

Infrastructure and energy APPENDIX 4 Amendments recommended to other parts of the PWDP

Chapter 13 Definitions

I. The following amendments to the definitions are recommended:

Definition	Meaning
Ancillary equipment	Means telecommunications, radiocommunications, electrical or similar equipment which is necessary to install <u>with</u> a facility to enable the facility to operate as intended, but not a self-contained power unit or a lightning rod. [697.363 Waikato District Council]
<u>Design Speed</u>	<u>Means a speed fixed for the design of those geometric features of a carriageway that influence vehicle operation. Design speed is the 85th percentile speed of traffic through that geometric feature. These can either be measured or estimated (Austroad design guides or similar).</u> [697.379 Waikato District Council]
Energy corridor	Means an energy corridor shown on the planning maps, <u>being a corridor for the transportation of minerals and substances, limited to coal ash, aggregate, overburden, clean-fill, wastewater and other liquids (other than a hazardous substance).</u> [680.132 FFNZ]
Functional need	Means for Chapter 14 Infrastructure and Energy, the need for a proposal or activity to traverse, locate or operate in a particular environment because it can only occur in that environment. [742.69 NZTA; 697.388 Waikato District Council]
<u>Land transport network</u>	<u>Means the network used for the land-based transportation of people and/or goods including by road, rail, cycling, walking and public transport.</u> [742.73 NZTA]
Limited access road	Means the following roads in the district to which sections 88 to 98 of the Government Roving Powers Act 1989 apply: (a) State Highway 1, except those parts within Huntly town boundaries and in Taupiri between Mangawara bridge and Kainui Road; (b) State Highways 2 and 26; and (c) State Highway 23 from the Hamilton City boundary to the Okete Stream bridge south abutment. <u>any road declared a limited access road under Section 88 of the Government Roving Powers Act 1989, Section 346A of the Local Government Act 1974 or the corresponding provisions of any former enactment.</u> [742.74 NZTA]

<p>National Grid <u>Subdivision Corridor</u> yard</p> <p>[EnviroWaste 302.2 and Holcim 766.6, 766.7, 766.8, 766.9]</p>	<p>Means the area measured either side of the centre line of any above-ground electricity transmission line as follows:</p> <p>(a) 14m for the 110kV national grid lines on single poles; (b) 16m for the 110kV national grid lines on pi poles; (b)(c) 32m for 110kV national grid lines on towers; and (c)(d) 37m for the 220kV transmission lines.</p> <p><u>The National Grid Subdivision Corridor does not apply to underground cables or any transmission line (or sections of lines) that are designated by Transpower. The measurement of setback distances from National Grid lines shall be taken from the centre line of the transmission line and the outer edge of any support structure. The centre line at any point is a straight line between the centre points of the two support structures at each end of the span.</u> [576.39 Transpower]</p>
<p>National Grid <u>corridor</u> Yard</p> <p>[EnviroWaste 302.2 and Holcim 766.6, 766.7, 766.8, 766.9]</p>	<p>Means the area located <u>within</u>:</p> <p>(a) 12 metres in any direction from the outer <u>visible</u> edge of a national grid support structure <u>foundation</u>; and (b) 10 metres either side of the centre line of any above-ground 110kV national grid line on single poles; and (c) 12 metres either side of the centre line of any above-ground national grid line on towers.</p> <p><u>The National Grid Yard does not apply to underground cables or any transmission line (or sections of lines) that are designated by Transpower. The measurement of setback distances from National Grid lines shall be taken from the centre line of the transmission line and the outer edge of any support structure. The centre line at any point is a straight line between the centre points of the two support structures at each end of the span.</u> [576.40 Transpower]</p>
<p>Road network activities</p>	<p>Means road infrastructure and transport services provided within the road, including:</p> <p>(a)...</p> <p>...</p> <p><u>(p) wastewater and water supply management structures [697.503 Waikato District Council]</u></p> <p><u>Rail activities, as defined in the Land Transport Management Act 2003, within the rail corridor shall have the same meaning and activity status as road network activities within the road.</u> [986.47 KiwiRail]</p>

Planning maps

2. The following amendments to the planning maps are recommended:

Amend the planning map Legend to list the Specific Areas/Activities, such as Energy Corridor; Ash Water Pipeline

Multiple Zone Sections

3. Insert the following rules in Chapters: 16 Residential; 17 Business; 18 Business Town Centre; 19 Business Tamahere; 22 Rural; 23 Country Living; 24 Village; 25 Reserve; 26 Motorsport and Recreation; 27 Te Kowhai Airpark; 28 Rangitahi Peninsula:

PX	Construction or alteration of a building for a sensitive land use	<p><u>16/17/18/19/22/23/24/25/26/27/28.X.X</u></p> <p>(a) The construction or alteration of a building for a sensitive land use that complies with all of the following conditions:</p> <p>(i) It is set back a minimum of 10m from the centre of line of any electrical distribution or transmission lines, not associated with the National Grid, that operate at a voltage of up to 110kV; or</p> <p>(ii) It is set back a minimum of 12m from the centre of line of any electrical distribution or transmission lines, not associated with the National Grid, that operate at a voltage of 110kV or more. [697.310; 697.23 and 697.24 Waikato District Council]</p>
<p><u>16/ 17/ 18/ 19/ 22/ 23/ 24/ 25/ 26/ 27/ 28.X.X</u> RDX</p>	<p>Construction or alteration of a building for a sensitive land use that does not comply with Rule <u>16/ 17/ 18/ 19/ 22/ 23/ 24/ 25/ 26/ 27/ 28.X.X</u></p>	<p>(a) Discretion is restricted to:</p> <p>(i) Effects on the amenity values of the site;</p> <p>(ii) The risk of electrical hazards affecting the safety of people;</p> <p>(iii) The risk of damage to property;</p> <p>(iv) Effects on the operation, maintenance and upgrading of the electrical distribution or transmission lines. [697.310; 697.23 and 697.24 Waikato District Council]</p>

4. Insert the following rules in Chapters: 16 Residential; 23 Country Living; 24 Village; 28 Rangitahi Peninsula:

PX	The establishment of impervious surfaces associated with new development or subdivision	<p><u>16/23/24/28.X.X</u></p> <p>(a) The establishment of impervious surfaces associated with new development or subdivision that complies with the following condition:</p> <p>(i) The maximum impervious surface of a site within the Residential/ Rangitahi Peninsula/ Village/ Country Living Zone is 70%. [697.310; 697.23 and 697.24 Waikato District Council]</p>
<p>16/ 23/ 24/ 28. X.X RDX</p>	<p>The establishment of impervious surfaces associated with new development or subdivision that do not comply with one or more of the conditions of Rule <u>16/23/24/28.X.X</u></p>	<p>Discretion is restricted to:</p> <p>(a) Site design, layout and amenity;</p> <p>(b) The risk of flooding, nuisance or damage to the site or other buildings and sites. [697.310; 697.23 and 697.24 Waikato District Council]</p>

5. Amend the Building Setback – Sensitive Land Use rules in Chapter 16 Residential Zone, Chapter 22 Rural Zone, Chapter 23 Country Living Zone, and Chapter 24 Village Zone, as follows:

Residential Zone 16.3.9.2 Building setback – Sensitive land use

PI	<p>(a) Any new building or alteration to an existing building for a sensitive land use must be set back a minimum of:</p> <p>(i) 5m from the designated boundary of the railway corridor;</p> <p>(ii) 15m from the boundary of a national route or regional arterial;</p> <p>(iii) 25m from the designated boundary of the Waikato Expressway;</p> <p>(iv) 300m from the edge of oxidation ponds that are part of a municipal wastewater treatment facility on another site; and</p> <p>(v) 30m from a municipal wastewater treatment facility where the treatment process is fully enclosed. [986.51 Kiwi Rail]</p>
P2	<p>(a) Any new building or alteration to an existing building for a sensitive land use within 100m of a state highway or legal boundary of a rail corridor must comply with Section 7 of Appendix I – Acoustic Insulation. [986.51 Kiwi Rail]</p>
RDI	<p>Any new building or alteration to an existing building for a sensitive land use within 100m of a state highway or legal boundary of a rail corridor that does not comply with the condition of Rule 16.3.9.2 P2</p> <p><u>Matters of discretion:</u></p> <p><u>Discretion is restricted to</u></p> <p>(a) Location of the building;</p> <p>(b) The effects of any non-compliance with the standards in Section 7 of Appendix I;</p> <p>(c) Topographical, ground conditions or building design features that will minimise vibration effects;</p> <p>(d) <u>The outcome of any consultation with NZTA or KiwiRail. [986.52 Kiwi Rail]</u></p>
DI	<p>Any building for a sensitive land use that does not comply with Rule 16.3.9.2. P1.</p>

Residential Zone 16.4.12 Subdivision - Building platform

RDI	<p>(a) Every proposed lot, other than one designed specifically for access, utility allotment must be capable of containing a building platform upon which a dwelling and living court could be sited as a permitted activity, with the building platform being contained within either of the following dimensions:</p> <p>(i) a circle with a diameter of at least 18m exclusive of yards; or</p> <p>(ii) a rectangle of at least 200m² with a minimum dimension of 12m exclusive of yards.</p> <p>(b) Council's discretion shall be restricted to the following matters:</p> <p>(i) Subdivision layout;</p> <p>(ii) Shape of allotments;</p> <p>(iii) Ability of allotments to accommodate a practical building platform;</p> <p>(iv) Likely location of future buildings and their potential effects on the environment;</p> <p>(v) Avoidance or mitigation of natural hazards;</p> <p>(vi) Geotechnical suitability for building; and</p> <p>(vii) Ponding areas and primary overland flow paths; and</p> <p><u>(viii) Where any building platform is within 100m of a state highway or rail corridor, Subdivision layout and design, in relation to the management of noise and vibration effects from the land transport networks; and the location of complying building platforms in relation to the state highway and/or rail corridor. [NZTA 742.244]</u></p>
DI	<p>Subdivision that does not comply with Rule 16.4.12 RDI.</p>

Rural Zone 22.3.7.2 Building setback – Sensitive land use

PI	(a) Any new building or alteration to an existing building for a sensitive land use must be set back a minimum of: (i) 5m from the designated boundary of the railway corridor; (ii) 15m from the boundary of a national route or regional arterial road; (iii) 25m from the designated boundary of the Waikato Expressway; (iv) 200m from an Aggregate... [986.51 Kiwi Rail]
P2	(a) Any new building or alteration to an existing building for a sensitive land use within 100m of a state highway or legal boundary of a rail corridor must comply with Section 7 of Appendix I – Acoustic Insulation. [986.51 Kiwi Rail]
RDI	Any new building or alteration to an existing building for a sensitive land use within 100m of a state highway or legal boundary of a rail corridor that does not comply with the condition of Rule 22.3.7.2 P2 <u>Matters of discretion: Discretion is restricted to</u> (a) <u>Location of the building;</u> (b) <u>The effects of any non-compliance with the standards in Section 7 of Appendix I;</u> (c) <u>Topographical, ground conditions or building design features that will minimise vibration effects;</u> (d) <u>The outcome of any consultation with NZTA or KiwiRail.</u> [986.51 Kiwi Rail]
DI	Any building for a sensitive land use that does not comply with Rule 22.3.7.2. PI.

Rural Zone 22.4.9 Subdivision - Building platform

RDI	(a) Subdivision, other than an access... (b) Council's discretion is restricted to the following matters: (i)...; <u>and</u> <u>(vii) Where any building platform for a sensitive land use is within 100m of a state highway or rail corridor. Subdivision layout and design, in relation to the management of noise and vibration effects from the land transport networks; and the location of complying building platforms in relation to the state highway and/or rail corridor. .[NZTA 742.244]</u>
DI	Subdivision that does not comply with Rule 22.4.9 RDI.

Country Living Zone 23.3.7.2 Building setback – Sensitive land use

PI	(a) Any new building or alteration to an existing building for a sensitive land use must be set back a minimum of: (i) 5m from the designated boundary of the railway corridor; (ii) 15m from the boundary of a national route or regional arterial road; (iii) 25m from the designated boundary of the Waikato Expressway; (iv) 200m from an Aggregate... [986.51 Kiwi Rail]
P2	(a) Any new building or alteration to an existing building for a sensitive land use within 100m of a state highway or legal boundary of a rail corridor must comply with Section 7 of Appendix I – Acoustic Insulation. [986.51 Kiwi Rail]
RDI	Any new building or alteration to an existing building for a sensitive land use within 100m of a state highway or legal boundary of a rail corridor that does not comply with the condition of Rule 23.3.7.2 P2 <u>Matters of discretion: Discretion is restricted to</u> (a) <u>Location of the building;</u> (b) <u>The effects of any non-compliance with the standards in Section 7 of Appendix I;</u>

	<u>(c) Topographical, ground conditions or building design features that will minimise vibration effects;</u> <u>(d) The outcome of any consultation with NZTA or KiwiRail. [986.52 Kiwi Rail]</u>
DI	Any building for a sensitive land use that does not comply with Rule 23.3.7.2. P1.

Country Living Zone 23.4.8 Subdivision - Building platform

RDI	(a) Subdivision, other than an access... (b) Council's discretion is restricted to the following matters: (i)...; <u>and</u> <u>(vi) Where any building platform for a sensitive land use is within 100m of a state highway or rail corridor. Subdivision layout and design, in relation to the management of noise and vibration effects from the land transport networks; and the location of complying building platforms in relation to the state highway and/or rail corridor. .[NZTA 742.244]</u>
DI	Subdivision that does not comply with Rule 23.4.8 RDI.

Village Zone 24.3.6.2 Building setback – Sensitive land use

PI	(a) Any new building or alteration to an existing building for a sensitive land use must be set back a minimum of: (i) 5m from the designated boundary of the railway corridor; (ii) 15m from the boundary of a national route or regional arterial road; (iii) 25m from the designated boundary of the Waikato Expressway; (iv) 300m from the edge of oxidation ponds... [986.52 Kiwi Rail]
<u>P2</u>	<u>(a) Any new building or alteration to an existing building for a sensitive land use within 100m of a state highway or legal boundary of a rail corridor must comply with Section 7 of Appendix I – Acoustic Insulation. [986.52 Kiwi Rail]</u>
<u>RDI</u>	<u>Any new building or alteration to an existing building for a sensitive land use within 100m of a state highway or legal boundary of a rail corridor that does not comply with the condition of Rule 24.3.6.2 P2</u> <u>Matters of discretion: Discretion is restricted to</u> <u>(a) Location of the building;</u> <u>(b) The effects of any non-compliance with the standards in Section 7 of Appendix I;</u> <u>(c) Topographical, ground conditions or building design features that will minimise vibration effects;</u> <u>(d) The outcome of any consultation with NZTA or KiwiRail. [986.52 Kiwi Rail]</u>
DI	Any building for a sensitive land use that does not comply with Rule 24.3.6.2. P1.

Village Zone 24.4.10 Subdivision - Building platform

RDI	(a) Every proposed lot... (b) Council's discretion is restricted to the following matters: (i)...; <u>and</u> <u>(viii) Where any building platform for a sensitive land use is within 100m of a state highway or rail corridor. Subdivision layout and design, in relation to the management of noise and vibration effects from the land transport networks; and the location of complying building platforms in relation to the state highway and/or rail corridor. .[NZTA 742.244]</u>
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DI	Subdivision that does not comply with Rule 24.4.10 RD1.

Appendix I Acoustic Insulation

6. Amend the Application section of Appendix I as follows:

I. Application

(a) This appendix is referred to in the rules related to:

(i)...

(iv) Buildings and alterations for Noise-sensitive Activities near State Highways and rail network within:

- A. Chapter 16: Residential Zone
- B. Chapter 22: Rural Zone
- C. Chapter 23: Country Living Zone
- D. Chapter 24: Village Zone

[986.51 Kiwi Rail]

7. Add to Appendix I a new section 7 as follows:

7. Noise-Sensitive Activities or Sensitive Land Uses within 100m of a State Highway or Rail Corridor Boundary:

	<u>Activity sensitive to noise near a State Highway or Rail Corridor</u>
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All zones – at any point within 100 metres from the legal boundary of any State Highway or railway network

Activity status: Permitted

1. Indoor noise

Any new building or alteration to an existing building that contains an activity sensitive to noise where the building or alteration;

- (a) Is designed, constructed and maintained to achieve indoor design noise levels resulting from the State Highway or railway not exceeding the maximum values in the following table; or

<u>Building type</u>	<u>Occupancy/activity</u>	<u>Maximum noise level</u> L _{Aeq(1h)}
<u>Residential</u>	<u>Sleeping spaces</u>	<u>35 dB</u>
	<u>All other habitable rooms</u>	<u>40 dB</u>
<u>Education</u>	<u>Lecture rooms/theatres, music studios, assembly halls</u>	<u>35 dB</u>
	<u>Teaching areas, conference rooms, drama studios, sleeping areas</u>	<u>40 dB</u>
	<u>Libraries</u>	<u>45 dB</u>
<u>Health</u>	<u>Overnight medical care, wards</u>	<u>40 dB</u>
	<u>Clinics, consulting rooms, theatres, nurses' stations</u>	<u>40 dB</u>
<u>Cultural</u>	<u>Places of worship; marae</u>	<u>35dB</u>

- (a) is at least 50 metres from any State Highway or railway network and is designed so that a noise barrier completely blocks line-of-sight from all parts of doors and windows to all points 3.8 metres above the road carriageway or railway tracks; or
- (b) is a single-storey framed residential building with habitable rooms designed, constructed and maintained in accordance with the construction schedule in Schedule Y.

2. Mechanical ventilation

If a building is constructed in accordance with 1(c) or if windows must be closed to achieve the design noise levels in clause 1(a), the building is designed, constructed and maintained with a mechanical ventilation system that:

- (a) For habitable rooms for a residential activity achieves the following requirements:
 - i. Provides mechanical ventilation to satisfy clause G4 of the New Zealand Building Code and;

- ii. Is adjustable by the occupant to control the ventilation rate in increments up to a high air flow setting that provides as least 6 air changes per hour; and
 - iii. Provides relief for the equivalent volumes of spill air;
 - iv. Provides cooling and heating that is controllable by the occupant and can maintain the inside temperature between 18°C and 25°C; and
 - v. Does not generate more than 35 dB L_{Aeq(30s)} when measured 1 metre away from any grille or diffuser.
- (b) For other spaces is as determined by a suitably qualified and experienced person.

3. Indoor vibration

Any new buildings or alterations to existing buildings containing an activity sensitive to noise, closer than 60 metres from the boundary of a State Highway or railway network;

- (a) is designed, constructed and maintained to achieve vibration levels from the road or railway not exceeding 0.3mm/s vw.95 or
- (b) is a single storey framed residential building with:
 - i. a constant level floor slab on a full surface vibration isolation bearing with natural frequency not exceeding 10Hz, installed in accordance with the supplier's instructions and recommendations; and
 - ii. vibration isolation separating the sides of the floor slab from the ground; and
 - iii. no rigid connections between the building and the ground.

4.Design report [alternatively may be replaced with development meeting construction schedule 'Y' to demonstrate compliance]

A report is submitted to the Council demonstrating compliance with clauses (1) to (3) above (as relevant) prior to the construction or alteration of any building containing an activity sensitive to noise.

In the design: State Highway or railway noise is assumed to be 70 L_{Aeq(1h)} at a distance of 12 metres from the road or track, and must be deemed to reduce at a rate of 3dB per doubling of distance up to 40 metres and 6 dB per doubling of distance beyond 40 metres.

Where the activity complies with the following rule requirements of Schedule Y: [986.51 Kiwi Rail]

8. Add Schedule Y to the end of new section 7 as follows:

Schedule Y Construction schedule for indoor noise control

<u>Elements</u>	<u>Minimum construction for noise control in addition to the requirements of the New Zealand Building Code [986.51 Kiwi Rail]</u>	
<u>External walls</u>	<u>Wall cavity infill of fibrous insulation, batts or similar (minimum density of 9 kg/m³) [986.51 Kiwi Rail]</u>	
	<u>Cladding and internal wall lining complying with either Options A, B or C below:</u>	
	<u>Option A – Light cladding: timber weatherboard or sheet materials with surface mass between 8 kg/m² and 30 kg/m² of wall cladding</u>	<u>Internal lining of minimum 17 kg/m² plasterboard, such as two layers of 10mm thick high density plasterboard on resilient / isolating mountings</u>
	<u>Option B – medium cladding: surface mass between 30 kg/m² and 80kg/m² of wall cladding</u>	<u>Internal lining of minimum 17 kg/m² plasterboard, such as two layers of 10mm thick high density plasterboard</u>
	<u>Option C – heavy cladding: surface mass between 80 kg/m² and 220 kg/m² of wall cladding</u>	<u>No requirements additional to New Zealand Building Code</u>
	<u>[986.51 Kiwi Rail]</u>	
	<u>Ceiling cavity infill fibrous insulation, batts or similar (minimum density of 7 kg/m³)</u>	
	<u>Ceiling penetrations such as for recessed lighting or ventilation, shall not allow additional noise break-in</u>	
	<u>Roof type and internal ceiling lining complying with either Options A, B or C below:</u>	
<u>Roof / ceiling</u>	<u>Option A – skillion roof with light cladding: surface mass up to 20 kg/m² or roof cladding</u>	<u>Internal lining of minimum 25 kg/m² plasterboard, such as two layers of 13mm thick high density plasterboard</u>
	<u>Option B – pitched roof with light cladding: surface mass up to 20 kg/m² of roof cladding</u>	<u>Internal lining of minimum 17 kg/m² plasterboard, such as two layers of 10mm thick high density plasterboard</u>
	<u>Option C – roof with heavy cladding: surface mass between 20 kg/m² and 60 kg/m² of roof cladding</u>	<u>No requirements additional to New Zealand Building Code</u>
	<u>[986.51 Kiwi Rail]</u>	

<p><u>Glazed areas</u></p>	<p><u>Aluminium frames with full compression seals on opening panes</u></p> <p><u>Glazed areas shall be less than 35% of each room floor area</u></p> <p><u>Either, double glazing with:</u></p> <ul style="list-style-type: none"> • <u>a laminated pane of glass at least 6 mm thick; and a cavity between the two panes of glass at least 12 mm deep; and</u> • <u>a second pane of glass at least 4 mm thick</u> <p><u>Or, any other glazing with a minimum performance of Rw 33 dB</u></p> <p>[986.51 Kiwi Rail]</p>	
<p><u>Exterior doors</u></p>	<p><u>Exterior doors with line-of-sight to any part of the state highway road surface or to any point 3.8 metres above railway tracks</u></p>	<p><u>Solid core exterior door minimum surface mass 24 kg/m² with edge and threshold compression seals; or other door set with minimum performance of Rw 30 dB</u></p>
	<p><u>Exterior doors shielded by the building so there is no line-of-sight to any parts of the state highway road surface or any points 3.8 metres above the railway tracks</u></p>	<p><u>Exterior doors with edge and threshold compression seals</u></p>
<p>[986.51 Kiwi Rail]</p>		

[742.244; 742.182 NZTA; 986.51 KiwiRail; 986.52 KiwiRail]

TO GO INTO APPENDIX 3 Chapter 6

1. The following amendments are recommended to Policy 6.2.6 in Chapter 6:
 - 6.2.6 Policy – Reverse sensitivity and the National Grid
 - (a) Manage subdivision, use and development so that the operation, maintenance, upgrading and development of the National Grid is not compromised by ensuring that:
 - (i) The National Grid is identified on the planning maps and the National Grid Yard and National Grid Subdivision Corridor establish buffer distances for managing land use development and subdivision near the National Grid;...
 - (ii) Subdivision is managed within the National Grid Subdivision Corridor to avoid subsequent land use from compromising the operation, maintenance, upgrading and development of the National Grid; and...[576.39; 576.40 Transpower; 419.128 Hort NZ]