

**BEFORE AN INDEPENDENT HEARINGS PANEL
OF THE WAIKATO DISTRICT COUNCIL**

IN THE MATTER of the Resource
Management Act 1991

AND

IN THE MATTER of the proposed Waikato
District Plan (Stage 1)
Hearing 25

**EVIDENCE OF TODD JAMES LANGWELL
ON BEHALF OF HYNDS PIPE SYSTEMS LIMITED AND THE HYNDS FOUNDATION**

TRAFFIC

17 February 2021

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1. INTRODUCTION

1.1 My full name is Todd James Langwell.

1.2 I hold a New Zealand Certificate of Engineering (Civil) and a post-graduate Certificate of Transport Planning, Management & Control from the University of New South Wales, Australia. I have been with Traffic Planning Consultants Limited (**TPC**) for the past 23 years and a director of the company for the past 12 years. Prior to that I gained 7 years of experience as a Traffic Engineer for Auckland City Council. During my time with TPC, I have been engaged by local authorities and the private sector for advice on many matters covering traffic engineering, road safety, design and network management.

1.3 I have read the Code of Conduct for Expert Witnesses (**Code**) outlined in the Environment Court's Consolidated Practice Note 2014 and confirm that I will comply with it in preparing my evidence. I confirm that the issues I will address are within my area of expertise, except where I state that I rely upon the evidence of other expert witnesses. I also confirm that I will not omit to consider material facts known to me that might alter or detract from my opinions.

2. SCOPE OF EVIDENCE

2.1 I was engaged by Hynds Pipe Systems Limited and the Hynds Foundation in October 2020 to provide traffic engineering advice and provide evidence on behalf of Hynds in relation to their submissions/further submissions on the Proposed Waikato District Plan (**Proposed Plan**). Hynds Pipe Systems Limited and the Hynds Foundation are referred to collectively as **Hynds** in this evidence unless the distinction is made between the two organisations.

2.2 The Proposed Plan applied the Rural zone to the land at 62 Bluff Road, adjoining the Hynds plant. This land has recently been purchased by Hynds. The focus of this evidence is Hynds' request that the lower portion of the 62 Bluff Road site be zoned Heavy Industrial whilst retaining the proposed Rural zone on the upper portion of the land. The total area planned to be rezoned as Heavy Industrial is 4.27 hectares of land.

2.3 I have read the transport related sections of the Waikato District Council Framework Report prepared in accordance with s42A of the RMA (**Council's s42A Report**).

2.4 My evidence will cover the following matters:

- (a) A summary of the key features of the surrounding transport environment;
- (b) An overview of the potential vehicle trip generation and potential transport effects;
- (c) Comments on the Council's s42A Framework Report; and
- (d) Conclusions

3. CURRENT TRANSPORT ENVIRONMENT

3.1 The Hynds site is located at 9 McDonald Road, Pokeno. Vehicle access to the site is typically via Great South Road and McDonald Road. Great South Road has on and off ramps to State Highway 1 to the north and south of the site, and also provides access to Pokeno Village. An alternative route to and from the north is available via Gateway Park Drive and Hitchen Road, however this takes slightly longer than using Great South Road so is not commonly used.

Road Network

3.2 McDonald Road is a local road that bounds the Hynds site's north-western boundary with a posted speed limit of 50 km/h. To the north-east it meets Great South Road at an intersection with a Give Way priority control. The Proposed Plan indicates the primary function of a local road is one of property access.

3.3 McDonald Road has a kerb-to-kerb carriageway width of approximately 12 metres within the vicinity of the site, which allows for one traffic lane in each direction and on-street parking on both sides of the road. A footpath is provided on its northern side for pedestrian use.

3.4 Traffic flows on McDonald Road have not been recently recorded. I have estimated that the current vehicle flow to be in the order of about 900-1,000 vehicles per day (**vpd**)¹. Typically, the busiest hours will be about 10% of the daily flows, or around 90-100 vehicles per hour (**vph**).

¹ Based on current land use activities that have access to McDonald Road.

3.5 Great South Road is classified as a collector road in the Proposed Plan. The Proposed Plan sets out the functions of collector roads as providing links between local and arterial roads. They are roads that:

- a) *provide locally-preferred routes between or within areas of population or activities*
- b) *provide alternative routes to arterials*
- c) *are sealed and are of road geometry aligned with operational safety standards required for the traffic volumes on each section*
- d) *the through traffic function needs to be balanced against the property access function.²*

3.6 Through the Pokeno area, Great South Road has varying widths but is typically one lane in each direction. Where Great South Road meets McDonald Road a painted median and right turn pocket is available for vehicles turning into McDonald Road.

3.7 The most recent traffic count undertaken by the Waikato District Council of Great South Road was in May 2019 near Walter Rodgers Road. The Average Daily Traffic Flow (**ADT**) was recorded as 3,393 vpd.

Public Transport

3.8 Bus stops are provided on McDonald Road immediately outside of the site, providing for Route 44 (Pokeno – Tuakau – Pukekohe) which generally provides a service on a frequency of 45 to 60 minutes Monday to Friday and a two-hourly frequency on Saturdays and Sundays.³

Walking and Cycling

3.9 Pedestrian footpaths are provided on each of the roads surrounding the site, however, are typically only available on one side of the road. There are no separated cycling facilities provided on any of the roads surrounding the site.

² Table 14.12.5.5 Proposed Waikato District Plan.

³ Busit.co.nz *Regional Buses - Pokeno to Pukekohe* <<https://busit.co.nz/regional-services/pokeno-to-pukekohe/>>.

Road Safety History

- 3.10** Information from the New Zealand Transport Agency's 'Crash Analysis System' for the five-year period, January 2016 to December 2020, indicates that five crashes have been reported on McDonald Road or Great South Road (between Pokeno Road and McDonald Road). Of these crashes only one resulted in minor injuries after a car lost control on Great South Road at an intersection due to a medical illness. Based on the reported crash history, I consider that there is no traffic safety problem on these roads at present.

4. POTENTIAL TRAFFIC GENERATION AND TRANSPORT EFFECTS

- 4.1** To determine the potential traffic generation effects of the increasing the area of Heavy Industrial Zone by 4.27 hectares, I have considered the current traffic generation for the Hynds operation.
- 4.2** The proposed zone is basically an extension of the existing zone and the Hynds site. It is therefore most likely that the traffic generation characteristics of the new zone area will be an extension of and similar to the existing Hynds operation.

Existing Hynds Traffic Generation

- 4.3** Information provided by Hynds indicates that the average daily number of vehicles using the site is about 340 vpd. This is a mixture of staff cars, visitors, courier deliveries and truck movements either entering or exiting the site. Typically, truck movements are about 15 to 20% of this volume depending on the types of inwards or outwards goods that are planned for the day.
- 4.4** Peak hour flows for the existing activity have not been measured but I consider that it aligns with the arrival or departure of staff. There are currently 96 parking spaces provided on site. If 50% of the vehicles using these spaces were to move during the same hour, I would expect a peak hour flow of around 48 vph or about 14% of the daily flows to and from the site.
- 4.5** The overall area of the Hynds site is 22.61 hectares. However, some of the site is either undeveloped or currently under development. I have measured the area of the current operation to be about 10.11 hectares including the car park, access and circulation roads, buildings and outdoor yard areas.

- 4.6** Based on the current site area under use, the Hynds operation therefore generates 33.6 vehicle movements per day per hectare (**vpd/ha**). This equates to about 4.7 vph/ha during the peak hour periods.

Potential Increase in Traffic Generation

- 4.7** By applying the traffic generation rates I have identified above to proposed zone (4.27 hectares), the potential increase in traffic generation from the new zone will be in the order of about 143 vpd, including about 4 additional truck movements per day, and about 20 vph during the peak hour periods.

Potential Transport Effects & Assessment

- 4.8** The area is relatively new and continuing to develop. There are still vacant lots and undeveloped portions of land on McDonald Road that are yet to be completed. This results in local traffic patterns always evolving and changing as land use established.
- 4.9** Nevertheless, I am confident that existing traffic conditions on McDonald Road and Great South Road can accommodate the additional traffic movements relating to additional Heavy Industrial zoning, including at the intersection where these two roads meet. I expect there is more than enough capacity to accommodate this additional traffic without any noticeable effects.
- 4.10** Typically, local roads with a single lane in each direction can accommodate up to 5,000 vpd and about 500 vph before it will begin to experience any notable congestion. The additional trips because of the rezoning sought by Hynds can be accommodated with no noticeable effect.
- 4.11** I have also considered the extent of undeveloped land that may have access to McDonald Road and estimate that about 50% of the land area is currently undeveloped. With current flows measuring at about 1,000 vpd, I would anticipate that future flows along McDonald Road will grow to around 2,000 vpd once all adjacent land is developed as currently zoned.
- 4.12** Therefore, the addition of 143 vpd as a result of the additional zoning is not significant in the context of future flows along McDonald Road and the wider road network. This would indicate that McDonald Road will continue to operate under capacity.

- 4.13** I have also considered what the additional vehicles movements will mean for road safety and in particular the effects on pedestrian and cycle safety. Based on the predicted flows I have discussed above, the future vehicle activity on McDonald Road is unlikely to have an adverse effect on road safety.
- 4.14** McDonald Road predominantly serves industrial land uses and as a result a low volume of pedestrians and cyclists are anticipated to use the road. Nonetheless, provided that any site access is designed in accordance with the Proposed Plan standards and volumes remain below 5,000 vpd, the additional Heavy Industrial zoning is not anticipated to negatively impact on pedestrian and cyclist safety or amenity.
- 4.15** Given the number of additional truck movements anticipated on a daily basis (4 truck movements per day), I also consider this will be within the daily fluctuation of truck activity from the existing Hynds operation and well within any daily truck activity on McDonald Road and the wider road network. Therefore, I do not consider that there will be any effect on safety and amenity of the surrounding area, including the Pokeno Village.

5. COMMENTS ON THE COUNCIL SECTION 42A REPORT

- 5.1** I have reviewed the Council's s42A Report.⁴ Although it does not specifically address the rezoning proposed by Hynds it sets out the Council's best practice guidance for rezoning.
- 5.2** In particular, the report sets out additional locations criteria for general business, industrial and business-park zoned land.⁵ The following is stated for industrial zones with regards to access:

b. ease of access to the regional road network (without passing through towns and village centres or through residential areas

- 5.3** The Hynds site is currently zoned Heavy Industrial in the Operative and Proposed Plans. As I have discussed above, it can only be accessed to and from the north via Great South Road and through Pokeno Village, or via Gateway Park Drive and Hitchen Road. Each of these roads have Business

⁴ Dr Mark Davey Hearing 25 Zone Extents Framework Report (19 January 2021).

⁵ Paragraph 162 – page 36.

Town Centre or residential zoned land, activities already existing, and vehicles access the Hynds site are currently using these roads.

5.4 Although I support this criterion to enable assessment of traffic effects on centres and residential activity, there are currently no alternatives for the Hynds operation (or the balance of Heavy Industrial zoned land adjacent) in terms of access to the regional road network. Therefore, any effects because of any extension of zoning needs to be considered in this context.

5.5 As I have discussed above, I consider any additional traffic generation because of the extended Heavy Industrial zoning will be within any daily fluctuations from what is currently occurring and what will occur once the existing industrial zoned land is fully developed.

6. CONCLUSION

6.1 I have considered the existing transport environment surrounding the Hynds site and the proposed extension of Heavy Industrial zoned land.

6.2 I have analysed the existing traffic generation activity from the Hynds operation to understand the potential traffic effects of rezoning 4.27 hectares of land currently proposed to be zoned rural to heavy industrial.

6.3 Any additional vehicle activity that may occur is in my opinion minor and well within any daily fluctuations of activity within the site and on the adjacent road network.

6.4 I have reviewed the Council's s42A Report and additional criteria for locations of industrial land. As the Hynds site is existing and has no other access options, any criteria around avoiding town centres and residential zoned lands needs to be considered within that context for this site.

6.5 Overall, I consider that the traffic effects of Hynds' proposed Heavy Industrial zoning extension can be accommodated on the road network without compromising its function, capacity or safety.

Todd James Langwell

17 February 2021