

Before the Thames Coromandel District Council

IN THE MATTER of the Resource Management Act 1991

AND

IN THE MATTER Proposed Variation 3 - Taiwawe Catchment
Structure Plan, Lot 2 DP 387067, 104 Taiwawe
Lane, Hot Water Beach

**SUPPLEMENTARY STATEMENT OF EVIDENCE OF JOHN MICHAEL BURGESS
ON BEHALF OF HOT WATER BEACH (NZ) LIMITED**

INTRODUCTION

1. My name is John Michael Burgess and I have been a director of Traffic Planning Consultants Ltd (*TPC*), a company which I founded, for the past 32 years. My full experience and qualifications are set out in my primary statement of evidence.
2. I confirm that, in preparing this statement of evidence, I have read and I am familiar with the Environment Court's Code of Conduct for Expert Witnesses, contained in the Environment Court Practice Note 2014, and I agree to comply with it. I also confirm that I have not omitted to consider any material facts known to me that might alter or detract from the opinions expressed in my evidence and that, except where I am relying on evidence of another person, the issues I address are within my area of expertise.
3. I give this supplementary evidence on behalf of Hot Water Beach (NZ) Limited regarding Proposed Variation 3 Taiwawe Catchment Structure Plan (**TCSP**), and in particular in response to the Supplementary Section 42A Hearing Report (undated) received at the start of the initial hearing on 15 March 2021.

SUPPLEMENTARY SECTION 42A REPORT

4. I understand that the Supplementary Section 42A Report was prepared in order to address the amendments that have been made to the proposed TCSP since initial lodgement by Hot Water Beach (NZ) Ltd. However, Attachment 1 to that report now includes detailed comments and concerns from the Council's Roading Manager that were not included in the original

Section 42A Report and which I was not aware of at the time of preparing my primary statement of evidence for the hearing. I shall address the key matters raised by the Roding Manager that are within my area of expertise in the following paragraphs.

5. **"The lack of any traffic impact assessment or calculations that include traffic flows on the existing public road at the junction of Hot Water Beach Road, generated by the adjacent development sites noted in the statement or from the traffic generated by the Top Ten Holiday Park to support the assumptions made of the suitability of the junction or access network"**.
6. In paragraphs 23 to 26 of my primary statement of evidence, I discussed the levels of traffic generation that were expected from the adjacent developments, from the Campground and from the TCSP area, and concluded that the intersection would continue to operate with a high level of service and minimal delays and queueing even with these total volumes. I did not however include details of the modelling that led me to that conclusion, but I do so now in the following Table.

Movement	SCENARIO 1					SCENARIO 2				
	Flow (vph)	Degree of Sat	Ave delay	Level of Service	95% Queue	Flow (vph)	Degree of Sat	Ave delay	Level of Service	95% Queue
Hot Water Beach (E)										
left	30	0.044	5.0	A	0	34	0.074	5.0	A	0
through	50	0.044	0	A	0	100	0.074	0	A	0
Hot Water Beach (W)										
through	50	0.040	0.1	A	1m	100	0.067	0.2	A	2m
right	30	0.040	6.3	A	1m	34	0.067	6.5	A	2m
Taiwawe Lane (W)										
left	30	0.058	9.2	A	2m	34	0.074	9.4	A	2m
right	30	0.058	8.7	A	2m	34	0.074	9.6	A	2m
Intersection	220	0.058	4.0			336	0.074	3.1		
Movement	SCENARIO 3					SCENARIO 4				
	Flow (vph)	Degree of Sat	Ave delay	Level of Service	95% Queue	Flow (vph)	Degree of Sat	Ave delay	Level of Service	95% Queue
Hot Water Beach (E)										
left	34	0.128	5.0	A	0	12	0.116	5.0	A	0
through	200	0.128	0	A	0	200	0.116	0	A	0
Hot Water Beach (W)										
through	200	0.115	0.2	A	2m	200	0.129	0.3	A	3m
right	34	0.115	7.0	A	2m	56	0.129	6.9	A	3m
Taiwawe Lane (W)										
left	34	0.093	9.9	A	3m	56	0.073	9.9	A	2m
right	34	0.093	11.8	B	3m	12	0.073	11.9	B	2m
Intersection	536	0.128	2.2			536	0.128	2.2		

7. The different scenarios that I have modelled are as follows:

Scenario 1: based on my predicted flows for the various activities on the TCSP land (200 vpd as set out in my primary statement of evidence), an assumed 50/50 split east/west at the intersection, plus an estimate of up to 1000 vehicles/day on Hot Water Beach Road (or 100 vehicles/hour in the peaks) based on the Council's own traffic flow data for average daily flow.

Scenario 2: based on my predicted flows for the various activities plus an allowance for additional traffic from the TCSP (360 vpd rather than 200 vpd), an assumed 50/50 split east/west at the intersection, plus double the average flows on Hot Water Beach Road (or 200 vehicles/hour in the peaks).

Scenario 3: based on my predicted flows for the various activities plus the allowance for additional traffic from the TCSP, an assumed 50/50 split east/west at the intersection, plus four times the average flows on Hot Water Beach Road (or 400 vehicles/hour in the peaks) to allow for peak holiday traffic conditions.

Scenario 4: based on my predicted flows for the various activities plus the allowance for additional traffic from the TCSP, an assumed 20/80 split east/west at the intersection, plus four times the average flows on Hot Water Beach Road (or 400 vehicles/hour in the peaks) to allow for peak holiday traffic conditions.

8. The results clearly show that the intersection will continue to function well within capacity at a high level of service, with minimal queuing and delay, even with higher traffic flows through the intersection.
9. **"Given the use of the access road between Hot Water Beach and the Top Ten campground by holiday makers, the absence of any commentary on the use of the roads and junction by pedestrians or cyclists causes me concern"**.
10. As I set out in paragraphs 15 to 22 of my primary evidence, I have simply adopted the intersection layout that was approved by the Council as Condition 18 in the Campground resource consent in 2011 (Figure 3 in my evidence) and modified it slightly to include Te Piuwa Place as a stop controlled T-intersection (Figure 5 in my evidence, Diagram B for the TCSP). That consent for the Campground included the provision of a separate pedestrian footpath/boardwalk along the full length of the right of way (Taiwawe Lane), the introduction of judder bars to reduce vehicle speeds, and the provision of an extended footpath on the

northern side of Hot Water Beach Road to link with the new Taiwawe Lane footpath. This was clearly seen by the Council as being appropriate to accommodate holiday makers, and the introduction of TCSP including the intersection design shown on my Figure 5 will not change that situation.

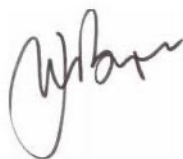
11. **"Proposed development area served by the junction in Diagram B has the potential for considerably more properties than are currently proposed. This is acknowledged in the statement by J Burgess (item 13). No information is provided on how this would be managed. I am concerned that subsequent redevelopment of the individual plots will lead to an increase in traffic volumes along sub-standard width roads with no pedestrian facilities leading to future issues that the Council will be asked to resolve"**.
12. There was no acknowledgement intended in my statement of evidence that there could be "considerably more properties than are currently proposed".
13. As I noted in my primary statement, I have assessed the predicted traffic for the now proposed 25 lots (200 vpd at 8 vpd per lot), rather than the 45 lots (360 vpd) addressed in my original traffic report (paragraphs 4 and 12 of my evidence). However, to 'sensitivity test' the outcome, I have also considered the possibility of additional traffic being generated from the 25 lots (paragraphs 24 and 25 of my evidence), using the original prediction of 360 vpd as an example. This assessment is reflected in Scenarios 2, 3 and 4 in the tables above. The intersection continues to operate at a high level of service, and no further upgrading of roads and right of ways will be required.
14. **"The entry vehicle swept path shows vehicle wheels leaving the sealed shoulder for a short section"**.
15. This is not the case. The underlying aerial photo on which the intersection layout and tracking curves have been superimposed is not up-to-date, and the tracking curves have been overlaid on the road layout that has now actually been constructed.
16. **"The vehicle turn is reliant on the driver having adequate forward visibility towards Hot Water Beach and sufficient time for the turn to be made. No details have been provided of the forward visibility at the junction"**

"No details have been provided for semi-articulated vehicles that may reasonably be anticipated to deliver to the site during the construction phase".

17. Again, the intersection layout shown is based on the layout that has already been approved by the Council for the Campground. That intersection was not required to be designed for large semi-trailer vehicles, and I do not anticipate that being necessary as a result of the TCSP.
18. The Roding Manager also includes some discussion regarding the history of this intersection. As I discussed in my primary statement, there are two options for the intersection layout, one that was approved as part of the Campground resource consent (which we modified to include Te Puia Place from the Hot Developments subdivision), and one that has actually been constructed to provide Te Puia Place as the link with priority over Taiwawe Lane. The former layout was chosen for the TCSP proposal following early discussions with Council officers, but the latter option would in my opinion also operate satisfactorily.
19. My understanding was that the reason for the design safety audit that is currently being undertaken for the Council was to determine the preferred layout option. I have attempted to initiate direct discussions with Mr Varley about his concerns in this respect, but he has declined to participate. I attach the relevant emails as Attachment A.

CONCLUSIONS

20. I remain of the opinion that the traffic that could potentially be generated by development of the property in line with the TCSP can be accommodated on the road network with less than a minor impact on the transport environment, including the intersection with Hot Water Beach Road. We have shown the intersection as being designed essentially in line with that approved as part of the resource consent for the existing Campground (but with Te Puia Place added), but I consider that the existing layout as actually constructed in connection with the Hot Developments subdivision would also operate satisfactorily.
21. I conclude that the proposed TCSP is acceptable from an overall transportation point of view.



John Burgess
26 March 2021