BEFORE THE WAIPĀ DISTRICT COUNCIL

IN THE MATTER	of the Resource Management Act 1991
AND	
IN THE MATTER	of Proposed Plan Change 20 – Airport Northern Precinct Extension to the Operative Waipā District Plan

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SUMMARY STATEMENT OF EVIDENCE OF GEORGIA THELMA ROSE CUMMINGS

(ECOLOGY – LONG-TAILED BATS)

14 March 2023

Counsel acting:
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1. My name is Georgia Thelma Rose Cummings. I am an ecologist and bat specialist at Tonkin & Taylor Ltd (T+T), Environmental and Engineering Consultants in Hamilton. My qualifications and experience were set out in my Primary Statement of Evidence.

2. Long-tailed bats are classified as Threatened – Nationally Critical. Long-tailed bats have been confirmed to use areas of southern Hamilton and surrounds primarily using ABM surveys (which record bat echolocation calls, providing an index of bat activity) and radiotelemetry (which involves catching individual bats, attaching a radio transmitter, and following their nightly movements). Radiotelemetry research has demonstrated that individual bats range over a large area of southern Hamilton into the Waipa and Waikato Districts, and there is likely a single population occurring across this landscape. Based on information gathered to date, the population's range approximately extends from the Mangakootukutuku and Mangaonua gullies in Hamilton City to south of Hamilton Airport in the Waipa District, and east of the Waikato River in the Waikato District.

3. Key bat habitats identified in the vicinity of the PC20 site include:

   (a) Three kahikatea remnants to the west and north-west of the PC20 site;

   (b) Meridian Oaks roost site to the north of the PC20 site;

   (c) The Narrows Park camping area to the north-east of the PC20 site; and

   (d) The Waikato River.

4. The above habitats have been identified through radiotelemetry studies as core habitat for multiple bats, and/or contain known roosts. They are shown in a context map in **Annexure "A"** to my Primary Statement of Evidence.

5. Long-tailed bats are wide ranging. While mature forest is considered preferred habitat, they can adapt to use various habitat types across modified landscapes as is the case with this bat population. While they can persist in modified agricultural landscapes, they are sensitive anthropogenic disturbance, namely artificial light.

6. The predominant vegetation cover on the PC20 Site is maize and pasture. Isolated areas of exotic trees are found across the PC20 site, with some native trees also present. 41ha of the PC20 site is already zoned Airport Business Zone.

7. A total of five acoustic bat surveys have been undertaken on the PC20 site. Bat activity during the 2020 surveys was variable with pockets of high activity (>10 passes per night on average). Bat activity recorded in the three surveys post-2020 have generally been

considerably lower across the site. All ABMs recorded an average of ≤0.5 passes per night in the most recent (Dec 2022/ Jan 2023) survey period.

8. No bat activity was recorded to the east of the PC20 site in the Hamilton Airport runway extension area suggesting that bats were not crossing this area to reach the Narrows or the Waikato River from the west during the Dec 2022/ Jan 2023 survey period.

9. I classified the habitat types in the PC20 site as having 'moderate' and 'low' value to bats. In my opinion there are no 'high value' habitat features in the PC20 site.

10. While I do not consider any of the habitat in the PC20 site meets the threshold of significant under the Waikato Regional Policy Statement, the site is located among multiple habitats that I consider significant in the surrounding landscape. Additionally, although higher value habitats occur outside of the PC20 site, removal of large areas of low and moderate value bat habitat will still result in a very high level of effect on long-tailed bats if not appropriately managed. Accordingly, PC20 needs to protect bats from the potential impacts of urbanisation resulting from the proposed land-use change.

11. The 'moderate value' habitat incorporates areas of established woody vegetation and associated "open edge" including the tree-lined driveway, the treeland surrounding the 'hub' area, and the shelterbelts on the boundary of the nursery property. The remainder of the site is characterised by cropland or pasture with scattered trees, young native plantings, and dwellings and other infrastructure (such as farm races). I have classified these areas as 'low value' habitat except for the dwellings and other infrastructure which I consider to be of negligible value to bats.

12. It is my opinion that the 'moderate' and 'low' value habitats within the PC20 site do not meet the threshold of significant habitat of indigenous fauna under the WRPS. Notwithstanding this, Bat Habitat Areas ("BHAs") have been identified in the PC20 site which, with enhancement and management of potential disturbance resulting from the surrounding future development, may achieve significance under the WRPS in the future.

13. The proposed PC20 Structure Plan and provisions have been revised considerably since the notified version in relation to long-tailed bat effects management. Habitat which is amongst the highest value located on the PC20 site is now proposed to be protected through the inclusion of BHAs in the amended Structure Plan. Potential effects associated with the interface between BHAs and surrounding urbanisation will be avoided and minimised through habitat enhancement in the BHAs, lighting standards and building setbacks. Residual impacts will be addressed through compensation.

14. A compensation site has been conditionally secured by Titanium Park Limited. I have visited the compensation site twice; it is largely comprised of maize cropping interspersed with some large exotic trees. The size of the compensation site is considerable compared to many of the key bat habitats identified in the surrounding landscape. Furthermore, the position of the compensation site relative to the Waikato River, a key movement corridor for the bat population, as well as other key bat habitats identified in the surrounding landscape, provides a valuable opportunity protect and enhance this area for future use by bats. I consider the proposed compensation site is an excellent opportunity to instigate habitat protection and enhancement and expand connective linkages across the landscape.

15. Since preparing my Primary Statement of Evidence the decision on Hamilton City Council's PC5 has been released. The Independent Hearing Panel ("the PC5 Panel") has decided to approve the PC5 provisions as generally set out in the s.42A hearing report Appendix B: Recommended Revisions to the notified Plan Change 5 – Peacocke Structure Plan provisions. No changes have been made by the Panel to the provisions relating to the management of long-tailed bats.

16. The amendments to the proposed PC20 provisions since notification have sought to generally align the PC20 provisions relating to long-tailed bat management with those proposed by Hamilton City Council at PC5, and now confirmed by the PC5 Panel. This has resulted in more robust protection measures for bats in the PC20 provisions, and takes a more holistic approach to bat management which I consider is required to protect the population which moves across a wide landscape. The proposed PC20 provisions differ from PC5 in instances where I consider differences in potential effects on bats between the areas require modified approaches.

17. A key feature of the ecological management package proposed in the PC5 provisions is off-site compensation through habitat restoration and/or enhancement and pest control. HCC discuss the opportunity such approach creates to establish an integrated, landscape wide approach to protecting bat habitat. I agree that this approach is important to protect the bat population from the cumulative impacts of urbanisation in the population's range. I consider the compensation site identified for the PC20 project would be an important initial step in contributing to a multi-agency, landscape wide approach to bat habitat protection, restoration and/or enhancement.

18. I also prepared a Statement of Evidence in Reply to Ms Thurley on behalf of the Director-General of Conservation.

19. In reply to Ms Thurley I outline why I disagree with her use of the term “preferred habitat” in relation to the bats use of agricultural land. I explain that while agricultural habitat was used by radio-tracked bats more than urbanised areas, a comparison of habitat use versus availability shows that agricultural habitat is not preferred by bats.

20. I respond to Ms Thurley’s concerns about the population being ‘squeezed out’ by reiterating my opinion that to protect the bat population, key habitats need to be protected and enhanced, and connectivity between these habitats maintained. Furthermore, the restoration and/or enhancement of lower value habitats can provide additional foraging, commuting and potential roosting (in the medium to long-term) habitat in the landscape. As such it is not my opinion that long-tailed bats require expansive areas of agricultural land to persist in the landscape. I also outline that under the status quo it is a permitted activity to remove mature exotic trees anywhere in the Waipa District and to remove indigenous trees outside of Significant Natural Areas, bush stands and biodiversity corridors identified in the Waipa District Plan. There are also no incentives to set aside productive land for bat habitat restoration or enhancement.

21. I agree with Ms Thurley that the criteria in APP5 of the WRPS, used to determine significance of indigenous biodiversity, does not specifically include thresholds for habitat value. However, the criteria have been used to map Significant Natural Areas (“SNA”) across a number of districts in the Waikato Region, in these instances professional judgement has been used when mapping areas in relation to long-tailed bat habitat. This has most recently occurred in PC5 and was accepted by the PC5 Panel. I outline how the logical outcome of not using professional judgement to apply these criteria would mean that a number of modified landscapes across the Waikato would become ‘blanket’ SNAs.

22. I reiterate that I do not consider it likely that increased noise levels resulting from PC20 will have a notable impact on bats. I rely on the evidence of Mr Bell-Booth, who describes the likely noise increases experience by neighbours as “barely perceptible”. While I accept Mr Bell-Booth’s EIC focusses on noise effects on humans, I consider it unlikely that the proposed changes in the noise environment will have a considerable impact on bats given that they already use the area in the presence of aircraft noise and major roads. Other parts of their range are also immediately adjacent to urbanised areas.

23. Ms Thurley considers it very uncertain whether bats will continue to the Bat Habitat Areas on the site once the area is urbanised. I agree that urbanisation of an area will increase the uncertainty that bats will continue to use that area. I refer to my EIC where I outline

the PC20 provisions which have been drafted to protect bats using the BHAs from disturbance from the adjacent development. I also point to the fact that this population currently uses habitat adjacent to urbanised areas. They also currently use the PC20 site which already surrounded by roads and an airport.

24. Ms Thurley does not consider that the compensation package is adequate relative to the extent of habitat removal associated with PC20. I note that the compensation package is preliminary at this point. I agree that it is likely that bats already use the proposed compensation site and consider enhancement of the site will considerably improve its habitat value for bats. In addition to providing more 'high value' habitat in the landscape, I consider the compensation site provides an excellent opportunity to contribute to a multi-agency approach to expand connective linkages for bats through the landscape.

25. Finally, I agree with Ms Thurley that monitoring of bat activity within the BHA would be useful and should inform the assessment of residual effects. A monitoring programme will be included in the Bat Management Plan as required under Rule 10.4.2.14B. The Bat Management Plan will be regularly reviewed, and results of the monitoring should inform adjustments to the offset/compensation package as required under Rule 10.4.2.14B.

Georgia Cummings
Tonkin and Taylor Limited
14 March 2023