

06 May 2026

Justin McDonald
c/- Oakland Estates Nelson Limited

Attention: Justin McDonald

Dear Justin

Oakland Estates Nelson Limited – High-Level Assessment for Fast-track Referral Application

Thank you for inviting me to provide high-level feedback on the traffic and transportation aspects of the Oakland Estates Nelson Limited (Oakland Estates) Track Referral Application. I understand that Oakland Estates intend to lodge a referral application under the Fast Track Approvals Act 2024. I have undertaken a high-level assessment of the transport elements and extent to which I can support the proposal. This letter documents the findings of my assessment.

By way of background, I am a transportation professional with over 25 years of experience. I have:

- been admitted as a Member of Engineering New Zealand (including the Transportation and NZMUGS sub-groups)
- been Chartered as a professional member of the Institute of Logistics and Transport
- been accredited as an independent hearing commissioner
- provided transportation engineering and planning advice including as an expert witness to a range of other public and private sector clients including NZ Transport Agency, Auckland Transport, Auckland Council, Taupo District Council, Selwyn District Council, Central Otago District Council, Fulton Hogan, Foodstuffs, Fonterra, Ports of Auckland and many others.

Transport Elements of the Application

The masterplan provides for approximately 580-740 new residential dwellings (with potential for a portion of these to be retirement units), plus approximately 6,000m² to 7,800 m² of supporting commercial floorspace. I have reviewed the material shared in relation to the proposal and consider that the key transportation elements are as follows (and refer Figure 1):

- New roads are to be constructed in accordance with Nelson City Council (NCC) requirements to provide access to the development as well as connectivity to the adjacent transportation network.
- Access to the wider network for all modes will be provided via a new road and intersection connecting to Suffolk Road and Saxton Road in Stoke and a connection to Ngati Rarua Street in Richmond.
- There is provision for all transport modes to also connect to Hills Road in Richmond however it is understood that this would require land outside of the site which is currently not designated as road reserve.
- The site is currently zoned Rural Zone and is adjacent to residential development to the northeast (adjacent to Suffolk Road), sports fields to the north and a retirement village and residential to the southwest.

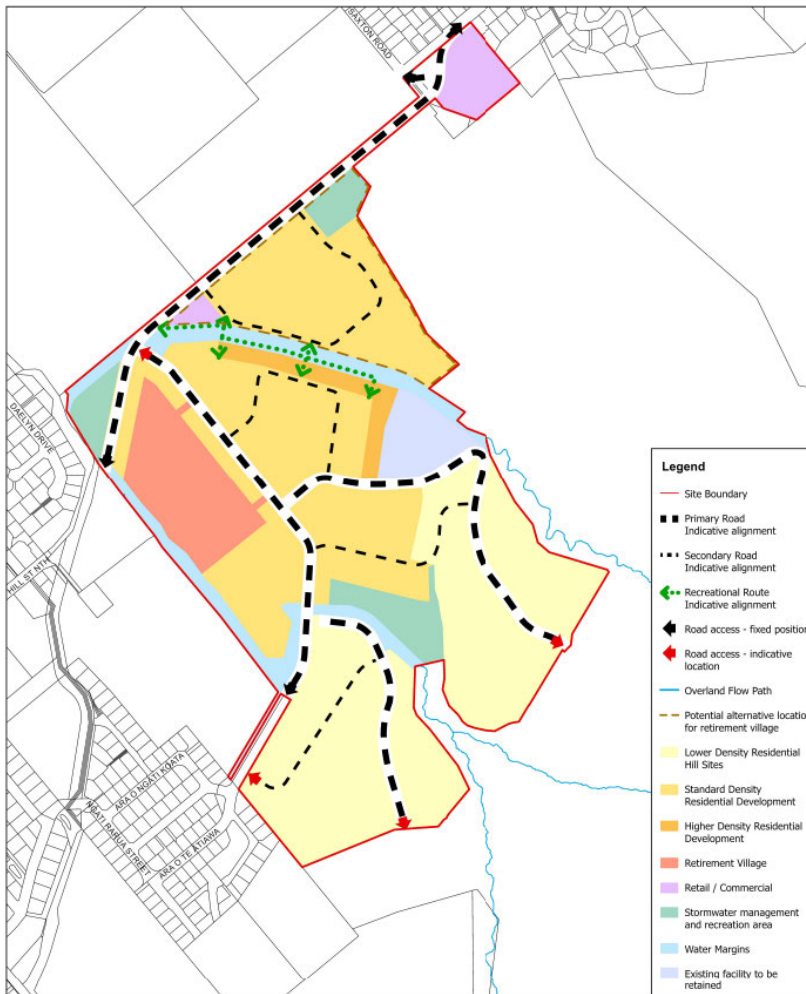


Figure 1 Proposed Structure Plan

One of my colleagues (Jared White, Principal Transportation Engineer) has supported me on this assessment and undertook a site visit on Friday 23rd January 2026 from approximately 9am to 11am to observe the operation of the current transport network in vicinity of the site, including the location of the new roads and accesses to the wider network. Although I have not undertaken a specific site visit for this assessment, I am familiar with the local network having been involved in transport planning and modelling projects in Nelson City and Tasman District over the past 20 years.

Road safety assessment

I have conducted a search of the NZTA Waka Kotahi Crash Analysis System (CAS) database of the surrounding roads, shown in Figure 2, in the vicinity of the site. Notably there were no recorded crashes in the vicinity of the Hill Street or Ngati Rarua Street corridors where accesses to the site from Richmond are anticipated.

The analysis revealed a total of 10 reported crashes over the past five years (between 2021 and 2026 year-to-date) along Suffolk Road. Eight of these crashes did not result in any injuries, and two resulted in minor injuries. A summary of these crashes is provided below

- Three non-injury crashes occurred on the horizontal curve where Saxton Road East transitions into Suffolk Road.
 - One crash occurred following a suspected medical event

- Another occurred when a drunk driver lost control on the curve and collided with a power pole / give way sign
- The third occurred where a drunk driver attempted to 'drift' around the curve and lost control.
- One minor injury crash occurred when a driver turning right out of the Saxton Sports Centre and collided with a westbound vehicle. Parked cars on Saxton Road were reported to obstruct sight lines.
- The remaining six crashes were reported at the Main Road Stoke / Saxton Road roundabout (one of which resulted in minor injuries and the remaining five did not result in any injuries).
 - One was a rear end crash on the southern Saxton Road approach, due to queuing at the intersection
 - Another occurred on the western Main Road Stoke approach due to queuing at the intersection
 - Another occurred where a westbound vehicle on Main Road Stoke was driving at excessive speed and under the influence of alcohol, the driver lost control and struck the roundabout
 - Another occurred where a driver under the influence of alcohol lost control and struck fence on the northeastern side of the roundabout
 - Another occurred where an intoxicated westbound driver was travelling too fast and lost control of the intersection.
 - The minor injury crash occurred where a vehicle turning left at the roundabout collided with a cyclist travelling straight through the intersection.



Figure 2 CAS search study area and results

The crash records highlight a trend of crashes involving intoxicated drivers, with 50% of crashes involving a driver under the influence of alcohol. The only other trend relates to queuing / rear end crashes at the roundabout, although only two crashes were reported of this nature. Overall, I consider there are no crash trends that would be cause for concern in the context of the proposed plan change.

Vehicle access assessment

The Structure Plan denotes two new roading connections to the existing transport network as shown in Figure 1. This will include a connection in the vicinity of Suffolk Road and Saxton Road East to the northeast of the site, and a connection to Ngati Rarua Street to the southwest. Note that the site is unable to connect through to Hill Street North due to a landholding gap between Hill Street North and the site. That notwithstanding, provision has been made to extend the internal road to the southwestern site boundary which will enable Council to achieve a future connection to Hill Street should the gap in the landholding be resolved.

The northeast connection onto Suffolk Road / Saxton Road will require realignment of the existing horizontal curve, as well as relocation of the existing Saxton Fields car park access that currently connects directly onto Saxton Road. This change in access location for the car park will have much

improved sight lines compared to the current Saxton Road access and it is understood that Council is supportive of integrating this access into any future roading improvements.

A four-leg roundabout is proposed which provides separate accesses to the residential and commercial portions of the site, and also improves connectivity to Saxton Road and Suffolk Road. I note that three crashes were reported on this current tight curve. A roundabout with realignment as shown in Figure 3 will clarify turning movement priority in this location and reduce traffic speeds on all of the approaches. I consider that this roundabout will improve road safety outcomes at this curve. Access to nearby properties on Suffolk Road can be provided through a service lane arrangement and would be a matter to be addressed through subsequent design stages.

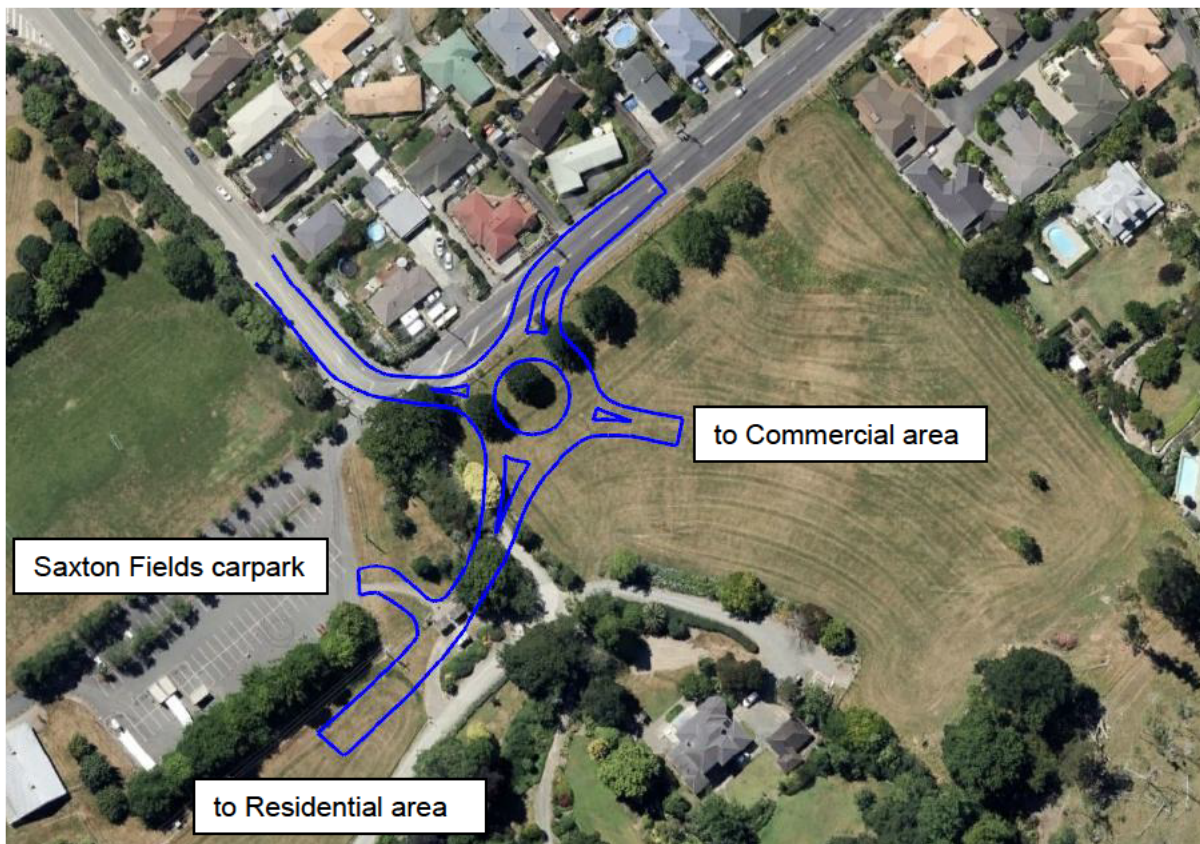


Figure 3 Concept for northeastern site access from Suffolk Road / Saxton Road

The southern end of the site will be connected to the existing transport network by way of extension of Ngati Rarua Street, which currently terminates at the site boundary. Hence, this represents a logical extension to the network and this will support enhanced network connectivity between existing and future residential areas. Ngati Rarua Street is a local access road that has recently been constructed as part of adjacent subdivisions, it has a carriageway width of circa 6.0m, with parking banned on one side, and footpaths / berms on both sides of the road. These connections will be further supported by two additional road connections to adjoining land to the south of the site. This enables connectivity for any future development to the south should that occur in the future.

Walk / cycle assessment

The site is well placed to connect to existing pedestrian and cycle infrastructure in the vicinity of the site, which will connect the site to the wider Nelson walking and cycling network. Of note is that the Nelson Cycle Map shows an on-road cycle lane that passes through the Saxton Field North, and a

shared pathway linking the Saxton Sports Ground area to the northern side of Main Road Stoke via an underpass, refer Figure 4.



Figure 4 Nelson Cycle Network near the site with recommended connectivity between site and network¹

It is understood that Council have requested (at their cost) the installation of a shared use path along the northern site boundary which will enable the connections shown above.

Public transport assessment

There are four bus services which run in the vicinity of the site as follows (and are shown in Figure 5):

- 1 Richmond to Nelson via Waimea Road – this service travels along Main Road Stoke and Champion Road half hourly in both directions on weekdays and weekends and connects to the Nelson City Centre via Waimea Road.
- 2 Richmond to Nelson via Rocks Road – this service travels along Main Road Stoke half hourly in both directions on weekdays and weekends and connects to the Nelson City Centre via Rocks Road.
- 7 Peak Overflow – every weekday an additional inbound (Richmond to Nelson) service runs in the morning peak and outbound (Nelson to Richmond) service runs in the school afternoon peak. This travels via Champion Road and Main Road Stoke.

¹ <https://www.nelson.govt.nz/4infrastructure/3transport/cycling/nelson-cycle-network-map>

- 8 Late Late Bus – on weekends four additional late evening services are scheduled to travel between Richmond and Nelson via Main Road Stoke.

The nearest public transport stops are currently on Main Road Stoke near Saxton Road and Hill Street near Champion Road. These are both approximately 600m from the edge of the site which is an approximately 7-8 minute walk².

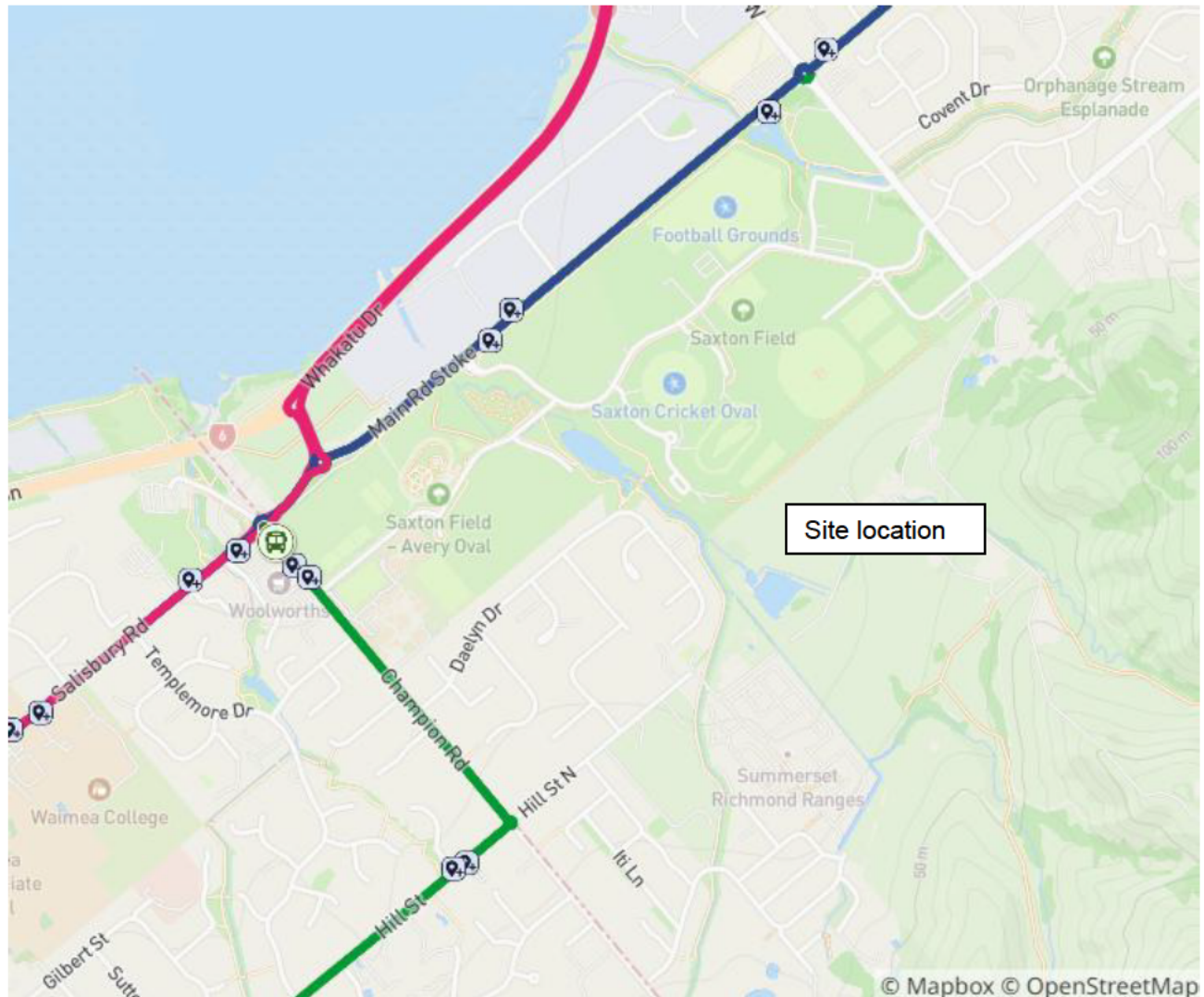


Figure 5 Current bus services in vicinity of the Site (source: ebus.nz)

I further recommend that all primary roads through the site be designed to suitable standard to enable for future public transport services including bus stop infrastructure. The provision of future bus services is a matter for Nelson City Council as a unitary authority managing public transport contracts and infrastructure. By designing for high quality public transport the site will not preclude the future provision of services.

Internal roading assessment

The proposed internal roading layout³ is shown in Figure 6.

² At an average adult walk speed of 1.3 ms⁻¹

³ Option 1, which includes the retirement village site

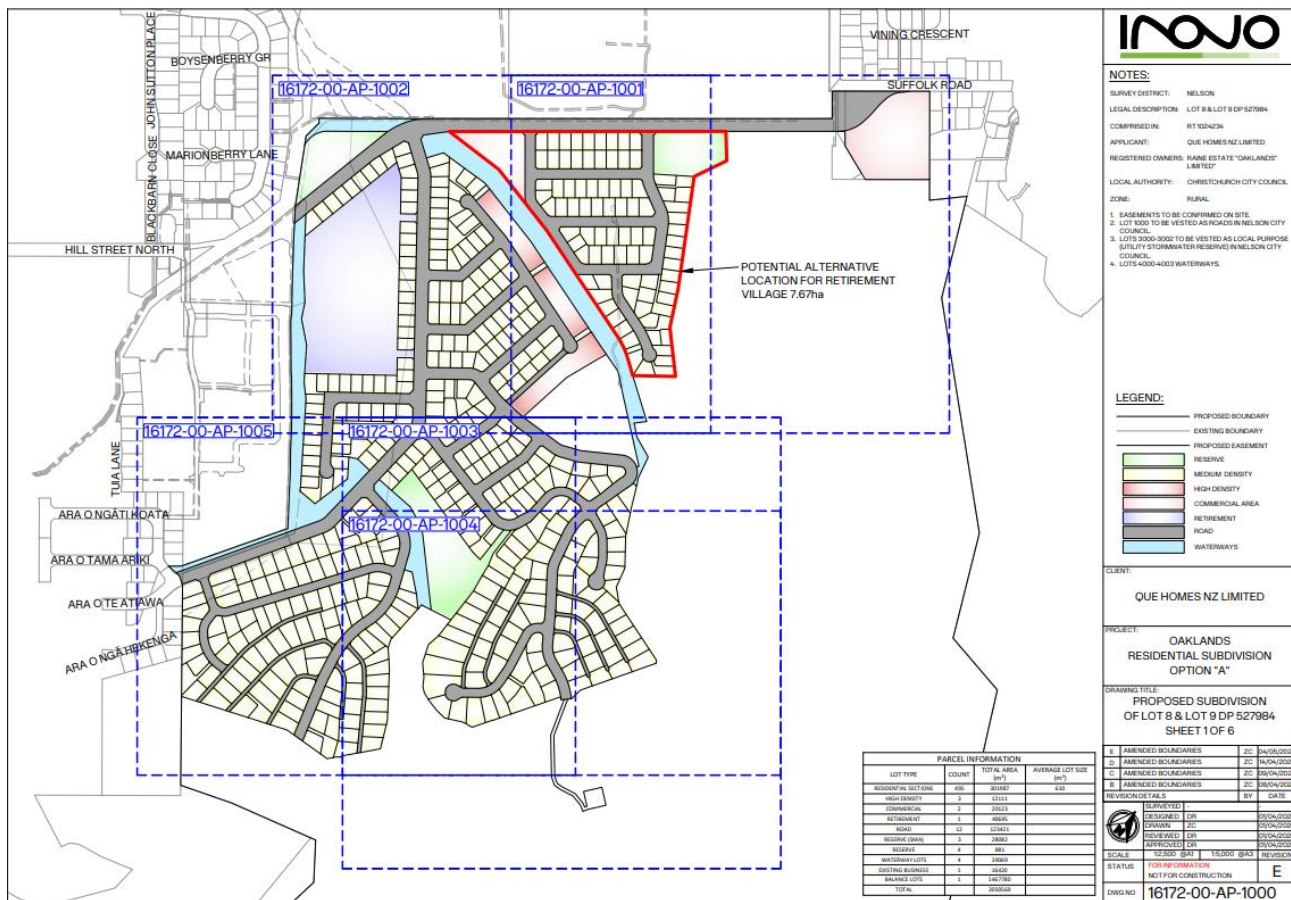


Figure 6 Option A concept

As the application progresses this will be developed further, however for the purposes of this high-level assessment I anticipate that:

- All internal roads will be classified as local roads which connect to the wider network other than the main spine road which will likely have collector road classification.
- The internal roads will be a slow speed environment with posted speed limit of no more than 50 kph. There is the potential to introduce traffic calming and a speed environment of 30 kph on some links where cycling is encouraged. The lower speeds will also assist with supporting appropriate sight distances between intersections.
- Internal intersections would generally be priority control with the option of including mini roundabouts at key intersections where there are conflicting traffic movements of whether slower speeds are encouraged. Appropriate pedestrian crossing facilities could be engineered into the design.
- Pedestrian connections internal and external to site will maintain excellent pedestrian and cycle connectivity with surrounding areas. There are connections to the northeast, west, southwest and connections to potential future development to the south.

I understand that the proposed road which leads to the existing milk bottling plant, as well as an existing track that continues up the hill to the south, will need to continue to accommodate truck access, for both milk deliveries (in the case of the milk bottling plant) and for dumping material at the back of the existing farm. I recommend that the specific access requirements be refined as the application progresses, and consider that vehicle tracking of the appropriate vehicle should be undertaken to ensure that the roading design is progressed in such a way that enables this access to occur safely and efficiently.

Although there will be more detail available at the substantive assessment stage, I consider that the internal layout can be designed to comply with transport rules and meet policies and objectives in the Nelson Resource Management Plan and Nelson Tasman Land Development Manual.

Traffic Generation Assessment

Average trip rates have been extracted for low density and medium density development from Trips Database Bureau which holds a repository of New Zealand and Australian surveys. The query results are shown in Appendix A, with the database demonstrating average New Zealand trip rates of:

- 0.563 trips per household in the morning peak hour (medium density)
- 0.691 trips per household in the evening peak hour (medium density)
- 0.756 trips per household in the morning peak hour (low density)
- 0.721 trips per household in the evening peak hour (low density)

Noting the proposal anticipates a range of densities, a trip rate in the low-medium range is anticipated. A representative trip rate of 0.7 trips per household is assumed. Based on a potential maximum of 740 households this equates to 518 two-way trips in peak hour. The commercial centre of a potential maximum of 7,800sqm GFA is anticipated to predominantly serve the site and neighbouring residential areas with relatively low traffic generation in the morning peak (as many retail facilities do not open prior to 9am) and modest traffic generation of up to 10 trips per 100sqm GFA in the evening peak hour, or approximately 780 two-way trips in peak hour, many of which are short local trips. To reflect the extent of local trip generation we anticipate that at least 30% of these trips will be within the local vicinity and not use the wider transport network.

Local and Wider Network Effects

To understand the impact of the proposal on the transport network I have assessed the proposal using Nelson City Council's Tracks Transportation Model (the Model) and received approval from Council to use the Model for this purpose. The Model is a strategic land use based model which forecasts future traffic flows and is frequently used to assess the effects of development applications such as this site.

I have checked traffic flows on key corridors in the vicinity of the proposal and checked that the traffic generation associated with the proposal is in line with the prior traffic generation assessment section. On this basis I am of the view that the model is fit-for-purpose for this assessment.

My assessment focuses on the weekday evening peak hour performance of the network which is the critical time period over which there is a substantial amount of congestion on key arterials on the Nelson transport network. As described earlier, to ensure a complete assessment approach has been taken, I have run one scenario at a future year of 2028, and this scenario is based on there being no connection to Hill Street North. I have also checked that the network performs satisfactorily under typical demands outside of peak hour.

The increase in traffic volumes is shown in Figure 7. Red symbology shows corridors where traffic increases and green shows where traffic decreases (mainly due to some minor re-routing of traffic).



Figure 7 2028 Evening peak hour change in traffic due to Oaklands Estates (no Hill Street link)

I note under the Nelson Long Term Plan 2024-34 (LTP) that there are several intersection upgrades planned along the Suffolk Road/The Ridgeway and Main Road Stoke corridors. These are as follows (with anticipated timeframe in brackets):

- Marsden Valley Ridgeway Upgrade (2024-28)
- Main Road Stoke / Marsden Road (2029-36)
- Polstead / Suffolk Intersection upgrade (2031-46)
- Polstead / Main Road Stoke Intersection Upgrade (2024-27)
- Ngawhatu / Suffolk Intersection Upgrade (2028-31)

This demonstrates that growth in traffic in the vicinity is anticipated.

Traffic associated with Oaklands Estates distributes via Ngati Rarua Street or Suffolk Road and Main Road Stoke corridors. This puts additional traffic through the Suffolk Road / Main Road Stoke intersection which is currently controlled with a roundabout. I have developed a Sidra Intersection Model to understand the operational performance of the roundabout in the evening peak hour. Sidra provides a more detailed assessment of delays and queueing of intersections compared to the Nelson Tracks Model. The results are shown in Figure 8.

The intersection modelling demonstrates that average delays of 9 seconds and delays for the worst movement being 21 seconds. Queue lengths are manageable and in my view this demonstrates excellent intersection performance in the urban peak hour context.

Site: [1 (3)] Main Road Stoke / Saxton Road PM with PC no Hill St link
(Folder1)

Output produced by SIDRA INTERSECTION Version: 10.0.6.236

New Site
Site Category: (None)
Roundabout
Site Scenario: 1 | Local Volumes

Vehicle Movement Performance															
Mov ID	Turn	Mov Class	Demand Flows		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Qued	Eff. Stop Rate	Number of Cycles to Depart	Aver. Speed
			[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
SouthEast: Saxton Road															
1	L2	All MCs	354	2.5	354	2.5	0.617	10.1	LOS B	6.3	45.0	0.92	0.86	1.14	43.2
2	T1	All MCs	82	2.5	82	2.5	0.617	10.0	LOS B	6.3	45.0	0.92	0.86	1.14	43.4
3	R2	All MCs	35	2.5	35	2.5	0.617	14.6	LOS B	6.3	45.0	0.92	0.86	1.14	42.9
Approach			471	2.5	471	2.5	0.617	10.4	LOS B	6.3	45.0	0.92	0.86	1.14	43.2
NorthEast: Main Road Stoke															
4	L2	All MCs	64	2.5	64	2.5	0.700	12.5	LOS B	8.2	58.9	0.93	0.94	1.30	42.3
5	T1	All MCs	499	2.5	499	2.5	0.700	12.5	LOS B	8.2	58.9	0.93	0.94	1.30	42.5
6	R2	All MCs	5	2.5	5	2.5	0.700	17.0	LOS B	8.2	58.9	0.93	0.94	1.30	42.0
Approach			568	2.5	568	2.5	0.700	12.5	LOS B	8.2	58.9	0.93	0.94	1.30	42.4
NorthWest: Saxton Road															
7	L2	All MCs	11	2.5	11	2.5	0.514	17.0	LOS B	4.5	32.0	0.98	0.95	1.25	39.6
8	T1	All MCs	143	2.5	143	2.5	0.514	16.9	LOS B	4.5	32.0	0.98	0.95	1.25	39.8
9	R2	All MCs	88	2.5	88	2.5	0.514	21.4	LOS C	4.5	32.0	0.98	0.95	1.25	39.4
Approach			242	2.5	242	2.5	0.514	18.6	LOS B	4.5	32.0	0.98	0.95	1.25	39.6
SouthWest: Main Road Stoke															
10	L2	All MCs	347	2.5	347	2.5	0.296	3.9	LOS A	2.1	15.0	0.40	0.45	0.40	46.2
11	T1	All MCs	605	2.5	605	2.5	0.614	3.6	LOS A	6.9	49.1	0.53	0.48	0.53	45.4
12	R2	All MCs	369	2.5	369	2.5	0.614	8.1	LOS A	6.9	49.1	0.53	0.48	0.53	44.8
Approach			1322	2.5	1322	2.5	0.614	4.9	LOS A	6.9	49.1	0.50	0.47	0.50	45.4
All Vehicles			2603	2.5	2603	2.5	0.700	8.8	LOS A	8.2	58.9	0.71	0.69	0.86	43.7

Figure 8 2028 Evening peak hour Main Road Stoke / Saxton roundabout with Oaklands Estates performance

I have further investigated intersection performance at other key intersections in the Model and concluded that outside of the proposal study area, no further transport upgrades are required outside of the site to support this proposal.

Infrastructure requirements

No specific roading upgrades or intersection improvements are required to support the application. The proposed roading layout will enable walking any cycling connections to be extended into Saxton Fields in the future, and I consider such connections would be appropriate from a transport connectivity perspective.

Future Assessment and Traffic Modelling Approach

Should the proposal successfully move forward to the substantive application stage I recommend that an Integrated Transportation Assessment (ITA) report be prepared based on industry best-practice guidance and include:

- a detailed description of the current and future receiving environments

- a description of the transport elements of the proposal including access and connectivity for all modes.
- the delivery of a trip generation assessment and comprehensive traffic modelling to inform the assessment of effects.
- an assessment of the standard of the roads and suitability of other transport infrastructure including against the Council standards.
- an assessment of the proposal against relevant transport-related policies and objectives.
- identify any mitigation requirements or recommended provisions / conditions of consent as required in relation to transportation matters.

One of the key components to the preparation of a future ITA will be more extensive analysis and reporting of traffic modelling outcomes. This will include:

- forecasting the anticipated level of uptake for each transport mode and understand impacts on the local and wider transport network.
- consider opportunities to extend public transport services into the site should Nelson City Council choose to do so in the future.

I propose that the current Tracks model and SIDRA Intersection would be the primary modelling tools, and we would continue to engage with Council to determine the most appropriate modelling approach and tools.

Summary of My Assessment

My assessment indicates that the development can be supported from a transport perspective, subject to the considerations and recommendations outlined in this letter. The site's location is well connected for all transport modes with opportunities for a well-integrated and resilient transport outcome through improved public transport coverage and new pedestrian and cycle connections into neighbouring areas.

I have also provided an overview of the scope of future transport assessment including the preparation of an Integrated Transportation Assessment (ITA) report with additional traffic modelling assessment. This would be delivered for the substantive assessment under the Fast Track Approvals Act (2024).

Please do not hesitate to contact me should you require any additional information in relation to my assessment including the recommendations put forward in this letter.

Regards,

Abley Limited



Dave Smith
Technical Director, Transportation Planning

D s 9(2)(a)

M s 9(2)(a)

E s 9(2)(a)

Appendix A.
Trips Database Bureau query results



