

PO Box 3737 Richmond 7050 Tasman District Ms 9(2)(a) E:s 9(2)(a)

23 May 2025 Ref: 1221

Nick Roberts
Managing Director
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AUCKLAND

Dear Nick

Ridgeburn Development - 122 Morven Ferry Rd - Doonholme - Estate, Queenstown Fast Track Application

The purpose of this letter is to provide an assessment of the effects of a development providing new homes and a commercial area with access from Morven Ferry Road in Queenstown.

#### 1. Executive Summary

This Transport Assessment has been prepared to support a fast-track referral application for the proposed Ridgeburn development by Gibbons Co Limited, located at 122 Morven Ferry Road, Queenstown.

The development site is located between Arrowtown and Frankton, with access from Morven Ferry Road. The surrounding transport environment includes State Highway 6 (SH6) to the north-west, which connects the site to Queenstown and wider regional destinations. The existing road network in the immediate area generally operates at Level of Service (LoS) A, with more constrained conditions closer to Frankton and Queenstown.

The proposal includes a well-connected internal roading layout, designed to promote low-speed travel and support multiple modes, including walking and cycling. A total of around 8,000 additional vehicle movements per day are anticipated once the development is

complete, including up to 800 during peak hours. These movements generate a number of known transport-related effects, including:

- Increased vehicle volumes on Morven Ferry Road;
- Pressure on the intersection with State Highway 6;
- Localised safety concerns due to the existing 100 km/h speed environment and crash history; and
- The need for an internal road network that safely accommodates all users and supports low-speed travel.

To manage these effects, the proposal includes the widening of Morven Ferry Road within the existing legal road reserve and intersection upgrades at SH6, including feasible options such as realignment, slip lanes and a roundabout. A review of the posted speed limit on SH6 is also expected. Internally, traffic calming and shared-use design measures will be incorporated to maintain speeds of 40 km/h or less throughout the development.

The development is well located to connect with the region's wider transport system. A new walking and cycling link will connect the site to the Arrowtown Trail, providing access to Arrowtown, Ladies Mile and Frankton. Further, Otago Regional Council is investigating a new public transport route along SH6, with a future bus stop near the site expected.

On-site commercial activities, remote working opportunities, and wider travel demand management measures including park-and-ride, carpooling, and shared transport schemes will help reduce reliance on private vehicles.

Overall, with these mitigation measures in place, the transport effects of the development can be appropriately managed, ensuring the safety and efficiency of the surrounding transport network are maintained.

### 2. Site Location and Context

The proposed subdivision is located on mostly flat land with some hills that lead up to Morven Hill. The development site has access from Morven Ferry Road. The proposed development is located around six kilometres east of Ladies Mile, around ten kilometres east of Frankton and around four kilometres south of Arrowtown.

The nearby urban areas will provide the future development with employment and services opportunities. There are schools in Arrowtown and Frankton. Significant growth is planned for Ladies Mile which will see more employment opportunities with commercial/retail areas. There are also new schools planned including a secondary school. Medical services will also be available.

The Queenstown Airport is located in Frankton along with other employment opportunities.

Figure 1 shows the site location and the wider road network.



Figure 1: Site Location. (Source: Google Maps)

The development site is located between Arrowtown and Frankton. To the northwest of the development site is State Highway 6 (SH6) which links to the west and Queenstown. Access to Arrowtown is via SH6 and McDonnell Road.

SH6 carries around 10,500 vehicles per day and has a sealed width of around eleven metres. There are no footpaths or kerb and channel along this section of highway. The posted speed limit along the highway is 100 km/h.

Generally, the road network in the immediate area towards Arrowtown and Ladies Mile is operating well. As you head closer to Frankton and Queenstown the road network steadily becomes more congested with poor levels of service on State Highway 6 and its key intersections. The state highway in this area carries around 26,000 vehicles per day with key intersections carrying around 8,000 vehicles per day.

The NZ Transport Agency have a number of roading projects to improve the functioning of the road corridor from Ladies Mile, Frankton to Queenstown. The focus of these projects is on public transport, walking and cycling. Some of these projects have already started construction on the highway at Frankton.

Figure 2 shows the transport connections available to the development site.

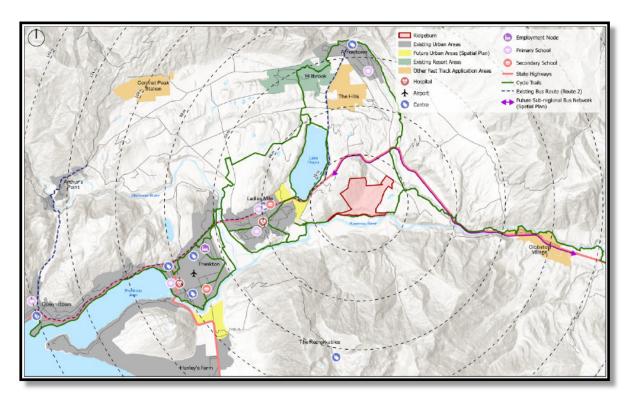


Figure 2: Transport Connections.

The site is highlighted with the red shading in the middle of the plan. The plan shows travel distances and times from the development site for vehicles and cycles. This also shows a new town centre planned for Ladies Mile along with a new primary and secondary school.

There is a public transport service that currently runs between Queenstown and Arrowtown that is managed by the Otago Regional Council. It is proposed by the Regional Council to run an "Orbital Bus Service" that goes along SH6 which will provide public passenger services closer to the development site.

The nearest bus top is currently around three kilometres to the west at Lake Hayes with park and ride facilities proposed for Ladies Mile to the west of the development site. Once the Orbital Buse Service is operational, there is potential to establish a bus stop near the development site.

Importantly, there is a cycle path that is on the southern side of the site which provides relatively direct access to Ladies Mile and Frankton which are within a 15 minute and 30-minute bike ride respectively. Arrowtown is around a 20-minute bike ride from the development site. The path can also be used by pedestrians. As discussed below, the applicant proposes to provide a safe cycle and pedestrian path from the Morven Ferry Road site entrance to connect with the Arrowtown cycle path.

The development site is ideally located to take advantage of the existing transport choices that have already been established and are planned. This will reduce the traffic movements from the development site

The intersection of Morven Ferry Road and SH6 is a tee junction with Moven Ferry Road controlled by give way signs. Morven Ferry Road is on the outside of the large radius curve.

Morven Ferry Road can also be accessed from Arrow Junction Road that also connects to SH6. Arrow Junction Road carries around 270 vehicles per day and has a sealed width of around six metres. Morven Ferry Road has a posted speed limit of 80 km/h.

Figure 3 shows the road environment along Morven Ferry Road.



Figure 3: Morven Ferry Road

Morven Ferry Road carries around 325 vehicles per day and has a formation width of around 5.5 metres. The road is sealed and has grass berms. There are no footpaths or kerb and channel along the road which is typical of a rural road.

Figure 4 shows the intersection of Morven Ferry Road and State Highway 6.



Figure 4: Morven Ferry Road/SH6 Intersection. (Source: Queenstown Maps)

There is a right turn bay provided for vehicles turning right into Morven Ferry Road which allows these drivers to wait clear of the through traffic lane. The intersection is formed with Morven Ferry Road forming an acute angle to the highway.

Figure 5 shows the sight lines towards the northwest from the intersection.



Figure 5: Sight lines to the north from Morven Ferry Road approach

The sight lines are restricted to around 130 metres by the large tree which is located on road reserve. The sight lines with the tree removed is around 330 metres. Most traffic exiting Morven Ferry Road is heading towards the north with a left turn out of the side road.

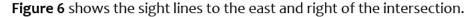




Figure 6: Sight lines to the east from Morven Ferry Road approach

The sight lines across road reserve are around 162 metres with sight lines across private land being more than 500 metres.

# Proposed Development

The proposed development will offer a variety of section and house types which will allow a cross section of the community to live and play in the proposed development and the wider community.

**Figure 7** shows the masterplan for the site. Larger scaled plans are included in the application.



Figure 7: Site Masterplan. (Source: RMM)

The development of the land will be completed over several stages and will result in 1,227 lots. The proposed development will provide a community hub that will allow residents to work on the site along with some residents working from home.

The development will form a new tee intersection onto Morven Ferry Road with a network of roads provided within the site. The roads within the development are proposed to be private and will be managed by a Resident's Association.

There is a small commercial area on the eastern side of the main entrance with most of the remaining site being developed as residential and reserves.

The internal roads will be designed around NZS4404:2010 with some variations to provide for walking and cycling as well as traffic calming features.

# 4. Transport Infrastructure Assessment

The completed subdivision is expected to increase the number of movements using the wider road network by around 8,000 vehicles per day or 800 vehicles in the peak hour. This

is still well below the operational capacity of Morven Ferry Road and the adjacent highway which are both operating easily within Level of Service A (LoS A). The increase in traffic is expected to keep the adjacent road network operating at LoS b or better.

Some measures to reduce traffic flows will be evaluated as part of providing a comprehensive development. These could include park and ride facilities off-site closer to the public transport corridor, a new bus stop near to the development site, improving connections to the existing cycle and walking paths to Frankton and Arrowtown, a passenger service vehicle managed by the Resident's Association and car share/carpool schemes.

Morven Ferry Road as noted above has a road width of 5.5 metres which will require widening to at least six to eight metres to accommodate the increased flows from the development. Morven Ferry Road is relatively flat and straight with a road reserve width of around 20 metres. The current sealed formation is positioned centrally within the legal width. Morven Ferry Road can be constructed to a wider width with relative ease.

The intersection of Morven Ferry Road and SH6 will need to be upgraded to accommodate the increased traffic flows from the development site. A number of options will need to be considered that may include realigning the intersection, so it enters the highway at 90 degrees through to additional slip lanes or a roundabout, all of which are considered to be feasible.

Attached to this assessment are two concept designs showing an upgrade to the intersection of SH6 and Morven Ferry Road. The designs are within the existing road reserve. One design is a roundabout with the other being a tee intersection with a long left merge lane towards Frankton. These plans have been designed to usual geometric standards and show that there are workable solutions to accommodate the new flows from the development within the existing road corridor.

Consideration around the posted speed limit and whether it needs to be reduced to 80 km/h will also need to be assessed. There are posted 80 km/h speed limits at each end of SH6 from Morven Ferry Road with the 100 km/h posted speed limit being around 3.5 kms long. There have been 25 reported crashes along the 100 km/h section of the highway with seven reported crashes along SH6 since 2015 within 500 metres of the Morven Ferry Road intersection.

Lowering the speed limit would make this section of SH6 safer and the existing intersection of Morven Ferry Road. Due to the road alignment the most likely option is a seagull lane for traffic heading east and a roundabout for the other movements. There are no reported crashes along Morven Ferry Road.

It is also proposed to link the northeastern part of the site with a shared path on Morven Ferry Road to the Arrowtown cycle trail to the east of the development site, at the intersection of Morven Ferry Road and Arrow Junction Road. This will make the existing cycle infrastructure more accessible to the future residents wanting to travel to Arrowtown or Ladies Mile.

As traffic moves further away from the development site, the effect of the new traffic will be dispersed over the wider network with future residents travelling to Arrowtown, Ladies Mile and Frankton.

The internal roads that will service the development will be designed to manage their effects to provide a safe and efficient network for all users. Shared paths and linking pathways will be a feature of the development. The development will be designed with a maximum speed of 40 km/h on main linking roads and less than 30 km/h on the other roads.

### 5. Conclusion

The development site is well located to take advantage of spare capacity in the adjacent road network which is operating at around LoS A between Arrowtown and Ladies Mile. Ladies Mile is also planned to accommodate a new centre and schools which will provide for convenient access for new residents. The site is also very well positioned to take advantage of existing transport options including cycling and walking available from the development site with plans to provide more convenient and accessible public transport with new services along with park and ride facilities.

The on-site effects can easily be managed within the development and the proposed Resident's Association management structure.

The off-site effects can be mitigated with the widening of Morven Ferry Road and the redesign of the Morven Ferry Road/SH6 intersection. These options are able to be implemented within the existing road reserve. Other mitigation measures include the on-site commercial hub and the ability to work from home or the business space within the development. Plans for off-site park and ride facilities at Ladies Mile, new cycle connections, car share and carpool schemes will also add to the measures to manage effects.

Overall, any effects can be managed so they are less than minor.

We are happy to provide any further clarification if required.

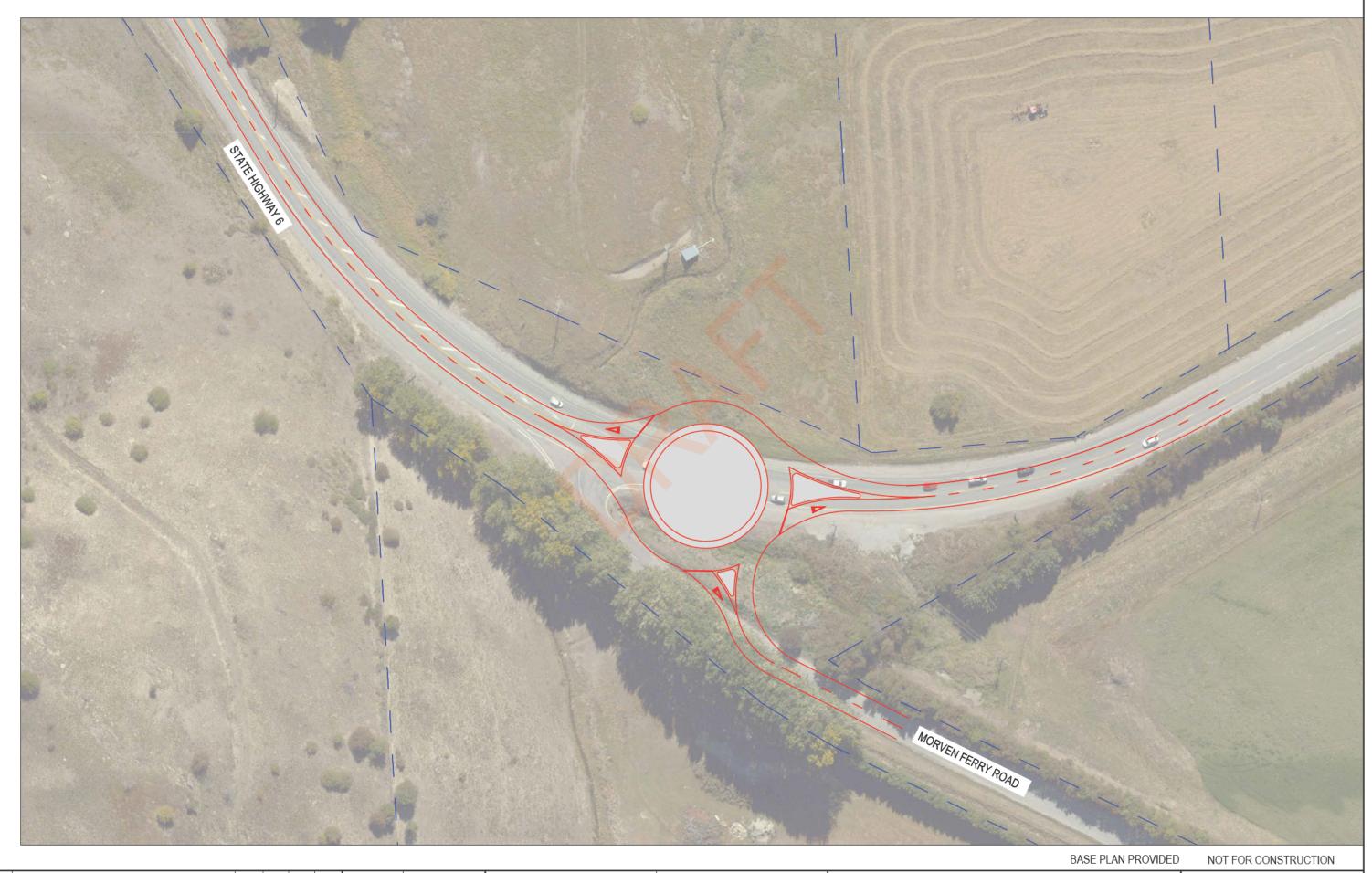
Regards

Gary Clark

Director

NZCE (Civil), REA, CPEngNZ Certified Safe System and Road Safety Auditor

Rage 9





CIVIL & TRANSPORTATION DESIGN LIMITED josh@ctdesign.co.nz 027 641 6653



TRAFFIC CONCEPTS

MORVEN FERRY ROAD / STATE HIGHWAY 6 INTERSECTION

INDICATIVE ROUNDABOUT CONCEPT

WORK IN PROGRESS

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