Planning | Surveying | Engineering | Environmental

A24315 – Donald Road and Allen Bell Drive, Kaitaia

Transportation Assessment Report

Document Control

CKL Reference	A24315
Filename:	A24315-TR- -TA.docx
Site Location:	Kaitaia Plan Change
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Authorised By:	Michael Hall Transportation Engineering Manager 
Revision No.	1
Document Status:	Approved
Date:	6 June 2025

Contents

1 Introduction

The Far North District is currently in the process of updating their District Plan. As part of that process, a submission was lodged to change the zoning of the 62ha parcel of land site known legal as Part Lot 1 DP 173052 to General Residential. The proposed District Plan currently has the site within the Rural Residential zone. The site is located just east of the existing urban Kaitaia area with frontages to Donald Road and Allen Bell Drive.

With the General Residential Zone, the site could potentially have a yield of up to 500 dwellings. This is a conservative estimate for this assessment as the site as topographical and ecological constraints that would reduce the yield. This report provides an overview of potential traffic effects associated with the potential rezoning and includes the following:

- Difference in traffic generation by the change in zoning.
- Access constraints to connect the site to the wider road network.
- Identify any infrastructure upgrades to support additional traffic movements or site access.
- Other notable developments or infrastructure projects that may affect nearby travel patterns.

These and other matters will be addressed in the detail of the report that follows. By way of summary, it is concluded that the proposed development can be established such that there will be less than minor effects to the function, capacity and safety of the surrounding transportation network.

2 Existing Environment

2.1 Site Location

Figure 1 is an aerial photograph from the Grip database with the subject site at Part Lot 1 DP 173052 highlighted in yellow. Donald Road runs along the northern boundary of the site and Allen Bell Drive is to the west.

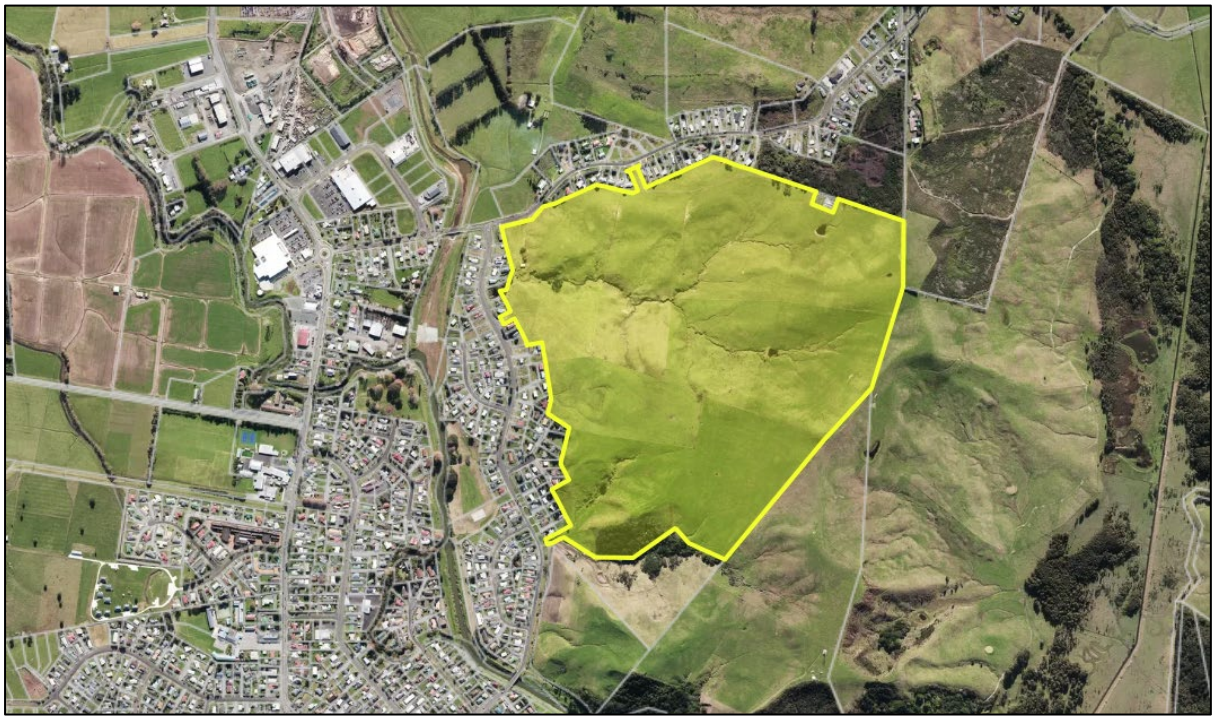

FIGURE 1: AERIAL PHOTOGRAPH OF SITE

Kaitaia Town Centre is within 1km to the southwest of the site. A commercial area featuring a Pak n Save supermarket, Mitre 10, McDonalds, Warehouse and other operators centred around the intersection between Donald Road and SH1 is approximately 500m west of the site. There is also an industrial precinct including the Juken wood processing factory approximately 2km driving distance to the northwest. The land to the immediately west and north of the site generally include single detached dwellings.

The site is currently included within the Rural Residential zone in the Proposed District Plan. The land to the west is within the Rural Production zone while lane to the west is within the General Residential zone. The proposal to change to the zoning of the site to General Residential would integrate with the zoning to the west.

2.2 Road Network

Figure 2 portrays the site identified by the yellow star in the context of the wider road network.

FIGURE 2: SURROUNDING ROAD NETWORK

The site has frontage to Donald Road and Allen Bell Drive. Allen Bell Drive is a two-way, two-lane road with shoulders that are wide enough for on-street parking. Donald Road is a two-way, two-lane road that

provides a connection between Kaitaia and Oturu. The carriageway is generally not wide enough to facilitate on-street parking. The posted speed limit on both roads is 50km/h.

The intersection between Donald Road and Allen Bell Drive is a T-intersection with give-way control. The primary route is between the northern leg of Donald Road into Allen Bell Drive with the southern approach acting as the minor approach. Throat islands are included on all legs to reinforce the order of priorities at the intersection. Just west of the intersection, there is a short one-way bridge.

The District Plan does not classify roads into a specific hierarchy but does include hierarchy definitions as per the One Network Road Classification. The Secondary Collector definition is considered to apply to both Donald Road and Allen Bell Drive given that these roads provide connections to local population areas but are not major through routes.

2.3 Public Transport

The nearest bus stop to the site is located on Allen Bell Drive approximately halfway along its length. This is served by the Kaitaia Service on Tuesdays, Wednesdays and Thursdays with services during these days at an approximate 90-minute frequency. The service route follows a general clockwise loop through Kaitaia with other stops including the town centre, hospital and Pak n Save.

2.4 Walking and Cycling

Footpaths are provided on both sides of Allen Bell Drive. Donald Road has a footpath on the eastern side of the road, including across the one-way bridge. Most of the site would be within 1.5km walking distance of the Pak n Save / McDonalds / Warehouse commercial precinct. There is no existing dedicated cycling infrastructure.

2.5 Traffic Volumes

Existing traffic volumes have been derived from the Mobile Roads database. This database only includes peak hour traffic volumes and peak hour volumes have been taken as 12% of the daily volumes. The existing traffic volumes are presented in Table 1

TABLE 1: EXISTING TRAFFIC VOLUMES

Road	Location	Peak (vph)	Daily (vpd)
Donald Road	North of Allen Bell Drive	177	1,471
Donald Road	South of Allen Bell Drive	220	1,834
Allen Bell Drive	East of Donald Road	220	1,837

2.6 Road Safety

A search was made of the NZTA Crash Analysis System for all reported crashes that had occurred along the full lengths of Donald Road and Allen Bell Drive including their intersections with SH1 and Hillcrest Road. The search found that 43 crashes has been reported within the study area, as illustrated in Figure 3 below and summarised in Table 2, of which 2 crashes resulted in serious injuries, 16 resulted in minor injuries and 25 were damage to property only.

FIGURE 3: CAS RESULTS

TABLE 2: CAS SUMMARY

Crash Type	Number	%
Overtaking	1	2.3%
Loss of Control on straight	10	23.3%
Loss of control on bend	10	23.3%
Rear end	7	16.3%
Crossing/turning	13	30.2%
Pedestrian	2	4.6%
Total	**43**	**100%**

One crash that resulted in serious injuries occurred on the one-way bridge on Donlad Road where a motorcyclist was heading eastbound and accelerated on the bridge as a vehicle was approaching form the opposing direction. The motorcyclist lost traction and crashed into the side rail. The wooden bridge surface was wet at the time which is likely to have been a contributing factor to the loss of traction.

The other crash that resulted in serious injuries occurred at the intersection between Allen Bell Drive and SH1. A vehicle turning out of Allen Bell Drive failed to stop and give-way at the intersection and was hit by a northbound vehicle.

Of the crashes involving pedestrian, one occurred where a person on a scooter crashed into the side of a slow-moving vehicle on Allen Bell Drive after losing control of the scooter and the other crash occurred within the Pak n Save car park where a car crashed into a trolley.

Crashes are also reasonably distributed throughout the study area with a slight concentration of 11 crashes at the intersection between Allen Bell Drive and SH1. This is expected given this is the location with the highest traffic volumes and that this intersection is a priority-controlled crossroad rather than a roundabout. There is also a reasonable proportion of traffic crossing SH1 on Allen Bell Drive when travelling from the residential areas in the east to and from the town centre.

The reported crashes are broadly reflective of the surrounding environment with a variety of contributing factors. Further assessment of the one-way bridge and the Allen Bell Drive / SH1 intersection are locations where road safety has been reviewed further in this report.

2.7 Committed Environmental Change

The site just north of the subject site is currently being developed into approximately 40 dwellings. This modest increase is unlikely to have a significant effect on traffic patterns in the area. Otherwise, there are no known developments or infrastructure projects that would affect travel patterns.

3 Proposal

The subject site is currently included within the Rural Residential zone within the Proposed Far North District Plan. It is proposed to update the zone to be General Residential. The expected number of dwellings that could be established within the site is likely to be in the order of 500 where each lot is expected to be approximately 600sqm in size.

An indicative masterplan has been prepared for the site which also shows what a future internal road network would look like. This is shown in Figure 4.

FIGURE 4: INDICATIVE MASTERPLAN

The site would establish an access to the existing road network via Donald Road and Allen Bell Drive. The primary route through the site would be established between these accesses with other road branching off to provide access to individual lots. All roads would have a legal width of 20m.

A third access is proposed to Donald Road near Allen Bell Drive. The masterplan shows connections between this access and the rest of the site although it is possible that connections may not be included at subdivision stage given the topography near this part of the site.

Footpaths would be included within the reverse areas and also between larger blocks of lots to provide strong pedestrian connectivity throughout. Cyclists would also be able to use these paths.

4 Traffic Effects

4.1 Trip Generation and Distribution

The Institute of Transportation Engineer Trip Generation Manual (ITE Manual) has been used to assess the effects of additional traffic form the site and identified whether any upgrades to the road network would be required. The Single Family Detached House (Land Use 210) is considered to best represent the future dwellings. In the morning peak, 75% of trips are outbound and in the evening peak 37% of trips are outbound. This reflects the fact that most people leave home to travel to work/school etc in the morning and then return in the evening.

Table 3 below summarises the number of trips that would likely be generated by the site as well as the inbound / outbound distribution of those trips.

TABLE 3: TRIP GENERATION SUMMARY

Activity	AM Peak			PM Peak			Daily	
	Trip Rate	Inbound	Outbound	Trip Rate	Inbound	Outbound	Trips Rate	Trips
500 Dwellings	0.74/unit	93	278	0.99/unit	460	183	9.44/unit	4,720
		370			495			

Overall, the site is likely to generate up to 693 trips in peak hour and 3,304 over the course of the day. For contrast, the Rural Residential zone would anticipate lot sizes to be 4,000sqm rather than the approximate 600sqm lot sizes enabled as part of the Plan Change. The Rural Residential zone would therefore anticipate only 75 lots within the site. Using the same trip rates above, this would result in 56 trips in the peak hour and 708 over the course of the day.

The trips from the site have been distributed to the road network based on existing traffic volumes on Allen Bell Drive. 56% of trips are expected to head towards Pak n Save or further north with the other 44% heading south towards the town centre. This reflects that there is a reasonable split in school/employment locations north or south of the site while the timber factory, Pak n Save, Warehouse and other surrounding industrial activities are likely to have slightly more jobs than within the town centre itself.

The site is likely to have two primary connections to the road network, one via Doanld Road and one via Allen Bell Drive. The access via Doanld Road is likely to be the more direct route for more houses and hence 60% of site trips are expected to use this access while 40% would use Allen Bell Drive.

A 40% sensitivity value has been applied to the site traffic volumes. This conservative approach provides additional robustness to ensure that the surrounding network is able to accommodate additional traffic volumes.

Appendix A illustrates the turning volumes associated with the site and the total future traffic volumes that have been used in subsequent modelling.

4.2 Modelling

The critical intersections affected by the site are likely to where SH1 intersections with Donald Road and Allen Bell Drive. These two intersections have the highest existing traffic volumes of nearby intersection and would be where site traffic joins a main road before distributing to other roads. A SIDRA model of both intersections has been developed to assess the effects of additional traffic at these locations.

4.2.1 SH1 / Donald Road

The SH1 / Donald Road intersection is a single lane roundabout. The modelled intersection layout is shown in Figure 5 with a summary of results presented in Table 4 and Table 5 below for the morning and evening peak hour respectively.

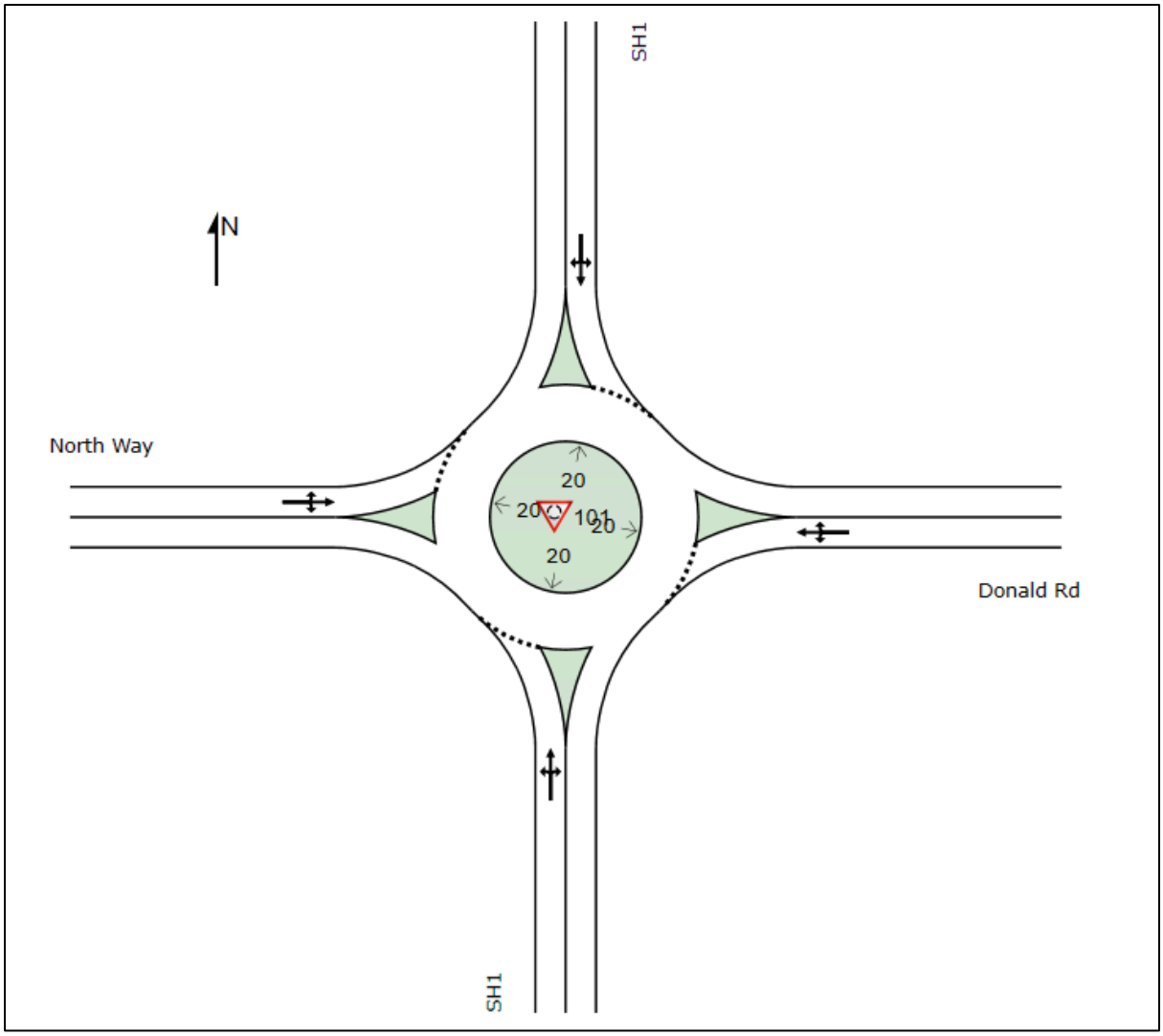

FIGURE 5: MODELLED LAYOUT

TABLE 4: AM PEAK MODELLING RESULTS

Approach	Movement	Existing Scenario			Future Scenario		
		Ave Delays (s)	LOS	95% Q (m)	Ave Delays (s)	LOS	95% Q (m)
SH1 (south)	Left	4.9	A	11.6	7.8	A	19.4
	Through	4.8	A	11.6	7.7	A	19.4
	Right	9.4	A	11.6	12.2	B	19.4
Donald Rd (east)	Left	6.9	A	8.4	11.8	B	48.2
	Through	6.8	A	8.4	11.7	B	48.2
	Right	11.3	A	8.4	16.2	B	48.2
SH1 (north)	Left	3.7	A	23.2	4.0	A	31.3
	Through	3.6	A	23.2	3.9	A	31.3
	Right	8.1	A	23.2	8.4	A	31.3
North Way (west)	Left	3.7	A	5.6	4.6	A	7.9
	Through	3.7	A	5.6	4.5	A	7.9
	Right	8.2	A	5.6	9.1	A	7.9
All Vehicles		**5.9**	**A**	-	**8.5**	**A**	-

TABLE 5: PM PEAK MODELLING RESULTS

Approach	Movement	Existing Scenario			Future Scenario		
		Ave Delays (s)	LOS	95% Q (m)	Ave Delays (s)	LOS	95% Q (m)
SH1 (south)	Left	3.6	A	16.3	5.4	A	21.4
	Through	3.5	A	16.3	5.3	A	21.4
	Right	8.1	A	16.3	9.8	A	21.4
Donald Rd (east)	Left	4.8	A	1.5	5.3	A	12.6
	Through	4.7	A	1.5	5.2	A	12.6
	Right	9.2	A	1.5	9.7	A	12.6
SH1 (north)	Left	4.8	A	14.3	8.8	A	43.4
	Through	4.7	A	14.3	8.7	A	43.4
	Right	9.3	A	14.3	13.2	B	43.4
North Way (west)	Left	4.7	A	13.9	6.8	A	32.5
	Through	4.6	A	13.9	6.7	A	32.5
	Right	9.2	A	13.9	11.2	B	32.5
All Vehicles		**5.7**	**A**	-	**8.0**	**A**	-

The modelling results shows that the intersection performs at high levels of efficiency with no significant delay on any movement even with the addition of site related traffic. The queuing on Donald Road is well below 190m which is the distance to the next upstream intersection. Overall, this intersection is able to accommodate the traffic associated with the proposed zone change.

4.2.2 SH1 / Allen Bell Drive

The SH1 /. Allen Bell Drive intersection is a stop-controlled crossroads intersection where SH1 is the main movement. There are no right turn bays provided. On-street parking on SH1 is prohibited near the intersection which may allow a through to pass a vehicle waiting to turn right however this would only be possible if a vehicle was not waiting on the side road. Similarly, the side road approaches flare and potentially allow for vehicle to queue side by side at the limit line. However, the modelling undertaken has conservatively not included any additional lanes at the intersection as bypassing stopped traffic would only be possible under certain conditions. The modelled intersection layout is shown in Figure 6 with a summary of results presented in Table 6 and Table 7 below.

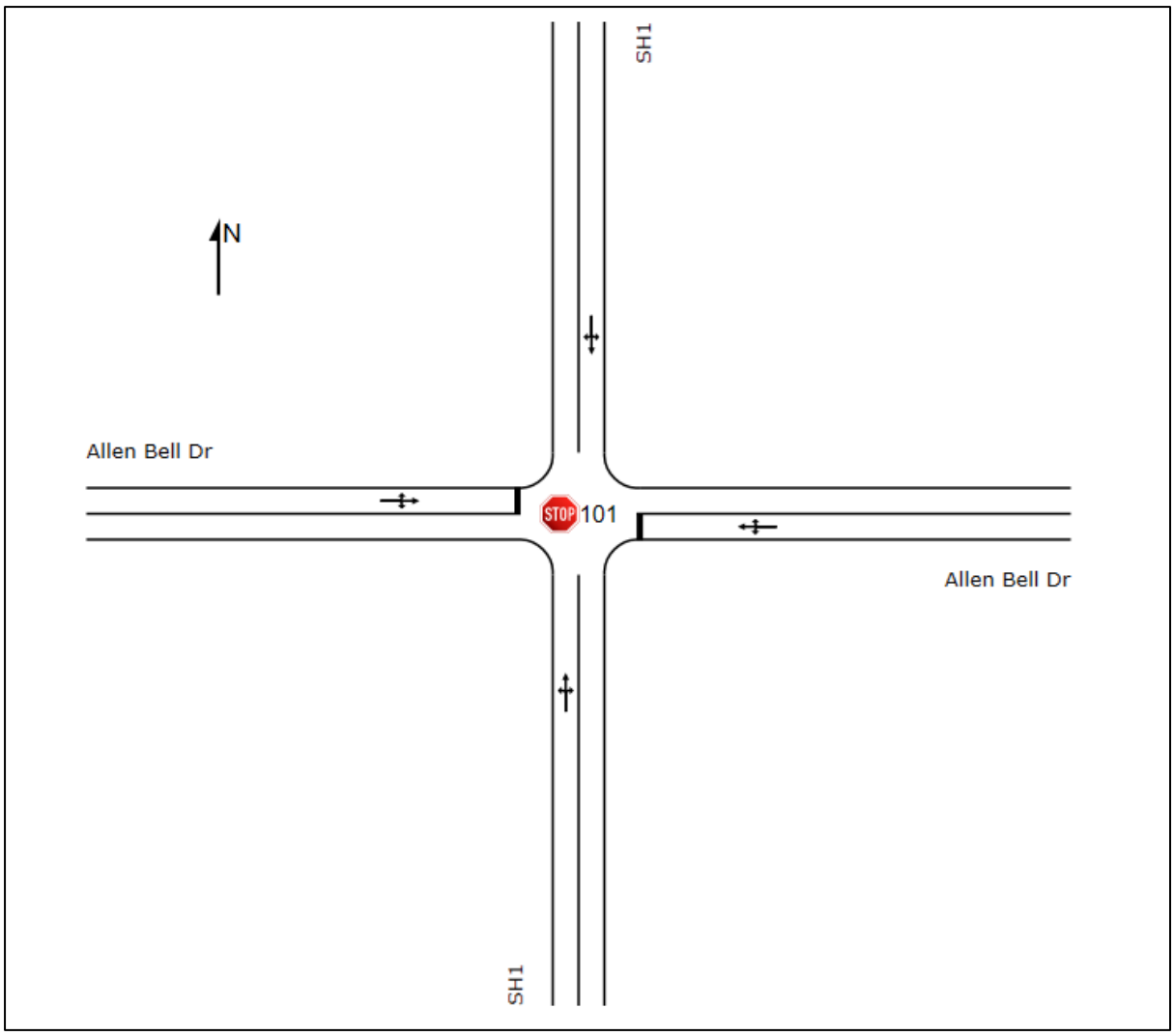

FIGURE 6: MODELLED LAYOUT

TABLE 6: AM PEAK MODELLING RESULTS

Approach	Movement	Existing Scenario			Future Scenario		
		Ave Delays (s)	LOS	95% Q (m)	Ave Delays (s)	LOS	95% Q (m)
SH1 (south)	Left	4.6	A	3.7	4.6	A	4.7
	Through	0.0	A	3.7	0.0	A	4.7
	Right	8.5	A	3.7	8.3	A	4.7
Allen Bell Dr (east)	Left	8.8	A	3.5	8.9	A	6.6
	Through	12.9	B	3.5	13.7	B	6.6
	Right	13.6	B	3.5	14.7	B	6.6
SH1 (north)	Left	4.6	A	7.8	4.6	A	7.8
	Through	0.0	A	7.8	0.0	A	7.8
	Right	6.7	A	7.8	6.7	A	7.8
Allen Bell Dr (west)	Left	8.2	A	4.9	8.2	A	5.7
	Through	13.4	B	4.9	13.7	B	5.7
	Right	13.9	B	4.9	15.5	C	5.7
All Vehicles		**4.6**	**NA**	-	**5.3**	**NA**	-

TABLE 7: PM PEAK MODELLING RESULTS

Approach	Movement	Existing Scenario			Future Scenario		
		Ave Delays (s)	LOS	95% Q (m)	Ave Delays (s)	LOS	95% Q (m)
SH1 (south)	Left	4.6	A	5.4	4.6	A	10.8
	Through	0.0	A	5.4	0.0	A	10.8
	Right	7.3	A	5.4	7.2	A	10.8
Allen Bell Dr (east)	Left	8.3	A	5.8	9.4	A	12.0
	Through	17.3	C	5.8	21.8	C	12.0
	Right	15.5	C	5.8	19.6	C	12.0
SH1 (north)	Left	4.6	A	8.1	4.6	A	8.1
	Through	0.0	A	8.1	0.0	A	8.1
	Right	10.4	B	8.1	10.4	B	8.1
Allen Bell Dr (west)	Left	9.2	A	2.6	9.3	A	3.4
	Through	14.8	B	2.6	16.6	C	3.4
	Right	16.6	C	2.6	20.0	C	3.4
All Vehicles		**4.6**	**NA**	-	**5.6**	**NA**	-

The performance during the morning peak shows no notable delay or queuing even when allowing for 40% additional traffic movements. The evening peak shows some movements may exceed 20 seconds delay however this is considered to still be within acceptable levels of performance. Overall, no upgrades to this intersection are necessary to accommodate additional traffic volumes.

4.3 One-way Bridge

Assessment has been conducted for the one-way bridge. There is approximately 70m separation between where vehicles are able to pass each other at either end of the bridge. A Poisson distribution has been adopted to assess whether an upgrade of this bridge would be required to support additional traffic movements. The distance between limit lines on approach to the bridge is 70m. The speed of vehicles crossing the bridge could be as low as 30km/h given that some vehicles may travelling slower to give way to others or are yet to accelerate after turning at nearby intersections. It would therefore take less than nine seconds for a vehicle to cross and clear the bridge.

Based on a development of 500 dwellings within the site, the bridge could accommodate up to 600 vehicles per hour when including existing background traffic. At this level of demand, there would be a 21% chance of a vehicle having to give-way to another vehicle at the bridge. While there are no exact standards for when a one-way bridge should be upgraded, it is considered that a 10% probability is an appropriate threshold for when the bridge should be upgraded. This would occur once 230 dwellings have been developed within the site and volumes on the bridge are approximately 370 vehicles per hour. Therefore, the site could be developed into 230 dwellings before an upgrade of this bridge would be appropriate to manage the increasing traffic demands.

It is noted that the intersection between Donald Road and Allen Bell Drive has the major flow as being between the northern and eastern approaches. This means that north-south through traffic does not have the right-of-way which is not intuitive. Therefore, it is also recommended to update the intersection make

the eastern approach the minor intersection approach and have the north-south movement as the major flow. This will reduce the potential for any potential confusion regarding which vehicles have right of way at the intersection. This upgrade would be undertaken at the same time as the bridge is upgraded.

5 Access Effects

5.1 Location

The site has two primary connection points to the wider road network. The first is via Donald Road between the dwellings at 54 and 56 Donald Road. This access currently serves a water utility facility. The second access is via Allen Bell Drive between the dwellings at 106 and 108. Both of these dwellings gain access via this stub road.

The site also has frontage to Donald Road close to the Allen Bell Drive intersection. It is possible that a small number of dwellings may be served by an access at this location, however, access to the bulk of the site via this section may not be achievable or desired at subdivision stage given the topography and ecological features nearby. Similarly, there is a short frontage section adjacent to 60 Allen Bell Drive where access into the site is also restricted by topography.

An internal road network would be created between the two primary access locations and ensure that the internal network would enable through connectivity. Both primary access locations have a legal width of 20m which is sufficient to accommodate a road. NZS4404 *Land Development and Subdivision Infrastructure* outlines cross section for various road types. From NZS4404, a road serving up to 800 dwellings in a suburban residential setting has a minimum recommended legal width of 20m. As such, no additional land take or reliance on neighbouring properties is required to establish access to the site.

5.2 Separation

The proposed District Plan stipulates a minimum separation of 10m between vehicles to an access road and 25m to a collector road. The roads within the site are likely to be access roads given that they would not provide an efficient through route for vehicles. It is expected that all vehicles crossing within the site would be able to achieve at least 10m separation from each other.

A new intersection to Donald Road would be approximately 20m from the existing vehicle crossings to the north and south. Similarly, 106 and 108 Allen Bell Drive are within 20m of their intersection with the road. These are existing non-compliances and only short by approximately 5m. The 20m separation is sufficient to ensure that vehicle turning at intersections or driveways would not conflict with other. There is also good visibility available between the locations which enables drivers to be able to observe and react to each other appropriately. As such, the proposed zone change is not considered to exacerbate separation to vehicle crossings.

5.3 Visibility

Visibility from the primary access location to the road network has been assessed based on the Austroads Guide to Road Design Part 4A *Unsignalised and Signalised Intersections*. The operating speed on Donald Road has been taken as 60km/h as during a site visit there were road works underway associated with an upgrade to underground services. A speed survey was undertaken on Allen Bell Drive where the 85th percentile operating speed was observed as 57km/h for northbound vehicles and 54km/h for southbound vehicles.

Table 8 below summarises the visibility measured at each location along with the respective Austroads requirement.

TABLE 8: VISIBILITY ASSESSMENT

Road	Location	Approach Speed	Austroads Requirement	Measured Visibility
Donald Road	Looking East	60km/h	123m	153m
	Looking West	60km/h	123m	135m
Allen Bell Drive	Looking North	54km/h	107m	113m
	Looking South	57km/h	115m	210m

Overall, all locations are able to satisfy the Austroads visibility standards. Looking north from the Allen Bell Drive location is the most restricted location due to the horizontal curvature in the road. Operating speeds were above the posted speed however there is still sufficient visibility available.

No exact measurements were undertaken for the Donald Road frontage close to Allen Bell Drive as an exact access location is not confirmed. However, there is at least 150m visibility available in both directions along this frontage when looking along Donald Road. It is recommended that the give-way priority at the Donald Road / Allen Bell Drive intersection are revised as discussed in section 4.3. The present alignment allows vehicles north on Allen Bell Drive to continue through the intersection without having to give-way. Visibility around the corner from the site may not exceed 50m which would be insufficient if turning vehicles do not have to slow and give-way. This recommendation would only affect timing of development in this part of the site and no other upgrades are required.

5.4 Gradient

The gradient of any internal roads would be assessed as part of any future subdivision. It is expected that all public roads would not exceed a 12.5% (1 in 8) gradient.

6 Parking Effects

The provision of parking will be considered as part of any future subdivision stages. It is expected that any parking effects would be contained within the site.

7 Road Safety Effects

The road safety report interrogated in Section 2.6 identified that the Allen Bell Drive / SH1 intersection has a higher occurrence of crashes. It is also note that this intersection takes the form of a priority crossroad with a reasonable number of vehicles crossing the main road. The intersection also does not include any right turn bays on the main road.

To support the proposed site rezoning, it is recommended to upgrade this intersection into a mini roundabout. A full-sized roundabout to Austroads standards, such as the one at the Donald Road / SH1 intersection near Pak n Save, would not be achievable as the intersection is constrained by existing land uses on all four corners. The mini roundabout could be similar to that at the intersection between Studholme Street and Thames Street in Morrinsville Town Centre. This intersection is similar to Allen Bell Drive / SH1 in that it is a crossroads within and urban area with a reasonable amount of traffic crossing over the main road. Exact details on any safety upgrades at this intersection can be considered in greater

detail as part of any future subdivision application. Consultation with NZTA would also need to be undertaken given they are road controlling authority for SH1.

Based on the assessment in section 4 of this report, the one-way bridge on Donald Road will need to be upgraded to support additional traffic demands. The upgraded bridge will also have an improved surface which would reduce the risk of motorcycles losing traction in wet conditions.

Both above features are considered to improve road safety in the vicinity of the site.

8 Consultation

A meeting with Far North District Council was held on 5 May. Council indicated that there are currently no notable proposed works on the transport network in the vicinity of the site and no other known developments aside from the site to the north which is already under construction.

In terms of site layout, Council indicated a preference for a through route within the site to ensure that the network is well connected and integrated and able to support any future public transport routes. This has been allowed for within the indicative site masterplan.

9 Conclusion

A submission has been made to the proposed District Plan to rezone the site at Part Lot 1 DP 173052 from Rural Residential to General Residential. The proposed zoning may feasibly allow up to 500 dwellings to be established within the site.

The site may generate up to 495 vehicles in the peak hour. A constraint has been identified in relation to the one-way bridge on Donald Road. It is recommended to upgrade this to a two-way bridge prior to the completion of 230 dwellings. As part of these works, it is also recommended to update the give-way priorities at the Donald Road / Allen Bell Drive intersections so that the north-south movements is the priority and that the side road of Allen Bell Drive is required to give way. This will make the intersection more intuitive to drivers in terms of which approach has priority. No other upgrades to the network are required to accommodate traffic associated with the site.

Two primary access locations have been identified to serve the site. A third may be possible however this would only serve a limited number of dwellings. It has been assessed that the primary access locations are suitable and that no land take or reliance on third parties is required. There are some non-compliances associated with separation between vehicle crossings at these locations however these are existing, and the proposal is not considered to exacerbate any safety or efficiency issues.

A review of the road safety record has identified that the SH1 / Allen Bell Drive intersection does feature a higher number of crashes. It is recommended to upgrade this intersection to a mini roundabout so that vehicles travel slower through the intersection and that give-way priorities are clearer to drivers. A formal roundabout at this location would not be achievable given the land area constraint and activities on each intersection corner. Consultation with NZTA would also be required for this given that they are road controlling authority for SH1.

It is expected that compliance with the District Plan requirements relating to parking and access within the site can be achieved. Further assessment of such features would be undertaken as part of any future subdivision consent application.

In summary the following recommendations have bene made in order to mitigate traffic effects associated with the proposed zoning change:

- Upgrade the one-way bridge prior to the completion of 230 dwellings.
- Update the give-way priorities at the Donald Road / Allen Bell Drive intersection.
- No direct access from the site is provided to Donald Road within 150m of Allen Bell Drive prior to changes in intersection priority.
- Upgrade the SH1 / Allen Bell Drive intersection to a mini roundabout.

With the above recommendations in place, it is concluded that there are no traffic engineering or transport planning reasons to preclude approval of the proposed development.

CKL