<u>Urban Forestry Advisory Panel</u> (Notes of the 4th Meeting)

Date and Time: 15 December 2022 (Thursday) at 10:00 am

Venue: Conference Room 7, G/F, Central Government Offices, Tamar

Present

Miss Kathy NG Chairperson (H/GLTMS, DEVB)

Ir. Chan Yun-cheung Member Prof. Chau Kwai-cheong, JP Member Prof. Leslie Chen, JP Member Mr. Kingsley Choi Member

Prof. Chu Lee-man Member (via video conferencing)

Mr. Mark Duntemann Member (via video conferencing at USA)

Dr. Billy Hau Member Mr. John Ho Member Mr. Evans Iu Member Mr. Patrick Lau, JP Member Prof. Anthony Leung Member Prof. Charles Wong Member Mr. Chiky Wong Member Dr. Wong Fook-yee Member Mr. Yiu Vor Member

Mr. Ryan Lin Member (H/TMO, DEVB)
Mr. Eric Liu Member (SConO(TS), AFCD)

Mr. Peter Lam Member (SLA/VM(U&Is), HyD) (via

video conferencing)

Mr. Michael Yip Member (LA/5, HD) (via video

conferencing)

Miss Annie Fung
Member (CLM(PA), LCSD)
Mr. Hsu Ka-man
Secretary (AS(TM)3, DEVB)
Mr. Kun Chong-meng
Note-taker (TMO5, DEVB)

Absent with Apologies

Dr. Paul Barber Member
Mr. Kevin Eckert Member
Dr. David Lau Member
Mr. Ian Shears Member

In Attendance

Ms. Josephine Yang AS(TM)2, DEVB

<u>UFAP Paper No. 05/2022</u>

(i) Mr. Peter Lam SLA/VM (U&Is), HyD

(ii) Mr. Lam Chi-kin LM (Arb)2, LCSD Mr. Nigel Tong LM(T)K, LCSD

UFAP Paper No. 06/2022

Mr. Nelson So TMO4, DEVB

Action

1. <u>The Chairperson</u> welcomed Members to the 4th Urban Forestry Advisory Panel (UFAP) meeting of the 2021-2022 term, including those who attended the meeting at the first time and via video conferencing.

Item 1 : Confirmation of the minutes of the last meeting

2. The minutes of the last meeting were confirmed without amendment.

Item 2: Report on the Conditions of Old and Valuable Trees (OVT) (UFAP Paper No. 05/2022)

- 3. <u>The Chairperson</u> invited SLA/VM (U&Is), HyD to share the department's effort in preserving two OVTs.
- 4. <u>SLA/VM(U&Is)</u>, <u>HyD</u> updated all members on the conditions of HyD's two OVTs, namely CW/1 and WCH/1. HYD CW/1, a *Ficus microcarpa*, was introduced including its background, the tree condition, the timeline of events, mitigation measures and monitoring, and the follow up actions; then followed by HYD WCH/1, also a *Ficus microcarpa*, on its background together with the slope condition, the timeline of events including the history of branch failure, tree condition, mitigation measures including the possible proposal on tree removal and monitoring, the follow up actions, etc.

- 5. <u>A Member</u> appreciated the comprehensive work done by HyD and asked if any crown reduction was conducted for the trunk named T1 of the OVT No. HYD CW/1 before the lateral and vertical movement had been observed.
- 6. <u>SLA/VM(U&Is), HyD</u> responded that they only conducted crown cleaning. He agreed to the Member's comment that reduction pruning would be appropriate in the future when noting the tree movement.
- 7. As regards_OVT No. HYD WCH/1, the Member noted some abandoned tree rings near the OVT and asked any attempt to divert the aerial roots of the OVT to the soil within those tree rings.
- 8. <u>SLA/VM(U&Is)</u>, <u>HyD</u> replied that they had considered using the tree rings next to the OVT to divert the aerial roots. Given its poor health situation, aerial roots were unavailable for the time being.
- 9. <u>The Member</u> advised that HyD could consider creating a wound on the lower part of the branch and wrapping the wound with moist peat moss to stimulate root germination. This kind of treatment was applicable to *Ficus* species.
- 10. A Member appreciated HyD's effort and offered comments on OVT No. HYD WCH/1. Though Branch C was still alive, the dead Branches A and B would impose potential risk to the public. A lot of effort paid to the OVT only delayed and exacerbated the problem, as it would be futile in saving the OVT. Therefore, saving this kind of OVTs was regarded as "fighting a losing battle". He suggested that there should be a policy to review the worthiness of saving irrecoverable OVTs considering the labour, time and resources involved. He opined that it was not worth to arrange such a comprehensive treatment to OVTs and stonewall trees in Hong Kong as trees had their lifespan limit.

- 11. A Member added from a landscape view point that aesthetic value was very important in considering the value of trees to a community, but the OVT No. HYD WCH/1 was unlikely to provide any benefit to the cityscape. Moreover, he was concerned about the stability of the root system due to public safety. A Member supplemented that the capability of increasing biomass and carbon fixation, improvement on micro climate and aesthetic value could be considered as factors to determine whether a tree should be preserved. In this connection, he suggested formulating an assessment system for big trees and educating the public the value of preservation.
- 12. <u>A Member</u> asked about the successful rate for saving BRRD infected *Ficus* trees by application of *Tricoderma*. In case the successful rate was low, tree removal might be considered earlier instead of continuously putting resources.
- 13. A Member opined that, though the application of *Tricoderma* and Biochar were control measures, their effectiveness to cure the disease was in doubt and the problem remained unsolved. He further expressed that trees after heavy pruning would lose its aesthetic value but there was no way to restore. Moreover, he commented that trench opening and shrub planting around the trees should be avoided.
- 14. <u>A Member</u> expressed that trees had all along providing services and benefits to us. When the services of a tree decreased, its replacement should be considered with enhancement, e.g. beautifying slope, upgrading visual impact, acting as noise barrier, etc., that would be more acceptable by the public.
- 15. <u>A Member</u> agreed that a policy review should be considered for preservation of OVTs. He considered that a tree with propping installation for support had passed its golden age and lost its vitality.
- 16. A Member added a sentimental value to the factors for consideration of tree preservation. For OVT No. HYD CW/1, he suggested that, in addition to guy wire and vertical prop, a horizontal element which tied the tree to the wall could save the vertical prop so as to leave more space for the pedestrian.

- 17. <u>The Chairperson</u> thanked Members for their valuable comments on these two trees, as well as HyD's efforts.
- 18. <u>SLA/VM(U&Is)</u>, <u>HyD</u> thanked Members' comments and would take into account on different points of view to review the follow up actions.
- 19. In the second part, <u>the Chairperson</u> invited LM(Arb)2, LCSD to present the four OVTs under LCSD's maintenance.
- 20. <u>LM(Arb)2, LCSD</u> briefed on the tree information, the tree condition, the mitigation measures and possible causes of death or collapse for three OVTs No. LCSD TW/6 (*Ginkgo biloba*) LCSD YTM/69 (*Celtis sinensis*) and LCSD YTM/105 (*Ficus microcarpa*). As for the remaining OVT No. LCSD YTM/2 (*Ficus microcarpa*), <u>LM(Arb)2</u>, <u>LCSD</u> informed Members of the tree information, the history of tree decline and the mitigation measures.
- 21. In response to the Chairperson's enquiry about the learning points for the three dead/collapsed OVTs, <u>LM(Arb)2</u>, <u>LCSD</u> supplemented that soil volume restriction and quality of nursery stock contributed to the poor growth of OVT No. LCSD TW/6; construction work near the trunk base caused irrecoverable damage of OVT LCSD No. YTM/69; and limited space provided by the planter would be the cause of collapse for OVT No. LCSD YTM/105.
- A Member commented that the first three cases quoted by LCSD were likely caused by design related problems, i.e. shallow planter or inadequate space for root growth. A landscape designer in most cases would be required to follow requirements to plant trees for compensation in projects and achieve a certain percentage of trees in the green area, and therefore, in some situations regardless of space availability. He suggested reviewing the planting policy in a holistic way.
- 23. The Chairperson stated that the incidents covered a number of issues, including construction related. The OVTs were growing there before the road formation and the government had been promoting "Right Tree Right Place" principle and promulgating various similar guidelines. GLTMS is continuously looking for more improvement.

- 24. A Member appreciated the promotion of "Right Tree Right Place" principle and expressed that the *Ginkgo biloba* (OVT No. LCSD TW/6) which originated from a temperate climate region was not suitable for growing in sub-tropical environment like Hong Kong. Regarding the *Celtis sinensis*, he opined that the tree might reach the end of its lifespan and suggested LCSD checking its age with reference to the tree ring and then compared its age with the normal lifespan of this species. The lifespan of a tree species was a good indicator when considering the worthiness of putting resources to preserve the tree. The last two *Ficus microcarpa* faced the problem of growing space that this situation should not be repeated in the future planting.
- 25. The Chairperson supplemented that some trees might face similar kind of constraint due to historical reason such as those in Kowloon Park and Park Lane in which there were change in level to some existing trees leading to decline of trees ultimately. GLTMS had since then formulated guidelines for tree preservation under development to remind departments avoiding some practices such as grade change around trees.
- A Member expressed that the two OVTs respectively at Luen Wan Street and Park Lane had similar background. They originally grew at the ground level and then became a planter tree with changed soil level. Sparse foliage was observed due to root disturbance, bacterial or fungal infection. He observed that BRRD was widespread in Hong Kong, but it seemed to infect urban trees more than those in the countryside. He suggested collecting some statistic figures about BRRD infected trees in urban and in country park for comparison.
- 27. <u>A Member</u> expressed that the surviving OVTs should have something to learn from. He suggested re-examination of them and then applying the key of their survival to other existing trees. Moreover, he was also aware that the trees planted for decades were due for replacement and suggested educating the community about the tree life-cycle and the normal situation for replacement.

- 28. <u>LM(Arb)2, LCSD</u> expressed that good quality stock, quality planting, proper tree maintenance and protection as well as the application of new technology were major elements contributed to the success of managing sustainable urban forestry.
- 29. <u>A Member</u> suggested using more aesthetic props in the future, by collaborating with design school and artists on the design, rather than using complicated iron frame for tree support.
- 30. The Chairperson supplemented that the prop to support the OVT (No. LCSD YTM/2) was proposed by the former Expert Panel on Tree Management and the condition of OVT at that time, about 10 years ago, better. Its health condition since then has been declining and it might be the high time to consider the next step. A Member (Mr. John Ho) added that the prop design for the OVT (No. LCSD YTM/2) was founded on engineering perspective and calculations to provide a higher level of safety factor.
- 31. <u>A Member</u> emphasized selection of suitable species for planting and expressed that *Ficus microcarpa* should not be continuously planted in tree pits and space with limited soil volume in urban area. It could be planted in open space like urban parks and countryside.
- 32. <u>The Chairperson</u> echoed Members' views and considered that a *Ficus* tree in Sha Tsui Playground in Sai Kung was an exemplary case as the tree had adequate growing space could give rise to very extensive and beautiful aerial roots.

Item 3: Update of Infestation of *Phauda flammans* (UFAP Paper No. 06/2022)

33. As regards the infestation of *Phauda flammans*, <u>TMO4</u> briefed Members on the summary of monitoring findings and review on various control measures undertaken by departments in the past years.

- 34. A Member observed that the problem in the village environment in the New Territories was not serious this year and asked about the effectiveness of the pesticide injection and any experiment with control arranged to support its effectiveness. Another Member wished to know any comparison on the effectiveness of different measures. TMO4 replied that a trial with control on soil injection was conducted in Tuen Mun Park last year. The trial revealed positive effect for trees treated with pesticide injection, as compared with the control group of trees. Amongst all the control measures, soil and trunk injection were considered the most effective methods.
- 35. The Member further expressed that the alleviated infestation this year might not be related directly to the control measures but a number of factors including weather conditions. Moreover, it would be costly to apply pesticide injection to all infested trees. In this connection, he suggested more research on the effectiveness of different methods, including the use of natural enemy. Finally, he commented that defoliated trees due to infestation of *Phauda flammans* would generally regenerate.
- 36. <u>A Member</u> asked which stage in the life cycle would be easier to implement control treatment, the way to apply pesticide to a high raised tree crown in residential area and the cost of pesticide application.
- 37. <u>H/TMO</u> responded that the pesticide, acephate, was applied through soil injection. Acephate was a registered chemical under AFCD. The tree would absorb and transport the pesticide up to the leaves. A larva would be poisoned once chewing the leaf. This treatment method could avoid interfering the environment nearby. As the application of soil injection was costly that only OVTs, some valuable trees, and trees near the strategic boundaries of pest spreading were selected for the application.
- 38. As regards the cost of the pesticide application, <u>CLM(PA)</u>, <u>LCSD</u> informed that LCSD currently applied pesticide by both in-house staff and contractor. The cost of out-sourcing to a contractor was currently about a thousand for each tree. In fact, LCSD applied soil injection twice a year or trunk injection once every two years. The latter method was observed more effective.

39. <u>A Member</u> expressed that high temperature this summer might lower the infestation rate of *Phauda flammans*. In view of differences in annual weather conditions, he suggested to keep monitoring the infestation for a longer period of time.

AOB item: Task Force on Roadside Tree Planting and Maintenance

- 40. H/TMO briefed Members on the incident of tree collapse at Perth Street which was caused by a combination of factors, including leaning of tree crown, BRRD infection, restricted growing space and compacted soil. He also introduced other tree collapse incidents between September and November 2022. He further informed that, in connection with the incident at Perth Street, the Government Departments reinspected urgently over 4 000 Delonix regia, and then other large roadside trees, and conducted mitigation measusres. Moreover, a Task Force on roadside tree planting and maintenance was also set up to review the existing tree management guidelines (Tree Risk Assessment Management (TRAM)), method of tree inspection, and aboveground and underground growth spaces for tree, soil quality and management requirements; examine the workflow and implementation by departments after tree inspections; and consider whether the relative large trees along the existing road were compatible with the current environment and explore the direction of treatment.
- 41. <u>A Member</u> asked the definition of_relatively large trees and whether the inspections would cover trees in both public and private areas.
- 42. <u>H/TMO</u> responded that a tree reaching a height of 9 m or a DBH of 500 mm would meet the definition and inspections were conducted to roadside trees in public area.

- 43. The Member expressed that the inspections should include trees in private area. It was because some trees were planted in private area many years ago and currently created maintenance problems to the residents. However, it was difficult to replace these problematic trees if an arborist could not justify their removal based on their health and structural condition only.
- 44. The Chairperson explained that private land owners should have to take care of their trees and the Government had incorporated the Handbook on Tree Management into Building Management Ordinance (Chapter 344) for private property owners or management personnel to follow. The Handbook covered the practices, the engagement of tree work professionals and the mitigation measures, etc. The Government targeted to promote good practices and advice to handle tree problems.
- 45. <u>A Member</u> expressed that aboveground and underground growth spaces for tree, soil quality and management requirements was most important. Trenching open and poor soil quality was the major causes of root problem. He suggested solving the problems by arranging a tree officer for on-site monitoring of trench opening and improving the soil corridor. Data collection was also important to complete the review.
- 46. A Member expressed that technology applying for tree inspection might have limitation and should be researched before implementation. As for the tree risk assessment which should be based on professional judgment, the guideline was too descriptive and the assessor who just followed the descriptions to complete the form might miss the personal judgment for the problem. Therefore, he preferred a concise form. He was also aware that the concept of some layman terms in the guidelines required verification. He also considered that departments would need to align when to use Form 1 or Form 2.
- 47. <u>A Member</u> expressed that the application of ground penetration radar had many constraints and further research or trial use should be considered first before use.

48. <u>The Chairperson</u> thanked for Members' comments and there being no other business, the meeting was adjourned at 12:45 pm.

Greening, Landscape and Tree Management Section Development Bureau February 2023