地政總署
建議移除位於般咸道
香港大學鄧志昂樓前兩株大樹

背景

在 2015 年年中，香港大學(下稱「港大」)、中西區區議會議員及一些市民對兩株位於般咸道的榕樹之安全表達關注。該兩株事涉樹木為細葉榕(又稱榕樹，拉丁學名為 *Ficus microcarpa*)生長於港大鄧志昂樓斜坡入口牌坊(下稱「牌坊」)兩旁的般咸道行人道旁(T1 及 T2)，位於未批租和未撥用政府土地(下稱「政府土地」)上(請參看附件一)。地政總署隨即委派樹木保養承辦商的合資格樹藝師到場進行樹木風險評估，觀察結果如下：

(i) 兩株榕樹樹身向般咸道方向傾斜(T1 及 T2 分別傾斜 30 度及 15 度)；
(ii) 兩株榕樹健康情況差，葉片稀疏，活樹冠比例偏低及樹冠不對稱；
(iii) 兩株榕樹的根部均被擠壓於狹窄的行人路上，部分樹根外露並纏繞在相鄰的矮牆上；
(iv) 榕樹(T1)上發現樹洞(約 30x 30 x 20 厘米)，樹洞中央有明顯內部腐爛跡象；及
(v) 另一株榕樹(T2) 上發現樹洞(約 50 x 30 x 20 厘米) ，的樹基上亦發現真菌子實體，顯示受到真菌感染，影響該樹的結構。

2. 基於以上觀察結果，報告認為該兩株榕樹的健康及結構情況甚差，有關評估經地政總署樹木組(下稱「樹木組」)專業人員確認。由於兩株榕樹位處的般咸道行人路狹窄，鄰近住宅、學校，附近交通繁忙，人流眾多，兩株榕樹對公眾安全構成風險，樹木組認同報告建議移除兩樹是最適當的方法。

3. 有關議題在中西區區議會 2015 年 8 月 27 日舉行的非正式會議上討論。與會議員在聽取地政總署報告後，建議地政總署先研究安裝鋼索穩定樹木的可行性，再決定是否移除兩樹。

跟進工作

(a) 樹的護養

4. 在上述中西區區議會非正式會議後，地政總署進行了下列工作：

(i) 樹木組在過去兩年持續監察兩株榕樹及委託專業樹藝師進行風險評估，確定樹木健康狀況甚差，一直按需要進行適當的護養工作，包括於 2015 年 9 月為兩株榕樹進行了適當的修剪以減輕兩樹樹冠的負重，並移除受真菌感染部位；

(ii) 向有關工程部門徵詢鋼索加固工程的方法。由於鋼索落腳點將會位於港大校園內，地政總署已徵詢港大意見；及

(iii) 地政總署與中西區民政事務處及港大代表到現場勘察，確認事涉兩株榕樹對附近交通及行人構成危險。而港大亦指出兩株榕樹相鄰的矮牆為鄧志昂樓建築的一部分，估計與主樓同期建成，而鄧志昂樓外部亦已被古物古蹟辦事處被鑑定為法定古蹟，所以保育矮牆是移除建議中的其中一個重要考慮。

(b) 兩樹生長的石牆狀況

5. 在使用鄧志昂樓斜坡作為鋼索支點方面，港大指出有關斜坡屬香港鐵路保護區 (Railway Protection Area)，可作支點位置有限。而港大也委任了註冊土力工程師跟進兩樹生長的石牆，留意到該矮牆的原來設計及結構沒有考慮容許樹木生長及承受其現時重量，矮牆向般咸道方向傾斜，而且情況不斷加劇(顯示最多有 17 厘米的移位)。另外，由於榕樹樹根已纏繞牆身，校方難以修復已經傾斜及牆身受損的矮牆。基於以上考慮，即在沒有任何可行的改善措施的情況下，認為矮牆和兩樹實在難以共同保存。

安全風險評估及建議

6. 由於被榕樹樹根纏繞的矮牆向般咸道行人路傾斜，就現場所見，牆身已凸起及出現多條裂縫。矮牆確實有明顯的倒塌危險。當暴雨時，大量雨水可能會把榕樹樹根附近的泥土經矮牆牆身的裂縫沖走，令榕樹失去底部支撐，造成倒塌。如在這情況下，就算已經為兩株榕樹安裝鋼索，這只會為榕樹提供一些額外支撐及減低榕樹直接向般咸道塌下，但不能排除樹和矮牆一起倒塌的機會。因此，為事涉兩株榕樹安裝鋼索並不能排除兩樹和矮牆一起倒塌的風險。

7. 自 2015 年 8 月區議會特別會議後，地政總署每 6 個月委派樹藝師為兩株榕樹進行樹木風險評估。樹藝師於 2017 年 12 月的風險評估報告(附件二)指出事涉兩樹的健康及結構問題並無改善，兩樹樹幹向般咸道傾斜情況持續，兩樹整棵倒塌的可能性被評為高，有緊急及明顯的風險。而兩樹對附近民居及行人的危害指數兩年間由 10 升至 11（指數最高為 12）。由於探討過安放支撐架鞏固樹幹、建立鋼索的可行性及樹木修剪等措施均未能減低兩樹和矮牆一起倒塌的風險，而兩株榕樹的健康狀況已甚差，樹木組認為搬移兩樹的方案並不可行。地政總署已諮詢了發展局樹木管理辦事處的意見，在別無選擇的情況下，建議盡快移除事涉兩株榕樹以保障公眾安全。

跟進工作

8. 地政總署會就移除事涉兩株榕樹的建議，聯絡有關持份者包括附近學校及居民、港大及中西區區議會等，收集各持份者的意見。

9. 地政總署與運輸署和警務處現正就移除事涉兩株榕樹對交通的影響及臨時封路措施的安排進行研究(附件三)。地政總署亦會在擬定移除樹木的日期後，預先通知毗鄰的學校及居民。

10. 因附近山坡仍有大量植物，移除該兩株健康及結構情況欠佳的榕樹對該地點的綠化環境影響不大。因為上址的般咸道行人道狹窄，人流及車流量高，故此不宜在原址重新種植其他樹木，移除該兩株榕樹所剩餘的空間會很快被附近樹木的樹冠覆蓋。

11. 在矮牆保育方面，港大將於移除事涉兩株榕樹的工程後，對有關矮牆進行復修工作，以保育有關的歷史建築。

徵詢意見

12. 地政總署歡迎各位議員就上述移除樹木建議提供寶貴意見。

地政總署
2018 年 5 月

TREE CONTRACT PLAN

附件一

Date: 24-Nov-2017 13:59:50
LAO, Land and Vegetation Contract Management Section (TW Office)
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SCALE 1:1000

Sheet Number
11-SW-7B
11-SW-7D

This Tree Contract Plan shows the approximate boundaries of land holdings, registered slopes of SMRIS and right of ways. The information indicated thereon may not be up-to-date and exhaustive. It is for identification purpose only. The information shown may be amended without prior notification as better or new information becomes available. Reproduction by PERMISSION only.

T1 - 位於牌坊右方的榕樹
T2 - 位於牌坊左方的榕樹

T1：位於牌坊右方的榕樹	T2：位於牌坊左方的榕樹

Tree Management Information System (TMIS) 樹木管理資訊系統
Tree Risk Assessment Form 2 - Individual Tree
樹木風險評估表格2：個別樹木

Please enable macro before using this workbook
請於填寫表格前啟用巨集
(Please save this workbook as xls format)

附件二

General Information基本資料

Dept. 部門/ Agency 機構:	LandsD	Inspection officer 巡查人員:	Wong Sze Ming	Post職位:	Certified Arborist
File Ref. 檔案編號:	T1	Endorsement Officer 覆核人員:	Cheung Shiu Bun, Steward	Post職位:	Qualified Arborist
Date of Inspection (dd/mm/yyyy) 巡查日期:	09/12/2017	Last Inspection Date (dd/mm/yyyy)上次巡查日期:			
Agency 機構/ Project 工程/ Contract No. 合約編號:					
Tree Risk Management Zone 樹木風險管理地點類別:	○ category I	○ category II	○ category III		
Inspection Frequency巡查週期:					

Location Information 位置資料

Tree ID (Dept. Ref.) 樹木編號(部門參考)	T1	Tree Species 樹木品種:	Ficus microcarpa 榕樹(細葉榕)		
Master Zone Departmental Ref. 主區編號:					
Sub Zone Departmental Ref. 副區編號:					
English Location 英文地點:	Near the Tang Chi Ngong Gate, the University of Hong Kong, Bonham Road, H.K. Island(adjacent to Bonham Tower)				
Chinese Location 中文地點:	香港島般咸道香港大學近鄧志昂樓閘口(般含閣 隔鄰)				
Nearby Utility Post No 就近公用設施編號:	Lamp post no. 32312				
Coordinates 座標 * (HK1980 GRID)	Northing 坐標北 (Y)	816130	Easting 坐標東 (X)	832477	
Is the tree on Tree Register? 是否樹木登記冊內樹木?	☐ Yes 是		Is the tree a Stone Wall Tree? 是否石牆樹?	☐ Yes 是	
Tree Register No. 樹木登記冊號碼:			OVT No. 古樹名木:		
TRIAGE Classification 分流等級	☐ Yes 是	☐ No 否	Black 黑 ☐	Red 紅 ☐	Yellow 黃 ☐

Location Types 地點類別: (multiple answers allowed 可選多於一項):

- ☑ Roadside ~~Landscaped Area~~ 路旁綠化地區
- ☐ Public Park/Recreation Venue公園/康樂場地
- ☐ Remote Countryside偏遠郊區
- ☐ Vacant Government Land政府空置土地
- ☐ Others (please specify)其他 (請說明):
- ☐ Central Divider中央分隔帶
- ☑ Unallocated Government Land未撥用的政府土地
- ☐ Recreational Site/Facilities inside Country Park 郊野公園內康樂用地或設施
- ☐ SIMAR Slopes系統性鑑辨維修責任的斜坡
- ☐ Tree Pit樹穴
- ☐ Village Environs鄉村範圍

No. of Tree Trunk(s) (#) 主幹數目(#):	1	DBH of tree trunk(s)(mm) (1.3m above soil level) 每枝主幹胸徑(毫米) (離地面1.3米)	#1	#2	#3	#4	#5	Aggregated DBH (mm) 總胸徑(毫米): 870
			870					
Tree Height(m)樹高(米):	22.0		Tree Spread(m) 樹冠闊度(米):					10.0
Age class 樹齡組別:	○ Young幼	○ Mature成熟	◉ Senescent衰老					

GENERAL CONDITION 基本狀況

Foliage density葉片密度:
○ Normal 正常
◉ Sparse 稀疏

Foliage colour葉片顏色
◉ Normal 正常
○ Chlorotic 萎黃
○ Brown (signs of wilting) 褐色 (呈現枯萎徵狀)

Leaf Size 葉片大小
◉ Normal 正常
○ Abnormal 不正常

Epicormics 水橫枝:
◉ Yes是 ○ No否
(please specify the location and severity 請說明位置及嚴重程度)

Trunk — Low 輕度嚴重(L)

Tree vigor芭壯程度:
○ Good 好
○ Average 良
◉ Poor 差

Lean 傾斜
◉ Yes是 ○ No否
Angle of lean from vertical
傾斜角度 30
○ Natural due to phototropism/ self – corrected 趨光性或已自然修正
◉ ~~Recently tilted~~/Unstable root- plate 新近傾斜/根基不穩

Soil cracks or cracks in structure(s) behind lean
有土壤裂縫或裂縫處於傾斜部位背後:
◉ Yes是 ○ No否

CROWN CONDITION 樹冠狀況 — **Severity of Defects 嚴重程度:**

Heavy crown load 樹冠負荷太重:
○ Yes是 ◉ No否

Live crown ratio 活冠比:
(foliage canopy / total height of tree)
有葉的樹冠 / 樹高
○ Low 低 < 40%
◉ Medium 中 40 - 70%
○ High 高 > 70%

Dieback twigs枯枝:
◉ <5% crown 樹冠
○ 5 - 20% crown 樹冠
○ 21 - 50% crown 樹冠
○ >50% crown 樹冠

Crown reduced/excessively thinned/ topped/ pollarded:
樹冠大幅減少 或削頂 或截頭
◉ Yes是 ○ No否 — Moderate 中度嚴重 (M)

Asymmetric tree canopy
樹冠不對稱：
◉ Yes是 ○ No否 — Moderate 中度嚴重(M

Signs of pests and disease
呈現病蟲害徵狀:
○ Yes是 ◉ No否
(If yes please specify type 如有請說明種類)

Others *(please specify)*:
其他*(請說明)*

BRANCH CONDITION 枝幹狀況 — **Severity of Defects 嚴重程度:**
(multiple answers allowed 可選多於一項):

- ☐ Co-dominant branches等勢枝
- ☐ Included bark 內夾樹皮
- ☐ Cavities樹洞
- ☐ Cracks/splits 裂縫/裂開
- ☑ Wounds/Mechanical injury 明顯傷痕/機械破損 — Insignificant 不嚴重(O)
- ☐ Dead branches/Hangers 枯死/懸吊斷枝
- ☑ Crooks/abrupt bends 不常規彎曲 — Moderate 中度嚴重(M)
- ☐ Cross branches 疊枝
- ☐ Heavy lateral limb 重側枝
- ☐ Lion's tailing獅尾 *(excessive end weight on branch 枝端過重)*
- ☐ Bleeding/sap flow滲液

Parasitic/Epiphytic plants
寄生/附生植物
○ Yes是 ◉ No否
(If yes please specify type
如有請說明種類)

Signs of pests and disease
呈現病蟲害徵狀:
○ Yes是 ◉ No否
(If yes please specify type 如有請說明種類)

Others *(please specify)*:
其他*(請說明)*

TRUNK CONDITION 主幹狀況 *(multiple answers allowed 可選多於一項)*	Severity of Defects 嚴重程度
☑ #1 Decay/Cavity * 腐爛/樹洞(open 可見的) Length長: 300 (mm) Width 闊: 300 (mm) Depth 深: 250 (mm)	Moderate 中度嚴重(M)
☐ #2 Decay/Cavity * 腐爛/樹洞(open 可見的) Length長: (mm) Width 闊: (mm) Depth 深: (mm)	
☐ #3 Decay/Cavity * 腐爛/樹洞(open 可見的) Length長: (mm) Width 闊: (mm) Depth 深: (mm)	
☐ Poor taper不良漸尖生長	
☐ Codominant trunks等勢幹	
☐ Included bark 內夾樹皮	
☐ Cracks/splits 裂縫或裂開	
☐ Abnormal bark crack 不尋常樹皮裂縫	
☑ Bulge腫脹	Insignificant 不嚴重(O)
☐ Fungal fruiting bodies 呈現菌類子實體	
☐ Exposed dead wood 枯幹外露	
☑ Wounds/Mechanical injury明顯傷痕/機械破損	Insignificant 不嚴重(O)
☐ Large wound/ crack/ decay on circumference 大範圍破損或裂縫或腐爛	
☐ Bleeding /Sap flow 滲液	
Signs of pests and disease呈現病蟲害徵狀: ○ Yes 是 ◉ No 否 *(If yes, please specify type 如有，請說明種類)*	
Others *(please specify)*: 其他*(請說明)*	

ROOT CONDITION 根部狀況 *(multiple answers allowed 可選多於一項)*	Severity of Defects 嚴重程度
☑ Root flare/collar not visible 根脊不現	Insignificant 不嚴重(O)
☐ Root rot根部腐壞	
☐ Cracks/splits裂縫或裂開	
☑ Cut/pruned roots 根部經切割或截根	Insignificant 不嚴重(O)
☐ Fungal fruiting bodies 呈現菌類子實體	
☐ Dead surface roots 根部枯萎	
☑ Exposed root根部外露	Insignificant 不嚴重(O)
☐ Mechanical injury機械破損	
☐ Termites/borers injury 白蟻或蛀心蟲蛀蝕	
☑ Root-plate movement 根基移位	Moderate 中度嚴重(M)
☑ Girdling roots纏繞根	Moderate 中度嚴重(M)
Rooting area restricted 根部伸展範圍受限制: ◉ Yes是 ○ No 否 *(If yes pls specify type 如有請說明)* ☐ Drain 渠道 ☑ Footpath/pavement行人道 ☐ Road curb路肩 ☑ Retaining structure 護土結構 ☑ Footings or railings 地基或欄杆 Others *(please specify)*: ☑ 其他*(請說明)* Cracks on the retaining structure and planter	Moderate 中度嚴重(M)
Signs of pests and disease呈現病蟲害徵狀: ○ Yes是 ◉ No 否 *(If yes, please specify type 如有，請說明種類)*	
Others *(please specify)*: 其他*(請說明)*	

SITE CONDITION 樹木生長環境 *(multiple answers allowed 可選多於一項)*
Site disturbed by construction activities 鄰近環境受工程影響: ☐ Road widening道路擴寬 ☐ Drain replacement渠道重鋪 ☐ Soil grade reduce/ increase 地表上升或下降 ☐ Site clearing地盤平整活動 ☐ Soil heaving 土壤脹起 ☐ Laying of new footpath 鋪設行人道 ☐ Laying of underground utilities 鋪設地下設施 ☐ New flower beds/ new lawn below tree在樹下加建花圃/草坪 ☐ Others*(specify)* 其他*(請說明)*
Soil condition 土壤情況 ☐ Sandy 沙質 ☐ Clay 黏土 ☐ Water logging 積水 ☑ Soil compaction 土壤被擠壓
(restricted root growth area inside dripline 於滴水線範圍內有障礙物限制根部延伸) ◉ Yes是 ○ No 否 ○ < 25% ○ 26-50% ◉ 51-75% ○ >75%
Width of Planting area 種植面範圍 ○ < 1.2m ◉ 1.3- 2m ○ 2.1- 3m ○ 3.1- 4m ○ > 4m
Tree location with exposure to wind 樹木所在地點的受風情況: ☐ Single tree單獨一棵 ☐ Tree with emergent canopy 樹冠層以上 ☑ Edge of a group of trees 樹群邊緣 ☐ Recently exposed新近暴露
Others *(please specify)*: 其他*(請說明)*

* Please specify the location and aspect of Decay/Cavity in section of Tree Photos or Comments (e.g. Location of Decay/Cavity with height above ground level and aspect of Decay/Cavity opening)
請於樹木相片或評註部分詳細說明腐爛/樹洞的位置及方位例：腐爛/樹洞離地距離及腐爛/樹洞開口面向的方向

TARGET (people or property potentially affected by tree/branch failure) 目標 (因樹木/枝幹倒下而致可能受影響的人或財產):

Use under tree 在樹下之用途: *(multiple answers allowed 可選多於一項)*:
☑ Building 建築物 ☐ Parking 停車位 ☑ Traffic 交通 ☑ Recreation 康樂
☐ Gathering point聚集地點 ☑ Pedestrians 行人道 ☐ Hardscape園藝景觀裝置
☐ Others 其他 *(please specify 請說明)*:

Can target be moved能否移除目標? ○ Yes 是 ◉ No否

Can use of site be restricted可否限制場地的使用? ○ Yes 是 ◉ No否

Frequency of use of location 使用該地點的頻密程度:
○ Occasional use偶爾使用 ○ Intermittent use間歇使用 ○ Frequent use經常使用 ◉ Constant use恆常使用

HAZARD RATING 危害評估:

Tree or part likely to fall 樹木或枝條有可能倒下
○ Trunk 樹幹 ○ Branch/limb枝幹 ◉ Whole 整棵

(Choose ONE option that is most likely to fall For more than one option with risk imposed fro public safety, please elaborate in "Comments"
選出最有可能倒下的一個選項。就其他對公眾安全構成風險的選項，請在"評註"詳述。)

Failure Potential + Size of Part + Target Rating = Hazard Rating
倒塌可能 + 部位大小 + 目標評估 = 危害評估

3 + 4 + 4 = 11

Failure potential倒下的可能性:
○ 1=low 低 ○ 2=medium中 ◉ 3=high 高 ○ 4=severe 極高

Size of part 部位大小:
○ 1= < 150mm
○ 2= 150 - 450mm
○ 3= 451 - 750mm
◉ 4= > 750mm

Target rating目標評估:
○ 1 – occasional use 偶爾使用
○ 2 – intermittent use 間歇使用
○ 3 – frequent use 經常使用
◉ 4 – constant use 恆常使用

REMEDIAL/RISK MITIGATION MEASURES
風險緩減措施 *(can tick more than one 可選多於一項)*:

☐ Remedial/Risk Mitigation measures taken.
已施行的風險緩減措施 *(please specify 請說明)*: _____

☑ Remedial/Risk Mitigation measures proposed to be taken as specified below:
將會施行以下所指明的風險緩減措施：

☐ Pruning修剪:
- ☐ Remove defective parts 移去有缺陷部份
- ☐ Crown thinning 疏減樹冠
- ☐ Crown raising提升樹冠
- ☐ Crown cleaning 清理樹冠
- ☐ Remove stub移去殘端部份
- ☐ Crown reduction縮減樹冠

☑ Tree Removal移除樹木:

☐ Cabling/Bracing/Propping 安裝纜索或支撐物:

☐ Move Target 移走目標:

☐ Restrict use within fall zone
限制可能發生樹木倒下或枝條斷裂的範圍使用

☐ Pest/ disease control控制病蟲害:

☐ Needs further inspection within____months
需於_____個月內再次檢查樹木 [ ] Month

(please specify 請說明): _____

	Anticipated Date of Completion 預計完成日期(dd/mm/yyyy)	Date of Completion 完成日期(dd/mm/yyyy)
Date:		
Date:	31/12/2017	
Date:		
Date:		
Date:		
Date:		

Comments 評註:

At the time of inspection, T1 had poor health since sparse foliage density was observed. Structurally, the tree was leaning at about 30 degree with unstable root-plate towards the Bonham Road and the tendency of trunk growth was conflicting with the pedestrians.Restricted by the pavement, retaining structure and footing/railings, the rooting condtions were very unfavorable. Girdling root was observed and therefore, the tree was structurally weak. The root spread on mansory wall was surface attachment only and with unknown amount of root penetration to the slope behind. The surface area of the retaining wall for tree anchorage was small and therefore, the wall may also fails when T1 fails or vice versa (overall failure). The mode of failure will be simialr to the one failed at slope no. 11SW-A/R577 at Bonham Road on 22 July 2015.Cracks were observed on the retaining structure and planter behind which may be caused by the root-plate movement of the T1. In the short term, additional structural support such as cabling and wiring, metallic framework are highly recommended to stablize the tree. However, there are site constraint of limited space for additional structural support at the slope side. In the long term,the failure potential of T1 is high due to its weak structure which pose risk to the buildings, traffic and the pedestrains and thus, tree removal is recommended.

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(Maximum 20 attachments and total 40MB allowed 最多可容納20個附件並合計不多於40MB)
Attachment: 附件 (Please double click the yellow area to get the related file 請雙擊黃色部份並選取相關附件)

Site Plan 場地平面圖 — Add Site Plan | Delete Site Plan
(At least 1 Site Plan is provide 最少提供一個場地平面圖)
1
Description 說明:

Tree Photo 樹木相片 — Add Tree Photo | Delete Tree Photo
(At least 1 Tree Photo is provide 最少提供一個樹木相片)
1 Attach_20171124142805.pdf
Description 說明: Photo record of T1

Resistograph Chart 微鑽阻力測試 — Add Resistograph Chart | Delete Resistograph Chart
1
Description 說明:

Tomograph 聲納圖像 — Add Tomography | Delete Tomography
1
Description 說明:

Other Attachments 其他附件 (Please specific 請註明) — Add Others | Delete Others
1
Subject Title 標題:
Description 說明:

Note:
Please read in conjunction with TMO's Guidelines on Tree Risk Assessment and Management Arrangement and relevant Technical Circulars promulgated on Development Bureau website www.trees.gov.hk

請參閱發展局網頁www.trees.gov.hk 樹木管理辦事處的樹木風險評估安排及管理指引及相關技術通告

Tree Management Information System (TMIS) 樹木管理資訊系統

Tree Risk Assessment Form 2 - Individual Tree

樹木風險評估表格2：個別樹木

Please enable macro before using this workbook
請於填寫表格前啟用巨集

(Please save this workbook as xls format)

General Information基本資料

Dept. 部門/ Agency 機構:	LandsD	Inspection officer 巡查人員:	Wong Sze Ming	Post職位:	Certified Arborist
File Ref. 檔案編號:	T2	Endorsement Officer 覆核人員:	Cheung Shiu Bun, Steward	Post職位:	Qualified Arborist
Date of Inspection (dd/mm/yyyy) 巡查日期:	09/12/2017	Last Inspection Date (dd/mm/yyyy)上次巡查日期:			
Agency 機構/ Project 工程/ Contract No. 合約編號:		1/LANDS/2016			
Tree Risk Management Zone 樹木風險管理地點類別:	○ category I	○ category II	○ category III		
Inspection Frequency巡查週期:					

Location Information 位置資料

Tree ID (Dept. Ref.) 樹木編號(部門參考)	T2	Tree Species 樹木品種:	Ficus microcarpa 榕樹(細葉榕)
Master Zone Departmental Ref. 主區編號:			
Sub Zone Departmental Ref. 副區編號:			
English Location 英文地點:	Near the Tang Chi Ngong Gate, the University of Hong Kong, Bonham Road, H.K. Island(adjacent to Bonham Tower)		
Chinese Location 中文地點:	香港島般咸道香港大學近鄧志昂樓閘口(般含閣 隔鄰)		
Nearby Utility Post No 就近公用設施編號:	Lamp post no.32313		
Coordinates 座標 * (HK1980 GRID)	Northing 坐標北 (Y) 816128	Easting 坐標東 (X)	832485
Is the tree on Tree Register? 是否樹木登記冊內樹木?	☐ Yes 是	Is the tree a Stone Wall Tree? 是否石牆樹?	☐ Yes 是
Tree Register No. 樹木登記冊號碼:		OVT No. 古樹名木:	
TRIAGE Classification 分流等級	☐ Yes 是 ☐ No 否	Black 黑 ☐ Red 紅 ☐	Yellow 黃 ☐

Location Types 地點類別: (multiple answers allowed 可選多於一項):

- ☑ Roadside ~~Landscaped Area~~ 路旁~~綠化地區~~
- ☐ Public Park/Recreation Venue公園/康樂場地
- ☐ Remote Countryside偏遠郊區
- ☐ Vacant Government Land政府空置土地
- ☐ Others (please specify)其他 (請說明):
- ☐ Central Divider中央分隔帶
- ☐ Tree Pit樹穴
- ☐ Village Environs鄉村範圍
- ☑ Unallocated Government Land未撥用的政府土地
- ☐ Recreational Site/Facilities inside Country Park 郊野公園內康樂用地或設施
- ☐ SIMAR Slopes系統性鑑辨維修責任的斜坡

No. of Tree Trunk(s) (#) 主幹數目(#):	1	DBH of tree trunk(s)(mm) (1.3m above soil level) 每枝主幹胸徑(毫米) (離地面1.3米)	#1 645	#2	#3	#4	#5	Aggregated DBH (mm) 總胸徑(毫米): 645
Tree Height(m)樹高(米):	22.0		Tree Spread(m) 樹冠闊度(米):					10.0
Age class 樹齡組別:	○ Young幼 ○ Mature成熟 ◉ Senescent衰老							

GENERAL CONDITION 基本狀況	
Foliage density葉片密度: ○ Normal 正常 ◉ Sparse 稀疏	
Foliage colour葉片顏色 ◉ Normal 正常 ○ Chlorotic 萎黃 ○ Brown (signs of wilting) 褐色 (呈現枯萎徵狀)	
Leaf Size 葉片大小 ◉ Normal 正常 ○ Abnormal 不正常	
Epicormics 水橫枝: ◉ Yes是 ○ No否 *(please specify the location and severity 請說明位置及嚴重程度)* branches	Moderate 中度嚴重(M)
Tree vigor苗壯程度: ○ Good 好 ○ Average 良 ◉ Poor 差	
Lean 傾斜 ◉ Yes是 ○ No否 Angle of lean from vertical 傾斜角度 15 ○ Natural due to phototropism/ self – corrected 趨光性或已自然修正 ◉ ~~Recently tilted~~/Unstable root- plate 新近傾斜/根基不穩	
Soil cracks or cracks in structure(s) behind lean 有土壤裂縫或裂縫處於傾斜部位背後: ◉ Yes是 ○ No否	

CROWN CONDITION 樹冠狀況	Severity of Defects 嚴重程度:
Heavy crown load 樹冠負荷太重: ○ Yes是 ◉ No否	
Live crown ratio 活冠比: (foliage canopy / total height of tree) 有葉的樹冠 / 樹高 ◉ Low 低 < 40% ○ Medium 中 40 - 70% ○ High 高 > 70%	
Dieback twigs枯枝: ◉ <5% crown 樹冠 ○ 5 - 20% crown 樹冠 ○ 21 - 50% crown 樹冠 ○ >50% crown 樹冠	
Crown reduced/excessively thinned/ topped/ pollarded: 樹冠大幅減少 或削頂 或截頭 ◉ Yes是 ○ No否	Moderate 中度嚴重 (M)
Asymmetric tree canopy **樹冠不對稱:** ◉ Yes是 ○ No否	Low 輕度嚴重(L)
Signs of pests and disease 呈現病蟲害徵狀: ○ Yes是 ◉ No否 *(If yes please specify type 如有請說明種類)*	
Others *(please specify)*: 其他*(請說明)*	

BRANCH CONDITION 枝幹狀況 *(multiple answers allowed 可選多於一項):*	Severity of Defects 嚴重程度:
☐ Co-dominant branches等勢枝	
☐ Included bark 內夾樹皮	
☑ Cavities樹洞	Insignificant 不嚴重(O)
☐ Cracks/splits 裂縫/裂開	
☑ Wounds/Mechanical injury 明顯傷痕/機械破損	Insignificant 不嚴重(O)
☐ Dead branches/Hangers 枯死/懸吊斷枝	
☐ Crooks/abrupt bends 不常規彎曲	
☐ Cross branches 疊枝	
☐ Heavy lateral limb 重側枝	
☐ Lion's tailing獅尾 *(excessive end weight on branch 枝端過重)*	
☐ Bleeding/sap flow滲液	
Parasitic/Epiphytic plants 寄生/附生植物 ○ Yes是 ◉ No否 (If yes please specify type *如有請說明種類)*	
Signs of pests and disease 呈現病蟲害徵狀: ○ Yes是 ◉ No否 *(If yes please specify type 如有請說明種類)*	
Others *(please specify)*: 其他*(請說明)*	

TRUNK CONDITION 主幹狀況 *(multiple answers allowed 可選多於一項)* :	Severity of Defects 嚴重程度:
☑ #1 Decay/Cavity * 腐爛/樹洞(open 可見的) Length長: 500 (mm) Width 闊: 300 (mm) Depth 深: 200 (mm)	Moderate 中度嚴重(M)
☐ #2 Decay/Cavity * 腐爛/樹洞(open 可見的) Length長: (mm) Width 闊: (mm) Depth 深: (mm)	
☐ #3 Decay/Cavity * 腐爛/樹洞(open 可見的) Length長: (mm) Width 闊: (mm) Depth 深: (mm)	
☐ Poor taper不良漸尖生長	
☐ Codominant trunks等勢幹	
☐ Included bark 內夾樹皮	
☐ Cracks/splits 裂縫或裂開	
☐ Abnormal bark crack 不尋常樹皮裂縫	
☐ Bulge 癟脹	
☐ Fungal fruiting bodies 呈現菌類子實體	
☐ Exposed dead wood 枯幹外露	
☑ Wounds/Mechanical injury明顯傷痕/機械破損	Insignificant 不嚴重(O)
☐ Large wound/ crack/ decay on circumference 大範圍破損或裂縫或腐爛	
☐ Bleeding /Sap flow 滲液	
Signs of pests and disease呈現病蟲害徵狀: ○ Yes 是 ◉ No 否 *(If yes, please specify type 如有，請說明種類)*	
Others *(please specify)* : 其他*(請說明)*	

ROOT CONDITION 根部狀況 *(multiple answers allowed 可選多於一項)* :	Severity of Defects 嚴重程度:
☑ Root flare/collar not visible 根脊不現	Insignificant 不嚴重(O)
☐ Root rot根部腐壞	
☐ Cracks/splits裂縫或裂開	
☑ Cut/pruned roots 根部經切割或截根	Insignificant 不嚴重(O)
☑ Fungal fruiting bodies 呈現菌類子實體	Insignificant 不嚴重(O)
☐ Dead surface roots 根部枯萎	
☑ Exposed root根部外露	Moderate 中度嚴重(M)
☐ Mechanical injury機械破損	
☐ Termites/borers injury 白蟻或蛀心蟲蛀蝕	
☑ Root-plate movement 根基移位	Moderate 中度嚴重(M)
☐ Girdling roots纏繞根	
Rooting area restricted 根部伸展範圍受限制: ◉ Yes是 ○ No 否 *(If yes pls specify type 如有請說明)* ☐ Drain 渠道 ☑ Footpath/pavement行人道 ☐ Road curb路肩 ☑ Retaining structure 護土結構 ☑ Footings or railings 地基或欄杆 Others *(please specify)* : ☐ 其他*(請說明)*	Moderate 中度嚴重(M)
Signs of pests and disease呈現病蟲害徵狀: ○ Yes是 ◉ No 否 *(If yes, please specify type 如有，請說明種類)*	
Others *(please specify)* : 其他*(請說明)*	

SITE CONDITION 樹木生長環境 *(multiple answers allowed 可選多於一項)* :
Site disturbed by construction activities 鄰近環境受工程影響: ☐ Road widening道路擴寬 ☐ Drain replacement渠道重鋪 ☐ Soil grade reduce/ increase 地表上升或下降 ☐ Site clearing地盤平整活動 ☐ Soil heaving 土壤脹起 ☐ Laying of new footpath 鋪設行人道 ☐ Laying of underground utilities 鋪設地下設施 ☐ New flower beds/ new lawn below tree在樹下加建花圃/草坪 ☐ Others*(specify)* 其他*(請說明)*
Soil condition 土壤情況 ☐ Sandy 沙質 ☐ Clay 黏土 ☐ Water logging 積水 ☑ Soil compaction 土壤被擠壓
(restricted root growth area inside dripline 於滴水線範圍內有障礙物限制根部延伸) ◉ Yes是 ○ No 否 ○ < 25% ○ 26-50% ◉ 51-75% ○ >75% **Width of Planting area 種植面範圍** ○ < 1.2m ○ 1.3- 2m ○ 2.1- 3m ○ 3.1- 4m ◉ > 4m
Tree location with exposure to wind 樹木所在地點的受風情況: ☐ Single tree單獨一棵 ☐ Tree with emergent canopy 樹冠層以上 ☑ Edge of a group of trees 樹群邊緣 ☐ Recently exposed新近暴露
Others *(please specify)* : 其他*(請說明)*

* Please specify the location and aspect of Decay/Cavity in section of Tree Photos or Comments (e.g. Location of Decay/Cavity with height above ground level and aspect of Decay/Cavity opening)
請於樹木相片或評註部分詳細說明腐爛/樹洞的位置及方位例：腐爛/樹洞離地距離及腐爛/樹洞開口面向的方向

TARGET (people or property potentially affected by tree/branch failure) 目標 (因樹木/枝幹倒下而致可能受影響的人或財產):

Use under tree 在樹下之用途: *(multiple answers allowed 可選多於一項)* :

☑ Building 建築物 ☐ Parking 停車位 ☑ Traffic 交通 ☑ Recreation 康樂
☐ Gathering point聚集地點 ☑ Pedestrians 行人道 ☐ Hardscape園藝景觀裝置
☐ Others 其他 *(please specify 請說明)* :

Can target be moved能否移除目標? ○ Yes 是 ◉ No否

Can use of site be restricted可否限制場地的使用? ○ Yes 是 ◉ No否

Frequency of use of location 使用該地點的頻密程度:
○ Occasional use偶爾使用 ○ Intermittent use間歇使用 ○ Frequent use經常使用 ◉ Constant use恆常使用

HAZARD RATING 危害評估:

Tree or part likely to fall 樹木或枝條有可能倒下
○ Trunk 樹幹 ○ Branch/limb枝幹 ◉ Whole 整棵

(Choose ONE option that is most likely to fall. For more than one option with risk imposed fro public safety, please elaborate in "Comments"
選出最有可能倒下的一個選項。就其他對公眾安全構成風險的選項，請在"評註"詳述。)

Failure Potential + Size of Part + Target Rating = Hazard Rating
倒塌可能 + 部位大小 + 目標評估 = 危害評估

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☐ Restrict use within fall zone
限制可能發生樹木倒下或枝條斷裂的範圍使用

☐ Pest/ disease control控制病蟲害:

☐ Needs further inspection within____months
需於_____個月內再次檢查樹木 [ ] Month

(please specify 請說明): _____

Anticipated Date of Completion 預計完成日期(dd/mm/yyyy)		Date of Completion 完成日期(dd/mm/yyyy)
Date:		
Date:	31/12/2017	
Date:		
Date:		
Date:		
Date:		

Comments 評註:

At the time of inspection, T2 had fair to poor health since sparse foliage density was observed. Structurally, the tree was leaning at about 15 degree with unstable root-plate towards Bonham Road and the tendency of trunk growth was conflicting with the pedestrains. Restricted by the pavement, retaining structure and footing/railings, the rooting conditions were very unfavorable. Fugal fruiting bodies were observed at the roots. The tree was structurally weak. The root sprea on mansory wall was surface attachemnt only and with unknown amount of root penetration to the slope behind. The surface area of the retaining wall for tree anchorage was small and therefore, the wall may also fails when T2 fails or vice versa (overall failure). The mode of failure will be similar to the one failed at slope no. 11SW-A/R577 at Bonham Road on 22 July 2015. Severe cracks were observed on the retaining structures which may be caused by the root-plate movements of the T2. In the short term additional structural support such as cabling and wiring, metallic framework are highly recommended to stablize the tree. However, there are site constraint of limited space for additional structural support at the slope side. In the long term, the failure potential of T2 is high due to its weak structure which pose risk to the buildings, traffic and the pedestrians and thus, tree removal is recommended.

Attached Information 附夾資料

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Site Plan 場地平面圖 — Add Site Plan | Delete Site Plan
(At least 1 Site Plan is provide 最少提供一個場地平面圖)
1
Description 說明:

Tree Photo 樹木相片 — Add Tree Photo | Delete Tree Photo
(At least 1 Tree Photo is provide 最少提供一個樹木相片)
1 Attach_20171206174556.pdf
Description 說明: Photo record of T2

Resistograph Chart 微鑽阻力測試 — Add Resistograph Chart | Delete Resistograph Chart
1
Description 說明:

Tomograph 聲納圖像 — Add Tomography | Delete Tomography
1
Description 說明:

Other Attachments 其他附件 (Please specific 請註明) — Add Others | Delete Others
1
Subject Title 標題:
Description 說明:

Note:
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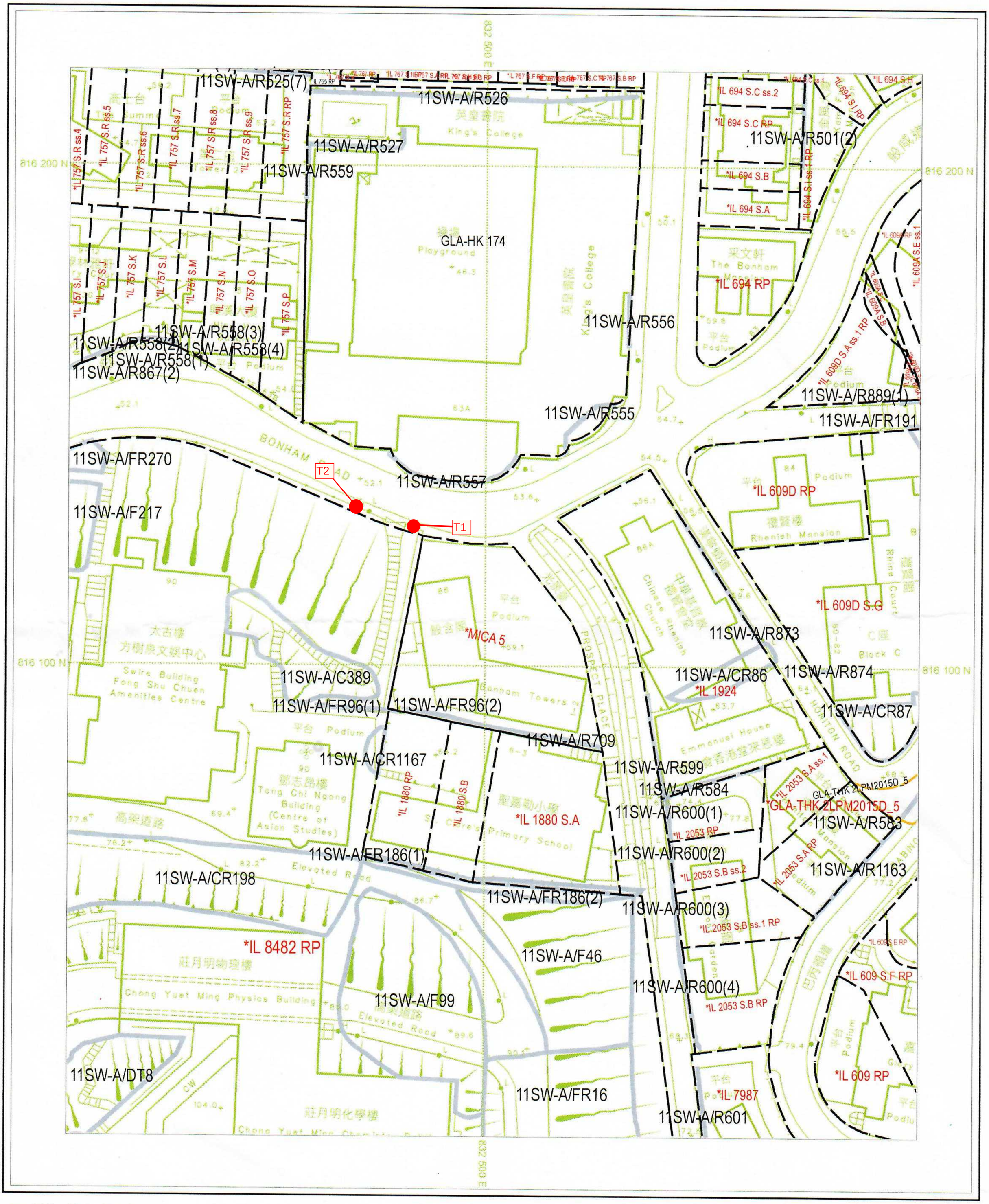
請參閱發展局網頁www.trees.gov.hk 樹木管理辦事處的樹木風險評估安排及管理指引及相關技術通告

TREE CONTRACT PLAN



Date: 24-Nov-2017 13:59:50
LAO, Land and Vegetation Contract Management Section (TW Office)
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SCALE 1:1000

Sheet Number
11-SW-7B
11-SW-7D

This Tree Contract Plan shows the approximate boundaries of land holdings, registered slopes of SMRIS and right of ways. The information indicated thereon may not be up-to-date and exhaustive. It is for identification purpose only. The information shown may be amended without prior notification as better or new information becomes available. Reproduction by PERMISSION only.

T1 Form 2 Photo Record

Contractor:	Wah On Garden Landscaping Limited
Contract:	1/LANDS/2016
Location:	Near the Tang Chi Ngong Gate, the University of Hong Kong, Bonham Road, H.K. Island(adjacent to Bonham Tower)
Inspection Date:	09/12/2017

T1 *Ficus microcarpa* 細葉榕

Overview of T1: Leaning at about 30 degree towards the Bonham Road

T1 Form 2 Photo Record

Contractor:	Wah On Garden Landscaping Limited
Contract:	1/LANDS/2016
Location:	Near the Tang Chi Ngong Gate, the University of Hong Kong, Bonham Road, H.K. Island(adjacent to Bonham Tower)
Inspection Date:	09/12/2017

Crown condition: Sparse foliage density; Crown reduced before

Branch Condition: Wounds

T1 Form 2 Photo Record

Contractor:	Wah On Garden Landscaping Limited
Contract:	1/LANDS/2016
Location:	Near the Tang Chi Ngong Gate, the University of Hong Kong, Bonham Road, H.K. Island(adjacent to Bonham Tower)
Inspection Date:	09/12/2017

Branch Condition: Abrupt bends

Trunk condition: Cavity 300mm length, 300 length, 250mm depth

T1 Form 2 Photo Record

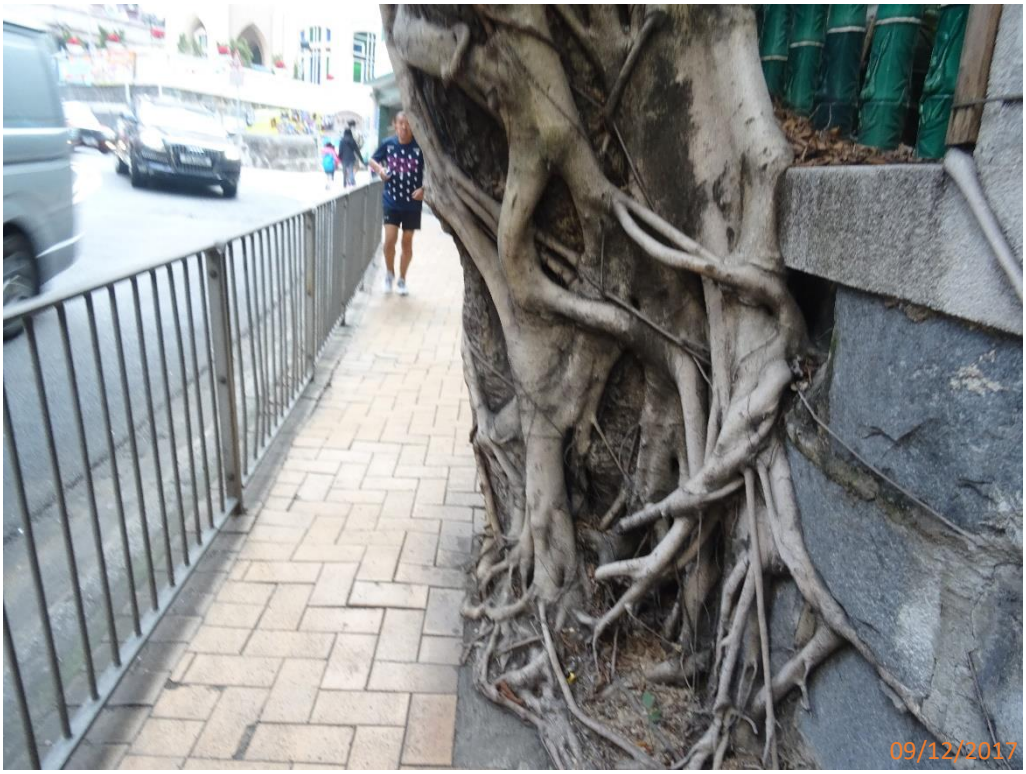
Contractor:	Wah On Garden Landscaping Limited
Contract:	1/LANDS/2016
Location:	Near the Tang Chi Ngong Gate, the University of Hong Kong, Bonham Road, H.K. Island(adjacent to Bonham Tower)
Inspection Date:	09/12/2017

Trunk condition: Wounds

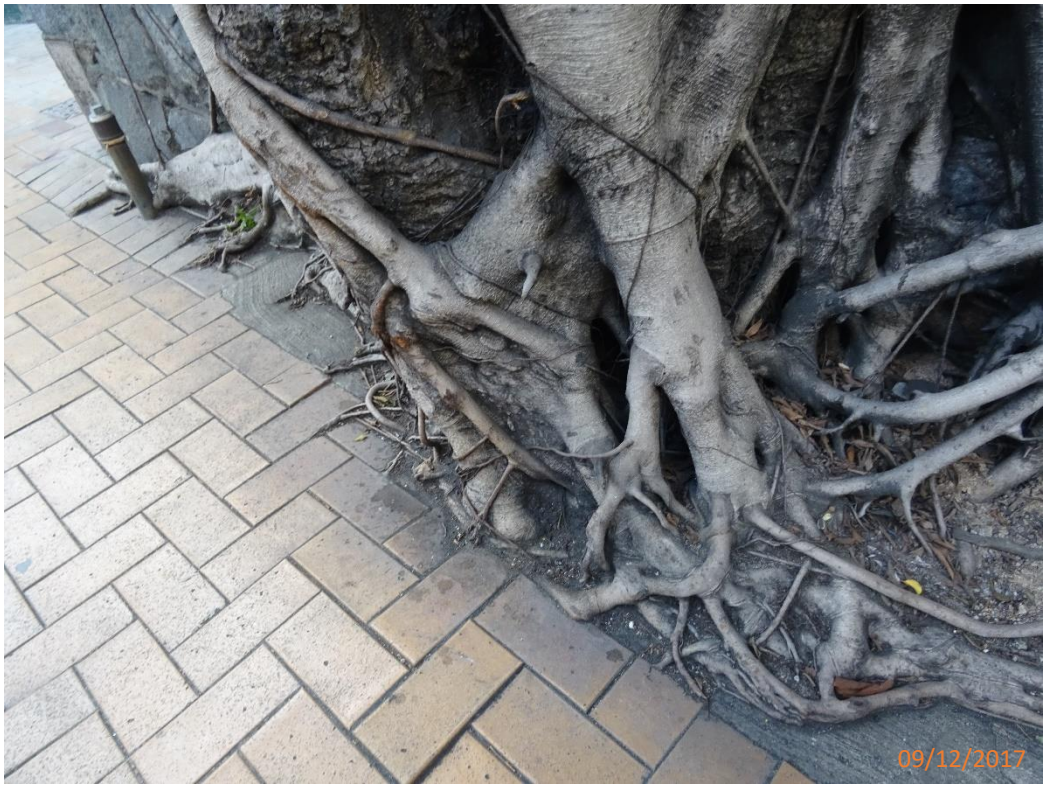
Root Condition: Root flare not visible and highly restricted by the pavement

T1 Form 2 Photo Record

Contractor: Wah On Garden Landscaping Limited
Contract: 1/LANDS/2016
Location: Near the Tang Chi Ngong Gate, the University of Hong Kong, Bonham Road, H.K. Island(adjacent to Bonham Tower)
Inspection Date: 09/12/2017



Root Condition: Exposed root



Root Condition: Girdling root

T1 Form 2 Photo Record

Contractor:	Wah On Garden Landscaping Limited
Contract:	1/LANDS/2016
Location:	Near the Tang Chi Ngong Gate, the University of Hong Kong, Bonham Road, H.K. Island(adjacent to Bonham Tower)
Inspection Date:	09/12/2017

Root Condition: Cut/pruned aerial root

Cracks on the retaining structure

T1 Form 2 Photo Record

Contractor:	Wah On Garden Landscaping Limited
Contract:	1/LANDS/2016
Location:	Near the Tang Chi Ngong Gate, the University of Hong Kong, Bonham Road, H.K. Island(adjacent to Bonham Tower)
Inspection Date:	09/12/2017

Cracks on the planter behind the tree

Tension side of the tree anchor into the slope planter. Cracks on retaining wall.

T1 Form 2 Photo Record

Contractor:	Wah On Garden Landscaping Limited
Contract:	1/LANDS/2016
Location:	Near the Tang Chi Ngong Gate, the University of Hong Kong, Bonham Road, H.K. Island(adjacent to Bonham Tower)
Inspection Date:	09/12/2017

The trunk tends to grow and expand towards the pavement which conflict with the pedestrians use.

Existing cables system without enough tension

T2 Form 2 Photo Record

Contractor:	Wah On Garden Landscaping Limited
Contract:	1/LANDS/2016
Location:	Near the Tang Chi Ngong Gate, the University of Hong Kong, Bonham Road, H.K. Island(adjacent to Bonham Tower)
Inspection Date:	09/12/2017

T2 *Ficus microcarpa* 細葉榕

Overview of T2: Leaning at about 15 degree towards the Bonham Road

T2 Form 2 Photo Record

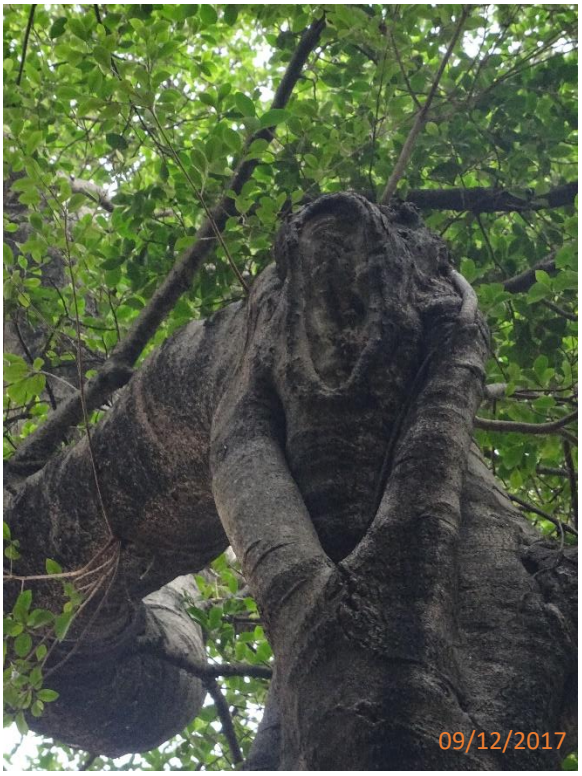
Contractor:	Wah On Garden Landscaping Limited
Contract:	1/LANDS/2016
Location:	Near the Tang Chi Ngong Gate, the University of Hong Kong, Bonham Road, H.K. Island(adjacent to Bonham Tower)
Inspection Date:	09/12/2017

Crown Condition: Sparse foliage density; Crown reduced before

Branch Condition: Wounds

T2 Form 2 Photo Record

Contractor:	Wah On Garden Landscaping Limited
Contract:	1/LANDS/2016
Location:	Near the Tang Chi Ngong Gate, the University of Hong Kong, Bonham Road, H.K. Island(adjacent to Bonham Tower)
Inspection Date:	09/12/2017



Branch Condition: Wounds

Overview of trunk condition

T2 Form 2 Photo Record

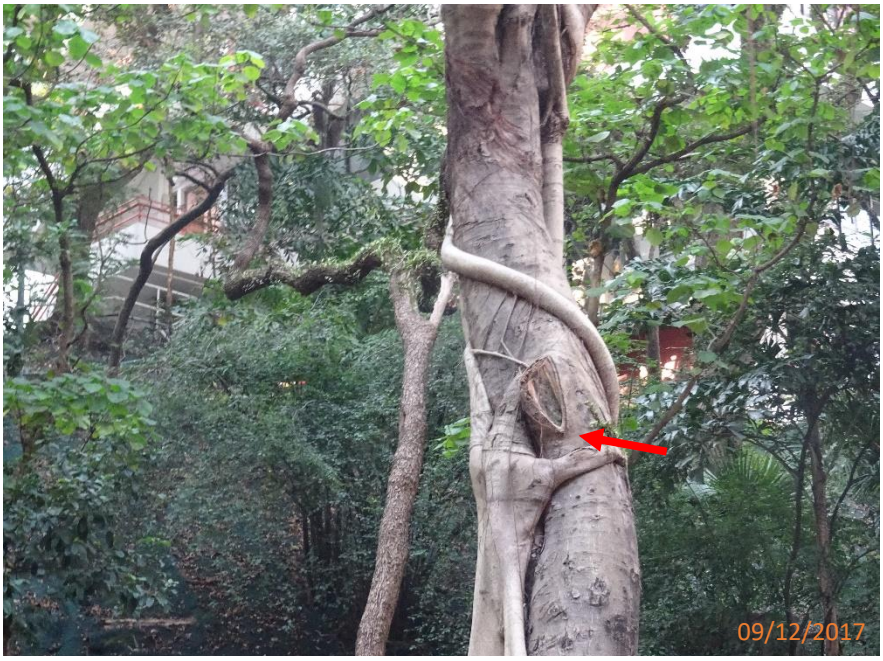
Contractor: Wah On Garden Landscaping Limited
Contract: 1/LANDS/2016
Location: Near the Tang Chi Ngong Gate, the University of Hong Kong, Bonham Road, H.K. Island(adjacent to Bonham Tower)
Inspection Date: 09/12/2017

Trunk Condition: Cavity

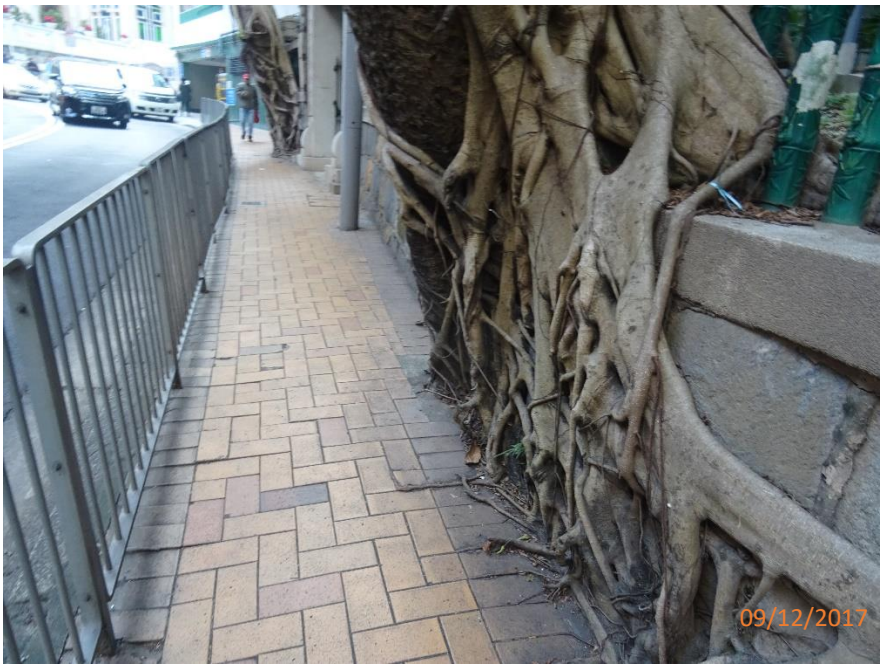
Trunk Condition: Close up of cavity 500mm length, 300mm length,200mm depth

T2 Form 2 Photo Record

Contractor: Wah On Garden Landscaping Limited
Contract: 1/LANDS/2016
Location: Near the Tang Chi Ngong Gate, the University of Hong Kong, Bonham Road, H.K. Island(adjacent to Bonham Tower)
Inspection Date: 09/12/2017



Trunk Condition: Wound



Root Condition: Root flare not visible and highly restricted by the pavement

T2 Form 2 Photo Record

Contractor: Wah On Garden Landscaping Limited
Contract: 1/LANDS/2016
Location: Near the Tang Chi Ngong Gate, the University of Hong Kong, Bonham Road, H.K. Island(adjacent to Bonham Tower)
Inspection Date: 09/12/2017

Root Condition: Exposed root

Root Condition: Root flare not visible and highly restricted by the pavement

T2 Form 2 Photo Record

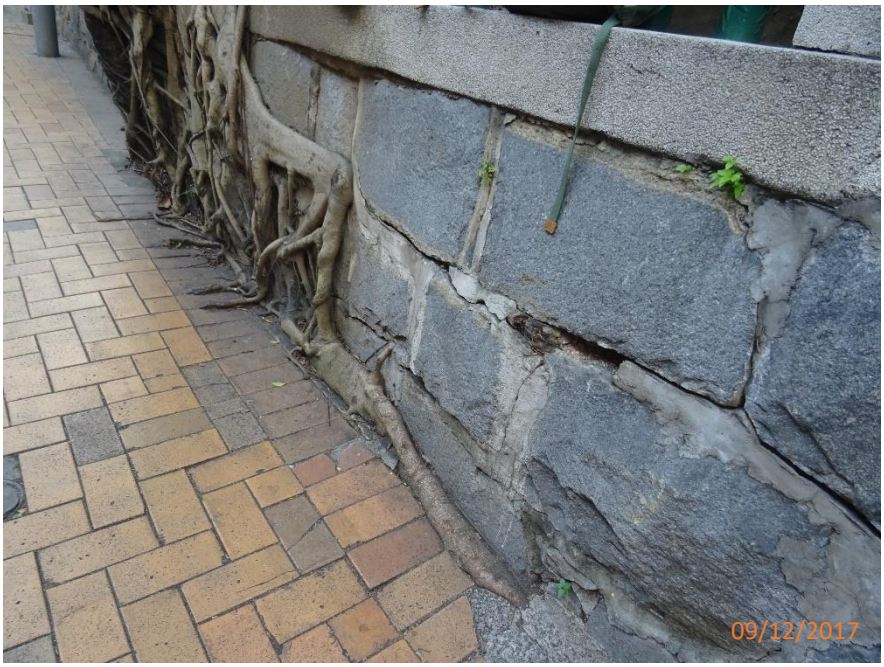
Contractor:	Wah On Garden Landscaping Limited
Contract:	1/LANDS/2016
Location:	Near the Tang Chi Ngong Gate, the University of Hong Kong, Bonham Road, H.K. Island(adjacent to Bonham Tower)
Inspection Date:	09/12/2017

Root Condition: Fungal fruiting bodies

Severe cracks on the retaining structure

T2 Form 2 Photo Record

Contractor: Wah On Garden Landscaping Limited
Contract: 1/LANDS/2016
Location: Near the Tang Chi Ngong Gate, the University of Hong Kong, Bonham Road, H.K. Island(adjacent to Bonham Tower)
Inspection Date: 09/12/2017



Close-up of the cracks

Tension side of the tree anchor into the slope planter. Cracks on retaining wall.

T2 Form 2 Photo Record

Contractor: Wah On Garden Landscaping Limited
Contract: 1/LANDS/2016
Location: Near the Tang Chi Ngong Gate, the University of Hong Kong, Bonham Road, H.K. Island(adjacent to Bonham Tower)
Inspection Date: 09/12/2017

Close-up of the cracks

The trunk tends to grow and expand towards the pavement which conflict with the pedestrian use.

Proposed Temporary Traffic Arrangement for tree removal at Bonham Road outside HKU

附件三

Photo taken on 14-05-2018

Photo taken on 14-05-2018

Temporary traffic sign

1

2

Temporary traffic sign

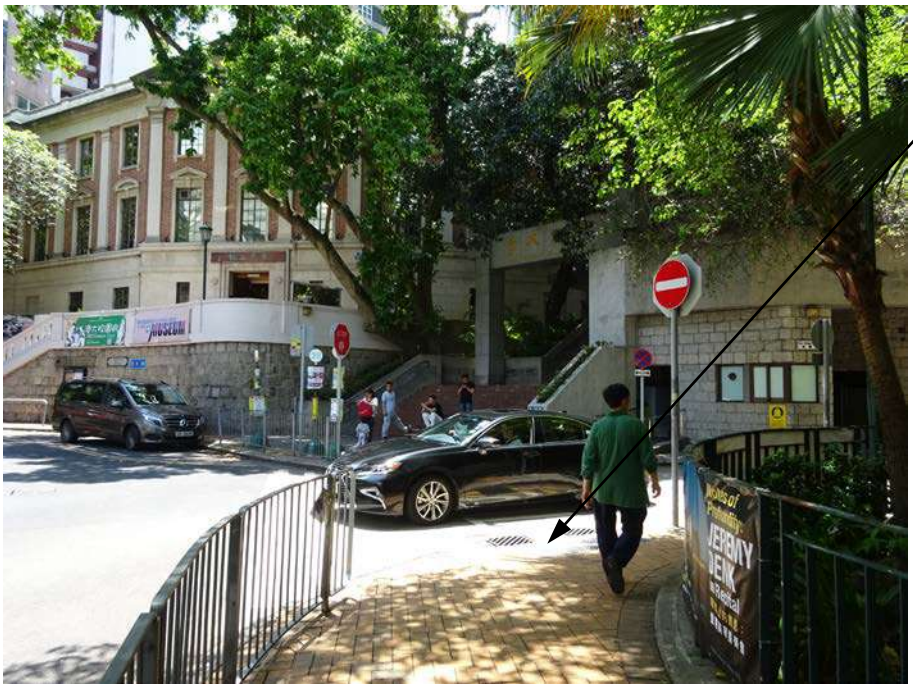


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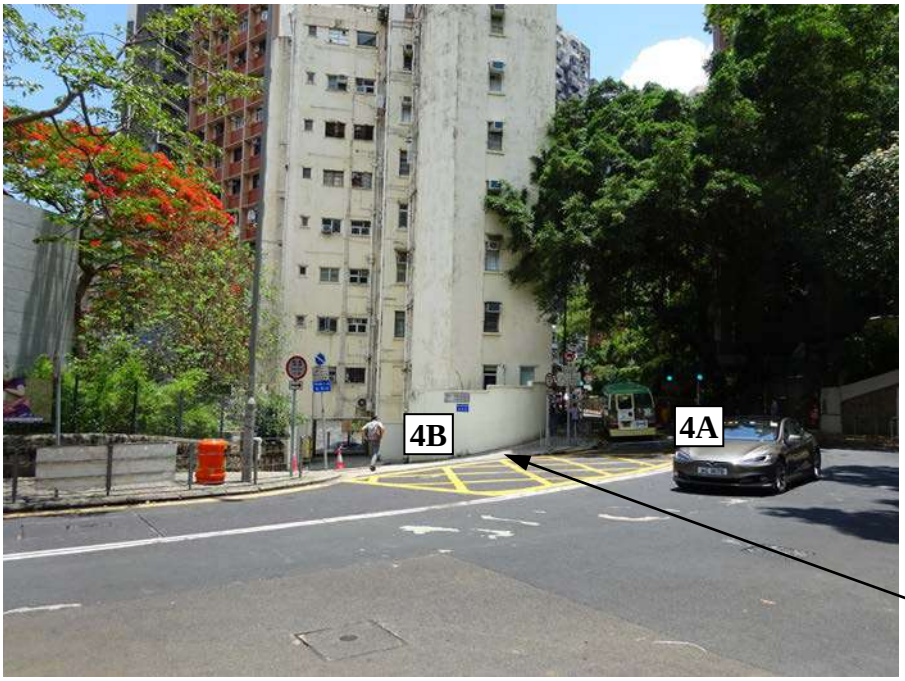
Photo taken on 14-05-2018



4A & 4B

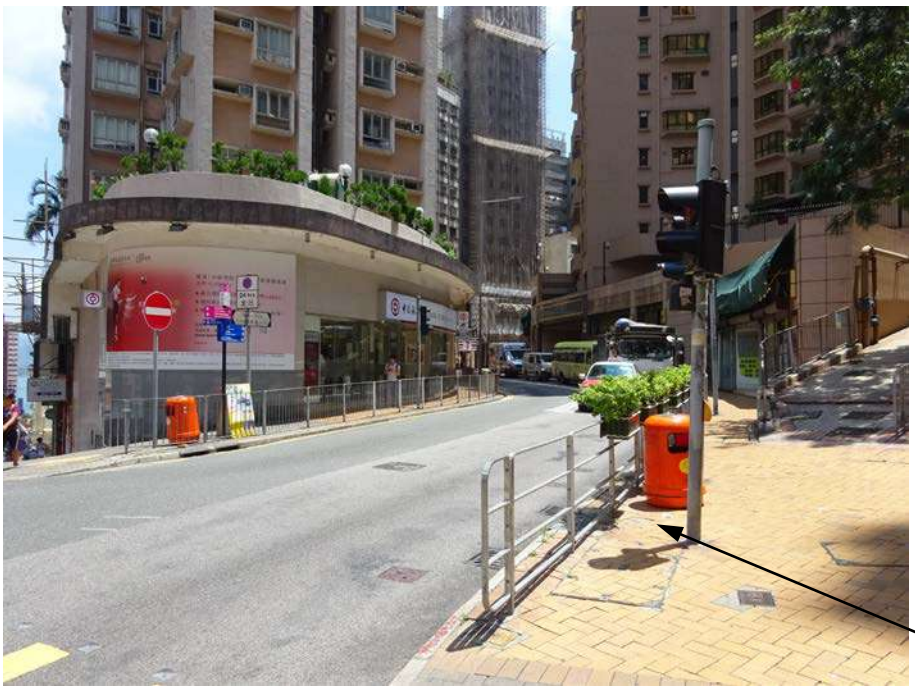
Temporary traffic sign

5

6

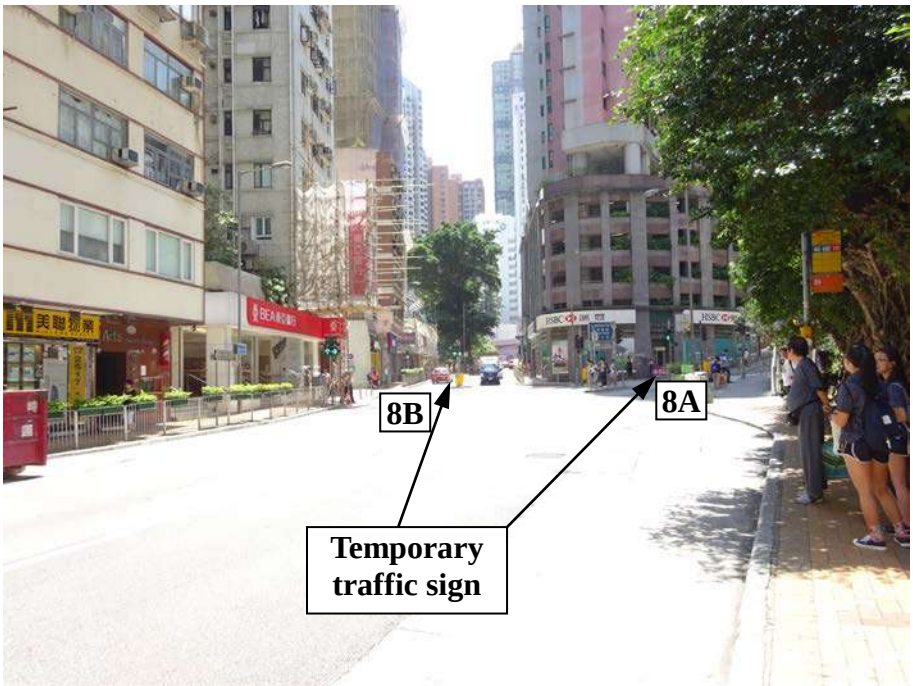
Temporary traffic sign

<u>Photo taken on 14-05-2018</u>



7

Temporary traffic sign



8A & 8B

9

Temporary traffic sign

Photo taken on 14-05-2018

Photo taken on 14-05-2018

Date: 14-May-2018
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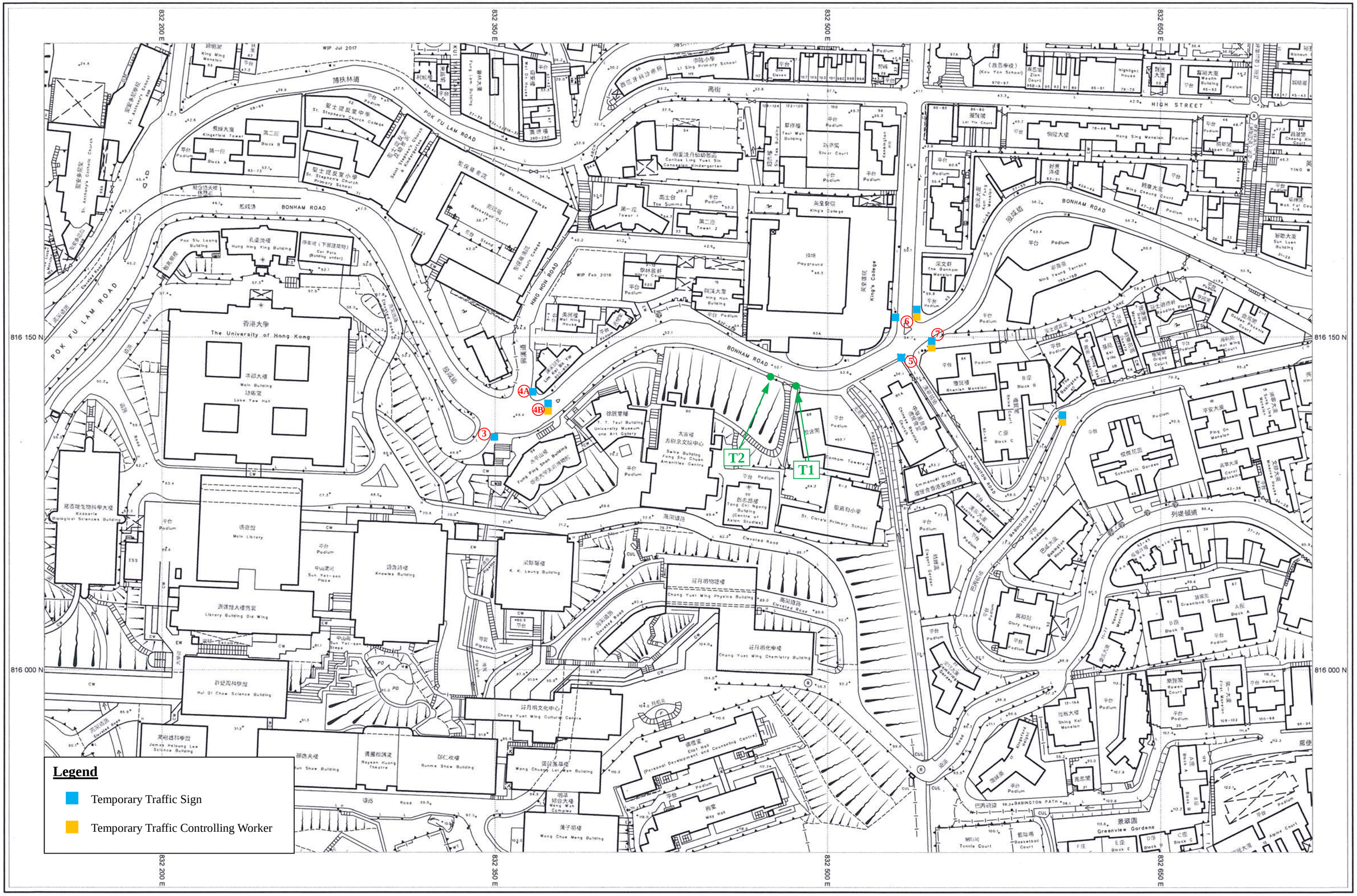

Date: 14-May-2018
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Sheet Number
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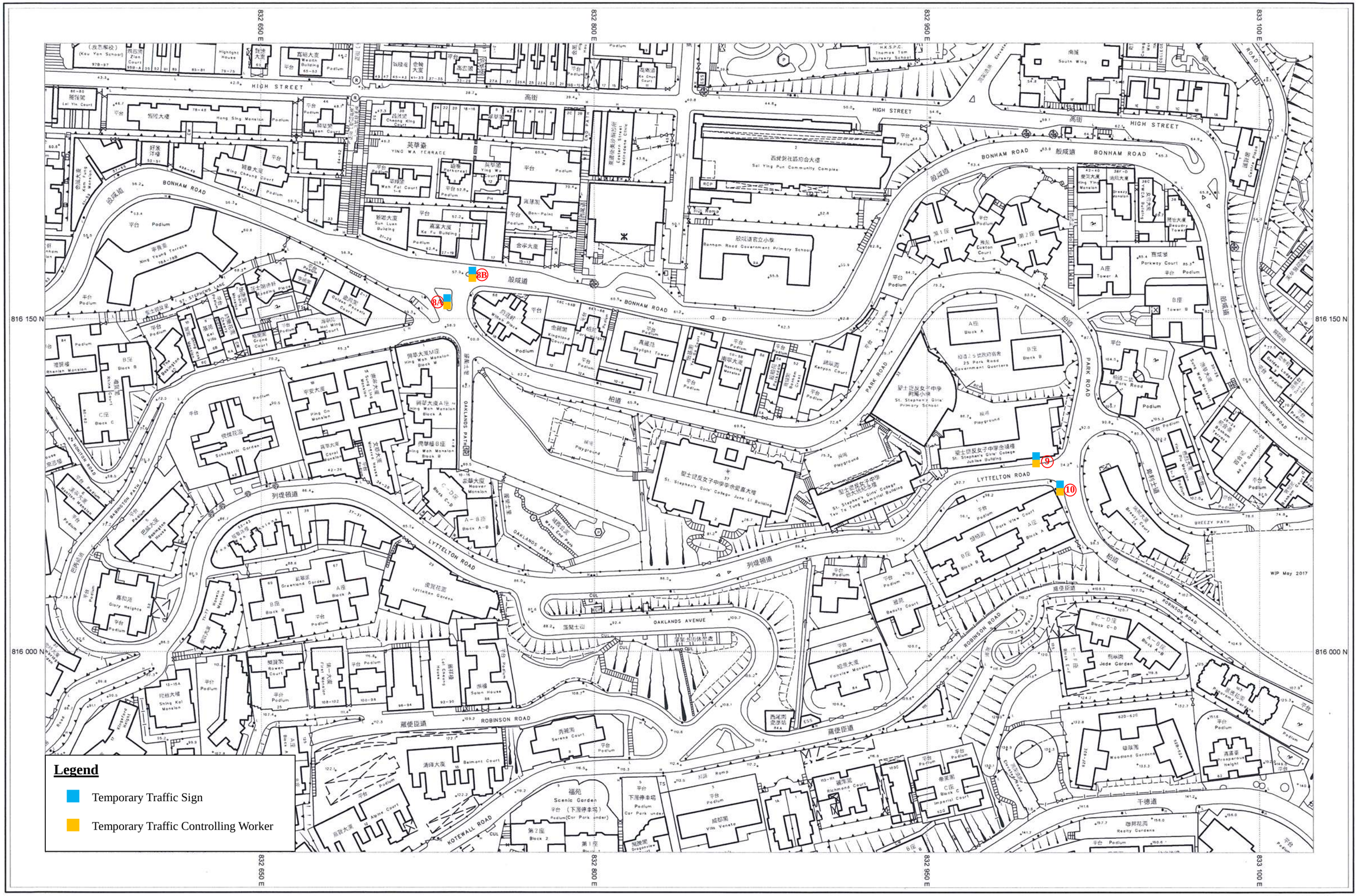

Date: 14-May-2018
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Sheet Number
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