Regional Speed Limit Reviews

Vinegar Hill Road Catchment
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APPENDIX 1: Whangarei District Plan Maps
1 Overview

Whangarei District Council (Council) is a Road Controlling Authority (RCA) within the Whangarei District, and has a statutory role in managing the District’s local roads (except State Highways), including the setting of speed limits. This statutory role as an RCA is set out under the Land Transport Act 1998, which also enables Council to make a bylaw that fixes the maximum speed of vehicles on any road for the safety of the public, or for the better preservation of any road (Section 22AB(1)(d)).

The Whangarei District Speed Limits Bylaw 2019 sets the speed limits on all local roads within the District, with the Schedules in that Bylaw identifying the enforceable speed limits and where they apply.

Council is proposing to amend the posted speed limits on some roads within the Vinegar Hill Road Catchment Area from Corks Road through to State Highway 1.

This Report sets out the proposed changes to the Schedules of the Whangarei District Speed Limits Bylaw 2019, along with the matters that Council has considered in proposing new speed limits, including:

- A summary of the proposed amendments to the Whangarei District Speed Limits Bylaw 2019 (new speed limits)
- Reasons for the proposed amendments
- Targeted consultation process
- Matters considered under Section 4.2(2) of the Setting of Speed Limits Rule 2017
- Options analysis

A separate Statement of Proposal as required under the Local Government Act 2002 is available on Council’s website by following the link:  [www.wdc.govt.nz/speedbylaw](http://www.wdc.govt.nz/speedbylaw)

It should be noted that Private Roads not under the care and control of Council are not included in this review.

Submissions are sought from any person or organisation and must be received by Council no later than 5pm, Monday 9th December 2019.

1.1 Road Speed Environments

NZTA Speed Management Guidance provides general guidance in assessing a safe and appropriate speed based on the type of road and other broad-based assessment criteria. The following provides a regionally consistent description of the expectations for various speed limits.

<table>
<thead>
<tr>
<th>Speed Limit</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>20kmph</td>
<td>Shared space areas where the principle use is for pedestrians. These areas will typically incorporate street furniture. Roads that are used principally for parking purposes and do not have through traffic.</td>
</tr>
<tr>
<td>30kmph</td>
<td>Shared Space areas that provide equal access to pedestrians, cyclists and motor vehicles. Beach access, including informal parking for pedestrian access to beaches. Most beaches.</td>
</tr>
<tr>
<td>40kmph</td>
<td>Urban areas where there are facilities that generate significant additional pedestrian activity such as schools, shopping centres, sports facilities or other developed recreational areas.</td>
</tr>
</tbody>
</table>
Central Business District areas, particularly where there is on-road parking and pedestrians crossing roads at controlled or uncontrolled crossing points; but not a formal shared space.

50kmph Urban roads that have a high residential density, but no facilities that would generate significant additional pedestrian activity such as schools, shopping centres, sports facilities or other developed recreational areas.

60kmph Semi-urban or rural roads that meet one or more of the following criteria:
- Significant industrial or commercial activity
- A road principally used for access to rural residential dwellings with a narrow single lane carriageway or a carriageway that has no centre line marking
- A road where significant residential or other development is directly accessed, including approaches to urban areas.
- Urban arterial routes
- An access road that is unsealed

70kmph In accordance with National Speed Management Guidance, 70kmph zones are generally discouraged and will only be used where there is clear evidence that both 60kmph and 80kmph are inappropriate. Where there is an existing 70kmph zone, consideration will be given to the benefits of changing that speed limit to 60kmph or 80kmph.

80kmph General rural roads that are un-divided, two-lane roads with marked centre lines with narrow shoulder areas and are not torturous.

90kmph In accordance with National Speed Management Guidance, 90kmph zones are generally discouraged and will only be utilised in exceptional circumstances.

100kmph Rural open roads that are of good quality and principally used as arterial routes. Typically, these roads will have good visibility; shoulder areas; and will be two lane roads with marked centre lines; or have a barrier between opposing lanes. Safety features will also be in place on these roads.

2 Review Area

The review area incorporates Vinegar Hill Road from the intersection with Corks Road through to the intersection with State Highway 1, and all roads connecting, either directly or indirectly with Vinegar Hill Road as identified in Figure 1, and includes the following roads:
- Steere Place
- Thomas Street
- Townsend Place
- Balmoral Road
- Riversong Road
- Mangakino Lane
- Waitaua Road
- Lauries Drive
- Logan Cameron Road
- Main Road
- Saleyards Road
- Jounneaux Road
Figure 1: Speed Management Review Area

Note: Some road names have not been included in the maps as the font size is too large for the map scale or because they are located within an existing Urban Traffic Area. Please refer to tables for all road names.
3 Summary of Proposed Amendments

In Whangarei District Council’s capacity as the Road Controlling Authority (RCA), the following amendments to the posted speed limits within the Speed Review Area are proposed:

<table>
<thead>
<tr>
<th>Road</th>
<th>Existing Posted Speed Limit</th>
<th>Proposed Speed Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vinegar Hill Road from Corks Road to the current 50kmph boundary</td>
<td>50kmph</td>
<td>50kmph</td>
</tr>
<tr>
<td>Vinegar Hill Road from current 50kmph boundary to a point 800m north of the intersection with Balmoral Road</td>
<td>100kmph</td>
<td>60kmph</td>
</tr>
<tr>
<td>Vinegar Hill Road from a point 800m north of Balmoral Road to a point 200m south-east of the intersection with Saleyards Road</td>
<td>100kmph</td>
<td>80kmph</td>
</tr>
<tr>
<td>Vinegar Hill Road from a point 200m south-east of the intersection with Saleyards Road to the intersection with State Highway 1</td>
<td>100kmph</td>
<td>60kmph</td>
</tr>
<tr>
<td>Steere Place (off Thomas Street)</td>
<td>50kmph</td>
<td>50kmph</td>
</tr>
<tr>
<td>Thomas Street</td>
<td>50kmph</td>
<td>50kmph</td>
</tr>
<tr>
<td>Townsend Place (off Thomas Street)</td>
<td>50kmph</td>
<td>50kmph</td>
</tr>
<tr>
<td>Balmoral Road</td>
<td>50kmph</td>
<td>50kmph</td>
</tr>
<tr>
<td>Riversong Road</td>
<td>100kmph</td>
<td>60kmph</td>
</tr>
<tr>
<td>Mangakino Lane</td>
<td>100kmph</td>
<td>80kmph</td>
</tr>
<tr>
<td>Waitaua Road</td>
<td>50kmph</td>
<td>60kmph</td>
</tr>
<tr>
<td>Lauries Drive</td>
<td>100kmph</td>
<td>60kmph</td>
</tr>
<tr>
<td>Logan Cameron Road</td>
<td>100kmph</td>
<td>60kmph</td>
</tr>
<tr>
<td>Main Road</td>
<td>100kmph</td>
<td>80kmph</td>
</tr>
<tr>
<td>Saleyards Road</td>
<td>100kmph</td>
<td>60kmph</td>
</tr>
<tr>
<td>Jounneaux Road</td>
<td>100kmph</td>
<td>60kmph</td>
</tr>
</tbody>
</table>

Table 1: Summary of proposed Speed Limit changes

Figure 2 (below) sets out the proposed new speed limits for the Nova Scotia Drive Catchment and Waipu review area, including the Waipu Urban Traffic Area.
Figure 2: Proposed changes to speed limit
4 Reasons for Change

Section 22AB(1)(d) of the Land Transport Act 1998 provides for a Road Controlling Authority to make a Bylaw to set a speed limit for the safety of the public, or for the better preservation of any road. Council updated its Speed Limit Bylaw in 2019.

Council, as the Road Controlling Authority are reviewing speed limits across the Whangarei District as part of central government Safer Journey’s Strategy, with the goal of setting safe and appropriate speed limits that will reduce fatal and serious injury crashes. The proposed changes to speed limits also takes account of the changing road environment, including the volume of traffic as well as current and planned development.

In response to new sub-division development, along with an assessment of the safe and appropriate speed for the road environment, Council is proposing to amend speed limits in the Vinegar Hill Road catchment area. The primary reasons for the amendments are:

- To better match the road speed limit with the wider road environment to lower the potential for fatal, serious injury and minor crashes.
- To respond to a changing wider road environment, including existing, new, and planned access from residential land-uses onto the main carriageway.
- Lower the potential for fatal and serious injury crashes involving pedestrians and cyclists within a growing semi-urban environment by providing for a safe and appropriate speed limit that recognises that environment.

Vinegar Hill Road has been specifically identified for a speed review for the following reasons:

- It has been identified as a High Benefit (first 5%) road catchment for a speed review
- The catchment area is well defined and will lead to consistency in speed limits
- Some key stakeholders have identified Vinegar Hill Road as an area that would benefit from a speed limit review.

5 Setting of Speed Limits Rule considerations

The purpose of the Setting of Speed Limits Rule 2017 is to give effect to a nationally consistent and evidence-based approach to speed management and to provide a mechanism for Road Controlling Authorities to set speed limits for roads in their jurisdictions.

Section 4.2(2) of the Setting of Speed Limits Rule 2017 requires a range of matters to be considered when reviewing and setting a speed limit. The following sets out the matters which Council has had regard to in setting the proposed speed limit within the review area.

5.1 NZTA Information

NZTA provide larger scale information and crash data. NZTA data has been utilised throughout the Speed Management Review, and includes, but is not restricted to:

- Crash data reported to NZTA through the Police
- Risk assessments, including Personal, Collective and Infrastructure Risk assessments
- Safe and appropriate speed data and assessment

Large scale NZTA data forms the basis for the speed management assessments undertaken and set out in this Report.

NZTA is also a member of the Key Stakeholders Group to facilitate consultation on speed reviews.

5.2 Speed Management Guidance

Guidance for the setting of speed limits is provided within the NZTA National Speed Management Guide 2016. The Speed Management Rule 2017 provides the process for reviewing speed limits across the District.
The Speed Management Guidance 2016 document has provided the basis for the assessments and processes (including consultation processes) utilised in this speed management review.

Generally, NZTA Speed Management Guidance promotes larger, catchment wide reviews in areas that are identified as high benefit. This Speed Review focusses on Vinegar Hill Road and its road catchment. The catchment itself is a smaller closed catchment area with limited tributary roads. None of the tributary roads connect to other significant roads. The only exception to this Catchment concept is Jounneaux Road, which sits on the edge of the Vinegar Hill Catchment. Jounneaux Road has been incorporated into this review as it is adjacent to Saleyards Road and does not in itself contribute to any other road catchment area.

In accordance with the Speed Management Guidance, the identified Vinegar Hill Road catchment area has been chosen for a speed review for the following reasons:

- It has been identified as a High Benefit (top 5%) road catchment for a speed review
- The Vinegar Hill Road catchment is well defined
- The catchment area has been subject to significant development in recent years
- The District Plan indicates ongoing development

5.3 Function and Use of the Road

The One Network Road Classification (ONRC) is a framework that provides a consistent system for the classification of roads throughout New Zealand. The ONRC considers the needs of all road users, be they motorists, cyclists or pedestrians.

Initial assessments of appropriate levels of service, safety features and speed ranges are made based on the function and classification of the road. The initial assessment does not consider local factors and provides a starting range for identifying an appropriate speed limit for a given road. The initial speed ranges are based on Figure 1.4 of the NZ Speed Management Guide 2016 (below).

<table>
<thead>
<tr>
<th>Classification</th>
<th>Straight open road /urban motorways</th>
<th>Curved open road</th>
<th>Winding open road</th>
<th>Urban (not motorway)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class 1 High volume national</td>
<td>100–110km/h</td>
<td></td>
<td></td>
<td>60–80km/h</td>
</tr>
<tr>
<td></td>
<td>Depends on design and safety risk (e.g. divided 4–5 star, grade separated intersections, safety barriers) and factoring in enforcement thresholds</td>
<td></td>
<td></td>
<td>50km/h</td>
</tr>
<tr>
<td>Class 2 National, Regional, Arterial</td>
<td>80–100km/h</td>
<td></td>
<td>60–80km/h</td>
<td>60–80km/h where safety risk allows, e.g. fewer intersections, mode separation for active users</td>
</tr>
<tr>
<td>Class 3 Primary and secondary collector</td>
<td>60–80km/h</td>
<td></td>
<td>30–50km/h</td>
<td>30km/h if high volumes of cyclists/peDESTrians</td>
</tr>
<tr>
<td>Class 4 Access and low-volume access All winding/tortuous</td>
<td>60–80km/h</td>
<td></td>
<td>10km/h for Shared Spaces</td>
<td></td>
</tr>
</tbody>
</table>

Figure 3: Recommended safe and appropriate speed ranges for road classes: Source: NZTA - NZ Speed Management Guidance, 2016
The review area consists the following roads and ONRC classification, road type and initial speed estimate range:

<table>
<thead>
<tr>
<th>Road</th>
<th>ONRC Classification</th>
<th>Type of Road</th>
<th>Speed Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vinegar Hill Road</td>
<td>ONRC Class 3</td>
<td>Primary Collector</td>
<td>60 – 80kmph¹</td>
</tr>
<tr>
<td>Steere Place</td>
<td>ONRC Class 4</td>
<td>Access (urban)</td>
<td>30 – 50kmph²</td>
</tr>
<tr>
<td>Thomas Street</td>
<td>ONRC Class 4</td>
<td>Access (urban)</td>
<td>30 – 50kmph²</td>
</tr>
<tr>
<td>Townsend Place</td>
<td>ONRC Class 4</td>
<td>Access (urban)</td>
<td>30 – 50kmph²</td>
</tr>
<tr>
<td>Balmoral Road</td>
<td>ONRC Class 4</td>
<td>Access (urban)</td>
<td>30 – 50kmph²</td>
</tr>
<tr>
<td>Riversong Road</td>
<td>ONRC Class 4</td>
<td>Access</td>
<td>60 – 80kmph</td>
</tr>
<tr>
<td>Mangakino Lane</td>
<td>ONRC Class 4</td>
<td>Access</td>
<td>60 – 80kmph</td>
</tr>
<tr>
<td>Waitaua Road</td>
<td>ONRC Class 4</td>
<td>Access</td>
<td>60 – 80kmph</td>
</tr>
<tr>
<td>Lauries Drive</td>
<td>ONRC Class 4</td>
<td>Access</td>
<td>60 – 80kmph</td>
</tr>
<tr>
<td>Logan Cameron Road</td>
<td>ONRC Class 4</td>
<td>Access</td>
<td>60 – 80kmph</td>
</tr>
<tr>
<td>Main Road</td>
<td>ONRC Class 3</td>
<td>Secondary Collector</td>
<td>80 – 100kmph³</td>
</tr>
<tr>
<td>Saleyards Road</td>
<td>ONRC Class 3</td>
<td>Primary Collector</td>
<td>80 – 100kmph⁴</td>
</tr>
<tr>
<td>Jounneaux Road</td>
<td>ONRC Class 4</td>
<td>Access</td>
<td>60 – 80kmph</td>
</tr>
</tbody>
</table>

Notes
1. Speed range is based on the winding nature of Vinegar Hill Road
2. 30kmph where there are high volumes of cyclists or pedestrians
3. Speed range is based on a straight open road
4. Saleyards Road has commercial development located on it and as such a lower speed range may apply

5.4 Crash Risk

Crash data is primarily sourced from data that is reported to NZTA from the NZ Police, and often does not report minor, non-injury crashes or near misses. The overall crash data provides a current personal and collective risk rating for the specified road, which are set out in the table below.

The overall crash risk analysis for Vinegar Hill Road is High. The Personal Risk, which is a measure of the risk to an individual using the road, is High.

<table>
<thead>
<tr>
<th>Road</th>
<th>Collective Risk¹</th>
<th>Personal Risk²</th>
<th>Infrastructure Risk³</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vinegar Hill Road</td>
<td>Medium</td>
<td>High</td>
<td>Medium</td>
</tr>
<tr>
<td>Steere Place</td>
<td>Low</td>
<td>Medium</td>
<td>Medium high</td>
</tr>
<tr>
<td>Thomas Street</td>
<td>Low</td>
<td>Medium</td>
<td>Medium high</td>
</tr>
<tr>
<td>Townsend Place</td>
<td>Low</td>
<td>Medium</td>
<td>Low medium</td>
</tr>
<tr>
<td>Balmoral Road</td>
<td>Low</td>
<td>Medium</td>
<td>Low medium</td>
</tr>
<tr>
<td>Riversong Road</td>
<td>Unknown</td>
<td>Unknown</td>
<td>Unknown</td>
</tr>
<tr>
<td>Mangakino Lane</td>
<td>Low</td>
<td>Unknown</td>
<td>Medium</td>
</tr>
<tr>
<td>Waitaua Road</td>
<td>Low</td>
<td>Unknown</td>
<td>Low medium</td>
</tr>
</tbody>
</table>
Table 4: Risk Data

Notes:
1. Collective Risk is a measure of the total number of fatal and serious injury crashes per kilometre over a section of road. Collective risk does not take account of the volume of traffic on the road.
2. Personal Risk is a measure of the danger to each individual using a road. Personal risk takes into account the traffic volumes on the section of road.
3. Infrastructure Risk utilises a road assessment methodology designed to assess road safety risk based on eight key design and infrastructure features.
4. Unknown Risk indicates that there is insufficient data available to determine the specific risk factor.

A review of crash data reported to NZTA through the NZ Police in the ten years from 2008 to 31 March 2018 is set out in Figures 4, 5 and 6. The data shows reported injury and non-injury crashes within the review area, including:

- Vinegar Hill Road 79 crashes
- Saleyards Road 6 crashes
- Main road 1 Crash
- Thomas Road 9 crashes
- Balmoral Road 2 crashes

Note: The crash nodes identified on the maps below may indicate more than one crash of similar severity in the same location.
Figure 4: Reported crashes Vinegar Hill South 2008 - 2018

Figure 5: Reported crashes Vinegar Hill Central 2008 - 2018
5.5 Characteristics of the Road

The characteristics of the road include the physical characteristics of the road that have an impact on crash risk such as the type of seal and shoulder width. The general environment also determines the characteristics of the road and crash risk, for example pedestrians and parking. The Table below sets out the significant physical characteristics of the roads where a speed limit change is proposed.

<table>
<thead>
<tr>
<th>Road</th>
<th>Road Character</th>
<th>Lane Width</th>
<th>Curves</th>
<th>Shoulder</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vinegar Hill Road</td>
<td>Two-lane undivided</td>
<td>Medium</td>
<td>Curved</td>
<td>Very narrow</td>
</tr>
<tr>
<td>Steere Place</td>
<td>Two-lane undivided</td>
<td>Medium</td>
<td>Curved</td>
<td>Narrow</td>
</tr>
<tr>
<td>Thomas Street</td>
<td>Two-lane undivided</td>
<td>Medium</td>
<td>Curved</td>
<td>Very narrow</td>
</tr>
<tr>
<td>Townsend Place</td>
<td>Two-lane undivided</td>
<td>Medium</td>
<td>Straight</td>
<td>Very narrow</td>
</tr>
<tr>
<td>Balmoral Road</td>
<td>Two-lane undivided</td>
<td>Medium</td>
<td>Straight</td>
<td>Wide</td>
</tr>
<tr>
<td>Riversong Road</td>
<td>Unsealed</td>
<td>Narrow</td>
<td>Straight</td>
<td>Narrow</td>
</tr>
<tr>
<td>Mangakino Lane</td>
<td>Two-lane undivided</td>
<td>Medium</td>
<td>Curved</td>
<td>Very narrow</td>
</tr>
<tr>
<td>Waitaua Road</td>
<td>Two-lane undivided</td>
<td>Narrow</td>
<td>Straight</td>
<td>Very narrow</td>
</tr>
<tr>
<td>Lauries Drive</td>
<td>Two-lane undivided</td>
<td>Narrow</td>
<td>Torturous</td>
<td>Very narrow</td>
</tr>
</tbody>
</table>
Table 5: Road Characteristics

<table>
<thead>
<tr>
<th>Road</th>
<th>Road Character</th>
<th>Lane Width</th>
<th>Curves</th>
<th>Shoulder</th>
</tr>
</thead>
<tbody>
<tr>
<td>Logan Cameron Road</td>
<td>Two-lane undivided</td>
<td>Narrow</td>
<td>Winding</td>
<td>Very narrow</td>
</tr>
<tr>
<td>Main Road</td>
<td>Two-lane undivided</td>
<td>Narrow</td>
<td>Winding</td>
<td>Very narrow</td>
</tr>
<tr>
<td>Saleyards Road</td>
<td>Two-lane undivided</td>
<td>Narrow</td>
<td>Curved</td>
<td>Very narrow</td>
</tr>
<tr>
<td>Jounneaux Road</td>
<td>Two-lane undivided</td>
<td>Medium</td>
<td>Curved</td>
<td>Very narrow</td>
</tr>
</tbody>
</table>

5.5.1 Vinegar Hill Road

Vinegar Hill Road connects Tikipunga with State Highway 1 to the north. Although the road connects Tikipunga with State Highway 1, through traffic is limited due to the hilly and winding nature of the road. Through traffic from Tikipunga to State Highway 1 generally utilises Puna-Rere Drive (extension to Spedding Road) to access the Kamo Bypass (State Highway 1) as this route is generally faster.

Vinegar Hill Road is undulating with some significant hills. There are numerous accesses directly onto the main carriageway, often with limited visibility. Although the current posted speed limit on Vinegar Hill Road is 100kmph, the practical operational speed is expected to be significantly lower.
5.5.2 Mangakino Lane
Mangakino Lane is primarily utilised as an access road. However, the carriageway is good quality and has two lanes that are clearly marked. The road incorporates gentle curves, with the narrow shoulder area limiting visibility.

5.5.3 Logan Cameron Road
Logan Cameron Road is a single lane road that provides access to residential dwellings and agricultural land. The carriageway is narrow, with a very narrow shoulder that incorporates a drainage ditch. Opposing vehicles expect to slow and move to the extreme edge of the carriageway to pass safely.

5.5.4 Main Road
Main Road is an access road with a good quality carriageway. There are two lanes that are clearly marked. The road incorporates gentle curves, with the narrow shoulder area limiting visibility in places.
Figure 11: Logan Cameron Road

Figure 12: Main Road

5.5.5 Saleyards Road

Saleyards Road forms a loop from State Highway 1 and connects back to State Highway 1 via the northern end of Vinegar Hill Road. Saleyards Road provides access to a stock sales yard, stock truck effluent disposal facility and other light industrial sites.
5.5.6 Jouneaux Road

Jouneaux Road is a single lane road that provides access to residential dwellings and agricultural land. The carriageway is narrow, with a very narrow shoulder that incorporates a drainage ditch on both sides. Opposing vehicles expect to slow and move to the extreme edge of the carriageway to pass safely.
5.6 **Adjacent Land-use**

Adjacent land-use has a range of impacts on the road environment and a safe and appropriate speed within that road environment, including:

- Influencing the number of pedestrians and cyclists accessing the road corridor.
- Effecting the number of direct accesses onto the road carriageway, which in turn increases the risk of crashes.
- Impacting on the type of vehicles using the road, particularly the proportion of Heavy Goods Vehicles.

The southern, or city end of Vinegar Hill Road is characterised by existing urban development from Corks Road through to Balmoral Road where the current road speed limit transitions from 50kmph to 100kmph.

The adjacent land-use quickly transitions into a largely rural residential environment. Although the land has a largely rural outlook, the rural-residential development is of moderate density.

Saleyards Road is located at the northern end of Vinegar Hill Road and is near the Kauri Dairy Factory. There is a level railway crossing at Saleyards Road. Saleyards Road also has a significant stock sale-yard where stock auctions occur on a regular basis. There are additional businesses located around the Saleyards Road area, and this is reflected within the Whangarei District Plan, which has both Business 2 and Business 4 Environments adjacent to the Road.

### 5.6.1 District Plan

The Whangarei District Plan is the principle document that provides direction for future development within the District. It achieves this by setting policy and rules for development, including the identification of different environments where specific activities will be encouraged, including the density of development.

Within the Vinegar Hill Road review area, the Whangarei District Plan identifies six separate Planning Environments:

- Living 1
- Living 3
- Urban Transition
- Strategic Rural Industry Environment
- Rural Urban Expansion
- Rural Production

The relevant Planning Maps are contained in Appendix 1.

#### 5.6.1.1 Living 1

The living 1 Environment includes general urban areas and incorporates a medium residential dwelling density with a current proposed plan change reducing individual lot sizes from 500m² to 450m².

Zoning un-developed, or minimally developed land as Living 1 has the effect of “freeing” that land for urban development. The effects of transitioning toward a Living 1 Environment on the road include:

- An urban feel to the area with increased residential dwelling density
- Significantly greater direct access onto the adjoining roads from residential dwellings
- Increased numbers of pedestrians and cyclists
- More young people having direct access to the road environment
- Increased distractions for drivers
- Increased Average Daily Traffic Flows

Slow Streets or other traffic calming often feature within urban Living 1 Environments.
The speed environment within an urban Living 1 Environment is expected to be 50kmph. A 40kmph or less speed limit normally applies around schools, shopping centres or other features that increase the number of pedestrians or young people accessing the road environment, or where there is traffic calming measures in place.

5.6.1.2 Living 3

The Living 3 Environment is effectively a rural residential environment where residential land-uses are predominant with an average net lot size of 2000m². Lots have either direct or indirect access to the road.

The effects of a Living 3 Environment on the road include:

- A moderate residential density, whilst maintaining a feeling that the driver is in a predominantly rural environment
- Increased direct access onto the adjoining roads from residential dwellings than would normally be expected within a rural environment
- Pedestrians (including small groups) utilising the road verge, or in the absence of a stable and flat road verge, the carriageway; particularly on weekends.
- High potential for obscured residential access-ways
- Average Daily Traffic Flows that are higher than would be expected for a rural environment

A safe and appropriate speed within a Living 3 rural residential environment is expected to be 80kmph or less.

5.6.1.3 Urban Transition Environment (UTE)

The Urban Transition Environment is a new zone within the District Plan.

The Urban Transition Environment promotes a minimum lot size of 5000m² giving rise to a low-density residential environment. The development of multiple residential dwellings within a working farm may be encouraged. This will lead to single road access points serving multiple residential dwellings.

The effects of the Urban Transition Environment on the road environment will be similar to a Living 3 Environment, albeit with an overall lower density of dwellings. There will be a greater number of multiple access points, as well as pedestrians and cyclists utilising the road environment.

A safe and appropriate speed within an Urban Transition Environment is expected to be 80kmph or less.

5.6.1.4 Strategic Rural Industry Environment (SRIE)

The Strategic Rural Industry Environment incorporates the previous Business 2 and Business 4 Environments (both heavy industry and light industrial uses). This environment incorporates the Croft Timber Mill and the Fonterra milk processing site and ancillary irrigation farms.

The Strategic Rural Industry Environment is located at the northern end of Vinegar Hill Road and is bounded by Saleyards Road, and State Highway 1 (south of Vinegar Hill Road) and extends to the north of Vinegar Hill Road between the railway line and State Highway 1.

The Fonterra milk processing site and ancillary irrigation farms extends along the northern side of Vinegar Hill for several hundred meters. This part of the environment is not expected to impact on Vinegar Hill Road or its catchment.

The SRIE is expected to generate a higher proportion of heavy vehicles and light to medium commercial vehicles. This has the potential effect of increasing the number of turning vehicles and slowing overall traffic flow.

A safe and appropriate speed within a Strategic Rural Industries Environment is expected to be 60kmph or less and reflect the nature of any adjacent environments.
5.6.1.5 Rural Urban Expansion Environment

The Rural Urban Expansion Environment provides for a density of rural residential development that lies between the densities of the Rural Living and (Urban) Living Environments. The area is managed to provide future capacity for urban expansion where infrastructure is extended. The Rural Urban Expansion Environment is generally low density.

The Rural Urban Expansion Environment extends along both the northern and southern sides of a significant part of Vinegar Hill Road.

A safe and appropriate speed within a Rural Urban Expansion Environment will be similar to that of a normal rural area, with reduced speed limits where urban expansion has occurred.

5.6.1.6 Rural Production Environment

The Rural Production Environment provides for a diverse range of rural production activities, including; commercial and industrial activities that have a functional need to service rural production activities; rural communities; or provide location-based recreation or tourist activities.

The Rural Production Environment is low density and the road environment has typically low traffic counts. It should be noted that these low traffic counts will vary, particularly where there is forestry or dairy activities. Roads are generally narrower with limited shoulder areas and may be unsealed.

A safe and appropriate speed within a Rural Production Environment is expected to be 80kmph or less, with a lower speed limit for unsealed roads; or where roads are particularly narrow; or with tight curves. A higher speed limit of 100kmph may be appropriate on key arterial routes where the road is in very good condition and safety measures are in place.

5.7 Intersections and Property Access

The density of property access onto the main carriageway has a direct influence on the number of vehicles turning on and off the road, influencing crash risk in the following ways:

- Increased risk of side impact crashes where a vehicle accesses the carriageway and fails to give way to an oncoming vehicle.
- Vehicles travelling along the road also have a higher risk of encountering stationary vehicles on the carriageway, or vehicles travelling at a significantly lower speed.

In both instances, the risk of a crash increases where the carriageway width is limited or there is limited visibility. Higher densities of property accesses also indicate more potential for pedestrian and cycle activity on or near the carriageway. As property access density increases, the safe and appropriate speed on a given road should decrease.

Property access density is indicative of the following:

- Urban areas: 20 or more per km
- Urban transition areas: 10 to 20 per km
- Rural residential: 5 to 15 per km
- General rural: 2 to 5 per km
- Remote rural: Less than 2 per km

Intersection density provides a measure of the frequency that vehicles may be crossing the carriageway; slowing to make a turn; or accelerating after having made a turn. Intersection and property access densities are set out in the table below where there is information available.

<table>
<thead>
<tr>
<th>Road</th>
<th>Property Access / Km</th>
<th>Intersections / km</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vinegar Hill Road</td>
<td>Less than 5</td>
<td>Less than 2</td>
</tr>
<tr>
<td>Steere Place</td>
<td>More than 20</td>
<td>Urban¹</td>
</tr>
<tr>
<td>Thomas Street</td>
<td>More than 20</td>
<td>Urban¹</td>
</tr>
<tr>
<td>Townsend Place</td>
<td>More than 20</td>
<td>Urban¹</td>
</tr>
</tbody>
</table>
Table 6: Property and intersection density

Notes:
1. Urban streets and roads have not been given a numerical estimate of intersections per km, but have been noted as being consistent with the general urban environment, which is a high number of intersections per km.

5.8 Traffic Volumes

Traffic volumes within the Vinegar Hill Road catchment are Average Daily Traffic (ADT) flows over a 7-day period. The traffic volumes are not provided for all roads within the catchment as many are smaller access roads that do not connect to other roads. These access roads have generally low traffic volumes.

Table 6: Estimated Traffic Volumes

The estimated traffic volumes are typical of a rural residential environment on the outskirts of Whangarei City. Heavy vehicles are concentrated at the northern end of Vinegar Hill Road where Saleyards and other rural industry is accessed.

5.8.1 Practical Operational Speed

The Practical Operational Speed, within the context of this report is the average speed driven along a particular road. Often the Practical Operational Speed of a road is significantly different from the posted speed limit and reflects the wider road environment and what the average driver perceives as a safe and appropriate speed.

The Practical Operational Speed utilises speed measurements taken over time to achieve an accurate average speed measure.
Table 7: Practical Operational Speeds

Notes:
1. Practical Operational Speed is the average speed driven along a section of road.
2. The change in journey time is calculated using the difference between the proposed speed limit and the Practical Operational Speed over the length of the road.

5.9 Planned Modifications to the Road

There are a range of Plans and Strategies that potentially identify specific funding, plans or priorities that would give rise to road modifications within the review area. These are set out in the Table below.

<table>
<thead>
<tr>
<th>Planning Document</th>
<th>Provisions for Review Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Long-Term Plan (10 year)</td>
<td>No funding identified to upgrade or make significant engineering improvements to the roads within the review area.</td>
</tr>
<tr>
<td>Infrastructure Strategy (30 year)</td>
<td>No issues or funding options identified for significant modifications to the road, or immediate surrounds.</td>
</tr>
<tr>
<td>Asset Management Plans</td>
<td>Short-term projects within the review area are identified below.</td>
</tr>
<tr>
<td>Walking and Cycling Strategy</td>
<td>The roads within the review area are not part of the strategic tourism and recreational cycleway/walkway routes identified in the Strategy.</td>
</tr>
<tr>
<td>Other Plans and Strategies</td>
<td>There are no additional Plans or Strategies that apply to the roads within the review area.</td>
</tr>
</tbody>
</table>

Table 8: Planned modifications to the road environment

The following projects that may impact on speed limits within the review area are planned:

- Installation of a new guard rail on Vinegar Hill Road near Logan Cameron Road to address historic crashes at this location.
- Installation of a new guard rail at Waiatua Road
- Realignment of Vinegar Hill Road near Riversong Road to enhance the geometric shape of the road
- Relocation of some power poles as part of a hazard reduction exercise
- Installation of additional curve advisory signs over the length of Vinegar Hill Road

5.10 Views of Interested Persons and Groups

The purpose of this Document is to set out those matters that Council must consider when reviewing speed limits. One of those matters is the views of interested persons of groups. This includes key stakeholders (as identified by Council) and the community adjacent to the road where new speed limits are proposed.

A Key Stakeholder Group has been identified by Council. This group includes:

- NZ Police
- The Automobile Association
- The Regional Land Transport Committee
• Regional Transport Associations (including Freight)
• Regional Road Safety Forum
• Road contractor representatives

The Key Stakeholder Group provides input into the overall prioritisation of speed reviews and other speed related issues through periodic workshops and direct requests for feedback. The Key stakeholder Group is also directly notified for feedback on specific speed reviews. The feedback received is incorporated into the final decision-making process for Council.

A consultation process, consistent with the requirements of Section 156 of the Local Government Act 2002 and the Setting of Speed Limits Rule 2017 is being undertaken. This process enables Council to obtain the views of the wider community before any final decision is taken.

6 Options Analysis

In assessing the options, a range of matters were considered, including the matters required by the Setting of Speed Limits Rule 2017 (refer above), and future development within, and adjacent to the review area.

In determining the proposed amendments to the speed limit within the review area, the following options have been considered:

Option A: No change to the current speed environment
Option B: Reduce the speed limit as proposed
Option C: Engineer the road to meet the current speed limits

This review of speed limits covers a wide area. The review itself is the result of considering a wide range of factors outlined in this Report. The Options Analysis therefore does not relate to individual roads but considers the high-level options.

6.1 Option A - No change to the current speed environment

The current speed limits include a 50kmph area that coincides with the urban areas at the Corks Road (southern) end of Vinegar Hill Road. The remainder of the catchment has a speed limit of 100kmph. The “no change” option would retain the existing speed limits.

The “no change” option has not been pursued because:

• The safe and appropriate speed for Vinegar Hill Road and its catchment is significantly slower than 100kmph. Attaining a speed of 100kmph on many parts of this road would require dangerous manoeuvres and crossing of the centreline with limited visibility.
• Vinegar Hill Road has a relatively narrow carriageway that climbs steeply with sharp curves and limited visibility in many areas. A continuation of the 100km/hr speed limit would require eventual engineering solutions to create a safer environment for the predominantly rural residential land-uses.
• Vinegar Hill Road and the surrounding catchment area has significant rural residential land uses, with a high number of direct accessways onto the carriageway. Visibility from many of these accessways is limited by curves in the road.
• The Whangarei District Plan identifies a changing land use at the southern end of Vinegar Hill Road toward a more urbanised environment. Maintaining a higher speed limit in this area does not reflect the expected changes in the surrounding environment. The changing environment is expected to increase the number of pedestrian and cycling uses of the road.

Although it is possible to engineer solutions to retain a safe environment at the current posted speed limits, it is considered that these solutions would result in undesirable effects, including:

• Unsustainable cost to the community to design, engineer and construct an engineered solution.
• Engineering options would require the straightening of parts of the road, resulting in the need to take land to achieve this.

The “no change” option is not recommended.
6.2 **Option B - Reduce the speed limit as proposed**

Having assessed all of the matters that must be considered under the Setting of Speed Limits Rule 2017 and set out in this Report, it has been determined that reducing the speed limit as proposed is the preferred option for the following principle reasons:

- The proposed speed limits reflect an appropriate speed environment that better reflects the current practical operational speed for roads within the review area, based on current road environment, including adjacent land-uses and planned development.
- The reduction in speed will have significant safety benefits:
- The proposed speed limits will address current and planned development in and adjacent to the review area.
- The proposed slower speed limits will not have a significant effect on travel times.
- The proposed speed limits are consistent with the NZTA Speed Management Guidance 2016.

6.3 **Option C - Engineer the road to meet the current speed limits**

Engineering the roads to meet the current speed limit involves the implementation of a variety of engineering solutions to ensure that the road environment is at a standard that meets the posted speed limit.

Option C to engineer the road to meet current posted speed limits is not recommended for the following reasons:

- Council has a strategic plan for maintaining and upgrading roads on a district wide basis that considers population projections and other long-term planning aspects.
- Engineering roads to meet posted speed limits in the short-term is cost prohibitive.
- As roads are improved as part of an ongoing strategic plan, speed limits can be reviewed so that they match new engineered road environments.

6.4 **Options Conclusions**

Following an assessment of the options available with respect to the proposed amendments to the speed environment in the identified review area; and having considered the matters set out the Setting of Speed Limits Rule 2017; it is recommended that Option B is adopted by Council for consultation.
7 Significance of Change

The Whangarei District Speed Limits Bylaw 2019 is made under the Land Transport Act 1998 (LTA). Section 22AD of the LTA requires Council to consult with the community in accordance with the requirements of Section 156 of the Local Government Act 2002.

The significance of changing the Speed Limits Bylaw is assessed to determine the methodology of the consultation process to be undertaken.

7.1 Significance and Engagement Policy

The amendments to the Speed Limits Bylaw 2019 have been assessed against Whangarei District Council’s Significance and Engagement Policy (2017). A determination has been made that the proposed amendments to the Bylaw, either individually or cumulatively do not meet the significance criteria in the Significance and Engagement Policy (2017).

7.2 Section 156 Assessment

Council has assessed the proposed changes in speed limits in accordance with Section 156 of the Local Government Act. Taken alongside the reviews of Ruakaka, One Tree Point, Marsden Point and Waipu catchment areas, it is considered that, collectively the proposals will give rise to significant public interest.

In accordance with Section 156 of the Local Government Act 2002, it has been determined that the proposed amendments to the Speed Limits Bylaw 2005 Schedules:

- Is not significant in terms of Council’s Significance and Engagement Policy (2017)
- Do not give rise to a significant impact on the public but is likely to impact on the local community and give rise to significant public interest.

Given the above assessment, and in accordance with Section 156(1)(a) of the Local Government Act 2002, it is appropriate that Council consult on the proposed amendments in accordance with the Special Consultative Procedure set out in Section 83 of the Local Government Act 2002.

8 Consultation Process

Consultation is undertaken in accordance with the requirements of Section 83, 83A and 83AA of the Local Government Act 2002 and the Setting of Speed Limits Rule 2017.

8.1 Local Government Act Requirements

In accordance with the requirements of Sections 83 – 86 of the Local Government Act, Council has produced a Statement of Proposal that is publicly available. The Statement of Proposal includes details of how interested persons can present their views to Council by making a submission and when submissions can be made.

This Report is intended to provide additional detailed information, including the information that must be considered in accordance with the Setting of Speed Limits Rule 2017.

8.2 Setting of Speed Limits Rule Requirements

Section 2.5 of the Setting of Speed Limits Rule 2017 sets out the consultation requirements when setting a speed limit, and includes a requirement to consult with the following:

- The occupiers of any properties adjoining the road to which the proposed bylaw applies
- Any affected local community
- The Commissioner of Police
- Any other organisation or road user group that the road controlling authority considers affected
- The New Zealand Transport Agency

In terms of “other organisations or road user groups”, The Northland Transport Alliance, which Whangarei District Council is part of, has established a Key Stakeholders Group. This Group
includes the Northland Police, NZTA and representatives from the Northland Road Safety Forums, NZ Road Carriers Association and the Regional Land Transport Committee. Northland Automobile Association (AA) are also included in the Key Stakeholders Group.

8.3 Giving Effect to Consultation Requirements

The consultation requirements of the Local Government Act and the Setting of Speed Limits Rule will be given effect to via direct notification of key stakeholders. In addition, the organisations identified in 7.2 (above) will also be directly notified. Direct notification will include:

- A summary of the proposed amendments
- Where further information is available
- How to present your views to Council (Having your say)

Given the extent of the review area, it is considered that direct notification of the occupiers of properties adjoining the roads that are subject to a proposed change in speed limit is not reasonably practicable. Council will therefore notify the proposed changes in the normal manner for a Bylaw review.

Council will proceed with a communications strategy that publicises and promotes the proposed changes to as wide an audience as possible. This may include:

- Public notice in appropriate media across the District
- Direct notification of community groups within the review area
- Notices on local notice boards and businesses
- Media releases, including social media advertising
- Information on council’s website and at Council Service Centres

Following the close of submissions, submitters who wish to present their views to Council in person will be provided an opportunity to do so; and will be advised of the process.

9 Making a Submission

Any person or organisation can make a submission on the proposed amendments to speed limits within the Vinegar Hill Road Catchment Area.

Submissions can be made, either electronically online; by email; or on paper; and should:

- State the submitters name, address and contact phone number or Email
- Clearly state the road or roads that the submission point relates to.
- Whether you support or oppose the proposed new speed limit.
- Your reasons for why you support or oppose the proposed speed limit.
- Other matters that you think Council should consider.

**All submissions must be received by 5pm, Monday 9th December 2019**

You can make a submission online at: www.wdc.govt.nz/Speedbylaw, or
Email your submission to: mailroom@wdc.govt.nz, or
Post your submission to:
Speed Reviews
Whangarei District Council
Private Bag 9023
**Whangarei 0148**

Submissions can also be hand delivered to the Whangarei District Council Office at Forum North in Rust Avenue, Whangarei, or at any Service Centre.
Notes:

All submitters that request it, have a right to further present their views to Council. Anyone wishing to present their views to Council personally will be advised of the process following the close of submissions.

Feedback received from the community will be considered, along with a range of other matters in reaching a final decision on the proposals within this document.

The Council is legally required to make all written or electronic submissions available to the public and to Councillors; this may include the name and address of the submitter. The submissions, including all contact details provided, will be available to the public, subject to the provisions of the Local Government Official Information and Meetings Act 1987.

If you consider there to be a compelling reason why your contact details and/or submission should be kept confidential, you should contact Council on 09 438 4200 or 0800 932 463

10 Where Can I Get More Information?

Copies of this Report and the Summary Document can be viewed on Whangarei District Councils website at www.wdc.govt.nz/speedbylaw.

Alternatively, copies of this Report and the Summary Document can be viewed at any Whangarei District Council Offices or Library.

<table>
<thead>
<tr>
<th>Whangarei</th>
<th>Forum North, Rust Avenue</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Library, Rust Avenue</td>
</tr>
</tbody>
</table>

| Ruakaka             | Ruakaka Service Centre, Takutai Place |

Alternatively, call the Whangarei District Council on 09 430 4200 or 800 932 463.

or email: Mailroom@wdc.govt.nz
Appendix 1 – District Plan Maps

Environment Maps

- Northpower Critical Overhead Lines CEL
- Northpower Critical Underground Lines CEL
- Multi Title Site
- Rescue Helicopter Flight Path
- State Highway
- Arterial Road
- Collector Road
- Local Road
- Designation
- Scheduled or Overlay Area ORP label
- Oil Refinery Overlay
- Living Overlay
- Rural (Urban Expansion)
- Rural Living
- Rural Production
- Rural Village Centre
- Rural Village Industry
- Rural Village Residential
- Strategic Rural Industry
- Forestry Napier Mills
- Processing SRE – Ancillary Irrigation Farms
- Business 1
- Business 2
- Business 3
- Business 4
- Port Nikau
- Marsden Point Port
- Airport
- Living 1
- Living 2
- Living 3
- Kamo Walkability
- Marsden Primary Centre
- Rukaia Equine
- Open Space
- Papasonga

Resource Areas Maps

- Heritage Trees
- Heritage Buildings, Sites & Objects
- Sites of Significance to Māori
- Coastal Area
- Outstanding Natural Features
- Outstanding Natural Landscape
- Building Line Restriction
- Esplanade Priority
- Runway
- Air Noise Boundary
- Outer Control Boundary
- Coastal Hazard 1
- Coastal Hazard 2
- Flood Susceptible
- Mining Hazard Area
- Mining Hazard Area
- Scheduled Historical
- Scheduled Area or Overlay Area
- Forestry Noise Control Boundary
- Helicopter Hovering
- QRA Quarrying Resource Area
- QRA Mining
- QRA Buffer
- QRA 500m Indicative
- Def Back
- Goal Control

Coastal Areas Maps

- Coastal Area
- Outstanding Natural Character Area
- High Natural Character

Map Legend

NHCP Map v.5.x includes only selected coastal areas.

Future Marine Village
Future Environment

Whangarei District Council

Whangarei District Council Operative Planning Map

Map Legend

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