

Before the Hearing Panel

Under the Resource Management Act 1991

In the Matter of the Waikato District Council Proposed District Plan -
Hearing 25: Zone extents

And Rezoning proposals by Havelock Village Limited and
Rainbow Water Limited in Pokeno

**Statement of Evidence of Don McKenzie (Transportation)
in support of a further submission by Yashili New Zealand Dairy Co Ltd**

Date: 10 March 2021



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EXECUTIVE SUMMARY

- 1 I have undertaken a technical review of the Integrated Transportation Assessment prepared by Commute which supported the original submission to the District Plan Review, and the transport engineering evidence prepared by Mr Leo Hills on behalf of the rezoning requested by Havelock Village Limited.
- 2 In my opinion, the Integrated Transportation Assessment and Mr Hills assessment contained in his evidence to this hearing, does not take sufficient account of the transport network connections and intersections expected to serve the future Havelock Village Limited development. In particular, I consider that Mr Hills has overlooked the specific effects of the rezoning (and likelihood of required mitigation) to the corridor comprised of Yashili Drive – Gateway Park Drive – McDonald Road which currently serves as the main spine for the surrounding industrial area.
- 3 I disagree with Mr Hills who considers that the requested rezoning be supported by a future development contribution levied against the future development contributing to the wider roading upgrades within the Pokeno area. I consider that there are a range of specific operational and safety issues associated with the roadways, driveway and intersections along Yashili Drive/Gateway Park Drive/McDonald Road that can be assessed separately from the surrounding Pokeno area and appropriate specific mitigation identified in respect of the rezoning requested by Havelock Village Limited.
- 4 I recommend that Havelock Village Limited's requested rezoning be accompanied by a requirement to undertake a specific assessment of the effects of its generated traffic on the safety and operation of the Pokeno industrial traffic network primarily relating to Yashili Drive and Gateway Park Drive. Such an assessment should in my professional opinion give particular attention to the safety of heavy traffic movements to and from the surrounding industrial sites, and the effects

of existing and future heavy traffic movements on the safety of pedestrian and cycling activity generated by the rezoning.

- 5 The requested rezoning should also in my opinion be accompanied by the preparation (in consultation with KiwiRail and the District Council) of a Level Crossing Safety Impact Assessment in respect of the vehicle and pedestrian level crossings over the North Island Main Trunk Railway line at McDonald Road.

- 6 I consider that Havelock Village Limited do not have the certainty required to ensure that its internal collector road connection (required by the District Council's engineering standards to provide a 20m road reserve width and 11m carriageway for a public road) can be safely and effectively connected to Yashili Drive. Nor do I consider that there is sufficient certainty around the ability to deliver the intersection of the Collector Road/Yashili Drive intersection within land that is controlled by Havelock Village Limited.

INTRODUCTION

Introduction

- 7 My full name is Donald John McKenzie. I am a practising specialist transportation engineer. Since April 2018 I have been employed by Stantec New Zealand as Private Sector (Transport) Leader and Group Manager (Northern Region) – Transportation, and prior to that was a shareholder of and employed by Traffic Design Group Limited for 25 years, most recently as a Director and the Auckland Branch Manager of that firm. In April 2018, Traffic Design Group Limited was acquired by Stantec New Zealand.

Qualifications and experience

- 8 I gained a Bachelor's degree in Civil Engineering with Honours from the University of Canterbury in 1991. I am a Chartered Professional Engineer in New Zealand, an International Professional Engineer, Fellow and Chartered Member of Engineering New Zealand, and a

Fellow and Professional Member of the Institute of Transportation Engineers, USA.

- 9 Throughout my 30 years of professional experience, I have practised as a traffic engineering and transportation planning specialist where I have provided transportation consulting and expert witness services to a wide variety of clients across the country within the private sector, local government and central government agencies.
- 10 Examples of my experience relevant to this project are:
- a) Provision of transportation expertise advice and assistance over the past five years to the Whangarei District Council in respect of several plan changes and District Plan reviews, the most recent of which is the Urban and Services Plan Change currently under appeal through the Environment Court and to which I am providing expert assistance through mediation and expert witness conferencing;
 - b) Transportation assessments of a number of land-use developments within the Pokeno area including involvement in the proposed Countdown supermarket in Great South Road and a proposed dairy processing plant adjacent to the existing Yashili site in William McRobbie Road; and
 - c) Expert transportation engineering evidence in support of the Stonehill Trust in respect of an industrial Plan Change at Wiri, South Auckland.

Code of conduct

- 11 I have read the code of conduct for expert witnesses in the Environment Court practice note. While this hearing is not in front of the Environment Court, I agree to comply with this code. The evidence in my statement is within my area of expertise, except where I state that I am relying on the evidence of another person. I have not omitted to consider material facts known to me that might detract from the opinions I express.

12 In preparing this statement of evidence I have read the relevant sections of the following statements of evidence:

- (a) Mr Jason Jones (planning witness for Yashili);
- (b) Mr Leo Hills (transport advisor for Havelock Village Limited);
- (c) Mr Mark Tollemache (planning consultant for Havelock Village Limited);
- (d) Mr Ryan Pithethley (civil engineer for Havelock Village Limited); and
- (e) Karl Ye (corporate representative of Havelock Village Limited).

13 I draw on that evidence in part.

Involvement in the Proposal

14 I have been engaged by Yashili Dairy New Zealand Co Limited (**Yashili**) and have been involved with their submission to the District Plan review since July 2020. My involvement has primarily focussed on the provision of traffic and transportation advice associated with the Yashili submission to the Waikato District Council's Proposed District Plan, and reviewing and considering the transportation assessments and evidence prepared on behalf of Havelock Village Limited (**HVL**)

15 I have reviewed the relevant parts of the District Plan, original submissions filed by HVL and Rainbow Water Limited (**RWL**) and the Council's Section 42A Framework Report (19 January 2021).

Scope of evidence

16 In respect of the Yashili submission I have:

- a) Reviewed the submissions prepared by HVL and RWL including the supporting transportation assessment report prepared by Commute Transportation Consultants (**Commute**) on behalf of HVL;
- b) Considered the transportation engineering evidence prepared by Mr Leo Hills of Commute on behalf of HVL;
- c) Reviewed Council evidence/reporting in respect of the Pokeno location and associated planning/transport provisions; and
- d) Prepared this statement of expert transportation evidence.

17 My evidence is structured as follows:

- a) Background
- b) Existing Environment
- c) The Yashili Operation
- d) Proposed Rezoning
- e) Assessment of Transportation Effects
- f) Conclusions

Background

18 Yashili owns and operates a dairy processing plant at 1 Yashili Drive, Pokeno. It is a further submitter to the Waikato District Council's Proposed District Plan (**PDP**) review in relation to the HVL (and RWL) submissions seeking the rezoning of land at Pokeno from Rural zoning to a mix of Residential, Industrial, Business and Rural Lifestyle zones.

19 Yashili wishes to ensure that any residential development that might be facilitated through the rezoning sought by HVL does not hinder or compromise its current or future operations. Yashili is concerned with the ongoing safety and efficiency of its heavy traffic movements (in particular) as a result of the introduction of additional volumes of residential activity including private car traffic, pedestrians and cyclists within the Yashili Drive/Gateway Park Drive industrial area.

Existing Environment

20 The Yashili milk processing site is located in the southern part of the existing urban area of Pokeno within a largely industrial area. Key major transport infrastructure in the area includes the North Island Main Trunk Railway line, the State Highway 1 (SH1) corridor and Pokeno grade-separated interchange as well as the major interchange between SH1 and SH2 to the north.

21 The Yashili site is shown (outlined in red) within the context of the surrounding local and strategic transport environment in the following figure.



Figure 1: Locality Plan

22 The Yashili site is surrounded on three sides by sections of the existing local roading network currently serving the industrial and heavy commercial business activities in this part of Pokeno including:

- a) Yashili Drive to the northwest (including a right-angled curve located at the western corner of the Yashili site),
- b) Gateway Park Drive to the northeast, and
- c) McDonald Road to the southeast.

- 23 The section of McDonald Road adjoining the site to the southeast operates primarily as a site access route serving both the Yashili site and the neighbouring Synlait milk processing plant to the east.
- 24 Vehicular access to the Yashili site itself is gained via primary site driveways from Yashili Drive – one serving staff and visitor traffic, and another two for production and export related heavy traffic (one for service traffic entering the site and another for service traffic leaving the site); as well as two driveways connecting to McDonald Road to the east.
- 25 Yashili Drive adjacent to the Yashili site comprises of an existing sealed carriageway kerb-to-kerb width of approximately 12m within a 22m legal road reserve. This carriageway provides for two-way traffic movement plus unrestricted ability for vehicles to park along both the eastern and western kerblines. As I have already discussed above, the Yashili site connects to the eastern side of the roadway via three separate vehicle crossings:
- (a) A 6.3m wide crossing serving staff and visitor entry/exit movements (as well as some limited servicing vehicle movements);
 - (b) A 10.3m wide crossing serving the entry movements of trucks accessing the site; and
 - (c) A 6.5m exit-only truck crossing.
- 26 On the western side of Yashili Drive opposite the Yashili facility other industrial and commercial sites currently provide vehicle access connections via a total of three heavy duty vehicle crossings each approximately 6-8m in width. An undeveloped site on the inside of the right-angled bend in Yashili Drive is yet to establish, however I expect that there would be at least one additional heavy-duty vehicle crossing connecting that site with the section of Yashili Drive opposite the Yashili site.

27 The Yashili site and the surrounding area is currently zoned Light Industrial (or Industrial 2) within the Operative District Plan and Industrial in the Proposed District Plan. It comprises large-scale industrial and manufacturing activities including the Synlait factory to the southeast, the Hynds concrete facility to the northeast and a range of other large format warehousing and production facilities to the north and west of the Yashili site.

The Yashili Operation

Current Operation

28 Yashili's milk processing operation currently involves a range of vehicular movements to and from the surrounding public road network and wider to/from the primary roading network within the Waikato Region and beyond including:

- a) Raw product delivery via both the Yashili Drive and McDonald Road accesses;
- b) Finished Goods Delivery via the McDonald Road access;
- c) Maintenance vehicles via the Yashili Drive access;
- d) Chemical deliveries via Yashili Drive and McDonald Road accesses;
- e) Sludge removal via the McDonald Road access;
- f) Waste removal via both the Yashili Drive and McDonald Road accesses;
- g) Other deliveries (e.g. consumables) via the Yashili Drive access; and
- h) Staff and visitors via the Yashili Drive carpark access.

29 The current operation generates approximately 158 vehicles per day of which approximately 136 light vehicles (staff, visitors and delivery vans) and 22 heavy vehicles (comprised of 19m and 10-12m heavy

goods vehicles). A detailed trip generation summary of the current operations is attached as Appendix A to my statement

- 30 I understand that the notified Proposed District Plan (Rule 14.12.1; P4) provides permitted activity status for activities within the Industrial zone to generate up to 250 vehicle movements per day and up to 15% heavy commercial vehicles.

Future Operation

- 31 I understand that Yashili owns the neighbouring land towards the southwest of its current processing plant. This land is zoned Light Industrial within the Operative District Plan and Industrial in the Notified Proposed District Plan.
- 32 A planned future expansion of the site to provide additional Ultra Heat Treated milk processing capacity and facilities is anticipated to be completed and operational within the next five years. The expanded site will extend the current operations of the site and could be expected to increase the daily trip generation of the Pokeno operation up to a total of approximately 305 vehicle movements per day (comprised of approximately 220 light vehicles and 53 heavy vehicles) across the combination of the current and expanded Yashili facilities.
- 33 I understand that the notified Proposed District Plan provisions enable a permitted development within this expanded part of the Yashili site to generate up to 250 vehicle movements per day and no more than 15% as heavy vehicle movements. Depending on the approach taken by the Commissioners in reaching a decision on the Proposed District Plan in respect of both the value of permitted traffic activity and the definition of the term “site” (referred to by some submitters to this process) in relation to the application of this traffic activity level, the permitted activity level of generated traffic from the two Yashili sites could be up to 500 vehicle movements per day and up to 15% heavy commercial vehicles.

34 I have accordingly considered this future scenario of traffic movements (not necessarily the District Plan permitted activity levels but more generally in terms of the future practical expectations) in reviewing the manner in which the HVL rezoning would be overlaid and the resulting future transport and traffic environment.

Proposed Rezoning - Havelock Village Limited

Requested Rezoning

35 I understand from the statements of evidence prepared by the HVL witnesses to this hearing, that the current request of HVL seeks to:

- a) rezone 148 hectares of land south of (and adjoining) the Yashili site from a Rural zoning to a combination of Residential, Industrial, Business and Rural Lifestyle zones;
- b) create approximately 600 residential and rural lifestyle lots (and accompanying dwelling units);
- c) create three primary, public roading access connections to the existing public roading network via Hitchen Road, Yashili Drive and Cole Road/Bluff Road; and
- d) construct a network of internal public roads, pedestrian and cycle trails within the subject land.

36 From my review of the Commute ITA (dated October 2018) and Mr Hills' evidence (dated February 2021) I understand that HVL has undertaken a multi-disciplinary review of the scale and intensity of the proposed residential development within its land from the position and extent sought in its original submission to the District Plan Review. Whereas the original submissions by HVL and the Commute ITA were based upon an expectation of up to 1070 dwellings, HVL now seeks to provide a total of 600 dwelling units. This lower level of future residential activity and associated traffic generation will form the basis of my review of the effects of the HVL rezoning request upon the existing and future transport environment surrounding and adjacent to the Yashili site.

Expected External Traffic Generation

- 37 Mr Hills sets out at paragraphs 5.3 – 5.7 of his evidence that the requested residential rezoning and creation of the 600 residential dwellings within the HVL land will give rise to a peak of approximately 510 vehicles per hour (**vph**) to and from the HVL land via the three external roading access connections. He considers that based on Census 2018 commuting patterns, his assessment that only the Hitchen and Yashili access connections will cater for the external traffic movements and his expectation that the Bluff Road/Cole Road connection would only be used for small volumes of local access movements via these rural routes, the Yashili Drive access route (via Yashili Drive, Gateway Park Drive and McDonald Road) would cater for approximately 40% or some 204 vph during the weekday peak hour.
- 38 At paragraph 5.11 of his statement Mr Hills then also discusses the further development of land by an HVL-related company at Tata Valley to be developed as a bespoke tourist resort zone and expected to include traveller's accommodation, hotel and tourist activities. Based on a previous Arrive transportation assessment undertaken for the Tata Valley tourist activity he refers to a potential for a further 232 – 364 vph during the weekday AM and PM peak hours, respectively. Mr Hills predicts that all of the Tata Valley traffic generation will connect to the external road network via Yashili Drive – Gateway Park Drive – McDonald Road route thereby adding all of the 232-364 vph onto the 40% of HVL residential traffic generation.
- 39 This translates into an upper estimate of external traffic generation of the rezoned HVL (and related entity) land to between 436 and 568 vph during the weekday peak hours. This traffic would be expected to traverse the proposed access leg connection from the HVL land onto Yashili Drive, Gateway Park Drive and McDonald Road (including passage across the level crossing of the North Island Main Truck railway line) before connecting with Great South Road via the existing Give Way priority-controlled intersection.

- 40 I am concerned that the assessments made within Mr Hills’ evidence (and by reference to the SIDRA intersection traffic modelling he attaches as Appendix E to his evidence) that he has under-estimated the effect of this additional traffic on the access route between the HVL land and the Great South Road primary route (and for onward connection to SH1 via the Pokeno interchange to other main centres including Hamilton and Auckland).
- 41 For example, the total intersection flows included in Mr Hills’ Appendix E and the table headed “*Movement Summary Site 101: [PM Existing]*” (appearing in the bottom row of the table) show a total of 475vph, and the corresponding table (two pages later) headed “*Movement Summary Site 101: [PM Development]*” indicates a total future volume of vehicles through the intersection of 842 vph. The difference between these two figures (representing the net additional traffic volume associated with the HVL rezoning) being 367vph.
- 42 In comparison the calculation of the combination of the proposed HVL rezoning development (204vph in the PM peak) and the Tata Valley development (364vph in the PM peak hour) totals 568vph. It appears that Mr Hills has under-estimated the future development traffic by approximately 201vph.
- 43 In this regard, I am concerned that Mr Hills may have potentially underestimated the scale and nature of requirements for potential future upgrading of the McDonald Road/Great South Road intersection (as well as completely ignoring the intersections of Yashili Drive/Gateway Park Drive and the roundabout at McDonald Road/Gateway Park Drive). Mr Hills concludes¹ that due to the number and range of rezoning requests sought under this District Plan Review, it is in his view inappropriate to specifically identify intersection upgrades. He considers it preferable to leave the identification of the upgrades and

¹ paragraphs 5.20 – 5.23

the contribution by developers to those upgrades to the District Council's development contribution policy and mechanisms. I disagree.

- 44 As I will discuss later in my statement, I consider that the specific effects arising from the HVL (and the related Tata Valley) rezoning requests are able to be identified and quantified separately from the wider range of rezoning and future developments in this area due to the specific external access route that would serve the rezoning. The proposed public access via Yashili Drive – Gateway Park Drive – McDonald Road can in my opinion be separately assessed in terms of generated traffic and the associated capacity and safety effects, specific upgrading/mitigation identified and proportional contributions to the identified works can be calculated.

Appropriateness of SIDRA Intersection analysis assumptions

- 45 The information contained within Appendix E of Mr Hills evidence indicates that a standard proportion of 5% heavy vehicles within the peak period traffic streams at the McDonald/Great South intersection (the only intersection along the Yashili Drive access route from the HVL land to Great South Road assessed by Mr Hills). While I have not undertaken my own surveys of traffic flows at this or other intersections along this route, from my experience and observations made within the surrounding network, I consider that the proportion of vehicles generated by the combined activities of Yashili, Hynds, Synlait and other industrial/manufacturing operations would give rise to a much higher proportion of heavy goods vehicle movements through this and other intersections along the route. In this regard, I also note the permitted traffic generation levels I discussed earlier in my statement provides for up to 15% heavy commercial vehicles to be generated to and from a site as a permitted activity.

- 46 I recommend that Mr Hills/HVL undertake a further sensitivity assessment (as well as surveys of these traffic volumes and vehicle classifications) for these intersection performance calculations to test the performance and in order to better reflect the higher proportional

contribution of heavy goods vehicles especially in this industrial/business area of Pokeno.

Planned Roading Upgrades

47 Mr Hills has only considered the “key” intersections potentially impacted by the rezoning request (including the operation of the McDonald Road/Great South Road intersection serving access movements via the Yashili Drive connection to the HVL land). He then refers² to the wider network effects associated with this and other rezoning requests/submissions made under the WDC Plan Review process and concludes:

“It is difficult to ascertain the number or size of these submissions, the traffic expected to be generated, the traffic patterns and therefore the traffic effects to the surrounding road network”

48 While I appreciate the complexity of considering the range and overlapping nature of multiple rezoning requests and their traffic generation effects across the wider Pokeno area, it is my view that consideration of the access route between the HVL (and Tata Valley) land should be extended to consider at least the intersections of Yashili Drive/Gateway Park Drive and Gateway Park Drive/McDonald Road. Mr Hills considers that the complexity of the multiple rezonings sought alongside the HVL request and other consented developments within the wider Pokeno area means that a development contribution regime is preferred over a specific assessment and possible development trigger regime to contribute to intersection or other transport upgrading.

49 The Commute ITA (prepared in support of the HVL submission to the District Plan Review) included³ a range of external transport mitigation measures and upgrading measures as follows:

² From Paragraph 5.20

³ Commute Integrated Transportation Assessment (8 October 2018), Table 13: Recommended Intersection and roading upgrades (indicative)

Table 13: Recommended Intersection and roading upgrades (indicative)

Road	Upgrade required	Comment
Potter Rd (Link A)	Should comply with upgrades outlined in Table 10 above	-
Hitchen Rd (Link B)	Provide dedicated cycle facilities between the site and Pokeno Road	-
McDonald Rd (Link C)	Provide dedicated cycle facilities between the site and Great South Road	-
Bluff Rd (Link D)	Should comply with upgrades outlined in Table 10 above	-
Cole Rd	Should comply with upgrades outlined in Table 10 above	-
Ewing Road	Should comply with upgrades outlined in Table 10 above	-
Pioneer Road	Should comply with upgrades outlined in Table 10 above	-
Ewing Road/ Whangarata Road	Provide a right turn bay on Whangarata Road	Monitor and assess at each resource consent stage to determine whether further upgrades/ mitigation measures are required
Ewing Rd/ Trigg Rd/ Potter Rd	Upgrade to formal give-way intersection control	Monitor and assess at each resource consent stage to determine whether further upgrades/ mitigation measures are required
Cole Rd/ Bluff Rd	Upgrade to formal give-way intersection control	Monitor and assess at each resource consent stage to determine whether further upgrades/ mitigation measures are required
Bluff Rd/ Pioneer Rd	Upgrade to formal give-way intersection control	Monitor and assess at each resource consent stage to determine whether further upgrades/ mitigation measures are required
Pioneer Rd/ underpass	-	Monitor and assess at each resource consent stage to determine if signals are warranted

50 At the time this ITA was prepared (October 2018), there was no specific proposal to connect the HVL land to Yashili Drive and hence the above table and supporting analysis/traffic modelling did not refer to any of the intersections along the Yashili / Gateway Park / McDonald route. Mr Hills now suggests that the above mitigation measures in support of the

HVL rezoning (and the other intersections identified in the Councils 2016 Pokeno Intersection Assessment report⁴) be captured and addressed via a Development Contribution process.

51 I am concerned with this approach in that there are specific effects associated with the HVL rezoning request and its generated vehicle trips (as well as potentially the pedestrian and cycle movements expected to move between the HVL and the Pokeno Town Centre via both Hitchen Road and McDonald Road) that should be associated more directly with the HVL request. In particular, I am concerned that insufficient consideration has been given by Mr Hills in respect of the capacity, safety and operational details of the connection between the HVL land and Yashili Drive, especially the absence of consideration of the future permitted activity development of the wider Yashili property that would require specific intersection design at the time of a future consent but at this time should include appropriate allowance for this development within the HVL assessment.

52 In my opinion, the specificity of the effect generated by the HVL rezoning particularly in relation to the access route via Yashili/Gateway Park/McDonald warrants a more specific inclusion of mitigation and associated development triggers for inclusion of the mitigation works to be attached to the HVL rezoning request.

Assessment of Effects

Access to Yashili Drive

53 The HVL request proposes that the Yashili Drive access be arranged via the access leg of the property at 5 Yashili Drive which would place it adjacent to the Yashili site (both current activities and expansion site). The existing legal width of the access leg of the 5 Yashili Drive property is only 12m wide. As I mentioned previously, the current legal width of

⁴ Waikato District Council Pokeno Intersection Assessment (Beca) 2016

the section of Yashili Drive adjacent to the existing Yashili operation is 22m.

- 54 The District Council's Roding standards⁵ require a minimum road reserve width of 20m for public roads serving more than 8 household allotments or activities. Within this roading standard, the Council standards also require a minimum carriageway width of 11m plus a footpath of 1.5m (and associated 1.5m wide service berms) on each side of a newly established public road.
- 55 The available legal width of the HVL access leg within the land that they control (12m) is clearly insufficient to provide an appropriate and safe 'collector' standard of roading infrastructure required by the District Plan (minimum 20m). HVL proposes that the detailed design of the extension of the Internal Collector Road and the proposed intersection with the existing Yashili Drive (at the location of the existing right-angle bend in Yashili Drive) be undertaken at resource consent stage.
- 56 In my opinion, given the lack of legal access to the standard expected by the District Council by HVL to Yashili Drive and its ability to ensure that the necessary roading design standard can be delivered (the 20m wide road reserve width), the rezoning of the land or the proposal to connect the HVL land to Yashili Drive should be deferred until the appropriate legal width can be delivered.

Network Function

- 57 Yashili's operation generates a significant volume of both light and heavy transport vehicles across the course of a typical weekday – at times reaching approximately 140-145 daily traffic movements (and up to approximately 20-30 would be heavy traffic movements) to and from the Yashili site driveways connecting to Yashili Drive. The mixing and

⁵ Waikato District Plan, Part 3 Appendices, Section A3 Provision of Access on Subdivision, Table 4 Access and Road Performance Standards

overlapping of these heavy traffic movements (plus other movements associated with the NZ Drinks and adjoining developments in Yashili Drive) could potentially create an undesirable environment where the expectations of different users of this route lead to unsafe manoeuvres or driver behaviour.

58 In an industrial environment such as this, there is in my experience a range of driver behaviours and expectations such that heavy traffic movements are expected and anticipated, primarily related to the expectation that heavy vehicles will be frequently turning to and from driveways, and through intersections. These movements into and out of the industrial facilities in the area also creates an environment where the addition of walking and cycling movements would firstly not be expected, and secondly lead to an inappropriate and potentially unsafe mixing of regular heavy traffic movement and more vulnerable road users. While the higher proportion of movements to and from the HVL land would be expected via Hitchen Road there is still the potential that a proportion of the walking and cycling activity generated to and from the HVL residential development would find a Yashili Drive connection attractive and convenient.

59 In my opinion, it would be more appropriate for the rezoning of the HVL land to incorporate either a greater focus of the HVL traffic movements along the Hitchen Road route where there is comparatively less industrial-generated heavy traffic movements and a heightened expectation of walking and cycling activity. Additionally, I consider it would be appropriate for the rules/precinct provisions associated with the rezoning of the HVL land to include a specific requirement for the consideration of the potential effects arising from the generated traffic movement arising from the future development within the HVL land upon the safety and operation of the road network and local access needs for the industrial areas along Yashili Drive and Gateway Park Drive.

North Island Main Trunk Railway Crossing

60 The transport connection between the HVL land and the Great South Road connection to / from SH1 and Pokeno Interchange via Yashili

Drive will create an increase in traffic movements passing over the North Island Main Trunk Railway line. I am aware that as operators and managers of the national railway network KiwiRail adopts a risk-based process to assess the implication of additional traffic volumes across its level crossing. This process – referred to as the Level Crossing Safety Impact Assessment (**LCSIA**) approach – considers the risk associated with the planned or expected increase in passing road traffic and potential increases in rail traffic.

61 My understanding of KiwiRail’s LCSIA approach is that in the case of a resource consent or rezoning application the local authority (in this case Waikato District Council) would normally notify KiwiRail as an affected party (in terms of a resource consent or Plan Change) and invite KiwiRail’s response which would typically be to undertake the LCSIA and provide advice as to the acceptability or otherwise of the proposal (and any associated level crossing upgrading required in support of the consent/rezoning). Given the proposed scale of the HVL rezoning sought and McDonald Road being one of the two main access routes serving the future 600 dwellings (as well as the fact that the McDonald Road level crossing includes specific pedestrian facilities), it is in my opinion most likely that KiwiRail would require the LCSIA in support of any development within the HVL (or Tata Valley) area.

62 I therefore recommend that the HVL rezoning be supported by a specific requirement for the completion and KiwiRail consideration of for an LCSIA assessment prior to the granting of consent for subdivision/land-use for any residential development within the HVL land.

Conclusion

63 I have been asked by Yashili New Zealand Dairy Co Ltd to assess the potential transportation effects associated with a proposed rezoning sought by HVL in respect of land adjacent to Yashili’s operation at Pokeno. I have reviewed the Integrated Transportation Assessment prepared by Commute and the transport engineering evidence prepared by Mr Leo Hills on behalf of HVL.

64 In my opinion the assessments undertaken in the ITA and by Mr Hills have failed to take sufficient account of the specific operation and driveway/intersection performance of the intersections planned to serve the future HVL development along the corridor comprised of Yashili Drive – Gateway Park Drive – McDoanld Road. I disagree with Mr Hills who considers that the HVL rezoning (and the future residential development that the rezoning would facilitate) should simply be addressed by a future development contribution levied against the HVL development contributing to the wider roading upgrades within the Pokeno area.

65 I consider that Mr Hills’ assessment should have taken a greater account of the specific effects of the HVL rezoning and future residential development activity on the following intersections:

- a) HVL’s Internal Collector Road / Yashili Drive;
- b) Yashili Drive / Gateway Park Drive, and
- c) Gateway Park Drive / McDonald Road.

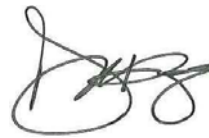
66 I recommend that the HVL rezoning application be accompanied by a requirement to undertake a specific assessment of the effects of HVL generated traffic on the safety and operation of the Pokeno industrial traffic network primarily relating to Yashili Drive and Gateway Park Drive, giving particular attention to the safety of heavy traffic movements to and from the surrounding industrial sites, and the effects of existing and future heavy traffic movements on the safety of pedestrian and cycling activity generated by the HVL site.

67 Additionally, I recommend that the HVL rezoning be accompanied by the preparation (in consultation with KiwiRail and the District Council) of a Level Crossing Safety Impact Assessment in respect of the vehicle and pedestrian level crossings over the North Island Main Trunk Railway line at McDonald Road.

68 Critically, I consider that the HVL rezoning should be deferred (or otherwise modified in scale and access location) until such time as the

appropriate width of public access road (a minimum 20m road reserve width) can be provided within HVL-controlled land for its connection to Yashili Drive. An appropriate design of the Collector Road/Yashili Drive intersection should be undertaken to show (at least to a concept level of design) that the intersection at Yashili Drive can be accommodated within HVL-controlled land.

Date: 10 March 2021



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Don McKenzie

Appendix A – Estimate of Current (2019) Trip Generation (Yashili Pokeno)

Size and type of vehicle	Reason: Visitor/Staff/Delivery	Gate/ Access Location	Quantity per 24 hrs	Time in	Time out
19m HGV (Large)	Raw products Delivery Oil	Yashili Drive	2	6:00 a.m.	6:00 p.m.
19m HGV (Large)	Raw products Delivery Milk	Yashili Drive	5	6:00 a.m.	6:00 a.m.
10-12m HGV (Medium)	Raw products Delivery	McDonald Road	5	6:00 a.m.	6:00 a.m.
10-12m HGV (Medium)	Finish goods outgoing	McDonald Road	5	6:00 a.m.	6:00 a.m.
Delivery Van (Small)	Maintenance	Yashili Drive	3	6:00 a.m.	5:00 p.m.
10-12m HGV (Medium)	Chemicals	McDonald Road	1	6:00 a.m.	5:00 p.m.
10-12m HGV (Medium)	Chemicals (NO2-CO2)	Yashili Drive	2	6:00 a.m.	5:00 p.m.
10-12m HGV (Medium)	Sludge	McDonald Road	1	6:00 a.m.	5:00 p.m.
10-12m HGV (Medium)	Waste	McDonald Road	0.5	6:00 a.m.	5:00 p.m.
10-12m HGV (Medium)	Waste	Yashili Drive	0.5	6:00 a.m.	5:00 p.m.
Delivery Van (Small)	Other deliveries consumables-samples-laundry-water....	Yashili Drive	3	6:00 a.m.	5:00 p.m.
Car	Staff	Yashili Drive	120	4:00 p.m.	4:00 a.m.
Car	Visitors	Yashili Drive	10	5:00 p.m.	17:00 pm
		TOTAL vehicles	158		