Level 2, 143 Durham Street
Tauranga, Bay of Plenty
PO Box 13027, Tauranga Central 3141
New Zealand
+64 7 838 0160

Level 5, Building E
Union Square, 192 Anglesea Street
Hamilton Central, Waikato
PO Box 9041, Hamilton 3240
New Zealand
+64 7 838 0144

consultants@bbo.co.nz
www.bbo.co.nz

Technical Memo

To	Horsham Downs Estate Limited
CC	Jarred Stent, Director, BBO
	Cameron Inder, Traffic and Transportation Engineering Manager, BBO
From	Thato Mariti, Transportation Engineer
Date	16 June 2026
Job No.	s 9(2)(b)(ii)
Job name	319 Gordonton Road
Subject	**Horsham Downs Estate - Transportation Assessment for Fast Track Referral Application**

1. Project Team

Thato Mariti is a Transportation Engineer at BBO with over 15 years of experience in traffic and transportation engineering. She holds a Bachelor of Science in Engineering (Civil Engineering) and has extensive experience in integrated transport assessments, intersection design, and traffic safety assessments across a range of development and infrastructure projects. Thato has visited and is familiar with the road network surrounding the site.

Cameron Inder is the Traffic and Transportation Engineering Manager at BBO. Cameron holds a Bachelor of Engineering (Hons) from the University of Auckland, New Zealand, and is a Chartered Professional Engineer (CPEng) with Engineering New Zealand. He has 27 years of professional engineering experience in traffic and transportation engineering, with extensive experience in transportation planning, modelling, and the design of both rural and urban transport corridors, including large and special projects related to urban and rural intersection design and transport effects assessment.

2. Introduction

Horsham Downs Estate Limited proposes the development of its site at 319 Gordonton Road ("site") for residential dwellings using the Fast Track Approvals Act 2024 ("FTAA"). BBO has been engaged to undertake a transportation assessment to inform the referral application and subsequently the substantive consent application. This technical memorandum outlines the traffic engineering aspects of the development.

This discussion document describes:

- the site description and the existing transport environment.
- high-level traffic and transportation effects, including potential site access arrangements and the ability of the surrounding transport network to safely and efficiently accommodate site-generated traffic.
- walking, cycling, and public transport connectivity, including the potential for improved access to other travel modes over time.
- mitigation measures, where appropriate.

It must be noted that this analysis is not a comprehensive integrated transport effects assessment and focuses primarily on whether the existing road network can accommodate the potential traffic volumes and associated capacity and safety effects, assuming that conventional transport improvement and mitigation measures would be deployed within the Site and/or the existing road width.

This memorandum has been prepared in accordance with the Environment Court Code of Conduct for Expert Witnesses.

2.1.1 Project Overview

319 Gordonton Road is proposed to be a residential development that comprises approximately 850-950 dwelling units of varying typologies and densities, along with an approximately 3,000 m^2 supporting mixed-use neighbourhood centre, open spaces, and infrastructure. The Gordonton Road masterplan is shown in **Figure No: 1**.

The site comprises these Records of Title which are legally described as follows:

(a) RT SA3D/1116 – Lot 1 DPS 9149 – 10.8810 ha
(b) RT SA63A/920 – Lot 1 DPS 79016 (3.6562 ha) and Lot 1 DP 24870 (39.4568 ha). The total area is 43.113 ha.

The site involves a total land area of approximately 54 ha.

The site is zoned Rural under the Waikato Operative District Plan (ODP) and General Rural Zone under the Waikato District Plan Operative in Part (WDP).



Figure No: 1 - Masterplan

3. Site Description and Proposal

3.1 Site Description

The site is located at 319 Gordonton Road, Rototuna, within the Waikato region, north of Rototuna. The site is bounded by Gordonton Road to the east, and Haynes Place and State Highway 1 (SH1) to the south. Refer to **Figure No: 2** for the site locality.

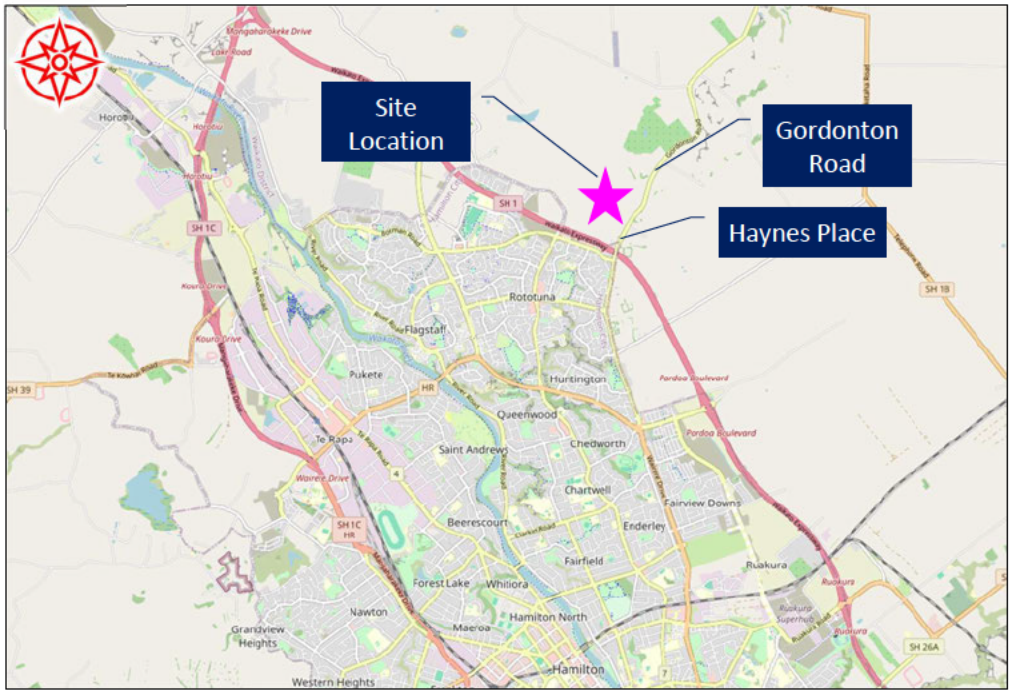


Figure No: 2 - Site Locality

4. Existing Environment

4.1 Adjacent Road Network

The existing network of public roads adjoining the site includes Gordonton Road and Haynes Place, as shown in **Figure No: 2**.

- **Gordonton Road** is a two-way, two-lane rural road running in a north-east to south-west direction past the proposed subdivision. The road has a posted speed limit of 100 km/h, and an operating speed of 88 km/h based on NZ Transport Agency Waka Kotahi's (NZTA) MegaMaps. It is classified as a Rural Connector in the One Network Framework (ONF) and a Regional Arterial Road in the WDP.

  Traffic data dated November 2025 was sourced from the Mobile Roads website, which shows that Gordonton Road has an Average Daily Traffic (ADT) volume of approximately 5,480 vehicles per day (vpd) and 4% Heavy Commercial Vehicles (HCV). The site currently has vehicle crossings located at Route Point 0.042 and Route Point 0.422. The applicant is proposing a new main access for the subdivision at Route Point 0.48.

- **Haynes Place** is a two-way, two-lane rural road running in an east-west direction along the southern boundary of the proposed subdivision. The road has a posted speed limit of 80 km/h, and an operating speed of 25 km/h based on MegaMaps. It is classified as a Rural Road in the One Network Framework (ONF) and a Regional Arterial Road in the WDP.

Traffic data dated June 2024 was sourced from the Mobile Roads website and it shows that Haynes Place has an Average Daily Traffic (ADT) volume of approximately 51 vpd and 5.1% HCV. The site currently does not derive access from Haynes Place; however, the applicant is proposing a new link to the existing Gordonton Road / Haynes Place intersection and, in turn, a connection to Haynes Place at approximately RP 0.054.

4.2 Existing intersections

The existing Gordonton Road / Haynes Place intersection is configured as a priority-controlled T-intersection, with Gordonton Road forming the primary through route and Haynes Place operating as the minor side road. Vehicle movements from Haynes Place are controlled via give-way priority, while through traffic on Gordonton Road is afforded priority. The intersection includes a right-turn bay on the northern approach to Gordonton Road, with single-lane approaches provided on the southern and eastern legs, as shown in **Figure No: 3.**



Figure No: 3 Existing Gordonton Road / Haynes Place intersection

4.3 Public Transport

The nearest public transport facilities exist in Rototuna North at the following locations, as shown in **Figure No: 4**:

- Borman Road has a bus stop located approximately 1.2 km (a 17-minute walk) from the Gordonton Road / Haynes Place intersection.
- Barrington Drive has a bus stop located approximately 1.1 km (a 15-minute walk) from the Gordonton Road / Haynes Place intersection.

These routes are served by the Rototuna Circle (RC) bus service, which travels from the Transport Centre to Clarkin Rd, Chartwell, Flagstaff, Rototuna High School, and Rototuna Shopping Centre in both clockwise and anticlockwise directions during weekdays. At weekends and on public holidays, limited services run from Chartwell to Rototuna Shopping Centre only.

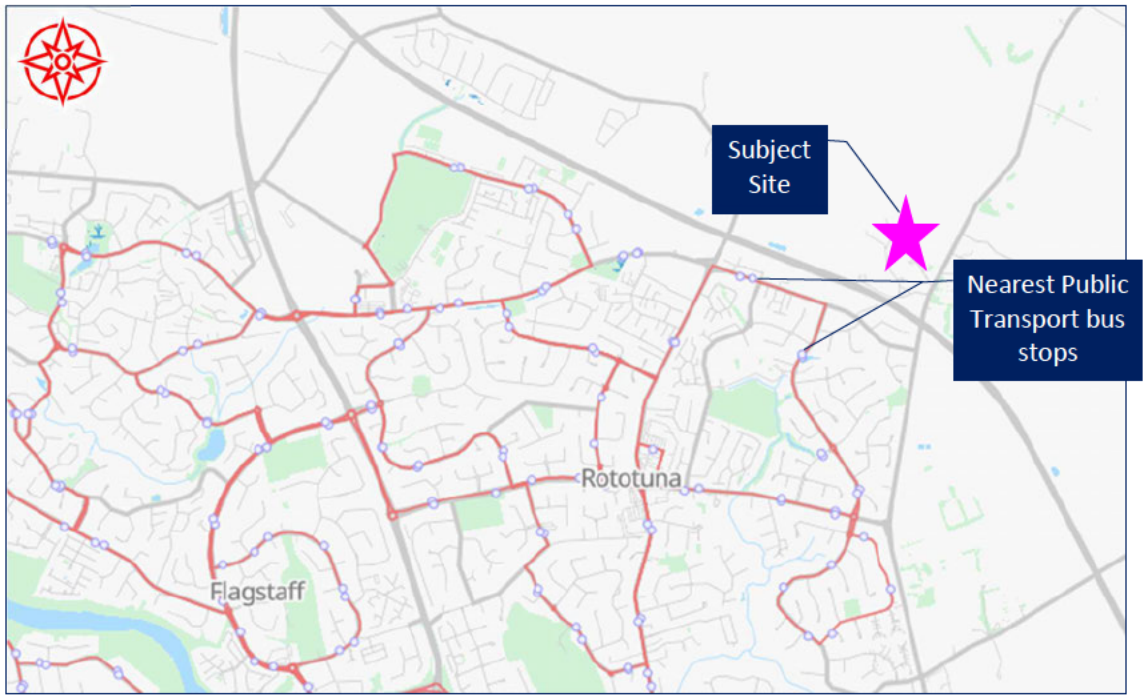


Figure No: 4 - Nearest Public Transport Facilities

4.4 Walking and cycling

Presently, Haynes Road and Gordonton Road adjacent to the site are rural in nature, with no footpaths or cycle facilities.

However, a 3.0 m wide shared walking and cycling path exists along the western side of Gordonton Road, connecting from Borman Road in Rototuna North to the south side of the Gordonton Road / Haynes Place intersection. This is shown in blue below in **Figure No: 5**.

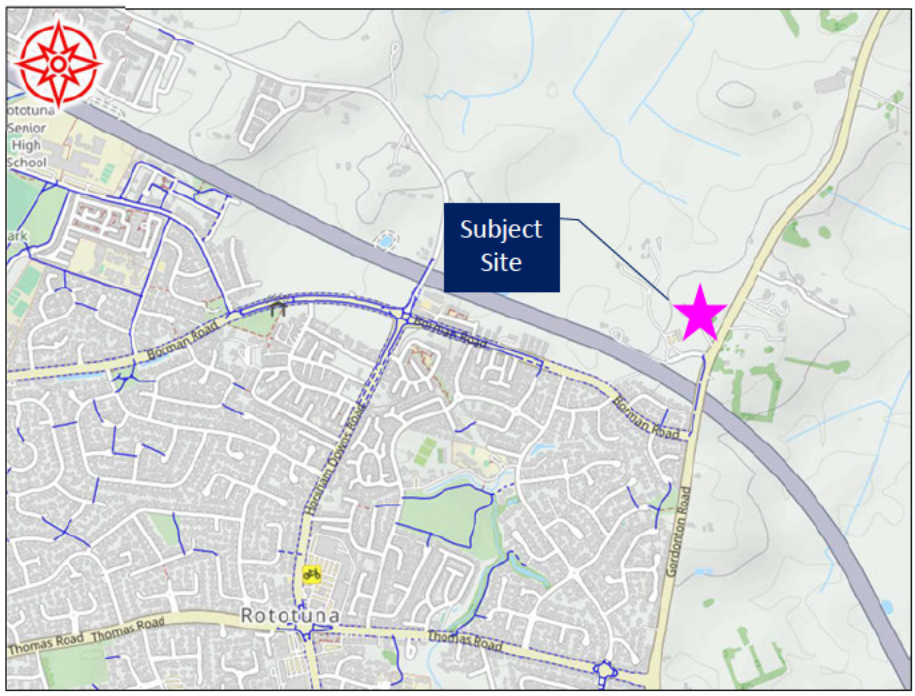


Figure No: 5 - Walking and Cycling Facilities

4.5 Road Safety

Crash data was sourced from the NZTA Crash Analysis System (CAS) over a five-year period from January 2021 to December 2025, including available data for 2026. The data was analysed to identify any road safety related issues on roads surrounding the subject site. **Figure No: 6** shows all recorded crashes along Gordonton Road, and the site frontage.

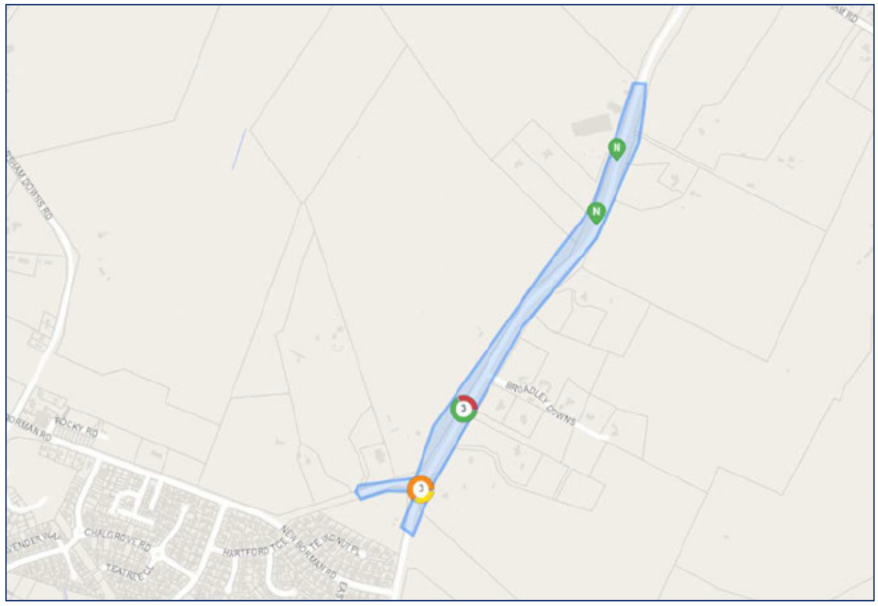


Figure No: 6 - Crash Data Record along Gordonton Road near the subject site

A summary of the intersection and mid-block related crashes is provided in **Table No: 1**. Three death and serious injury (DSI) crashes were recorded along this section of Gordonton Road near the site.

Table No: 1

Crash summary for the five-year period January 2021 to December 2025, Including Available Data for 2026						
Location	Crash Severity				Total	Crash Types
	Fatal	Serious	Minor	Non-Injury		
Gordonton Road / Haynes Place	-	2	1	-	3	3 x Right-turn
Gordonton Road / Broadley Downs	1	-	-	2	3	3 x Lost control
North of the Proposed Site Access	-	-	-	2	2	2 x Lost control
-	1	2	1	4	8	-

The following observations are made from the review of the intersection crash data:

- Gordonton Road / Haynes Place intersection: Three crashes were recorded within a 100 m radius of this intersection. All three crashes were associated with right-turning movements and failure to give way to

through traffic. Two crashes resulted in serious injuries, while one resulted in a minor injury. All three crashes occurred under low-visibility conditions, such as twilight or darkness.

- Gordonton Road / Broadley Downs intersection: Three crashes were recorded near this intersection. All three crashes involved drivers losing control of their vehicles. One motorcycle crash resulted in a fatality, while the other two resulted in no injuries. The crashes occurred under varying weather and visibility conditions, including darkness and bright sunlight.
- The remaining two crashes were recorded further north, within a 100 m radius of the proposed access intersection. Both crashes involved drivers losing control of their vehicles and occurred under low-visibility conditions, such as overcast conditions or darkness.

No fundamental safety issues have been identified from the crash history above. However, a Safe System approach will be applied when assessing any road infrastructure that may be required to support the development and to ensure safe road and transport infrastructure is prioritised. The site has a long frontage along Gordonton Road, providing sufficient space to incorporate additional road design or safety features, if required.

5. High-Level Traffic and Transportation Effects

5.1 Trip Generation

Trip generation rates from *NZTA Research Report 453 Trips and Parking related to Land Use* (RR453) have been used to estimate the number of peak hour and daily trips. As the Project has indicated a residential development yield "range" of 850-950 dwellings, the upper limit of 950 dwellings has been adopted for assessing potential effects, as shown in **Table No: 2**.

The typical trip generation rates for the "Dwelling (Outer suburban)" land use in RR453 are 0.9 vehicle trips per peak hour and 8.2 daily trips per dwelling. A split of 75/25 is also applied to approximate the predominant flow direction during the peak hours, with 75% of trips being outbound traffic in the AM peak and 75% being inbound traffic in the PM peak.

Table 1 shows the total trip generation is estimated at 7,790 trips per day and 855 trips per hour, translating to 641 trips outbound and 214 trips inbound during the morning peak period, and vice versa in the afternoon peak period.

Table No: 2

Predicted Trip Rates								
Source	Land Use Activity	Yield (Dwelling Units)	Trip Rate /DU		Predicted Trip Generation		Percentage Split	
			Daily Rate	Peak Hour	Daily Trips (vpd)	Peak Hour Trips	Peak Hour Trips	
NZ Transport Agency research report 453 (Table C.1)	Residential (Outer Suburban)	950	8.2	0.9	7 790	855	641	214

5.1.1 Estimated Mode Share

According to 2018 census data on the Stats NZ website:

- Approximately 1% of residents in the Horsham Downs statistical area, which is adjacent to the site, use public transport (bus) to travel to work, 3% either walk or jog, and 1% cycle to work.
- Approximately 53% drive a private vehicle to work, while 17% drive a company car and 2% are passengers.
- A further 23% work from home, and 0.5% are classified as other.

Table No: 3 provides an estimate of the anticipated mode share across all travel modes during the weekday commuter peak periods. On this basis, the proposed development could generate approximately 78 commuter trips per day (tpd) and 9 trips per hour (tph), together with approximately 312 walking and cycling trips per day and 34 trips per hour.

Table No: 3

Estimated 2031 Mode Share			
Transport Mode	Assumed Mode Share percentage	Net Predicted Trips	
		Daily Trips (tpd)	Peak Hour Trips (tph)
Car Driver	69%	5 375	590
Car Passenger	2%	156	17
Public Transport	1%	78	9
Walking & Cycling	4%	312	34
Working from Home	23%	1 791	196
Other	1%	78	9
Total	**100%**	**7 790**	**855**

5.2 Proposed Road Access

Access to the site is proposed via two primary road connections illustrated in **Figure No: 7**:

- **Access 1:** A new road connection to Gordonton Road via a three-arm roundabout on Gordonton Road at approximately RP 0.48; and
- **Access 2:** A new road connection to Haynes Place via existing Gordonton Road / Haynes Place T-intersection.



Figure No: 7 - Proposed Access to Site

While the indicative masterplan shows some individual properties fronting Gordonton Road, direct access to these properties would require the existing speed limit on Gordonton Road to be reduced to an appropriate urban environment speed of 60km/h or less from the existing 100 km/h rural speed limit.

If the rural speed limit were to remain then minor internal design reconfiguration could take place so that all property would be accessed from the internal residential roads or laneways within the site.

5.3 Anticipated Road Capacity Effects

5.3.1 Wider Network

The 2025 Waikato Regional Transport Model (WRTM) provides indicative traffic volumes for the existing Gordonton Road. This shows approximately 50% of peak hour trips are currently travelling south towards Hamilton, and 50% north towards the Huntly-Ohinewai area and west towards Morrinsville.

This changes for the PM peak in the 2035 WRTM with the peak hour directional flow on Gordonton Road being 62% toward Hamilton and 38% leaving Hamilton, as shown in **Table No: 4.**

Table No: 4

2035 WRTM Modelling Peak Hour Volumes		
Road	Peak Hour Volumes	
	AM Peak	PM Peak
Gordonton Rd SB	428	550
Gordonton Rd NB	432	385
Total	**860**	**935**

Using the Austroads Guide to Traffic Management Part 3: Transport Study and Analysis Methods, the typical mid-block capacity of an undivided urban road with interrupted flow and roadside parking is about 900 passenger car units per hour (pcu/h) one-way, i.e. about 1,800 combined. The guide indicates that the in the absence of on-street parking. The guide recommends adopting a factor of 2.5 pcu in traffic volume calculations for heavy commercial vehicles. It is assumed that the current 4% HCV composition will remain as baseline traffic on Gordonton Road in future. If the typology of the road carriageway is retained in its present form (little to no interrupted flow and no roadside parking, the peak-period mid-block capacity of Gordonton Road may increase to 1200 to 1400 pc/h/ln. As a result, this analysis is a reasonable conservative approach.

Table No: 5 demonstrates the indicative increase in pcu/h using Gordonton Road during the peak periods. This preliminary assessment finds that the additional traffic on the road network will still be comfortably under the serviceable capacity of 900 pcu/h (one-way) even with the additional heavy vehicles allowed for (less than 85% of capacity). On this basis, the existing road network is expected to be able to accommodate the forecast increase in peak hour through traffic from the subject site.

Table No: 5

Increase in Traffic Movements					
Road	Existing Traffic (Pcu/h/ln)		Anticipated Development Traffic Pcu/h/ln	Existing Traffic (Pcu/h/ln)	
	AM Peak	PM Peak		AM Peak	PM Peak
Gordonton Rd SB	454	583	322	776	905
Gordonton Rd NB	458	408	322	780	730

Detailed assessment of the intersections of Gordonton Road / Access 1 and Gordonton Road / Haynes Place (Access 2) will be undertaken in the Integrated Transportation Assessment (ITA) as part of the consent application to confirm access intersection performance, safety and any required effects mitigation.

Any new intersections or upgrades to these intersections can be undertaken within the existing road corridor and/or within land forming part of the Project area, therefore, no third-party land will be required.

5.3.2 Internal Access Roads

The internal access roads will be designed in general accordance with the ODP and WDP Transportation Rules, including the guidelines in the Regional Infrastructure Technical Specifications (RITS). This is expected to include:

- 17 m–22 m road cross-sections on local roads with less than 500 vpd, which can accommodate 6 m traffic lanes, 1.8 m footpaths on both sides, and parking on both sides.
- A minimum 22 m road cross-section on local roads carrying 500 to 1,500 vpd, which can accommodate 6 m traffic lanes, 1.8 m footpaths on both sides, 2.5 m parking on both sides, and 3.5 m grass swales on both sides.
- 25.5 m-wide collector roads carrying more than 1,500 vpd, which can accommodate 8 m traffic lanes with a 5.0 m central median/grass swale, 1.8 m footpaths on one side, a 3.0 m shared path on one side, 2.65 m parking on both sides, and a 1.35 m service area on both sides.

5.4 Active Modes

Active mode infrastructure will be provided within the site and on the site frontages along Gordonton Road and Haynes Place, connecting to the existing shared path along Gordonton Road over the SH1 bridge.

The infrastructure will be integrated into the development to reduce car dependency. These connections will be investigated further through the detailed ITA. The walking and cycling facilities will be designed in general accordance with the ODP and WDP Transportation Rules and will likely include:

- Footpaths on roads as outline above
- On road cycling (in lane) for local roads within the Project Area

Given the site's proximity to existing Hamilton urban environment, it is anticipated that the mode share for walking and cycling trips to and from the site will increase over time with suitable active mode infrastructure throughout the site. It is planned that this internal network will connect to the termination point of the existing shared path at Haynes Road. (Refer to **Figure No: 5**)

5.5 Public Transport

While access to public transport from the site is presently limited and involves a minimum 15-minute walk (refer to Section 4.3), the Hamilton-Waikato Metropolitan Spatial Plan[1] identifies Rototuna, which is accessible to the site via existing PT services, as a "Key Frequent PT node" integrated with the future Hamilton rapid transit network. Refer to **Figure No: 8.**

Public transport provision is expected to be demand driven as the development progresses. On this basis, the site layout and frontage design should be future-proofed to facilitate appropriate public transport connectivity and accessibility over time.

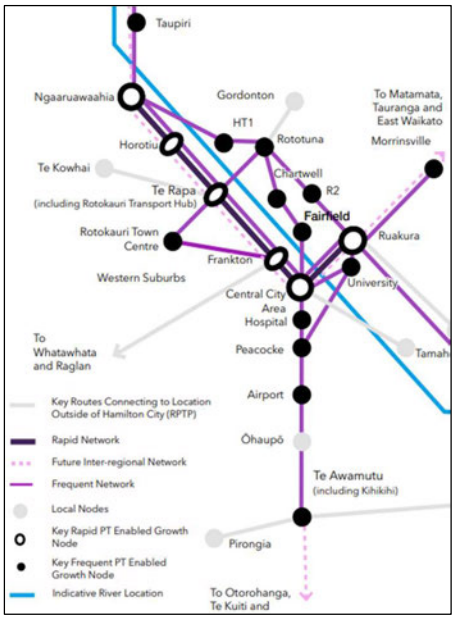


Figure No: 8 - Planned Public Transport Facilities

6. Conclusions

This memorandum provides a high-level transport review of the proposed 319 Gordonton Road residential development to inform the fast-track referral application and subsequently the substantive consent application.

The primary conclusions of this assessment are:

- The proposed development is anticipated to generate circa 7,800 trips per day and 860 trips during the weekday peak hours based on the upper development yield of 950 residential units.
- Two road access points to Gordonton Road will be sufficient for transport servicing of the site.

[1] https://www.futureproof.org.nz/our-strategic-direction/hamilton-waikato-metro-spatial-plan/#gsc.tab=0

- A preliminary capacity review shows that Gordonton Road can accommodate the additional traffic volumes without the need for additional lanes. However, the form, operation, and effects of the proposed access intersections will require detailed assessment at the substantive application stage.
- A new intersection (likely a roundabout) at the indicated Access 2 location could be constructed to meet current District Plan separation distance and sight distance requirements for the 100 km/h speed limit and is expected to be suitable to service the development's traffic. It could be located entirely within the existing road corridor and the site, avoiding any 3rd party private land.
- Active mode infrastructure will need to be provided within the site and along the frontages to connect with the existing shared path network.
- Public transport provision is expected to be demand-driven and will need to be planned for and delivered progressively as the development is implemented.

Having regard to the preliminary nature of this review, and subject to more detailed transport assessment and design as part of the substantive application, no adverse effects on transport matters have been identified at this stage that would, in principle, prevent the proposal from being considered through the fast-track referral process.

7. Recommendations

From a transport perspective, the following matters should be progressed as part of the substantive application:

- Confirm the final masterplan, including the proposed access strategy, internal roading hierarchy, road cross-sections, and property accesses.
- Prepare an ITA in support of the substantive application, including detailed analysis of the Gordonton Road access and the Gordonton Road / Haynes Place intersection and a resource consent level of detail for any required transport network improvements or devices to avoid, remedy or mitigate the effects of this proposal.
- Further develop the walking and cycling network to demonstrate how footpaths, shared paths, cycling provision, and internal connections will integrate with the existing Gordonton Road shared path and the surrounding transport network.
- Plan for public transport provision, including future-proofing the site layout and Gordonton Road frontage design to enable public transport infrastructure to be retro-fitted when / if required.

We trust this meets your requirements. Please do not hesitate to contact us if you have any questions or require any additional information.

Yours sincerely
Bloxam Burnett & Olliver



Thato Mariti
Transportation Engineer
s 9(2)(a)
s 9(2)(a)

s 9(2)(b)(ii)

Endorsement

The recommendation outlined in this Technical Memo is endorsed by the signatories below.

Name	Cameron Inder
Role title	Traffic and Transportation Manager
Date	16/06/2026
Signature	

Name	
Role title	
Date	
Signature	

