

**Before Kaipara District Council**

**In the Matter**

of the Resource Management Act 1991 (**RMA**)

**And**

**In the Matter**

of an application for Private Plan Change 82  
(**PPC82**) by **MOONLIGHT HEIGHTS LIMITED** to  
rezone 39.2 ha of land at Awakino Road,  
Dargaville from Rural Zone to Residential Zone

---

**Supplementary Evidence of Melissa Ivy McGrath on behalf of Moonlight Heights  
Limited**

**(Planning)**

**Dated 4 August 2023**

---

Jeremy Brabant  
Barrister  
Foundry Chambers  
Level 4, Vulcan Buildings  
PO Box 1502, Shortland St  
Auckland City  
021 494 506  
Email: [jeremy@brabant.co.nz](mailto:jeremy@brabant.co.nz)

## **Introduction**

1. My full name is Melissa Ivy McGrath. I am a Senior Associate (Planner) with Barker and Associates. I have qualifications and experience as set out in my Evidence in Chief ("**EiC**") dated 21 July 2023.
2. As per my EiC, I confirm that I have read the Code of Conduct for Expert Witnesses in the Environment Court Practice Note 2023 and I agree to comply with it. In that regard I confirm that this evidence is within my sphere of expertise and I have not omitted to consider material facts known to me that might alter or detract from the opinions I express.
3. The purpose of this supplementary statement, is to further address reverse sensitivity with respect to Designation 34 Dargaville Transfer Station and the appropriateness of Kaipara District Plan ("**KDP**") rule 13.10.8. This matter has been briefly discussed in paragraphs 112-116 of my EiC.

## **Reverse Sensitivity Rules**

4. Mr Ibbotson as detailed in his evidence, has undertaken desk top analysis and modelling of the potential noise effects associated with the Dargaville Transfer Station and recommended methods to manage potential noise effects associated with the Transfer Station within the proposed residential zone. Mr Ibbotson's findings confirm that KDP rule 13.10.8 which applies a 300m separation distance from industrial activities to all sensitive activities is unnecessarily onerous when applied to the Awakino Precinct.
5. In his opinion Mr Ibbotson has stated that sensitive activities are best avoided where noise levels will be above 55dBL<sub>Aeq</sub>. Mr Ibbotson has considered that a noise barrier would provide a level of mitigation reducing the extent of Awakino Precinct that would potentially be exposed to noise levels above 55dBL<sub>Aeq</sub>.
6. I recommend additional provisions as detailed in Attachment 1 to manage potential noise effects as recommended by Mr Ibbotson. This includes the addition of specific "Noise Areas" near the transfer station, implemented by

an additional subdivision rule to trigger the establishment of a noise barrier, and an additional land use rule which will ensure sensitive activities will avoid exposure to noise levels above 55dBL<sub>Aeq</sub>.

### **Section 32 AA Evaluation**

7. I consider that the proposed provisions will more appropriately manage potential reverse sensitivity effects within the context of the Awakino Precinct when compared to KDP rule 13.10.8. The recommended provisions will give effect to proposed policy PREC1-P1(3) and Northland Regional Policy Statement (“**NRPS**”) policy 5.1.1 (e). The proposed provisions reduce the area of land to which limitations on sensitive activities apply when compared to the 300m buffer applied by rule 13.10.8, which provides for a more efficient use of land and avoids cost associated with unnecessary resource consents. I consider that a non-complying activity status for sensitive activities located within proposed Noise Area C is an appropriate activity status to ensure that sensitive activities are avoided as recommended by Mr Ibbotson. For these reasons I conclude that the recommended noise provisions detailed in Attachment 1 are appropriate, efficient and effective to manage potential reverse sensitivity effects in accordance with section 32AA of the Resource Management Act.

---

Melissa Ivy McGrath

Dated 4 August 2023

# Attachment 1: Recommended Precinct Provisions

Changes are identified as **highlighted**.

Insert new Precinct Section into Chapter 13 – between 13.9 and 13.10

## **PREC1                      AWAKINO PRECINCT**

### **Description of Awakino Precinct**

The Awakino Precinct enables medium density residential development for a range of allotment sizes where ecological enhancement, open space and connectivity corridors are achieved. The Awakino Precinct integrates with the Residential Zone to provide for a variety of residential intensities that promote housing and living choices whilst recognising the natural features and characteristics of the area. The Residential Zone provides for traditional suburban densities and housing forms which is currently characterised by one to two storey detached residential units on larger properties setback from boundaries with landscape gardens.

<b>Objectives</b>	
<b>PREC1-O1</b>	<b>Awakino Precinct Density</b>
Residential living opportunities and housing choice is enabled in the Awakino Precinct whilst ecological, reverse sensitivity, <b>stormwater and transport</b> and character and amenity effects are managed.	

<b>Policies</b>	
<b>PREC1-P1</b>	<b>Awakino Precinct Subdivision</b>
Awakino Precinct provides for a range of site sizes and densities, and subdivision layout where: <ol style="list-style-type: none"><li>1. A mixture of allotment sizes is provided that have the ability to accommodate different housing typologies.</li><li>2. There is sufficient infrastructure to accommodate the development.</li><li>3. The development is sympathetic to the surrounding environment and adverse effects on adjoining sites are managed, including reverse sensitivity effects.</li><li>4. Good design of subdivision is achieved by the following:<ol style="list-style-type: none"><li>a. Urban blocks that respond to topography, solar orientation, prevailing winds and are flexible to deliver a range of typologies.</li><li>b. Lots are generally shaped, sized and orientated to achieve positive sunlight access, onsite amenity, privacy and outlook, with particular regard to east – west orientation.</li><li>c. Have a well-connected, <b>safe and legible</b> transportation <b>and open space</b> networks, including walking and cycling corridors.</li><li><del>d. Public roads, and open space networks are well-connected, legible and safe.</del></li><li>e. The creation of rear lots is minimised, except where there is no practicable alternative.</li><li>f. Integration with adjacent sites to enable future development opportunities.</li></ol></li></ol>	
<b>PREC1-P2</b>	<b>Awakino Precinct Residential Amenity</b>
To manage adverse effects on residential amenity and character by requiring residential activities to have regard to the way the development:	

1. Provides street activation through: <ol style="list-style-type: none"> <li><u>Orientation of building mass towards the street;</u></li> <li><u>Visual and physical connection between principal pedestrian access and the street;</u></li> <li><u>Visual connection from windows overlooking the street to create passive surveillance.</u></li> <li><u>Provides landscaping and fencing treatments at the interface with the Rural Zone, natural wetland network and other open space.</u></li> <li><u>Relates to neighbouring properties by employing setbacks, sensitive building orientation and design, and landscaping to mitigate dominance and privacy impacts.</u></li> <li><u>Provides safe and active interface to open space networks and road corridors onto which it fronts.</u></li> <li><u>Design to recognise the amenity and character of the street and other buildings in the vicinity, having regard to building bulk, scale and mass.</u></li> </ol>	
<b>PREC1-P3</b>	<b>Awakino Precinct Connectivity</b>
Require land use and subdivision to achieve a connected, legible and safe open space, pedestrian and transport network in the Awakino Precinct by: <ol style="list-style-type: none"> <li><u>Forming a well-connected street network, that avoids no exit roads and cul-de-sacs, except where there is no practical alternative.</u></li> <li><u>Establishing connections along and between the existing wetland features and open spaces.</u></li> <li><u>Establishing a visually distinct, high amenity road (the Green Road) providing connection within the precinct that accommodates separated cycle infrastructure with restricted vehicle access along one side and connects parks, open space and the freshwater network and terrestrial habitats.</u></li> <li><u>Maximising walking and cycling networks along streets, waterways and open space.</u></li> </ol>	
<b>PREC1-P4</b>	<b>Awakino Precinct Ecological Values</b>
Protect and restore the values of all natural wetland features, intermittent and permanent streams, and indigenous vegetation within the Awakino Precinct when undertaking land use and subdivision, with particular regard to: <ol style="list-style-type: none"> <li><u>Maintaining the interconnected network between the natural features.</u></li> <li><u>Method of enhancement and permanent protection of the natural features; and</u></li> <li><u>Appropriate setback of residential activities.</u></li> </ol>	
<b>PREC1-P5</b>	<b>Awakino Precinct Open Space</b>
Require subdivision within the Awakino Precinct to provide for the recreation and amenity needs of residents by: <ol style="list-style-type: none"> <li><u>Providing open spaces which are prominent and accessible and are of a quality and size in proportion to the future density of the neighbourhood.</u></li> <li><u>Providing for pedestrian and/or cycle linkages.</u></li> <li><u>Incorporate natural features, mature trees and ecological areas into the design of subdivisions through open spaces where they can contribute to recreation networks and/or maintain ecological values.</u></li> </ol>	
<b>PREC-P6</b>	<b>Awakino Precinct Stormwater Management</b>
Ensure that stormwater is managed and treated to: <ol style="list-style-type: none"> <li><u>Maintain and enhance the health and ecological values of the wetlands and streams.</u></li> <li><u>Avoid, remedy or mitigate hazards associated with climate change.</u></li> </ol>	

## Amendments to Chapter 13 – 13.10 Performance Standards Residential Land Use

Amended Rules				
Rule	Parameter	Residential Permitted Activity Performance Standard	Activity Status if the Activity does not meet the Performance Standard	Assessment Criteria
13.10.3a	Dwellings	<p>(1) Construction of a <b>dwelling</b> is a <b>Permitted Activity</b> if:</p> <ol style="list-style-type: none"> <li>After completion, it will be the only dwelling on the <b>site</b>; or</li> <li>It will be an additional dwelling on the site, and the minimum <b>net site area</b> associated with each additional dwelling is: <ol style="list-style-type: none"> <li>600m<sup>2</sup> for a <b>serviced site</b> not in an Overlay Area; or</li> <li>1,000m<sup>2</sup> for a serviced site in an Overlay Area; or</li> <li>3,000m<sup>2</sup> for an un-serviced site.</li> </ol> </li> <li>There is a separation distance of at least 3m from any other detached dwelling; and</li> <li>There is a separation distance of at least 6m where there is a private open space area located between two residential dwellings.</li> </ol> <p><b>Note 1:</b> The <b>demolition</b> and/or removal of a dwelling is a Permitted Activity except where the provisions of Chapter 17: Historic Heritage apply.</p> <p><b>Note 2:</b> Each dwelling is also required to be assessed against the relevant performance Standards contained in the Plan, including within Sections 13.10 and 13.13.</p> <p><b>Note 3:</b> For dwellings within an Outstanding Natural Landscape, Rule 13.10.3c shall also apply.</p> <p><b>Note 4:</b> There is an exemption for Rule 13.10.3 that applies to part of Lot 2 DP 73030 Cynthia Place (Baylys Beach). See Rule 13.10.29(4).</p> <p>(2) <u>Any dwelling located within a site, within the Awakino Precinct that has a road boundary shall provide:</u></p> <ol style="list-style-type: none"> <li><u>The primary pedestrian access oriented toward a road, and</u></li> <li><u>At least one habitable room with at least one clear-glazed window, at least 1m<sup>2</sup> in size which is oriented toward the road.</u></li> </ol>	Restricted Discretionary / Discretionary Activity	<p><u>Where an activity is not permitted by this Rule and is located in the Awakino Precinct, the construction of a dwelling is a Restricted Discretionary Activity if:</u></p> <ol style="list-style-type: none"> <li><u>It will be located in the Awakino Precinct; and</u></li> <li><u>It will be an additional dwelling on the site, and the minimum net site area associated with each additional dwelling is:</u> <ol style="list-style-type: none"> <li><u>450m<sup>2</sup> for a serviced site; or</u></li> <li><u>2,500m<sup>2</sup> for an un-serviced site.</u></li> </ol> </li> <li><u>There is a separation distance of at least 3m from any other detached dwelling; and</u></li> <li><u>There is a separation distance of at least 6m where there is a private open space area located between two residential dwellings.</u></li> </ol> <p><u>Council has restricted its discretion over the following matters when considering and determining an application for Resource Consent:</u></p> <ol style="list-style-type: none"> <li><u>The privacy, outlook and amenity of adjacent and adjoining sites;</u></li> <li><u>Sufficient sunlight access to the outdoor living space;</u></li> <li><u>Building mass, orientation and passive surveillance of the road/street.</u></li> <li><u>Bulk and scale effects;</u></li> <li><u>Effects on any natural features with respect to natural wetlands, water courses, and indigenous vegetation;</u></li> <li><u>The extent to which the activity is consistent with the purpose, character and amenity values of the Awakino Precinct; and</u></li> <li><u>The ability to accommodate incidental activities anticipated within the Awakino Precinct such as parking (if it is to be provided), manoeuvring, waste collection and landscaping.</u></li> </ol> <p>Where an activity is not permitted by this Rule, <b>Council</b> will have regard to the following matters when considering an application for Resource Consent:</p> <ol style="list-style-type: none"> <li><b>Building</b> location, including alternatives considered;</li> <li>Size and shape of the <b>site</b>;</li> <li>Extent of visual intrusion of the building from beyond the site, particularly from the <b>road</b> and public places including the <b>Coastal Marine Area</b>, and the <b>effects</b> on skylines and ridgelines;</li> <li>The extent to which proposed landscaping is consistent with the character of the area, provides screening from adjoining public places and <b>dwellings</b> and is in accordance with any Council adopted Design Guidelines;</li> <li>Effects on the locality, particularly residential character and <b>amenity values</b>;</li> <li>If located within an Overlay, the extent to which the values identified in the Objectives and Policies for Overlays (Chapter 4) are present on the site, and the extent to which the proposal is compatible with those values;</li> <li>Effects on landscape and heritage;</li> <li>The extent to which the proposal will affect the values of any Outstanding Natural Landscape identified in Map Series 2;</li> <li>Effects on safety and efficiency of vehicles and pedestrians using the site and affected roads and</li> </ol>

				<p><b>private ways;</b></p> <p>x) The extent to which the activity will affect any heritage values identified in Appendix 17.1 and 17.2 of the Plan.</p> <p><b>Note 1:</b> A description of the landscapes and features is provided in Appendix 18A. The values associated with Outstanding Natural Landscapes are described in the Kaipara District Landscape Technical Report (2010).</p>
13.10.7	Setbacks	<p><b>(1) Residential Zone</b></p> <p>Any <b>building</b> is a <b>Permitted Activity</b> if it is located outside the following <b>setback</b> distances (<b>yards</b>):</p> <p>a) <b>Front yard</b> - 5m;</p> <p>b) <b>Side yards</b> – one of 1.5m and one of 3m (Residential Zone), two of 3m in Overlay Areas;</p> <p>c) <b>Rear yards</b> - 3m except on rear <b>sites</b> where one yard of 1.5m may be provided;</p> <p>d) Coast - 30m from the <b>Coastal Marine Area</b>; and</p> <p>e) <b>Lake / River</b> - 30m from the banks of: any dune lake; any other lake whose <b>bed</b> has an area of 8ha or more; any river including a <b>perennial stream</b> whose bed has an average width of 3m or more;</p> <p>f) Any building is setback 30m from a railway line where there is an intersection of road and rail (level crossing controlled by giveway signage) within 300m; and</p> <p>g) Any building is set back 300m from the intersection of the State Highway and any local road (measured from the centreline of the local road).</p> <p>Provided that an accessory building may be erected in any side or rear yard where:</p> <p>h) Vehicle access is retained to the rear of the site; and</p> <p>i) It is located at least 3m from any <b>habitable room</b> on an adjoining site; and</p> <p>j) It does not exceed 10m in length or 25% of the length of the side or rear yard, whichever is less.</p> <p>In addition to the above Performance Standards</p> <p><b>(2) Mangawhai Harbour and Kai iwi Lakes Overlays</b></p> <p>Any building is a Permitted Activity if it is located outside the following setback distances (yards):</p> <p>a) River – 6m from the banks of any river with an average bed width of between 1 to 3m.</p> <p><b>Note:</b> For clarification, if the average bed width is less than 1m this rule does not apply and if the average is greater than 3m the Rule 13.10.7(1)(e) above applies.</p> <p><b><u>(3) Awakino Precinct</u></b></p> <p><b><u>Any building is a Permitted Activity if it is located outside the following setback distances (yards):</u></b></p> <p>a) <b><u>Front yard - 3m;</u></b></p> <p>b) <b><u>Side yards – 1.5m;</u></b></p> <p>c) <b><u>Rear yards - 1.5m;</u></b></p> <p>d) <b><u>Wetlands and Rivers– 10m setback from any natural wetland; and river including a perennial stream;</u></b></p> <p>e) <b><u>Rural Zone – 3m.</u></b></p> <p><b><u>Provided that an accessory building may be erected in any side or rear yard where:</u></b></p> <p>f) <b><u>Vehicle access is retained to the rear of the site; and</u></b></p> <p>g) <b><u>It is located at least 3m from any habitable room on an adjoining site; and</u></b></p> <p>h) <b><u>It does not exceed 10m in length or 25% of the length of the side or rear yard, whichever is less.</u></b></p> <p><b>Note 1:</b> The Regional Water and Soil Plan for Northland also requires setbacks from waterways and the coast for <b>excavation</b> activities. Applicants should contact the Northland Regional Council to confirm whether or not Resource Consent is required.</p>	Restricted Discretionary Activity	<p>Where an activity is not permitted by this Rule, <b>Council</b> has restricted its discretion over the following matters when considering and determining an application for Resource Consent:</p> <p>i) The outlook and privacy of adjacent and adjoining neighbours;</p> <p>ii) Extent of visual intrusion and dominance of any <b>buildings</b> from beyond the <b>site</b>, particularly from the <b>road</b> and public places including the <b>Coastal Marine Area</b>, and the <b>effect</b> on skylines and ridgelines;</p> <p>iii) If in the Mangawhai <b>Structure Plan</b> Area, whether the proposed landscaping is in accordance with the design principles of the Mangawhai Structure Plan (pages 46 - 49) for Policy Area Three;</p> <p>iv) Effects on the locality, particularly residential and natural character and <b>amenity values</b>;</p> <p>v) If located within an Overlay, the extent to which the values identified in the Objectives and Policies for Overlays (Chapter 4) are present on the site, and the extent to which the proposal is compatible with those values;</p> <p>vi) The extent to which the proposal will affect the values of any Outstanding Natural Landscape identified in Map Series 2 and if applicable the extent to which the subdivision, use or development meets the additional assessment criteria contained in Appendix 18B;</p> <p>vii) Effects on ecological values and in particular any <b>sites of ecological significance</b> as defined by the criteria listed in Appendix 25G;</p> <p>viii) Effects on public access;</p> <p>ix) Effects on <b>natural hazards</b>, including the design and construction of hazard protection works on land adjacent to the Coastal Marine Area, <b>rivers</b> and <b>lakes</b>;</p> <p>x) Protection of the conservation, ecological, recreation, access and hazard mitigation values of <b>esplanade reserves</b> or <b>strips</b>;</p> <p>xi) Where buildings are located in close proximity to State Highways or Rail (level crossings) whether and the extent to which consultation has been undertaken with NZ Transport Agency and New Zealand Railways Corporation respectively and written approval obtained; and</p> <p>xii) The functional requirements of the building and activity.</p> <p><b>Note 1:</b> A description of the landscape features is provided in Appendix 18A. The values associated with the Outstanding Natural Landscapes are described in the Kaipara District Landscape Technical Report (2010).</p>

		<p><b>Note 2:</b> The 300m radius referred to in relation to State Highways shall be measured from the position where the centreline of the road joins the State Highway.</p> <p><b>Note 3:</b> Any changes in land use on sites that have access onto Limited Access Road's require approval from the NZ Transport Agency under the Government Roding Powers Act 1989.</p>		
<b>13.10.7a</b>	<b>Fence and Landscaping</b>	<p><b>(1) Awakino Precinct</b></p> <p>a) <u>Any fence is a <b>permitted activity</b> where:</u></p> <p>i. <u>The fence is adjacent to any road boundary and has a maximum height of 1.2m; or</u></p> <p>ii. <u>The fence is adjacent to any neighbourhood park or wetland enhancement area and has a maximum height of 1.5m and is 50% visually permeable.</u></p> <p>b) <u>Any <b>building</b> or <b>dwelling</b> is a permitted activity where:</u></p> <p>i. <u>The site is adjacent to the green street identified on the Awkaino Precinct Plan and 60% of the site frontage shall be vegetated to a minimum depth of .5m and a maximum height of 1.2m.</u></p> <p>c) <u>Any residential activity within a site that has a legal boundary with Designation 34 is a <b>permitted activity</b> where an area of planting is provided along the entire length of the Designation 34 legal boundary which is:</u></p> <p>i. <u>2m wide; and</u></p> <p>ii. <u>Capable of achieving a minimum establishment height of 1.8m; and</u></p> <p>iii. <u>At a density that will achieve canopy closure within 3-5 years.</u></p>	Restricted Discretionary Activity	<p>Where an activity is not permitted by this Rule, <b>Council</b> has restricted its discretion over the following matters when considering and determining an application for Resource Consent:</p> <p>i. <u>The extent to which the fencing and landscaping visually connects the private front yards to the wider green street.</u></p> <p>ii. <u>The extent to which privacy is provided for residential units, while enabling opportunities for passive surveillance of public places.</u></p> <p>iii. <u>The extent to which shading and visual dominance effects to immediate neighbours and the street are minimised.</u></p> <p>iv. <u>Health and safety effects.</u></p> <p>v. <u>The extent to which activities within Designation 32 are obscured from any residential activity within the residential site.</u></p>
<b>13.10.8</b>	<b>Separation Distance for Noise Sensitive Activities</b>	<p>Any <b>Noise Sensitive Activity</b> (as defined in Chapter 24: Definitions) is permitted if:</p> <p><b>(1) A 300m separation distance is maintained between the noise sensitive activity and activities listed as follows, on a site under separate ownership:</b></p> <p>a) <b>Building</b> or enclosure intended for housing livestock;</p> <p>b) Wastewater treatment site or other site of plant or animal effluent storage or disposal (excluding domestic disposal systems and land effluent application);</p> <p>c) Building used for an industrial or commercial activity;</p> <p>d) Intensive feed lot or feed storage area;</p> <p>e) <b>Intensive farming</b>;</p> <p>f) Dairying shed;</p> <p>g) Mining or <b>quarrying</b>; and</p> <p>h) Any other activity that has <b>existing use rights</b> or Resource Consent to exceed the General Noise, Use of Explosives and Blasting Standards, or a Discharge Consent relating to odour from the Northland Regional Council; and</p> <p><b>(2) The activity is setback outside the Noise Contour Boundary surrounding the Maungaturoto Dairy Factory site as shown on Planning Maps 20 and 50 (Map Series 2), except that this Rule 13.10.8(2) shall not apply to Lots 1, 2 and 3 DP 88949 (Doctors Hill Road).</b></p> <p><b>Note 1:</b> This Rule is intended to protect existing, lawfully established activities in adjoining Zones. If a noise sensitive activity develops then it would be required to maintain the appropriate separation distance to avoid future land use conflicts.</p>	Restricted Discretionary Activity	<p>Where an activity is not permitted by this Rule, Council has restricted its discretion over the following matters when considering and determining an application for Resource Consent:</p> <p>i. The extent to which alternative locations have been considered; Mechanisms in place to avoid future reverse sensitivity conflicts (including covenants on titles) or other physical mitigation works;</p> <p>ii. <b>Effects</b> on health and safety of communities;</p> <p>iii. Any consultation with relevant property owners or occupiers;</p> <p>iv. How the activity contributes to the Objectives and Outcomes of the Plan, particularly Chapters 2 and 13;</p> <p>v. The extent to which the internal noise level in any <b>habitable room</b> does not exceed 35dB LAeq 24 hours while at the same time providing ventilation requirements (for example, as required by clause G4 of the New Zealand Building Code 2010); and</p> <p>vi. The extent to which the proposal will affect the values of any Outstanding Natural Landscape identified in Map Series 2 and if applicable the extent to which the subdivision, use or development meets the additional assessment criteria contained in Appendix 18B.</p> <p>And In the case of any Noise Sensitive Activity within the Noise Contour Boundary of the Maungaturoto Dairy Factory, the following additional assessment criterion will apply:</p> <p>vii. The potential reverse sensitivity effects on the operation of the Maungaturoto Dairy Factory;</p> <p><b>Note 1:</b> The operators of the Maungaturoto Dairy Factory will be considered an affected party in relation to any resource consent applications, in respect of Rule 13.10.8(2).</p> <p><b>Note 2:</b> A description of the landscape features is provided in Appendix 18A. The values associated with the Outstanding Natural Landscapes are described in the Kaipara District Landscape Technical Report (2010).</p>



		<p><b>Note 2:</b> Maungaturoto Dairy Factory has existing use rights for its current operations on its site. Development locating within this Zone will therefore be subject to this Rule in relation to the Maungaturoto Dairy Factory’s existing operations.</p> <p><b>Note 3:</b> For the purposes of this Rule, the term ‘noise sensitive activities’ is used to describe the types of activities that may be affected by sensitivity issues.</p> <p><b>Note 4:</b> For clarity, any Noise Sensitive Activity within the Noise Contour Boundary of the Maungaturoto Dairy Factory site will require Resource Consent.</p> <p><b>(3) Except the following is a permitted activity and is excluded from the Standards of 13.10.8:</b></p> <p><b>(a)</b> Any noise sensitive activity within 300m of the cadastral boundaries of Lot 1 DP 341981 being the site at the corner of Molesworth Drive, Estuary Drive and Norfolk Drive at Mangawhai.</p> <p><b>(b) Any noise sensitive activity within the Awakino Precinct.</b></p>		
<b>13.10.8A</b>	<b>Noise Sensitive Activities in Awakino Precinct</b>	<p><b>1. Any Noise Sensitive Activity is permitted if:</b></p> <p><b>a. Designation D34 Dargaville Landfill has been removed from the plan; or</b></p> <p><b>b. A noise barrier has been established in accordance with rule 13.13A.26 and the noise sensitivity activity is located outside of Noise Area A as identified on the Awakino Noise Plan; or</b></p> <p><b>c. No noise barrier has been established in accordance with rule 13.13A.26 and the noise sensitive activity is outside of Noise Areas B and C as identified on the Awakino Noise Plan.</b></p> <p><b>2. Any Noise Sensitive Activity is a restricted discretionary activity where:</b></p> <p><b>a. A noise barrier has been established in accordance with rule 13.13A.26 and the noise sensitivity activity is located in Noise Area A as identified on the Awakino Noise Plan; or</b></p> <p><b>b. No noise barrier has been established in accordance with rule 13.13A.26 and the noise sensitive activity is in Noise Area B as identified on the Awakino Noise Plan.</b></p> <p><b>3. Any Noise Sensitive Activity is a non-complying activity where no noise barrier has been established in accordance with rule 13.13A.26 and the noise sensitive activity is in Noise Area C as identified on the Awakino Noise Plan.</b></p> <p><b>4. Information Requirement, every application under rules 13.10.8A(2) shall be supported by an acoustic report prepared by a suitably qualified acoustic engineer which recommends appropriate mitigation measures including but not limited to:</b></p>	-	<p><b>Where an activity is not permitted by this Rule, Council has restricted its discretion over the following matters when considering and determining an application for Resource Consent:</b></p> <p><b>i. The effects on people’s health and internal residential amenity, including effects on future residents and effects from future levels of noise anticipated when the application is being assessed.</b></p> <p><b>ii. Whether or not the noise sensitive activity could be designed or located to achieve compliance with the rules.</b></p> <p><b>iii. The extent to which non-compliance with the rules could unduly compromise the continuing operation of the Dargaville Landfill.</b></p> <p><b>iv. Any natural or built features of the site or surrounding area which will mitigate noise effects.</b></p>

		<p>a. <b>Façade attenuation measures proposed to achieve an appropriate level of internal noise within habitable rooms. The report shall use NZS2107:2016 unless an alternative criteria is justified.</b></p> <p>b. <b>Attenuation measures to limit the level of noise within outdoor living areas.</b></p> <p>c. <b>Cooling and ventilation methods to ensure that internal temperature of habitable rooms will be maintained with windows and doors closed.</b></p>		
13.10.11	Private Open Space	<p><b>(1) Residential Zone</b> A <b>dwelling</b> is a <b>Permitted Activity</b> if the private open space meets the following:</p> <p>a) Is equivalent to 50% of the <b>gross floor area</b> of the dwelling;</p> <p>b) Is of a usable shape of no less than 3m dimension, capable of accommodating one circle of no less than 5m in diameter;</p> <p>c) Is located on the east, north or west side of the dwelling;</p> <p>d) Has direct access from the main living area of the dwelling;</p> <p>e) Is unobstructed by vehicle access or <b>parking areas</b>; and</p> <p>f) Is adequately screened from adjoining dwellings and adjacent <b>sites</b>, except in the case of reserves.</p> <p><b>(2) Awakino Precinct</b> A <b>dwelling</b> is a <b>Permitted Activity</b> if <del>the</del> private open space <b>is provided and</b> meets the following:</p> <p>a) <u>Is at least 20m<sup>2</sup> or equivalent to 25% of the <b>gross floor area</b> of the dwelling;</u></p> <p>b) <u>Has a minimum dimension of 4m;</u></p> <p>c) <u>Is located on the east, north or west side of the dwelling;</u></p> <p>d) <u>Has direct access from the main living area of the dwelling; and</u></p> <p>e) <u>Is <b>unobstructed by exclusive</b> of vehicle access, <b>or parking areas and buildings</b>.</u></p>	Restricted Discretionary Activity	<p>Where an activity is not permitted by this Rule, <b>Council</b> has restricted its discretion over the following matters when considering and determining an application for Resource Consent:</p> <p>i) The on-site privacy and amenity of the occupants;</p> <p>ii) The open space nature of the surrounding neighbourhood; and</p> <p>iii) The extent to which the proposal will affect the values of any Outstanding Natural Landscape identified in Map Series 2 and if applicable the extent to which the subdivision, use or development meets the additional assessment criteria contained in Appendix 18B.</p> <p><b>Note 1:</b> A description of the landscape features is provided in Appendix 18A. The values associated with the Outstanding Natural Landscapes are described in the Kaipara District Landscape Technical Report (2010).</p>
13.10.12	Permeable Surfaces	<p><b>(1) Residential Zone</b> Any activity is a <b>Permitted Activity</b> if:</p> <p>a) The area of any <b>site</b> covered by <b>buildings</b> and other <b>impermeable surfaces</b> is less than 40% of the <b>net site area</b>.</p> <p><b>(2) Awakino Precinct</b> Any activity is a <b>Permitted Activity</b> if:</p> <p>a) <u>The area of any site covered by buildings and other impermeable surfaces is less than 60% of the net site area; and</u></p> <p>b) <u>All stormwater management for the site shall comply with any stormwater management plan approved under <del>rule 13.13b</del> and performance standard 13.14.5 Stormwater Disposal.</u></p> <p><b>Note 1:</b> For the purposes of this Rule, any area regularly used by vehicles whether metalled, sealed or concreted shall be considered an impermeable surface.</p>	Restricted Discretionary Activity	<p>Where an activity is not permitted by this Rule, <b>Council</b> has restricted its discretion over the following matters when considering and determining an application for Resource Consent:</p> <p>i) Control of stormwater run-off;</p> <p>ii) The <b>effects</b> of increased stormwater flows downstream;</p> <p>iii) Methods of attenuating stormwater flows to pre-development rates,</p> <p>iv) Whether and the extent to which the activity meets the relevant Performance Standards or the Kaipara District Council Engineering Standards 2011;</p> <p>v) Effects on `water quality; and</p> <p>vi) The extent to which low impact design principles are utilised.</p> <p>vi) <u>Within the Awakino Precinct, whether the proposal utilises low impact and/or water sensitive stormwater management devices and designs, outfalls that mitigate concentrated flows and detail of any obligations for lot owners to construct and maintain such devices.</u></p> <p>vi) <u>Within the Awakino Precinct, the extent to which stormwater quality treatment has been provided to protect the environment from contaminants generated from the activity including whether the proposal includes appropriate stormwater quality monitoring associated with the design and construction stages as well as the consent holder's maintenance obligations.</u></p> <p><b>(3) Awakino Precinct Information Requirement:</b></p>

				<p><u>Any application shall be supported by a detailed stormwater assessment report prepared by a suitably qualified engineer to confirm that the proposal will achieve the following:</u></p> <ul style="list-style-type: none"> <li>i) <u>Treatment of the Water Quality Volume (WQV) or Water Quality Flow (WQF) from all <b>contaminant</b> generating <b>impermeable surfaces</b> by a water quality device for the relevant contaminants.</u></li> <li>ii) <u>Retention (volume reduction) of a minimum of 5mm runoff depth for all <b>impermeable surfaces</b>.</u></li> <li>iii) <u>Detention (temporary storage) with a drain down period of 24 hours for the difference between the pre-development (grassed state) and post-development runoff volumes from the 1/3 of the 2 Year ARI, 24-hour rainfall event minus any retention volume provided for all <b>impermeable surfaces</b>.</u></li> <li>iv) <u>Conveyance and discharge of primary and secondary flow in accordance with the Kaipara District Council Engineering Standards 2011.</u></li> </ul> <p><u><b>Note 1:</b> Within the Awakino Precinct, 1/3 of the 2 Year ARI rainfall event runoff volume is to be used as the Water Quality Volume (WQV) when designing a treatment device, and 10mm/hour is to be used as the Water Quality Flow (WQF).</u></p> <p><u><b>Note 2:</b> Within the Awakino Precinct, good management practice for stormwater management is equivalent to those set out in the guideline document, <i>Stormwater Management Devices in the Auckland Region (GD01)</i>.</u></p>
13.10.13	Building Coverage	<p><b>(1) <u>Residential Zone</u></b></p> <p>Any activity is a <b>Permitted Activity</b> if:</p> <ul style="list-style-type: none"> <li>a) <b><i>Building coverage</i></b> on a <b><i>site</i></b> is less than 35% of the <b><i>net site area</i></b>.</li> </ul> <p><b>(2) <u>Awakino Precinct</u></b></p> <p><u>Any activity is a Permitted Activity if:</u></p> <ul style="list-style-type: none"> <li>a) <u><i>Building coverage on a site is less than 45% of the net site area.</i></u></li> </ul> <p><b>Note 1:</b> For clarity, for sites within an Outstanding Natural Landscape, Rule 13.10.3c shall also apply</p>	Restricted Discretionary Activity	<p>Where an activity is not permitted by this Rule, <b>Council</b> has restricted its discretion over the following matters when considering and determining an application for Resource Consent:</p> <ul style="list-style-type: none"> <li>i) The scale and bulk of the <b><i>building</i></b> in relation to the <b><i>site</i></b>;</li> <li>ii) The existing built character of the surrounding neighbourhood;</li> <li>iii) <b><i>Effect</i></b> on the open space nature of the surrounding neighbourhood;</li> <li>iv) The availability of useable on-site outdoor living space; and</li> <li>v) The extent to which the proposal will affect the values of any Outstanding Natural Landscape identified in Map Series 2 and if applicable the extent to which the subdivision, use or development meets the additional assessment criteria contained in Appendix 18B.</li> </ul> <p><b>Note 1:</b> A description of the landscape features is provided in Appendix 18A. The values associated with the Outstanding Natural Landscapes are described in the Kaipara District Landscape Technical Report (2010).</p>

13.10.25	Vehicle Access and Driveways	<p><b>(1) Residential Zone</b></p> <p>Any activity is permitted if:</p> <ul style="list-style-type: none"> <li>a) The owner or occupier of each <b>site</b> shall provide and maintain at all times adequate access for emergency vehicles and vehicles generally associated with activities on site;</li> <li>b) For new vehicle <b>crossings</b> on to State Highways, all NZ Transport Agency engineering requirements have been satisfied; or for vehicle crossings on to <b>roads</b> controlled by the Kaipara District Council, all Council engineering requirements have been satisfied (e.g. Kaipara District Council Engineering Standards 2011);</li> <li>c) Where a loading ramp is required it shall not be located within 25m of the edge of a traffic lane; and</li> <li>d) Each site shall be provided with and maintain a <b>driveway</b> to the following Standard: <ul style="list-style-type: none"> <li>i) Formed with an all-weather surface;</li> <li>ii) For driveways of greater than 100m, a passing bay shall be provided no further apart than 1 per 100m;</li> <li>iii) For an accessway or driveway servicing up to 6 dwellings the minimum width of 3.0m and for between 7 and 30 dwellings a minimum width of 5.5m and for more than 30 dwellings a width of 6m;</li> <li>iv) The maximum gradient shall be 1:5 for sealed and 1:8 for gravel driveway;</li> <li>v) Shall include internal manoeuvring area sufficient that vehicles using the driveway do not need to reverse onto a road or shared driveway (in accordance with 90th percentile vehicle manoeuvring figures in Appendix 25C: Parking, Loading and Manoeuvring Standard);</li> <li>vi) Access and manoeuvring areas shall comply with the New Zealand Building Code acceptable solutions C/AS1 Part 8.1 (Fire Service Vehicular Access 2010);</li> <li>vii) Where a private driveway is gated, the gates shall be located at least 13m from the edge of the public road carriageway (with an 80 or 100km/h speed limit) where the gate opens into the site or 13m plus the gate width where it opens towards the road; unless onto a State Highway (where gate setbacks may be higher and are required to be complied with);</li> <li>viii) All gated accesses shall be provided with turning provisions, such that a 90th percentile car may enter the driveway and turn around, without passing the gates or affecting through traffic on the public road;</li> <li>ix) Stormwater drainage for at least a 10% AEP rainfall event sufficient that surface ponding does not occur and discharge from the driveway does not result in <b>adverse effects</b> to adjoining properties or roads; and</li> </ul> </li> <li>e) The site is not within an Outstanding Natural Landscape, as identified in Map Series 2, unless the work is necessary for the maintenance of existing accesses or firebreaks.</li> </ul> <p><b>(2) Awakino Precinct</b></p> <p><u>Any activity is permitted if:</u></p> <ul style="list-style-type: none"> <li>a. <u>If it meets the standards in 13.10.25.1 (a) and (c);</u></li> <li>b. <u>New vehicle crossings on to roads controlled by the Kaipara District Council shall be designed, constructed and located in accordance with the Kaipara District Council Engineering Standards 2011, except as it relates to 5.2.10.d and 5.2.10.e, the following shall be met:</u> <ul style="list-style-type: none"> <li>i. <u>No vehicle crossing shall be situated within 10m of any road intersection (as measured from the meeting point of the main kerb alignments).</u></li> <li>ii. <u>The minimum spacing between vehicle crossings on the same side of any road shall be 2m.</u></li> <li>iii. <u>No more than one vehicle crossing is provided to each lot, except where a vehicle crossing is a double width crossing and serves more than one site, in which case the vehicle crossing width shall be a maximum of 7m.</u></li> </ul> </li> <li>c. <u>Each site shall be provided with and maintain a driveway to the following Standard:</u></li> </ul>	Restricted Discretionary Activity	<p>Where an activity is not permitted by this Rule, <b>Council</b> has restricted its discretion over the following matters when considering and determining an application for Resource Consent:</p> <ul style="list-style-type: none"> <li>i) Whether and the extent to which the vehicle access and <b>driveway</b> meets the Performance Standards in Rule 13.10.25 or the <b>Kaipara District Council Engineering Standards 2011</b>;</li> <li>ii) The provision of safe, practical access for all persons and vehicles likely to need access to the <b>site</b>, including pedestrian, cycle, disabled, vehicular;</li> <li>iii) The expected vehicle operating speeds and methods of controlling vehicle speeds;</li> <li>iv) The ease of access to and from, and within the <b>site</b>;</li> <li>v) Adequacy of sight distances at the <b>vehicle crossing</b> and along the access;</li> <li>vi) Possible measures or restrictions on vehicle movements in and out of the access;</li> <li>vii) Possible adverse <b>effects</b> on Council infrastructure or adjoining properties;</li> <li>viii) The provision made to mitigate the effects of stormwater runoff, and any impact of roading and access on waterways, ecosystems, drainage patterns or the amenities on adjoining properties;</li> <li>ix) Any traffic safety or congestion problems in the area;</li> <li>x) Any foreseeable future changes in traffic patterns in the area;</li> <li>xi) If a new access is being provided or modification of an existing access onto a State Highway, or on sites that have access over a railway line, whether the consent of the NZ Transport Agency or New Zealand Railways Corporation is obtained;</li> <li>xii) Whether and the extent to which the design of vehicle accesses and driveways meets the requirements of the NZ Building Code acceptable solutions C/AS1 Part 8.1 (Fire Service Vehicular Access); and</li> <li>xiii) The extent to which the proposal will affect the values of any Outstanding Natural Landscape identified in Map Series 2 and if applicable the extent to which the subdivision, use or development meets the additional assessment criteria contained in Appendix 18B.</li> </ul> <p><b>Note 1:</b> A description of the landscape features is provided in Appendix 18A. The values associated with the Outstanding Natural Landscapes are described in the Kaipara District Landscape Technical Report (2010).</p>
----------	------------------------------	--	-----------------------------------	---

		<div><div><div>i. <u>Formed with a sealed all-weather surface.</u></div><div>ii. <u>For an accessway or driveway servicing up to 6 dwellings the minimum width of 3.0m and for between 7 and 30 dwellings a minimum width of 5.5m and for more than 30 dwellings a width of 6m.</u></div><div>iii. <u>Shall include internal manoeuvring area sufficient that vehicles using the driveway do not need to reverse onto a road or shared where the access is located within 10m of an intersection road boundary.</u></div><div>iv. <u>Shall serve no more than four parking spaces, should vehicles be required to reverse from a site;</u></div></div><div><b>Note 1:</b> Any changes in land use on sites that have access over a railway line require approval from the New Zealand railways Corporation under the New Zealand Railways Corporation Act 1981.</div><div><b>Note 2:</b> Where land adjoins a limited access road under the Government Roding Powers Act 1989 access to and from that road is subject to restrictions and controlled by the NZ Transport Agency.</div><div><b>Note 3:</b> Council will confirm engineering approval for Council controlled roads, as per clause <u>13.10.25.1</u> (b) above, of the vehicle access and driveways by compliance with the Kaipara District Council Engineering Standards 2011 or by review from an independent appropriately qualified engineer.</div></div>		
--	--	--	--	--

13.10.27	Parking	<p>Any activity is permitted if:</p> <ul style="list-style-type: none"> <li>a) The owner or occupier of each <b>site</b> provides and maintains at all times spaces for the off street parking of cars and other vehicles generally associated with activities on the site;</li> <li>b) The number of parking spaces to be provided shall meet the minimum requirements outlined in Appendix 25C: Parking, Loading and Manoeuvring Standards; and</li> <li>c) Each parking space shall be formed and maintained so that the maximum gradient on any area used for parking and manoeuvring shall be 6%; and</li> <li>d) Parking spaces may be situated within a <b>building</b> provided the <b>Council</b> is satisfied that the spaces can be clearly defined and made available for parking at all times. The area of any parking spaces and associated access within a building shall be excluded from the <b>gross floor area</b> of that building for the purposes of assessing the total number of spaces required; and</li> <li>e) Any parking spaces required under the provisions of the District Plan are to be sited at least 15m from the banks of any <b>river</b> or stream, whose <b>bed</b> has an average width of 3m or more, any <b>lake</b> with an area greater than 8ha or the <b>Coastal Marine Area</b> or any mapped waterway or <b>wetland</b> in the Valued Natural Environments of Mangawhai, except where appropriate provision is made for the collection treatment and disposal of stormwater from the areas to a Council stormwater system or other approved outlet; and</li> <li>f) Each parking space shall have adequate physical access to a road, street or service lane and the buildings or uses to which it is intended to serve. It shall be provided with such access drives and aisles as are necessary for safe and convenient movement of vehicles to and from the street or service lane for the manoeuvring of vehicles within the <b>site</b> in accordance with the Figures in Appendix 25C: Parking, Loading and Manoeuvring; and</li> <li>g) <b>Control of Access</b> - Any <b>parking area</b> associated with a Commercial or <b>Industrial Activity</b> which adjoins a street shall be provided with a fence, kerb, nib or similar non-mountable barrier not less than 0.15m high along those parts of the <b>site's frontage</b> not used for access purposes. The barrier shall be designed to prevent vehicles entering or leaving the parking area other than by the access drives or aisles provided; and</li> <li>h) <b>Control of Reversing</b> - All parking areas shall be designed so that all vehicles can enter and leave the site in a forward gear and do not have to reverse onto or off the adjacent road or street <u>except as provided in the Awakino Precinct by 13.10.25.2</u>; and</li> <li>i) <b>Screening of Parking Areas</b> - Any parking associated with a Commercial or Industrial activity shall be screened from residential <b>sites</b> by appropriate landscaping, fencing or other suitable screening of at least 1.8m in <b>height</b>. Any landscaping is to be provided and maintained in such a manner as to create and preserve a good standard of visual amenity; and</li> <li>j) <b>Control of Stormwater</b> - Each parking area shall be provided with a stormwater drainage system that is designed for at least a 10% AEP rainfall event sufficient that surface ponding does not occur and discharge does not result in adverse <b>effects</b> to adjoining properties or roads.</li> </ul>	Restricted Discretionary Activity	<p>Where an activity is not permitted by this Rule, <b>Council</b> has restricted its discretion over the following matters when considering and determining an application for Resource Consent:</p> <ul style="list-style-type: none"> <li>i) The nature of street or service lane access available to the proposed parking and/or loading facilities;</li> <li>ii) The provision which can be made for parking and/or loading facilities for the proposed land use on an adjacent <b>site</b>;</li> <li>iii) The adequacy of public parking and/or loading facilities in the immediate vicinity of the site;</li> <li>iv) The nature of any special landscaping or pedestrian design features to be developed on the site;</li> <li>v) The hours of operation of the proposed use and number of employees on shift work if a <b>Commercial activity</b> is proposed in a Residential Zone;</li> <li>vi) The size and number of vehicles expected to use the site;</li> <li>vii) Whether and the extent to which the proposed <b>parking area</b> is designed, constructed and adequately drained in accordance with the Performance Standards in Rule 13.10.28 or the the <b>Kaipara District Council Engineering Standards 2011</b>; and</li> <li>viii) The extent to which the proposal will affect the values of any Outstanding Natural Landscape identified in Map Series 2 and if applicable the extent to which the subdivision, use or development meets the additional assessment criteria contained in Appendix 18B.</li> </ul> <p>In granting any application the Council may require as a Condition of Consent either that:</p> <ul style="list-style-type: none"> <li>i) The parking and/or loading spaces required be provided on other available <b>sites</b> in the immediate neighbourhood; or</li> <li>ii) A cash contribution is paid to the Council for the purchase of land and/or the construction of suitable parking and/or loading facilities.</li> </ul> <p><b>Note 1:</b> Any cash contribution required by the Council shall not exceed the value of a sufficient part of the <b>site</b> or <b>building</b> to accommodate the vehicles for which provision is required, and the associated cost of their construction.</p> <p><b>Note 2:</b> A description of the landscape features is provided in Appendix 18A. The values associated with the Outstanding Natural Landscapes are described in the Kaipara District Landscape Technical Report (2010).</p>
----------	---------	---	-----------------------------------	---



## Amendments to Chapter 13 – 13.13 Performance Standards for All Residential Subdivision

Rule	Parameter	Terms for Subdivision	Matters for Discretion
<b>13.13A</b>	<b>Awakino Precinct Subdivision</b>	<p>General Rules:</p> <ol style="list-style-type: none"> <li>Any subdivision within the Awakino Precinct:</li> <li>Is not subject to Residential Zone rules 13.11.1 – 3, 13.12.1, 13.13.1 and 2.</li> <li>Is subject to rules 13.13A.</li> <li>Complies with the relevant Performance Standards in Section 13.10 and 13.14 of this Chapter.</li> <li>Any subdivision within the Awakino Precinct is a Restricted Discretionary Activity where it complies with rules 8 – 13.</li> <li>Any subdivision within the Awakino Precinct is a Discretionary Activity where it does not comply with rules <b>5 8 – 113, 18 and 25</b>.</li> <li><b>Any subdivision within the Awakino Precinct is a Restricted Discretionary Activity where it does not comply with rules 13-16.</b></li> <li>Any subdivision within the Awakino Precinct shall comply with information requirements in rules <b>20-24</b>.</li> </ol> <p>Subdivision Design Rules:</p> <ol style="list-style-type: none"> <li>Every allotment has: <ol style="list-style-type: none"> <li>A minimum net site area <b>exclusive of vested assets and ecological features to be protected in accordance with Rule 13.13A17</b> of 450m<sup>2</sup> and an average net site area of 600m<sup>2</sup> where a connection to public reticulated wastewater infrastructure is available, or a private wastewater system is proposed to be established to serve all proposed allotments; <b>or</b></li> <li><b>10. A minimum net site area of 2,500m<sup>2</sup> and an average net site area 3,000m<sup>2</sup> where a connection to reticulated wastewater infrastructure is not available.</b></li> </ol> </li> <li>Every urban block has: <ol style="list-style-type: none"> <li>A maximum length of 250m.</li> <li>A maximum perimeter (bounded by roads) of 750m.</li> </ol> </li> </ol> <p>Open Space Rules:</p> <ol style="list-style-type: none"> <li>Any subdivision within the Awakino Precinct, where the site contains an indicative neighbourhood park shown on the Awakino Precinct Map 1 shall: <ol style="list-style-type: none"> <li>Provide <b>legally establish and manage on an on-going basis</b> as part of the subdivision, a neighbourhood park that shall: <ol style="list-style-type: none"> <li>Be no less than 3000m<sup>2</sup> in net site area for the provision of a children's play area.</li> <li>Be located in general accordance with the indicative neighbourhood park shown on the Awakino Precinct Map 1.</li> <li>Include flat open spaces suitable for a range of informal recreational.</li> <li>Except where a neighbourhood park has been legally established within the Awakino Precinct.</li> </ol> </li> </ol> </li> </ol> <p>Road Layout <b>and Upgrade</b> Rules:</p> <ol style="list-style-type: none"> <li>Any subdivision within the Awakino Precinct shall construct and establish a loop road, (to vest as public road) located in general accordance with the indicative loop road shown on the Awakino Precinct Map 1; or</li> <li>Where the full extent of the indicative loop road shown on the Awakino Precinct Map 1 is not provided, any subdivision within the Awakino Precinct shall:</li> </ol>	<p>Council will restrict its discretionary over the following matters when considering and determining an application for Resource Consent:</p> <ol style="list-style-type: none"> <li>The extent to which the proposal is consistent with the Awakino Precinct policies.</li> <li>The extent to which the proposal is generally in accordance with the Awakino Precinct Map 1.</li> <li>Measures to ensure the protection, restoration or enhancement of any natural features, including (but not limited to) the creation, extension or upgrading of services and systems, planting or replanting, the protection of natural wetlands and streams or any other works or services necessary to ensure the avoidance, remediation or mitigation of adverse environmental effects.</li> <li>The design, size, shape, gradient and location of any allotment, urban block or public road.</li> <li>Where any subdivision involves an identified natural wetland or stream, whether the details of ecological protection and enhancement have been provided, including 10m riparian planting to streams and wetlands, weed and pest management controls and indigenous revegetation (where appropriate), are provided and any required mechanisms for ownership and maintenance of the area. For the avoidance of doubt these areas may form parts of private lots and be held in private ownership.</li> <li>Whether the proposal utilises low impact and/or water sensitive stormwater management devices and designs, outfalls that mitigate concentrated flows and detail of any obligations for lot owners to construct and maintain such devices.</li> <li>The extent to which stormwater quality treatment has been provided to protect the environment from contaminants generated from the activity including whether the proposal includes appropriate stormwater quality monitoring associated with the design and construction stages as well as the consent holder's maintenance obligations.</li> <li>The extent to which adequate access is provided to each lot.</li> <li>The extent to which the proposal provides connections to transport networks including walking and cycling and roading function and design, including parking.</li> <li>The location of vehicle crossings, private access ways and proposed allotment boundaries so as to avoid no exit roads and cul-de-sacs.</li> <li>The nature of proposed street frontage in terms of securing effective, safe access onto a legal road.</li> <li>Where staged subdivision is proposed, whether all necessary infrastructure, roading, utilities, public spaces and connections to service the proposed development will be established.</li> <li>Where common lots are proposed, the extent to which appropriate mechanisms are provided to ensure that all infrastructure management and maintenance requirements are sustainable.</li> <li>Where there are any communally owned or managed services, infrastructure or other such assets or joint responsibilities arising from any proposal; that the nature of arrangements which are proposed ensure the on-going implementation of such arrangements whether through body corporate or similar mechanisms.</li> <li>Location of existing buildings, access and manoeuvring, and private open space.</li> <li>The location of proposed allotment boundaries and building areas so as to avoid potential conflicts between incompatible land use activities, including reverse sensitivity effects.</li> <li>The provision, location, design, capacity, connection, upgrading, staging and integration of infrastructure, and how any adverse effects on existing infrastructure are managed.</li> <li>The protection of land within the proposed allotments to allow access and linkages to adjacent allotments for future infrastructure.</li> <li><b>Whether sufficient firefighting water supply is available, taking into account a risk based assessment (refer to Note 1)</b></li> <li>Avoidance or mitigation of natural or man-made hazards.</li> <li>The extent to which the subdivision avoids adverse effects on significant flora and fauna habitats, including methods of weed and pest management.</li> <li>The safe and efficient movement of people and vehicles including traffic manoeuvring, pedestrians and cyclists, and the potential effects on the accessibility and safety of transport networks.</li> <li>Whether the subdivision creates lots adjoining public open space (including recreation reserves and riparian/green corridors) that are designed to encourage passive surveillance of reserve areas having regard to finished contours, retaining, fencing and landscaping.</li> <li>Whether parks will be accessible to pedestrians and cyclists and located to integrate with riparian margins and the Green Road</li> </ol>

		<p>a. <u>Construct and establish any part of the indicative loop road within the site boundary in general accordance with the indicative loop road shown on the Awakino Precinct Map 1; and</u></p> <p>b. <u>Provide a minimum of two public road intersections with Awakino Road where those intersections are connected internally within the Awakino Precinct via a public road.</u></p> <p>15. <u>Any subdivision within the Awakino Precinct shall construct and establish a green street (to vest as public road) located in general accordance with the indicative green street shown on the Awakino Precinct Map 1, where:</u></p> <p>a. <u>A minimum of 8 locally eco-sourced indigenous trees, of a minimum planter bag size of 160L shall be planted on each side (16 in total) of the green street within the road reserve; and</u></p> <p>b. <u>A cycleway and footpath shall be established to connect to any neighbourhood park.</u></p> <p><b>16. Any subdivision within the Awakino Precinct shall upgrade Awakino Road to an urban standard. The portion of Awakino Road to be upgraded shall be limited to between the northern most proposed subdivision access point onto Awakino Road to 10 metres south of Paratai Place. This rule shall apply where:</b></p> <p>a. <b>The subdivision results in 125 cumulative peak hour traffic movements to or from Awakino Road (approximately 139 lots); and</b></p> <p>b. <b>The upgrades in Rule 13.13A(16) have not already occurred.</b></p> <p><b>17. Any Awakino Road upgrade requirements under Rule 13.13A(16) shall be limited to:</b></p> <p>a. <b>Kerb and channel on both sides of road;</b></p> <p>b. <b>Infill of existing open swale drainage;</b></p> <p>c. <b>7.5-metre-wide carriageway (Face of kerb to Face of kerb);</b></p> <p>d. <b>1.8-metre-wide footpath on the western side of Awakino Road (this does not apply where an existing footpath is established);</b></p> <p>e. <b>Pedestrian crossing facility near the primary subdivision entrance intersection;</b></p> <p>f. <b>Re-establishment of abutting properties vehicle crossings.</b></p> <p><u>Ecological Enhancement Rules:</u></p> <p>18. <u>Any subdivision within the Awakino Precinct where the site contains an indicative ecological feature shown on the Awakino Precinct Map 1 shall:</u></p> <p>a. <u>Legally protect in perpetuity and manage on an on-going basis the ecological feature in accordance with an Ecological Enhancement and Management Plan.</u></p> <p><u>Information Requirement:</u></p> <p>19. <u>When Rules <del>7, 8 and 10</del> 12 – 14 apply the following information requirements shall be met:</u></p> <p>a. <u>The road layout is supported by an <b>Integrated Transport Assessment and an Urban Design Assessment.</b></u></p> <p>b. <u>The green street layout indigenous planting shall be supported by a street tree planting plan.</u></p> <p><b>20. When rule 14 infringed the following information requirement shall be met:</b></p> <p>a. <b>An application must be accompanied by an integrated transport assessment prepared by suitably qualified transport planner or traffic engineer. Information must be provided, detailing how the subdivision design and any methods proposed allows for the safe and efficient function of the transport network. This assessment shall identify of any necessary mitigation measures that will be required to address any impacts on the transport network, including:</b></p> <p>i. <b>Potential mitigation measures needed both within the proposed development and on the immediately adjacent transport network including any improvements, upgrades, alterations or extensions to the transport network (including at level crossings),</b></p>	<p><u>where possible.</u></p> <p>(25) <u>The extent to which a green street is created, providing a connection between open space, parks in a manner that provides ecological benefit, encourages cycle and pedestrian movement between areas of open spaces.</u></p> <p><b>(26) Whether subdivision or development will result in Awakino Road being progressively upgraded to urban standards along the extent of road reserve that fronts the precinct boundary;</b></p> <p><b>(27) Whether State Highway 12/Awakino Road intersection is capable of accommodating the traffic from the subdivided and developed portion of the precinct including the predicted traffic from the land which is the subject of the application.</b></p> <p><b>(28) Whether the subdivision or development connects to established shared path facilities</b></p> <p><b>Note 1:</b></p> <p><b>For avoidance of doubt, an example of sufficient firefighting water for a single residential dwelling will generally include (subject to site-specific risks) 10,000 litres of water from sources that are:</b></p> <ul style="list-style-type: none"> <li>• <b>Within 90metres of an identified building platform on each lot; and</b></li> <li>• <b>Existing or likely to be available at a time of development of the lot; and</b></li> <li>• <b>Accessible and available all year round; and</b></li> </ul> <p><b>May be comprised of water tanks, permanent natural waterbodies, dams, swimming pools, whether located on or off the lot.</b></p>
--	--	--	--



		<p>ii. Any mitigation required to achieve convenient and safe operation of access points for all users and safe and efficient pedestrian and cycle connections and crossings.</p> <p>iii. Any recommendations and necessary mitigation to establish active transport connectivity and compliance with NZ Pedestrian Planning Design Guide 2022.</p> <p>21. Any subdivision which results in a cumulative total of 70 additional peak hour (not daily) traffic movements from the Awakino Precinct at the intersection of State Highway and Awakino Road must be accompanied by an integrated transport assessment prepared by suitably qualified transport planner or traffic engineer. Any assessment shall be commensurate to the scale and effect of the proposed development, and identify of any necessary mitigation measures that will be required to address any impacts on the transport network, including:</p> <p>a. A summary of the implications that the development will have for transport on the intersection with Awakino Road and the State Highway, including any proposed mitigation measures.</p> <p>b. The assessment shall carry out a Safe System Approach Assessment of the intersection.</p> <p>a. <del>Open Space:</del></p> <p>22. The neighbourhood park shall be supported by a plan confirming the park suitably located, sized and provides for a range of recreational opportunities.</p> <p>a. <del>Ecological Enhancement:</del></p> <p>23. An Ecological and Wetland Assessment and Ecological Management Plan shall be prepared to ensure that existing natural features and ecological values on site are appropriately enhanced as a part of site development. Any Ecological and Wetland Assessment shall consider requirements under the NPS-IB (2023).</p> <p>24. Earthworks – Details of any excavation and fill associated with the subdivision, including erosion and sediment control measures in accordance with best practice.</p> <p><u>Note 1:</u> Within the Awakino Precinct, good management practice for erosion and sediment control measures is equivalent to those set out in the guideline document, 2016/05 Erosion and Sediment Control Guide for Land Disturbing Activities in the Auckland Region. Incorporating amendment 2, 2020.</p> <p><b>Archaeological Site Rules:</b></p> <p>25. Any subdivision within the Awakino Precinct where the site contains an indicative archaeological site shown on the Awakino Precinct Map 1 shall:</p> <p>a. Legally protect in perpetuity all land within 20m of the feature.</p> <p><b>Noise Rules</b></p> <p>26. Any subdivision within the Awakino Precinct where the site boundary adjoins the Designation D34 Dargaville Landfill shall establish and provide for on-going maintenance of a noise barrier where:</p> <p>a. The noise barrier located in accordance with the Awakino Precinct Map 1.</p> <p>b. The noise barrier will be a total of 2.5 metres finished height above ground level at the adjacent boundary.</p> <p>c. The noise barrier is comprised of either:</p> <p>i. An earth bund; or</p> <p>ii. An acoustic fence; or</p> <p>iii. A combination of a base earth bund and acoustic fence.</p> <p>d. The design and construction of the noise barrier shall:</p> <p>i. Be certified by a suitably qualified engineer to confirm that the noise barrier finished height of the bund complies with the relevant rules following settlement</p> <p>ii. Be certified by a suitably qualified acoustic engineer to confirm that the <del>if</del> an acoustic fence has an overall surface density of at least 10kg/m<sup>2</sup></p>	
--	--	---	--

		<p>with less than 1% leakage between fence palings and between the bund and the bottom of the fence.</p> <p>Note: For the purpose of this rule an acoustic fence shall not constitute a building and shall not require approval under rules 13.10.6 and 13.10.7.</p>	
--	--	--	--

## Amendments to Chapter 13 – 13.14 Performance Standards for All Residential Subdivision

Rule	Parameter	Residential Permitted Activity Performance Standard	Activity Status if the Activity does not meet the Performance Standard	Assessment Criteria
13.14.2	Road, Private Way and Property Access	<p>The design and layout of the <b>subdivision</b> provides for, and takes into account:</p> <p><b>(1) Property Access</b></p> <ul style="list-style-type: none"> <li>a) Every <b>allotment</b> within the subdivision is capable of having vehicular access to a <b>road</b>;</li> <li>b) Property access is formed where it is shared by two or more allotments;</li> <li>c) Vehicle access and <b>driveways</b> comply with Rule 13.10.25;</li> <li>d) No more than seven allotments are served by a private shared access;</li> <li>e) Driveways onto the road or <b>private ways</b> are located in a manner that will allow for the safe entry and exit from the <b>site</b> based on expected vehicle operating speeds and methods for controlling vehicle speeds;</li> <li>f) Driveways onto the road or private ways are located to provide adequate sight distances for the safe functioning of the <b>vehicle crossing</b> and access;</li> <li>g) The property access is of a suitable width to contain required services.; and</li> <li>h) For new vehicle crossings on to State Highways, all NZ Transport Agency engineering requirements have been satisfied.</li> </ul> <p><b>Note 1:</b> Any changes in land use, <b>development</b> or subdivision on sites that have access over a railway line require approval from the New Zealand Railways Corporation under the New Zealand Railways Corporation Act 1981.</p> <p><b>(2) Road, Private Way, Cycle Way and Property Access Formation</b></p> <ul style="list-style-type: none"> <li>a) Road vesting in accordance with the following requirements, <u>excluding sites within the Awakino Precinct</u>: <ul style="list-style-type: none"> <li>– Driveways serving eight or more allotments shall be by public road vested with <b>Council</b>;</li> <li>– Design and construction shall be to the satisfaction of Council's Asset Manager (in accordance with the Standards in Kaipara District Council Engineering Standards 2011); and</li> <li>– A cul-de-sac shall be provided at the end of any no-exit public road.</li> </ul> </li> <li>b) Use and construction of unformed legal roads is to the satisfaction of Council's Asset Manager (in accordance with the Standards in Kaipara District Council Engineering Standards 2011), <u>excluding sites within the Awakino Precinct</u>.</li> </ul> <p><b>(3) Awakino Precinct Road, Private way, Cycle Way and Property Access Formation</b></p> <p><u>a) Road vesting in accordance with the following requirements:</u></p> <ul style="list-style-type: none"> <li>i) <u>Driveways serving either 8 or more allotments shall be by public road vested with Council;</u></li> <li>ii) <u>Roads and Private Ways shall be designed and constructed in accordance with the Kaipara District Council Engineering Standards 2011, except as they relate to the following:</u> <ul style="list-style-type: none"> <li>– <u>The legal and construction widths as detailed in Table 5.1 of the Kaipara District Council Engineering Standards 2011 do not apply. Legal and construction widths shall meet Table 13.1.</u></li> <li>– <u>On-street car parking detailed in 5.2.10.d of the Kaipara District Council Engineering Standards 2011. On-street parking shall be provided at a rate of 1 per 2 dwellings along the loop road and at a 1 per 4 dwellings for all other roads.</u></li> </ul> </li> </ul>	Discretionary Activity	<p><b>Council</b> will have regard to the following matters when considering an application for Resource Consent under this Rule</p> <ul style="list-style-type: none"> <li>i) Whether and the extent to which the <b>road or private way</b> follows the alignment of indicative roads;</li> <li>ii) Whether and the extent to which there is a need for forming or upgrading roads in the vicinity, due to increased traffic from the <b>subdivision</b>;</li> <li>iii) Whether and the extent to which there is a the need for traffic control measures on the roads due to increased traffic from the subdivision;</li> <li>iv) Whether and the extent to which there is a the need for footpaths;</li> <li>v) Whether and the extent to which there is a need for stormwater management associated with the provision of the new road or private way;</li> <li>vi) Whether an adequate alternative access is able to be provided for the anticipated use;</li> <li>vii) Whether the access can contain required services;</li> <li>viii) The expected vehicle operating speeds and methods for controlling vehicle speeds;</li> <li>ix) Adequacy of sight distances available at the <b>vehicle crossing</b> and along the access;</li> <li>x) Possible measures or restrictions on vehicle movements in and out of the access;</li> <li>xi) Possible adverse <b>effects</b> on Council infrastructure on adjoining properties;</li> <li>xii) Any foreseeable future changes in traffic patterns in the area (including future congestion);</li> <li>xiii) The provision made to mitigate the effects of stormwater runoff and any impact on roading and access on waterways, ecosystems, drainage patterns or the amenities of adjoining properties;</li> <li>xiv) Whether and the extent to which the road, private way or property access complies with the <b>Kaipara District Council Engineering Standards 2011</b> or has been confirmed as appropriate by Council's Engineer.; and</li> <li>xv) Where a new access is being provided or an existing access onto a State Highway modified, or on sites that have access over a railway line, whether the consent of the NZ Transport Agency and/or New Zealand Railways Corporation is obtained;</li> <li>xvi) <u>Within the Awakino Precinct, the safe and efficient movement of people and vehicles including traffic manoeuvring, pedestrians and cyclists, and the potential effects on the accessibility and safety of transport networks.</u></li> <li>xvii) <u>Within the Awakino Precinct, whether the subdivision creates lots adjoining public open space (including recreation reserves and riparian/green corridors) that are designed to encourage passive surveillance of reserve areas having regard to finished contours, retaining, fencing and landscaping.</u></li> <li>xviii) <u>Within the Awakino Precinct, whether parks will be accessible to pedestrians and cyclists and located to integrate with riparian margins and the Green Road where possible.</u></li> <li>xix) <u>Within the Awakino Precinct, the extent to which a green street is created, providing a connection between open space, parks in a manner that provides ecological benefit, encourages cycle and pedestrian movement between areas of open spaces.</u></li> </ul> <p><b>Note 1:</b> General assessment of the Kaipara District Council Engineering Standards 2011 is undertaken as part of the assessment of the Subdivision Resource Consent application and conditions relating to compliance with any of these Standards may be applied to the consent as part of the engineering approval.</p>

13.14.5	Stormwater Disposal	<p>(1) Where available all allotments are provided, within their net site area, with:</p> <p>a) A connection to a <b>Council</b>-maintained stormwater system, <u>excluding sites within the Awakino Precinct</u>; or</p> <p>(2) Where no Council system is available:</p> <p>a) All <b>allotments</b> are provided with the means for the transport and disposal of collected stormwater from the roof of all potential or existing <b>buildings</b> and from all impervious surfaces, in such a way as to avoid any adverse <b>effects</b> of stormwater runoff on the receiving <b>environment</b> in accordance with the Kaipara District Council Engineering Standards 2011, <u>excluding sites within the Awakino Precinct</u>.</p> <p><b>(3) Awakino Precinct Stormwater Management</b></p> <p>a) <u>All allotments are provided with the means for the transport and disposal of collected stormwater from the roof of all potential or existing buildings and from all impervious surface, in such a way as to mitigate any adverse effects of stormwater runoff on the receiving environment by providing:</u></p> <p>i) <u>Treatment of the Water Quality Volume (WQV) or Water Quality Flow (WQF) from all contaminant generating impermeable surfaces by a water quality device for the relevant contaminants.</u></p> <p>ii) <u>Retention (volume reduction) of a minimum of 5mm runoff depth for all impermeable surfaces.</u></p> <p>iii) <u>Detention (temporary storage) with a drain down period of 24 hours for the difference between the pre-development (grassed state) and post-development runoff volumes from the 1/3 of the 2 Year ARI, 24-hour rainfall event with climate change minus any retention volume provided for all impermeable surfaces.</u></p> <p>iv) <u>Conveyance and discharge of primary and secondary flow in accordance with the Kaipara District Council Engineering Standards 2011.</u></p> <p><b>Note 1:</b> Stormwater discharges may require Resource Consent under the Regional Water and Soil Plan for Northland. Applicants should contact the Northland Regional Council to determine whether or not a Resource Consent is required.</p> <p><b>Note 2:</b> Where parallel Resource Consent for stormwater discharge is required from the Northland Regional Council, Kaipara District Council will seek to undertake joint processing of both applications, via delegated authority from the Northland Regional Council.</p> <p><b>Note 3:</b> The discharge of stormwater into the rail corridor is an offence under the Railways Act 2005 unless the written consent of the New Zealand Railways Corporation has been provided.</p> <p><b>Note 1:</b> <u>Within the Awakino Precinct, 1/3 of the 2 Year ARI 24hr rainfall depth with climate change is to be used to determine the Water Quality Volume (WQV) when designing a treatment device.</u></p> <p><b>Note 5:</b> <u>Good management practice for stormwater management is equivalent to those set out in the guideline document, Stormwater Management Devices in the Auckland Region (GD01).</u></p>	Discretionary Activity	<p><b>Council</b> will have regard to the following matters when considering an application for Resource Consent under this Rule:</p> <p>i) Whether there is sufficient control of water-borne <b>contaminants</b>, litter and sediment; ii) Whether there is sufficient land available for disposal of stormwater;</p> <p>ii) Whether and the extent to which the capacity of the downstream stormwater system is able to cater for increased runoff from the proposed <b>allotments</b>;</p> <p>iii) Whether and the extent to which measures are necessary in order to give <b>effect</b> to any drainage or</p> <p>iv) <b>Catchment</b> Integrated <b>Development</b> that has been prepared for the area;</p> <p>v) Whether and the extent to which measures proposed for avoiding or mitigating the effects of stormwater runoff, including low impact design principles are effective;</p> <p>vi) Whether and the extent to which the stormwater infrastructure within the <b>subdivision</b>, is able to link with existing disposal systems outside the subdivision;</p> <p>vii) Whether and the extent to which the development meets the relevant performance standards or the <b>Kaipara District Council Engineering Standards 2011</b> <u>or the Awakino Precinct Stormwater Management Plan</u>;</p> <p>viii) Whether there is a need for land to be set aside and vested in the Council as a <b>site</b> for any public utility required to be provided;</p> <p>ix) <u>Within the Awakino Precinct:</u></p> <ul style="list-style-type: none"> <li><u>The extent to which run-off from a developed catchment is discharged back into its natural catchment.</u></li> <li><u>The applicability of retention to be provided within a 72-hour period.</u></li> <li><u>The extent to which inert building materials are to be utilised (e.g., inert roof material).</u></li> </ul> <p><b>(4) Awakino Precinct Information Requirement:</b></p> <p><u>Any application shall be supported by a detailed stormwater assessment report and stormwater management plan prepared by a suitably qualified engineer to confirm that the proposal will achieve the following:</u></p> <p>i) <u>Treatment of the Water Quality Volume (WQV) or Water Quality Flow (WQF) from all contaminant generating impermeable surfaces by a water quality device for the relevant contaminants.</u></p> <p>ii) <u>Retention (volume reduction) of a minimum of 5mm runoff depth for all impermeable surfaces.</u></p> <p>iii) <u>Detention (temporary storage) with a drain down period of 24 hours for the difference between the pre-development (grassed state) and post-development runoff volumes from the 1/3 of the 2 Year ARI, 24-hour rainfall event minus any retention volume provided for all impermeable surfaces.</u></p> <p>iv) <u>Conveyance and discharge of primary and secondary flow in accordance with the Kaipara District Council Engineering Standards 2011.</u></p>
---------	---------------------	---	------------------------	--

**Table 13.1 Awakino Precinct Road, Private Way, Cycle Way and Property Access Legal and Construction Widths**

<b>URBAN</b>									
<u>Household Equivalents</u>	<u>Minimum Legal Width</u>	<u>Minimum Carriageway Width</u>	<u>Minimum Cycleway/Footpath Width (one side of Road only)</u>	<u>Surface</u>	<u>Minimum Design Speed</u>	<u>Minimum Radius (m)</u>	<u>Minimum SSD(m)</u>	<u>Minimum Cres K (m/%)</u>	<u>Maximum Grade</u>
<u>1</u>	<u>4.2m</u>	<u>3.0m</u>	<u>-</u>	<u>Seal</u>	<u>-</u>	<u>15m</u>	<u>20m</u>	<u>0.5</u>	<u>20.0%</u>
<u>2 to 3</u>	<u>6.0m</u>	<u>3.0m</u>	<u>-</u>		<u>20km/h</u>	<u>15m</u>	<u>30m*</u>	<u>0.5</u>	<u>16.7%</u>
<u>4 to 6</u>	<u>12.0m</u>	<u>5.5m</u>	<u>-</u>		<u>30km/h</u>	<u>20m</u>	<u>50m*</u>	<u>1.0</u>	<u>12.5%</u>

<u>7 to 30</u>	<u>18.0m</u>	<u>6.0m + indented parking bays</u>	<u>3m</u>		<u>40km/h</u>	<u>30m</u>	<u>40m</u>	<u>1.5</u>	<u>12.5%</u>
<u>31-50</u>	<u>20.0m</u>	<u>6.0m + indented parking bays</u>	<u>3m</u>		<u>40km/h</u>	<u>30m</u>	<u>40m</u>	<u>1.5</u>	<u>12.5%</u>
<u>&gt;50</u>	<u>20.0m</u>	<u>6.5m + indented parking bays</u>	<u>3m</u>		<u>40km/h</u>	<u>30m</u>	<u>40m</u>	<u>1.5</u>	<u>10.0%</u>

**Table 13.1 Notes:**

(1). The legal width shall be sufficient for the carriageway (including widening on curves), cul-de-sacs, footpaths and cycleways (where appropriate), parking (where appropriate), public utilities, drainage facilities, grassed Berms, Swale Drains, amenity planting, sight benching and street furniture. Roads to vest shall have sufficient legal width for planned future development. Refer to Kaipara District Council Engineering Standards 2011, clause 5.2.4.

(2). Carriageway width is exclusive of Berms, kerb concrete and parking. Carriageway widths should be increased by up to 1.0m where there is a high proportion of heavy traffic. Additional widening is required on curves in accordance with Kaipara District Council Engineering Standards 2011 clause 5.2.5. Passing bays are required on single lane carriageways in accordance with Kaipara District Council Engineering Standards 2011 clause 5.2.5.

(3). Carriageway surface shall be sealed in accordance with Kaipara District Council Engineering Standards 2011 clause 5.2.6.

(4). Design speeds are based on rolling terrain typical in Kaipara District. Higher design speeds should be considered in flatter terrain.

(5). Safe stopping sight distances marked \* have been increased to provide for two vehicles approaching each other on a single lane carriageway to stop before colliding. If a two lane carriageway is proposed for access ways serving 1 to 6 lots, sight distances may be reduced accordingly. K value is the length of vertical curve (m) divided by the algebraic difference in gradients (%).

(6) Where there is potential for further development under the District Plan, the horizontal and vertical geometry and legal width shall provide for the Ultimate Development.

(7) Intersection design, public and private road design shall be carried out on accordance with Austroads guidelines, where not directly superseded by Precinct Plan Provisions.

(8) Footpath/cycleway design shall be carried out in accordance with Waka Kotahi's Pedestrian Network Guidance and Cycling Network Guidance, where not directly superseded by Precinct Plan Provisions.

