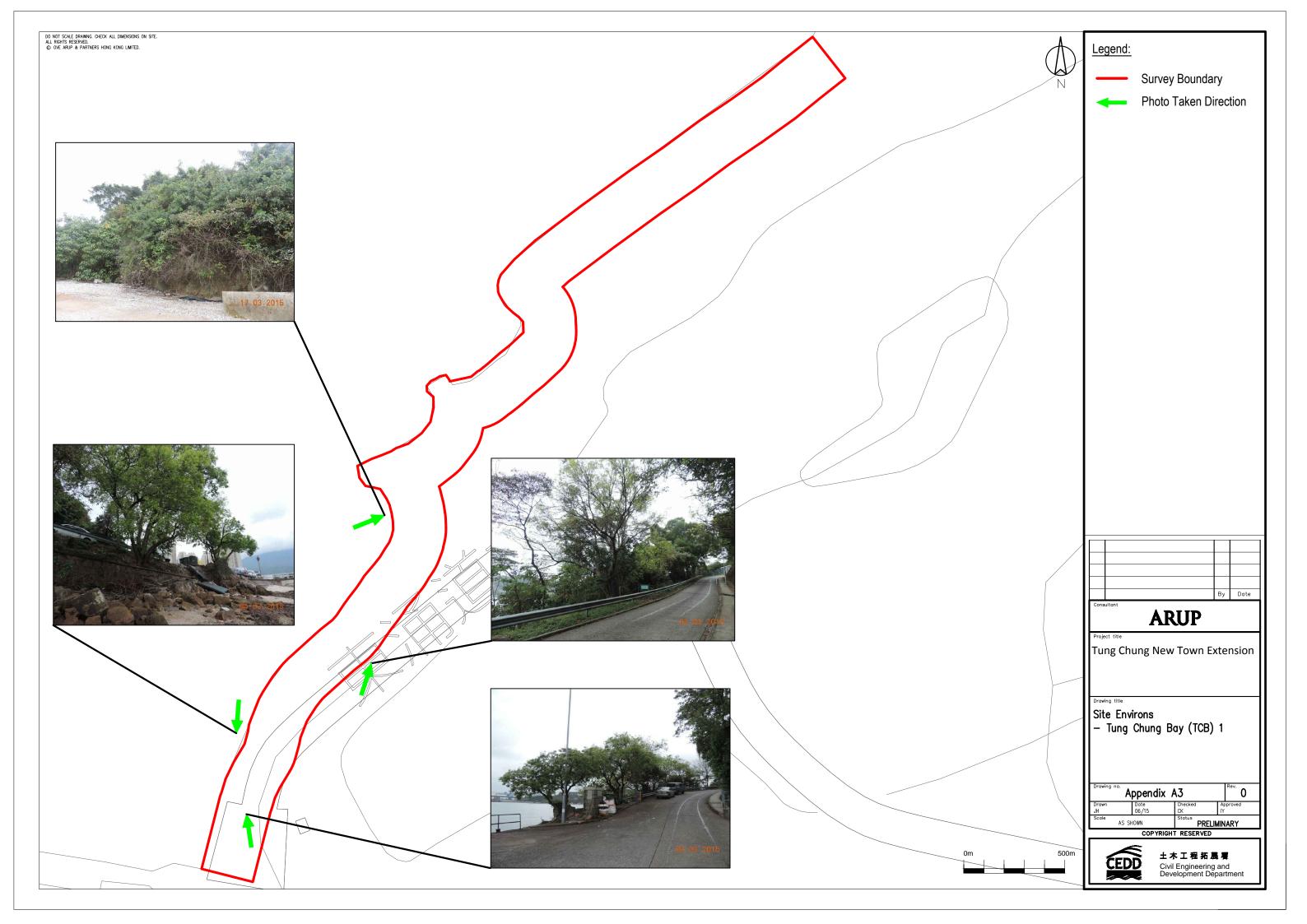


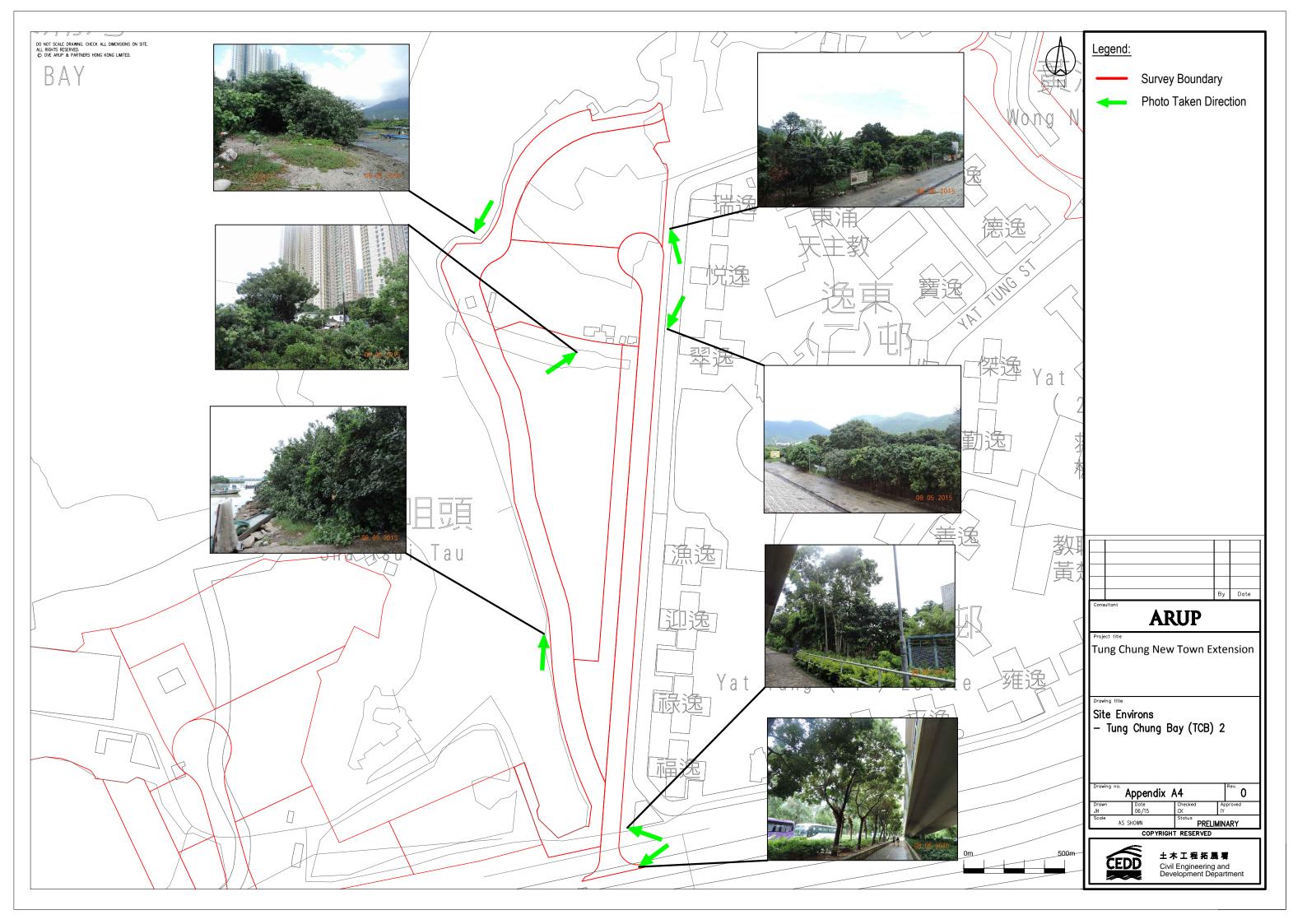




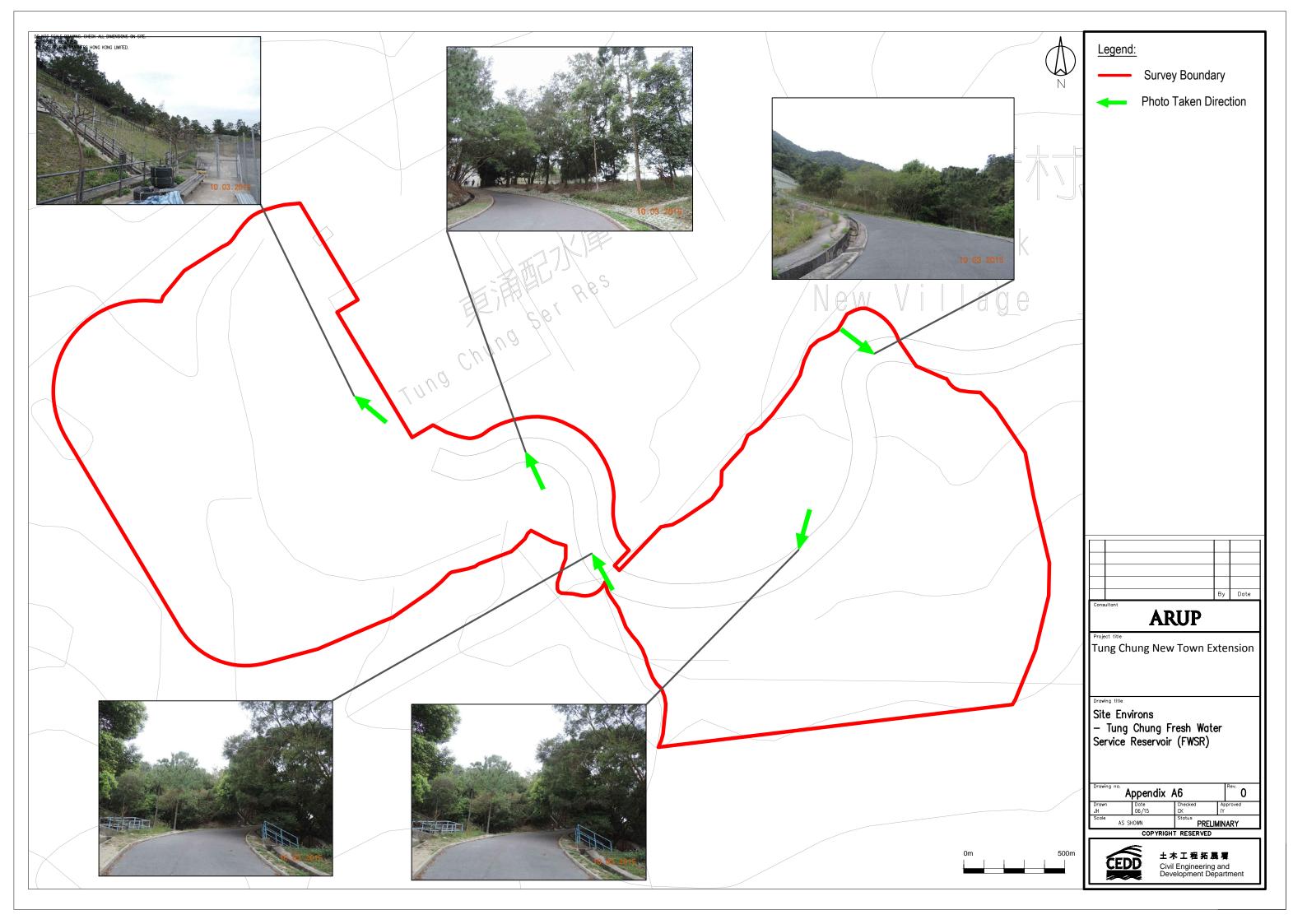




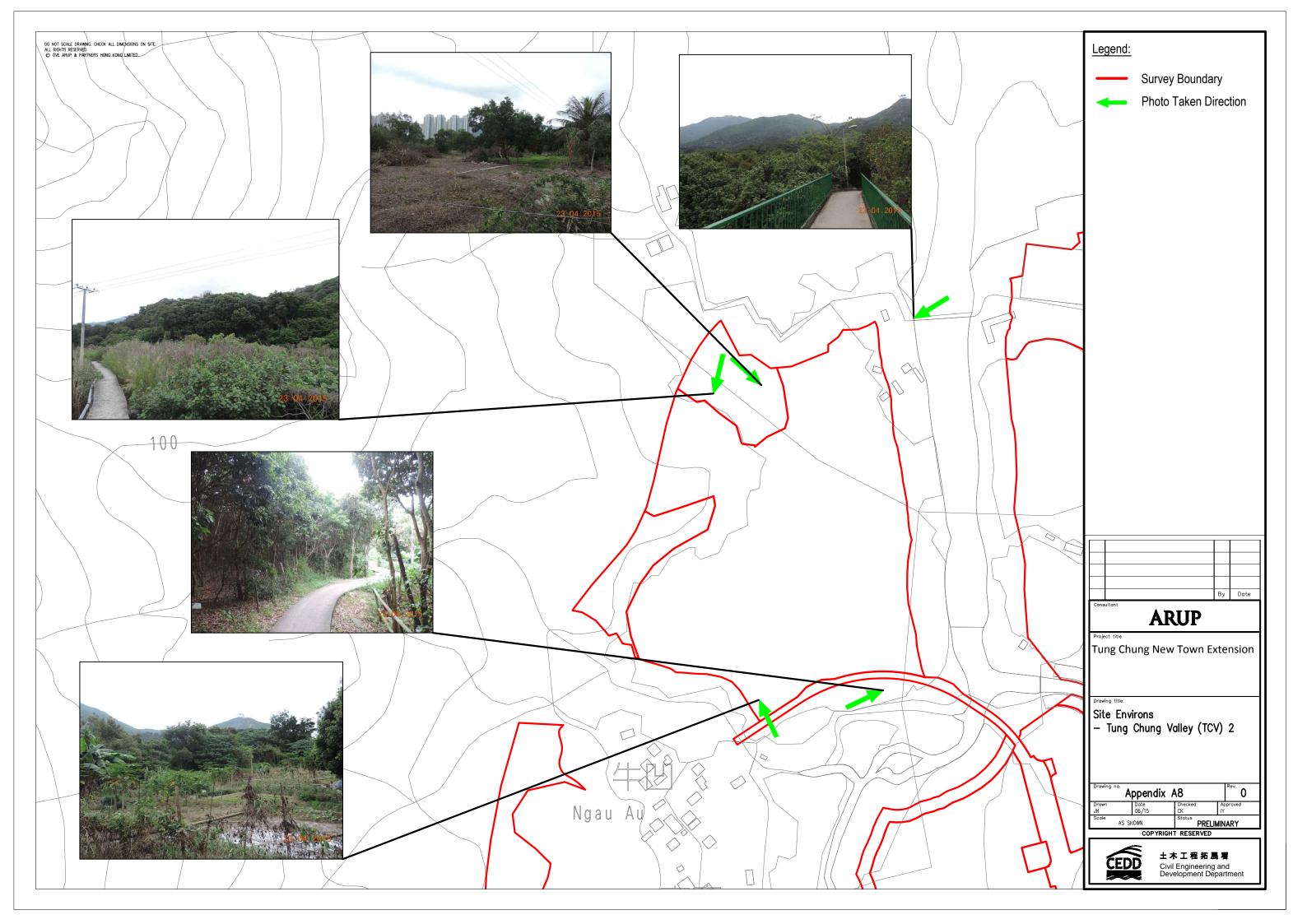


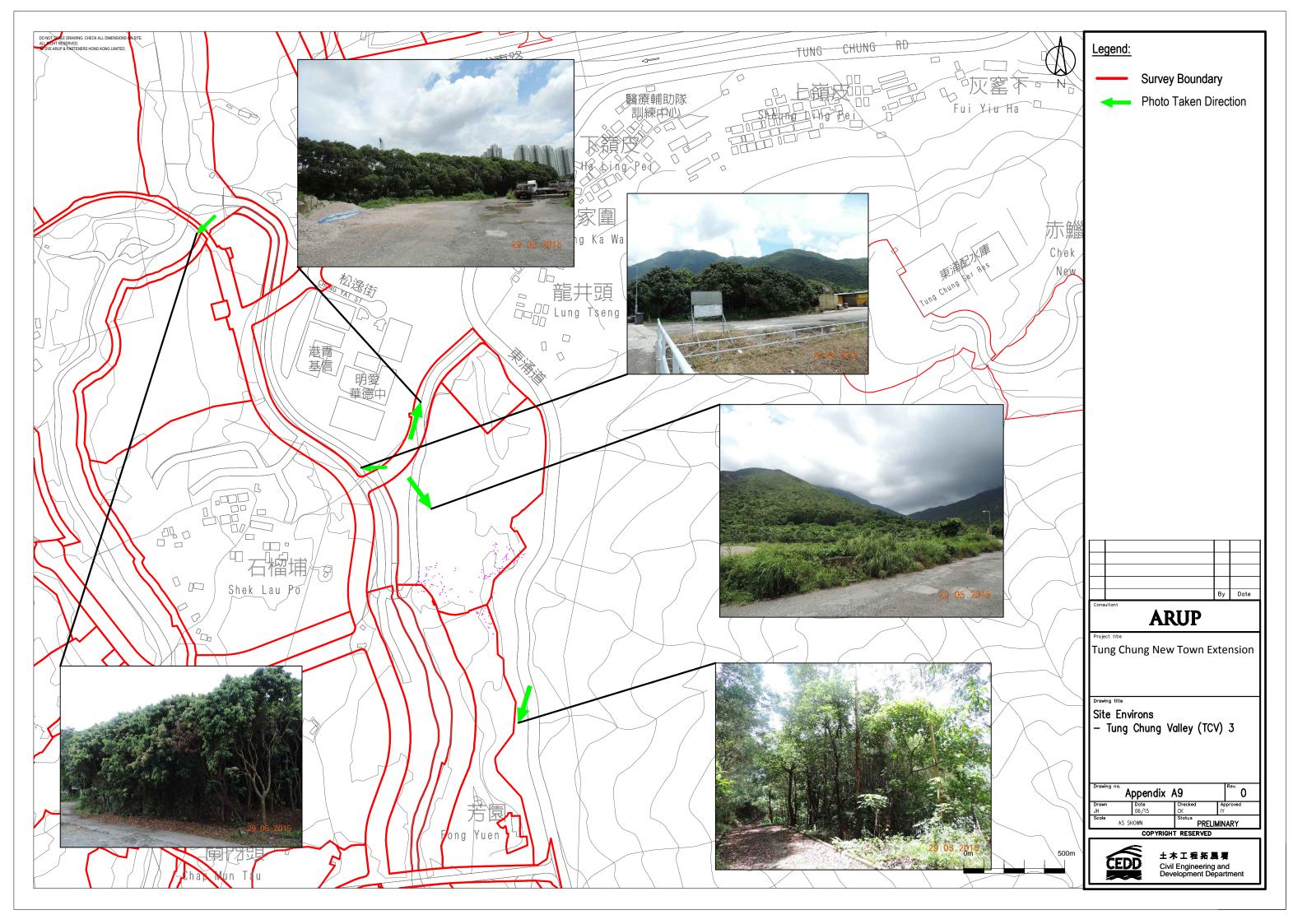


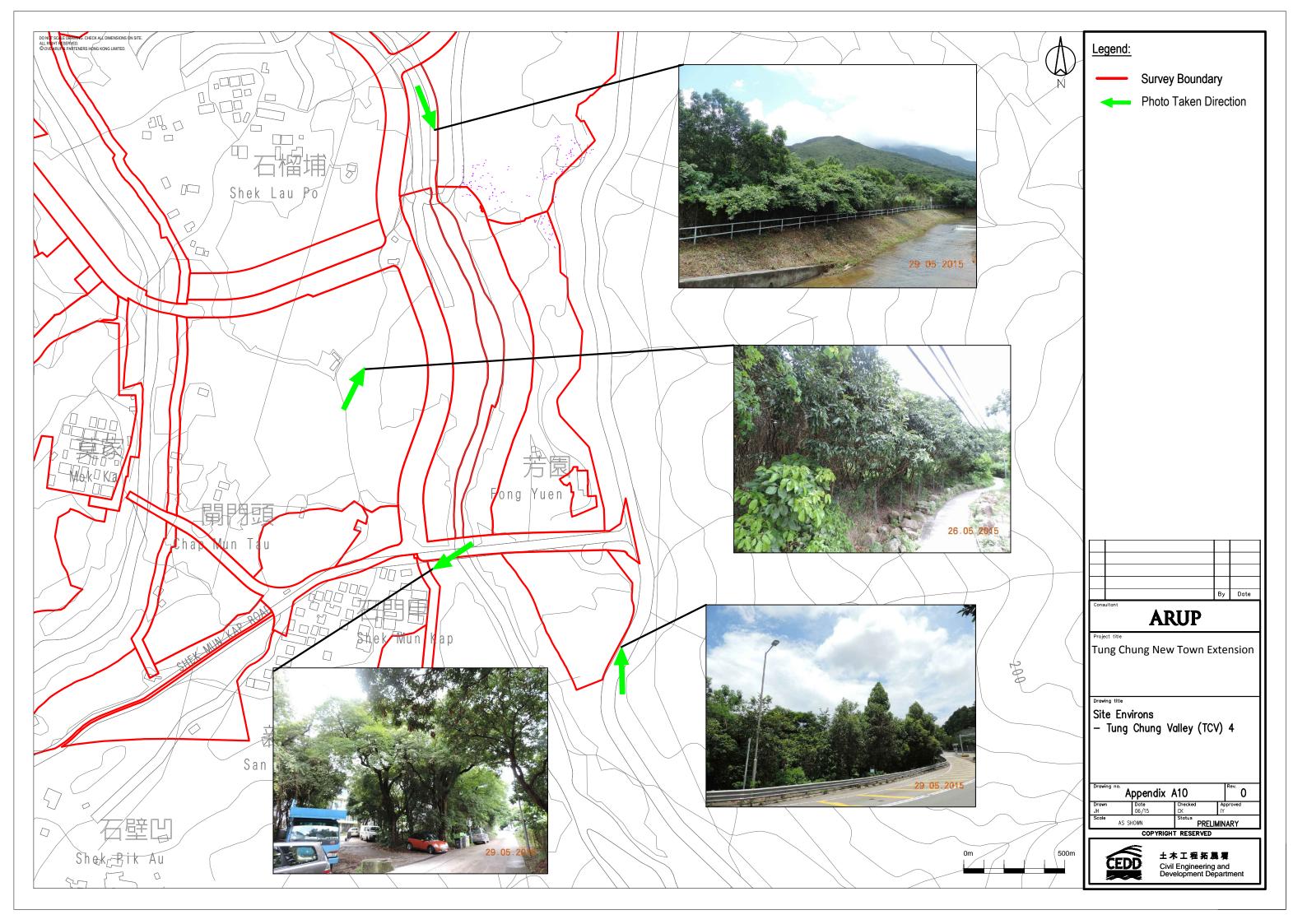


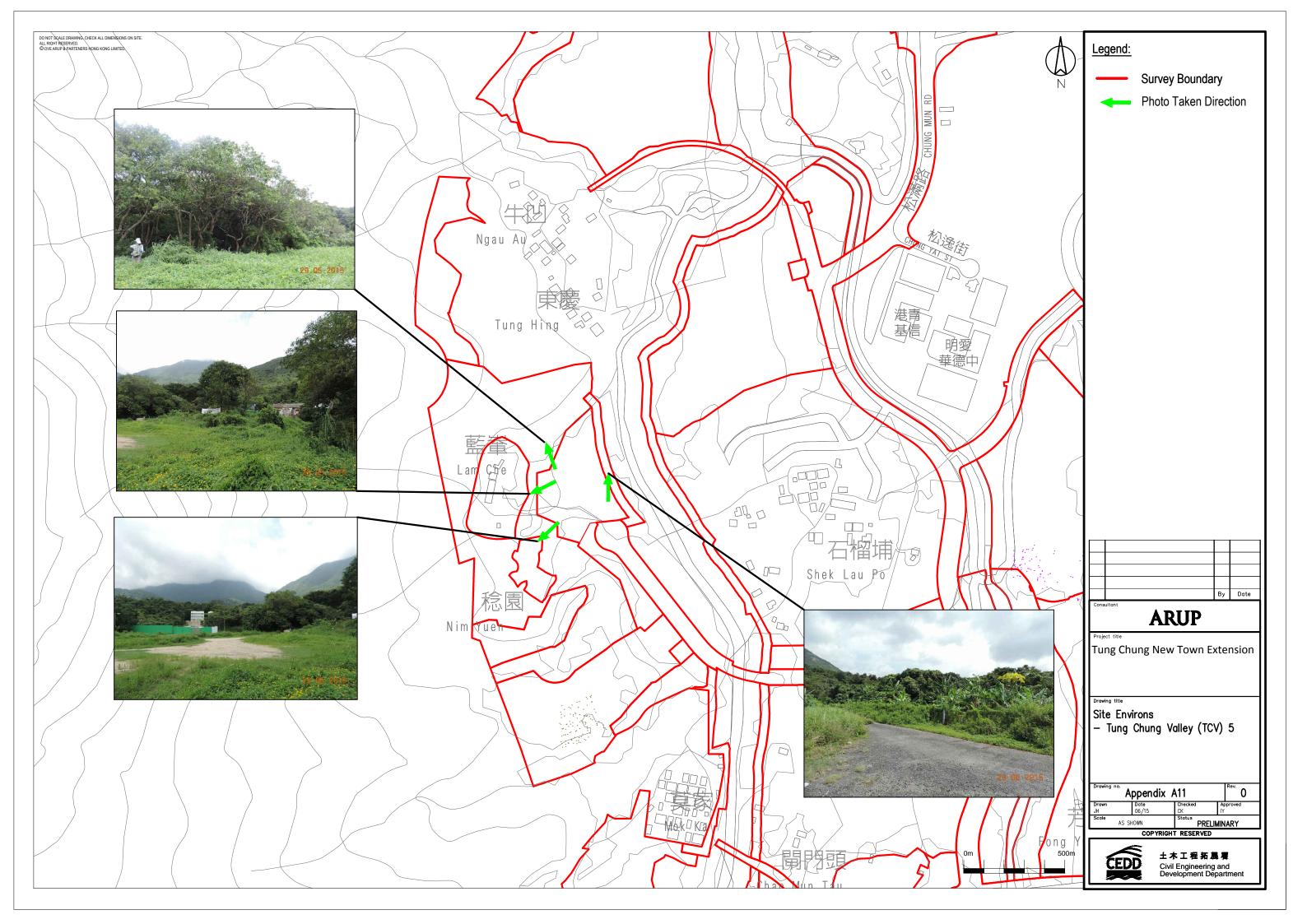


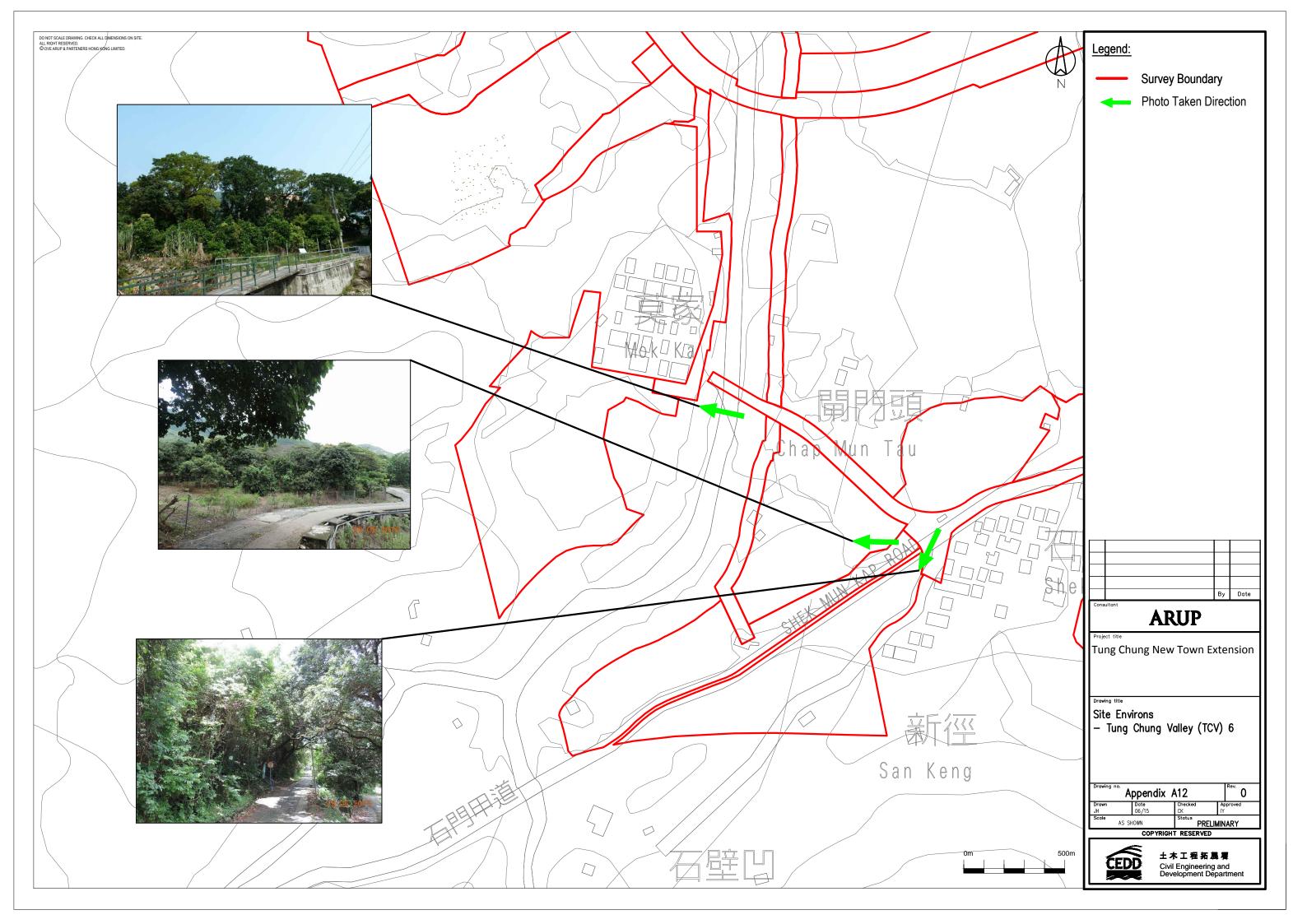








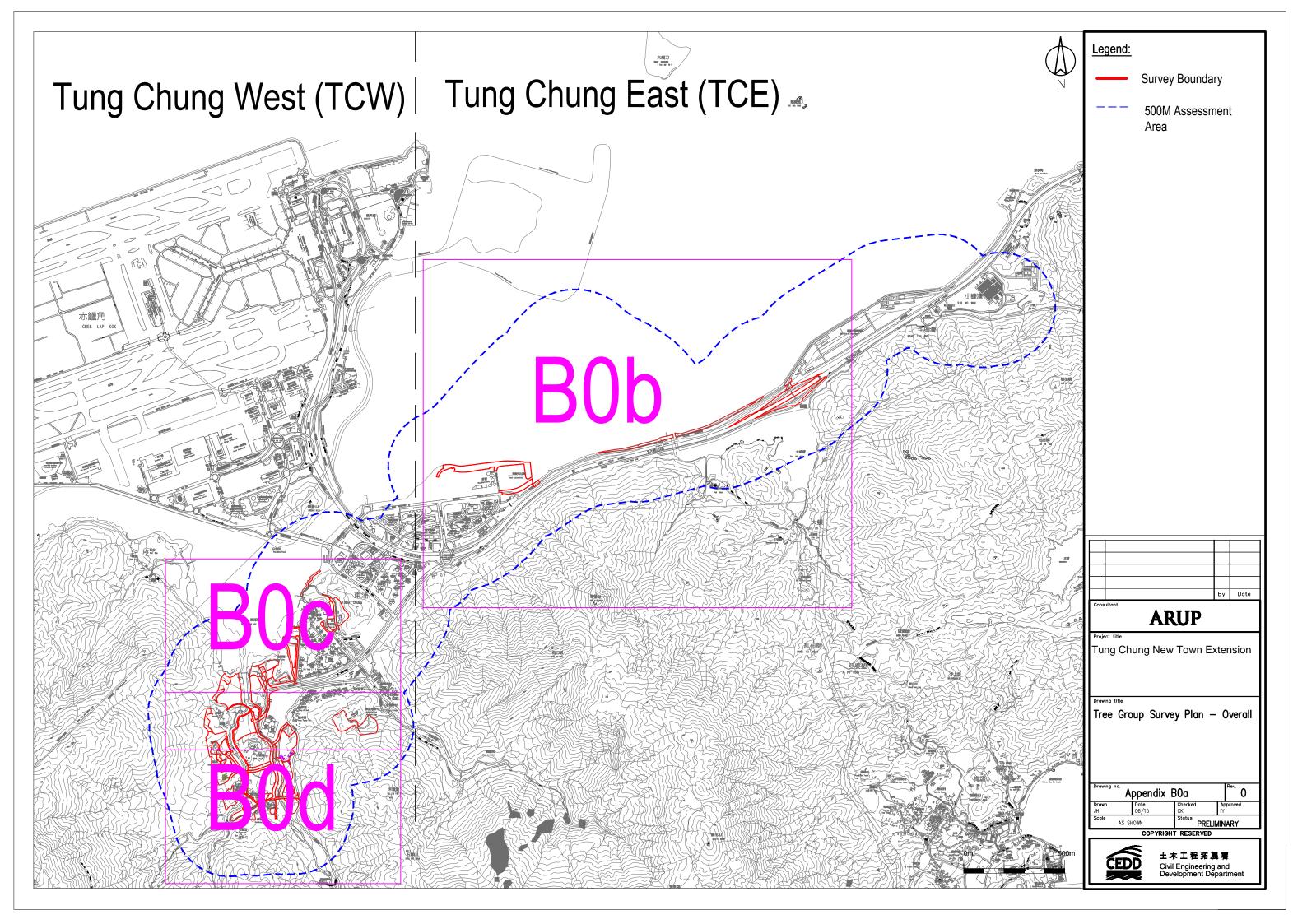


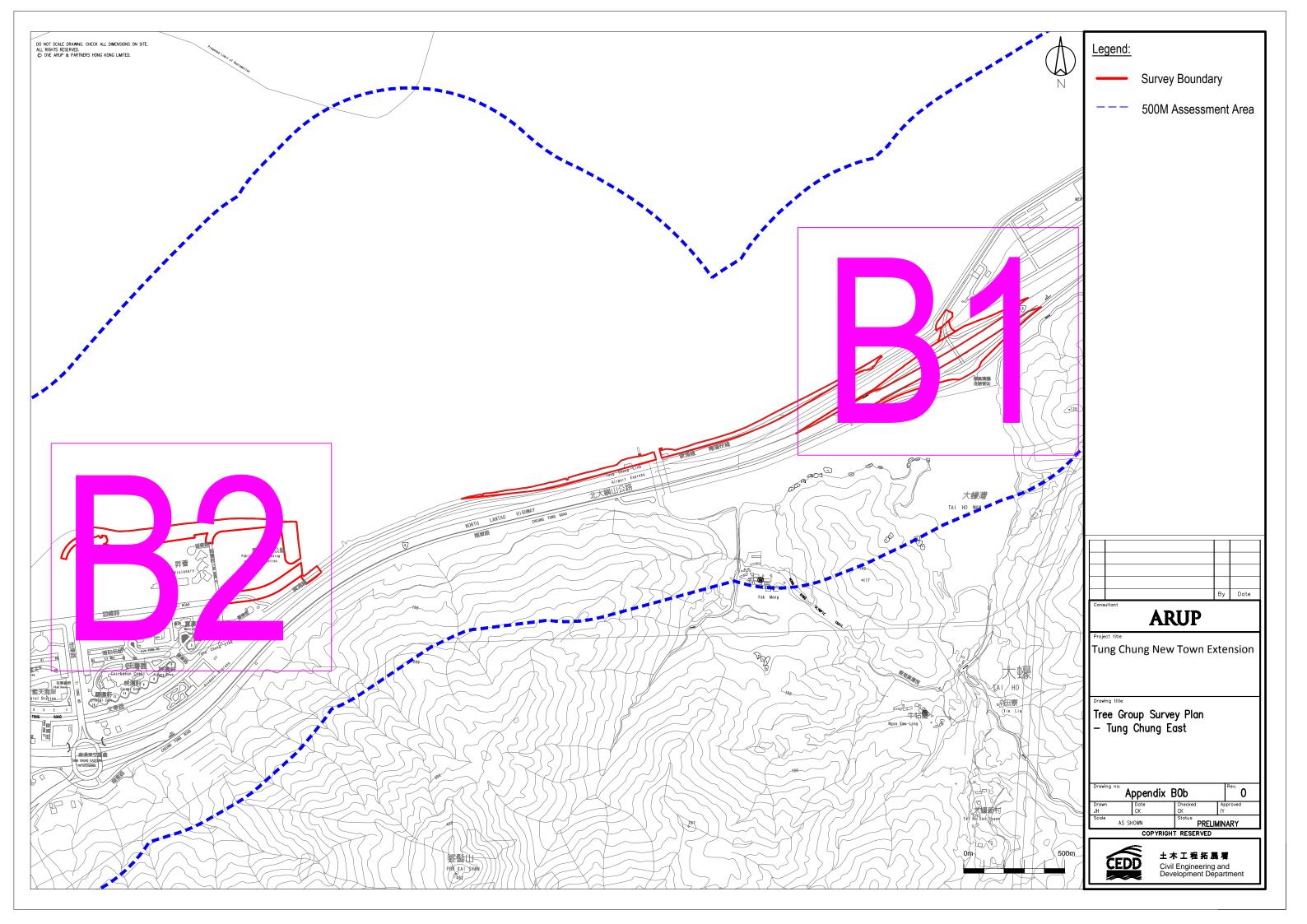


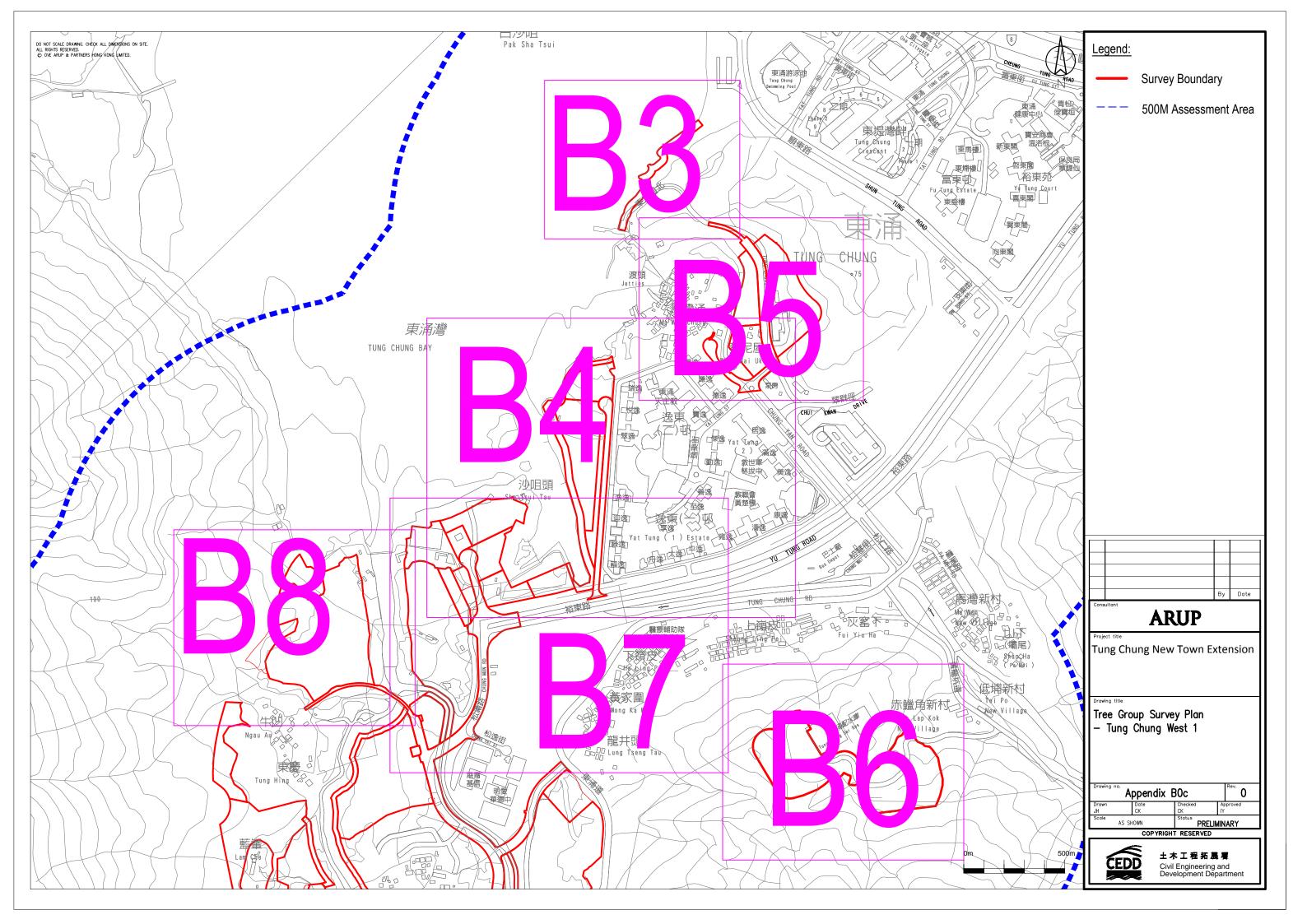
Appendix B

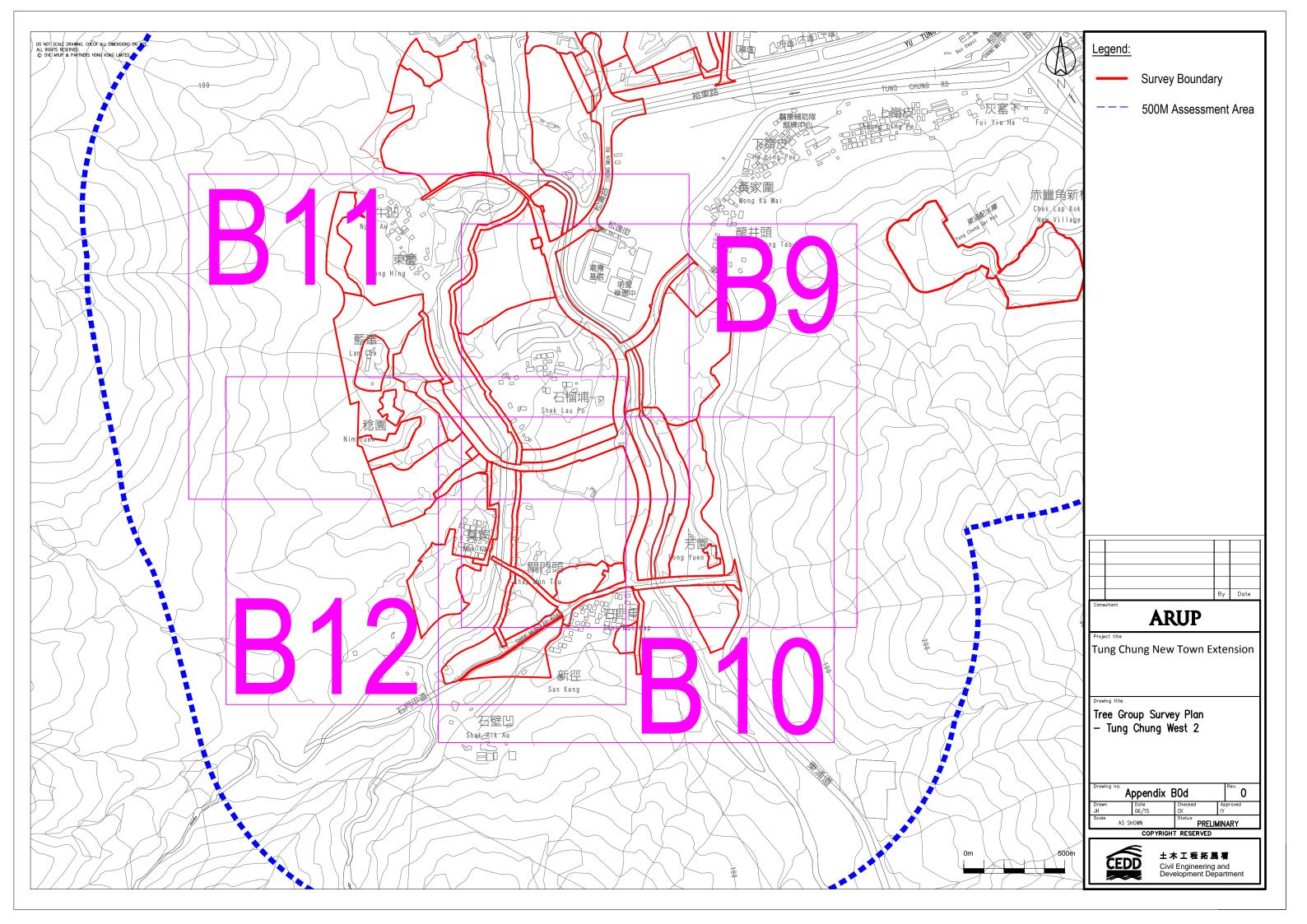
Tree Survey Plan (with Rare/ Protected Plant Species)

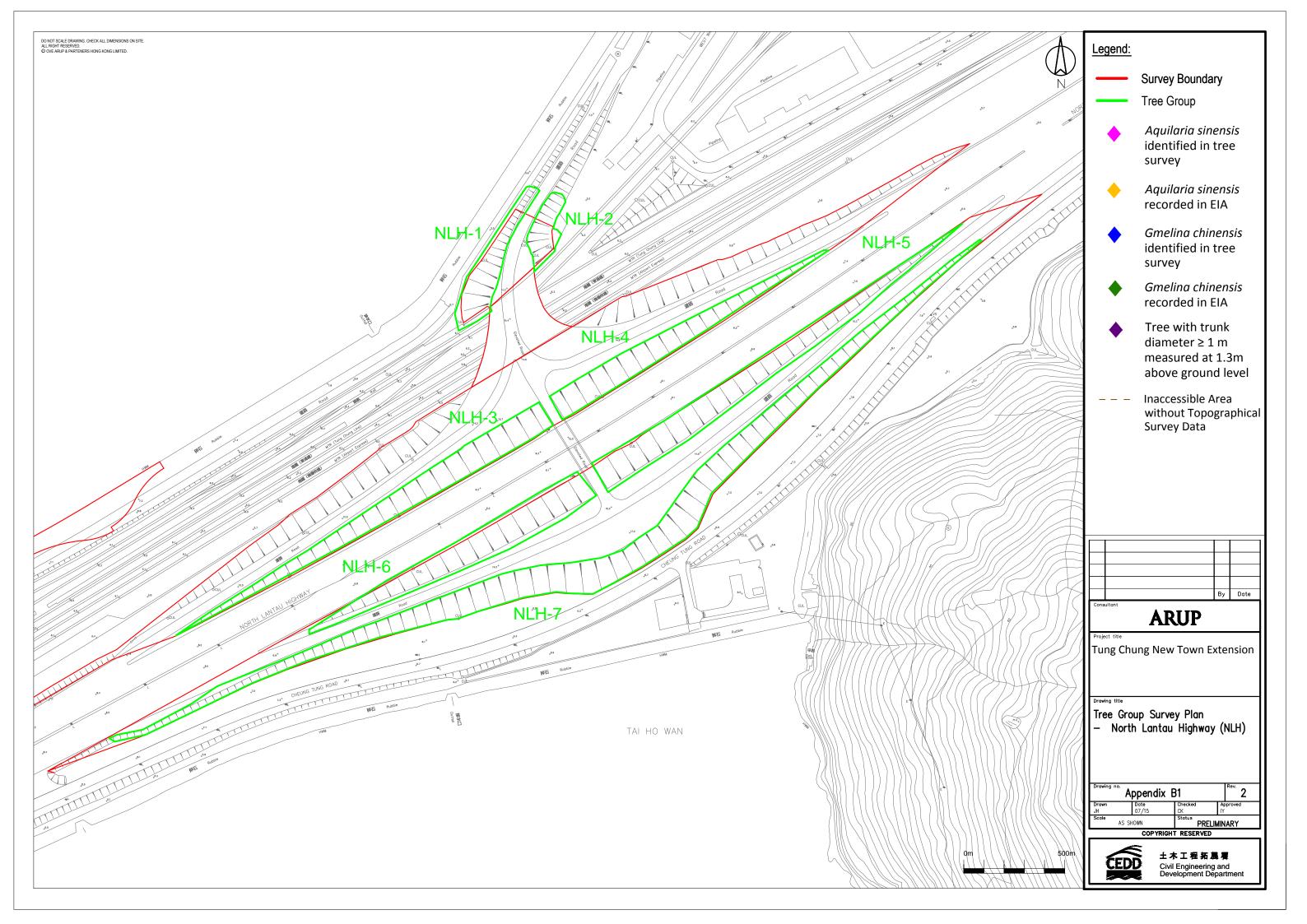


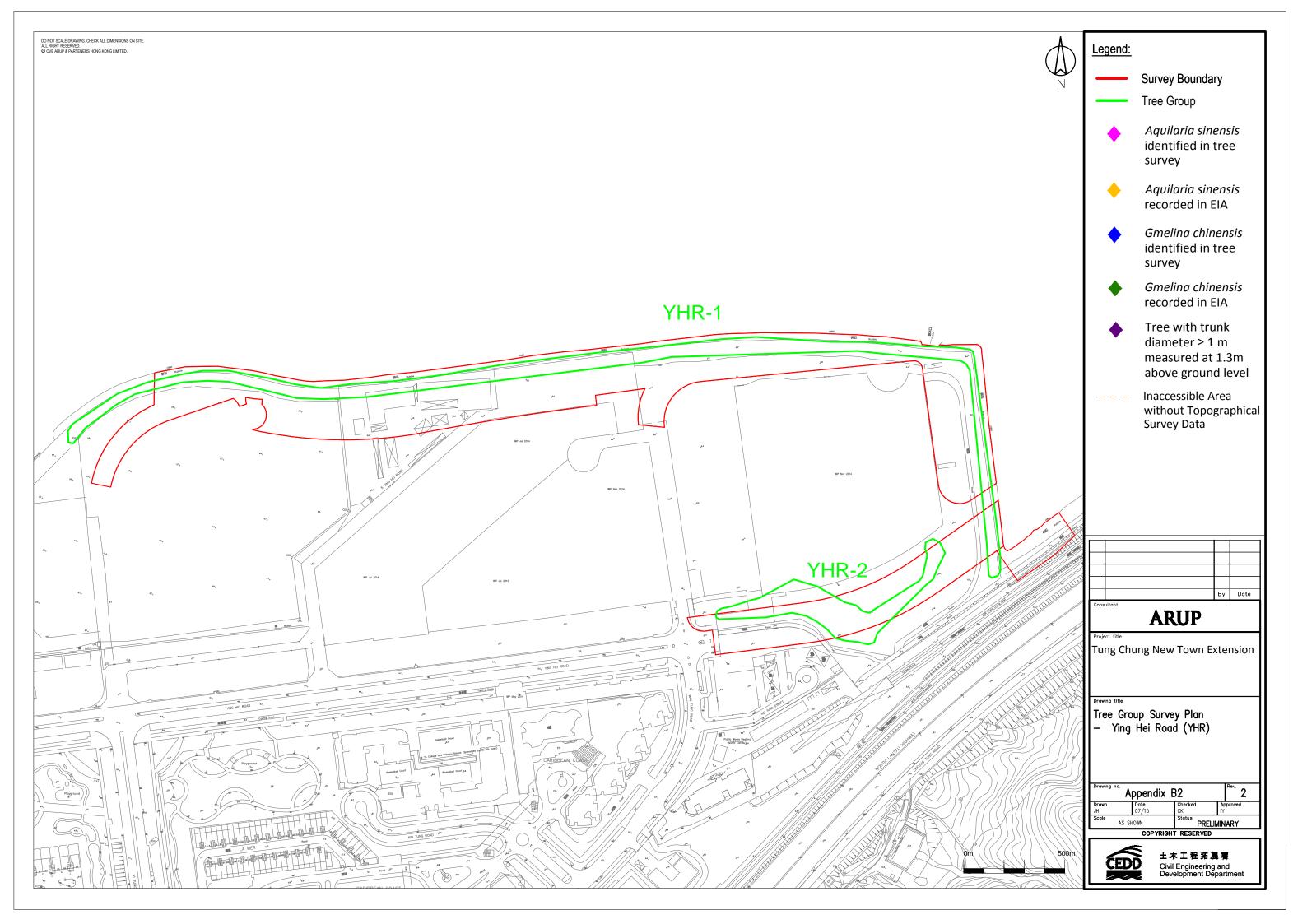


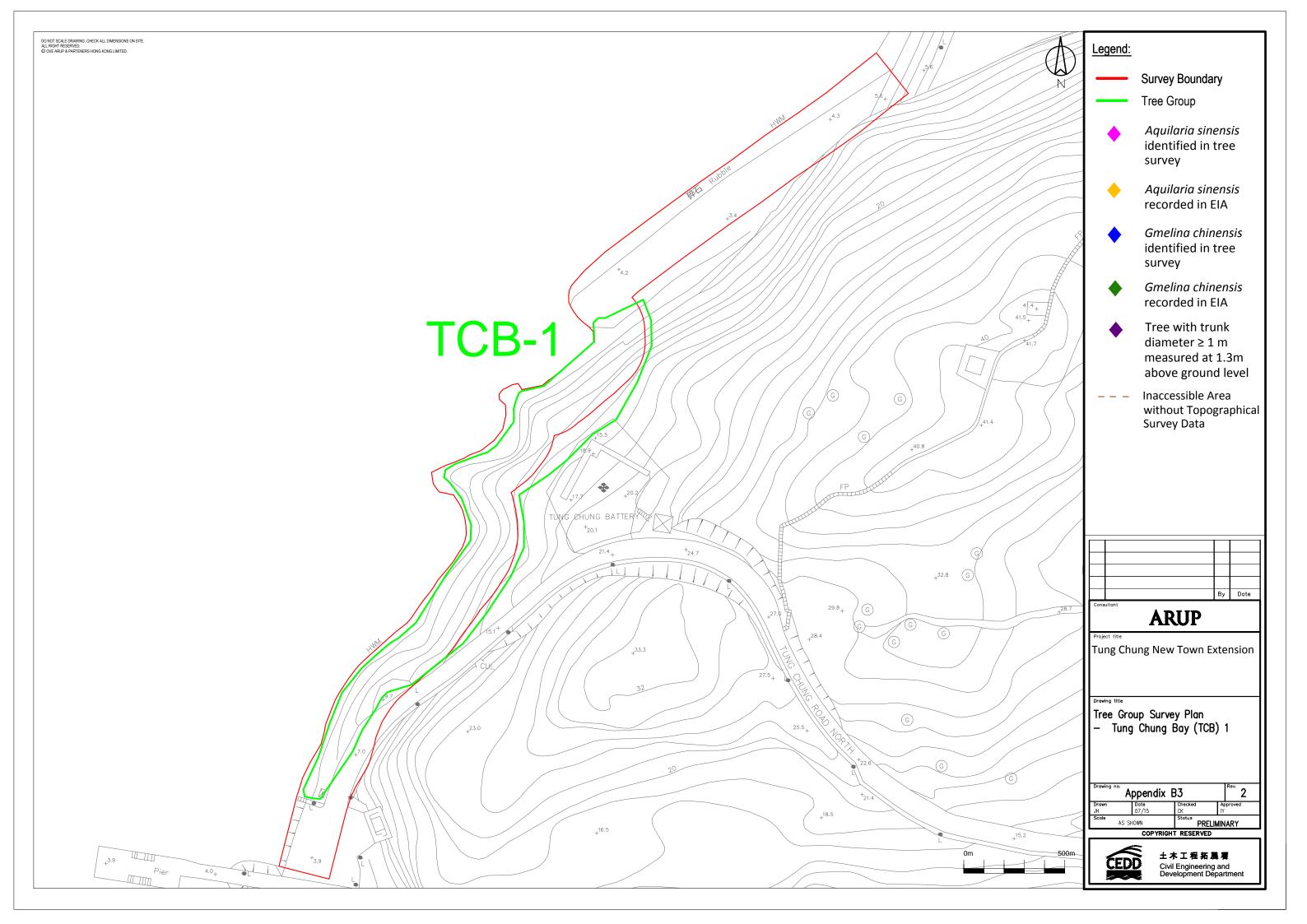


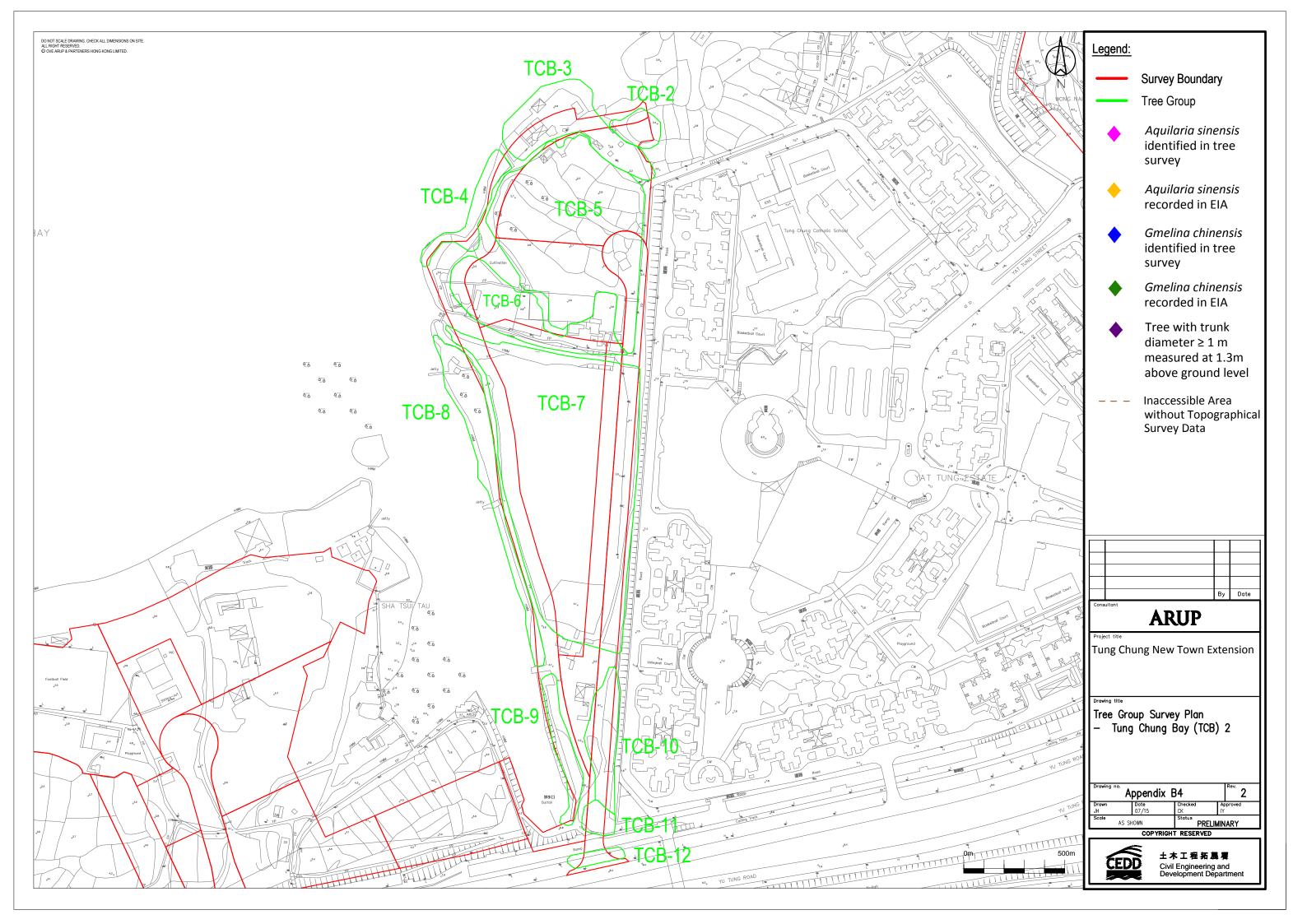


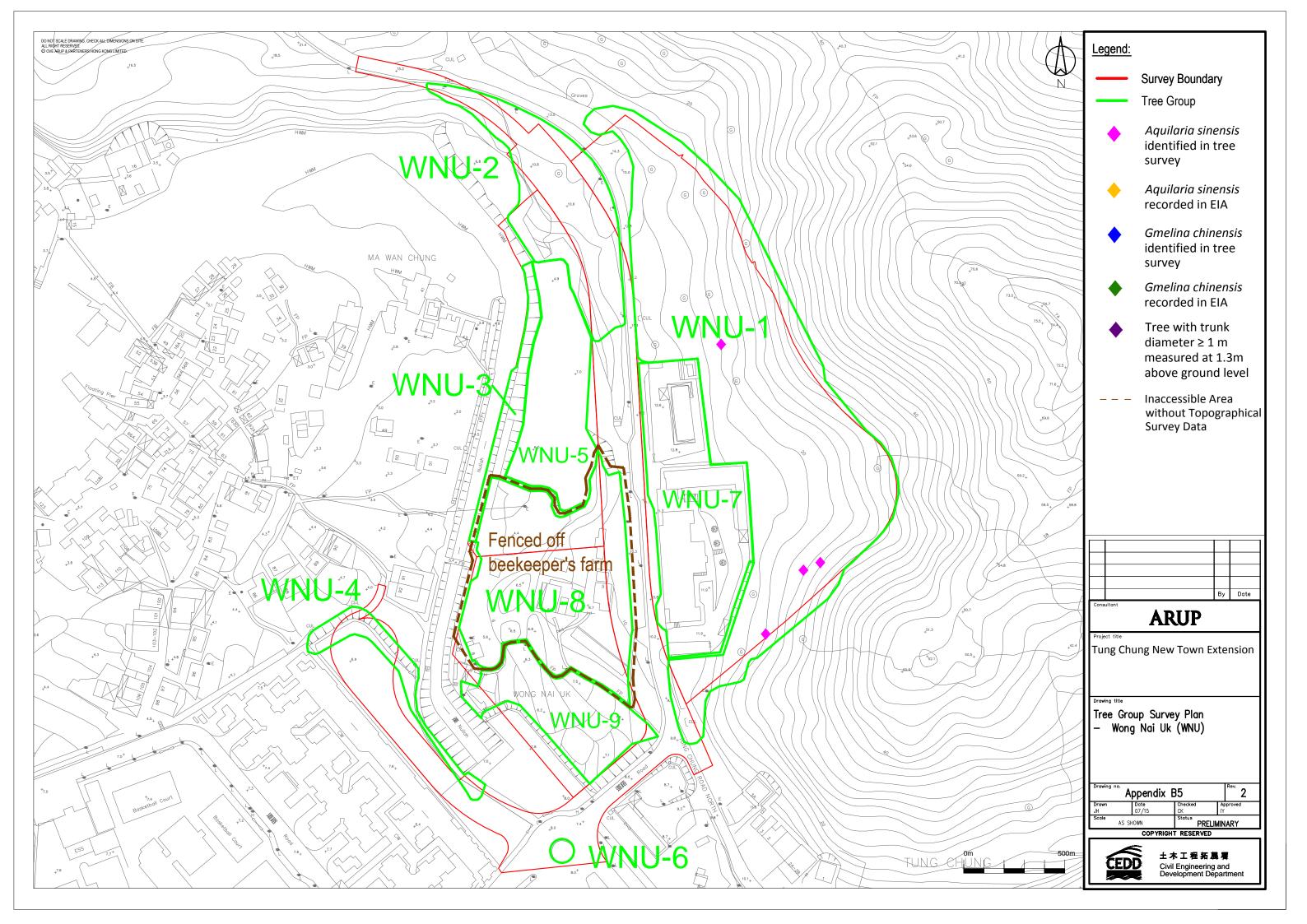


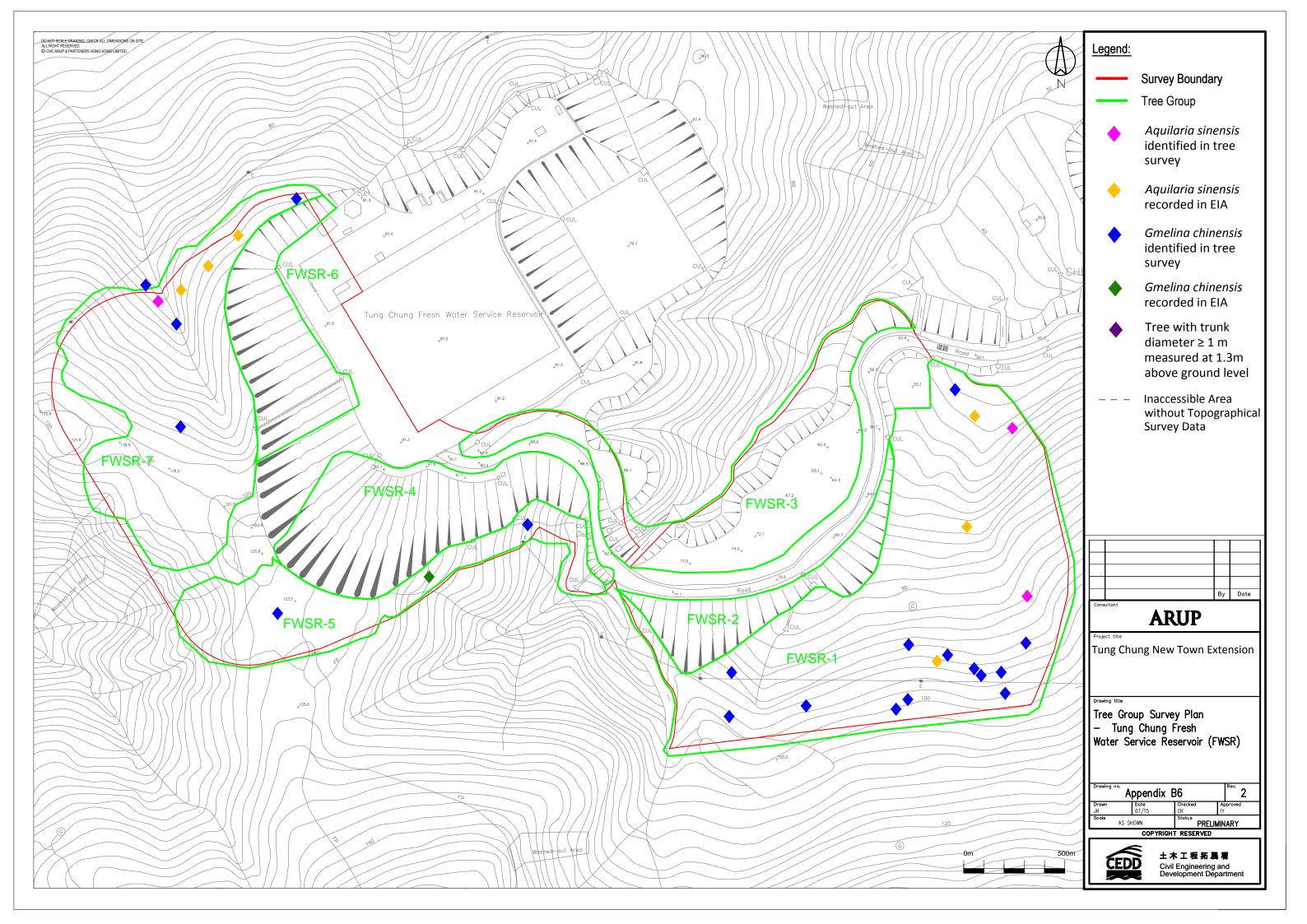


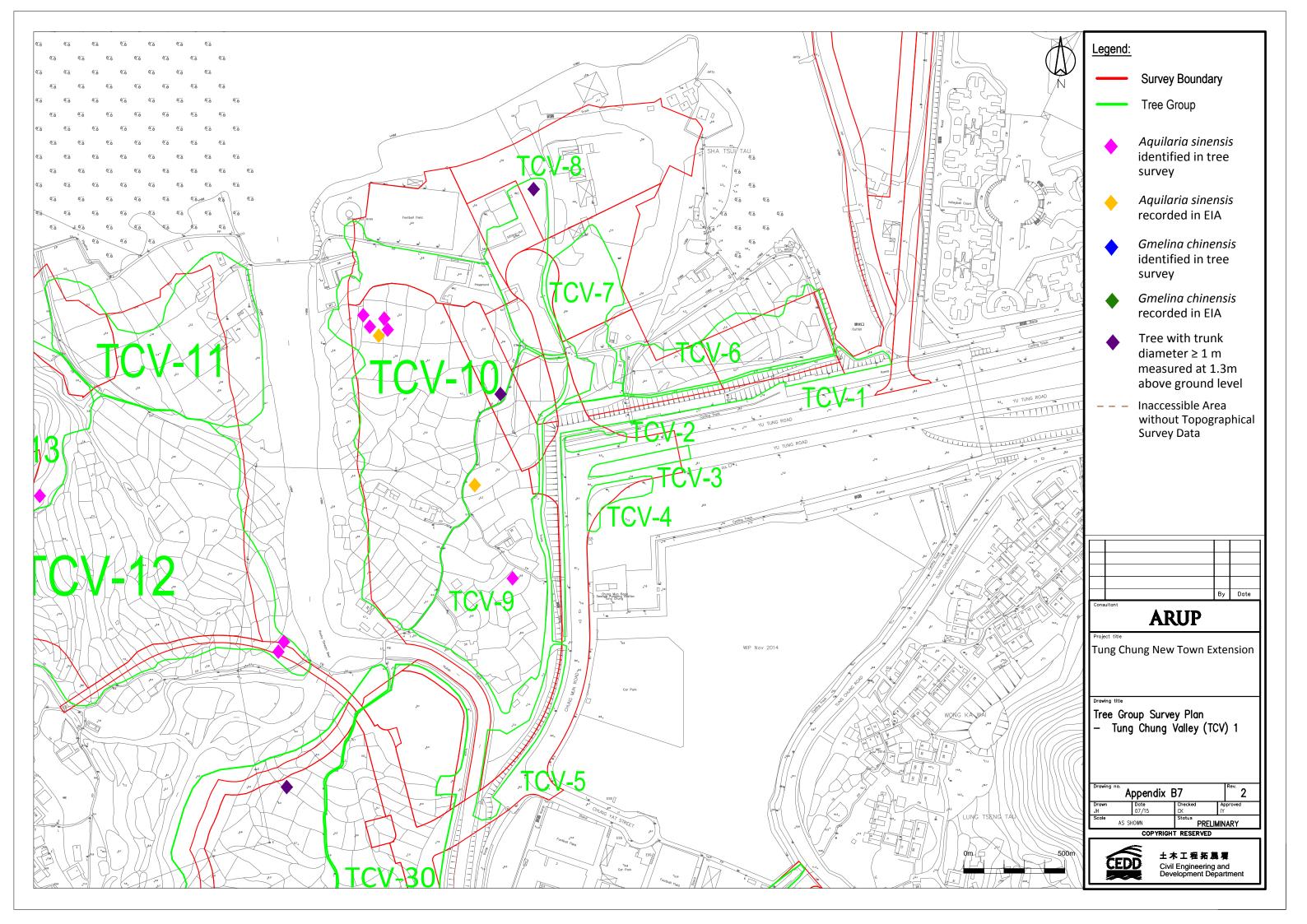


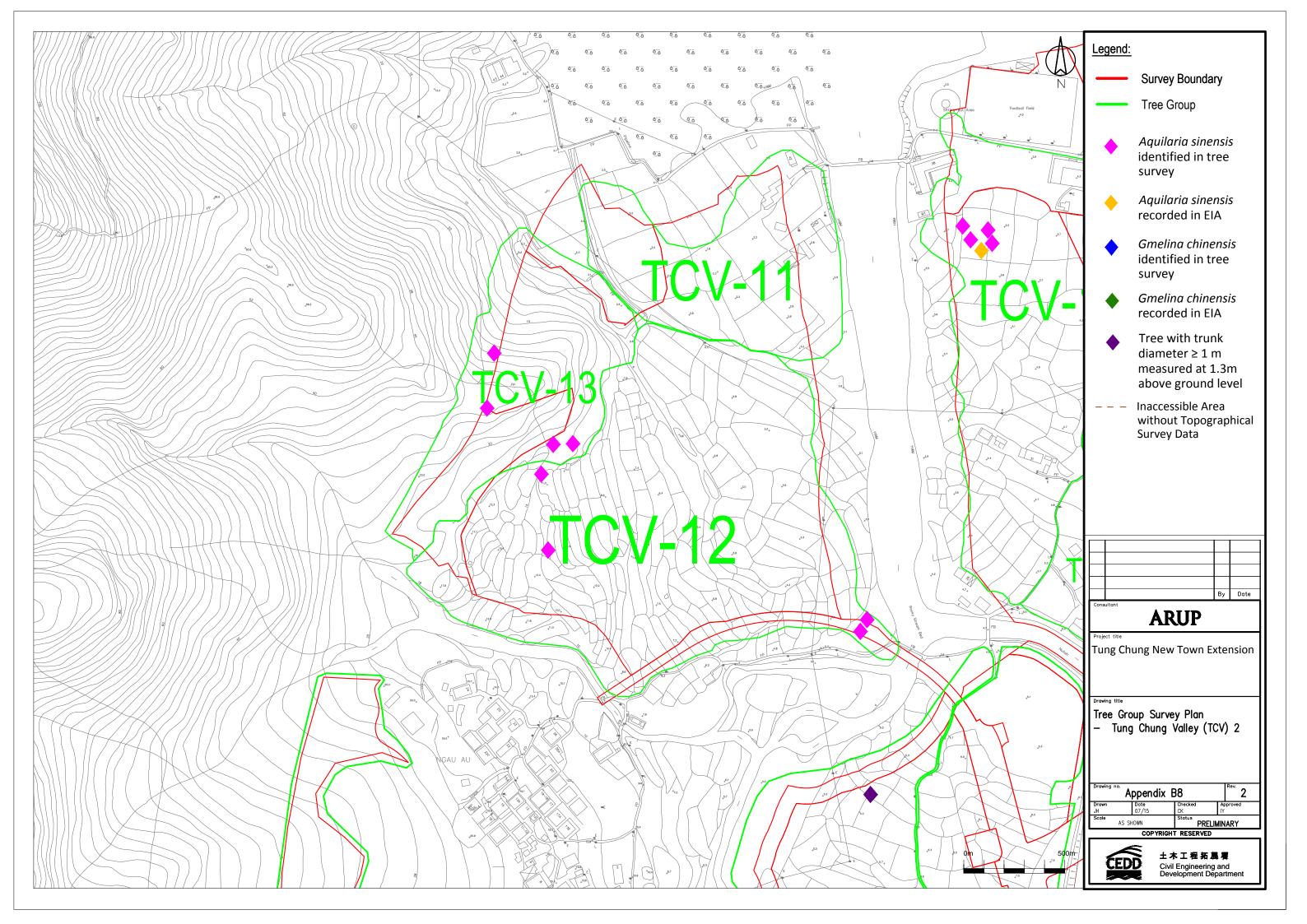


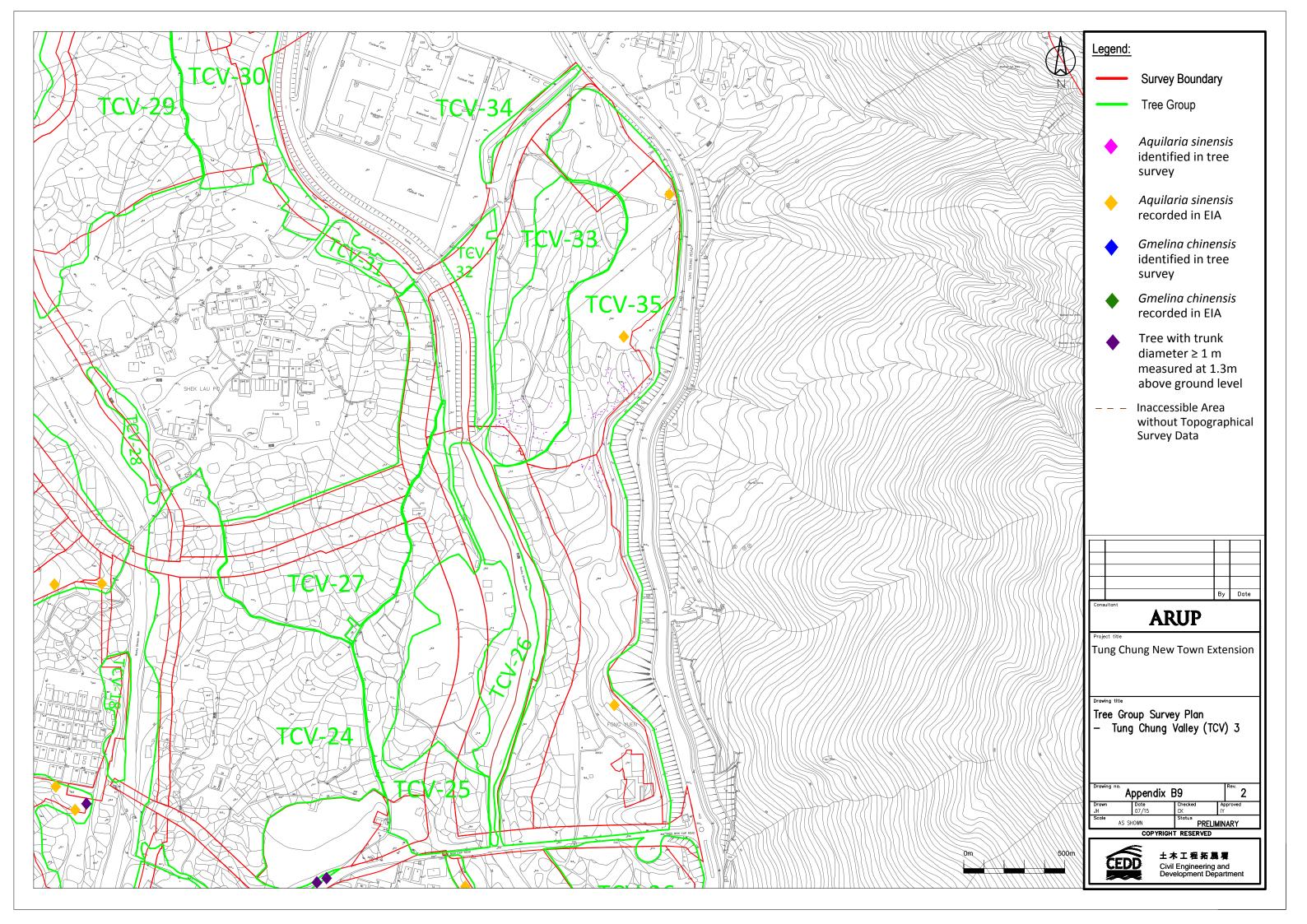


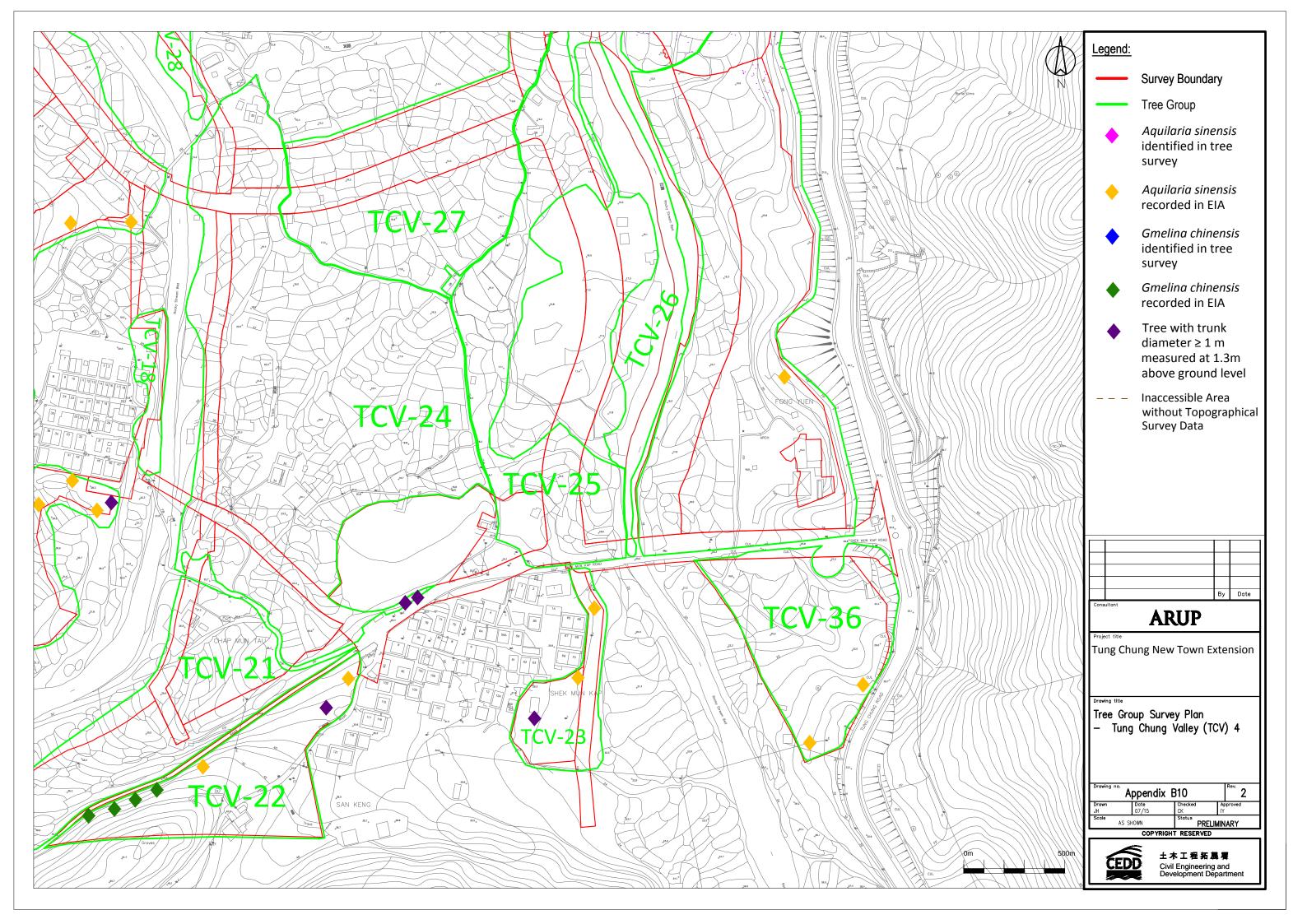


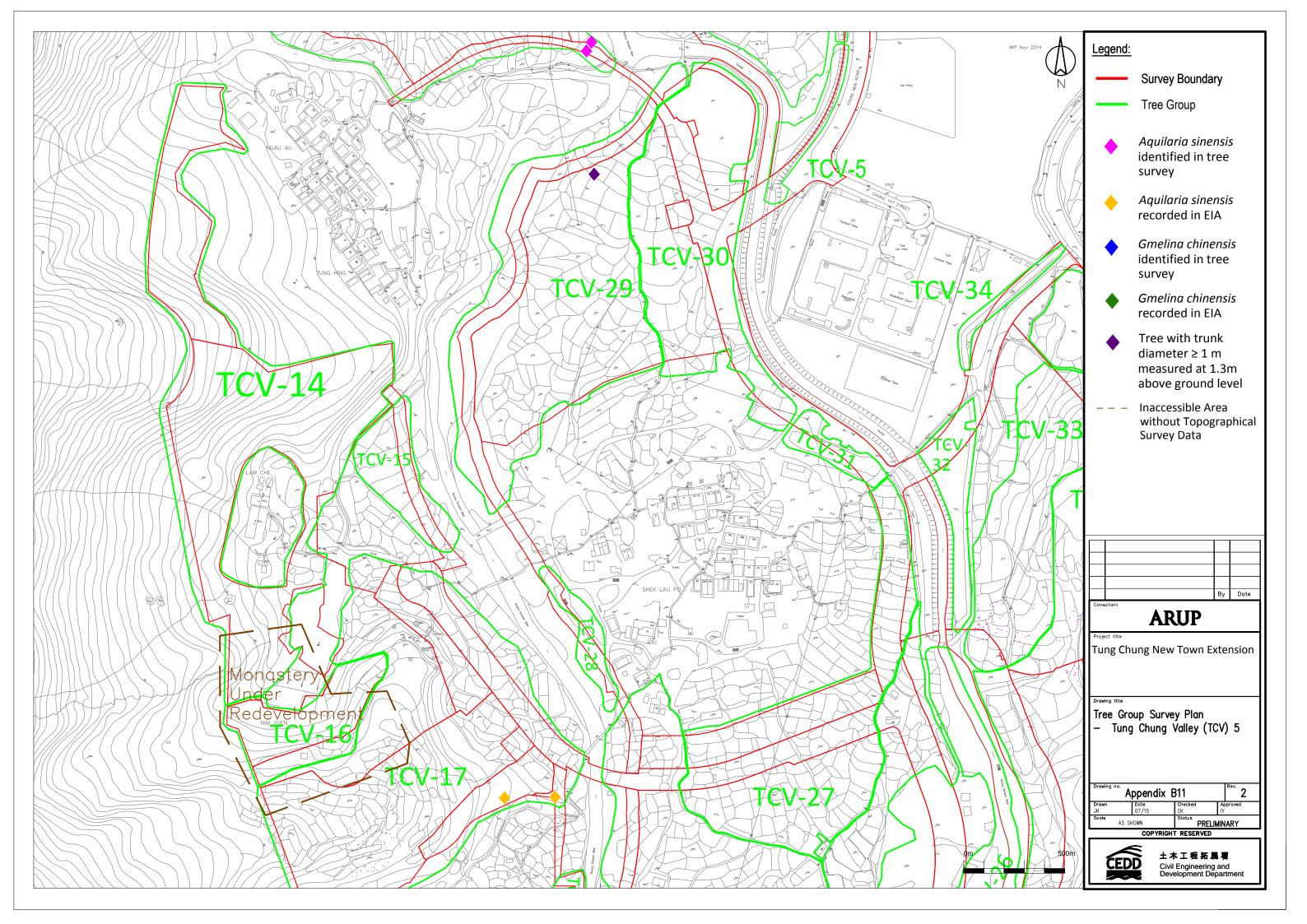


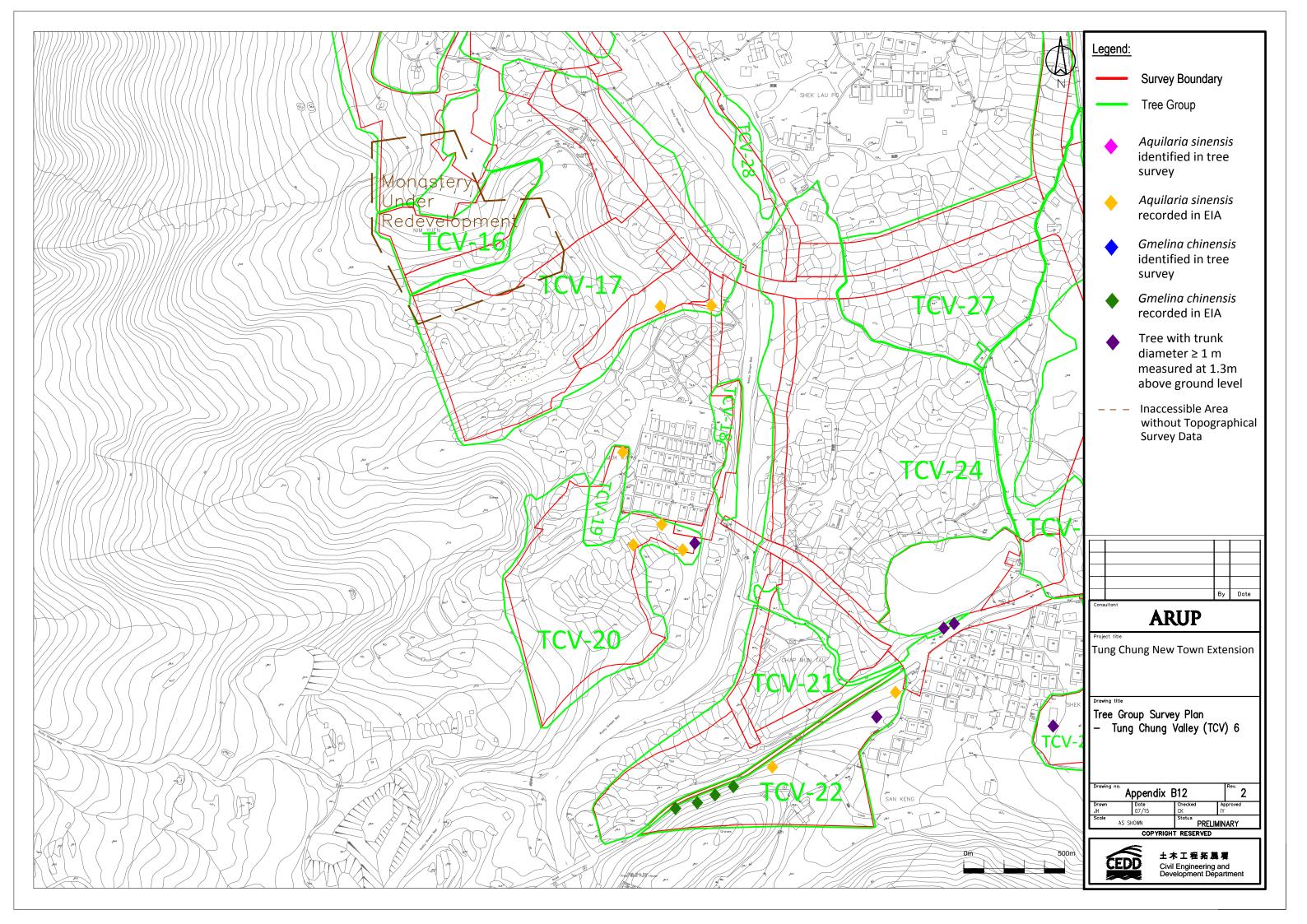












Appendix C

Tree Survey Schedule



			Main Tr	ee Species			Size of Tree			
Tree Group Reference No.	Estimated No. of Trees	Density (Estimated No. of Trees/m ²)	Scientific Name	Common Chinese Name	Species Origin	Range of Height (m)	Range of Trunk Diameter (mm)	Range of Crown Spread (mm)	General Health Condition (Good/Fair/Poor)	Protected / Rare Tree Species (Y/N)
NLH-1	40	0.0279	Hibiscus tiliaceus	黃槿	Native	2-7	100-350	3-7	Fair	N
NLH-2	20	0.0286	Acacia confusa	台灣相思	Exotic	8-9	350-400	7-8	Fair	N
INLM-Z	20	0.0260	Hibiscus tiliaceus	黄槿	Native	3-10	150-400	5-10	Fair	N
NLH-3	10	0.0031	Nerium oleander	夾竹桃	Exotic	3-6	100-150	3-4	Fair	N
NII LI A	40	0.0166	Bombax ceiba	木棉	Exotic	2-8	100-300	1-5	Fair	N
NLH-4	40	0.0166	Leucaena leucocephala	銀合歡	Exotic	5-8	120-180	3-5	Fair	N
NULL E	00	0.0220	Bombax ceiba	木棉	Exotic	3-10	100-350	2-8	Fair	N
NLH-5	90	0.0229	Leucaena leucocephala	銀合歡	Exotic	4-8	100-250	2-6	Fair	N
NII II C	70	0.0200	Bombax ceiba	木棉	Exotic	4-10	100-400	2-7	Fair	N
NLH-6	70	0.0208	Leucaena leucocephala	銀合歡	Exotic	5-10	100-200	3-6	Fair	N
NU 11 7	20	0.0025	Bombax ceiba	木棉	Exotic	5-6	150-200	2-3	Fair	N
NLH-7	20	0.0025	Hibiscus tiliaceus	黄槿	Native	5-6	150-250	5-8	Fair	N
			Acacia auriculiformis	耳果相思	Exotic	5-6	100-250	5-7	Fair	N
YHR-1	20	0.0021	Albizia lebbeck	大葉合歡	Exotic	7-8	350-400	9-10	Fair	N
			Leucaena leucocephala	銀合歡	Exotic	4-7	100-200	4-10	Fair	N
			Acacia auriculiformis	耳果相思	Exotic	6-7	150-200	4-6	Fair	N
YHR-2	60	0.0115	Casuarina equisetifolia	木麻黄	Exotic	14-16	150-250	4-5	Fair	N
			Leucaena leucocephala	銀合歡	Exotic	4-10	100-450	3-10	Fair	N
			Bridelia tomentosa	土蜜樹	Native	4-6	100-200	3-6	Fair	N
			Celtis sinensis	朴樹	Native	4-10	120-250	3-8	Fair	N
			Cerbera manghas	海杧果	Native	3-10	100-300	2-8	Fair-Poor	N
TCB-1	100	0.0376	Macaranga tanarius var. tomentosa	血桐	Native	4-5	100-150	4-8	Fair	N
			Mallotus paniculatus	白楸	Native	5-7	100-300	4-7	Fair	N
			Melia azedarach	苦楝	Exotic	9-10	200-220	7-8	Fair	N
			Microcos nervosa	布渣葉	Native	4-10	100-150	3-5	Fair	N
			Schefflera heptaphylla	鵝掌柴	Native	4-8	120-250	3-5	Fair	N
TCD 2	20	0.0475	Dimocarpus longan	龍眼	Exotic	4-8	100-250	3-6	Fair-Poor	N
TCB-2	30	0.0475	Litchi chinensis	荔枝	Exotic	3-8	100-150	2-4	Fair	N
			Celtis sinensis	朴樹	Native	10-11	400-450	9-10	Fair	N
			Cerbera manghas	海杧果	Native	4-5	200-250	4-5	Fair	N
TCB-3	10	0.0033	Ficus microcarpa	榕樹	Native	4-5	100-150	4-5	Fair	N
			Litchi chinensis	荔枝	Exotic	4-5	100-150	4-5	Fair	N
			Melia azedarach	苦楝	Exotic	9-10	400-500	7-8	Fair	N
			Bridelia tomentosa	土蜜樹	Native	5-12	120-200	3-6	Fair	N
TCD 4		0.0574	Celtis sinensis	朴樹	Native	5-10	100-250	3-6	Fair	N
TCB-4	60	0.0574	Hibiscus tiliaceus	黄槿	Native	4-8	100-500	3-6	Fair	N
			Thespesia populnea	恒春黃槿	Native	4-10	100-350	4-6	Fair	N

			Main Tro	ee Species			Size of Tree			
Tree Group Reference No.	Estimated No. of Trees	Density (Estimated No. of Trees/m²)	Scientific Name	Common Chinese Name	Species Origin	Range of Height (m)	Range of Trunk Diameter (mm)	Range of Crown Spread (mm)	General Health Condition (Good/Fair/Poor)	Protected / Rare Tree Species (Y/N)
			Celtis sinensis	朴樹	Native	6-12	100-450	4-10	Fair	N
TCB-5	600	0.0599	Clausena lansium	黄皮	Exotic	4-7	100-200	2-5	Fair	N
ICB-5	600	0.0599	Dimocarpus longan	龍眼	Exotic	3-8	100-450	2-7	Fair	N
			Litchi chinensis	荔枝	Exotic	4-12	100-300	2-7	Fair	N
			Carica papaya	番木瓜	Exotic	2-4	100-150	1-2	Fair	N
			Celtis sinensis	朴樹	Native	6-12	150-550	4-9	Fair	N
TCB-6	40	0.0116	Clausena lansium	黄皮	Exotic	4-5	100-200	3-4	Fair	N
			Litchi chinensis	荔枝	Exotic	5-7	100-150	2-6	Fair	N
			Thespesia populnea	恒春黃槿	Native	5-7	150-400	4-8	Fair	N
			Acacia auriculiformis	耳果相思	Exotic	5-12	100-250	3-6	Fair	N
			Celtis sinensis	朴樹	Native	4-10	100-350	2-10	Fair	N
			Litchi chinensis	荔枝	Exotic	4-7	100-400	2-6	Fair	N
TCB-7	330	0.0197	Macaranga tanarius var. tomentosa	血桐	Native	4-9	100-300	3-10	Fair	N
			Mallotus paniculatus	白楸	Native	4-9	100-300	3-6	Fair	N
			Thespesia populnea	恒春黃槿	Native	4-7	120-300	2-8	Fair	N
			Acacia auriculiformis	耳果相思	Exotic	6-10	150-250	2-6	Fair	N
			Celtis sinensis	朴樹	Native	5-6	100-200	3-5	Fair	N
TCB-8	100	0.0378	Excoecaria agallocha	海漆	Native	2-6	100-250	2-6	Fair-Poor	N
			Hibiscus tiliaceus	黃槿	Native	4-8	100-350	3-12	Fair	N
			Thespesia populnea	恒春黃槿	Native	5-8	100-450	3-10	Fair	N
			Artocarpus heterophyllus	菠蘿蜜	Exotic	5-6	100-300	2-7	Fair	N
TCB-9	20	0.0189	Macaranga tanarius var. tomentosa	血桐	Native	3-5	150-250	5-8	Fair	N
			Artocarpus heterophyllus	菠蘿蜜	Exotic	4-7	100-250	2-6	Fair	N
TCD 10	20	0.0122	Dimocarpus longan	龍眼	Exotic	4-5	130-150	3-4	Fair	N
TCB-10	20	0.0133	Ficus variegata	青果榕	Native	7-8	150-200	5-6	Fair	N
			Michelia x alba	白蘭	Exotic	7-8	150-200	5-6	Fair	N
			Eucalyptus citriodora	檸檬桉	Exotic	10-12	150-300	3-5	Fair	N
TCB-11	20	0.0476	Ficus altissima	高山榕	Exotic	3-7	100-200	2-4	Fair	N
			Ficus microcarpa	榕樹	Native	7-10	200-300	4-6	Fair	N
			Cinnamomum burmannii	陰香	Native	7-10	250-350	5-6	Fair	N
TCB-12	20	0.0613	Livistona chinensis	蒲葵	Exotic	5-7	200-250	3-4	Fair	N
	<u> </u>		Phoenix roebelenii	日本葵	Exotic	4-5	120-140	2-3	Fair	N

			Main Tre	e Species			Size of Tree			
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			Acacia confusa	台灣相思	Exotic	5-18	100-950	3-20	Fair-Poor	N
			Alangium chinense	八角楓	Native	5-12	100-200	2-6	Fair	N
			Aporusa dioica	銀柴	Native	3-15	100-300	2-8	Fair	N
			Aquilaria sinensis	土沉香	Native	6-12	100-250	2-4	Fair	Υ
			Bridelia tomentosa	土蜜樹	Native	4-10	100-200	2-5	Fair	N
			Celtis sinensis	朴樹	Native	4-15	100-350	2-10	Fair	N
			Cerbera manghas	海杧果	Native	5-10	120-150	2-4	Fair	N
			Clausena lansium	黄皮	Exotic	5-8	100-150	2-4	Fair	N
			Cratoxylum cochinchinense	黄牛木	Native	3-15	100-200	2-6	Fair	N
WNU-1	800	0.0559	Dimocarpus longan	龍眼	Exotic	4-12	100-800	2-8	Fair	N
VV IV O-1	800	0.0559	Litsea glutinosa	潺槁樹	Native	3-8	100-200	2-6	Fair	N
			Litsea rotundifolia var. oblongifolia	豺皮樟	Native	4-8	100-200	2-4	Fair	N
			Macaranga tanarius var. tomentosa	血桐	Native	3-12	100-300	2-8	Fair	N
			Mallotus paniculatus	白楸	Native	3-15	100-300	2-10	Fair	N
			Microcos nervosa	布渣葉	Native	3-12	100-450	2-10	Fair	N
			Schefflera heptaphylla	鵝掌柴	Native	3-15	100-800	2-8	Fair	N
			Sterculia lanceolata	假蘋婆	Native	5-15	100-250	2-8	Fair	N
			Tetradium glabrifolium	棟葉吳茱萸	Native	4-8	100-150	2-5	Fair	N
			Aporusa dioica	銀柴	Native	4-8	100-600	3-5	Fair	N
			Celtis sinensis	朴樹	Native	2-12	100-350	2-8	Fair	N
WNU-2	200	0.0553	Macaranga tanarius var. tomentosa	血桐	Native	4-6	100-250	3-8	Fair	N
			Mallotus paniculatus	白楸	Native	3-12	100-450	2-8	Fair	N
			Microcos nervosa	布渣葉	Native	3-8	100-300	2-8	Fair	N
			Schefflera heptaphylla	鵝掌柴	Native	3-10	100-550	2-6	Fair	N
			Acacia confusa	台灣相思	Exotic	6-12	200-600	4-10	Fair	N
			Celtis sinensis	朴樹	Native	3-12	100-350	3-8	Fair	N
WNU-3	50	0.0541	Macaranga tanarius var. tomentosa	血桐	Native	4-8	100-200	3-6	Fair	N
			Acacia auriculiformis	耳果相思	Exotic	5-8	150-200	5-6	Fair	N
,,,,,,,,,,		0.0046	Celtis sinensis	朴樹	Native	6-8	150-250	5-6	Fair	N
WNU-4	20	0.0246	Macaranga tanarius var. tomentosa	血桐	Native	3-5	120-150	4-6	Fair	N
			Litchi chinensis	荔枝	Exotic	3-5	100-120	2-4	Fair-Poor	N
WNU-5	20	0.0071	Dimocarpus longan	龍眼	Exotic	5-9	120-180	4-6	Fair-Poor	N
			Artocarpus heterophyllus	菠蘿蜜	Exotic	3-8	150-350	6-15	Fair-Poor	N
WNU-6	2	0.0220	Livistona chinensis	蒲葵	Exotic	3-4	200-250	2-3	Fair	N

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			Acacia confusa	台灣相思	Exotic	10-15	400-700	8-16	Fair	N
			Bridelia tomentosa	土蜜樹	Native	6-8	120-150	3-5	Fair	N
WNU-7	20	0.0043	Casuarina equisetifolia	木麻黄	Exotic	12-18	350-500	6-10	Fair	N
			Celtis sinensis	朴樹	Native	6-10	300-500	6-8	Fair	N
			Litsea monopetala	假柿木薑子	Native	7-9	250-350	6-8	Fair	N
			Acacia confusa	台灣相思	Exotic	6-9	150-500	6-8	Fair	N
			Artocarpus heterophyllus	菠蘿蜜	Exotic	6-8	150-350	4-8	Fair	N
			Clausena lansium	黄皮	Exotic	3-6	100-800	3-6	Fair	N
VA/NILL O	100	0.0176	Dimocarpus longan	龍眼	Exotic	4-8	120-500	4-8	Fair	N
WNU-8	100	0.0176	Eriobotrya japonica	枇杷	Exotic	4-6	120-200	4-6	Fair	N
			Litchi chinensis	荔枝	Exotic	3-6	100-200	3-6	Fair	N
			Macaranga tanarius var. tomentosa	血桐	Native	5-6	120-150	5-8	Fair	N
			Artocarpus heterophyllus	菠蘿蜜	Exotic	5-8	150-250	4-8	Fair	N
			Dimocarpus longan	龍眼	Exotic	4-8	100-500	4-8	Fair	N
WNU-9	80	0.0354	Litchi chinensis	荔枝	Exotic	3-6	100-150	3-5	Fair	N
			Macaranga tanarius var. tomentosa	血桐	Native	4-6	120-150	4-8	Fair	N
			Aporusa dioica	銀柴	Native	5-8	100-200	3-7	Fair	N
			Aquilaria sinensis	土沉香	Native	5-7	150-180	3-4	Fair	Υ
			Canthium dicoccum	魚骨木	Native	5-10	140-400	5-8	Fair	N
			Cratoxylum cochinchinense	黃牛木	Native	5-8	100-200	3-6	Fair	N
			Diospyros morrisiana	羅浮柿	Native	4-7	100-200	3-6	Fair	N
			Garcinia oblongifolia	嶺南山竹子	Native	3-10	100-300	3-10	Fair	N
FWSR-1	320	0.0236	Gmelina chinensis	石梓	Native	3-8	100-350	3-7	Fair	Υ
			Itea chinensis	老鼠刺	Native	3-10	100-200	2-6	Fair	N
			Litsea cubeba	木薑子	Native	5-8	100-130	3-5	Fair	N
			Pinus massoniana	馬尾松	Native	5-10	150-350	3-7	Fair	N
			Polyspora axillaris	大頭茶	Native	4-8	200-550	5-7	Fair	N
			Rhus succedanea	木蠟樹	Native	4-8	100-150	2-6	Fair	N
			Schefflera heptaphylla	鵝掌柴	Native	4-7	100-180	4-9	Fair	N
EVA/CD 2	20	0.0453	Pinus elliottii	濕地松	Exotic	7-12	120-250	3-6	Fair	N
FWSR-2	30	0.0152	Pinus massoniana	馬尾松	Native	4-5	150-250	5-6	Fair	N

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			Acacia confusa	台灣相思	Exotic	4-12	100-650	2-10	Fair	N
			Caryota mitis	短穗魚尾葵	Exotic	6-7	100-200	3-4	Fair	N
			Casuarina equisetifolia	木麻黄	Exotic	4-20	100-400	2-7	Fair	N
			Cinnamomum camphora	樟	Native	5-12	100-250	3-8	Fair	N
FWSR-3	180	0.0329	Cinnamomum parthenoxylon	黃樟	Native	5-10	150-250	3-7	Fair	N
			Leucaena leucocephala	銀合歡	Exotic	5-10	100-250	3-7	Fair	N
			Liquidambar formosana	楓香	Native	6-13	100-300	2-7	Fair	N
			Mallotus paniculatus	白楸	Native	5-10	100-350	3-7	Fair	N
			Pinus elliottii	濕地松	Exotic	5-12	100-250	2-5	Fair	N
			Acacia confusa	台灣相思	Exotic	5-12	100-500	3-10	Fair	N
			Casuarina equisetifolia	木麻黄	Exotic	6-20	100-450	3-10	Fair	N
ENACE A	140	0.0247	Eucalyptus sp.	按屬植物	Exotic	6-15	100-350	3-6	Fair	N
FWSR-4	110	0.0247	Liquidambar formosana	楓香	Native	4-10	100-200	2-5	Fair	N
			Pinus elliottii	濕地松	Exotic	4-15	100-250	2-8	Fair	N
			Pinus massoniana	馬尾松	Native	4-7	150-250	4-5	Fair	N
			Gmelina chinensis	石梓	Native	4-5	130-200	4-5	Fair	Υ
			Lophostemon confertus	紅膠木	Exotic	6-7	150-250	4-5	Fair	N
FWSR-5	40	0.0111	Mallotus paniculatus	白楸	Native	4-7	100-180	3-5	Fair	N
			Pinus massoniana	馬尾松	Native	4-7	100-250	2-6	Fair	N
			Pinus elliottii	濕地松	Exotic	4-8	100-250	3-6	Fair	N
FWSR-6	120	0.0423	Pinus massoniana	馬尾松	Native	4-8	100-250	3-6	Fair	N
			Adinandra millettii	黄瑞木	Native	4-13	100-250	3-6	Fair	N
			Aquilaria sinensis	土沉香	Native	12-13	150-200	4-5	Fair	Y
			Canthium dicoccum	魚骨木	Native	5-15	100-400	2-8	Fair	N
			Endospermum chinense	黄桐	Native	5-20	100-400	2-10	Fair	N
			Glochidion wrightii	白背算盤子	Native	4-10	100-150	3-6	Fair	N
			Gmelina chinensis	石梓	Native	4-15	100-250	3-6	Fair	Υ
FWSR-7	320	0.0423	Itea chinensis	老鼠刺	Native	3-12	100-400	2-8	Fair	N
			Litsea cubeba	木薑子	Native	5-8	100-250	2-5	Fair	N
			Lophostemon confertus	紅膠木	Exotic	4-8	100-200	2-6	Fair	N
			Pinus elliottii	濕地松	Exotic	6-9	100-300	2-5	Fair	N
			Pinus massoniana	馬尾松	Native	4-14	100-350	2-7	Fair	N
			Rhaphiolepis indica	石斑木	Native	2-8	100-250	2-7	Fair	N
			Schefflera heptaphylla	鵝掌柴	Native	4-10	100-200	2-8	Fair	N

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			Acacia auriculiformis	耳果相思	Exotic	4-15	100-500	2-10	Fair	N
			Acacia confusa	台灣相思	Exotic	5-15	100-350	4-15	Fair	N
			Albizia lebbeck	大葉合歡	Exotic	4-8	100-300	2-10	Fair	N
			Bauhinia sp.	羊蹄甲屬植物	Exotic	4-12	100-250	3-8	Fair	N
TCV-1	450	0.0732	Casuarina equisetifolia	木麻黄	Exotic	5-12	100-150	3-5	Fair	N
			Cinnamomum burmannii	陰香	Native	5-9	100-300	4-8	Fair	N
			Cinnamomum camphora	樟	Native	5-12	100-200	3-6	Fair-Poor	N
			Eucalyptus sp.	桉屬植物	Exotic	6-20	100-400	3-10	Fair	N
			Ficus microcarpa	榕樹	Native	4-12	100-200	2-6	Fair	N
			Cinnamomum burmannii	陰香	Native	7-9	150-300	5-8	Fair	N
TCV-2	20	0.0409	Livistona chinensis	蒲葵	Exotic	4-5	150-200	2-3	Fair	N
			Phoenix roebelenii	江邊刺葵	Exotic	3-4	100-120	1.5-2	Fair	N
			Acacia auriculiformis	耳果相思	Exotic	7-14	150-350	4-8	Fair	N
TCV-3	40	0.0535	Casuarina equisetifolia	木麻黄	Exotic	8-16	120-300	4-8	Fair	N
			Ficus microcarpa	榕樹	Native	5-12	200-350	4-8	Fair	N
			Acacia auriculiformis	耳果相思	Exotic	8-15	150-500	4-12	Fair	N
			Albizia lebbeck	大葉合歡	Exotic	9-10	150-200	4-5	Fair	N
TCV-4	20	0.0224	Cinnamomum camphora	樟	Native	9-12	150-500	6-8	Fair	N
1CV-4	20	0.0224	Ficus microcarpa	榕樹	Native	10-11	250-300	6-7	Fair	N
			Lophostemon confertus	紅膠木	Exotic	8-9	150-200	5-6	Fair	N
			Sapium sebiferum	烏桕	Native	9-10	150-200	5-6	Fair	N
			Acacia auriculiformis	耳果相思	Exotic	5-12	100-350	3-7	Fair	N
			Acacia confusa	台灣相思	Exotic	7-14	180-250	5-6	Fair	N
			Albizia lebbeck	大葉合歡	Exotic	6-10	100-300	3-8	Fair	N
TCV-5	160	0.0642	Bauhinia sp.	羊蹄甲屬植物	Exotic	2-8	100-200	3-9	Fair	N
ICV-5	100	0.0042	Cinnamomum burmannii	陰香	Native	4-10	100-350	2-7	Fair	N
			Cinnamomum camphora	樟	Native	5-8	100-180	3-5	Fair	N
			Eucalyptus sp.	桉屬植物	Exotic	7-16	100-350	3-7	Fair	N
			Ficus microcarpa	榕樹	Native	5-8	100-250	4-5	Fair	N
			Artocarpus heterophyllus	菠蘿蜜	Exotic	4-7	100-200	3-5	Fair	N
			Bauhinia sp.	羊蹄甲屬植物	Exotic	6-8	100-200	4-7	Fair	N
			Celtis sinensis	朴樹	Native	4-13	100-350	2-8	Fair	N
			Citrus maxima	柚	Exotic	5-10	120-250	4-6	Fair	N
			Dimocarpus longan	龍眼	Exotic	4-10	100-250	3-7	Fair	N
TCV-6	250	0.0397	Ficus microcarpa	榕樹	Native	10-11	600-800	10-15	Fair	N
			Leucaena leucocephala	銀合歡	Exotic	6-12	100-350	2-8	Fair-Poor	N
			Litchi chinensis	荔枝	Exotic	4-8	100-180	2-6	Fair	N
			Macaranga tanarius var. tomentosa	血桐	Native	4-8	100-150	3-7	Fair	N
			Mallotus paniculatus	白楸	Native	4-10	100-250	3-5	Fair	N

			Main Tr	ee Species			Size of Tree			
Tree Group Reference No.	Estimated No. of Trees	Density (Estimated No. of Trees/m ²)	Scientific Name	Common Chinese Name	Species Origin	Range of Height (m)	Range of Trunk Diameter (mm)	Range of Crown Spread (mm)	General Health Condition (Good/Fair/Poor)	Protected / Rare Tree Species (Y/N)
			Acacia auriculiformis	耳果相思	Exotic	9-10	200-250	6-8	Fair	N
			Cerbera manghas	海杧果	Native	3-7	100-300	2-6	Fair	N
			Dimocarpus longan	龍眼	Exotic	5-7	100-150	3-5	Fair	N
TCV-7	60	0.0132	Ficus microcarpa	榕樹	Native	8-9	500-700	10-12	Fair	N
			Leucaena leucocephala	銀合歡	Exotic	5-9	100-200	3-7	Fair	N
			Litchi chinensis	荔枝	Exotic	4-6	100-200	4-5	Fair	N
			Psidium guajava	番石榴	Exotic	2-7	100-350	2-7	Fair-Poor	N
			Artocarpus heterophyllus	菠蘿蜜	Exotic	5-7	150-200	4-5	Fair	N
			Celtis sinensis	朴樹	Native	3-8	100-1100	3-9	Fair	N
			Dimocarpus longan	龍眼	Exotic	4-7	150-350	2-6	Fair	N
TCV-8	50	0.0114	Litchi chinensis	荔枝	Exotic	4-6	100-200	3-5	Fair	N
			Litsea glutinosa	潺槁樹	Native	3-6	100-150	3-5	Fair	N
			Melia azedarach	苦楝	Exotic	7-9	250-450	5-6	Fair	N
			Morus alba	桑	Native	5-7	150-250	4-6	Fair	N
			Acacia auriculiformis	耳果相思	Exotic	5-10	100-200	3-6	Fair	N
			Aquilaria sinensis	土沉香	Native	6-7	100-120	3-4	Fair	Υ
			Artocarpus heterophyllus	菠蘿蜜	Exotic	4-12	100-650	2-7	Fair	N
TCV 0	050	0.0555	Bridelia tomentosa	土蜜樹	Native	4-9	100-300	3-6	Fair	N
TCV-9	850	0.0555	Celtis sinensis	朴樹	Native	4-15	100-950	2-12	Fair	N
			Clausena lansium	黄皮	Exotic	3-8	100-250	2-8	Fair	N
			Dimocarpus longan	龍眼	Exotic	3-12	100-400	2-10	Fair	N
			Litchi chinensis	荔枝	Exotic	3-8	100-250	2-8	Fair	N
			Acacia auriculiformis	耳果相思	Exotic	6-12	100-350	3-7	Fair	N
			Aquilaria sinensis	土沉香	Native	3-7	100-150	3-5	Fair	Υ
			Artocarpus heterophyllus	菠蘿蜜	Exotic	4-10	100-250	2-7	Fair	N
			Bridelia tomentosa	土蜜樹	Native	4-10	100-350	2-8	Fair	N
			Celtis sinensis	朴樹	Native	6-12	120-500	4-10	Fair	N
TCV-10	1200	0.0472	Clausena lansium	黄皮	Exotic	4-8	100-350	2-8	Fair	N
			Dimocarpus longan	龍眼	Exotic	4-12	100-500	2-12	Fair	N
			Litchi chinensis	荔枝	Exotic	3-12	100-200	2-7	Fair	N
			Litsea glutinosa	潺槁樹	Native	3-10	100-500	2-12	Fair	N
			Mallotus paniculatus	白楸	Native	3-10	100-400	2-10	Fair	N
			Microcos nervosa	破布葉	Native	5-10	100-350	4-6	Fair	N
			Acacia auriculiformis	耳果相思	Exotic	5-10	100-300	4-8	Fair	N
TO / 44	430	0.000=	Dimocarpus longan	龍眼	Exotic	4-5	100-200	3-5	Fair-Poor	N
TCV-11	130	0.0097	Hibiscus tiliaceus	黄槿	Native	2-5	100-250	4-7	Fair	N
			Litchi chinensis	荔枝	Exotic	3-8	100-250	2-8	Fair	N

			Main Tr	ee Species			Size of Tree			
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			Aquilaria sinensis	土沉香	Native	4-8	100-250	2-6	Fair	Υ
			Artocarpus heterophyllus	菠蘿蜜	Exotic	4-12	100-350	2-6	Fair	N
			Celtis sinensis	朴樹	Native	4-15	100-850	3-10	Fair	N
			Citrus maxima	柚	Exotic	4-12	100-200	2-6	Fair	N
			Clausena lansium	黄皮	Exotic	4-8	100-200	3-5	Fair	N
TCV-12	1550	0.0399	Dimocarpus longan	龍眼	Exotic	3-12	100-850	2-10	Fair	N
			Litchi chinensis	荔枝	Exotic	2-12	100-300	2-8	Fair	N
			Macaranga tanarius var. tomentosa	血桐	Native	5-12	150-350	4-10	Fair	N
			Mallotus paniculatus	白楸	Native	3-15	100-450	2-10	Fair	N
			Mangifera indica	杧果	Exotic	4-12	100-350	2-6	Fair	N
			Alangium chinense	八角楓	Native	5-12	100-200	2-6	Fair	N
			Aporusa dioica	銀柴	Native	4-12	100-350	2-6	Fair	N
TO V. 40	460		Aquilaria sinensis	土沉香	Native	6-8	100-160	3-6	Fair	Υ
TCV-13	460	0.0325	Dimocarpus longan	龍眼	Exotic	4-12	100-550	2-10	Fair-Poor	N
			Litchi chinensis	荔枝	Exotic	3-15	100-500	2-12	Fair	N
			Mallotus paniculatus	白楸	Native	4-13	100-550	3-10	Fair	N
			Alangium chinense	八角楓	Native	5-12	100-200	2-6	Fair	N
			Aporusa dioica	銀柴	Native	3-8	100-250	2-8	Fair	N
			Celtis sinensis	朴樹	Native	4-12	100-400	3-10	Fair	N
			Cleistocalyx nervosum	水翁	Native	6-13	100-500	6-12	Fair	N
			Litsea glutinosa	潺槁樹	Native	6-8	100-300	6-10	Fair	N
TCV-14	1000	0.0266	Litsea monopetala	假柿木薑子	Native	6-12	100-500	6-12	Fair	N
			Macaranga tanarius var. tomentosa	血桐	Native	5-12	150-350	4-10	Fair	N
			Mallotus paniculatus	白楸	Native	5-10	100-350	4-10	Fair	N
			Schefflera heptaphylla	鵝掌柴	Native	5-12	100-500	5-12	Fair	N
			Sterculia lanceolata	假蘋婆	Native	5-8	100-250	4-8	Fair	N
			Artocarpus heterophyllus	菠蘿蜜	Exotic	4-10	100-250	2-7	Fair	N
			Clausena lansium	黄皮	Exotic	2-6	100-200	2-6	Fair	N
TCV-15	130	0.0280	Dimocarpus longan	龍眼	Exotic	3-8	100-300	2-7	Fair	N
		Ī	Litchi chinensis	荔枝	Exotic	2-7	100-200	2-6	Fair	N
			Mallotus paniculatus	白楸	Native	5-10	100-250	4-10	Fair	N

			Main Tr	ee Species			Size of Tree			
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			Alangium chinense	八角楓	Native	4-7	100-200	4-6	Fair	N
			Aporusa dioica	銀柴	Native	5-8	100-250	3-6	Fair	N
			Celtis sinensis	朴樹	Native	6-12	100-600	6-10	Fair	N
			Litsea glutinosa	潺槁樹	Native	6-12	100-300	6-10	Fair	N
TCV-16	30	0.0044	Litsea monopetala	假柿木薑子	Native	6-12	100-500	6-12	Fair	N
			Macaranga tanarius var. tomentosa	血桐	Native	4-8	100-200	3-6	Fair	N
			Mallotus paniculatus	白楸	Native	5-10	100-350	3-7	Fair	N
			Syzygium jambos	蒲桃	Exotic	5-10	100-350	6-10	Fair	N
			Aporusa dioica	銀柴	Native	3-8	100-250	2-8	Fair	N
			Bridelia tomentosa	土蜜樹	Native	4-10	100-350	2-8	Fair	N
			Celtis sinensis	朴樹	Native	6-12	120-500	4-10	Fair	N
			Cratoxylum cochinchinense	黄牛木	Native	5-8	100-250	3-6	Fair	N
TC) / 4.7	000	0.0404	Litsea glutinosa	潺槁樹	Native	3-6	100-150	3-5	Fair	N
TCV-17	800	0.0184	Macaranga tanarius var. tomentosa	血桐	Native	6-10	100-300	5-8	Fair	N
			Mallotus paniculatus	白楸	Native	6-10	100-300	6-10	Fair	N
			Schefflera heptaphylla	鵝掌柴	Native	5-12	100-400	5-10	Fair	N
			Sterculia lanceolata	假蘋婆	Native	4-6	100-250	3-6	Fair	N
			Bischofia javanica	秋楓	Native	8-10	100-400	6-10	Fair	N
			Celtis sinensis	朴樹	Native	6-12	120-500	4-10	Fair	N
			Cleistocalyx nervosum	水翁	Native	6-15	100-500	6-12	Fair	N
TC) / 40	60	0.0202	Dimocarpus longan	龍眼	Exotic	4-10	100-450	5-8	Fai	N
TCV-18	60	0.0292	Ficus microcarpa	榕樹	Native	5-15	100-500	5-12	Fair	N
			Litsea glutinosa	潺槁樹	Native	3-6	100-150	3-5	Fair	N
			Mallotus paniculatus	白楸	Native	4-8	100-350	4-8	Fair	N
			Syzygium jambos	蒲桃	Exotic	4-7	100-300	4-8	Fair	N
			Bischofia javanica	秋楓	Native	6-15	100-400	6-14	Fair	N
			Cleistocalyx nervosum	水翁	Native	6-15	100-500	6-12	Fair	N
TCV 40	00	0.0444	Celtis sinensis	朴樹	Native	6-12	100-500	6-10	Fair	N
TCV-19	80	0.0411	Litsea glutinosa	潺槁樹	Native	6-12	100-300	6-10	Fair	N
			Litsea monopetala	假柿木薑子	Native	6-12	100-500	6-12	Fair	N
			Syzygium jambos	蒲桃	Exotic	5-10	100-350	6-10	Fair	N

	1		Main Tre	ee Species			Size of Tree			
Tree Group Reference No.	Estimated No. of Trees	Density (Estimated No. of Trees/m ²)	Scientific Name	Common Chinese Name	Species Origin	Range of Height (m)	Range of Trunk Diameter (mm)	Range of Crown Spread (mm)	General Health Condition (Good/Fair/Poor)	Protected / Rare Tree Species (Y/N)
			Alangium chinense	八角楓	Native	4-8	100-200	3-6	Fair	N
			Celtis sinensis	朴樹	Native	4-10	100-150	3-6	Fair	N
			Cratoxylum cochinchinense	黃牛木	Native	4-7	100-250	3-6	Fair	N
			Litsea glutinosa	潺槁樹	Native	4-8	100-300	3-5	Fair	N
			Litsea monopetala	假柿木薑子	Native	4-8	100-350	4-8	Fair	N
TCV-20	520	0.0297	Macaranga tanarius var. tomentosa	血桐	Native	4-8	100-200	3-6	Fair	N
			Mallotus paniculatus	白楸	Native	5-10	100-350	3-7	Fair	N
			Schefflera heptaphylla	鵝掌柴	Native	6-8	100-400	5-8	Fair	N
			Sterculia lanceolata	假蘋婆	Native	4-6	100-250	4-7	Fair	N
			Syzygium jambos	蒲桃	Exotic	4-7	100-300	4-8	Fair	N
			Artocarpus heterophyllus	菠蘿蜜	Exotic	4-12	100-350	2-8	Fair	N
			Bridelia tomentosa	土蜜樹	Native	4-9	100-200	3-6	Fair	N
			Celtis sinensis	朴樹	Native	4-15	100-500	3-12	Fair	N
TCV-21	340	0.0233	Clausena lansium	黄皮	Exotic	3-8	100-250	3-8	Fair	N
1CV-21	340	0.0233	Dimocarpus longan	龍眼	Exotic	3-12	100-350	5-10	Fair	N
			Litchi chinensis	荔枝	Exotic	3-8	100-250	3-8	Fair	N
			Macaranga tanarius var. tomentosa	血桐	Native	4-8	100-200	3-8	Fair	N
			Acacia auriculiformis	耳果相思	Exotic	4-8	150-300	4-6	Fair	N
			Acacia confusa	台灣相思	Exotic	4-10	150-350	3-8	Fair	N
			Celtis sinensis	朴樹	Native	4-10	100-150	3-6	Fair	N
			Litsea glutinosa	潺槁樹	Native	4-8	100-300	3-5	Fair	N
			Litsea monopetala	假柿木薑子	Native	4-8	100-350	4-8	Fair	N
TCV-22	340	0.0323	Macaranga tanarius var. tomentosa	血桐	Native	4-8	100-200	3-6	Fair	N
			Mallotus paniculatus	白楸	Native	5-10	100-350	3-7	Fair	N
			Rhus succedanea	木蠟樹	Native	4-7	100-250	4-6	Fair	N
			Schefflera heptaphylla	鵝掌柴	Native	6-8	100-400	5-8	Fair	N
			Sterculia lanceolata	假蘋婆	Native	4-6	100-250	4-7	Fair	N
			Syzygium jambos	蒲桃	Exotic	4-7	100-300	4-8	Fair	N
			Bischofia javanica	秋楓	Native	6-15	100-600	6-14	Fair	N
			Cleistocalyx nervosum	水翁	Native	6-15	100-500	6-12	Fair	N
			Celtis sinensis	朴樹	Native	6-12	100-600	6-10	Fair	N
TCV-23	140	0.0300	Litsea glutinosa	潺槁樹	Native	6-12	100-300	6-10	Fair	N
			Litsea monopetala	假柿木薑子	Native	6-12	100-500	6-12	Fair	N
			Dimocarpus longan	龍眼	Exotic	6-12	100-350	5-10	Fair	N
			Syzygium jambos	蒲桃	Exotic	5-10	100-350	6-10	Fair	N

			Main Tre	ee Species			Size of Tree			
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			Artocarpus heterophyllus	菠蘿蜜	Exotic	4-12	100-350	2-8	Fair	N
			Celtis sinensis	朴樹	Native	4-15	100-500	3-10	Fair	N
			Citrus maxima	柚	Exotic	4-12	100-200	2-6	Fair	N
			Clausena lansium	黄皮	Exotic	4-8	100-200	3-6	Fair	N
TCV-24	480	0.0105	Dimocarpus longan	龍眼	Exotic	3-12	100-300	3-10	Fair	N
100-24	400	0.0103	Litchi chinensis	荔枝	Exotic	2-12	100-300	2-8	Fair	N
			Macaranga tanarius var. tomentosa	血桐	Native	5-12	150-350	4-10	Fair	N
			Mallotus paniculatus	白楸	Native	3-25	100-450	2-10	Fair	N
			Mangifera indica	杧果	Exotic	4-12	100-350	2-6	Fair	N
			Artocarpus heterophyllus	菠蘿蜜	Exotic	4-7	100-200	3-5	Fair	N
			Celtis sinensis	朴樹	Native	4-13	100-350	2-8	Fair	N
			Cleistocalyx nervosum	水翁	Native	6-10	200-400	6-10	Fair	N
TCV-25	300	0.0175	Dimocarpus longan	龍眼	Exotic	4-10	100-250	3-7	Fair	N
			Macaranga tanarius var. tomentosa	血桐	Native	4-8	100-150	3-7	Fair	N
			Mallotus paniculatus	白楸	Native	4-10	100-250	3-5	Fair	N
			Acacia auriculiformis	耳果相思	Exotic	4-8	150-300	4-6	Fair	N
			Acacia confusa	台灣相思	Exotic	4-10	150-350	3-8	Fair	N
			Acacia mangium	大葉相思	Exotic	5-10	150-350	5-8	Fair	N
TCV-26	220	0.0245	Celtis sinensis	朴樹	Native	4-6	100-150	3-6	Fair	N
			Macaranga tanarius var. tomentosa	血桐	Native	4-6	100-200	3-8	Fair	N
			Mallotus paniculatus	白楸	Native	4-10	100-200	3-6	Fair	N
			Artocarpus heterophyllus	菠蘿蜜	Exotic	4-7	100-200	3-5	Fair	N
			Celtis sinensis	朴樹	Native	4-10	100-350	2-8	Fair	N
			Citrus maxima	柚	Exotic	5-6	120-200	4-6	Fair	N
TCV-27	1100	0.0506	Dimocarpus longan	龍眼	Exotic	4-8	100-250	3-8	Fair	N
			Litchi chinensis	荔枝	Exotic	4-8	100-250	2-7	Fair	N
			Macaranga tanarius var. tomentosa	血桐	Native	4-8	100-200	3-7	Fair	N
			Celtis sinensis	朴樹	Native	4-15	100-450	4-10	Fair	N
			Dimocarpus longan	龍眼	Exotic	3-12	100-400	3-10	Fair	N
TCV-28	40	0.0191	Macaranga tanarius var. tomentosa	血桐	Native	5-12	150-350	4-10	Fair	N
			Mallotus paniculatus	白楸	Native	3-25	100-300	2-10	Fair	N

			Main Tro	ee Species			Size of Tree			
Tree Group Reference No.	Estimated No. of Trees	Density (Estimated No. of Trees/m ²)	Scientific Name	Common Chinese Name	Species Origin	Range of Height (m)	Range of Trunk Diameter (mm)	Range of Crown Spread (mm)	General Health Condition (Good/Fair/Poor)	Protected / Rare Tree Species (Y/N)
			Artocarpus heterophyllus	菠蘿蜜	Exotic	4-12	100-350	2-6	Fair	N
			Celtis sinensis	朴樹	Native	4-15	100-400	3-10	Fair	N
			Citrus maxima	柚	Exotic	4-12	100-200	2-6	Fair	N
			Clausena lansium	黄皮	Exotic	4-8	100-200	3-5	Fair	N
TCV-29	1720	0.0526	Dimocarpus longan	龍眼	Exotic	3-12	100-350	2-10	Fair	N
100-29	1/20	0.0320	Litchi chinensis	荔枝	Exotic	2-12	100-250	2-8	Fair	N
			Macaranga tanarius var. tomentosa	血桐	Native	5-12	150-350	4-10	Fair	N
			Mallotus paniculatus	白楸	Native	3-25	100-400	2-10	Fair	N
			Mangifera indica	杧果	Exotic	4-12	100-300	2-6	Fair	N
			Celtis sinensis	朴樹	Native	4-15	100-300	3-10	Fair	N
			Dimocarpus longan	龍眼	Exotic	3-12	100-250	2-8	Fair	N
TC) / 20	1100	0.0530	Litchi chinensis	荔枝	Exotic	2-12	100-200	2-7	Fair	N
TCV-30	1100	0.0520	Macaranga tanarius var. tomentosa	血桐	Native	5-12	150-300	4-8	Fair	N
			Mallotus paniculatus	白楸	Native	3-25	100-250	2-8	Fair	N
			Dimocarpus longan	龍眼	Exotic	3-12	100-850	2-10	Fair	N
TCV-31	180	0.0889	Litchi chinensis	荔枝	Exotic	2-12	100-300	2-8	Fair	N
1CV-31	180	0.0889	Macaranga tanarius var. tomentosa	血桐	Native	5-12	150-350	4-10	Fair	N
			Acacia auriculiformis	耳果相思	Exotic	4-8	150-300	4-6	Fair	N
			Acacia confusa	台灣相思	Exotic	4-10	150-350	3-8	Fair	N
TCV-32	100	0.0257	Bridelia tomentosa	土蜜樹	Native	3-5	100-120	2-5	Fair	N
1CV-32	100	0.0237	Celtis sinensis	朴樹	Native	4-6	100-150	3-6	Fair	N
			Macaranga tanarius var. tomentosa	血桐	Native	4-6	100-200	3-8	Fair	N
			Artocarpus heterophyllus	菠蘿蜜	Exotic	4-12	100-350	2-6	Fair	N
			Celtis sinensis	朴樹	Native	4-15	100-850	3-10	Fair	N
			Citrus maxima	柚	Exotic	4-12	100-200	2-6	Fair	N
			Clausena lansium	黄皮	Exotic	4-8	100-200	3-5	Fair	N
TCV-33	200	0.0129	Dimocarpus longan	龍眼	Exotic	3-12	100-850	2-10	Fair	N
			Litchi chinensis	荔枝	Exotic	2-12	100-300	2-8	Fair	N
			Macaranga tanarius var. tomentosa	血桐	Native	5-12	150-350	4-10	Fair	N
			Mangifera indica	杧果	Exotic	4-12	100-350	2-6	Fair	N
TCV-34	60	0.0438	Acacia confusa	台灣相思	Exotic	5-10	150-400	3-8	Fair	N

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Tree Group Reference No.	Estimated No. of Trees	Density (Estimated No. of Trees/m ²)	Main Tree Species			Size of Tree				
			Scientific Name	Common Chinese Name	Species Origin	Range of Height (m)	Range of Trunk Diameter (mm)	Range of Crown Spread (mm)	General Health Condition (Good/Fair/Poor)	Protected / Rare Tree Species (Y/N)
TCV-35	780	0.0140	Acacia auriculiformis	耳果相思	Exotic	5-12	150-400	3-8	Fair	N
			Acacia confusa	台灣相思	Exotic	5-10	150-500	3-8	Fair	N
			Acacia mangium	大葉相思	Exotic	5-10	150-350	5-8	Fair	N
			Bauhinia sp.	羊蹄甲屬植物	Exotic	4-12	100-250	3-8	Fair	N
			Bridelia tomentosa	土蜜樹	Native	4-6	100-150	3-6	Fair	N
			Cleistocalyx nervosum	水翁	Native	6-10	100-400	6-10	Fair	N
			Ficus hispida	對葉榕	Native	4-8	100-200	3-6	Fair	N
			Ficus variegata	青果榕	Native	5-8	100-250	3-6	Fair	N
			Macaranga tanarius var. tomentosa	血桐	Native	4-8	100-250	3-7	Fair	N
			Mallotus paniculatus	白楸	Native	4-10	100-200	3-6	Fair	N
			Eucalyptus robusta	大葉桉	Exotic	6-20	100-400	3-8	Fair	N
TCV-36	300	0.0248	Acacia mangium	大葉相思	Exotic	5-10	150-300	5-8	Fair	N
			Celtis sinensis	朴樹	Native	4-8	100-250	4-6	Fair	N
			Macaranga tanarius var. tomentosa	血桐	Native	4-8	100-200	3-6	Fair	N
			Mallotus paniculatus	白楸	Native	5-10	100-350	3-7	Fair	N
			Eucalyptus robusta	大葉桉	Exotic	6-15	100-400	3-8	Fair	N