## **Executive Summary**

# Direct Investigation into Government's Handling of Four Stonewall Trees along Bonham Road

# **Background**

On a masonry retaining wall ("the stonewall") between Bonham Road and St Stephen's Lane in the Central and Western District, there were originally six Chinese banyan trees ("stonewall trees", "T1" - "T6"). On 22 July 2015, T2 suddenly collapsed, causing personal injuries and damage to property. After the incident, the Highways Department ("Hy D"), which was responsible for maintaining those six stonewall trees, removed the remaining five for the sake of public safety (T3 was removed on 22 July; T1, T4, T5 and T6 on 7 August).

2. Hy D's removal of the four stonewall trees on 7 August aroused extensive media coverage and public debate. The Ombudsman, therefore, initiated this direct investigation to probe whether Hy D's removal of those four stonewall trees had sufficient grounds, whether the departments concerned had followed established policies and procedures in removing the trees and in conducting prior consultation, and whether they had acted in an open and fair manner. The ambit of this investigation covered Hy D, the Development Bureau ("DEVB") and its Tree Management Office ("TMO"), and the Home Affairs Department ("HAD").

#### The Events

## Expert Assessment, Maintenance of Stonewall Trees and Mitigation Measures

- 3. As early as in 2012, Hy D had commissioned a tree expert to assess the structure and health condition of the six stonewall trees. According to the expert, T4 and T5 were rated at "high risk level"; and T1, T2, T3 and T6 at "low risk level". Hy D then carried out major pruning works on T4 and T5 in 2013 to mitigate the risk of tree collapse. Since then, Hy D's contractor conducted half-yearly inspections. None of the inspections revealed any health problem with the trees.
- 4. Meanwhile, Hy D studied various proposals to stabilise or support the stonewall trees. It eventually concluded that none of those proposals were feasible. The installation of anchorage structures for the trees was rejected mainly because of the narrow carriageway and footpath, heavy vehicular traffic, presence of major underground utilities, and the question of extra loading to the adjacent building structures.

#### Collapse of T2

5. On **22 July 2015**, when the amber rainstorm warning signal was in force, T2, the tree rated at "low risk level", suddenly collapsed. Later in the evening, Hy D found five cracks on the parapet wall behind T3 (the parapet wall was built along the footpath on St Stephen's Lane near the crest of the stonewall). Hy D and TMO considered that the cracks indicated anchorage instability and T3 was then at the risk of imminent collapse. Hy D, therefore, removed T3 that evening.

## Hy D's Assessment of the Remaining Four Stonewall Trees

- 6. As for the remaining four stonewall trees (T1, T4, T5 and T6), Hy D monitored their condition almost daily after 22 July. On 3 August, Hy D and TMO, together with TMO's Expert Panel, which consisted of local and overseas tree experts, conducted a site inspection and held a meeting. The attendees were of the view that the trees were not at any risk of imminent collapse and the stonewall showed no sign of instability. On that occasion, members of the Expert Panel put forward three proposals on supporting or stabilising the trees. Hy D concluded that none of those proposals was feasible.
- 7. Between 5 and 7 August, Hy D continued to discover new cracks and gaps on the parapet wall, i.e. the top part (tension part) of the tree anchorage. After assessment, the Department considered that those were "warning signs" of tree anchorage instability, outward shift of the tree anchorage, and weakened resistance against toppling.
- 8. Hy D's assessment showed that upon failure of any one of T4, T5 or T6, the falling tree would generate a traction force through the probably interwoven roots, resulting in the collapse of all three trees at once. The collapse could cover an extensive area, leaving little chance for pedestrians (especially those waiting at the bus stop underneath the trees) and vehicles on Bonham Road to escape and thus possibly resulting in injuries or even deaths. As the trees were quite tall, the residential flats and ground level shops of the opposite buildings might also be severely damaged. As for T1, since it was located at a rather high point, the risk of causing injury or death and significant damage to property, in the event of collapse, could not be underestimated either.

#### Decision to Remove the Four Stonewall Trees

- 9. On 7 August, Hy D decided to remove the four stonewall trees to ensure public safety in view of the following urgent developments:
  - (1) shortly after the extensive pruning of the four trees, new cracks/gaps had been found at the parapet wall/some spots on the stonewall close to where these trees were situated;

- (2) it was difficult to estimate the tipping point between resilience and collapse of the four trees;
- (3) the four trees might collapse anytime and with dire consequences;
- (4) there was no feasible proposal to mitigate the risk of collapse of the four trees; and
- with a Super Typhoon approaching, the weather would remain unstable according to the forecast of the Hong Kong Observatory ("HKO").

#### Hy D and HAD Informing Relevant Parties of the Decision to Remove the Trees

- 10. Having decided to remove the four stonewall trees, Hy D sent an email to the Central and Western District Office ("DO") of HAD that afternoon (7 August), requesting DO to forward a letter ("notification letter") to the Chairman of the Working Group on Environmental Improvement, Greening and Beautification Works ("the Working Group") under the Food, Environment, Hygiene and Works Committee of the Central and Western District Council ("DC") to inform him of Hy D's decision and justifications. Hy D also copied the notification letter to DEVB by fax.
- 11. DO then forwarded the notification letter by email to all Members of DC, including the Chairman of the Working Group. The DO also **notified by telephone** six DC Members, namely, the Chairman and Vice Chairman of DC, the Chairman of the Working Group, and the Elected Members of the three constituencies (i.e. the University, Centre Street, and Tung Wah Constituencies) which were more likely to be affected by the ensuring road closure and traffic diversion.

#### **Our Comments**

12. After careful examination of the causes and consequences of the whole incident and all relevant information, we have the following comments.

#### (1) Decision to Remove the Stonewall Trees Not Unreasonable

- 13. With regards to the challenges from some in the community to Hy D's justifications for removing the four stonewall trees, we accept the clarification/explanation given by the Department:
  - (1) The Department has explained in detail why the "warning signs" concerning the risk of collapse of the four stonewall trees were credible.
  - (2) There were views that Hy D should not have removed those trees on grounds of instability especially since the Civil Engineering and Development Department ("CEDD") had confirmed the structural

integrity of the stonewall. In response, Hy D has clarified that CEDD's assessment was premised on the stability of the stonewall itself, not of the trees that were growing on it. Even though the stonewall itself was stable, the tree anchorage had already deteriorated, meaning that there was still a risk that the trees would collapse.

- (3) Hy D has pointed out that studies on various proposals for installing structural supports to reinforce the four stonewall trees had been conducted, but the proposals were all found in feasible.
- 14. We appreciate that those who care about the four stonewall trees must have felt disappointed and sad about Hy D's abrupt decision to remove the trees. Nevertheless, the parapet wall and tree anchorage had indeed shown signs of imminent deterioration within a matter of three days between 5 and 7 August 2015, and the situation should not be taken lightly as the trees might collapse anytime. Moreover, in view of the continually unstable weather as forecast by HKO and the potential risk of casualty, it was not unreasonable of Hy D to adopt a cautious attitude to ensure public safety. Hy D had provided justifications in its consideration of the removal of the trees and its assessment of the potential risk of collapse of the trees. In addition, we have consulted engineering experts, who concerned with Hy D's decision to remove the trees and its justifications. Having taken into account the views of different parties, we have then overall examined this controversial issue from an administrative and rational Our conclusion is that: there is no substantive evidence to show that Hy D's decision to remove those four stonewall trees was rash or unreasonable.

## (2) Involvement of the Expert Panel Should be Strengthened

- 15. There were views that Hy D's failure to notify members of the Expert Panel prior to removal of the stonewall trees was disrespectful to the Panel.
- 16. We noticed that Hy D had previously reported to the Expert Panel on all the proposals, and their infeasibility, to stabilise/support the six stonewall trees. TMO had also consulted the Panel members on the health and stability of the four stonewall trees in question. When Hy D decided to remove those four trees, it had followed established procedures and informed DEVB (TMO). The fact is that TMO had not made use of the hour or so before the removal to inform the Expert Panel to allow them to voice their last-minute opinions. This was a case of TMO failing to make the best use of the Panel's expertise and professional views. Conceivably, this has fallen short of the expectation of both Panel members and the public.
- 17. We consider that in future Government should as far as possible allow members of the Expert Panel to voice their opinions on its decision to remove trees involving controversy or of special value. Their opinions should be clearly recorded and made known to the public in order to enhance the transparency and accountability of the Government's decisions.

## (3) Not Unreasonable of DO to Notify Selected DC Members by Telephone

18. DEVB does not make it mandatory for Government departments responsible for tree management to consult the public on cases of tree removal. In this incident, besides notifying all the Members of DC by email of Hy D's decision to remove the trees and its justifications, DO had also separately telephoned the Chairman and Vice Chairman of DC, the Chairman of the Working Group as well as the DC Members whose constituencies were more likely to be affected by the incident. We consider DO's action reasonable and appropriate. The DC Members concerned, having received early notification, could help explain the situation to the residents affected. We did not find that the DO, in notifying those DC Members by telephone, had given them preferential treatment based on irrelevant considerations.

# (4) Public Awareness Should be Heightened of the Potential Danger Posed by Certain Kinds of Trees

19. Because of their size, form/shape or special environment of their locations, some trees might actually be potentially less stable, thus posing a bigger risk to public safety. In this incident, for instance, sizable trees had been growing not on the ground but on a vertical wall. Some of those trees had already been rated as posing "high risk". The public's awareness of such kinds of risk needs heightening.

#### **Recommendations**

- 20. In the light of the above, The Ombudsman recommends that:
  - (1) DEVB should clearly record opinions of the Expert Panel and make them known to the public to enhance transparency and accountability;
  - (2) DO should accumulate experience and formulate clear and specific criteria for deciding in future whom to be specially informed by telephone of the Government's decisions to remove trees, so as to avoid arousing suspicious; and
  - (3) TMO should find ways to heighten public awareness of the potential danger posed by certain kinds of trees.

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