

LandPro Ltd,  
PO Box 8235  
New Plymouth  
4342



AMTANZ Ltd  
580 Wortley Rd  
RD 9  
Inglewood 4389  
Ph: 0274884121

27<sup>th</sup> April 2022

**Attention: Louise McLay**


**Re: 249C & 251 Tukapa St - Traffic Assessment**

Dear Louise,

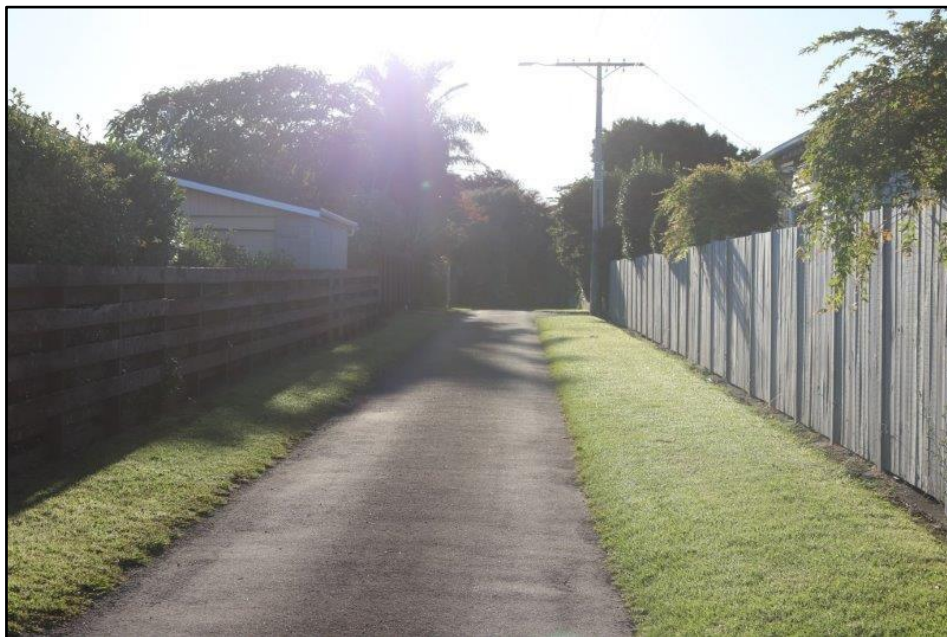
**Introduction**

AMTANZ Ltd were engaged to assist with the assessment of the traffic impacts of the proposal to subdivide 249C and 251 Tukapa St utilising the existing right of way for access. This short report presents our findings and conclusions.

**The existing situation**

Currently three properties are actively serviced by the right of way (RoW) being 249 A,B and C Tukapa St. Whilst 251 Tukapa St has direct access to Tukapa St, at the time of the creation of the RoW 251 secured the right to access their property from the RoW, but this has never been formed. Therefore there are four properties with rights to utilise the RoW. The proposal will see the new Lots access the RoW and 251 Tukapa St revoke their rights to the RoW. This increases the number of properties with rights to the RoW by one to five. 

The right of way has width of 5.5m for the first 27m before widening to 6m. It has an approximately 2.5m wide sealed drive with accesses to each of the properties. It falls gently towards Tukapa St and is approximately 90m long as shown in the following photograph:



*Figure 1 - View of RoW*

## Description of the local road network

The right of way accesses Tukapa St near the intersection of Nursery Place, a cul de sac on the opposite side of the road. In the vicinity of the site council records show Tukapa St carrying an average daily traffic volume 3,254 vehicles in 2018 with a peak hour flow of 429 vehicles occurring at 8:00 a.m.

Nursery Place has an average daily traffic of 142 vehicles recorded in 2014 with a peak hour flow of 22 vehicles at 10:00 a.m. The peak hour is later than a typical urban road and probably reflects the independent aged living units at the end of the cul de sac.

Tukapa St runs approximately north- south at this location and consists of a sealed carriageway of 10.5m width, consisting of two 3m wide traffic lanes and shoulders of approximately 2.25m each side. It has kerb and channel on both sides. There is a 1.25m concrete footpath on the western berm and a 1.5m concrete footpath on the eastern berm.

The following aerial photograph shows the roading layout with the existing right of way highlighted in red.



*Figure 2 - Aerial photograph of site*

The sight distance from the RoW is 175m to the south limited by a left hand bend as shown in the photograph below:



*Figure 3 - View to the south from RoW*

To the north the sight distance is in excess of 200m restricted by a horizontal curve as shown in the following photograph:



*Figure 4 - View to the north from RoW*

#### **Crash Data**

The national crash data base indicates there have been no reported crashes within the immediate vicinity of the site within the last five years.

#### **District Plan Requirements**

The properties are zoned as Residential A in the Operative District Plan and General Residential Zone in the Proposed District Plan. Tuakapa St is classified as a collector road and Nursery Place as a local road in both plans.

The district plan specifies minimum criteria for an access, the following table outlines the requirements under the operative and proposed plans:

*Table 1 - District Plan Requirements*

	Operative Plan	Proposed Plan
Minimum separation from an intersection.	30m*	9m
Minimum separation to next access.	N/A	N/A
Minimum sight distance (50kph posted speed limit)	45m	90m
Maximum width of crossing.	N/A	4m
Minimum number of parking spaces for a 4 or less bedroom dwelling	2	2
Minimum drive width	3m	
Passing bay spacing	50m	50m
Turning area	Required	Required

\*- on the same side as intersection.



The design of right of ways is specified in the local supplement to NZS4404:2010 Land Development and Subdivision standard as shown in the following extracts:

Table 3.2 - Road design standards

PLACE AND CONTEXT		DESIGN AND ENVIRONMENT				LINK CONTEXT					FIGURE NO.
Area & land use	Local attributes	Locality served	Target operating speed (km/h)	Min. road width (m)	Max grade	Pedestrians	Passing, parking, loading and shoulder	Cyclists	Movement lane (excluding shoulder) (m)	Classification	
URBAN	Access to houses/townhouses	1 to 3 du	10 (allow for fire appliance manoeuvring)	4.0	20%	Shared in movement lane	Allow for passing up to every 50m	Shared	3.0	Private ROW or private road	E9
		1 to 6 du		4.5							



Figure E9- Suburban, live and play, access to houses/townhouses (1-3 du, or 1-6 du)

Figure 5 - Extract from NZS4404

### Discussion

The existing right of way services three lots being 249 A, B & C. These three lots will generate of the order of 30 vehicles movements/day with a peak hour flow of 3 vehicles movements. The additional 2 Lots will increase this to 50 vehicle movements/ day and 5 movements during the peak hour. We would anticipate that the majority of movements would be right out /left in towards the CBD.

The right of way has excellent sight distance in both directions, being well in excess of the requirements of the district plan. The operative district plan only shows a minimum separation from an intersection on the same side as the intersection whilst the proposed district plan requires a 9m separation. The separation between the RoW and Nursery Place is measured at 2.5m from the centre line of Nursery PI to the centre of the right of way, effectively making it a cross roads.

Cross roads are generally not a favoured form of intersection due to their relatively poor crash record, which relates mainly to the through movement from the two minor side roads. Given the residential nature of Nursery Place and the right of way we believe there would be little if any crossing movements between them. This reduces the risk profile of the intersection as shown by the lack of a crash record. The increase in traffic movements on the RoW will not materially change the level of risk.



Tukapa St has sufficient capacity that the additional two Lots is unlikely to effect its performance in terms of efficiency or safety.

The current RoW layout does not comply with the latest standards in terms of its width, lack of a passing bay and turning area. There is ample room for the RoW to be widened to the current minimum requirement of 3m and to provide a 5.5m wide passing bay as shown in the following image.



*Figure 6 - RoW Upgrades*

Given effects of the subdivision are between the drive to 249C and Tukapa St, we see no need for the upgrades to extend beyond the drive to 249C.

We believe there is no need for a turning area as the RoW has performed adequately for many years without one, provided the Lots have sufficient space for vehicles to turn and exit the property in a forward direction as required by the district plan.

### **Conclusion**

The additional two Lots will not affect the safety or efficiency of the local roading network. The RoW can be upgraded to meet the current standards over the length it is affected by the additional traffic generation. We therefore conclude that the effects are less than minor.

Yours sincerely,

Andrew Skerrett  
Director