BEFORE AN INDEPENDENT HEARINGS COMMISSIONER AT NELSON



COUNCIL REF: RM200488, RM200489 AND RM220578

UNDER THE

Resource Management Act 1991

IN THE MATTER OF

Land use consent applications by CJ Industries Limited to extract gravel from 134 Peach Island Road, Motueka from the berm of the Motueka River and on the landward side of the stopbank at Peach Island with vehicle access via a right of way over 493 Motueka River West Bank Road, Crown land and unformed legal road (RM200488 and RM200489); and discharge permit application by CJ Industries Limited to discharge contaminants to land from backfill material associate with the proposed gravel extraction (RM220578)

STATEMENT OF EVIDENCE OF PETER JOHN TAIA ON BEHALF OF VALLEY RESIDENTS AGAINST GRAVEL EXTRACTION (LANDSCAPE PLANTING / MITIGATION)

Dated: 11 November 2022

QUALIFICATIONS AND EXPERIENCE

- 1. My full name is Peter John Taia. I have worked as a self-employed nurseryman for 15 years providing plants and personalised landscape design services including planting, planning and advice for projects large and small within and outside of the Motueka area. I have a Certificate in Horticultural Practice.
- 2. I have lived in the Motueka Valley for 15 years. I have considerable experience with the conditions in this area, and I also have over two decades experience with landscape planning and planting.
- 3. I have provided services and plants in the local area for a number of consented developments including provision of planting services and implementation of landscape plans for 10 or more years. I have supplied plants for some Canopy (now Boffa Miskell) designed plans in the past.
- 4. I live and operate my native plant nursery business, Westbank Natives at 370 Motueka River Westbank Road, Motueka.

CODE OF CONDUCT

5. I have lodged a submission opposing the proposed land use and discharge applications and therefore I acknowledge I am not independent. However, I have read the Code of Conduct for Expert Witnesses in the Environment Court Note 2014 and I agree to comply with it. My evidence is within my area of expertise. I have not omitted to consider material facts known to me that might alter or detract from the opinions expressed in my evidence.

SCOPE OF EVIDENCE

6. My evidence discusses the mitigation planting CJ Industries Limited (CJs) propose as part of the quarry development at 134 Peach Island Road.

EXECUTIVE SUMMARY

7. In my view, it is very unlikely that the mitigation planting proposed by Canopy will successfully establish in the Stage 1 area. This area is outside the stopbank in a flood plain. It is well draining and is either too dry for the proposed species to establish in the

- proposed 6-year period, or the area is subject to frequent flooding which will inhibit effective root development and prevent them from establishing.
- 8. Some of the species identified by Canopy are deciduous and would not provide effective visual screening in winter months.

CJ'S PROPOSAL

- 9. CJs propose to carry out gravel extraction in the Stage 2 and 3 areas first before moving into Stage 1. This is to allow landscape mitigation planting around the Stage 1 area to establish prior to quarrying activities in that area commencing.
- 10. I have reviewed the Landscape graphic attachment (13 July 2022) and the 2022 Canopy landscape mitigation plan proposed by Liz Gavin for the CJ Industries application. I have read the Landscape Evidence submitted by Ms Gavin on 15 July 2022.
- 11. I understand the Canopy plan is for the mitigation of visual impacts associated with the establishment of a proposed quarrying activity at 134 Peach Island Road.
- 12. I understand the Canopy plan also outlines a suggested river terrace restoration of a portion of the stage 1 area following the gravel extraction from that area.
- 13. The report is dated 13 July 2022 which is mid-winter, though the photos attached by Ms Gavin are clearly all taken much earlier in the year. All of the trees and vegetation on site have full leaf-cover. 95% or more of the existing vegetation on stage 1 and surrounding orchard trees, including orchard shelter belts are deciduous species and are bare for up to five months of the year. This provides a very low level of visual mitigation for residents on Westbank Road for four-five winter months of the year.
- 14. 27 photos included in the Canopy report show the site from various heights, distances and angles which serves to only represent the views observed for approximately 7 months of the year. As for the remaining months from late autumn through winter, almost all vegetation is absent.
- 15. My view is that this plan presented is a concept plan only as there is no detail of a planting plan or individual species numbers. There is a mention of PB18 grades, which I believe is a 10L volume potted grade, which costs \$25 minimum each at a wholesale rate. These, depending on the species concerned would be a significant expense for the scale and expected duration of this planting, considering the flooding risks that present

because of the location in the floodplain. It is not specified what species or number are suggested to be planted at that grade size.

MITIGATION PLANTING PROPOSED

- 16. Landscaping is proposed to be undertaken on the site within the first full planting season available following the grant of consent. This is to provide screening to mitigate the visual effects of quarrying activities. Ms Gavin's evidence discusses planting along the periphery of extraction areas and the haul road, and Stage 1 is proposed to be replanted with native 'river terrace' species following completion of the Stage 1 works. I understand this is intended to provide for visual amenity and ecological betterment.
- 17. The landscape assessment suggests the Stage 1 area is considerably altered and does not represent the original character of the locality. In my view the historical alteration, whether purposely altered or naturally changed, of both river and berm lands over time requires the site to continue to be maintained if not managed as a floodplain, particularly now as we are subjected to heavy rain events more frequently and intensely. The Tasman District Council (TDC) is currently working with landowners to reduce the vegetation that impedes or inhibits water flow from the flood plain during flood events, specifically where the Back channel intersects with the Shaggery River prior to the Peach Island bridge. TDC plans to be able to clear the 'blockade' caused by the built-up vegetation to relieve high flood waters from the area.
- 18. My understanding is that the proposed river terrace restoration planting in the stage 1 area following extraction and backfilling will commence the first opportunity/planting season at completion ie in 15 years' time **if** consent is granted. It will take 5-6 years, all going well, for planting to show any result. This makes it a 20 plus year timeframe. I do not believe that I will be seeing completion of this planting in my time.
- 19. I note that Ms Gavin uses the wording 'river terrace' to describe the area to be restored at the completion of the quarrying consent period. This area is not a terrace, it is floodplain and will remain so even after reinstatement post quarrying.
- 20. I understand the river terrace restoration at the completion of extraction implies a wetland planting as all the species suggested are distinctly wetland types. Ms Gavin provides a generic list of first stage appropriate species for a bare site. However, the floodplain is a very dry zone other than when in the midst of a flooding event. The view of the area implies that it may be suitable for wetland restoration but in reality, it is particularly free draining and does not hold water, as it is a flood plain. The only time water is a feature is when it becomes inundated during flood events.

IMPACTS OF FLOOD EVENTS ON THE PLANNED MITIGATION PLANTING

- 21. The Le Frantz, a local family that farm Peach Island and associated flood channel land for many years, have provided their historical records that demonstrate the frequency of significant flood events, which inundate this land regularly.
- 22. 10 years recorded flood events provided by landowners LeFrantz who live adjacent to the application site:
 - (a) 2013 Three floods
 - (b) 2014 One flood
 - (c) 2015 None
 - (d) 2016 One flood
 - (e) 2017 One flood
 - (f) 2018 One flood during ex-cyclone GITA
 - (g) 2019 None
 - (h) 2020 None
 - (i) 2021 Two floods including 17 July 2021
 - (j) 2022 One flood including July 2022
- 23. Based on the frequency of flooding events in the back channel, this area can be expected to be inundated an estimated 10 times in the next 10 years, making establishment of the mitigation planting unlikely in the suggested 6-year period.
- 24. The landscape concept suggests root trainer grade plants with protective guards (and canes to secure is assumed as per standard practice) to protect from predation from rabbits (and hares) around each individual plant during the establishment period. These guards are critical to any restorative planting using root trainers also to protect from harsh winter conditions and form protection from herbicide or mechanical weed control maintenance that is critical to the successful establishment of the planting.

 These guards need to be maintained around each plant for at least two growing seasons ie. two years or more depending on the conditions. Due to the harsh nature of the environment of the flood plain and back channel they may need to be protected for longer.
 - 25. In reality, protective guards, whether plastic or cardboard, are not robust to withstand flood water velocity of the levels that occur when the channel flows with flood water.

- 26. The evidence provided above of almost yearly channel flooding events and the associated water flow velocity in the channel, such as July 2021 where the whole of stage 1 was 1-2 meters deep, will inevitably result in significant to almost total failure of any planting undertaken in the floodplain.
- 27. In my view the function of the flood plain is to take water away from the land which reduces the damage of inundation. The floodplain is not a suitable medium by its nature for the establishment of a mitigation planting.

COMMENTS ON SPECIFIC SPECIES MENTIONED IN THE CANOPY REPORT

- 28. The two Poplar species mentioned in the 2022 Canopy landscape mitigation plan are deciduous and will offer little to no visual mitigation over the winter months. Poplar species root systems can be aggressive when hunting water under dry conditions and this can lead to damage to infrastructure.
- 29. Personal experience with Eucalyptus nitens and its susceptibility to nuisance aphid infestation required us to remove a wood lot from our property at 370 Motueka River Westbank Road. This pest susceptibility could create problems for nearby orchards to the east and west of the proposed planting.
- 30. Kahikatea is a wetland native slow growing species. It needs plentiful and regular water. It will not establish well in the dry and exposed floodplain.
- 31. A combination of the four species offered, the two poplars, eucalypt and kahikatea will create a dry shade situation if they have the opportunity to establish. However, they will also compete for the limited water availability making the establishment of the native understory very difficult as they will be starved of water over the dry months of the year.

Peter Taia



17 July 2021 - Stage 1 site in peak flood.



17 July 2021 - Stage 1 Close up view during peak flood.



12 July 2022 - Stage 1 site in flood.