香港青年協會
the hongkong federation of youth groups

Phase III Redevelopment of The Hong Kong Federation of Youth Groups Jockey Club Sai Kung Outdoor Training Camp

On-Site Compensatory Woodland Planting Plan (Amended)

September 2013







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1. INTRODUCTION

1.1.1 An Environmental Impact Assessment (EIA) has been conducted for the construction and operation of the Project, namely "Phase III Redevelopment of The Hong Kong Federation of Youth Groups Jockey Club Sai Kung Outdoor Training Camp" (hereinafter referred to as "the Project"). The Project Proponent is the Hong Kong Federation of Youth Groups (HKFYG). The EIA was approved in December 2010 and the Environmental Permit (EP) is issued in January 2011.

1.1.2 According to the EIA and EM&A Manual, the ecological impacts included loss of 0.01 ha of mangroves, loss of 0.31 ha of woodland and associated vegetation, and potential impacts to 8 nos. of a protected tree species *Aquilaria sinensis*. Mitigation measures included compensatory mangrove and woodland planting, and tree transplantation. Compensatory mangrove planting of 0.01 ha of Kandelia droppers will be implemented along the intertidal zone at the camp site. Compensatory woodland planting will include mainly native tree and shrub species which are present in the existing habitats and are valuable to wildlife. Due to limited space within the Project site, in addition to on-site (about 0.03 ha) compensatory woodland planting, off-site (about 0.8 ha at Lui Ta Shek, Sai Kung West Country Park) compensatory woodland planting were also proposed, both to be implemented by a qualified landscape contractor appointed by the Project Proponent. Of the 8 no. of *Aquilaria sinensis* recorded within the site formation boundary, 3 will be retained and 5 will be transplanted.

1.1.3 According to the EP Condition 3.3 for Ecological Preservation and Compensation Measures, the Permit Holder (HKFYG) shall, at least one month before any compensatory planting, submit 3 hard copies and one electronic copy of the detailed Planting Plan including details such as location, maintenance requirement and programme, of the tree transplanting, compensatory mangrove and woodland planting to the Director for approval. The Mangrove Planting Plan was submitted to EPD in 11 March 2011 and was approved in 23 March 2011. Mangrove planting was implemented in April 2011. The Tree Protection and Transplanting Plan & The Whip Planting Plan (Off-site Compensatory Woodland Planting Plan) at Lui Ta Shek, Sai Kung West Country Park was submitted to EPD on 14 March and 27 April 2011 and was approved on 30 May 2011. Planting at Lui Tak Shek was implemented in June 2011 and June 2013, while tree transplantation was completed in March 2012. The On-site Compensatory Woodland Planting Plan was first submitted to EPD on 11 September 2012 and was approved on 14 September 2012. The approved schedule of drawings is attached in **Appendix 1**.

1.1.4 The approved plan shows three woodland planting areas (Area A, area B and Area C) with a total of 0.07 ha. This exceeds the area (0.03 ha) identified during the EIA stage because the Project Proponent would like to promote nature conservation and plant as many native tree species as possible on-site. During the construction phase, the consultant team and the contractor have made effort to reduce the extent of temporary works area and retain as many trees as possible. The site formation area was therefore further minimised. The overall woodland loss remained the same, but more individual trees have been retained on site. Given the above, the area and location available for on-site woodland compensatory planting was adjusted accordingly. For example, Area A (241m^2) is the slope behind the temporary access road formed during construction phase. Since no slope cutting was required during the formation of the access road, the trees on the slope were not affected, and the area is

therefore not available for planting. Area B (227m^2) was planned for formation of an on-grade temporary access road to the dormitory site, and site formation work was expected. However, the consultant team and the contractor decided to construct a temporary steel bridge instead for access. Extent of site formation was therefore reduced. The site was reinstated with no-fine concrete to meet the slope safety requirement, and therefore is not available for planting. However, we have made the efforts to identify two other new locations on site suitable for woodland planting. Area C (254m^2) is retained for on-site woodland compensatory planting as in the approved plan, with only slight variation in size (from 254m^2 to 264m^2) after reinstatement. The purpose of this submission is to present the amended On-site Compensatory Woodland Planting Plan. The amended schedule of drawings is attached in **Appendix 2**.

2. ON-SITE COMPENSATORY WOODLAND PLANTING PLAN

2.1 Planting Locations and Materials

2.1.1 Three locations with a total area of about 0.05 ha will be designated for on-site compensatory woodland planting areas (shown as the hatched areas designated for tree whip plantings (DRG. NOs. AT3-PP-01.4C-5C(EPD) in **Appendix 2**). About 245 no. of native tree whips including *Castanopsis fissa, Litsea glutinosa, Reevesia thyrsoidea, Sterculia lanceolata, Schefflera heptaphylla, Machilus breviflora, Sapium discolor* will be planted at 1.5 m spacing in these areas.

2.1.2 The total area for on-site compensatory woodland planting (0.05 ha) still exceeds the area (0.03 ha) identified in the approved EM&A Manual and therefore fulfills the EIAO requirement.

2.2 Planting Programme

2.2.1 As site formation and slope stabilization work was completed, it is anticipated that the planting works will be implemented immediately upon approval of the amended plan and tentatively be completed by October 2013.

3. MONITORING

3.1.1 Monthly site inspection will be carried out for the first three month after planting and quarterly thereafter for two years. Survival and growth of representative species should be observed and recorded with photo records. The results of compensatory woodland planting monitoring will be included in the EM&A reports which will be verified by the Independent Environmental Checker (IEC).

3.1.2 According to the EM&A manual, should non-compliance of the ecological impacts occur, actions in accordance with the action plan stated in **Table 1** below should be carried out.

Table 1*
Event and Action Plan for Ecological Impact - Construction Phase

Action Level	Environmental Team (ET) Leader	Independent Environmental Checker (IEC)	Camp operator/ Landscape Contractor
Poor survival or health of woodland planting	1. Identify source 2. Inform the IEC 3. Discuss remedial actions with the IEC and Landscape Contractor 4. Monitor remedial actions until rectification has been completed	1. Check report 2. Discuss with the Landscape Contractor on possible remedial measures 4. Advise the Landscape Contractor on effectiveness of proposed remedial measures	1. Amend maintenance programme and replant as necessary

* extracted from Table 5.1 of the EM&A Manual.

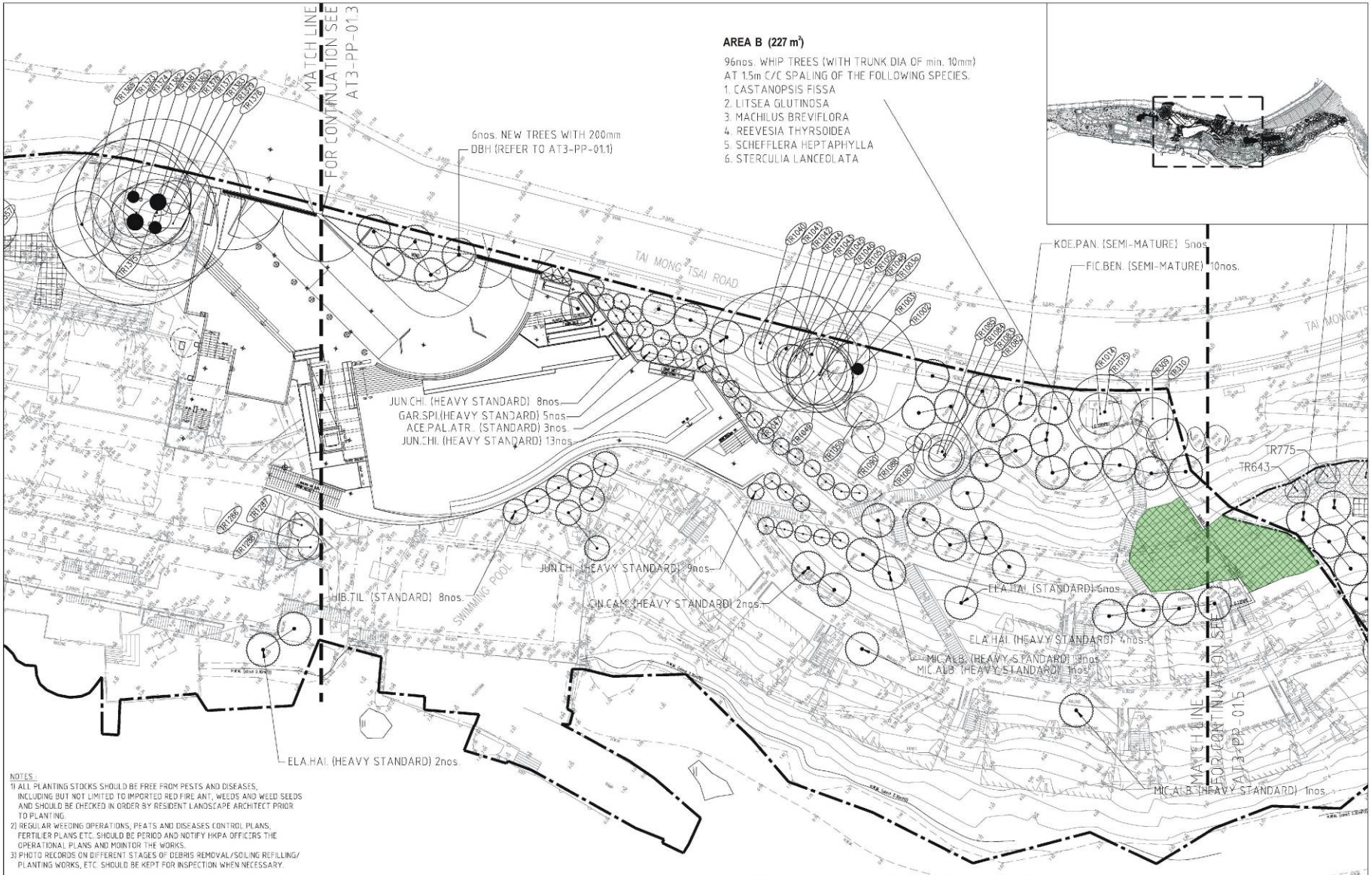
4. CONCLUSION

4.1.1 Upon approval of the amended on-site compensatory woodland planting plan, implementation of the planting and monitoring will be documented accordingly in the monthly environmental and monitoring reports.

Appendix 1

Approved On-Site Compensatory Woodland Planting Plan
- Schedule of Drawings (Approved by EPD on 14 September 2012)





NOTES :
1) ALL PLANTING STOCKS SHOULD BE FREE FROM PESTS AND DISEASES, INCLUDING BUT NOT LIMITED TO IMPORTED RED FIRE ANT, WEEDS AND WEED SEEDS AND SHOULD BE CHECKED IN ORDER BY RESIDENT LANDSCAPE ARCHITECT PRIOR TO PLANTING.
2) REGULAR WEEDING OPERATIONS, PEATS AND DISEASES CONTROL PLANS, FERTILIER PLANS ETC. SHOULD BE PERIOD AND NOTIFY HKPA OFFICERS THE OPERATIONAL PLANS AND MOINTOR THE WORKS.
3) PHOTO RECORDS ON DIFFERENT STAGES OF DEBRIS REMOVAL/SOILING REFILLING/ PLANTING WORKS, ETC. SHOULD BE KEPT FOR INSPECTION WHEN NECESSARY.

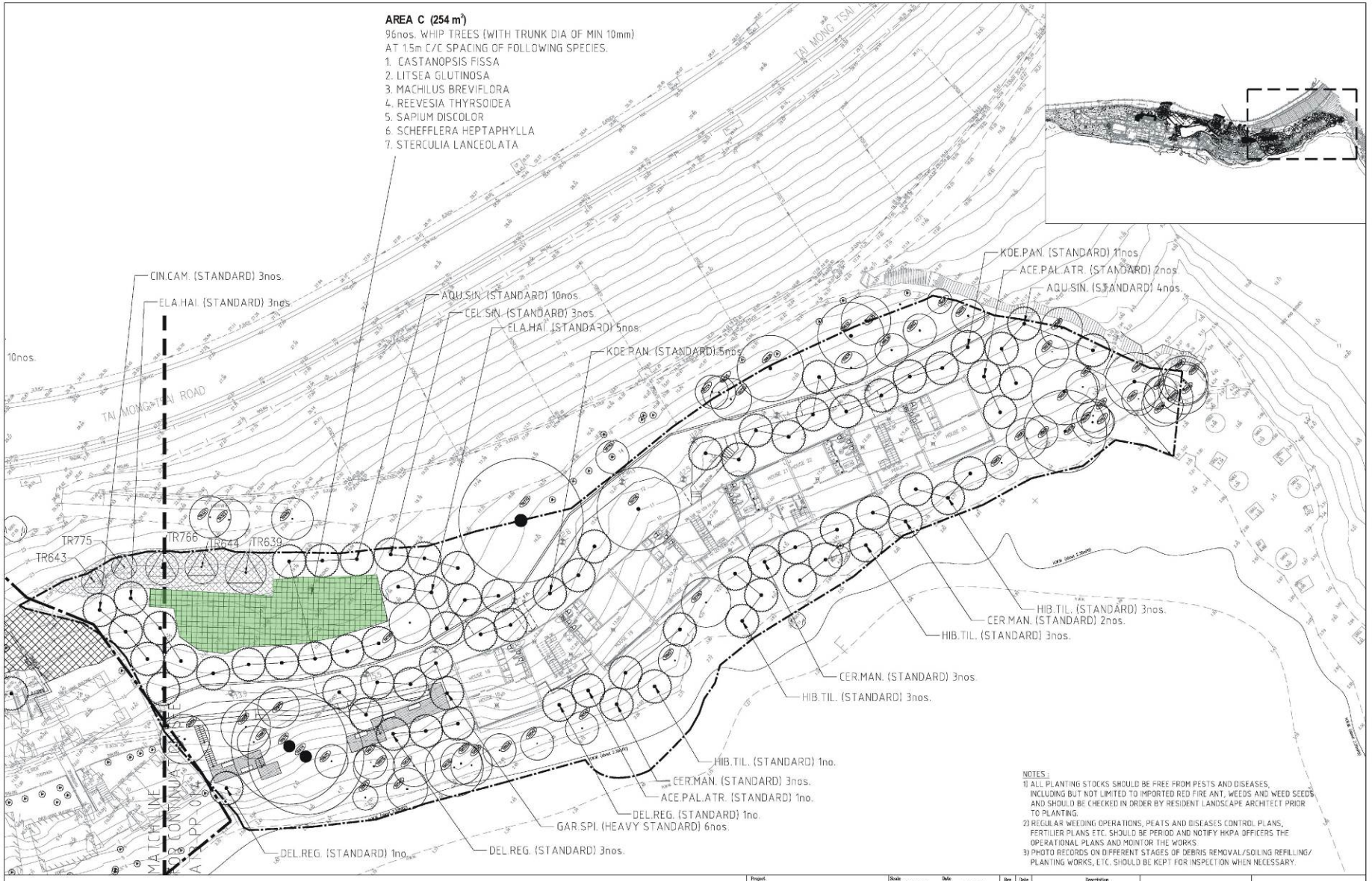
on-site compensatory woodland planting

Project: PROPOSED REDEVELOPMENT OF H.K.F.Y.G. TAI MONG TSAI OUTDOOR TRAINING CAMP PHASE III TAI MONG TSAI ROAD, SAI KUNG	Scale: 1:200 A1	Date: MAY 2012	Rev.	Date	Description
	B.D. Ref. No.:	BD 2 /9215/09			
	FPB Ref. No.:	FTP8/2057			
Drawing Title: TREE PLANTING PLAN CANTEEN BLOCK 1	Project No.: 05916	Drawn by:			
	Drawing No.: AT3-PP-01.46	Checked by: KN	A	JUL'12	GENERAL REVISION

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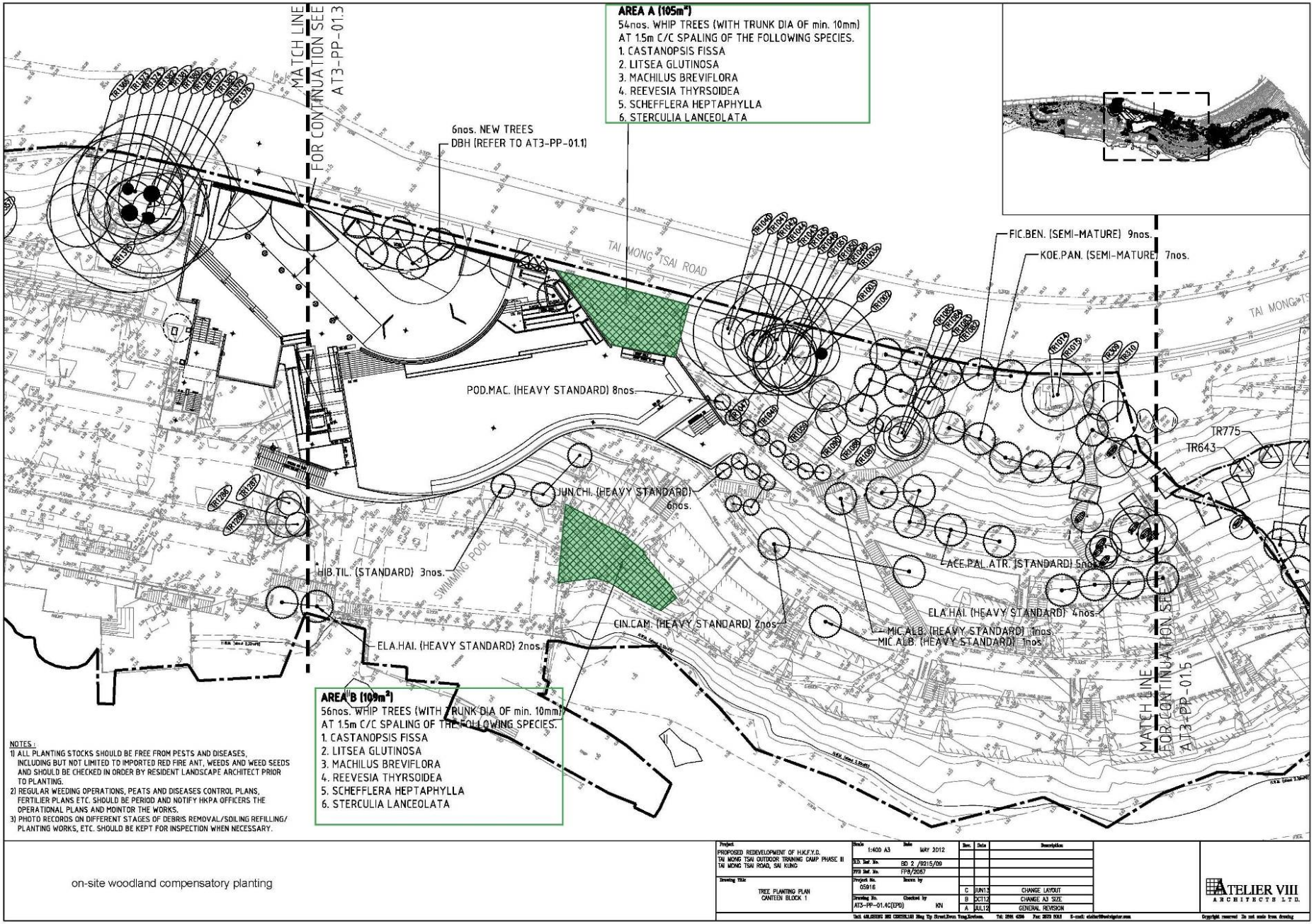

AREA C (254 m²)
96nos. WHIP TREES (WITH TRUNK DIA OF MIN 10mm)
AT 1.5m C/C SPACING OF FOLLOWING SPECIES.
1. CASTANOPSIS FISSA
2. LITSEA GLUTINOSA
3. MACHILUS BREVIFLORA
4. REEVESIA THYRSOIDEA
5. SAPIUM DISCOLOR
6. SCHEFFLERA HEPTAPHYLLA
7. STERCULIA LANCEOLATA
TAI MONG TSAI ROAD
CIN.CAM. (STANDARD) 3nos.
ELA.HAI. (STANDARD) 3nos.
AQU.SIN. (STANDARD) 10nos.
CEL.SIN. (STANDARD) 3nos.
ELA.HAI. (STANDARD) 5nos.
KOE.PAN. (STANDARD) 5nos.
10nos.
TAI MONG TSAI ROAD
TR775
TR643
TR766
TR644
TR639
KOE.PAN. (STANDARD) 1nos.
ACE.PAL.ATR. (STANDARD) 2nos.
AQU.SIN. (STANDARD) 4nos.
HIB.TIL. (STANDARD) 3nos.
CER.MAN. (STANDARD) 2nos.
HIB.TIL. (STANDARD) 3nos.
CER.MAN. (STANDARD) 3nos.
HIB.TIL. (STANDARD) 3nos.
HIB.TIL. (STANDARD) 1no.
CER.MAN. (STANDARD) 3nos.
ACE.PAL.ATR. (STANDARD) 1no.
DEL.REG. (STANDARD) 1no.
GAR.SPI. (HEAVY STANDARD) 6nos.
DEL.REG. (STANDARD) 1no.
DEL.REG. (STANDARD) 3nos.
MATCH LINE
APP. OF
NOTES :
1) ALL PLANTING STOCKS SHOULD BE FREE FROM PESTS AND DISEASES, INCLUDING BUT NOT LIMITED TO IMPORTED RED FIRE ANT, WEEDS AND WEED SEEDS AND SHOULD BE CHECKED IN ORDER BY RESIDENT LANDSCAPE ARCHITECT PRIOR TO PLANTING.
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on-site compensatory woodland planting
Project
PROPOSED REDEVELOPMENT OF H.K.F.Y.G.
TAI MONG TSAI OUTDOOR TRAINING CAMP PHASE II
TAI MONG TSAI ROAD, SAI KUNG
Drawing Title
TREE PLANTING PLAN
(DORMITORY AREA)
Scale 1:200 A1
Date JUN 2012
H.D. Ref. No. BD 2 /9215/09
FVR Ref. No. FP8/2067
Project No. 05916
Drawn by
Drawing No. A13-PP-01.SA
Checked by KN
Rev. Date Description
A JUL12 GENERAL REVISION
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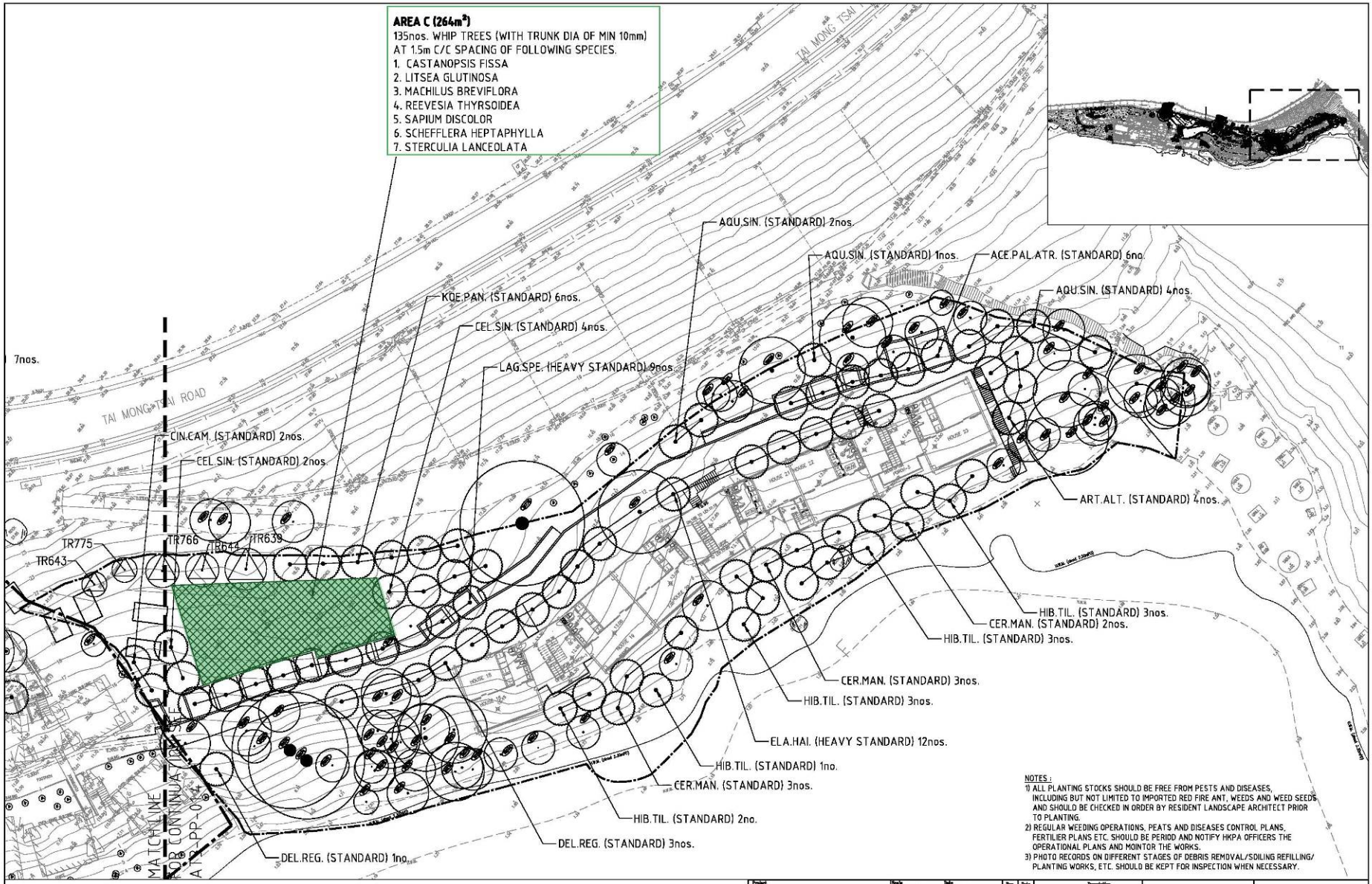
Tree Whip Planting Schedule

Type	Botanical Name	Chinese Name	Standard	Spacing	QUANTITY
CAS. FIS.	CASTANOPSIS FISSA	裂斗錐栗	TREE WHIP MIN 10MM TRUNK DIAMETER	1.5M C/C	30
MAC. BRE.	MACHILUS BREVIFLORA	短花楠	TREE WHIP MIN 10MM TRUNK DIAMETER	1.5M C/C	60
LIT. GLU.	LITSEA GLUTINOSA	潺槁樹	TREE WHIP MIN 10MM TRUNK DIAMETER	1.5M C/C	59
REE. THY.	REEVESIA THYRSOIDEA	梭羅樹	TREE WHIP MIN 10MM TRUNK DIAMETER	1.5M C/C	29
SAP. DIS.	SAPIUM DISCOLOR	山烏桕	TREE WHIP MIN 10MM TRUNK DIAMETER	1.5M C/C	14
STE. LAN.	STERCULIA LANCEOLATA	假蘋婆	TREE WHIP MIN 10MM TRUNK DIAMETER	1.5M C/C	60
SCH. HEP.	SCHEFFLERA HEPTAPHYLLA	鴨腳木	TREE WHIP MIN 10MM TRUNK DIAMETER	1.5M C/C	60

Appendix 2

Amended On-Site Compensatory Woodland Planting Plan
- Schedule of Drawings




AREA C (264m²)
135nos. WHIP TREES (WITH TRUNK DIA OF MIN 10mm)
AT 1.5m C/C SPACING OF FOLLOWING SPECIES.
1. CASTANOPSIS FISSA
2. LITSEA GLUTINOSA
3. MACHILUS BREVIFLORA
4. REEVESIA THYRSOIDEA
5. SAPIUM DISCOLOR
6. SCHEFFLERA HEPTAPHYLLA
7. STERCULIA LANCEOLATA
TAI MONG TSAI
TAI MONG TSAI ROAD
7nos.
AQU.SIN. (STANDARD) 2nos.
AQU.SIN. (STANDARD) 1nos.
ACE.PAL.ATR. (STANDARD) 6no.
AQU.SIN. (STANDARD) 4nos.
KOE.PAN. (STANDARD) 6nos.
CEL.SIN. (STANDARD) 4nos.
LAG.SPE. (HEAVY STANDARD) 9nos.
CIN.CAM. (STANDARD) 2nos.
CEL.SIN. (STANDARD) 2nos.
TR775
TR643
TR766
TR644
TR639
ART.ALT. (STANDARD) 4nos.
HIB.TIL. (STANDARD) 3nos.
CER.MAN. (STANDARD) 2nos.
HIB.TIL. (STANDARD) 3nos.
CER.MAN. (STANDARD) 3nos.
HIB.TIL. (STANDARD) 3nos.
ELA.HAI. (HEAVY STANDARD) 12nos.
HIB.TIL. (STANDARD) 1no.
CER.MAN. (STANDARD) 3nos.
HIB.TIL. (STANDARD) 2no.
DEL.REG. (STANDARD) 3nos.
DEL.REG. (STANDARD) 1no.
MATCHLINE FOR CONTINUATION OF A1 PP-014
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Drawing Title
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(DORMITORY AREA)
Scale 1:400 A3
Date JUN 2012
B.D. Ref. No. BD 2 /0215/09
PFR Ref. No. FPR/2067
Project No. 05918
Drawn by
Drawing No. A13-PP-01.SC(EPD)
Checked by KN
Rev. Date Description
C JUN13 CHANGE LAYOUT
B OCT12 CHANGE A3 SIZE
A JUL12 GENERAL REVISION
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Tree Whip Planting Schedule

Type	Botanical Name	Chinese Name	Standard	Spacing	QUANTITY
CAS. FIS.	CASTANOPSIS FISSA	裂斗錐粟	TREE WHIP MIN 10MM TRUNK DIAMETER	1.5M C/C	39
MAC. BRE.	MACHILUS BREVIFLORA	短花楠	TREE WHIP MIN 10MM TRUNK DIAMETER	1.5M C/C	39
LIT. GLU.	LITSEA GLUTINOSA	潺槁樹	TREE WHIP MIN 10MM TRUNK DIAMETER	1.5M C/C	37
REE. THY.	REEVESIA THYRSOIDEA	梭羅樹	TREE WHIP MIN 10MM TRUNK DIAMETER	1.5M C/C	37
SAP. DIS.	SAPIUM DISCOLOR	山烏桕	TREE WHIP MIN 10MM TRUNK DIAMETER	1.5M C/C	19
STE. LAN.	STERCULIA LANCEOLATA	假蘋婆	TREE WHIP MIN 10MM TRUNK DIAMETER	1.5M C/C	37
SCH. HEP.	SCHEFFLERA HEPTAPHYLLA	鴨腳木	TREE WHIP MIN 10MM TRUNK DIAMETER	1.5M C/C	37