WAIKATO DISTRICT COUNCIL

Hearings of Submissions on the Proposed Waikato District Plan

Report and Decisions of Independent Commissioners

Decision Report 13: Infrastructure

17 January 2022

Commissioners

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1 Introduction

- 1. Hearing 22 related to all the submissions received by the Waikato District Council (Council) on infrastructure provisions within the Waikato Proposed District Plan (PDP). This hearing specifically related to objectives, policies, land use activities, land use effects, building and subdivision in Chapters 6 and 14 Infrastructure and Energy.
- 2. Infrastructure comprises the physical services and facilities needed for a community to function. Infrastructure covers the services provided by the physical networks associated with energy, water supply, telecommunications, sanitation and waste facilities, and drainage. The Resource Management Act 1991 (RMA) provides a definition for infrastructure as follows:
 - a. pipelines that distribute or transmit natural or manufactured gas, petroleum, biofuel, or geothermal energy:
 - b. a network for the purpose of telecommunication as defined in section 5 of the Telecommunications Act 2001:
 - c. a network for the purpose of radiocommunication as defined in section 2(1) of the Radiocommunications Act 1989:
 - d. facilities for the generation of electricity, lines used or intended to be used to convey electricity, and support structures for lines used or intended to be used to convey electricity, excluding facilities, lines, and support structures if a person—
 - (i) uses them in connection with the generation of electricity for the person's use; and
 - (ii) does not use them to generate any electricity for supply to any other person:
 - e. a water supply distribution system, including a system for irrigation:
 - f. a drainage or sewerage system:
 - g. structures for transport on land by cycleways, rail, roads, walkways, or any other means:
 - h. facilities for the loading or unloading of cargo or passengers transported on land by any means:
 - i. an airport as defined in section 2 of the Airport Authorities Act 1966:
 - j. a navigation installation as defined in section 2 of the Civil Aviation Act 1990:

- k. facilities for the loading or unloading of cargo or passengers carried by sea, including a port related commercial undertaking as defined in section 2(1) of the Port Companies Act 1988:
- I. anything described as a network utility operation in regulations made for the purposes of the definition of network utility operator in section 166
- 3. We are aware that the approach of the PDP for infrastructure departs significantly from the Operative District Plan (both Franklin and Waikato sections) in that the infrastructure provisions have been extracted from the zones and combined into two standalone chapters: Chapter 6 contains the objectives and policies, and Chapter 14 contains the rules, comprising activities, standards and matters of control and discretion. The Infrastructure and Energy provisions apply across all zones and roads. Both chapters are structured by the particular infrastructure e.g., National Grid, transport, electricity generation, telecommunications etc., although there are objectives, policies and rules which apply to all infrastructure.

1 Hearing Arrangement

- 4. The hearing was held on Tuesday 20 October and Wednesday 21 October 2020 via Zoom. All of the relevant information pertaining to this hearing (i.e., section 42A report, legal submissions and evidence) is contained on Council's website.
- 5. We heard from the following parties on the infrastructure provisions of the PDP:

Submitter organisation	Attendee at the hearing
Council	Trevor Mackie (author of section 42A report)
Colette Hanraham	In person
Simon Dromgool	In person
Brendhan Greaney	In person
Kane Ongley	In person
The Surveying Company	Leigh Shaw and Vanessa Addy
Parkmere Farms, Cindy and Tony Young	Nick Grala

Phillip Barrett	In person
Waikato Regional Council	Miffy Foley
First Gas	Hywel Edwards
Watercare Services	Ilze Gotelli (corporate)
	Chris Scrafton (planning)
	Warren Bangma (legal counsel)
Genesis Energy Limited	Richard Matthews
WEL Networks	Sara Brown
Department of Conservation	Maggie Burns and Tertia Thurley
	Troy Urlich (legal counsel)
New Zealand Transport Agency Waka Kotahi	Mike Wood (planning)
vvaka Kulaili	Stephen Chiles (acoustic)
	Robert Swears (transportation)
	Christina Sheard (legal counsel)
Kiwi Rail	Pam Butler (planning)
	Stephen Chiles (acoustic)
	Tom Atkins (legal counsel)
NZ Association of Radio Transmitters Inc	Douglas Birt
Counties Power Limited	Shravan Miryala
	Rachel Bilbe

Te Kauwhata Land Limited	Ian McAlley
	Joan Forret (legal counsel)
horus New Zealand Limited, park New Zealand Trading	Chris Horne
Limited and Vodafone New Zealand Limited	Graeme McCarrison
	Andrew Kantor
	Colin Clune
Transpower New Zealand Ltd	Dougall Campbell (corporate evidence)
	Pauline Whitney (planning)
	Andrew Renton (transmission engineering)
Horticulture NZ	Lynette Wharfe
Ports of Auckland	Mark Arbuthnot
Kainga Ora	Douglas Allan (legal counsel)
	Brendon Liggett (corporate)
	Phil Stickney (planning)
	Matt Lindenberg (planning and urban design)
	Jon Styles (acoustic)

- 6. Although they did not attend the hearing, written material and/or evidence was filed by the following parties:
 - a. PowerCo;
 - b. Christine Foster on behalf of Meridian Energy;
 - c. Birch Surveyors on behalf of Annie Chen;
 - d. Carolyn McAlley on behalf Heritage New Zealand Pouhere Taonga;
 - e. Hilary Walker on behalf of Federated Farmers of New Zealand;

- f. Alec Duncan on behalf of the Ministry of Education; and
- g. Alec Duncan on behalf of Fire and Emergency New Zealand.

2 Overview of issues raised in Submissions

- 7. In the section 42A report, Mr Trevor Mackie set out the full list of submissions received pertaining to the infrastructure provisions. In brief, the key matters of relief sought by the submitters included:1
 - a. Infrastructure and Energy Overall:
 - More enabling of infrastructure with less stringent activity status and standards;
 - ii. Better integration of planning (live zoning) and infrastructure;
 - iii. Consistent approach to managing infrastructure in Identified Area identification;
 - iv. Relocation of rules from the Infrastructure and Energy chapters into Zone Chapters;
 - v. Minor amendments to Definitions;
 - vi. Management of noise-sensitive activities in close proximity to the rail corridor and State Highway / Waikato Expressway; and
 - b. Objectives and policies:
 - i. Support for retaining many of the objectives and policies as notified;
 - ii. Minor wording adjustments and amendments;
 - iii. New objectives/policies to give effect to Waikato Regional Policy Statement (RPS) and take into account the Regional Land Transport Plan;
 - iv. Additional clauses to policies to add specific matters (e.g., Crime Prevention Through Environmental Design, sustainability, renewable energy, reverse sensitivity, emergency services);
 - v. More enabling policies relating to primary production/farming activities; and

¹ Section 42A Report Hearing 12: Country Living Zones, Paragraph 31, dated 3 March 2020.

c. Chapter 14 Introduction:

- Advice note on the requirements of the Heritage New Zealand Pouhere Taonga Act 2014;
- Distinguishing on-site farming infrastructure from facilities and structures of network utility operators;
- iii. The relationship between PDP provisions and National Environmental Standards; and

d. Rules applying to all infrastructure:

- i. Increasing area and height controls;
- ii. Default activity status for unspecified infrastructure;
- iii. More enabling provisions for line support structures and overhead lines;
- iv. Noise limits;
- v. Ensure sufficient protection of Identified Area values;
- vi. Clarify relationship between 14.3 General Infrastructure and the specialist section provisions 14.4 to 14.12;
- vii. Increasing the duration of temporary network utilities;
- viii. Protect all natural areas against infrastructure effects;
- ix. Clarifying tree trimming related to electricity and telecommunication lines;
- x. Ensuring there is sufficient water for firefighting;
- xi. Clarification of water supply, wastewater and stormwater management in Rural and Country Living Zones;
- xii. Requirement to ensue appropriate service connections and vehicle access upon subdivision, while recognising that changing technology means there are different ways of providing services; and

e. National Grid:

- Transposition error in the definitions National Grid Yard versus
 National Grid Corridor;
- ii. Creating a more enabling approach for private land, housing, farming and horticulture near the National Grid;

- iii. Ensuring the provisions give effect to National Policy Statement on Electricity Transmission;
- iv. Location of National Grid Yard rules for sensitive land uses, structure setbacks, earthworks setbacks in terms of their position in the Plan;
- v. Management of sensitive activities near or beneath the National Grid;
- vi. Activities status of structures and activities within National Grid Yard; and

f. Electrical Distribution:

- More enabling area and height controls, including for support structures, switch-rooms and pole-mounted transformers;
- ii. Approach to requiring undergrounding of new and existing electricity distribution lines;
- iii. Increased flexibility for substations and transformer location in the Rural Zone;
- iv. Protection of electricity distribution network against reverse sensitivity of sensitive land uses; and

g. Electricity generation:

- i. More enabling area and height controls;
- ii. Explicit recognition of Huntly Power station electricity generation activity;
- iii. Manage electricity generation activity effects on roads and within identified Areas;
- iv. Increased flexibility for research and exploratory scale equipment;
- v. Ensuring there is a complete activity status cascade; and

h. Liquid fuels and gas:

- Recognition and protection of gas transmission and distribution network pipelines and associated equipment;
- ii. Clarification of whether the rules apply to on-site fuel and gas storage; and

i. Meteorological:

 Increasing the permitted height and area to match the size of wind turbines; and

j. Amateur radio:

 Enabling amateur radio configurations, their aerials/antennas and support structures; and

k. Telecommunications and radiocommunications:

- i. Increasing the area and height controls for structures;
- ii. Enabling connections to historic heritage buildings;
- iii. Control of the underground infrastructure in Identified Areas versus focusing on earthworks provisions; and

I. Water, wastewater and stormwater:

- Clarifying the different approaches to low impact and treatment train stormwater management;
- ii. Reference to Waikato Regional Council (WRC) stormwater guidelines;
- iii. Re-locate impervious area rules into the zone chapters;
- iv. Wastewater disposal alternatives;
- v. Water supply options, rain harvesting and firefighting water supplies;
- vi. Enabling bulk water and wastewater infrastructure in Identified Areas; and

m. Transportation:

- i. Safety and sightline provisions;
- ii. Vehicle access design requirements, including access by emergency services vehicles;
- iii. Traffic generation / vehicle movement controls;
- iv. Car parking requirements;
- v. Consistency of technical rules with latest transport standards, manuals and guidance;
- vi. Specific activity and development standards including for transport for new zones;
- vii. Road hierarchy classifications; and

viii. Adding or deleting new cycle/walkways that are in Council's walking, cycling and bridle trails strategies to the planning maps.

3 Overview of evidence

- 8. Ms Colette Hanraham attended the hearing and spoke of her concerns about the identification of an indicative walkway, bridleway, cycleway on the planning maps for her property at 126B Woodcock Road, Tamahere where it borders the Mangaharakeke Stream. She expressed concern about the use of her private land for public purposes, the lack of consultation and no thought being given to her privacy, safety or ownership. Ms Hanraham sought to delete the walkway, bridleway, cycleway from her property and Fuschia Lane. She considered there are risks with a walkway being next to a waterbody, especially when it is located in a floodplain. She considered that construction of a walkway is likely to cause loss of habitat due to removal of riparian vegetation and increased stream bank instability.
- 9. Mr Simon Dromgool attended the hearing and spoke of his desire to have an approved wastewater treatment system classified as a controlled activity. He discussed the different onsite wastewater treatment systems currently available, particularly the advanced enviro septic system which only requires a small amount of land. He considered that Tuakau sites in the order of quarter of an acre (i.e., approximately 1,000m2) should be able to be built on and serviced via an on-site wastewater system.
- 10. Mr Brendhan Greaney prepared a presentation supporting his submission to remove the Redwood Grove indicative road notation from the PDP maps. He considered that the original purpose of the indicative road was to provide access to 264 Newell Road, Tamahere but this has already been achieved from Newell Road. He considered there is no practical need to retain or extend the Redwood Grove indicative road to access Elmwood Lane properties. He outlined the advantages to focusing on Elmwood Lane as being:
 - a. It currently services the undeveloped lots:
 - b. Offers greater development options, with more properties being able to develop and not needing to be reliant on each other for access;
 - c. Minimal impact on existing residential properties;
 - d. Potentially enables access to a further undeveloped lot;
 - e. Provides a superior traffic outcome;
 - f. Is widely supported by the local neighbourhood as the preferred option;

- g. Is technically feasible as assessed by CKL Planning Surveying Engineering and that report has been provided; and
- h. Supports the transport objectives and policies of the PDP.
- 11. In response to our questions, Mr Greaney acknowledged that Elmwood Lane would need to be upgraded to accommodate the expected level of traffic.
- 12. Mr Kane Ongley attended the hearing to discuss the walkway and cycleway at Raglan between Lorenzen Bay and Cox's Bay. While he supported the concept of walkways and cycleways, he considered that the topography of that area is not suitable, and a better location would be down the bottom of the cliff but sited so the path does not get blocked or damaged by rockfalls. He had particular concerns that the rock is unstable.
- 13. Mr Leigh Shaw presented joint evidence on behalf of The Surveying Company, prepared by himself and Ms Vanessa Addy, which addressed four transport tables being:
 - a. Table 14.12.5.3 Minimum sight distances from a vehicle entrance;
 - b. Table 14.12.5.1 Separation distances of an access onto a road from an intersection or between accesses;
 - c. Table 14.12.5.14 Access and road conditions (Residential, Village, Business, Business Town Centre and Industrial Zones); and
 - d. Table 14.12.5.15 Access and road conditions (Rural and Country Living Zones).
- 14. Mr Shaw sought to remove onerous transportation standards from the PDP such as sight distances and access standards and instead rely on the Regional Infrastructure Technical Specifications (RITS). He considered this to be a "living" document that can easily be updated without the need to go through a complex plan change process.2 In particular, he sought deletion of Table 14.12.5.3 Minimum sight distances from a vehicle entrance and Table 14.12.5.15 Access and road conditions (Rural and Country Living Zones) and reliance instead on the RITS.
- 15. He considered that Table 14.12.5.1 contradicts Rule 16.4.11 Subdivision Road frontage, as the table requires vehicle access for new subdivision to be separated by 20 metres, while Rule 16.4.11 Subdivision requires a minimum road frontage of only 15 metres. He observed that either a restricted discretionary activity resource consent is required as part of the subdivision consenting process, or an inefficient lot yield and

² Joint Statement of evidence by Leigh Shaw and Vanessa Addy on behalf of The Surveying Company Ltd, paragraph 9, dated September 2020.

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- unnecessary impermeable areas will result. He considered that deletion of the separation distances would encourage innovation and self-expression.3
- 16. Mr Shaw considered that Table 14.12.5.14 Access and road conditions would very much restrict and limit future potential Residential and Village zone Subdivisions, and in particular the requirement for an 8-metre legal right of way (ROW) width and 5-metre carriageway width. He considered that an 8-metre width simply cannot be obtained in most in-fill residential situations and is not an efficient use of the residential land resource.4 He supported increasing the potential number of users of a private way or ROW from 8 to 20 dwellings in accordance with NZS 4404:2010 Land Development and Subdivision Infrastructure Table 3.2 Roading Design Standards.
- 17. Mr Phillip Barrett expressed similar concerns about Table 14.12.5.14 Access and roads, and the 8-metre width requirement. He did not consider this to be an efficient use of the residential land and supported it being reduced to three metres for a single lot and scaled up from there.
- 18. Ms Miffy Foley appeared on behalf of WRC and expressed her support for a number of the recommendations in the section 42A report. She focused on the following three particular areas which she considered to be problematic:
 - a. Low impact approach to stormwater, where she considered there was a gap in the rule framework if an activity did not meet the permitted activity standards. She sought an additional matter of discretion to enable best practice low impact stormwater design to be considered;
 - b. Inconsistency of the provisions for identified areas, particularly in significant natural areas; and
 - c. Policy and rules needed to enable the maintenance, repair, replacement and upgrade of WRC's flood protection infrastructure which is critical for protecting life and property. The proposed definition of "infrastructure" includes drainage systems but not flood protection. The consequence of this is that rules in Chapter 14 do not apply to WRC flood protection infrastructure and its maintenance, repair, replacement and upgrade would thus be a non-complying activity.
- 19. Mr Hywel Edwards presented evidence on behalf of First Gas. He outlined the location and nature of First Gas's infrastructure within Waikato District and focused on the gas infrastructure in the Rural Zone. He sought inclusion of a definition for "gas

³ Joint Statement of evidence by Leigh Shaw and Vanessa Addy on behalf of The Surveying Company Ltd, September 2020, paragraph 13

⁴ Joint Statement of evidence by Leigh Shaw and Vanessa Addy on behalf of The Surveying Company Ltd, September 2020, paragraph 17

transmission network" and, in addition to the gas pipeline itself, sought that the ten aboveground gas stations be included on the planning maps. He also made the point that not all of the infrastructure is underground.

- 20. A key concern for Mr Edwards was to protect infrastructure from reverse sensitivity effects in accordance with Objective 6.16 of the PDP. He outlined the differing risk profile for the aboveground versus belowground gas infrastructure. He provided examples of where the gas transmission line is located close to a sensitive activity and the difficulties that causes for First Gas's day-to-day operation of the network.
- 21. Mr Chris Scrafton, Ms Ilze Gotelli and Mr Warren Bangma represented Watercare Services Ltd ("Watercare"). Ms Gotelli described the key water and wastewater infrastructure owned and operated by Watercare which includes wastewater treatment plants, water takes, and water storage dams and lakes. We understand that Watercare manages Council's water, wastewater, and stormwater assets under an agreement signed in October 2019. Ms Gotelli and Mr Scrafton outlined the difficulties that the PDP provisions are likely to cause. Ms Gotelli described that water and wastewater infrastructure often has a functional need to locate next to rivers, lakes, the coastal marine area or in forested catchments.⁵
- 22. These are areas which the PDP has often delineated as Identified Areas, but the management of these in the PDP means that water treatment plants, wastewater treatment plants and aboveground reservoirs within Identified Areas require resource consent as non-complying activities (Rule 14.11.4). Mr Scrafton considered that the policy framework for infrastructure in Identified Areas means that infrastructure will generally struggle to pass either of the gateway tests for non-complying activities in section 104D of the RMA.6 He considered that in order to give effect to the National Policy Statement for Urban Development 2020 (NPS-UD) and RPS, water treatment plants, wastewater treatment plants and aboveground reservoirs (all as defined regionally significant infrastructure) within Identified Areas should be discretionary activities rather than non-complying activities. He observed that the only difference between a discretionary and non-complying activity status from a resource consent perspective is the gateway tests in s104D of the RMA that are applied to a non-complying activity.7
- 23. In addition, Mr Scrafton considered that the PDP should be amended to include:

⁵ Evidence in Chief of Ilze Gotelli on behalf of Watercare Services Limited, Paragraph 4.5, dated 29 September 2020.

⁶ Summary statement of Christopher Scrafton on behalf of Watercare Services Limited, Paragraph 3.1., dated 29 September 2020.

⁷ Summary statement of Christopher Scrafton on behalf of Watercare Services Limited, Paragraph 3.4., dated 29 September 2020.

- Specific guidance making it clear that the relevant objectives and policies of Chapters 2, 3 and 7 are to be applied in addition to the objectives and policies contained in Chapter 6;
- An additional policy within Chapter 6 enabling infrastructure within Identified Areas where first, there is a demonstrated functional and/or operational need, and then that any adverse effects on the values of the Identified Area be avoided, mitigated and remedied to the greatest extent practicable; and
- c. Additional policy support for the functional and operational needs of infrastructure within the policy framework for each of the Identified Areas.⁸

In response to our questioning, Mr Scrafton considered that the concept of best practicable option could be included in the policies.

- 24. Mr Richard Matthews attended the hearing on behalf of Genesis Energy Limited and his evidence focused on the areas where he disagreed with the recommendations of Mr Mackie in his section 42A report. Mr Matthews supported including a definition for "energy corridor" in the PDP, but sought a further amendment to include "coal" to ensure that the definition includes the activities that the energy corridor shown in the Huntly planning maps provides for. He sought the following amendments:⁹
 - a. Policy 6.1.3 Technological advances to include the word "enable" the efficient use of infrastructure. He considered that this policy does not contemplate situations where new technologies enable better use of infrastructure;
 - b. Policy 6.1.9 Environmental effects, community health, safety and amenity to avoid any implication that Council may "require" the "operation, maintenance, repair, replacement, upgrading and removal of infrastructure";
 - c. Objective 6.3.6 Non-renewable energy to include explicit reference to electricity generation;
 - d. Policy 6.1.17 Regionally Significant Infrastructure to include construction, operation, maintenance, repair, replacement and upgrading of infrastructure, not just development and use. He supports the inclusion of a policy addressing Regionally Significant Infrastructure; and

⁸ Summary statement of Christopher Scrafton on behalf of Watercare Services Limited, Paragraph 2.2, dated 29 September 2020.

⁹ Summary statement of Richard Matthews on behalf of Genesis Energy Limited, Paragraphs 7-10, dated 15 October 2020.

within the Rural Zone.

25. Recognition in Rule 14.12.1.4(1)(d) to include specific provision for up to 85 heavy

vehicle movements per day for transport of ash away from the ash management area

- 26. Ms Sara Brown presented evidence on behalf of WEL Networks and whilst she was generally supportive of the overall intent of the PDP, she sought amendments to recognise the importance of electricity and telecommunication infrastructure as provided in Part 2 of the RMA. Ms Brown helpfully set out the PDP provisions which she supported, but focused her evidence on four outstanding matters. WEL's submission sought the inclusion of a new rule that:
 - a. applies to the design and location of infrastructure services; and
 - b. requires all new subdivision and development to provide utilities corridors in the road reserve free of tree plantings in accordance with Tables 14.12.5.14 and 14.12.5.15.
- 27. The reason for this was to ensure sufficient space is available for WEL to install its network utility equipment, and for vegetation and utilities to co-locate in berms without damaging each other. Non-compliance with this standard would cascade to a discretionary activity status.
- 28. The second issue was an amendment to Rule 14.3.1.1 P2 Minor upgrading of existing infrastructure, relating to condition (a) to allow existing poles to be relocated within 10 metres of the existing location rather than the 5-metre condition recommended by Mr Mackie in his section 42A report. Ms Brown explained that WEL will generally only move poles if there is an ongoing occurrence of car versus pole accidents or the ground is found unstable or unsuitable for such infrastructure. In both instances, a restriction of five metres is unlikely to be enough and has the potential to delay necessary safety works.¹⁰
- 29. The third matter was the deletion of a condition associated with Rules 14.6.1 P1 and P2 which provides for small-scale and community-scale distributed renewable energy generation as a permitted activity. Specifically, WEL requested the deletion of condition (b) which would require resource consent for all electricity generation activities within a road, or unformed road. Ms Brown considered that the concerns raised by Mr Mackie regarding streetscape amenity when electricity generation activities are undertaken within the road reserve can be adequately regulated through the other conditions which limit size of any structures. She was concerned that solar panels installed on light poles or on other structures within the road reserve, such as bus stops, would be captured by this rule. She considered that electricity generation

¹⁰ Evidence in Chief of Sara Brown on behalf of WEL Networks Limited, Paragraph 5.12, dated 29 September 2020.

activities in the road reserve or road not otherwise utilised would be an efficient use of land.11

- 30. The fourth matter was the limit of a 20kW threshold with respect to community scale generation. Ms Brown considered that the 20kW limit was unreasonable and provided an example of the solar panels on the rooftop of WEL's headquarters in Hamilton which has the potential to generate electricity in excess of 20kW. She pointed out that these solar panels have no adverse effects as they are black and do not reflect light and do not produce noise. Condition (j) requires solar panels on roofs of buildings not to exceed one and a half metres in height above the existing roof which will capture any potential visual effects.12
- 31. Ms Maggie Burns and Ms Tertia Thurley represented the Director General of Conservation ("DOC"). Ms Thurley's evidence focused primarily on long-tailed bats, particularly as the Waikato District holds several populations of long-tailed bats. Her area of concern was the effect of wind farms on bats. She observed that internationally large numbers of bats are killed by wind farms using large turbines. She explained that knowledge of the impact of small wind turbines is limited, however studies show that despite bats generally avoiding small wind turbines, they do kill bats.13
- 32. She considered that the best approach to minimise risk to bats is by not allowing wind turbines in a known bat habitat and, in the absence of information, requiring bat surveys to determine bat presence/absence prior to installation.¹⁴ She also considered that the matters of discretion for small-scale and community wind farm applications need to be applied to all the habitats that bat populations require to function, not just to significant natural areas.
- 33. The evidence of Ms Burns focused on the rules for wind farms (of all scales) and DOC's further submission on Powerco's submissions relating to infrastructure in Identified Areas. Ms Burns sought the inclusion of additional matters of discretion to address any potential adverse effects associated with the construction, operation and decommissioning of small-scale and community-scale electricity generation projects, particularly on avifauna and bats. She considered that wind farms, even those of small and community scale, have the potential to have significant ecological effects

¹¹ Evidence in Chief of Sara Brown on behalf of WEL Networks Limited, Paragraphs 5.21-5.22, dated 29 September 2020.

¹² Evidence in Chief of Sara Brown on behalf of WEL Networks Limited, Paragraph 5.23, dated 29 September 2020.

¹³ Summary statement of evidence of Tertia Thurley for the Director General of Conservation, Paragraph 10, dated 15 October 2020.

¹⁴ Summary statement of evidence of Tertia Thurley for the Director General of Conservation, Paragraph 15, dated 15 October 2020.

particularly on bats.¹⁵ She supported the discretionary activity status for large-scale wind farms in the rural zone, and the non-complying activity status for large scale wind farms outside of the rural zone and within identified areas. Ms Burns opposed the amendments to Policy 6.1.10 and Rule 14.2.3 as sought by Powerco on the basis that they would be excessively permissive for infrastructure in identified areas. She considered that the current policy and rule wording is appropriate and allows consideration of significant adverse effects on identified areas.

- 34. Mr Michael Wood presented evidence on behalf of Waka Kotahi New Zealand Transport Agency (Waka Kotahi) seeking an approach to trip generation thresholds based on "Equivalent Car Movement" (ECM), and the type of road (i.e., arterial, collector or local road). Mr Wood sought a restricted discretionary activity where an activity does not comply with the relevant ECM, and either a "simple integrated transport assessment" or "broad integrated transport assessment" depending on the specific ECM. He considered that the requirements for simple and broad integrated transport assessments can be included in advice notes. He also considered that integrated transport assessments ("ITA") enable Waka Kotahi and Council to consider the proposed impact of a development on the transport system and the effectiveness of any mitigation measures that are proposed to address adverse impacts and/or opportunities to achieve wider transport outcomes such as road safety and mode shift, consistent with Council and Government priorities. He considered ITAs address a range of initiatives to mitigate effects by influencing behaviour change including opportunities for walking, cycling, new technology, parking or an alternative land use approach if considered necessary (this could be in cases where the operating performance of the network is poor). 16
- 35. Mr Robert Swears presented evidence on behalf of Waka Kotahi. Mr Swears focused on the trip generation rules and the need for ITAs to accompany resource consent applications involving traffic generating activities where those activities may result in adverse effects on the transport network. He proposed amendments to the notified version of the PDP that set appropriate ECM limits for new land use activities, which clearly specify what level of information would be required for any application for resource consent and put in place relevant assessment criteria. Mr Swears addressed the evidence of Mr Arbuthnot on behalf of Ports of Auckland Limited and partly agreed that while the PDP provides a mechanism to enable the traffic effects to be considered, the varying rates and thresholds of Rule 14.12.1.4 P4 do not adequately allow for the effects associated with heavy vehicles.17

¹⁵ Summary statement of evidence of Maggie Burns for the Director General of Conservation, Paragraph 7, dated 15 October 2020.

¹⁶ Summary statement of evidence of Michael Wood on behalf of Waka Kotahi, Paragraph 3.3, dated 15 October 2020.

¹⁷ Summary statement of evidence of Robert Swears on behalf of Waka Kotahi, Paragraph 3.3, dated 15 October 2020.

- 36. Ms Butler on behalf of KiwiRail expressed concern that controls designed to protect landscape and natural character areas do not provide for necessary works associated with regionally significant infrastructure. She considered that Rule 14.3.1.3(3)(b) and Rule 14.3.1.3(3)(c)-(e) will restrict KiwiRail's ability to carry essential works to enable the safe and efficient operation of the rail network.
- 37. Mr Douglas Birt presented evidence on behalf of New Zealand Association of Radio Transmitters Incorporated. Mr Birt explained what Amateur Radio is and the value it provides to the community. He expressed concern at Mr Mackie's recommendation to reject the definition of Amateur Radio Configurations, as Mr Birt considered without the definition there is a risk of unlicenced operators establishing. He then helpfully outlined all the other amendments and explanations provided by Mr Mackie which he agreed with.
- 38. Mr Shravan Miryala presented evidence on behalf of Counties Power Limited and focused on three issues:
 - a. Provisions that enable overhead distribution lines in Village Zone; Country Living Zone; Industrial and Heavy Industrial Zones and within formed and unformed roads adjacent to these Zones. He advised that most new subdivisions in urban areas will incorporate underground power cables as space/area for ducting is provided for in the subdivision layout within roads and as required by the Territorial Authority's engineering standards. He considered overhead power cables were acceptable in in the industrial areas due to the reduced level of amenity, and the semi-rural low density character of the Village Zone and the Rural Lifestyle Zone; 18
 - Subdivision within proximity of existing lines should be protected from subdivision, use and development in a manner similar to Transpower's National Grid; and
 - c. The permitted size of a switch room should be increased, or a less onerous activity status imposed such as a controlled activity. Mr Miryala provided examples of the size of existing switch rooms which range from 187m² in Tuakau to 480m² in Pokeno.
- 39. Ms Rachel Bilbe spoke about the advantages of having overhead electricity distribution lines, and the ability to find and fix faults more rapidly than if the cables are underground. She also described the standard dimensions of support structures for electricity distribution.

¹⁸ Evidence in Chief of Shravan Miryala on behalf of Counties Power Limited, Paragraph 21, dated 29 September 2020.

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- 40. Dr Joan Forret presented legal submissions on behalf of Ian McAlley and expressed concern that the PDP retains references to Te Kauwhata West in Chapter 14. Mr McAlley considered that the Structure Plan should be removed and Te Kauwhata West should now be fully integrated into the general Residential Zone, negating the need for such references in the infrastructure provisions.
- 41. Dr Forret also addressed Policy 6.5.2 and the inclusion of a new clause (ix) that acknowledges the relationship of the long-term goals and advantages of an efficient, effective and integrated land transport network, whilst noting the likelihood of adverse effects on the environment which changes in construction will bring.¹⁹
- 42. Mr Chris Horne presented evidence on behalf of Chorus New Zealand Limited, Spark New Zealand Trading Limited and Vodafone New Zealand Limited. He considered that the section 42A report recommendations adequately address many of the matters raised in the submissions by these telecommunications companies. Accordingly, Mr Horne's evidence focussed only on three outstanding matters being:
 - a. Service connections to heritage buildings which he said should be a controlled activity. He considered this supports the ongoing, adaptive use of these buildings and contributes to their long-term upkeep, whilst ensuring any service connections are appropriately designed and positioned via a controlled activity resource consent;
 - b. Below ground telecommunications facilities in Identified Areas should have no standards, as once the infrastructure is in place there are no ongoing adverse effects on the values and attributes of Identified Areas. He noted that there are separate rules for earthworks for infrastructure in Identified Areas which would be triggered by the installation of underground infrastructure in Identified Areas; and
 - c. Changes to the description of Rule 14.1.10 P7 and the standards in Rule 14.10.1.5 to provide improved clarity that the rule applies to antennas that are not dish and panel antennas and to make the standards more workable. Mr Horne illustrated that these antennas have limited bulk and visual impact and are only enabled by the rule to the extent they would be attached to other buildings or structures that in themselves would need to be existing, and comply with District Plan rules.²⁰

¹⁹ Legal submissions on behalf of Ian McAlley, Paragraphs 28-29, dated 14 October 2020.

²⁰ Summary statement of evidence of Chris Horne on behalf of the telecommunications companies, Paragraph 10, dated 21 October 2020.

- 43. Mr Graeme McCarrison, Mr Andrew Kantor and Mr Colin Clune also presented joint evidence on behalf of the three telecommunications companies. Their evidence addressed three main issues being:
 - a. An explanation of the provision of telecommunication connections for new lot subdivisions and how compliance with the provisions can be achieved. The evidence considered that compliance with Rule 14.3.1 P12 should be via formal confirmation from the relevant telecommunication network operator but not retail telecommunication service providers;
 - b. Support for the inclusion of a controlled activity rule for service connections to the façade or item specifically listed in Schedule 30.1; and
 - c. Outlining the importance of the National Environmental Standards for Telecommunications Facilities 2016 (NES-TF).
- 44. Transpower New Zealand Ltd ("Transpower") was represented by Mr Dougall Campbell, Ms Pauline Whitney and Mr Andrew Renton. Mr Campbell explained that Transpower is responsible for maintaining, upgrading and development of the National Grid as well as the operational requirements and engineering constraints that both dictate and constrain the way it is managed. He summarised the National Policy Statement on Electricity Transmission 2008 (NPS-ET) and the need for the PDP to give effect to that document, in terms of managing the effects of land use and development on the National Grid. He stated that the PDP needs to manage land use, subdivision and earthworks activities around the National Grid.21
- 45. Mr Renton described the National Grid assets in the Waikato District and the typical operation, maintenance and upgrade works required as well as the safety issues and reserve sensitivity effects Transpower needs to manage. He helpfully described the impacts of third-party activities on Transpower's assets and operations. The planning approach adopted by Transpower is to have a National Grid corridor comprising a National Grid Yard and National Grid Subdivision Corridor. Mr Renton explained that the yard and corridor widths are the bare minimum necessary to ensure that Transpower's maintenance, repair, upgrade and operation activities are not compromised. He explained the relationship between the National Grid yard and the New Zealand Electrical Code of Practice for Electrical Safe Distances:2001 (NZECP34:2001) and considered that while NZECP34:2001 may adequately provide for the minimum safe electrical distances for smaller buildings and structures around transmission lines, it does not prevent underbuilds nor does it ensure that the

²¹ Summary statement of evidence of Dougall Campbell on behalf of Transpower New Zealand Limited, Paragraph 8, dated 15 October 2020.

operation, maintenance, upgrade and development of the National Grid is not compromised.22

- 46. Ms Whitney's evidence focused on the wording changes she sought to specific provisions including:²³
 - a. Policy 6.2.5 National Grid to clarify the application and relationship of the policy to other PDP provisions;
 - b. Activity status for new National Grid substations/switching stations within Identified Areas where a discretionary activity status is supported rather than non-complying;
 - National Grid specific Earthworks Rule 14.4.2. RD3 and Rule 14.4.4. NC11
 where two minor amendments are sought to clarify the application of and
 relationship between the rules;
 - d. National Grid Yard Rule 14.4.1.2 P2 to delete the recommended prescriptive list of permitted farming related activities (clause (g)) (on the basis such activities are already permitted under other rules);
 - e. An amendment is also sought to Rule 14.4.4 NC5 and Rule 14.4.4 NC9 to clarify the relationship to the permitted rules and the insertion of a 'catch all' non-complying rule to capture buildings and structures not included within the permitted rules; and
 - f. Advice Notes for 14.1 Introduction to clarify that Transpower will be considered an affected party should the National Grid corridor rules not be complied with.
- 47. Ms Lynette Wharfe presented evidence on behalf of Horticulture New Zealand and focused on the provisions of concern, being:
 - a. Policy 6.1.2 "Development, operation and maintenance" where she did not support the addition of the words 'the need to access infrastructure';
 - b. Policy 6.1.4 "Infrastructure benefits" where she sought deletion of clause iv) 'Managing adverse effects on the environment' as it is not a 'benefit';
 - c. Objective 6.1.6 and Policy 6.1.7 "Reverse sensitivity" where she was concerned that the provisions are being driven by the need to give effect to the NPS-ET,

²² Summary statement of evidence of Andrew Renton on behalf of Transpower New Zealand Limited, paragraph 10, dated 15 October 2020.

²³ Evidence in chief of Pauline Whitney on behalf of Transpower New Zealand Limited, paragraph 13, dated 29 September 2020.

whereas Policy 6.2.6 applies specifically to reverse sensitivity and the National Grid, essentially resulting in duplication. She also expressed concern about the words "protected" and "avoid" in those provisions;

- d. Policy 6.1.12 "Co-location of compatible facilities" where she supported a minor change to include specific reference to reverse sensitivity;
- e. Policy 6.1.17 "Regionally significant infrastructure" where she supported the addition of a specific policy for regionally significant infrastructure but was concerned with the section 42A recommended wording;
- f. She opposed reference to the gas network being added to the National Grid provisions;
- g. Objective 6.2.1 "National Grid" where she sought amendments to ensure consistency with the NPS-ET;
- h. Policy 6.2.5 "Environmental effects" where she sought amendments to avoid, remedy or mitigate adverse effects on areas other than overlays which reflect section 6 of the RMA;
- i. Policy 6.2.6 "Reverse sensitivity" where amendments were sought to better articulate the management of reverse sensitivity near the National Grid;
- National Grid rules in section 14.4 to ensure that there is consistency with NZECP34:2001 where appropriate; and
- k. Definition of minor upgrading to acknowledge an increase in voltage.
- 48. Mr Mark Arbuthnot presented evidence on behalf of Ports of Auckland and addressed amendments to Rule 14.12.1.4 P4 to reinstate the permitted traffic generation thresholds of the Operative District Plan as they relate to the Horotiu Industrial Park. He opposed the evidence from Mr Wood on behalf of Waka Kotahi which had the effect of significantly reducing the permitted activity traffic generation "thresholds" of Rule 14.12.1.4 P4 in relation to the Horotiu Industrial Park. He expressed concern that Mr Wood had not considered the effect of the proposed rule on the ongoing development of the Horotiu Industrial Park as a strategic industrial node and how a requirement to prepare an ITA could be incorporated into the existing rule framework of the PDP.24 As the rule deems one heavy vehicle to be equivalent to three cars, he considered Waka Kotahi's approach will have the effect of reducing the permitted traffic generation of the Horotiu Industrial Park by one third.

²⁴ Summary statement of evidence of Mark Arbuthnot for Ports of Auckland Limited, Paragraph 2.5, dated 15 October 2020.

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- 49. Kāinga Ora was represented by Mr Douglas Allan, Dr Alex Devine, Mr Brendan Liggett, Mr Phil Stickney, Mr Matt Lindenberg and Mr Jon Styles.
- 50. Mr Allan outlined the three matters which concern Kāinga Ora, being:
 - a. The National Grid Subdivision Corridor;
 - b. Noise and vibration generated by state highways; and
 - c. Noise and vibration generated by the trunk railway network.
- 51. He explained that in each case the key issue is whether and to what extent owners of land adjacent to those networks should be constrained in their activities or be expected to mitigate potential adverse effects generated by the infrastructure. ²⁵ He advised that Kāinga Ora opposes the extent and nature of controls proposed with respect to all three categories of infrastructure networks.
- 52. Mr Lindenberg focused on the National Grid Corridor which controls subdivision in close proximity to the National Grid. He considered that the spatial extent of the National Grid Subdivision Corridor should better reflect the actual spatial extent of the effects which may be generated. He considered that a more fulsome assessment of the costs and broader impacts of imposing the PDP National Grid Overlay package of provisions is required to be undertaken, particularly in relation to urban land.26
- 53. In addition to addressing the corridor around state highways and rail, Mr Stickney also addressed changes to Table 14.12.5.7 and Table 14.12.5.14., which regulate minimum parking standards and accessway and road corridor widths. He observed that the NPS-UD requires the removal of minimum parking standards. In relation to accessways, he considered that Table 14.12.5.14 should be amended so that where more than eight lots are created, a narrower legal width of 16 metres should be enabled instead of the standard 20-metre width in the Village and Residential Zones. Alternatively, the trigger point for the number of allotments could be adjusted upwards to enable to greater number to be serviced without a 20-metre road being required.
- 54. Although Mr Gary Schofield did not attend the hearing, he filed evidence on behalf of Powerco. He addressed the following provisions:
 - a. The definition of minor infrastructure structure and sought the inclusion of transformers, regulator stations and pumping stations;

²⁵ Legal submissions on behalf of Kainga Ora, Paragraph 1.4, dated 15 October 2020.

²⁶ Summary statement of evidence of Matt Lindenberg on behalf of Kainga Ora, Paragraph 4.1, dated 15 October 2020.

- Inclusion of support structures for the distribution of electricity as a permitted activity in Rule 14.2.1 P1, and exemption of the height in relation to boundary rules for support poles associated with service connections
- c. Amendments to Rule 14.3.1 P5 for works to be undertaken by a "works arborist";
- d. Inclusion of the requirement for compliance with NZCEP34:2001 in Rule 14.5.1.3 P5;
- e. Including additional matters of discretion in Rule 14.5.2 RD2 addressing safety;
- f. Inclusion of "regionally significant infrastructure" in Objective 6.1.6; and
- g. Amendments to Policy 6.1.9 to recognise that network utilities cannot always be located to avoid all adverse effects on communities, and focussing on avoiding significant adverse effects as well as what is reasonably practicable to achieve in Policy 6.1.9.
- 55. Ms Christine Foster filed evidence on behalf of Meridian Energy Limited and addressed the following provisions where she disagreed with Mr Mackie's section 42A report recommendations:
 - a. Definition of "infrastructure" to include large scale wind farms and clarity as to whether the word "facilities" in that definition would include wind farms;
 - b. Definition of "minor upgrading" to include all ancillary structures of a wind farm;
 - Include reference to having particular regard to the benefits of use and development of renewable energy in Policy 6.1.4, given section 7 (j) of the RMA;
 - d. Amend Policy 6.1.7 to give effect to Policy D of the National Policy Statement for Renewable Electricity Generation to manage activities to avoid reverse sensitivity effects on existing and consented renewable electricity generation facilities;
 - e. Increase the distance for relocation and height of +50% in Rule 14.3.1.1 (1) (a), (b) and (c): Minor Upgrading Thresholds;
 - f. Increase the permitted height for Rules 14.6.1.2, 14.8.1.1 (a) (ii) and 14.8.1.2 (a) Provision for Wind Investigation Structures to enable measurements to be made at a similar height to that occupied by wind farm structures (e.g., 80 metres);
 - g. To acknowledge widely accepted NZS6808:2010 as the appropriate methodology for assessing wind turbine noise, in Rule 14.6.3 (a) D1: Discretionary Activity Provision for Large-Scale Wind Farms;
 - h. Improve clarity in Rule 14.6.4 NC1 and Rule NC2; and

- i. Meteorological facilities that do not meet the permitted standards should cascade to restricted discretionary rather than discretionary activity status.
- 56. Sir William Birch filed evidence on behalf of Annie Chen opposing some of the section 42A report recommendations. Sir William did not support the replacement of "discourage" with "avoid" in Policy 6.4.4, particularly given recent case law on the impact of avoid provisions and that it represents an absolute policy position. He outlined an alternative approach whereby Policy 6.4.4 contains a qualifier as to the scale of effects that should be avoided, such as "significant", or "manage" is used instead. He helpfully provided examples of policies from other plans.
- 57. Ms Carolyn McAlley filed evidence on behalf Heritage New Zealand Pouhere Taonga ("Heritage NZPT") and expressed support for Mr Mackie's recommended amendments to Policy 6.1.10 and Policy 6.2.5 (a) (v) (although she did not support the inclusion of the words "where practicable"). She considered these policies provide a clearer expectation of the outcomes expected in relation to the finite section 6 resources and better supports the non-complying status of some of the activities.
- 58. Ms Hilary Walker filed evidence on behalf of Federated Farmers of New Zealand and expressed general support for the recommended changes by Mr Mackie in his section 42A report, except for the parameters used for upgrading in the National Environmental Standard for Electricity Transmission, which Ms Walker preferred instead of those recommended by Mr Mackie.27 Ms Walker also clarified that the submission from Federated Farmers on Policy 6.1.11(a) was to limit undergrounding of new infrastructure to residential and urban areas.
- 59. Ms Alec Duncan filed evidence on behalf of the Ministry of Education which focused on carparking for educational facilities. She noted that the NPS-UD requires deletion of car park requirements from district plans and supported deleting the carparking table and related objectives and policies now rather than in a later plan change. Ms Duncan also addressed traffic movement rates for education facilities.
- 60. Ms Duncan also filed evidence on behalf of Fire and Emergency New Zealand and expressed support for the recommendations made by Mr Mackie:
 - a. To retain policy 6.4.3 and replace the word "supply" with "management";
 - b. Largely retain Policy 6.5.2 i as drafted;
 - c. Amend Rule 14.12.1.1 Vehicle access for all activities to ensure sufficient access for firefighting purposes;

²⁷ Evidence in chief of Hilary Walker on behalf of Federated Farmers of New Zealand, Paragraph 10, dated 28 September 2020.

- d. Include access clearance requirements for firefighting purposes as a matter of discretion in Rule 14.12.2; and
- e. Amend Tables 14.12.5.14 and 14.12.5.15 to provide clarity and certainty ensuring that accesses are appropriately designed to facilitate access to sites by fire appliances.
- Ms Duncan did not support Mr Mackie's recommended amendments to Rule 14.3.1.8 61. which excluded the requirement to have an adequate supply of water and access to water supplies for firefighting purposes in the Rural and Country Living Zone. Ms Duncan considered that despite not having reticulated water supplies in these zones, there are a range of possible solutions to ensure a firefighting water supply in such circumstances.

Sensitive land uses in close proximity to state highways and rail corridors

- Mr Mike Wood on behalf of Waka Kotahi sought new rules for managing sensitive 62. activities adjacent to existing or planned state highways, including modifications to existing sensitive activities. His new rules are intended to be in addition to the notified "no build" setbacks within the PDP. In essence, Mr Woods sought amendments to require new or altered buildings within 100 metres of a state highway that contain noise sensitive activities to comply with specified standards for noise and vibration.
- 63. Dr Stephen Chiles considered that due to the nature of their operations, KiwiRail and Waka Kotahi are unable to internalise all noise and vibration effects associated with their activities. He considered that adverse effects on new and altered buildings containing sensitive activities can be avoided and managed through well understood controls in district plans. He considered it is critical that the PDP includes appropriate land use controls to manage the location of sensitive activities near road and rail corridors, to protect these users from adverse effects and in turn to manage potential reverse sensitivity effects on KiwiRail and Waka Kotahi. Given the well accepted health effects of noise and vibration from roads, he considered it is illogical and inconsistent from the perspective of protecting human health for the PDP to contain land use controls for sensitive activities near a range of other sources but to largely omit controls near road and rail networks. He supported:
 - a. An "effects" area of 100 metres from the state highway carriageway or railway for noise sensitive activities, and an "effects" area of 40 metres from the state highway carriageway, and 60 metres from the railway, for vibration sensitive activities; and
 - b. Noise and vibration standards for new or altered buildings containing sensitive activities within the relevant "effects" areas.
- Ms Pam Butler presented evidence on this matter on behalf of KiwiRail and referenced KiwiRail's noise complaints database as showing a correlation between urban

development near the rail corridor and the number of noise complaints received.²⁸ Ms Butler considered that requiring new buildings or alterations to existing buildings for a sensitive land use within 100 metres of the railway corridor boundary to be mitigated against the effects of rail noise and vibration would strike the appropriate balance between the onus on existing lawful emitters to manage their effects and the onus on new sensitive activities to protect themselves against such effects.²⁹

- 65. Mr Nick Grala appeared on behalf of Cindy and Tony Young and Parkmere Farms and explained his concerns with the submission made by Waka Kotahi. He expressed concern at the restrictions that would be imposed by the introduction of a Noise Sensitive Overlay applying to:
 - a. The construction of all buildings for a sensitive land use within 100 metres of a state highway carriageway or legal boundary of a railway corridor;
 - b. The alteration of all buildings for a sensitive land use within 100 metres of a state highway carriageway or legal boundary of a railway corridor; and
 - c. All subdivision having to locate building platforms further than 100 metres from a state highway carriageway or legal boundary of a railway corridor (irrespective of intended use).
- 66. He observed that the PDP already contains large setback requirements for sensitive activities in relation to a state highway in various rules within the different zones.30
- 67. Mr Grala stated that hearing panels in both Auckland and Whangarei have rejected similar Noise Sensitive Overlay rule frameworks in their District Plans and outlined the reasons for those decisions. He expressed concern at the absence of a robust s32AA evaluation to support the request for a Noise Sensitive Overlay, and in particular, the absence of calculations showing the number of properties that would be affected throughout the district and costs for both existing dwellings and new builds.
- 68. Mr Grala considered that Waka Kotahi and KiwiRail's approach transfers the obligation (and cost) of managing noise to the landowners and community rather than the manager of the infrastructure generating the noise.³¹ He expressed concern that both KiwiRail and Waka Kotahi cite reverse sensitivity as the justification for the rules they

²⁸ Summary statement of evidence of Pam Butler on behalf of KiwiRail, paragraph 2.2, dated 15 October 2020.

²⁹ Summary statement of evidence of Pam Butler on behalf of KiwiRail, Paragraph 2.3, dated 15 October 2020.

³⁰ Summary statement of evidence of Nicholas Grala on behalf of Cindy and Tony Young and Parkmere Farms, Paragraph 3, dated 15 October 2020.

³¹ Summary of Nicholas Grala on behalf of Cindy and Tony Young and Parkmere Farms, Paragraph 13, dated 15 October 2020.

propose. However, Mr Grala also observed that no evidence has been provided by Waka Kotahi or KiwiRail to demonstrate that reverse sensitivity issues are manifesting within the Waikato District. He provided a useful example of how the rule would apply to alterations to an existing dwelling, which, regardless of the scale or nature of those alterations, would be required to be designed and constructed with acoustic insulation. He considered that the potential for reverse sensitivity effects simply does not exist in situations where the sensitive land uses are lawfully established in their current locations prior to the establishment of the adjoining transport infrastructure.³²

- 69. Mr Phil Stickney presented evidence on behalf of Kāinga Ora and opposed the relief sought by KiwiRail and Waka Kotahi as he considered that including acoustic and vibration controls for a distance of 100 metres each side of the outer boundary of a state highway or rail designation was an inappropriate and unjustified planning response. He considered that the analysis does not signal that there is indeed a significant reverse sensitivity effect that is manifesting itself through the curtailing of road or rail movements, nor that the particular noise environment within the Waikato District justifies their introduction. He opposed the inclusion of outdoor noise controls in terms of their practicalities (being onerous and unduly complicated) and costs for the landowner.33
- 70. Mr Jon Styles presented acoustic evidence on behalf of Kāinga Ora and considered that the management of the issue requires an integrated approach where the noise and vibration generators are required to mitigate their effects at the source and as far as is practicable. Any controls in the receiving environment should deal with the effects that cannot be internalised following the adoption of the best practicable option. He addressed noise and vibration generated by both state highways and rail by drawing on examples and measurements, then concluded that the controls are unnecessary and inappropriate.

4 Panel Decisions

71. We note that 1316 primary submission points were received on the Infrastructure and Energy provisions and these were considered in a comprehensive section 42A report, rebuttal and closing statement prepared by Mr Mackie who recommended a number of changes. This is a substantive section of the PDP, so we have structured our decision into sections which largely reflect the structure of Chapter 14 with a separate section for the objectives and policies in Chapter 6. Given the sheer volume of submissions, we do not attempt to address every submission point individually and instead focus on them thematically by reference to the key changes sought by submitters.

³² Summary of Nicholas Grala on behalf of Cindy and Tony Young and Parkmere Farms, Paragraph 16, dated 15 October 2020.

³³ Summary statement of evidence of Phil Stickney on behalf of Kainga Ora, Paragraph 3.3-3.4, dated 15 October 2020.

4.1 Overall approach to infrastructure

- 72. The key overarching general themes emerging from broad submissions applicable to infrastructure and energy relate to:
 - a. Better integration between zone and infrastructure provisions;
 - b. Energy efficiency;
 - c. Definitions; and
 - d. Mapping of potential sites for infrastructure and energy-related facilities.
- 73. While a number of submitters sought amendments to the infrastructure provisions to better integrate them with land use planning, we are satisfied that integration is already embedded in the objectives and policies in Section 4.7 Urban Environment and Section 6.4 Infrastructure, Subdivision and Development. The rules in Chapter 14 also ensure that subdivision and development is appropriately serviced. We do not consider that any specific amendments are required in the infrastructure provisions to address these submission points.
- 74. Similarly, a number of submitters sought that the PDP actively enables energy efficiency initiatives and the implementation of solar power. We consider that the PDP already addresses this by virtue of the objectives and policies in Section 6.3 and the rules in section 14.6.1. We consider this approach gives effect to the NPS-REG and the relevant RPS provisions, such that no specific initiatives are required.
- 75. Definitions were the focus of a number of submissions, and we have outlined our findings on each as follows:
 - a. Minor infrastructure structure while submitters sought to include specific structures in this definition, we have not made any changes to avoid an extensive list of structures that may be read as being all-inclusive. Some of the concerns are addressed by the height and area standards in the rule for minor infrastructure structures.
 - b. Minor upgrading of existing infrastructure we have not made any amendments to this definition as we do not consider it is appropriate to limit increases in voltage to existing lines as sought by Horticulture New Zealand nor include ancillary activities as sought by Meridian Energy.
 - c. National Grid terms we note that the definitions for National Grid Yard and National Grid Corridor were unfortunately transposed in the PDP and have corrected this. We have largely adopted the submission of Transpower and consider that the amendments provide additional clarity.

- d. Infrastructure we have not made any changes to this definition to avoid inconsistency with the RMA definition.
- e. Regionally Significant Infrastructure we have added a definition for this term, for the reasons set out in Decision Report 5: Strategic Directions.
- f. Road network activities we consider it appropriate to recognise that wastewater and water supply management structures are routinely located in the road corridor, and that rail activities are to be treated in the same way as road network activities where they are located within the road corridor.
- g. Design speed a new definition is inserted to provide clarity regarding the tables in Chapter 14.12.
- h. Energy corridor we agree that amendments are appropriate to clarify that it provides for activities associated with the Huntly power station.
- Land transport network we agree that inclusion of this definition will appropriately recognise the whole transport system and the functions that road, rail, cycling and walking facilities have.
- j. Limited access road we agree that amending the definition will better describe their legal status.
- 76. We have not made any other changes to definitions as we consider they are either not necessary or are addressed by other provisions in the PDP (e.g., height and area). We have set out the amendments to the Definitions in Decision Report: 30 Definitions.
- 77. A number of submission points relating to a variety of discrete issues were addressed in section 19 of Mr Mackie's section 42A report. We agree with his analysis and have not made any changes to the provisions as a result.

4.2 Infrastructure in Identified Areas

- 78. This matter was the focus of a number of submitters. Many sought a more enabling approach to significant infrastructure in Identified Areas, while others, such as Tainui o Tainui and Heritage NZPT, sought protection of the Identified Areas.
- 79. Mr Scrafton's evidence on behalf of Watercare Services Ltd (Watercare) drew to our attention that around 20 percent of the Waikato District is included within the Identified Areas. Mr Scrafton observed that this includes areas next to rivers, lakes, and water storage lakes where their water and wastewater assets are already located, and where

there may be a functional or operational need to locate further water and wastewater assets in the future.³⁴

- 80. We agree that the management of key infrastructure within Identified Areas needs to be carefully managed as the infrastructure is often needed to provide for the health and safety of the community and there can be operational constraints as to where the infrastructure can be located. This obviously needs to be balanced against the requirements of section 6 of the RMA and policy directives in the relevant national policy statements and the RPS. Overall, we agree with Mr Scrafton that there needs to be explicit recognition of the operational and functional needs of infrastructure, particularly for regionally significant infrastructure, and have included a new clause (b) in Policy 6.1.10.
- 81. Turning to the activity status for water treatment plants and aboveground reservoirs in Identified Areas, we agree with Mr Scrafton and Mr Bangma that a discretionary activity status is more appropriate than non-complying. With the interpretation of the rules, these activities are informed by objectives and policies which primarily serve to protect the values of the Identified Areas but recognise the operational and functional needs of infrastructure. We consider this approach is the most appropriate way to achieve the objectives in Chapter 3, 6, and 7 of the PDP.

4.3 Objectives and Policies

- 82. All of the objectives and policies relating to infrastructure are contained in Chapter 6 Infrastructure and Energy. In our consideration of the submissions on the objectives and policies we have been cognisant of the policy directions set out in the RPS, New Zealand Coastal Policy Statement, NPS-ET, NPS-REG and NPS-UD. We have also had regard to the relevant provisions of the Waikato-Tainui Environmental Plan and Maniapoto Environmental Management Plan.
- 83. We have addressed every submission in our deliberations. However, where we have rejected a submission that sought amendments to the objectives or policies, we have not necessarily addressed them individually, but record here that they have been rejected for one or more of the following reasons:
 - a. It is not the most appropriate way to achieve the purpose of the Act (in the case of objectives);
 - b. It is not the most appropriate way to achieve the objectives (in the case of policies); or

³⁴ Evidence in Chief of Chris Scrafton on behalf of Watercare Services Ltd, Paragraph 4.3, dated 29 September 2020.

c. It does not give effect to the relevant national policy statements and/or RPS.

General submissions

- 84. Powerco sought inclusion of a statement to the effect that the underlying zone and overlay objectives and policies do not apply to infrastructure activities unless specifically referred to within the Infrastructure chapter. Given that we have restructured the PDP completely to implement the National Planning Standards, we consider that inclusion of such a statement would be helpful to clarify that the objectives and policies in the zone chapters do not apply. The objectives and policies relating to District Wide Matters (e.g., Historical Heritage, Ecosystems and Indigenous Biodiversity) will be relevant where infrastructure is located within those overlays, and we consider that a statement alerting users to this would be useful.
- 85. On behalf of WRC, Ms Foley sought the inclusion of a policy framework to support new rules enabling the ongoing maintenance, repair, replacement and upgrade of flood and drainage scheme infrastructure and waterway protection. We agree that it is appropriate to recognise the importance of flood management infrastructure and have amended Objective 6.4.6 and Policy 6.4.7 accordingly. In accordance with s32AA of the RMA, after considering the options for managing this issue, we consider that the objective is the most appropriate for achieving the purpose of the Act, and the policy is the most appropriate to achieve the objective.
- 86. Counties Manukau Police sought recognition of Crime Prevention Through Environmental Design (CPTED) in the objectives and policies. We have generally rejected this request, as infrastructure providers including road controlling authorities are aware of the need for CPTED principles to be applied to the design and construction, maintenance and operation of the land transport network, including road design, structures, lighting, signage and vegetation management. It seems to us that should a consent be required for discretionary or non-complying infrastructure, it would be difficult to assess whether the infrastructure conformed with the guidelines. Where infrastructure is in remote rural locations (for example) the CPTED principles are somewhat irrelevant.

Section 6.1 General infrastructure

87. Genesis Energy Ltd sought inclusion of a policy recognising the benefits from the development and use of regionally significant infrastructure. We note this term is not used in the PDP, although it is defined in the RPS. We are mindful of RPS Objective 3.12 Built Environment, Policies 6.1 and 6.6. We agree with Mr Mackie in his section 42A report that there should be a policy for regionally significant infrastructure. We have inserted a new policy 6.1.17 Regionally Significant Infrastructure and consider this is the most effective and efficient way to achieve Objective 6.1.1 as well as the various provisions in the RPS relating to regionally significant infrastructure. In

- addition, we have added an objective in Strategic Directions which recognises the important of regionally significant infrastructure.
- 88. Turning to Objective 6.1.1, we have included reference to "upgrading" and "enhancing" infrastructure. We consider that changing "benefit" to "enhance" will encourage improvement rather than maintaining the status quo, and that there are wider benefits of infrastructure within and beyond the district. We have also deleted reference to "district" at the end of the objective as we consider that this unnecessarily constrains consideration of the benefits associated with infrastructure. We consider upgrading is a necessary part of maintaining an infrastructure network and that this better reflects the language used in the RPS. We consider the amended objective is more appropriate than the notified version in achieving the purpose of the Act.
- 89. Objective 6.1.1 is achieved by a suite of policies. There were a number of submissions on those policies and we make the following changes for the reasons outlined:
 - a. Policy 6.1.2 Development, operation and maintenance we agree with First Gas that achieving access to infrastructure is a critical component of maintaining it, although the policy cannot impinge on landowner rights to control access across their land.
 - b. Policy 6.1.3 Technological advances we have made a number of changes to this policy to broaden its application to infrastructure, networks and services. We agree with the telecommunications operators that the policy should enable technological advances that increase resilience, safety or reliability, and promote environmentally sustainable outcomes. We consider these amendments better recognise the scope of new technologies as well as their benefits.
 - c. Policy 6.1.4 Infrastructure benefits we have largely retained this policy intact with the addition of a clause that addressed the benefits of renewable energy. We consider this is necessary to ensure the PDP gives effect to the NPS-REG and reflects s7(j) of the RMA.
 - d. Policy 6.1.5 Natural hazards and climate change we agree with the amendments sought to the start of the policy by Federated Farmers and consider these amendments will result in a more meaningful policy.
- 90. Objective 6.1.6 is focused on reverse sensitivity and is achieved by Policy 6.1.7. We have amended the title of Objective 6.1.6 to make it clearer that it is focussed on the adverse effects on infrastructure rather than reverse sensitivity effects. We have deleted references to the National Grid as the definition of "infrastructure" already includes the National Grid. In any case, the National Grid has its own suite of objectives and policies. We have broadened reference to "efficient operation" to better reflect the different aspects of operating an infrastructure network. We have made similar amendments to Policy 6.1.7. We are aware of the concerns of Ms Wharfe

around the use of "protect" and "avoid" however this language reflects the RPS. We note that "avoid" in the context of Policy 6.1.7 is not absolute and is somewhat softened by the words "as far as reasonably practicable". We consider these amendments will result in a clearer objective that identifies the aspects of infrastructure which can be compromised by adverse effects of other activities, including reverse sensitivity effects.

- 91. Objective 6.1.8 primarily addresses infrastructure in Identified Areas and the values of the environment surrounding infrastructure proposals. This objective is achieved by Policies 6.1.9 6.1.17 which cover a range of matters. We have amended the beginning of Objective 6.1.8 to better reflect the RPS by focusing the objective on the "provision of infrastructure". In terms of the policies, we have made the following decisions, for the reasons stated below.
 - a. Policy 6.1.9 Environmental effects, community health, safety and amenity we have not made any changes to this policy and consider it gives effect to the RPS.
 - b. Policy 6.1.10 Infrastructure in identified areas for consistency reasons, we have expanded the description of the overlays to match those included in "Identified Areas". We have also inserted a new clause (b) in response to the evidence of Mr Scrafton on behalf of Watercare, which we have addressed in detail elsewhere in this decision.
 - c. Policy 6.1.11 Undergrounding new infrastructure we have added explicit recognition of historic heritage as a reason for having infrastructure aboveground. Given the definition of "historic heritage" in the RMA, we consider this will effectively include all aspects of historic heritage without needing to outline each one. We have not limited the application of this policy to any particular zones or environments as requested by submitters such as Counties Power, as the policy position is to "encourage" rather than any requirement to place new infrastructure underground.
 - d. Policy 6.1.12 Co-location of compatible facilities we have expanded the management options to reflect the avoid, remedy or mitigate hierarchy from the RMA.
 - e. Policy 6.1.13 Future growth areas we have adopted the amendments sought by Waka Kotahi and consider that in order to plan and develop urban areas, infrastructure and land use planning need to be integrated. We consider these amendments give effect to the NPS-UD.
 - f. Policy 6.1.16 Water conservation despite a number of submitters seeking explicit recognition of actions such as rain water tanks, we consider that the wording of the policy is broad enough to encourage a range of methods. We have made no changes to the policy.

Section 6.2 National Grid

- 92. This section of Chapter 6 is primarily intended to give effect to the NPS-ET which recognises, as a matter of national significance, the need to operate, maintain, develop and upgrade the electricity transmission network and the RPS provisions relating to the National Grid. While Kāinga Ora opposed this section, we have largely retained the notified provisions, given that the PDP must give effect to the NPS-ET. First Gas sought inclusion of the gas transmission network in this suite of objectives and policies, however we agree with Transpower that the purpose of these provisions is to give effect to the NPS-ET, and therefore broadening the provisions to the gas network is not appropriate.
- 93. In terms of Objective 6.2.1, we agree with Ms Whitney on behalf of Transpower that the addition of "and provided for" at the end of the objective is more consistent with the terminology used in Policy 2 of the NPS-ET, whereas the wording sought by Federated Farmers is not. Objective 6.2.1 National Grid is achieved by Policies 6.2.2 -6.2.6 and we have set out our amendments to each below:
 - a. Policy 6.2.2 Recognise the National Grid we have amended the title of the policy to recognise the "needs and constraints" of the National Grid to more accurately articulate and convey the content of the policy. We agree with Ms Whitney that the policy appropriately recognises the constraints associated with the National Grid and gives effect to Policy 3 of the NPS-ET and Objective 3.5.h) and Policy 6.6.c) of the RPS.
 - b. Policy 6.2.5 Environmental effects we have largely adopted the evidence of Transpower and Heritage NZPT and consider that the amendments more appropriately give effect to the NPS-ET. Federated Farmers sought the inclusion of a number of specific activities that can occur under the National Grid, but we consider this is more appropriately addressed in the rules.
 - c. Policy 6.2.6 Reverse sensitivity and the National Grid we have largely adopted the amendments sought by Transpower to focus the policy on adverse effects on the National Grid. Federated Farmers sought to include an extensive list of activities that can occur within the National Grid corridor, but consider this is more appropriately addressed in the rules. We have included reference to "to the extent reasonably possible" in clause (i) in response to the submission from Horticulture NZ, and acknowledge the comments from Ms Whitney that she is comfortable with its inclusion on the basis that it reflects Policy 10 of the NPS-ET.

Section 6.3 Energy

94. This section of the PDP is primarily focused on giving effect to the NPS-REG and the RPS objectives and policies addressing renewable electricity generation. The NPS-REG requires decision-makers to recognise and provide for the national significance of

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renewable electricity generation activities, including the national, regional and local benefits relevant to renewable electricity generation activities. There are two objectives in this section:

- a. Objective 6.3.1 Renewable energy; and
- b. Objective 6.3.6 Non-renewable energy.
- 95. Starting with Objective 6.3.1, we have deleted the reference to "activities are promoted" in response to the submission from Meridian Energy. We agree that the NPS-REG is not confined to simply promoting renewable electricity generation. We also agree that its objective is to achieve an increase in electricity generation from renewable energy sources to a level that meets or exceeds the New Zealand Government's national target for renewable electricity generation. Synlait Milk Ltd sought inclusion of an additional clause in the objective and a new policy regarding carbon free energy sources. We are not sure what this would entail and as we received no evidence, we have rejected the submission.
- 96. We have made changes to Policy 6.3.5 by adding clause (b) to enable non-sensitive rural land use activities where they can co-exist with existing renewable electricity generation facilities. While the submission from Federated Farmers sought inclusion of a number of activities that were compatible with renewable electricity generation facilities, we consider this level of detail is more appropriate in the rules. However, we do see value in acknowledging that some rural land uses will be compatible.
- 97. Objective 6.3.6 relates to non-renewable energy and we agree with Mr Matthews on behalf of Genesis Energy Ltd that it is appropriate to recognise non-renewable electricity generation explicitly in the objective. We consider this amendment will clarify that this objective applies both to the energy resource and the activity (electricity generation) that converts the non-renewable energy resource into a form of energy that can be utilised by people and communities. Including "electricity generation" within the objective enables a clearer cascade to Policy 6.3.7 which requires the recognition of non-renewable energy resources, including energy production from non-renewable energy resources.

Section 6.4 Infrastructure, Subdivision and Development

- 98. The purpose of this section of Chapter 6 is to integrate infrastructure with subdivision, use and development. There are two objectives being:
 - a. Objective 6.4.1 Integration of infrastructure with subdivision, land use and development; and
 - b. Objective 6.4.6 Stormwater, and drainage and flood management.

- 99. Starting with Objective 6.4.1, we have not made any amendments to this objective. Although Counties Power sought that protection of existing infrastructure assets be included, we consider there are other objectives which address this issue more comprehensively.
- 100. Objective 6.4.1 is achieved by Policies 6.4.2 6.4.5 and our decisions on each is set out below:
 - a. Policy 6.4.2 Provide adequate infrastructure in response to the submission from Federated Farmers, we have added wording to reflect the scenario where subdivision does not result in additional lots (e.g. boundary adjustments) or subdivision that does not result in a lot that needs servicing (e.g. subdivision to create allotments for infrastructure). We also have amended the policy in response to the submission from Waka Kotahi to acknowledge that a significant change in land use may require an increase in the level of servicing.
 - b. Policy 6.4.3 Infrastructure Location and Services we have changed the three waters from "supply" to "management" as stormwater and wastewater are not supplied.
 - c. Policy 6.4.4 Road and rail network KiwiRail and Waka Kotahi sought a number of changes to this policy and we agree that many of them are necessary to make the policy more relevant to the land transport network, rather than limiting it to "road and rail". We consider that "avoid, remedy or mitigate" better reflects section 5 of the RMA and the full spectrum of mechanisms available to manage the safety and efficiency of the land transport network. We have also added clause (b) to reflect our decisions on noise sensitive activities establishing in close proximity to existing transport corridors (which we have addressed in detail later in this decision report).
 - d. Policy 6.4.5 Land transport network infrastructure we agree that this policy is more logically located in in section 6.5. We have broadened the application of the policy to encompass the land transport network, instead of limiting it just to roads. We have also added clause (v) in response to the submission of Counties Power Ltd to recognise that network infrastructure is often installed in new roads and the design, alignment and dimension of new roads need to accommodate this.
- 101. Turning to Objective 6.4.6, we have expanded it to address flood management infrastructure and have addressed this matter in detail elsewhere in our decision. In response to the submission from Federated Farmers, we have expanded clause (a) to clarify that the objective applies where new subdivision, development or land use is proposed. Objective 6.4.6 is achieved by Policy 6.4.7 Stormwater. We have amended this policy to include flood management infrastructure and have addressed this matter in detail elsewhere in our decision. We have amended clause (a)(ii) to focus on atsource management rather than on-site management. We have amended clause (a)(v)

to refer to adjacent properties to broaden the application of the policy in response to the submission from Waka Kotahi. We have added two clauses that recognise the generation of contaminants from urban development and to require preparation of a stormwater management plan. We consider these amendments will more appropriately achieve Objective 6.4.1. We have added clauses (b), (c) and (d) in response to the submissions from Waikato Regional Council regarding flood management infrastructure which we have addressed in detail elsewhere in this decision.

Section 6.5 Transport

- 102. Objective 6.5.1 is the key objective in this section and is achieved through policies 6.5.2-6.5.7. WRC sought amendments to the provisions in this section to take into account the Regional Land Transport Plan. We appreciate the comparison undertaken by Mr Mackie in his section 42A report and have included two additional clauses to Objective 6.5.1 to recognise the important role that strategic road and rail corridors play in the district by facilitating the movement of inter and intra-regional freight. We have also amended the objective to include upgrading, as this is a key aspect of a land transport network. We have also replaced "managed" with "avoided, remedied or mitigated" to better reflect the RMA.
- 103. We set out below our decisions on each of the attendant policies:
 - a. Policy 6.5.2 Construction and operation of the land transport network we have broadened this policy to include maintenance and upgrading as these are important components of providing a safe and efficient land transport network. We have included reference to "accessibility" to recognise that accessible transport networks can enable increased levels of physical activity and community connectedness. We have also added two clauses to recognise the importance of the rail networks and freight routes.
 - b. Policy 6.5.3 Road hierarchy and function we have replaced this policy completely to recognise that different roads perform different functions, and that these functions should influence how adjacent land uses are managed. Although clause (c) contains the word "protect", it is the function of the road that is being protected which we consider to be appropriate.
 - c. Policy 6.5.4 Road standards no changes have been made. We do not consider the changes sought by Federated Farmers to be necessary as these matters are addressed by other provisions in Chapter 6.
 - d. Policy 6.5.5 Road safety we have broadened this policy to refer to "land transport network", rather than simply "roads", as well as adding "vehicle access" as a matter which can compromise the safe and efficient operation of the land transport network.

- e. Policy 6.5.6 Network utility location no changes have been made, as we do not consider that the wording changes sought by WEL Networks will improve clarity of the policy.
- f. Policy 6.5.7 Vehicle access we have largely adopted the amendments sought by Waka Kotahi. We consider the amendments will improve clarity and serve to maintain as well as improve the safety of the land transport network.

4.4 Section 14.1 Introduction

- 104. Unsurprisingly there were a number of submitters seeking inclusion of various advice notes or explanations in the front section of Chapter 14. We have not adopted all of the text sought by Federated Farmers, but we consider it is important to distinguish between on-farm infrastructure and infrastructure as provided by a network utility operator. Accordingly we have included a paragraph clarifying this difference.
- 105. We have also included a paragraph drawing attention to the Heritage New Zealand Pouhere Taonga Act 2014. In response to Mr Horne's evidence on behalf of the telecommunication companies, we have clarified that the NES-TF provisions are to prevail unless the infrastructure is located within an Identified Area other than the Urban Expansion Area. In response to Ms Whitney's evidence on behalf of Transpower, we have included a paragraph in the Introduction regarding compliance with the New Zealand Electrical Code of Practice for Electrical Safe Distances (NZCEP 34:2001) and the Electricity (Hazards from Trees) Regulations 2003. We consider this additional text provides useful context for the rules in the chapter and/or draws attention to relevant National Environmental Standards.

4.5 Section 14.2 and 14.3 All Infrastructure

106. For the purposes of recording our decision, we have combined our discussion of Sections 14.2 and 14.3 as they both apply to all infrastructure and it is not clear to us why they were split into separate sections. We consider that Sections 14.2 and 14.3 can be merged. We agree with Mr Mackie that there is potential for conflict between the "general" rules in these sections and the more specific rules in sections 14.4-14.12. We consider the advice note stating that where there is a conflict or overlap, then the more specific rules in section 14.4-14.12 is a useful clarification.

Section 14.2 Rules applying to all infrastructure

- 107. While we understand the concerns of WEL Network wanting to have utility corridors in the road reserve free of tree plantings, it seems to us from Figure 14.12.5.16 that there is no intention for utility corridors to be completely free of trees. We therefore reject this submission point.
- 108. In terms of Rule 14.2.1 P1, a number of submissions expressed concern at the maximum area and height standards, particularly where rules elsewhere in the chapter

allowed larger structures. We agree that the inclusion of these standards is likely to result in conflicting rules and confusing interpretation. We have therefore deleted the area and height standards from this rule and inserted it into all the permitted activity rules in sections 14.4-14.12, but only where there is no specific area or height standard. Powerco sought an exemption from the height standards for support poles associated with service connections and we agree that such an amendment will provide clarity. We have also made changes to how noise is measured as we consider that the notified wording would cause confusion.

109. Federated Farmers sought exclusions in a number of rules for the Rural Zone, on the basis that it is hugely inefficient and presents an onerous and inappropriate burden on farmers who need to install, maintain, repair, replace or upgrade infrastructure, including associated earthworks. It seems to us that this is part of the larger issue as to whether on-site infrastructure associated with farming is captured by Chapter 14 or not. It is our opinion that on-farm infrastructure to assist with the day to day running of a farm should not fall under the definition of "infrastructure" and therefore would not be subject to Chapter 14. We have inserted additional text in the Introduction to make that clear.

4.6 Section 14.3 General Infrastructure

- 110. The general infrastructure section covers the operation, maintenance, repair and removal, and minor upgrading of all types of existing infrastructure, temporary infrastructure, earthworks and works on and around trees. It also covers other specified activities generally associated with infrastructure works, including service connections, minor structures, signage, CCTV, and cable and pipe bridges.
- 111. Counties Power Ltd sought the inclusion of standards in Rule 14.3.1 P1 for the operation, maintenance, repair and removal of existing infrastructure, however we do not consider this is necessary. We are aware that the reason for this submission was to distinguish between repair and minor upgrade, but we consider the standards in Rule 14.3.1 P2 to be the more appropriate location to distinguish between the two.
- 112. A number of submissions addressed Rule 14.3.1 P2 which relates to minor upgrading of infrastructure. While many sought retention of the rule and to provide for minor upgrading of infrastructure as a permitted activity, a number sought amendments to the standards. In response to the submissions seeking more flexibility to increase the dimensions of an existing structure, we agree that the standards are overly restrictive. We consider that the amended standards will enable more flexibility and be more enabling of infrastructure, whilst limiting any adverse effects. We have also inserted text to clarify that the conditions for minor upgrading of infrastructure do not apply to road network activities or other lineal networks. In this regard, we agree with Council; the standards are too constraining noting the length and width of roads (particularly new roads) and they are not the most efficient approach to managing structures and activities associated with the road and transport network.

- 113. Mr Horne sought clarification of Standard 14.3.1.1 Minor Infrastructure Upgrading, on the 'largest face' of an antenna, the 'diameter of a dish' antenna, and the minor upgrading of height of 20 percent. In response, Mr Mackie recommended amendments to Rule 14.3.1.1 P2 and we agree that these changes provide more clarity.
- 114. Rule 14.3.1 P3 and Rule 14.3.4 D2 relate to temporary infrastructure. The only submission seeking changes to these rules was from Counties Power Ltd who sought to increase the allowable timeframe from 12 to 24 months. We consider 12 months is an appropriate timeframe for temporary infrastructure.
- 115. Rule 14.3.1 P4 sets out the standards for permitted earthworks associated with infrastructure. We have made several amendments to this rule in response to matters raised by submissions and in evidence, as follows:
 - a. Firstly, we have made it clear that the rule applies to earthworks for the formation and maintenance of access tracks, as this was not clear in the notified version of the rule.
 - b. Next, we clarified that the setback requirements for earthworks near a watercourse do not apply to an artificial watercourse.
 - c. We have excluded existing rail infrastructure from the waterbody standard in recognition that KiwiRail's network already exists close to or crosses over waterbodies.
 - d. We have also excluded the land transport network from needing to comply with the standard for earthworks in an Outstanding Natural Feature or Landscape for similar reasons
 - e. We have expanded the list of areas where earthworks are not able to be undertaken as a permitted activity to include all the Historic Heritage overlays and Significant Natural Areas, which was in response to the submission of Heritage NZPT.
 - f. In response to the evidence of Ms Butler on behalf of KiwiRail, we have excluded the land transport network from needing to comply with the aggregate / metal standard. We appreciate that this is necessary to enable operation of the land transport network.
- 116. Rule 14.3.1 P5 relates to the trimming, maintenance or removal of vegetation or trees associated with infrastructure and we have included a description of the circumstances when clearing vegetation is enabled by this rule. We understand that it is important for infrastructure providers to be able to trim, maintain or remove any vegetation that could affect the safe operation, maintenance or upgrade of its infrastructure. We have also clarified the level of any Significant Natural Area that can be cleared as a permitted activity in response to the concerns raised by Ms Foley on behalf of the

- Waikato Regional Council. We consider this appropriately balances the need to protect significant natural areas, while enabling safe operation of infrastructure.
- 117. Rule 14.3.1 P7 relates to electric vehicle chargers and we have amended the standards to address the concerns raised by WEL Networks. We agree that the amended standards are more reasonable and better reflect the scale and form of electric vehicle chargers.
- 118. Rule 14.3.1 P12 establishes requirements for servicing of subdivision. Fire and Emergency New Zealand sought that except for Rural and Country Living Zones, all zones must have a water supply sufficient for firefighting purposes. We agree this is necessary for the health and safety of the community, although we have added Village Zone to the excluded zones as most of these areas do not have a reticulated water supply. We have also exempted the Rural, Country Living and Village Zones from the requirement to have wastewater, water supply and stormwater connections up to the boundary. We consider these amendments reflect the general absence of reticulated three water systems in these zones.
- 119. Council sought to amend Rule 14.3.1 P12(1)(d) to address the PDP's electricity requirements for subdivision. The proposed amendment sought to acknowledge that new owners may wish to generate electricity off-grid on their lots, for example by solar or wind devices, particularly where distance from a distribution network makes electricity supply expensive. However, given that subdivision is a restricted discretionary activity in most cases, we consider any alternative supplies can be addressed through that process. This also applies to telecommunications.
- 120. Moving onto Rule 14.3.2 C1, which manages subdivision for the purposes of accommodating infrastructure, we agree with Council that standards (2) and (3) are unnecessary and have deleted them.
- 121. Rule 14.3.3 RD1 relates to minor upgrading of infrastructure that cannot comply with one or more of the permitted standards in Rule 14.3.1 P2. We have deleted the matter of discretion relating to earthworks and flood risks. We agree that these are more appropriate in Rule 14.3.3 RD2 which relates to earthworks.
- 122. Rule 14.3.3 RD2 applies to earthworks that cannot comply with the permitted activity standards in Rule 14.3.1 P3. We agree with Heritage NZPT that the values of Maaori Sites and Areas of Significance and any Heritage Items should be included in the matters of discretion.
- 123. We have included an additional mater of discretion in Rule 14.3.3 RD3 regarding the trimming of trees to ensure the effects on land transport network safety and efficiency are considered. We agree with Waka Kotahi that tree-works near the road can affect land transport network safety and efficiency and that a traffic management plan would likely be required for such works.

- 124. Planners for the telecommunications companies considered that service connections to a scheduled historic heritage area, façade or item should be a controlled activity to provide certainty rather than a restricted discretionary activity (as currently contained in Rule 14.3.3 RD6). Mr Mackie did not agree, and, on balance, we favour controlled activity status for the reasons advanced by the telecommunications companies and because service connections are critical if heritage assets are able to function and, where necessary, be adaptively re-used.
- 125. Kāinga Ora sought to replace Rule 14.3.4 D3 with a new restricted discretionary activity rule applicable to subdivisions which cannot comply with one or more of the service connection requirements in Rule P12. We agree that a restricted discretionary activity status is more appropriate, however we have modified the matters of discretion to ensure that they relate directly to the effects of non-compliance with the standards.

4.7 Section 14.4 National Grid

- 126. Of particular relevance to our decision making on the provisions concerning the National Grid are various higher order statutory documents, specifically the NPS-ET, NESETA and the relevant RPS provisions, including those relating to regionally significant infrastructure. The PDP was notified with the National Grid identified on the planning maps, and a suite of provisions relating to activities within the National Grid Yard and the National Grid Corridor. In terms of Transpower's activities, many of them are regulated under the NESETA, although this only applies to those existing as at 14 January 2010 (when the NESETA regulations commenced).
- 127. While we note the unfortunate transposition of the National Grid Yard and National Grid Corridor in the notified definitions, it seems to us that there were three areas of concern with the National Grid provisions raised at the hearing, as follows:
 - a. The extent of the National Grid Yard and Corridor;
 - b. The restriction on activities within these areas; and
 - c. Most appropriate location in the PDP for the rules that address activities within the National Grid Yard.

We address each of these matters in turn.

Extent of the National Grid Yard and Corridor

128. The extent of the National Grid Yard and National Grid Subdivision Corridor was challenged by Mr Lindenberg on behalf of Kāinga Ora, as well as other submitters who did not present evidence. Mr Lindenberg considered that a more tailored and evidence-based approach to the identification of the spatial extent of the National Grid Subdivision Corridor was warranted to better reflect the actual spatial extent of the effects which may be generated. He supported delineation of a more nuanced corridor

which reflected the physical characteristics of each span, i.e. the distance between support structures and the carrying capacity of the line.

- 129. We asked Kāinga Ora to work with Transpower to see if an agreement could be reached and it was disappointing that this did not result in any additional evidence or a more refined National Grid Corridor. Although Mr Lindenberg held up the Auckland Unitary Plan as an example of a National Grid Subdivision Corridor that varied depending on the characteristics of each span, we are very mindful that the underlying zoning in Waikato District is mostly rural, with a limited potential for underbuild or development. This is clearly a different scenario to urban Auckland.
- 130. We heard from Ms Whitney on behalf of Transpower that the three primary reasons for restricting activities within the buffer corridor are electrical risk, annoyance caused by transmission lines and reverse sensitivity, as well as restrictions on the ability for Transpower to access, maintain, upgrade and develop the lines, as well as compromising the assets themselves. It is clear to us that the National Grid Corridor and Yard are an effective way to give effect to the NPS-ET and the RPS. We confirm that it is appropriate for the PDP to have a National Grid Subdivision Corridor and National Grid Yard and this approach is consistent with other district plans. In the absence of any accurate and detailed evidence to narrow the extent of these, we retain the spatial extents as set out in the definitions (after correcting the transposed defined terms).

Activities within the National Grid Corridor and Yard

- 131. The issue which logically flows from the spatial extent of the National Grid Subdivision Corridor and National Grid Yard is the management of activities within them. Federated Farmers considered a controlled activity status for subdivision of land containing the National Grid (at least in the Rural Zone), but we do not agree given that a resource consent application for a controlled activity cannot be declined. Federated Farmers gave the example of boundary adjustments and boundary relocations. Such boundary adjustments have the potential to result in a building platform within each site and increase the risk to both people and the National Grid. We do not consider this approach would give effect to the NPS-ET. Transpower sought the inclusion of additional matters of discretion for subdivision within the National Grid Subdivision Corridor and we agree that this is a more effective way of achieving Objective 6.2.1.
- 132. Ms Whitney sought a number of additions to the list of permitted activities including fences, additions to existing buildings or structures not for a sensitive use, network utilities, non-habitable horticultural buildings and minor farming structures. We

³⁵ Evidence in Chief of Pauline Whitney on behalf of Transpower New Zealand Ltd, Paragraph 11.3, dated 29 September 2020.

consider these are appropriate within the National Grid Yard due to their nature and small scale, and because they will not compromise the operation, maintenance or any upgrade of the network itself. We agree that it is appropriate for the standards to ensure vehicular access to a National Grid support structure.

- 133. While Federated Farmers sought an allowance for farm water infrastructure, we are aware these can be significant structures (such as irrigation systems) and can pose a risk to the National Grid. For this reason, we have excluded them from the permitted activities.
- 134. There were a number of submissions regarding earthworks in close proximity to the National Grid. We agree with Ms Whitney that the rule should be simplified to improve clarity. We are aware that the National Planning Standards have changed the definition of earthworks and that some consequential amendments are necessary. Federated Farmers sought to expand the list of exempt farming activities to include maintaining non-habitable farm buildings, drinking water pipelines, tanks or troughs, fences, gates or other stock exclusion structures. We support the approach taken by Mr Mackie of focusing the rule on the scale of permitted earthworks, rather than the reason for them. In response to the submission of Heritage NZPT regarding earthworks within both the National Grid Yard and an Identified Area so that it is not a permitted activity, we do not consider this to be necessary and is more appropriately addressed by the Earthworks chapter.
- 135. Federated Farmers opposed the activity cascade to non-complying status for activities in the Rural Zone that cannot comply with the standards. In our opinion, non-complying activity status is the most effective means of giving effect to the NPS-ET's objective of managing the adverse effects of the transmission network and managing the adverse effects of other activities on the network. In particular, a non-complying activity status:
 - Most appropriately recognises and provides for the effective operation, maintenance, upgrading and development of the network, as required by Policy 2 of the NPS-ET; and
 - b. Is the most appropriate method to manage other activities to ensure the operation, maintenance, upgrading, and development of the network is not compromised, as required by Policy 10 of the NPS-ET.

Location of rules in the Plan

136. Council sought relocation of the rules for buildings, structures and sensitive land uses within the National Grid Yard into each zone chapter to ensure they were not overlooked. Ms Whitney opposed this approach and preferred that all the rules regarding the National Grid were kept together, rather than being duplicated across the Plan. While we can appreciate Ms Whitney's preference to keep the objectives, policies and rules together in the Infrastructure chapter, we consider from a Plan-

user's perspective that it is more appropriate that the land-use rules are inserted into the relevant zone chapters and the earthworks provisions are inserted into the Earthworks chapter. It seems to us that the Infrastructure chapter is focused primarily on activities undertaken by infrastructure providers. Even with cross-referencing to the Infrastructure chapter, we consider there is a real risk that the National Grid provisions will be overlooked by lay users of the Plan. The National Grid, the National Grid Yard and National Grid Subdivision Corridor sit over the following zones:

- a. COMZ Commercial zone
- b. FUZ Future urban zone
- c. GIZ General industrial zone
- d. GRUZ General rural zone
- e. GRZ General residential zone
- f. HIZ Heavy industrial zone
- g. LLRZ Large lot residential zone
- h. OSZ Open space zone
- i. RLZ Rural lifestyle zone
- j. SETZ Settlement zone
- k. TTZ TaTa Valley zone; and
- I. Road.
- 137. This approach has necessitated the rules being located in all of the zone chapters listed above, the Hazardous Substances chapter, the Subdivision chapter and the Earthworks chapter. We have left the rules in the infrastructure chapter as well to cover the situation where these activities are proposed within a road corridor.

4.8 Section 14.5 Electrical distribution

138. Mr Miryala presented planning evidence for Counties Power on this section of Chapter 14. Starting with the provisions relating to undergrounding, Mr Miryala sought provisions that enable overhead distribution lines in the Village, Country Living, Industrial and Heavy Industrial Zones and within formed and unformed roads adjacent to these Zones. In contrast, Gabrielle Parson on behalf of Raglan Naturally sought that undergrounding lines be a requirement when new line work is undertaken. Existing use rights conferred by section 10 of the RMA means that the PDP cannot require undergrounding of existing overhead lines when maintenance repair and replacement is undertaken. While we understand the operational advantages of overhead lines for the electricity distributor, are aware of the existing approach to undergrounding in the Operative District Plan (both Franklin and Waikato sections) and do not support relaxing this approach. For many reasons including character, amenity, but also road safety, we have retained the approach to enabling electricity distribution lines to be located underground, with overhead networks requiring resource consent (except for the Rural Zone).

- 139. Federated Farmers sought an increase in the height of electricity distribution support structures, but we are mindful of the evidence from Counties Power that poles rarely exceed 25 metres in height. We therefore consider that the maximum height of support structures as notified at 25 metres is appropriate.
- 140. Mr Miryala sought provisions to ensure that existing lines should be protected from subdivision, use and development in a manner similar to Transpower's National Grid. Mr Miryala clarified at the hearing that he sought inclusion of matters of control/discretion that address this issue within the subdivision rules of the individual Zone Chapters. We are mindful that the national importance of the National Grid is acknowledged and supported by a National Policy Statement, whereas electricity distribution lines are not afforded such status. We are also aware that the NZECP 34:2001 sets out distances that apply within proximity to electrical distribution lines which will go some way to protecting the lines, and Rule 14.5.1 P5 protects electrical distribution lines in terms of construction or alteration of a sensitive land use. We consider that to be the appropriate approach, and have adopted Mr Mackie's proposal to locate these rules in the individual zone chapters.
- 141. Powerco sought that non-compliance with Rule 14.5.1 P5 should result in a non-complying activity status, but we consider that potential adverse effects can be adequately managed through a restricted discretionary activity status provided that appropriate matters of discretion are included. Federated Farmers sought an exclusion for the Rural Zone but we consider that the electrical distribution network needs protection against reverse sensitivity effects as well as managing its effects on sensitive land uses, and there should be consistency across the zones.
- 142. Turning to the permitted size of a switch room, the 100 square metre permitted standard in the notified version of the PDP is rather arbitrary and we consider that a maximum size of 250 square metres is more appropriate is a more appropriate way to give effect to Objective 6.1.1. Counties Power and Powerco sought inclusion for transformers and switching stations in the Rural Zone and we agree that this change gives effect to the RPS by enabling integrated and efficient provision of infrastructure, especially as these structures are not uncommon in the Rural Zone.

4.9 Section 14.6 Electricity generation

- 143. The main themes arising from evidence and submissions on electricity generation are as follows:
 - a. Enable Huntly Power station electricity generation activity;
 - b. Permitted electricity generation standards; and
 - c. Large-scale wind farms.
- 144. We address each one of these in turn.

Huntly power station

145. We agree with Mr Matthews' and Mr Mackie's advice that the Huntly power station should have specific rules in this section of the PDP, given that it is a significant electricity generator in the district. Mr Matthews sought inclusion of "coal" in the definition for "energy corridor" to ensure that the definition is consistent with the Huntly planning maps, which depict this activity as shown in the energy corridor. We agree that this more appropriately describes the energy corridor and activities associated with the Huntly power station.

Permitted electricity generation

- 146. Ms Brown, on behalf of WEL Networks, sought the deletion of condition (b) in Rule 14.6.1 P1 and Rule 14.6.1 P2 to allow electricity generation activities within a road, or unformed road. Her primary concern is that the rule does not allow solar panels installed on lights poles or on other structures within the road reserve, such as bus stops. We agree with Ms Brown and it seems illogical to have rules preventing efficient use of existing structures in such a manner. This is particularly evident when considering the corridor access request process for structures in the road corridor and the need to give effect to the NPS-REG. We can see the value in retaining the limitations on structures in indicative roads. However, Ms Brown also sought an increase in the permitted electricity output on the basis that the 20kW limitation is impractical, unreasonable and would likely discourage this type of generation. We do not share the same concerns as Mr Mackie, and instead agree with Ms Brown that standards limiting the dimensions of the structure are more important in managing effects than limiting the power output.
- 147. We agree with Mr Mackie's recommended recognition in the standards for solar panels being mounted to a ground frame in response to the submission from Powerco.
- 148. Federated Farmers sought a permitted activity status for small-scale and community-scale electricity generation in any Identified Area in a Rural Zone, but we consider that such proposals should be subject to a resource consent process given the potential sensitivity of the Identified Areas.
- 149. Rule 14.6.1.2 P2 sets the height limit for permitted activity research and exploratory scale investigations for renewable electricity generation. On behalf of Meridian Energy Limited, Ms Foster sought an increase to the height to 80 metres to accommodate investigations required for wind generation proposals. WEL Networks sought an increase in height in the Rural Zone to 20 metres. While we can appreciate Ms Foster's concerns, we consider that a blanket permitted height of 80 metres is not appropriate due to the potential for adverse effects in certain locations. We agree that a 20 metre height is appropriate in the Rural Zone given the open character of that zone and the 10 metre maximum height permitted for buildings.

Large-scale wind farms

- 150. Ms Foster considered that NZS6808:2010 is widely accepted as the appropriate methodology for assessing wind turbine noise and sought inclusion of the following standard in Rule 14.6.3 (a) D1 "Wind turbine noise must be measured and assessed in accordance with NZS6808:2010 Acoustics - Wind Farm Noise". We agree that this is a useful inclusion for both discretionary and non-complying rules for large-scale wind farms.
- 151. Ms Foster also expressed concern at the lack of clarity around Rule 14.6.4 NC1 and Rule 14.6.4 NC2. We agree it is not clear and have made amendments to clarify that large wind farms in a Rural Zone, but not an Identified Area, are discretionary activities, and that wind farms in any other zone or within an Identified Area are noncomplying activities. We consider this is the most appropriate way to efficiently and effectively manage the Identified Areas consistent with section 6 of the RMA, the RPS and the PDP.
- 152. On behalf of DOC, Ms Burns and Ms Thurley expressed concern as to the effect of wind farms on bats. We have added "ecology and biodiversity effects" to small-scale electricity generation in Rule 14.6.2 RD1, as some of these activities could have the potential to cause bird strike and this will ensure those effects are assessed.

4.10 Section 14.7 Liquid fuels and gas

- 153. Mr Edwards' evidence on behalf of First Gas sought protection of the gas transmission network in both the planning maps and plan provisions. The gas transmission lines are identified on the PDP maps and we agree that these are appropriate to retain.
- 154. Mr Mackie advised that all of the compressor stations and delivery point stations are located on the transmission pipeline corridor, and for that reason, we do not consider there needs to be separate identification and mapping of delivery point stations on the PDP maps.
- 155. Federated Farmers of New Zealand were concerned that many farms have aboveground fuel storage and gas tanks, therefore the rules in this section would unintentionally capture those activities. We consider that that the nature and scale of liquid and gas-related storage facilities on farms is best covered by the hazardous substances provisions of the PDP rather than Section 14.7. However, we agree that there could be interpretation issues in the future so we have amended the introduction in Section 14.7 to refer to facilities "operated by a network utility operator".
- 156. Ports of Auckland also submitted on this topic seeking a restricted discretionary activity for pipelines and storage facilities that do not comply with the permitted activity rule.

We note that Mr Arbuthnot accepted the discretionary activity in his evidence, ³⁶ and we see no reason to depart from this activity status.

4.11 Section 14.8 Meteorological

- 157. The key issue with regards to this section of Chapter 14 was the maximum height for meteorological measurement masts. Ms Foster sought an increase in the maximum height of wind investigation structures to enable measurements at a similar height to wind farm structures. This request was recommended to be rejected by Mr Mackie on the basis that the effects of a structure of that height are more appropriately addressed through a resource consent application. We agree with Mr Mackie that 80 metres is significantly higher than the permitted height of a building in any zone and a resource consent process is the most appropriate route for assessing any effects of such a structure.
- 158. We agree that the additional discretionary activity rules (Rule 14.8.3 D3 and D4) sought by Council are required to complete the activity cascade.

4.12 Section 14.9 Amateur radio

- 159. The Section 14.9 Amateur Radio provisions apply over all zones and allow the associated antennas, aerials and support structures as permitted activities where they meet the activity specific conditions. We consider that having the amateur radio provisions as a separate section of the infrastructure chapter is helpful for both operators and Council. We appreciate the way Mr Birt presented his case for New Zealand Association of Radio Transmitters Incorporated and the helpful way he outlined his support for many of the notified provisions of the PDP relating to amateur radio and the further recommendations of Mr Mackie in his section 42A report. It seems to us that the remaining outstanding issue is the definition of 'Amateur Radio Configurations', particularly the recognition of licenced amateur radio operators. We note that Mr Mackie included in his closing statement a definition for Amateur Radio Configuration which includes the amendments sought by Mr Birt and we agree that this definition will provide more certainty.
- 160. We agree with Mr Mackie and Mr Birt that the amendments to the amateur radio provisions will make the provisions clearer, which is important given the highly technical nature of the standards. In terms of a section 32AA evaluation, we note that the majority of amendments are intended to simplify the description of dimensional limits, and improve the efficiency and effectiveness of the provisions. Allowing a second pole for 3.6MHz radio configurations as a permitted activity will more appropriately achieve the enabling Objective 6.1.1 Development, operation and maintenance of infrastructure, and is more efficient and effective than requiring a resource consent to be obtained. There may be small adverse amenity effects on

³⁶ Evidence in Chief of Mark Arbuthnot for Ports of Auckland Limited, Paragraph 4.1, dated 29 September 2020.

neighbours, but their occurrence will be relatively rare and are outweighed by the benefits. Similarly, the amendment to the definition of 'Amateur Radio Configurations'

is a more efficient way of achieving the objective than what was notified.

4.13 Section 14.10 Telecommunications and radio-communications

- 161. While we accept that there was no specific submission addressing the status of the National Environmental Standards for Telecommunications Facilities (NESTF), we agree with Mr Mackie that clarifying that the NESTF will prevail over the PDP except where the rules are specific to an Identified Area is a useful inclusion to the Introduction of Chapter 14.37
- 162. There are only three remaining areas of disagreement between the planners for the telecommunications companies and Mr Mackie. With regards to Rule 14.10.1 P2, we agree with Mr Horne that there is no point in have rules to manage below ground telecommunications and radiocommunications facilities, lines, cables and ducts in an Identified Area when this can be more effectively managed by the earthworks provisions. Mr Mackie considered that the earthworks provisions may not be sufficient to manage effects, particularly those of maintenance and repair, and minor upgrading of those underground facilities.38 We do not agree. We consider that the infrastructure itself is unlikely to give rise to any ongoing adverse effects as it is the earthworks that will create the effects. In addition, we note that other sections in Chapter 14 enable underground infrastructure in Identified Areas as a permitted activity, such as below ground gas pipelines (Rule 14.7.1 P2).
- 163. Heritage NZPT sought more restrictive activity status for telecommunication structures in Identified Areas and we agree in most cases that this is an effective approach to managing adverse effects on historic heritage and cultural values and achieving Objective 7.1.1. We have also included effects on the heritage item or area as a matter of discretion where infrastructure is proposed in an Identified Area. For these same reasons we have rejected the submissions from Federated Farmers that sought enabling provisions for telecommunications in identified areas in the Rural Zone.
- 164. In terms of the other amendments to section 14.10, we make the following observations:
 - a. We agree that including dimensions that match the NESTF is helpful;
 - b. We agree with the inclusion of 1.6-metre Yagi antenna on an existing pole as a permitted activity in Rule 14.10.1.4 P5; and
 - c. We agree with increasing the diameter for externally-mounted telecommunication satellite dishes and ancillary components in less sensitive zones.

³⁷ Section 42A rebuttal evidence of Trevor Mackie, Paragraph 80, dated 13 November 2020.

³⁸ Section 42A rebuttal evidence of Trevor Mackie, Paragraph 89, dated 13 November 2020.

165. The objectives of Chapter 6 Infrastructure and Energy seek to enable infrastructure (6.1.1 "Development, operation and maintenance of infrastructure: Infrastructure is developed, operated and maintained to benefit the social, economic, cultural and environmental wellbeing of the district."), and to manage adverse effects of infrastructure within the community (Objective 6.1.8). After considering the costs and benefits, we consider the amendments to Section 14.10 will be more efficient and effective in achieving the objectives than the notified provisions.

4.14 Section 14.11 Water, wastewater and stormwater

- 166. The key matters raised in submissions and evidence on this section of Chapter 14 include:
 - a. Low impact stormwater management;
 - b. Water supply;

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- c. Impervious surface rules;
- d. WRC's flood protection infrastructure; and
- e. Wastewater servicing.
- 167. As a general observation, we note that Federated Farmers had concerns that the rules in this section of the Plan would constrain primary production activities in the Rural Zone. Mr Mackie suggested including an advice note to the Introduction of Chapter 14 to clarify that on-farm infrastructure associated with primary production is not intended to be captured by many of the rules in this chapter and we agree that this is a sensible approach to providing clarity.
- 168. On behalf of Watercare, Mr Scrafton presented evidence on the need for three waters infrastructure to be located in Identified Areas. While his evidence was focused on three waters, this is part of a larger discussion on infrastructure in Identified Areas and we have addressed this elsewhere in our decision.

Low-impact stormwater management

169. A number of submitters supported low-impact stormwater design including John Lawson, Whaingaroa Environmental Defence Incorporated Society, Raglan Naturally and Jade Hyslop. It seems to us that the PDP actively encourages low-impact stormwater design. In order to be a permitted activity under 14.11.1 P1, new subdivision stormwater systems are required to meet standards including low-impact design. These standards are supported by the Regional Infrastructure Technical Specifications and WRC's control of stormwater network discharge consents, which we consider is an appropriate approach. We agree that including the Waikato Stormwater Management Guideline and Waikato Stormwater Runoff Modelling Guidelines as advice notes will assist in managing stormwater and flooding. While Federated Farmers sought exemptions for stormwater management in Rural Zone sites, we agree with Mr Mackie that management of stormwater on Rural Zone sites is important (albeit that it will be on-site).³⁹ We do not consider that the stormwater rules duplicate the regional rules as submitted by Synlait Milk Limited and Hynds Pipe Systems Limited. The PDP has a role in the management of stormwater in terms of managing land use and development to meet the requirements of the regional network discharge consents, as well as flood management and land stability.

- 170. Ms Foley presented evidence on behalf of WRC seeking amendments to better deliver low-impact stormwater management, including additional matters of discretion for stormwater management activities which do not meet the permitted activity standards. We agree with her suggested additions to these and other provisions in this section, and consider these will more efficiently achieve the stormwater Objective 6.4.6.
- 171. Lakeside 2017 sought recognition of stormwater treatment trains approved in previous consents, but we do not consider this to be necessary as the PDP provisions do not override previous consents to manage stormwater. Hamilton City Council sought various changes to the stormwater provisions, but we consider most of them are unnecessary for the reasons set out in Mr Mackie's section 42A report.
- 172. While we understand Tainui o Tainui's concerns regarding not locating three waters infrastructure on Maaori land, we are aware that there may be situations where infrastructure is appropriate in a Maaori Area or Site of Significance. We consider it appropriate to assess such proposals through a resource consent process. Tainui o Tainui's submission also sought that stormwater discharges into sandy areas be avoided, but we consider that this is most appropriately managed through the regional plan and, as appropriate, the associated regional resource consent processes.

Water supply

- 173. We agree with Mr Mackie that it is appropriate to include a new rule for water supply servicing of new development or subdivision, which specifically enables supplementary rainwater harvesting. However, as proposed, this standard does not allow the use of the rainwater for potable uses. This issue causes us some difficulty as we can see no logical reason why a development needs to be constrained in the manner proposed, particularly in the Rural, Country Living and Village Zones where servicing for water and wastewater is on-site.
- 174. Ms Duncan filed evidence on behalf of Fire and Emergency New Zealand seeking to ensure that sites have adequate supply of water and access to water supplies for firefighting purposes in accordance with New Zealand Fire Service Firefighting Water Services Code of Practice SNZ PAS 4509:2008. Mr Mackie recommended including a new restricted discretionary activity for water supplies that do not comply with these

³⁹ Section 42A report on Infrastructure and Energy, Trevor Mackie, Paragraphs 33-34, dated 14 September 2020.

requirements, with sufficiency of supply for firefighting as a matter of discretion. We agree that this will more effectively and efficiently meet the objectives and implement the policies for infrastructure, subdivision and development, and for integration of infrastructure with subdivision, land use and development.

Impervious surface rules

175. Council sought relocation of the impervious surface rules into the individual zone chapters and we agree this this is a logical place for them. Lakeside 2017 sought an increased level of impervious surface, but we note that the standard for this area is already 70 percent. We accept that increased impervious surface above 70 percent may be possible, but consider that this should only be if it is authorised by a resource consent.

Waikato Regional Council's flood protection infrastructure

176. Ms Foley sought a policy and rule framework to provide for the ongoing maintenance, repair, replacement and upgrade of flood and drainage scheme infrastructure. We agree that this the inclusion of permitted and restricted discretionary activities is an appropriate addition and will clarify the activity status for this regionally significant infrastructure. We consider that this is the most appropriate way to achieve Objectives 6.1.1 and 6.1.8. We have not included the advice note regarding section 330 of the RMA as we consider this to be an unnecessary addition in a district plan.

Wastewater servicing

177. We heard from Mr Droomgool and his desire for the rules to enable on-site wastewater systems for small sites, while Federated Farmers sought exclusion of sites in the Rural Zone from the wastewater requirements. In response to both of these submitters we note that Rule 14.11.1 P3 allows for site-contained, alternative methods of wastewater disposal as a permitted activity. We consider this rule appropriately requires all new development or subdivision to be serviced for wastewater which is important for health and safety.

Section 14.12 Transportation

- 178. Section 14.12 contains provisions to manage transport across all zones, including management of roads, the design of sites including access and loading, and the traffic generation arising from activities and this was the subject of a large number of submissions. The main issues were:
 - a. Car parking requirements;
 - b. Vehicle access design;
 - c. Railway crossings;

- d. Traffic generation/vehicle movement controls;
- e. Corrections and clarifications to wording and terminology;
- f. Integrated transport assessments; and
- g. Car parking requirements.
- 179. A large number of submission points were received on Table 14.12.5.7, which sets out the required parking spaces and loading bays as well as Rule 14.12.1 P2, which requires compliance with Table 14.12.5.7. We are aware that Policy 11 of the NPS-UD relates to carparking and provides that district plans of tier 1,2 and 3 territorial authorities do not set minimum car parking rate requirements, other than for accessible car parks. Furthermore, Standard 3.38 (1) in subpart 8 of Part 3: Implementation, provides that tier 1 local authorities must change their district plans (without using the Schedule 1 process) to remove the effect of any objectives, policies, rules or assessment criteria that require a minimum number of carparks, other than accessible car parks. Given this directive we have deleted the parking requirements from Table 14.12.5.7 and all other references to a minimum number of carparks in the objectives, policies and rules. Consequently Rule 14.12.2 RD2 has been amended to focus only on the effects of non-compliance with on-site loading standards. Because the requirements for accessible carparks and cycling spaces were dependent on the number of carparks required, the deletion of the requirements for carpark spaces has necessitated revision of those rules for accessible carparks and cycling spaces.
- 180. We have added loading bay requirements for supermarkets to Table 14.12.5.7 Required parking spaces and loading bays as requested by Woolworths NZ Ltd (Woolworths) as this is a reasonable addition.
- 181. While car parking requirements are required to be removed from the Plan, cycling requirements can be retained. The main submission of note in this regard is from Woolworths NZ Ltd who sought to reduce the number of required cycle spaces on the basis that they are too onerous. We agree with Mr Mackie that the provisions are intended to encourage and enable cycling as an alternative transport mode, particularly in the district's urban areas.

Vehicle access design

- 182. We received evidence from a number of submitters challenging the vehicle access standards in:
 - a. Table 14.12.5.1 Separation distances of an access onto a road from an intersection or between accesses;
 - b. Table 14.12.5.3 Minimum sight distances from a vehicle entrance;

- c. Table 14.12.5.14 Access and road conditions (Residential, Village, Business, Business Town Centre and Industrial Zones); and
- d. Table 14.12.5.15 (Rural and Country Living Zones).
- 183. Common concerns included that the standards are excessive and do not constitute an efficient use of the land resource, particularly in the urban zones. Fire and Emergency New Zealand and Counties Manukau Police had a different perspective and sought amendments to ensure that accesses have sufficient room to accommodate emergency services and their vehicles. Hamilton City Council sought that the standards aligned with more onerous provisions of an adjoining plan. We appreciate the comparison that Mr Mackie undertook between the access widths in the PDP, the Auckland Unitary Plan and the Hamilton District Plan. We note that the widths in the PDP are wider than those two other district plans but consider they are not unreasonable and are more appropriate to the Waikato District. We are aware also that there must be sufficient room to easily accommodate emergency service vehicles and for these reasons we retain the access width standards as notified. We have made the following amendments:
 - a. Increased separation distances for accesses onto National Regional Arterial and Arterial to be consistent with the Transit NZ Policy Planning Manual Table App5B/3;
 - b. Included design speeds for separation distances for accesses to highlight the difference between the operating and design speeds; and
 - c. Increased minimum sight distances for vehicle accesses to align with those in Appendix 5b of the Transit NZ Policy Planning Manual.
- 184. We have looked critically at the matters of discretion in Rule 14.12.2 RD1 for accesses that do not comply with the permitted activity standards and have added matters of discretion to include access for emergency vehicles, and the safety and efficiency of rail and road operations. We consider the amendments to be the most appropriate option to achieve the relevant objectives and policies, specifically Objective 6.5.1 and Policy 6.5.2 to promote an efficient, effective, integrated, safe, resilient and sustainable land transport network.

Railway crossings

185. KiwiRail sought the addition of new provisions to address sightlines for railway level crossings, including a proposed new activity condition specific to Rule 14.12.1.1 P1. The proposed condition would require compliance with the standards for railway level crossing sight triangles that are to be added to Table 14.12.5. We agree that the inclusion of these diagrams and provisions will improve the safety of level rail crossings. We consider the suite of provisions are the most appropriate option for

achieving Policy 6.5.2 by controlling the location of buildings and structures within the sightline areas of rail level crossings.

Traffic generation/vehicle movement controls

- 186. On-site manoeuvring and queuing are managed by Rule 14.12.1 P3. Waka Kotahi sought amendments to this rule to refer to the largest combination standard configuration for heavy vehicles permitted on roads (i.e., heavy trucks and trailers) to which the site has frontage. We agree that this is an appropriate amendment to ensure that the largest anticipated vehicle type can access the site.
- 187. Woolworths sought amendments to clarify that on-site manoeuvring and queuing space for sites on the listed streets are not precluded, but rather that their provision is optional. We are aware standards need to be certain and that non-compliance with a rule is most appropriately addressed through a resource consent process. We therefore do not support the amendment sought. We do agree with the addition of a standard requiring onsite manoeuvring to not be within an Identified Area, as proposed by WRC. We note that this decision necessitates consequential amendments to avoid inconsistencies with the rules for clearance of indigenous vegetation for parking and manoeuvring areas in a Significant Natural Area.
- 188. In response to the submission from Waka Kotahi, we have amended the matters of discretion in Rule 14.12.2 RD3 to ensure safety for all users of the vehicle access is achieved.
- 189. Rule 14.12.1 P4 sets out the maximum traffic generation for permitted activities in each zone. Council and Waka Kotahi sought that the numbers in the rule be measured "per site per day" rather than per activity and we agree. A number of submitters, such as Woolworths, Horticulture NZ and Balle Brothers Group, sought specific traffic generation numbers for their particular activity, while others sought an increase in the number of permitted vehicle movements. Synlait Milk Ltd took an alternative approach and sought an increase to the maximum number of vehicle movements per day and the maximum percentage of heavy vehicle movements or replace the rule with a requirement for developments over 10,000m² to prepare an integrated transport assessment.
- 190. We consider that the zone approach in Rule 14.12.1 P4 is a better approach than by activity classification. We consider that this will also allow anticipated traffic generation to be assessed by zone and be reflected in the design of the roads. We do accept that primary production harvesting activities will cause increased vehicle movements for short periods of time and have reflected this in the rules. We agree with Mr Arbuthnot that Horotiu Industrial Park necessitates a different approach given the heavy reliance on roads and the characteristics of an inland port. We have therefore included a specific traffic generation rule for Horotiu Industrial Park that better reflects the limits in the Operative District Plan. We consider these amendments are the most appropriate

option to achieve the relevant objectives and policies, specifically Objective 6.5.1 and Policy 6.5.2 to promote an efficient, effective, integrated, safe, resilient and sustainable land transport network.

- 191. We note that Table 14.12.5.1.3 sets out vehicle movement rates by activity and that this can be used to help determine compliance with Rule 14.12.1 P4. Waka Kotahi sought to replace Table 14.12.5.13 with Table 7.4 from Trips and parking related to land use (2011) (NZ Transport Agency research report 453), because it considered that many of the trip generation rates in Table 14.12.5.13 appear to be too low. We appreciate the comparison undertaken by Mr Mackie⁴⁰ and are satisfied that Table 14.12.5.13 is consistent with the details cited by Waka Kotahi, with the exception of health facilities, veterinary clinics and personal services, which we have increased. We have also added indicative vehicle movement figures for takeaway food and warehouses and decreased the rate for garden centres because they seem to have been an oversight in the notified PDP.
- 192. Turning to the scale of traffic generation for each zone, we consider these are consistent and reflect the type and scale of activity in the relevant zone. We are satisfied that the permitted activity thresholds for traffic generation are of a scale that would not have significant adverse effects on the transport network and any activity generating more vehicle movements than this can be assessed through a resource consent process as a restricted discretionary activity.
- 193. We have also made a number of amendments to the matters of discretion in Rule 14.12.2 RD4 and Rule 14.12.2 RD7. This was in response to the submission from Waka Kotahi, which sought to enable more effective assessments of the effects of non-compliance with the permitted traffic generation rule.

Corrections and clarifications to wording and terminology

- 194. Waka Kotahi sought amendments to Rule 14.12.1 P5 to better describe permitted activities in the road reserve and we agree that this wording better reflects the activities. There are numerous minor amendments that we have made to the rules in Section 14.12 in response to submissions which are set out in the tracked changes version of the chapter. We consider that each one of these either clarifies the rule or is the most appropriate way of achieving the objectives in Chapter 6.
- 195. Mr McAlley of Te Kauwhata Land Ltd sought deletion of references to Te Kauwhata West in Section 14.12 including the road cross sections. After undertaking a site visit to Te Kauwhata, we consider that the cross section of roads is appropriate. We were particularly impressed with the form of the road and management of stormwater in Bragato Way. We are aware that the Te Kauwhata Structure Plan has not been

⁴⁰ Section 42A report for infrastructure, Trevor Mackie, Paragraph 490, dated 29 September 2020.

brought through into the PDP, which makes the references in Chapter 14.12 to the Te Kauwhata structure plan somewhat redundant. We consider that the connection between Travers Road and Wayside Road (comprising the extension of Bragato Way) should be consistent with the existing road form and cross section of Bragato Way and have reworded the provision accordingly.

- 196. We agree with the changes to Rule 14.12.1 P8 regarding off-road pedestrian walkways and cycleways as recommended by Mr Mackie. In response to the submission from Heritage NZPT, we have added a matter of discretion to Rule 14.12.2 RD8 for facilities that do not comply with the permitted activity standards. This amendment will enable the consideration of effects on the values, qualities and characteristics of the site or area.
- 197. We agree to the addition of three collector roads to Table 14.12.5.6 as requested by Hamilton City Council. However, we do not consider it necessary for the classification of roads in the Waikato District to automatically align with the classification of roads in Hamilton City, as their functions may be different. We consider the three additional roads reflect the existing function and are in accordance with Policy 6.5.3 providing a hierarchy of roads, and Policy 6.5.4 ensuring that the construction, maintenance and operation of roads is consistent with their function in the road hierarchy.
- 198. Lakeside 2017 sought to amend Figures 14.12.5.19 and 14.12.5.20 to be consistent with Plan Change 20 for the Te Kauwhata Lakeside Precinct, which identified a special parking control for sites less than 300 square metres to recognise the lower car ownerships of smaller households and promote affordable housing in recognition of possible future public transport services to Te Kauwhata. We do not consider this to be necessary as alternative configurations can be established by Comprehensive Land Development Consent, subdivision and development resource consents.

Integrated transport assessments

199. On behalf of Waka Kotahi, Mr Wood and Mr Swears sought to include a new rule to require Integrated Transport Assessments for new development based on a combination of traffic thresholds and the function of the road (providing access to the new development) in the roading hierarchy. We consider this approach to be cumbersome and unwieldy and prefer the notified provision. We consider there is no need to specify the information that should be contained in a resource consent application, and it is for the decision maker to determine whether the information provided is sufficient, having considered the scale and significance of the activity.

4.15 Sensitive land uses in close proximity to state highways and rail corridors

200. Of all the topics canvassed in the infrastructure hearing, the management of land (and particularly sensitive land uses) in close proximity to state highways and rail corridors was one of the most contentious. On one hand, we heard from the experts representing Waka Kotahi and KiwiRail who considered that the presence of noise

sensitive activities within 100 metres of a state highway or rail corridor would give rise to reverse sensitivity effects. On the other hand, we heard from the experts representing Kāinga Ora and affected landowners that it was unreasonably onerous, would impose significant additional costs on landowners and that the risk of reverse sensitivity had been overstated by the infrastructure providers.

- 201. We are aware that the PDP as notified contained setbacks in the individual zone chapters for any new building or alteration to an existing building for a sensitive land uses. These setbacks applied to areas that were 5 metres from the designated boundary of the railway corridor, 15 metres from the boundary of a national route or regional arterial, and 25 metres from the designated boundary of the Waikato Expressway. The evidence from Mr Wood appears to have proposed deleting these setback requirements (although his summary statement retained a 15-metre setback from the boundary of a national route or regional arterial) and instead would require any new building or alteration to an existing building for sensitive land use within 100 metres from the edge of a state highway carriageway or legal boundary of a rail corridor to comply with standards relating to:
 - a. Indoor design noise levels;
 - b. Mechanical ventilation; and
 - c. Indoor vibration.
- 202. We understand that compliance with the standards in proposed Appendix 1 is required to be demonstrated through the submission of an acoustic design report (submitted to Council as part of a building consent or resource consent application). As explained by Dr Chiles, an alternative means of achieving the required internal design noise levels is to provide either a noise barrier (at least 50 metres from the carriageway of the state highway or rail network) that completely blocks line of sight from all doors and windows to all points 3.8 metres above the carriageway or railway tracks, or design single-story residential buildings with habitable rooms in accordance with the construction schedule provided in proposed Schedule Y.41
- 203. It seems to us that we have two choices: a spatial setback which would potentially sterilise the land adjoining the rail and state highway; or enable buildings accommodating sensitive activities to be located closer to the transport infrastructure but require them to have significant noise insulation. For both options, it seems to us inherently unfair that the burden of mitigating the noise generated by the railway or state highway would be borne by the adjoining landowners. We are particularly concerned that the evidence presented to us did not assess the costs of either option. It also seems to us that there are variables which affect the noise generation that are entirely beyond the control of the adjoining landowner. These variables include the surface of the road, the frequency and type of traffic (e.g., proportion of heavy

⁴¹ Evidence in Chief of Stephen Chiles on behalf of Waka Kotahi, Paragraph 5.2, dated 29 September 2020.

vehicles), surrounding topography and the width of the berm between the carriageway and the edge of the designation, all of which requiring acoustic insulation.

- 204. There are also no requirements in the PDP for either Waka Kotahi or KiwiRail to minimise the noise effects from the infrastructure. We remain concerned that Mr Wood applies these rules to alterations to existing buildings as well as new builds. We agree with Mr Grala that this creates a perverse outcome whereby an alteration to a 1940s dwelling that is situated close to a state highway would be required to be designed and constructed with acoustic insulation, regardless of the scale or nature of those alterations. As Mr Lindenberg stated in his evidence on behalf of Kāinga Ora, the extension or alteration of the existing 'sensitive activity' would not create a 'new' sensitive activity, nor a 'new' reverse sensitivity effect it is merely an alteration of what already exists.
- 205. Mr Styles, Kāinga Ora's noise consultant, explained it well when he said:43

In my experience of dealing with rules and standards relating to the management of noise and vibration effects from land transport, there is often a large gap between the simplest rule set and the most effective rule set.

For example, the easiest way to specify the extent of the noise or vibration effects areas would be to assume a 'Standard Distance' from the nearest lane or track along the full length of all road and rail in the district. This approach is simple and easy to map.

However, this approach is also likely to extend the effects areas onto land that may not be affected by noise or vibration to the extent that any development control is needed.... On other more open sections of road, the effects area could be larger.

[original paragraph references omitted]

206. Thus, in our assessment both approaches are flawed. We note that Mr Styles' National Land Transport (Road) Noise Map shows that noise levels from the state highway and regionally significant routes in Hamilton (accepting that this is not the Waikato District) are reduced to acceptable levels well within the 100-metre buffer strip that was being

⁴² Evidence in Chief of Nick Grala on behalf of Cindy and Tony Young and Parkmere Farms, Paragraph 39, dated 29 September 2020.

⁴³ Evidence in chief of Jon Styles on behalf of Kainga Ora, Paragraphs 6.6-6.8, dated 29 September 2020.

advocated. Neither Waka Kotahi nor KiwiRail provided us with evidence of the actual noise generated by the state highways or the railway. Mr Styles considered there is an option which explores a set of controls that are tailored to the Waikato District, with careful consideration of the actual and reasonably potential adverse noise and vibration effects on the land surrounding the network after the best practicable option has been adopted to minimise the effects at the source. We agree, but are unfortunately left with only two broad options; both of which are somewhat blunt instruments.

- 207. We are aware of the scale of properties potentially affected as set out in Mr Grala's evidence, and it is highly unlikely the landowners that would be affected by the provisions were aware of the possible consequences of the submissions. We consider that any land use control needs to strike an appropriate balance between internalisation of effects by the primary effects-generator and the recognition of the economic and social importance of the infrastructure. With this in mind, and considering the evidence before us, we consider the setbacks as contained in the PDP are a more appropriate approach than that promoted by the transport infrastructure providers. The setback approach provides clarity for the community, provides some degree of protection against potential reverse sensitivity for the regionally significant land transport infrastructure and enables efficient use of the land resource.
- 208. Despite our best efforts to encourage the various government agencies to liaise and develop a consistent, uniform approach, it does not appear that any genuine efforts have been made to adopt our suggestions. As our encouragement was not taken up, we have no choice other than to assume that the government submitters did not progress or conclude their discussions on a uniform approach to sensitive land uses.

4.16 Trails

- 209. We heard from Mr Mackie that the indicative trails are shown on the planning maps; while some of these are existing trails, many are indicative locations of future trails. We understand that they do not, in all places, align with Council's Trails Strategy which sets out an extensive network of high, medium and low priority trails across the district. After hearing from the submitters such as Ms Hanrahan and Mr Ongley, it became apparent that many submitters had misunderstood the purpose of the indicative walking, cycling and bridle trails on the planning maps. We are aware of concerns that having a trail notated on a property might infer (incorrectly) that the public would be allowed to access private property. We can reassure submitters that this is not the case.
- 210. It was apparent to us that the submitters opposing the indicative trails being shown on the planning maps were generally landowners, while those submitters supporting them

⁴⁴ Evidence in chief of Jon Styles on behalf of Kainga Ora, Paragraph 9.12, dated 29 September 2020.

were community groups who valued having a connected network of trails. After carefully considering all the evidence and submissions, including such matters as:

- a. Some trails are not connected in any logical way;
- b. Some trails pass through zones or areas not appropriate for development, i.e., Maaori Land;
- c. Some trails have been completed or are in the construction phase, but are still shown as being indicative;
- d. Not all high priority trails have been included;
- e. Many trails are in topographically unsuitable locations; and
- f. There are inconsistencies between the trails in Council's Trail Strategy and the PDP.
- 211. We have deleted all indicative walkways, cycleways and bridleways from the Planning Maps and made consequential amendments to the provisions across the Plan to delete all references to them. Having considered all the options, we consider deletion to be more appropriate in achieving the objectives for integration of land use, transportation and infrastructure.

4.17 Indicative roads

- 212. Indicative roads are shown on the planning maps as red dashed lines. We understand from Mr Mackie that their principal function is to show how access can be gained to future subdivisions so that land does not become land-locked and unable to be subdivided. ⁴⁵ There were nine submissions on indicative roads, including one multiparty submission seeking to delete the indicative road off Redwood Grove which Mr Greaney spoke to at the hearing.
- 213. The Redwood Grove issue is highly complex; the need for the indicative road from Redwood Grove into future subdivisions appears to us to depend on all or part of Elmwood Lane becoming public road, or some other alternative form of public access. We support the removal of the indicative road off Redwood Grove, if the matter can be resolved by Council accepting vesting of Elmwood Lane as public road, with all properties having legal access to it. Advice from Council roading engineers is that Elmwood Road is not yet designed to public road standards.46 We are aware that the owners of properties accessed via Elmwood Lane own individual rights-of-way or easements to access their properties, and those easements would need to be acquired or surrendered to create a public road. As the Elmwood Lane road access has not yet been agreed, we are left having no option but to reject this request.

⁴⁵ Section 42A report for Infrastructure Section D12A, Trevor Mackie, Paragraph 108, dated 14 September 2020.

⁴⁶ Ibid, Paragraph 131.

- 214. While no other parties presented evidence on the issue of indicative roads, we have carefully considered Mr Mackie's recommendations in his section 42A report. We have retained all the indicative roads that are the subject of submissions for the following reasons:
 - a. they will help achieve a highly connected road layout; and
 - b. any changes to the roading network can be resolved as part of the subdivision design and consenting process.
- 215. We consider this approach is the most effective way of achieving Objective 6.5.1.

5 Conclusion

- 216. We accept and/or reject the section 42A report and the evidence filed by the submitters for the reasons set out in this Decision, collectively forming the section 32AA assessment informing this Decision.
- 217. Overall, we are satisfied that the infrastructure and energy provisions as amended will provide a suitable framework for managing the development, operation and maintenance of infrastructure whilst managing any adverse effects.

For the Hearings Panel

Phirmet.

Dr Phil Mitchell, Chair

Dated: 17 January 2022

Chapter 6: Infrastructure and Energy

As this chapter contains district-wide provisions relating to Network Utilities, the objectives and policies in Part 3 Area Specific Matters are not intended to apply to Network Utilities (unless otherwise specified). The objectives and policies in Part 2 District Wide Matters will apply where relevant.

6.1 General Infrastructure

In addition to Sections 6.2, 6.3, 6.4 and 6.5, the following objectives and policies apply, unless otherwise stated.

6.1.1 Objective - Development, operation and maintenance of infrastructure

(a) Infrastructure is developed, operated, and maintained and upgraded to benefit the enhance social, economic, cultural and environmental well-being of the district.

6.1.2 Policy - Development, operation and maintenance

- (a) Provide for the development, operation, maintenance, repair, replacement, upgrading and removal of infrastructure throughout the district by recognising:
 - (i) Functional and operational needs;
 - (ii) Location, route and design needs and constraints;
 - (iii) Locational constraints related to the need to access suitable resources or sites;
 - (iv) The benefits of infrastructure to people and communities;
 - (v) The need to quickly restore disrupted services; and
 - (vi) Its role in servicing existing consented and planned development;
 - (vii) The need for physical access to access infrastructure.

6.1.3 Policy - Technological advances

- (a) Provide flexibility for infrastructure operators to use new technological advances adopt new technologies that:
 - (i) Improve access to, and enable the efficient use of infrastructure, networks and services or development of infrastructure;
 - (ii) Allow for the reuse of redundant <u>services</u>, infrastructure and structures where appropriate; and
 - (iii) Result in positive environmental and community outcomes Increase resilience, safety or reliability of infrastructure, networks and services;
 - (iv) Result in environmental benefits and enhancements; or
 - (v) Promote environmentally sustainable outcomes including green infrastructure and the increased utilisation of renewable resources.

6.1.4 Policy - Infrastructure benefits

(a) Have regard to the benefits that infrastructure provides, including:

- (i) Enabling enhancement of the quality of life and residential standard for people and communities;
- (ii) Providing for public health and safety;
- (iii) Enabling the functioning of business and growth and development;
- (iv) Managing adverse effects on the environment;
- (v) Enabling the transportation of freight, goods and people;
- (vi) Enabling interaction and communication; and
- (vii) Providing for lifeline utility services.
- (b) Have particular regard to the benefits that the use and development of renewable energy provide.

6.1.5 Policy - Natural hazards and climate change

(a) Improve the resilience of infrastructure to natural hazard risk and climate change disruptions by encouraging Encourage the design and location of infrastructure to take account of natural hazards and the effects of climate change.

6.1.6 Objective - Reverse sensitivity Adverse Effects on Infrastructure

(a) Infrastructure is protected from reverse sensitivity effects, and infrastructure (including the National Grid) its construction, operation, maintenance, repair, replacement and upgrading is not compromised.

6.1.7 Policy - Reverse sensitivity Adverse Effects on and infrastructure

(a) Avoid reverse sensitivity effects on infrastructure from subdivision, use and development as far as reasonably practicable, <u>and ensure</u> so that the <u>construction</u>, <u>operation</u>, <u>maintenance</u>, <u>repair</u>, <u>replacement and upgrading</u> the <u>ongoing and efficient operation</u> of infrastructure is <u>are</u> not compromised.

6.1.8 Objective - Infrastructure in the community and identified areas

(a) <u>Provision of Infrastructure takes into account the qualities and characteristics of surrounding environments and community well-being.</u>

6.1.9 Policy - Environmental effects, community health, safety and amenity

(a) Require the development, operation, maintenance, repair, replacement, upgrading and removal of infrastructure and its associated structures to avoid, remedy or mitigate adverse effects on the environment, community health, safety and amenity.

6.1.10 Policy - Infrastructure in identified areas

- (a) Ensure consideration of the values, qualities and characteristics of Significant Natural Areas, Landscape and Natural Character Areas, and Historic Heritage Items, Heritage areas, and Sites and Areas of Significance to Maaori, including Waahi Tapu and Waahi Tapu Areas when proposing new infrastructure or undertaking significant upgrades to existing infrastructure.
- (b) Provide for regionally significant infrastructure within Identified Areas where:
 - (i) There is a demonstrated functional or operational need for the infrastructure to be located within the Identified Area; and

(ii) It is demonstrated through an options assessment that locating within the Identified Area is the best practicable option, having particular regard to the financial implications, social, cultural and environmental effects of the preferred option, compared to other alternative options.

6.1.11 Policy - Undergrounding new infrastructure

- (a) Encourage new infrastructure to be placed underground unless:
 - (i) The adverse effects on the environment are greater than placing the infrastructure above ground;
 - (ii) A natural or physical feature or structure renders underground placement impractical or undesirable; or
 - (iii) There are significant operational, functional, technical, cultural, <u>historic heritage</u> or economic reasons that require the infrastructure to be above ground.

6.1.12 Policy - Co-location of compatible facilities

(a) Encourage compatible infrastructure to share sharing of location or facilities where operational advantages can be achieved or and adverse effects are reduced avoided, remedied or mitigated.

6.1.13 Policy - Future growth areas

(a) Require infrastructure services to be <u>planned</u>, developed <u>and co-ordinated with</u> <u>development</u> to <u>ensure it</u> a <u>standard that enables the service</u> <u>can</u> to be extended to future growth areas where <u>and when</u> appropriate.

6.1.14 Policy - Electromagnetic and radio frequency fields

(a) Require infrastructure that generates electromagnetic or radio frequency fields to comply with the International Commission on Non-ionising Radiation Protection Guidelines, relevant WHO guidelines and the relevant New Zealand Standard.

6.1.15 Policy - Raglan navigation beacons

(a) Avoid obscuring navigational beacons and associated view shafts at Raglan Harbour (Whaingaroa).

6.1.16 Policy - Water conservation

(a) Encourage water conservation measures and, where appropriate, low impact stormwater design and facilities.

6.1.17 Policy- Regionally Significant Infrastructure

- a. Have particular regard to the benefits that can be gained from the development and use of regionally significant infrastructure; and
- b. Protect the effectiveness and efficiency of existing and planned regionally significant infrastructure.

6.2 National Grid

6.2.1 Objective - National Ggrid

(a) The national significance of the National Grid is recognised, and protected and provided for.

6.2.2 Policy - Recognise the needs and constraints of the nNational gGrid

(a) Recognise the operational, functional and technical <u>needs and</u> constraints of the National Grid, and the interconnectedness of networks.

6.2.3 Policy - Operation and development of the National Grid

(a) Provide for the operation, upgrading and development of the National Grid.

6.2.4 Policy - Maintenance and minor upgrade of the National Grid

(a) Enable the repair, maintenance, replacement and minor upgrade of the National Grid.

6.2.5 Policy – Environmental effects

- (a) Manage the environmental effects of the development or upgrades (other than minor upgrades) of the National Grid, by:
 - (i) Recognising <u>and providing for</u> the national, regional and local benefits of sustainable, secure and efficient electricity transmission;
 - (ii) <u>Considering the extent to which any Avoiding, remedying or mitigating</u> adverse effects through consideration of have been avoided, remedied or mitigated by the route, site and method selection;
 - (iii) Seeking to rReduce the existing adverse effects as part of any substantial upgrade;
 - (iv) Considering the effects on urban amenity (including town centres), areas of high recreational or amenity value and existing sensitive land uses; and
 - (v) Within urban environments, a Addressing the adverse effects on any heritage values, cultural values, outstanding natural landscapes, areas of high natural character, town centres, areas of high recreation value and existing sensitive activities including the avoidance of adverse effects where practicable.
 - (vi) Within rural environments, seeking to avoid adverse effects on identified heritage values, cultural values, outstanding natural landscapes, outstanding natural features, significant natural areas, areas of outstanding or high natural character, areas of high recreation value and existing sensitive activities.

6.2.6 Policy - Adverse effects Reverse sensitivity on the National Grid

- (a) Manage subdivision, use and development to the extent reasonably possible 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) <u>Land uses (including sSensitive land uses)</u> and structures that may compromise the National Grid, including intensive farming activities, are excluded from establishing within the National Grid Yard;

- (iii) Subdivision is managed within the National Grid <u>Subdivision</u> Corridor to avoid subsequent land use from compromising the operation, maintenance, upgrading and development of the National Grid; and
- (iv) Changes to existing activities within a National Grid Yard do not further restrict the operation, maintenance, upgrading and development of the National Grid.

6.3 Energy

6.3.1 Objective - Renewable energy

(a) Energy efficient design and an increase in renewable electricity generation activities are promoted.

6.3.2 Policy - Utilising energy efficiency

(a) Design subdivision, land use and development so that buildings can utilise energy efficiency and conservation measures, including by orientation to the sun and through other natural elements.

6.3.3 Policy - Enabling renewable electricity generation

(a) Enable the investigation, development, operation, maintenance and upgrading of renewable electricity generation activities, including domestic and community scale distributed renewable electricity generation, provided that adverse effects are avoided, remedied or mitigated.

6.3.4 Policy – Future renewable electricity

(a) Provide for the investigation, identification and assessment of potential sites and energy sources for renewable electricity generation activities.

6.3.5 Policy – Existing renewable electricity facilities

- (a) Ensure subdivision, use and development are designed and located so that they do not adversely affect the operation and maintenance of existing, lawfully established renewable energy generation facilities.
- (b) Enable non-sensitive rural land use activities, where they can co-exist with existing renewable electricity generation facilities.

6.3.6 Objective - Non-renewable energy

(a) Non-renewable energy resources <u>and electricity generation</u> are recognised within the district.

6.3.7 Policy - Recognise non-renewable energy resources

(a) Recognise the actual and potential contribution to national energy production from non-renewable electricity resources.

6.4 Infrastructure, Subdivision and Development

6.4.1 Objective - Integration of infrastructure with subdivision, land use and development

(a) Infrastructure is provided for, and integrated with, subdivision, use and development.

6.4.2 Policy - Provide adequate infrastructure

(a) Ensure adequate provision of infrastructure, including land transport networks, where land is subdivided <u>creating one or more additional lots</u>, <u>excluding reserve or non-housing conservation lots</u>, <u>access and utility allotments</u>, or its use <u>is significantly changed or intensified</u>, <u>needing additional or upgraded infrastructure</u>.

6.4.3 Policy – Infrastructure Location and Services

- (a) Ensure subdivision, use and development are provided with infrastructure and services to a level that is appropriate to its location and intended use including:
 - (i) Three waters (water, wastewater and stormwater supply management);
 - (ii) Telecommunication services;
 - (iii) Electricity services; and
 - (iv) Adequate water supply within urban areas for firefighting purposes.

6.4.4 Policy - Road and rail Land transport network

- (a) Discourage Avoid, remedy or mitigate effects of subdivision, use and development that would compromise:
 - (i) The road function, as specified in the road hierarchy, or the safety and efficiency of the roading network;
 - (ii) The access by emergency services and their vehicles; and
 - (iii) The safety and efficiency, <u>including the maintenance</u>, <u>upgrading</u>, <u>development and</u> operation of the railway land transport network.
- (b) Minimise reverse sensitivity effects on the land transport network through setbacks for noise sensitive activities established in proximity to existing transport corridors.

6.4.5 Policy - Roading infrastructure (Re-locate Policy 6.4.5 to be 6.5.8 and amend)

- (a) Ensure that roading infrastructure is developed so that:
 - (i) The design, location, alignment and dimensions of new roads provide safe vehicle, pedestrian and cycling access and manoeuvring to every site;
 - (ii) The roading pattern provides good connectivity to the site and integrates with adjacent land identified as future growth areas including public transport such as bus stops:
 - (iii) There is adequate provision of on-site parking and manoeuvring for land use activities; and
 - (iv) Contaminants generated are appropriately mitigated.

6.4.6 Objective - Stormwater, and drainage and flood management

- (a) The hydrological characteristics of the natural drainage processes are retained where new subdivision, development or land use is proposed.
- (b) Recognise the importance to the economic and social well-being of the district and the essential nature of regional flood management infrastructure so as to provide for its development, operation and maintenance.
- (c) Regional flood management infrastructure is provided in a manner that:
 - (i) Does not adversely affect the health and safety of the people of the district;

- (ii) Avoids, remedies or mitigates any adverse effects on the natural and physical resources;
- (iii) <u>Is sensitive to the amenity values of the district, and relevant cultural or spiritual</u> values; and
- (iv) Is efficient.

6.4.7 Policies - Stormwater, drainage and flood management

- (a) Ensure that stormwater and drainage infrastructure for subdivision, land use and development:
 - (i) Adopts, where appropriate, a best-practice low impact design approach to the management of stormwater;
 - (ii) Manages stormwater in accordance with a drainage hierarchy, with a preference for on-site treatment at-source management;
 - (iii) Minimises impervious surfaces to reduce stormwater run-off;
 - (iv) Retains pre-development hydrological conditions as far as practicable;
 - (v) Does not increase the flow of stormwater runoff onto adjoining properties adjacent land or flood plains, or reduce storage capacity on-site;
 - (vi) Provides a stormwater catchment management plan for future urban development; and
 - (vii) Promotes clean water reuse and groundwater recharge where practicable:
 - (viii) Avoids, remedies or mitigates the generation of contaminants from urban development; and
 - (ix) Is supported by a stormwater management plan.
- (b) Protect the continuing operation of existing regional flood management infrastructure from the adverse effects of other activities. In particular consideration shall be given to:
 - (i) Maintaining and enhancing the operational efficiency, effectiveness, viability and safety of regional flood management infrastructure;
 - (ii) Protecting investment in existing regional flood management infrastructure; and
 - (iii) Retaining the ability to maintain and upgrade regional flood management infrastructure.
- (c) Ensure that new regional flood management infrastructure is considered having regard to:
 - (i) The environment as it exists:
 - (ii) The duration, timing and frequency of the adverse effect;
 - (iii) The impact on other existing regional flood management infrastructure if the new work is not undertaken;
 - (iv) The need for the work in the context of the wider network or in the context of the provision of alternative infrastructure;
 - (v) The avoidance, remediation or mitigation of anticipated adverse environmental effects to the extent practicable;
 - (vi) The demand for and benefits of new regional flood management infrastructure;
 - (vii) The route, site, and method selection process;
 - (viii) The technical and locational constraints; and
 - (ix) The benefits of the regional flood management infrastructure in terms of managing climate change effects.
- (d) Provision of new regional flood management infrastructure occurs in a planned and coordinated manner which recognises and addresses potential cumulative effects and is

based on sufficient information to allow assessment of the potential long-term effects on the environment.

6.5 Transport

6.5.1 Objective - Land transport network

- (a) An integrated land transport network where:
 - (i) All transport modes are accessible, safe and efficient; and
 - (ii) Adverse effects from the construction, maintenance, <u>upgrading</u> and operation of the transport network are <u>managed avoided</u>, <u>remedied or mitigated</u>.
 - (iii) Strategic road and rail corridors play an important role in the district for facilitating the movement of inter and intra-regional freight:
 - (iv) There is an effective and efficient land transport system that enhances economic well-being, and supports growth and productivity within the Waikato region and upper North Island.

6.5.2 Policy - Construction, maintenance, upgrading and operation of the land transport network

- (a) Promote Provide for the construction, maintenance, upgrading and operation of an efficient, effective, integrated, safe, resilient, accessible and sustainable transport network through:
 - (i) Corridor, carriageway and intersection design which is appropriate to the road function as specified in the road hierarchy and in accordance with relevant guidelines;
 - (ii) The appropriate design and location of sites' accesses;
 - (iii) Traffic signage, road marking, lighting, rest areas and parking as appropriate;
 - (iv) <u>Safe and accessible</u> provision for pedestrians and cyclists <u>to maximise accessibility</u> that addresses accessibility, including off-road facilities and connections;
 - (v) Corridor and carriageway design which is sufficient to enable enables provision of public transport;
 - (vi) Provision for other infrastructure, including where suitable low impact design stormwater facilities;
 - (vii) Provision for stock underpasses where suitable access is not readily available;
 - (viii) Discouraging the installation of new at grade road and pedestrian rail level crossings:
 - A. Controlling the location of buildings and other visual obstructions within the sightline areas of rail level crossings; and
 - B. Railway crossing design in accordance with the requirements of the rail operator.
 - (ix) A. Protection and promoteion of the development of the regional rail network for the transportation of freight; and
 - (x) B. Development of efficient processes and freight routes for the movement of high productivity motor vehicles through the region.

6.5.3 Policy - Road hierarchy and function

- (a) Provide a hierarchy of roads for different functions and modes of land transport while recognising the nature of the surrounding land use within the district. Establish a road hierarchy and categorise roads in the district in accordance with their function.
- (b) Adopt the one network approach to ensure 'whole of journey' people and goods movements within the region.
- (c) Protect the function of roads as identified in the road hierarchy from the adverse effects of subdivision, use and development.

6.5.4 Policy - Road standards

(a) Ensure that the construction and operation of roads is consistent with their function in the road hierarchy.

6.5.5 Policy - Road Land transport safety

(a) Ensure that structures, <u>vehicle access</u>, lighting, signage and vegetation are located and designed so as to not compromise the safe and efficient operation of the land transport network, or obscure RAPID numbers.

6.5.6 Policy - Network utility location

(a) Encourage the location of network utility infrastructure within transport corridors where the function, safety and efficiency of the transport network will not be compromised.

6.5.7 Policy - Vehicle access

(a) Control the location of new vehicle accesses to sites adjacent relative to other accesses, intersections and rail level crossings to maintain and improve the safety and efficiency of the land transport network.

6.4.5 6.5.8 Policy - Roading Land transport network infrastructure

- (a) Ensure that roading land transport network infrastructure is developed so that:
 - (i) The design, location, alignment and dimensions of new roads land transport networks provide safe vehicle, pedestrian and cycling access and manoeuvring to every site;
 - (ii) The roading pattern land transport network provides good connectivity to the site and integrates with adjacent land developments and identified as future growth areas including walking and cycling networks and facilities and public transport such as bus stops;
 - (iii) There is adequate provision of on-site parking and manoeuvring for land use activities; and
 - (iv) Contaminants generated during construction are appropriately mitigated; and
 - (v) Design, alignment and dimension of new roads will accommodate the installation of network infrastructure in accordance with technical and safety specifications.

Chapter 14: Infrastructure and Energy

14.1 Introduction

- (1) The provisions within this Infrastructure and Energy chapter of the district plan shall apply across the district in all the zones and overlays in the district plan. The zone chapters and their associated overlays, objectives, policies and rules do not apply to infrastructure and energy activities unless specifically referred to within this Infrastructure and Energy chapter. The objectives and policies of Ch 2 Tangata Whenua, Ch 3 Natural Environment and Ch 7 Historic Heritage will apply to infrastructure activities within the Identified Areas of those Chapters.
- (2) This infrastructure topic includes the land transport networks, network utilities operations, and electricity generation (including renewable electricity sources) and transmission. It should be noted that this chapter also contains a number of rules (such as on-site car parking and stormwater management) relating to district-wide land development activities; and as such these particular rules should be read in conjunction with the relevant zone chapters where applicable.
- (3) The Identified <u>aAreas</u> within the activity tables below this chapter covers the following areas and items identified within this plan:
 - a. Urban Expansion Area
 - b. Significant Natural Area
 - c. Outstanding Natural Feature
 - d. Outstanding Natural Landscape
 - e. Significant Amenity Landscape
 - f. Outstanding Natural Character
 - g. High Natural Characterh. Heritage Precinct

 - i. Historic Heritage Items
 - Maaori Sites and Areas of Significance to Maaori
 - Maaori Areas of Significance
 - Notable Trees
- (4) In the activity tables rules within this chapter, the letters below mean the following:
 - a. P = Permitted Activity
 - b. C = Controlled Activity
 - RD = Restricted Discretionary Activity
 - d. D = Discretionary Activity
 - NC = Non-Complying Activity
 - f. N/A = Not Applicable
- (5) Where relevant, the requirements of the National Code of Practice for Utility Operators' Access to Transport Corridors will apply to the placement, maintenance, improvement and removal of utility structures in roads (or unformed roads).
- (6) The requirements of the Resource Management (National Environmental Standards for Electricity Transmission Activities) Regulations 2009 ("NESETA") apply directly to the operation, maintenance, upgrading, relocation or removal of transmission line(s) that were operating or able to be operated on or before 14 January 2010 and remain part of the National Grid. In the case of conflict with any other provision of this plan, including any provision in the activity table rules in this section, the NESETA provisions shall prevail.
- (7) The Resource Management (National Environmental Standards for Telecommunication Facilities) Regulations 2016 ("NESTF") provides national consistency in the rules surrounding the deployment of telecommunications infrastructure across New Zealand. This means that many telecommunications facilities may potentially be deployed as a permitted activity. However, telecommunications facilities which do not comply with the conditions within the NESTF, or are not covered by the regulations of

- the NESTF, will have the activity status specified in this plan. In the case of conflict with any other provision of this plan, the NESTF provisions shall prevail, unless located within an Identified Area other than the Urban Expansion Area, where the district plan rules for infrastructure may apply to regulated activities as per Regulation 56 of the NESTF.
- (8) The New Zealand Archaeological Association Archaeological sites are included on the planning maps for District Plan information purposes only. However, these sites are subject to the requirements of the Heritage New Zealand Pouhere Taonga Act 2014. Heritage New Zealand Pouhere Taonga must be contacted regarding development on or in proximity to these sites and the need to undertake an archaeological authority. The Heritage New Zealand Pouhere Taonga Act 2014 protects both recorded and unrecorded archaeological sites.
- (9) Rural land uses, such as farming activities, are generally not infrastructure when they are on-farm services and do not have a public or group infrastructure purpose. Infrastructure is defined in Chapter 13, and on-farm infrastructure to assist with the day to day running of a farm is not included in the definition of "infrastructure" and therefore is largely not subject to Chapter 14.

This chapter is organised into the following rule sections:

- 14.2 Rules applying to all infrastructure
- 14.3 General infrastructure
- 14.4 National Grid
- 14.5 Electrical distribution
- 14.6 Electricity generation
- 14.7 Liquid fuels and gas
- 14.8 Meteorological
- 14.9 Amateur radio
- 14.10 Telecommunications and radiocommunications
- 14.11 Water, wastewater and stormwater
- 14.12 Transportation

Advice Notes for 14.1 Introduction:

- (10) Transpower or a suitably qualified engineer should be contacted for assistance with clearance requirements in NZECP 34:2001. Compliance with the New Zealand Electrical Code of Practice for Electrical Safe Distances (NZCEP 34:2001) is mandatory under the Electricity Act 1992. All activities regulated by NZECP34:2001, including buildings, structures, earthworks and the operation of mobile plants must comply with that regulation. Activities should be checked for compliance even if they are permitted by the District Plan.
- (11) The Electricity (Hazards from Trees) Regulations 2003 applies to vegetation planted within the National Grid Corridor or near sub-transmission or distribution electricity lines and must be complied with. Vegetation to be planted within the National Grid Yard as shown on the District

Plan Maps should be selected and/or managed to ensure that it will not result in that vegetation breaching the Electricity (Hazards from Trees) Regulations 2003 or prevent access to support structures. To discuss works, including tree planting near any electricity line especially works within the National Grid Yard, contact the relevant network utility operator.

- (12) Any zoning (including precinct provisions) ceases to have effect from the time the land is vested or dedicated as a road.
- (13) In the case of stopped roads, the zoning reverts to that of the adjoining land at the time when the road is stopped, and where there are two different zones, the adjacent zone extends to the centre line of the former road.

14.2 Rules applying to all infrastructure

14.2.1 Permitted Activities

- (a) The following activities are permitted activities if they meet the activity specific conditions standards set out in this table. These rules apply to all infrastructure throughout the District.
- (b) The Activity and activity specific standards in 14.2 apply to all infrastructure except where a provision in the specific infrastructure type section 14.4 to 14.12 deals with the same matter, in which case the specific infrastructure type provision shall prevail. Where compliance with Rules 14.2 would contravene Rules 14.4, 14.5, 14.6, 14.7, 14.8, 14.9, 14.10, 14.11, or 14.12, then the requirements of Rules 14.4, 14.5, 14.6, 14.7, 14.8, 14.9, 14.10, 14.11, or 14.12 shall prevail.

Activity		Activity specific conditions standards	
PI	New infrastructure	14.2.1.1	
		 (1) Any new infrastructure activity and associated structures listed as a permitted activity within Chapter 14 must meet all of the following conditions standards: (a) Not exceed 10m² in area above ground; (b) Not exceed 2.5m in height; (c) Comply with the height in relation to boundary limits for the zone in which it is located; (d) Comply with the height in relation to boundary limits for the adjoining zone, if located in road or unformed road; (e) Not exceed the relevant noise limits that are applicable to that zone, when measured at the nearest boundary of the site. and any adjacent zone; and (f) Any other relevant conditions standards applying to that activity listed within Rules 14.3 14.4 -14.12. 	
		(2) The conditions standards in Rule 14.2.1.1(1) do not apply to:	
		(a) Activities with specific conditions <u>standards</u> relating to area, height, location and noise listed elsewhere within Rules <u>14.314.4-14.12</u> ;	
		(b) Roads or other lineal transport networks;	
		 (c) Road network activities, which include lighting and signage structures; and 	
		(d) Activities subject to National Environmental Standards Telecommunication Facilities 2016; and	

		(e)Support poles associated with service connections are exempt from height in relation to boundary rules
P2	Construction noise	14.2.1.2
		(1) Construction, maintenance, repair, replacement, upgrading or removal of infrastructure or the installation of new infrastructure must comply with NZS 6803:1999 Acoustics — Construction noise.
P3	Any activity emitting	14.2.1.3
	electric and magnetic fields	(1) Compliance with the International Commission on Non-ionising Radiation Protection Guidelines for limiting exposure to time varying electric and magnetic fields (1Hz – 100kHz) (Health Physics, 2010, 99(6); 818-836) and the recommendations from the World Health Organisation monograph Environmental Health Criteria (No 238, June 2007.
P4	Any activity emitting radio	14.2.1.4
	frequency fields	(1) Radio frequency fields must not exceed the maximum exposure level of the general public in the New Zealand Standard for Radiofrequency Fields Part 1: Maximum Exposure Levels 3 kHz to 300GHz (NZS 2772.1: 1999) measured at all places reasonably accessible to the general public.
PI	The operation,	Nil
<u>P5</u>	maintenance, repair and	
	removal of	
	existing <mark>infrastructure</mark>	
P2 <u>P6</u>	Minor upgrading of existing	14.3.1.1 <u>14.2.1.5</u>
	infrastructure	 (1) The realignment, configuration, relocation or replacement of infrastructure and associated structures that meet all of the following conditions standards: (a) Are within 5m of the existing alignment or location; (b) Do not increase the height of any existing pole or support structure by more than 15% 40% to a maximum height of 20m in all zones except the GRUZ – General Rural Zone, GIZ – General Industrial Zone, HIZ - Heavy Industrial Zone and MSRZ - Motor Sport and Recreation Zone; (c) Do not increase the diameter (width) of any existing pole or support structure by more than 15-50%, or 100% increase in the case of a double pole, in ALL zones; (d) Do not increase the diameter of any existing above-ground pipe by more than 15%300mm; and (e) Do not increase the area of any existing above-ground structure by more than 15%25% (2) Alterations and additions to overhead electricity and telecommunication lines on existing poles or support structures involving any of the following: (a) The addition of conductors to form a twinned or duplex-pairing; (b) The reconductoring of the line with higher capacity conductors; (c) The addition of longer, more efficient insulators; (e) The addition of earth wires (which may contain telecommunication lines), earthpeaks and lightning rods; (f) The addition, replacement or relocation of transformers or

		<u></u>
		(g) The addition, replacement or relocation of circuits and conductors:
		(h) The addition or replacement of telecommunication lines and fittings;
		(i) The replacement of existing crossarms with crossarms of an alternative design;
		(j) The increase in voltage of electric lines up to 110kV; or
		(k) The installation of mid-span electricity poles in existing networks to address clearances in New Zealand Electrical
		Code of Practice for Electrical Safe Distances 34:2001 ISSN
		0114-0663 (NZECP34:2001).
		(3) The addition, replacement or relocation of existing antennas where:
		(a) The antennas shall not increase in the largest face area by
		more than 20%-of the relevant permitted standard for new panel antennas and shall not increase the diameter of dish
		antenna by more than 20% of the relevant permitted
		standard for a new dish antenna; and (b) The antennas shall not increase in height by more than 20%
		of the relevant permitted standard for new dish and panel
		antenna s .
		Except that this rule shall not restrict the size of an antenna that
		would otherwise comply with the permitted activity rules applying
		to new antennas.
		Earthworks activities associated with the minor upgrading of existing
		infrastructure must comply with the conditions standards of Rule 14.3.1.3 14.2.1.7.
		(4) The minor upgrading of existing infrastructure must not remove
		any tree identified in Schedule 30.2. (5) Any trimming of a tree identified in Schedule 30.2 associated
		with the minor upgrading of existing infrastructure must be
		undertaken in accordance with the conditions <u>standards</u> of Rule <u>14.3.1.4</u> 14.2.1.8.
		(6) The standards in Rule 14.2.1.5(1) do not apply to road network
		activities or other lineal transport networks.
P3	Town	14.3.1.2 <u>14.2.1.6</u>
<u>P7</u>	Temporary infrastructure	
		(1) Installation and operation of temporary infrastructure that meets all of the following conditions standards:
		(a) Any buildings and/or structures must be removed from
		the site on completion of the works; (b) The ground must be reinstated on completion of works; and
		(c) The activity, including the requirements of Rule 14.3.1.2
D4		14.2.1.6(1) (a) and (b), must not exceed 12 months in total.
P4 P8	Earthworks activities associated	14.3.1.3 <u>14.2.1.7</u>
	associated with infrastructure	Any earthworks associated with infrastructure, including formation
		and maintenance of access tracks, must comply with all of the following conditions standards:
		(a) Do not exceed a volume of more than 2,500m³ for any single
Ì		activity;

		(b) Do not exceed an area of more than 2,500m² for any single
		activity;
		(c) Within 10m of a watercourse (excluding artificial
		watercourses) or 20m of Mean High Water Springs do not
		exceed a volume of more than 5m ³ and an area of more than 5m ² for any single activity, excluding existing rail
		infrastructure;
		(d) Erosion and sediment controls are implemented and
		maintained to retain sediment on the site of the earthworks
		activity;
		(e) All fill material used must be clean fill;
		(f) Areas exposed by earthworks activities are to be
		recontoured and replanted within 6 months of the
		commencement of the earthworks;
		(g) Earthworks shall not obstruct or divert any stormwater
		overland flow path or in such a way as to result in changed
		stormwater drainage patterns on another site; and (h) Earthworks are not located within:
		i. any Historic Heritage sites identified within Appendix
		Schedule 30.1; ii. any Sites or Areas of Significance to Maaori within
		Schedule 30.3 or 30.4;
		iii. the dripline of any Notable Tree within Schedule 30.2;
		iv. <u>any <mark>Heritage Precinct</mark>; or</u>
		v. <u>any <mark>Significant Natural Area.</mark></u>
		(2) Rule 14.3.1.314.2.1.7(1)(f) does not apply to earthworks required
		to establish a foundation or surface that will ultimately be sealed
		or constructed upon. (3) Earthworks associated with infrastructure in Landscape and
		Natural Character Areas must not:
		(a) Exceed 1.5m in height in relation to the cut or fill batter
		face; and
		(b) Use imported soil, other than the placement of
		aggregate/metal on any access track or in association
		with laying underground infrastructure or for land
		transport network infrastructure; and
		(c) Disturb or move more than 50m³ or exceed an area of
		250m ² in a Significant Amenity Landscape sand dune over
		any consecutive 12 month time period; and
		(d) Disturb or move more than 50m³ or exceed an area of
		250m ² in a High or Outstanding Natural Character area
		of the coastal environment over any consecutive 12-
		month time period; and
		(e) Disturb or move more than 50m³ or exceed an area of
		250m ² in an Outstanding Natural Feature or Outstanding
		Natural Landscapes over any consecutive 12 month time
		period. Rule 14.2.1.7(3)(e) shall not apply to earthworks
		associated with land transport network infrastructure.
P5	Trimming, maintenance or	14.3.1.4 <u>14.2.1.8</u>
<u>P9</u>	removal of vegetation or	(1)Trimming and pruning of trees and vegetation, except for Notable
	trees associated	(1)Trimming and pruning of trees and vegetation, except for Notable
	with infrastructure	trees in Schedule 30.2, necessary to protect all overhead electric lines
		or telecommunication lines; and any trimming, maintenance or removal
		of vegetation or trees associated with infrastructure, including access
		tracks, that meet all of the following standards:
	1	1

		()
P6 P10	Pipe and cable bridge structures for the conveyance of electricity, telecommunications, water, wastewater, stormwater and gas Electric vehicle chargers	 (a) No tree identified in Schedule 30.2 is removed; (b) Any required trimming of a tree identified in Schedule 30.2 is either: (i) To remove dead, dying, or diseased branches and the tree work is undertaken by a works arborist; or (ii) The maximum branch diameter does not exceed 50mm at severance and no more than 10% of live foliage growth is removed over any consecutive 12 month time period. (c) Any indigenous vegetation alteration or removal within a Significant Natural Area must not: (i) Include any trees over 6m in height or 600mm in girth at a height of 1.4m; and (ii) Exceed 50m² per site over any consecutive 12 month time period. (2) Any trimming, maintenance or removal of vegetation or trees associated with infrastructure that meet all of the following conditions: (2) Any trimming, maintenance or removal of vegetation, where required for the safe operation or maintenance of the National Grid or to remove a potential fire risk associated with the National Grid. Note: Trimming, maintenance or removal of vegetation or non-notable threes in and around electrical assets are required to be shall be managed in accordance with the Electricity (Hazards from Trees) Regulations 2003. 14.3.1.5-14.2.1.9 (1) Pipe and cable bridge structures that meet all of the following conditions standards: (a) Do not exceed 1m depth; (b) Do not exceed 1m depth; and (d) Are not located in an dentified Area. 14.3.1.6-14.2.1.10 (1) Electric vehicle chargers that meet all of the following conditions standards: (a) Do not exceed maximum height, measured from the natural ground level immediately below the structure, of 1.8m-2.5m each; (b) Do not exceed a maximum area of 1.5m² each; and (c) Have a socket connection, or a fitted cable management
		 (c) Have a socket connection, or a fitted cable management accessory; (d) Have at least one formed car park (in accordance with the relevant requirements of Table 14.12.5.11) per connection or charging cable if the site is located outside the road; (e) (c) Are not located in an Identified Area.
P8 <u>P12</u>	Service connections	14.3.1.7 14.2.1.11
		(1) There is no connection to an area, façade or item specifically listed in Schedule 30.1.
P9 P13	Minor infrastructure structure	

P10 P14	Closed-circuit television (CCTV) systems attached to existing buildings and structures	
PH PI5	Signage associated with infrastructure required for health and safety or asset identification purposes and/or required by legislation	Nil
P12 P16	Service connections for subdivision	(1) All new lots created as part of a subdivision other than a utility allotment, access allotment or reserve allotment, must be designed and located so that provision is made for access and service connections up to the boundary of the lot for: (a) Wastewater; (b) Water supply; (c) Stormwater (a management system that complies with Rule 14.11.1.1); (d) Electricity supply; (e) Telecommunications that is hard-wired or wireless; and (f) Vehicle access that complies with Rule 14.12.1.1. (2) Rule 14.3.1.8(1)(a) does not apply to any allotment that is served by a site contained wastewater system in accordance with Rule 14.11.1.3. (3) Within all zones, except the GRUZ – General Rural, RLZ – Rural Lifestyle and Country Living LLRZ – Large lot residential and SETZ - Settlement Zones where there is no reticulated water supply, the water supply required under Rule 14.3.1.8 14.2.1.12(1)(b) must be adequate for fire-fighting purposes in accordance with New Zealand Fire Service Firefighting Water Supplies Code of Practice SNZ PAS 4509:2008. Compliance with this Code of Practice can typically be achieved through connection to a Council reticulated water supply. (4) Within the GRUZ – General Rural, RLZ – Rural Lifestyle and non-reticulated LLRZ – Large lot residential and SETZ - Settlement Zones, where a subdivision is for the purposes of an additional house or workplace building, provision shall be made for an adequate supply of water and access to water supplies for firefighting purposes in accordance with New Zealand Fire Service Firefighting Water Services Code of Practice SNZ PAS 4509:2008. (5) Rule 14.32.1.12(1)(a), (b) and (c) do not apply to any GRUZ – General Rural, RLZ – Rural Lifestyle, LLRZ – Large lot residential or SETZ - Settlement zone or site.

14.3.2 14.2.2Controlled Activities

(a) The activity listed below is a controlled activity.

Activity		Activity specific conditions standards	Matters of control
CI	Subdivision to create a utility allotment for accommodating infrastructure	14.3.2.1-14.2.2.1 (1) Is undertaken by a network utility operator as defined by the Resource Management Act 1991.; and (2) Is for infrastructure permitted under Chapter 14; or (3) Is for infrastructure that has all necessary resource consents granted or notices of requirement confirmed.	Control is reserved over: (a) The adequacy of the allotment for its intended use; and (b) Whether any easement is required.
<u>C2</u>	Connection to an area, façade or item specifically listed in Schedule 30.1 for: (a) CCTV systems attached to existing buildings and structures; (b) Service connections; or (c) Minor infrastructure structures.		Control is reserved over: (a) The functional and operational needs of, and benefits derived from, the activity; and (b) Effects on the specific values, qualities and characteristics of the item specifically listed in Schedule 30.1.

14.2.2 14.2.3 Restricted Discretionary Activities

(a) The activities listed below are restricted discretionary activities.

Activity		Matters of Discretion	
RDI	New infrastructure that does not	Discretion is restricted to:	
	comply with one or more of the	(a) The functional and operational needs of, and	
	conditions standards of Rule 14.2.1.1	benefits derived from, the infrastructure;	
		(b) Visual, landscape, streetscape and amenity effects;	
		<u>and</u>	
		(c) Noise levels.	
RD2	Construction noise that does not	Discretion is restricted to:	
	comply with Rule 14.2.1.2	(a) Effects on amenity values;	
		(b) Hours of construction;	
		(c) Noise levels;	
		(d) Timing and duration; and	
		(e) Methods of construction.	
RDI	Minor upgrading of existing	Discretion is restricted to:	
	infrastructure that does not comply	i. The functional and operational needs of, and	
RD3	with one or more of the conditions	benefits derived from, the infrastructure;	
	standards of Rule 14.3.1.1 14.2.1.5	ii. Visual, streetscape and amenity effects;	
		iii. <u>Transport</u> road network safety and efficiency;	

	which are relevant to the activity proposed	 iv. Management of sediment and dust, including the staging of works; v. The volume, extent and depth of the earthworks activities; vi. The location of the earthworks activities, taking into account any effects on the values, qualities and characteristics of the site; vii. Any flood or land stability risks; viii. Visual, landscape and amenity effects; ix. Whether alternative methodologies avoiding the need to affect any tree identified in Schedule 30.2
RD2	Earthworks associated with	have been adequately considered. Discretion is restricted to:
1,02	infrastructure that do not comply with one or more of the conditions standards of Rule 14.3.1.3 14.2.1.7	 (a) Management of sediment and dust, including the staging of works; (b) The volume, extent and depth of the earthworks activities; (c) The location of the earthworks activities, taking into account any effects on the values, qualities and characteristics of the site, including Sites and Areas of Significance to Maaori and any Historic Heritage Items;
		(d) Any flood or land stability risks; and(e) Visual, landscape and amenity effects.
RD3	Trimming, maintenance or removal of vegetation or trees that does not comply with one or more of the conditions standards of Rule 14.3.1.4 14.2.1.8	Discretion is restricted to: (a) The extent of the works required; (b) Effects on the values, qualities and characteristics of any tree identified in Schedule 30.2 or any Significant Natural Area; (c) Whether alternative methodologies avoiding the need to affect the tree(s)/vegetation have been adequately considered. (d) land transport network safety and efficiency
RD4	Pipe and cable bridge structures for	Discretion is restricted to:
	the conveyance of electricity, telecommunications, water, wastewater, stormwater and gas: (a) That do not comply with one or more of the conditions standards of Rule 14.3.1.5 14.2.1.9; or (b) Are located within Identified areas.	 (a) The functional and operational needs of, and benefits derived from, the infrastructure; (b) Visual, streetscape and amenity effects, (c) Public safety; and (a) Effects on the values, qualities and characteristics of any Identified Area.
RD5	Electric vehicle charging stations	Discretion is restricted to:
	located: (a) That do not comply with one or more of the conditions standards of Rule 14.3.1.6 14.2.1.10; or (b) Are located within Identified areas.	 (a) The functional and operational needs of, and benefits derived from, the infrastructure; (b) Visual, streetscape and amenity effects; (c) Road-Land transport network safety and efficiency; (d) Public safety; (b) Effects on the values, qualities and characteristics of any Identified Area.
RD6	The following activities that does not comply with Rule 14.3.1.7: (a) CCTV systems attached to existing buildings and structures (b) Service connections (c) Minor infrastructure structures.	Discretion is restricted to: (a) The functional and operational needs of, and benefits derived from, the activity, and (b) Effects on the specific values, qualities and characteristics of the item specifically listed in Schedule 30.1.

RD7	Access and service connections for	Discretion is restricted to:
	subdivision that do not comply with one or more of the standards of	a) The adequacy of the service connection:
	14.2.1.12	 b) The functional and operational needs of, and benefits derived from, the infrastructure;
		c) Subdivision layout; and
		For vehicle access:
		d) Land transport network safety and efficiency;
		e) The extent to which the safety and efficiency of rail and road operations will be adversely affected, including:
		i. The outcome of any consultation with KiwiRail; NZTA; Waikato District Council, as the rail or road controlling authority;
		ii. Any characteristics of the proposed use that will make compliance unnecessary:
		g) Traffic generation by the activities to be served by the vehicle access:
		h) Mitigation to address safety and/or efficiency of vehicle access, including access clearance requirements for fire-fighting purposes;
		 i) The foreseeable needs for access by emergency services and their vehicles;
		j) Location and design of the vehicle access; and
		 k) Safety for all users of the vehicle access and/or intersecting road including but not limited to vehicle occupants or riders and pedestrians.

14.2.3 Discretionary Activities

(a) The activities listed below are discretionary activities.

DI	Any infrastructure not specifically listed provided for as a permitted, restricted discretionary or non-complying activity within Chapter 14, including associated earthworks, not located within an Identified Area.
ĐI	Activities and permanent structures or facilities located within road or unformed road not
	provided as road network activities under Rule 14.12.1
D2	Temporary infrastructure that does not comply with one or more of the conditions standards of Rule 14.3.1.2 14.2.1.6
D3	Access and service connections for subdivision that do not comply with one or more of the conditions
	of Rule 14.3.1.8

D4 <u>3</u>	Subdivision to create a utility allotment for accommodating infrastructure that does not comply with
	one or more of the conditions <u>standards</u> of Rule 14.3.2.1

14.2.34 Non-Complying Activities

(a) The activities listed below are non-complying activities.

NCI	Any activity that does not comply with the electric and magnetic field emissions standard in Rule 14.2.1.3
NC2	Any activity that does not comply with the radio frequency fields standard in Rule 14.2.1.4
NC3	Any infrastructure not specifically listed provided for as a permitted, restricted discretionary, discretionary or non-complying activity within Chapter 14, including associated earthworks, located within an Identified Area

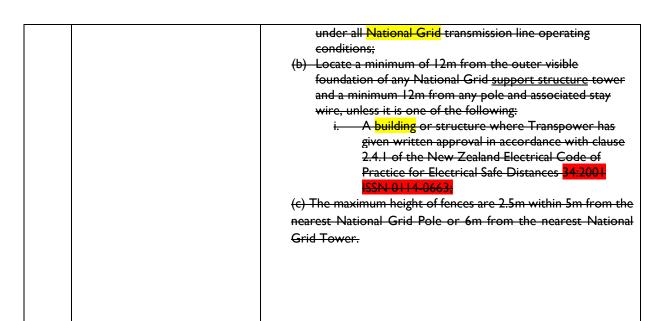
14.3 General infrastructure

14.4 National Grid

14.4.1 Permitted Activities

(a) The following activities are permitted activities within the National Grid Yard within a road if they meet the activity specific conditions standards set out in this table. These rules apply throughout the District.

Activity		Activity specific conditions standards
PI	Buildings, structures and sensitive land uses within the National Grid Yard in existing Residential or Village Zones as of 18 July 2018	14.4.1.1 (1) Within the National Grid Yard in the Residential or Village Zone: (a) Building alterations and additions to an existing building or structure for a sensitive land use that does not involve an increase in the building height or footprint; (b) New, buildings and structures that are not for a sensitive land use; (c) Infrastructure (other than for the reticulation and storage of water for irrigation purposes) undertaken by a network utility operator as defined in the Resource Management Act 1991
		(2) All buildings or structures permitted by Rule 14.4.1.1(1) must: (a) Comply with the New Zealand Electrical Code of Practice for Electrical Safe Distances 34:2001 ISSN 0114-0663

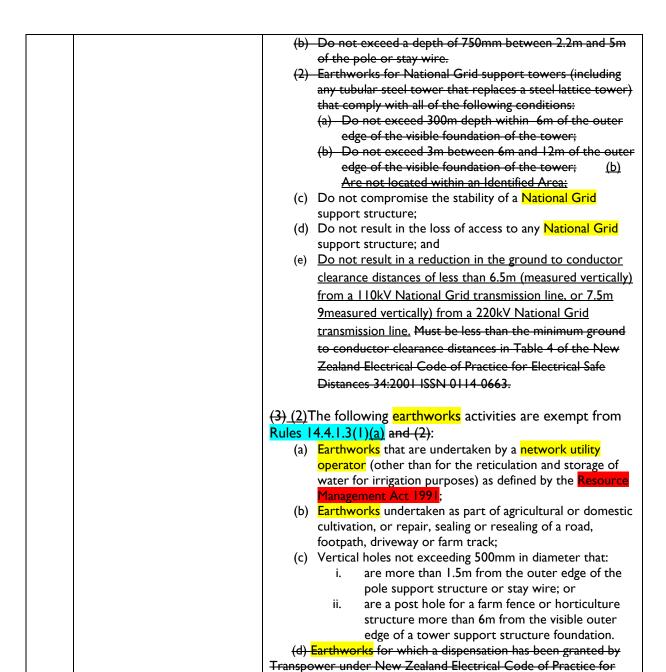


P2 Buildings, structures and sensitive land use within the National Grid Yard in a road all other zones as of 18 July 2018

14.4.1.2

- (1) Within National Grid Yard in the Business, Industrial, Country Living, Heavy Industrial, Rural, Town Centre Business, Hampton Downs Motorsport and Recreation, Tamahere Business, Te Kowhai Zone Airpark, or Reserves Zone:
 - Building alterations and additions to an existing building or structure that does not involve an increase in the building height or footprint; or
 - Infrastructure (other than for the reticulation and storage of water for irrigation purposes) undertaken by a network utility operator as defined in the Resource Management Act 1991; or
 - Non-habitable buildings or structures for farming activities in rural zones (but not including any intensive farming buildings, commercial greenhouses and milking/dairy sheds); or
 - d. Yards for milking/dairy sheds Non-habitable horticultural buildings; or
 - (e) Artificial crop protection and support structures (f) Fences less than 2.5m in height, measured from the natural ground level immediately below the structure; and (g) Minor structures associated with farming activity that are not situated within 12m of the outer visible foundation of any National Grid tower or 10m of the outer visible foundation of a National Grid tower, including: fences, gates, stock exclusion structures, cattle-stops, stock underpasses, stock bridges and culvert crossings, and drinking water supply pipelines, troughs, and water storage tanks.
 - (2) All buildings or structures permitted by Rule 14.4.1.2(1) must:
 - a. Comply with the New Zealand Electrical Code of Practice for Electrical Safe Distances 34:2001
 ISSN 0114-0663 under all National Grid transmission line operating conditions; and

		b. Locate a minimum 12m from the outer visible
		foundation of any National Grid support
		structure foundation tower and locate a
		minimum 12m from any pole and associated
		stay wire, unless it is:
		i. A building or structure where
		Transpower has given written approval
		in accordance with clause 2.4.1 of the
		New Zealand Electrical Code of Practice
		for Electrical Safe Distances NZECP; or
		ii. Fences less than 2.5m in height,
		measured from the natural ground level
		immediately below the structure, and
		located a minimum of 5m from the
		nearest National Grid support structure
		foundation; or
		iii. Artificial crop protection. Network
		• •
		utilities (other than for the reticulation
		and storage of water for irrigation
		purposes) or any part of electricity
		infrastructure undertaken by a
		network utility operator as defined in
		the Resource Management Act 1991,
		that connects to the National Grid; and
		(c) Not permanently physically impede existing
		vehicular access to a National Grid support structure
		(3) The maximum height of fences are 2.5m within 5m from
		the nearest National Grid Pole or 6m from the nearest
		National Grid tower.
		(3) Artificial crop protection <u>structures</u> and support
		structures between 8m and 12m from a single pole
		support structure but not a tower and any associated
		guy wire (but not tower) must that :
		a. Meet the requirements of the New Zealand
		Electrical Code of Practice for Electrical Safe
		Distances NZECP 34:2001 ISSN 0114-0663 for
		separation distances from the conductor;
		b. BeAre no higher than maximum 2.5m high;
		c. Be Are removable or temporary, to allow a clear
		working space of at least 12 metres from the
		pole when necessary for maintenance and
		emergency repair purposes;
		(a) Allow all-weather access to the pole and a sufficient
		area for maintenance equipment, including a crane.
P3	Family and and the second	14.4.1.3
'	Earthworks activities within a	
	road within the National Grid	(I) Earthworks within the for National Grid Yard support poles
	Yard	and any stay wires that comply with all of the following
		conditions standards:
		(a) Do not exceed a depth (measured vertically) of 300mm
		within 12m of the outer visible edge of any National Grid
		support structure foundation.2.2m of the pole or stay
<u></u>		wire; and



14.4.2 Restricted Discretionary Activities

- (a) The activities listed below are restricted discretionary activities.
- (b) Discretion to grant or decline consent and impose conditions is restricted to the matters of discretion set out in the following table.

Electrical Safe Distances 34:2001 ISSN 0114-0663.

Activity	1	Matters of Discretion
RDI	Below ground transmission lines associated with the National Grid not located within identified areas	Discretion is restricted to: (a) The functional and operational needs of, and benefits derived from, the infrastructure;

RD2	Transformers, substations and switching stations associated with the National Grid not located within Identified Areas	 (b) Visual, streetscape and amenity effects; <u>and</u> (c) The risk of electrical hazards affecting public or individual safety, and risk of property damage.
RD3	Earthworks within a road within the National Grid Yard that do not comply with one or more of the conditions standards (a) of Rule 14.4.1.3(1) or and Rule 14.4.1.3(2) but complies with standards (b) (c) (d) and (e) of Rule 14.4.1.3(2)	Discretion is restricted to: (a) Impacts on the operation, maintenance, upgrading and development of the National Grid; (b) The risk to the structural integrity of the affected National Grid support structure(s); (c) Any impact on the ability of the National Grid owner (Transpower) to access the National Grid; (d) The risk of electrical hazards affecting public or individual safety, and the risk of property damage. (e) Technical advice provided by the National Grid owner (Transpower); and (f) Any effects on National Grid support structures including the creation of an unstable
RD4	The subdivision of land in any zone a road within the National Grid Subdivision Corridor that complies with all of the following conditions standards: (a) All resulting allotments intended to contain a sensitive land use must provide be able to demonstrate that they are capable of accommodating a building platform for the likely principal building(s) and any building(s) for a sensitive land use to be located outside of the National Grid Yard, other than where the allotments are for roads, access ways or infrastructure; or and (b) The layout of allotments and any enabling earthworks must ensure that physical access is maintained to any National Grid support structures located on the allotments, including any balance area.	Discretion is restricted to: (a) The subdivision layout and design in regard to how this may impact on the operation, maintenance, upgrading and development of, including access to, the National Grid; (b) The ability to provide a complying building platform outside of the National Grid Yard; (c) The risk of electrical hazards affecting public or individual safety, and the risk of property damage; (d) The nature and location of any vegetation to be planted in the vicinity of National Grid transmission lines, and the how such landscaping will impact on the operation, maintenance, upgrade and development (including access) of the National Grid; (e) (e) The risk to the structural integrity of the National Grid: (f) The extent to which the subdivision design and consequential development will minimise the potential reverse sensitivity on and amenity and nuisance effects of the National Grid asset.

14.4.3 Discretionary Activities

(a) The activities listed below are discretionary activities.

DI	New <u>above and</u> below ground transmission lines associated with the National Grid within Identified Areas
D2	New above-ground transmission lines associated with the National Grid not located within identified areas

14.4.4 Non-Complying Activities

(a) The activities listed below are non-complying activities.

<u>NCI</u>	Earthworks within a road and within the National Grid Yard that is not a permitted activity under Rule 14.4.1 PH P3 or a restricted discretionary activity under Rule 14.4.2 RD3 or a discretionary activity under Rule 14.4.3 D3
NCI	Above ground transmission lines associated with the National Grid located within identified areas
NC2	Transformers, Substations and switching stations associated with the National Grid located within Identified Areas identified areas
NC3	Any activity within a road and within the National Grid Yard that does not comply with one or more of the conditions standards of Rule 14.4.1.1
NC4	Any activity within a road and within the National Grid Yard that does not comply with one or more of the conditions standards of Rule 14.4.1.2
NC5	Any new building for a sensitive land use, or addition to an existing building that involves an increase in the building envelope or height for a sensitive land use, within a road and within the National Grid Yard
NC6	Any change of use of an existing building to a sensitive land use within a road and within the National Grid Yard
NC7	The establishment of any new sensitive land use within a road and within the National Grid Yard
NC8	Any new hazardous facility that involves the storage and handling of hazardous substances with explosive or flammable intrinsic properties within 12m of the centre line of a National Grid Transmission Line
NC9	Dairy/milking sheds or buildings for intensive farming within the National Grid Yard
NCI0	Any subdivision of land in any zone a road and within the National Grid Corridor that does not comply with one or more of the conditions standards of Rule 14.4.2.1
NCH	Earthworks within the National Grid Yard that is not a permitted activity under Rule 14.4.1 P3 or a restricted discretionary activity under Rule 14.4.2 RD3 or a discretionary activity under Rule 14.4.3 D4

14.5 Electrical distribution

14.5.1 Permitted Activities

- (a) The following activities are permitted activities if they meet the activity specific conditions standards set out in this table. These rules apply throughout the District.
- (b) Rule 14.2.1.1 will apply to the activities set out in this table unless there is a specific area, height, location and noise condition standard listed below

Activity		Activity specific conditions standards
PI	Below ground distribution lines	Nil
P2	Overhead distribution lines and support structures within the GRUZ – General Rural Zone	14.5.1.1(a) Overhead distribution lines and support structures that comply with the following:

P3	Overhead distribution lines and support structures within road or unformed road located adjacent to the GRUZ – General Rural Zone	 (i) Do not exceed a voltage up to and including I 10kV; and (ii) Do not exceed a maximum height of 25m, measured from the natural ground level immediately below the structure,; or (iii) Do not exceed a maximum height of 30m, measured from the natural ground level immediately below the structure, for co-location of at least two operators; and (iv) Are not located within an Identified Area.
P4	Substations and associated transformers and switching stations	 14.5.1.2 (a) Substations and associated transformers and switching stations distributing electricity that comply with the following: Distribute electricity at a voltage up to and including I 10kV; and Are located within the COMZ - Commercial Business Zone, Business TCZ - Town Centre Zone, BTZ - Business Tamahere Business zone, TKAZ - Te Kowhai Airpark Zone, GIZ - General Industrial Zone, HIZ - Heavy Industrial Zone and MSRZ - Motor Sport and Recreation Zone; and the GRUZ - General Rural Zone Any ancillary buildings do not exceed 100 250m² in gross floor area; and Are not located within an Identified Area; and Maximum height 10m, measured from the natural ground level immediately below the structure.
P5	Construction or alteration of a building for a sensitive land use	14.5.1.3 (a) The construction or alteration of a building for a sensitive land use that complies with all of the following conditions: (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 (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.

14.5.2 Restricted Discretionary Activities

- (a) The activities listed below are restricted discretionary activities.
- (b) Discretion to grant or decline consent and impose conditions is restricted to the matters of discretion set out in the following table.

Activity		Matters of Discretion	
RDI	 (a) Overhead distribution lines and support structures not exceeding a voltage up to and including I I 0kV: (i) Not located within the GRUZ – General Rural Zone; (ii) Not located within an Identified Area. 	 (a) Discretion is restricted to: (i) The functional need and operational need of, and benefits derived from, the infrastructure; (ii) The extent to which alternative technologies and techniques have been considered; (iii) The extent to which co-location of overhead lines is technically, economically and practically reasonable; (iv) The extent to which the proposal is in accordance with relevant industry standards 	

		and meets specified clearance requirements for operational and safety reasons; (v) The extent to which the proposal will adversely affect the amenity values of the site and locality; and (vi) The extent to which there are difficult ground conditions, topography or obstructions which make undergrounding impractical.
RD2	Construction or alteration of a building for	(a) Discretion is restricted to:
	a sensitive land use that does not comply	(i) Effects on the amenity values of the site;
	with Rule 14.5.1.3	(ii) The risk of electrical hazards affecting the
		safety of people;
		(iii) The risk of damage to property; and
		(iv) Effects on the operation, maintenance and
		upgrading of the electrical distribution or
		transmission lines.

14.5.3 Discretionary Activities

(a) The activities listed below are discretionary activities.

DI	Overhead distribution lines and support structures exceeding a voltage of 110kV
D2	Overhead distribution lines and support structures of any voltage located within an identified area
D3	Substations and associated transformers and switching stations that do not comply with one or more conditions standards of Rule 14.5.1.2

14.6 Electricity generation

14.6.1 Permitted Activities

- (a) The following activities are permitted activities if they meet the activity specific conditions standards set out in this table. These rules apply throughout the District.
- (b) Rule 14.2.1.1 will apply to the activities set out in this table unless there is a specific area, height, location and noise condition standard listed below.

Activity		Activity specific conditions standards
PI	Small-scale electricity generation	(a) Small-scale electricity generation and community-scale electricity generation that comply with each of the following conditions
P2	Community-scale electricity generation	 standards, where applicable: (a) Is not located within an Identified Area; (b) Is not located on a road, or unformed road; (c) Less than 20kW of electricity is generated; (d) Maximum one wind turbine per site in the GRZ – General Residential, MRZ – Medium Density Residential, RPZ - Rangitahi Peninsula, LLRZ – Large lot residential and SETZ – Settlement and Village Zones; (e) Freestanding wind turbines must not exceed the building height limit of the zone in which they are located by more than 3m;

		(f) Freestanding wind turbines have a maximum blade diameter
		of 2.5m; (g) Roof-mounted wind turbines must not exceed the building height limit of the zone in which they are located
		by more than 3m; (h) Roof-mounted wind turbines have a maximum blade diameter
		of 2.5m; (i) Any wind turbine on a site adjoining GRZ – General Residential, MRZ – Medium Density Residential, RPZ - Rangitahi Peninsula, LLRZ – Large lot residential or SETZ – Settlement zone or Village Zones must meet the height in relation to boundary limits on the boundary with that adjoining zone; (j) Solar panels on the roof of a building must not exceed 1.5m in height above the existing roof; or attached to a ground mounted frame; (k) Wind turbine noise must: (i) Not exceed the background sound level (L95) by more than 5dBA, or a level of 40dBA (L95), whichever is the greater, when measured at operational wind speeds, and for properties located adjacent to the facility when measured at: (1) Any existing building or structure for
		sensitive land uses; and (2) Any potential building site where a building
		or structure for sensitive land uses could be located as a permitted activity; and
		(ii) Be measured and assessed in accordance with NZS6808: 2010 Acoustics – Wind Farm Noise; and
		All other structures not listed above must not be higher than the maximum building height limit of the zone in which they are located.
P3	Research and exploratory- scale investigations for	14.6.1.2
	renewable electricity	(a) Research and exploratory-scale investigations for renewable electricity generation activities that comply with all of the
	generation activities	following:
		 (i) The noise limits that are applicable to the zone; (ii) The height of any equipment must not exceed the building height limit of the zone in which they are located by more than 3m, or within the GRUZ – General Rural Zone must not exceed 20m total height measured from the natural ground level immediately below the structure.; (iii) The size and location of any equipment must not exceed height in relation to boundary relevant to the zone in which it is located; and
		 (iv) Setbacks relevant to the zone in which it is located; (v) Is not located within an identified area; and (vi) Is not located on a road, or unformed road.
P4	Temporary diesel-fuelled electricity generation activities	(vi) is not located on a road, or unformed road. Nil
P5	Electricity generation within the Huntly Power Station site in the HIZ - Heavy Industrial Zone.	I4.6.1.3 Electricity generation within the Huntly Power Station site in the HIZ - Heavy Industrial Zone that complies with the HIZ - Heavy Industrial Zone rules.

14.6.2 Restricted Discretionary Activities

- (a) The activities listed below are restricted discretionary activities.
- (b) Discretion to grant or decline consent and impose conditions is restricted to the matters of discretion set out in the following table.

Activi	ity	Matters of Discretion
RDI	Small-scale electricity generation that do not comply with one or more of the conditions standards of Rule 14.6.1.1 Community-scale electricity	Discretion is restricted to: (a) The functional and operational needs of, and benefits derived from, the infrastructure; (b) Visual, landscape, streetscape and amenity effects, including noise;
	generation that do not comply with one or more of the conditions standards of Rule 14.6.1.1	 (c) Shadow flicker effects; (d) The risk of hazards affecting public or individual safety, and risk of property damage; (e) Effects on the values, qualities and
RD3	Research and exploratory-scale investigations for renewable electricity generation activities that do not comply with one or more of the conditions standards of Rule 14.6.1.2	characteristics of any Identified Area; <u>and</u> (f) <u>Ecology and biodiversity effects.</u>
RD4	Electricity generation within the Huntly Power Station site in the HIZ – Heavy Industrial Zone that do not comply with one or more standards of the Rule 14.6.1 P5	Discretion is restricted to the extent of effects associated with the HIZ - Heavy Industrial Zone rules that the activity does not comply with.

14.6.3 Discretionary Activities

(a) The activities listed below are discretionary activities.

DI	Large-scale wind farms located within the GRUZ – General Rural Zone, not within an Identified Area
	Wind turbine noise must be measured and assessed in accordance with NZS6808:2010 Acoustics – Wind Farm Noise

14.6.4 Non-Complying Activities

(a) The activities listed below are non-complying activities.

NCI	Large-scale wind farms not located within in a zone other than the GRUZ – General Rural Zone, including within an Identified Area
	Wind turbine noise must be measured and assessed in accordance with NZS6808:2010 Acoustics – Wind Farm Noise
NC2	<u>Large-scale wind farm located within any Identified Area in the GRUZ – General Rural Zone and within an Identified Area</u>
	Wind turbine noise must be measured and assessed in accordance with NZS6808:2010 Acoustics – Wind Farm Noise

14.7 Liquid fuels and gas

Introduction

The rules in Section 14.7 only apply to facilities and structures operated by a network utility operator.

14.7.1 Permitted Activities

- (a) The following activities are permitted activities if they meet the activity specific conditions standards set out in this table. These rules apply throughout the District.
- (b) Rule 14.2.1.1 will apply to the activities set out in this table unless there is a specific area, height, location and noise condition standard listed below.

Activity		Activity specific conditions standards	
PI	Below ground pipelines for the conveyance of liquid fuels and gas	 (a) Below ground pipelines for the conveyance of liquid fuels and gas that comply with all of the following: (i) Any aboveground sections of pipeline must comply with the following: A. Not exceed 25m in length, and B. Not exceed 300mm in diameter. (ii) Gas pipelines must not exceed a gauge pressure of 2,000 kilopascals. (iii) Is not located within an Identified Area. 	
P2	Below ground pipelines located within an Identified Area	 (a) Below ground pipelines for the conveyance of liquid fuels and gas, located within an Identified Area that comply with the following: (i) There are no aboveground sections of pipeline within the Identified Area; and (ii) Gas pipelines must not exceed a gauge pressure of 2,000 kilopascals. 	
P3	Storage facilities and pump stations for liquid fuels and gas	 (a) Storage facilities and pump stations for liquid fuels and gas that comply with all of the following: (i) Is not located within an Identified Area; and (ii) Is not located on a road, or unformed road. 	

14.7.2 Discretionary Activities

(a) The activities listed below are discretionary activities.

DI	Pipelines for the conveyance of liquid fuels and gas that do not comply with one or more of the conditions standards of Rule 14.7.1.1 or 14.7.1.2
D2	Storage facilities and pump stations for liquid fuels and gas that do not comply with one or more of the conditions standards of Rule 14.7.1.3

14.8 Meteorological

14.8.1 Permitted Activities

- (a) The following activities are permitted activities if they meet the activity specific conditions standards set out in this table. These rules apply throughout the District.
- (b) Rule 14.2.1.1 will apply to the activities set out in this table unless there is a specific area, height, location and noise condition standard listed below.

Activity		Activity specific conditions standards
PI	Meteorological enclosures and buildings, including automatic weather stations	 (a) Meteorological enclosures and buildings, including automatic weather stations, that comply with all of the following: (i) The size of the structure must not exceed 30m² in gross floor area; (ii) The structure complies with any relevant building height condition standard for the applicable zone; (iii) Is not located within an Identified Area; and (iv) Is not located on a road, or unformed road.
P2	Meteorological and air quality monitoring structures and devices	 (a) Meteorological and air quality monitoring structures and devices that comply with all of the following: (i) Do not exceed I2m in height measured from the natural ground level immediately below the structure; (ii) There shall be no more than one structure instrument, or device per site; (iii) Is not located within an Identified Area; (iv) Is not located on a road, or unformed road. (v) Maximum area is 10m².

14.8.2 Restricted Discretionary Activities

- (a) The activities listed below are restricted discretionary activities.
- (b) Discretion to grant or decline consent and impose conditions is restricted to the matters of discretion set out in the following table.

Activity		Matters of Discretion	
RDI RD2	Meteorological enclosures and buildings, including automatic weather stations located within road or unformed road Meteorological and air quality monitoring structures and devices located within road or unformed road	 (a) Discretion is restricted to: (i) The functional and operational needs of, and benefits derived from, the infrastructure; (ii) Visual, streetscape and amenity effects; and (iii) Road network safety and efficiency; and (iv) Effects on the specific values, qualities and characteristics of any Identified Area. 	

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14.8.3 Discretionary Activities

(a) The activities listed below are discretionary activities.

DI	Meteorological enclosures and buildings, including automatic weather stations located within Identified areas
D2	Meteorological and air quality monitoring structures and devices located within Identified areas
<u>D3</u>	Meteorological enclosures and buildings, including automatic weather stations that do not comply with one or more standards in Rule 14.8.31 (P1)
<u>D4</u>	Meteorological and air quality monitoring structures and devices that do not comply with one or more standards in Rule 14.8.31 (P2)

14.9 Amateur radio

14.9.1 Permitted Activities

- (a) The following activities are permitted activities if they meet the activity specific conditions standards set out in this table. These rules apply throughout the District.
- (b) Rule 14.2.1.1 will apply to the activities set out in this table unless there is a specific area, height, location and noise condition standard listed below.

Activity	Activity specific conditions standards
PI Antennas associated with amateur radio configurations	 (a) Antennas associated with amateur radio configurations that comply with all of the following: (i) Where attached to a building or other structure (including a mast): A. The maximum diameter is 2m for an antenna dish; B. The maximum area is 2m² in area for a panel antenna; C. The maximum dimension in any direction is 2m for a panel antenna; D. The antenna must not overhang a site boundary; (ii) One pedestal-mounted antenna per site that meets the following: A. The antenna is pivoted less than 4m above the ground; B. The maximum diameter is 5m; C. Complies with the setback and height in relation to boundary requirements of the relevant zone; (iii) Are not located within an Identified Area;
P2 Aerials associated with amateur radio configurations	 (iv) Is not located on a road, or unformed road. 14.9.1.2 (a) Aerials associated with amateur radio configurations that comply with all of the following: (i) Any of the elements making up the aerial do not exceed 80mm in diameter; (ii) For horizontal HF yagi aerials, the maximum element length does not exceed 14.9m, and the boom length does not exceed 13m; (iii) No part of the aerial (including aerial wires) overhangs a site boundary; (iv) The setback standards applying to buildings in the applicable zone, except that aerial wires are not required to comply with the setback standards; (v) No part of the aerial exceeds the maximum stated height applying to buildings in the applicable zone by more than 2m (except for vertical aerials as provided for in Rule 14.9.1.2(1)(f) below) Rule 14.9.1.2(a)(vi); (vi) For vertical aerials, one vertical aerial to a maximum height of 20m, measured from the natural ground level immediately below the structure, provided there is only one vertical aerial or one supporting structure (and attached aerial(s) or antenna(s) under Rule 14.9.1.3(1)(c) below Rule 14.9.1.3(a)(iii) per site that exceeds the maximum stated height applying to buildings in the applicable zone by more than 2m; (vii) Are not located within an Identified Area; and (viii) Is not located on a road, or unformed road.

P3	6	14.9.1.3
「3	Support structures	17.7.1.3
	associated with	(a) Support structures associated with amateur radio configurations that
	amateur radio	comply with all of the following:
	configurations	(i) For wire aerials of less than 115mm in outside diameter, no more
		than six support poles per site provided that:
		A. The maximum height of the support poles is the maximum
		building height applying in the zone in which they are located;
		B. The setback and height in relation to boundary standards shall
		not apply to these support poles; <u>and</u>
		(ii) Where guy wires are used these must not exceed 12mm in
		diameter;
		(iii) One pole support structure (excluding support poles for wire
		aerials) or lattice support structure per site, provided that:
		A. The maximum height of the pole support structure is 9m
		measured from the natural ground level immediately below the structure, and the maximum inscribed circle of the pole
		and any lowering mechanism shall be 600mm below 4m in
		height and 115mm above 4m; or
		B. The maximum height of the lattice support structure is 9m
		measured from the natural ground level immediately below
		the structure, and the maximum inscribed circle and any
		lowering mechanism shall be 900mm below 8m in height and
		660mm above 8m; <u>and</u>
		C. The pole or lattice structure is located in accordance with
		setback standards applying to buildings in the zone in which
		they are located. For the purpose of this rule the height in
		relation to boundary standards shall not apply to the pole or
		lattice support structure; <u>and</u> D. Where guy wires are used these must not exceed I2mm in
		diameter; and
		E. At no point must any guy wire overhang the boundary; and
		(iv) For each site, one support structure can exceed the maximum
		stated height applying to buildings in the applicable zone by more
		than 2m, provided that:
		A. The maximum height of the support structure and any
		attached aerials or antennas is 20m measured from the natural
		ground level immediately below the structure,;
		B. Theis single tall supporting structure may be one of the
		following: <u>Ba.</u> A <u>pole, a tubular guyed mast, a lattice mast, and may be</u>
		guyed or self-supporting. The maximum inscribed circle of the
		mast below 9m shall be 1000mm, and above 9m must fit
		within a tapering envelope with a maximum inscribed circle of
		660mm at 9m, and 420mm at 20m; andshall be 115mm, or
		BbA guyed lattice mast. The maximum inscribed circle of the mast
		below 9m shall be 1000mm, and above 9m shall be 300mm. The
		mast may be of constant width or tapering, or
		BcA self-supporting lattice mast. The maximum inscribed circle of
		the mast below 9m shall be 1000mm, and above 9m must fit
		within a tapering envelope with a maximum inscribed circle of 660mm at 9m and 420mm at 20m, or
		BdA self-supporting tubular mast. The maximum inscribed circle of
		the mast below 9m shall be 1000mm, and above 9m must fit
		within a tapering envelope with a maximum inscribed circle of
		230mm at 9m and 115mm at 20m; and
		Bb. There may be local enlargement of the support
		structure to accommodate a rotator mechanism; and

Bc. The supporting structure is located in accordance with
setback standards applying to buildings in the applicable
11,70
zone. For the purpose of this rule the height in relation to
boundary standards shall not apply to the supporting
structure; and
Bd. Where guy wires are used, these must not exceed 12
mm in diameter; and
Be. At no point must any guy wire overhang the boundary;
Bf. A second pole or support structure up to 14m height is
permitted for operation of 3.6MHz radio; and
(v) Are not located within an Identified Area; and
(vi) Is not located on a road, or unformed road.

14.9.2 Restricted Discretionary Activities

- (a) The activities listed below are restricted discretionary activities.
- (b) Discretion to grant or decline consent and impose conditions is restricted to the matters of discretion set out in the following table.

Activity		Matters of Discretion	
RDI	Amateur radio configurations that are not located on a road, unformed road or Identified Area, and do not comply with one or more of the conditions standards of Rules 14.9.1.1, 14.9.1.2 and 14.9.1.3	Discretion is restricted to: (a) The bulk, form, scale, location and number of antennas, aerials and supporting structures; (b) Location on site; and (c) Visual, streetscape and amenity effects.	

14.9.3 Discretionary Activities

(a) The activities listed below are discretionary activities.

DI	Antennas, aerials and support structures associated with amateur radio configurations located within road and unformed road
D2	Antennas, aerials and support structures associated with amateur radio configurations located within Identified areas

14.10 Telecommunications and radiocommunications

Notes:

+1 Means activities not provided as a permitted activity under the Resource Management (National Environmental Standards for Telecommunication Facilities ("NESTF")) Regulations 2016

14.10.1 Permitted Activities

- (a) The following activities are permitted activities if they meet the activity specific conditions standards set out in this table. These rules apply throughout the District.
- (b) Rule 14.2.1.1 will apply to the activities set out in this table unless there is a specific area, height, location and noise condition standard listed below.

Activity		Activity specific conditions -standards		
PI	Ancillary equipment	 (a) Ancillary equipment that complies with the following: (i) It is not connected to an area, façade or item specifically listed in Schedule 30.1. (ii) Not exceed 10m² in area above-ground; and (iii) Not exceed 2.5m in height measured from the natural ground level immediately below the structure 		
P2	Below ground telecommunications and radiocommunications facilities, lines, cables and ducts	ground level infillediately below the structure		
P3	Cabinets+1	 (a) Cabinets that comply with the following condition standards: (i) Are not located within an Identified Area. (ii) Not exceed 10m² in area above-ground; and (iii) Not exceed 2.5m in height measured from the natural ground level immediately below the structure 		
P4	Antennas and lines attached to retaining walls, tunnels, bridges and other structures located within the road+1	 (a) Antennas that comply with all of the following conditions standards: (i) Do not connect to an area, façade or item specifically listed in Schedule 30.1; (ii) Panel antenna do not exceed 0.7m in width; (iii) Dish antenna do not exceed 0.6m in width diameter within the GRZ – General Residential and MRZ – Medium Density Residential Zones; and (iv) Within the GRZ – General Residential and MRZ – Medium Density Residential Zones the maximum number of antennas per site is 4. (b) Rule 14.10.1.3(1)(a) does not apply a face-mounted panel antenna located within the fascia and below the roof line of an existing building, except where the area, façade or item is specifically listed in Schedule 30.1 		
P5	Antennas+1 attached to a building and/or structure	(a) Antennas attached to a building and/or structure that comply with all of the following conditions standards: (i) Do not connect to an area, façade or item specifically listed in Schedule 30.1; (ii) The building and/or structure is located within:		

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		J. RLZ - Rural Lifestyle Country Living Zone K. Reserves Open Space Zone and (iii) The face of the antenna does not exceed 1.5m² or 1.2m in diameter for dish antennas, or 1.6m in length for Yagi antenna on an existing pole. (b) Rule 14.10.1.4 does not apply to private television antennas and satellite dishes + 1.2	
P6	Antennas inside new or existing buildings	Nil	
P7	Other Antennas not attached to a building and/or structure	 (a) Antennas that comply with all of the following conditions standards are excluded from any height standards in 14.10.1 P4, P5 and P9: (i) GPS Antennas that do not exceed the following dimensions: A. 300mm high: and B. 130mm in diameter. (ii) Omni-directional 'whip' or di-pole type antennas that do not exceed the following dimensions: A. 1.6m high; B. 1.5m horizontal length whip or rod; or C. Cross section element no more than 60mm in diameter. (iii) Are not located within an Identified Area; and (iv) Do not connect to an area, façade or item specifically 	
P8	Small cell units exceeding the permitted volumetric dimension of 0.11m³ regulated in the NESTF	listed in Schedule 30.1. 14.10.1.6 (a) Small cell units exceeding the permitted volumetric dimension of 0.11m ² m ³ regulated in the NESTF that comply with all of the following conditions standards: (i) Do not exceed a maximum volumetric volume dimension of 0.25m ³ ; (ii) Are not located within an Identified Area; and (iii) Do not connect to an area, façade or item specifically listed in Schedule 30.1.	
P9	Poles, antennas and headframes+1	14.10.1.7 (a) Any poles and attached antenna that comply with the following conditions standards: (i) Are not located within an Identified Area; (ii) Do not connect to an area, façade or item specifically listed in Schedule 30.1; (iii) Comply with the height in relation to boundary limits for the zone in which it is located; and (iv) Not exceed the height limits set out in the following table: Zone Permitted height	
		measured from the natural ground level immediately below the structure	

			CD117 C :: :	25 / 122 :
			GRUZ – General Rural,	25m (and 30m for co-
			RLZ - Rural Lifestyle	location of at least two
			Country Living	operators)
			GIZ – General Industrial,	25m (and 30m for co-
			HIZ - Heavy Industrial	location of at least two
			and MSRZ - Motor Sport	operators)
			and Recreation	
			COMZ - Commercial	20m
			Business, Business TCZ -	
			Town Centre, LCZ –	
			Local centre zone; BTZ -	
			Business <u>Tamahere</u> Zone	
			Tamahere, TKAZ - Te	
			Kowhai Airpark Zone	
			Rownai 7 iii pai R <u>Zone</u>	
			Reserves Open Space	20m
			GRZ – General	15m
			Residential, MRZ -	
			Medium Density	
			Residential, RPZ -	
			Rangitahi Peninsula,	
			LLRZ – Large lot	
			residential, SETZ –	
			Settlement Village and	
			Special purpose zones	
			not otherwise listed.	
			not other wise nated.	
			Road or unformed road	That of the adjoining zone
		(b)	for the zone in which is	t in relation to boundary limits t is located;
				neral Residential and MRZ – ential Zones do not exceed
			1.0m diameter; or	_
			• •	and unformed roads do not
			exceed 6.0m diameter;	
			(iv) Within the road do no	t exceed u./m diameter.
			D. I 14.10.1.7(1)(.)	
		(c)		not apply to lightning rods and
			telecommunication devices	onal whip antenna, ancillary
PIO	Externally-mounted	14.1	0.1.8	and cardi peaks.
	telecommunication satellite dishes	(a)	Externally-mounted telecor	nmunication satellite dishes and
	and ancillary components	` ′	ancillary components that c	
	and anchiary components		conditions standards:	
			• •	diameter, or 1.8m in diameter
			<u>in GIZ – General Indus</u>	<u>strial Zone, HIZ - Heavy</u>

		Industrial Zone, RLZ - Rural Lifestyle Zone and GRUZ - General Rural Zone; (ii) Are attached to existing buildings; and/or including a pole or structure other than a building when located in the RLZ - Rural Lifestyle and GRUZ – General Rural Zones; (iii) Do not connect to an area, façade or item specifically listed in Schedule 30.1; and (iv) Are not located within an Identified Area.
PII	Telecommunication kiosk	 (a) Telecommunication kiosks that comply with all of the following conditions standards: (i) Are not located within road or unformed road located adjacent to an Identified Area; (ii) Do not connect to an area, façade or item specifically listed in Schedule 30.1; and (iii) Are not located within an Identified Area; and (iv) Not exceed 10m² in area above-ground; and (v) Not exceed 2.5m in height measured from the natural ground level immediately below the structure.
PI2	Telephone exchanges, including the installation and operation of equipment inside existing telephone exchanges	 14.10.1.10 (a) Telephone exchanges, including the installation and operation of equipment inside existing telephone exchanges, that comply with the following conditions standards: (i) Do not exceed 20m² in area in roads or sites zoned GRZ – General Residential, MRZ – Medium Density Residential and RLZ - Rural Lifestyle Country Living; or (ii) Do not exceed 30m² in area in all other zones; (iii) Comply with the height and height in relation to boundary limits for the zone in which it is located; (iv) Are not located within road or unformed road located adjacent to an Identified Area; and (v) Are not located within an Identified Area.
PI3	Self-contained power units	 (a) Self-contained power units that comply with all of the following conditions standards: (i) Do not connect to an area, façade or item specifically listed in Schedule 30.1; (ii) Are not located within an Identified Area. (iii) Not exceed 10m² in area above-ground; and (iv) Not exceed 2.5m in height measured from the natural ground level immediately below the structure
PI4	Aerial telecommunication lines and associated support structures, including those not complying with regulations 41-42 of the NESTF	 (a) Aerial telecommunication lines and associated support structures, including those not complying with regulations 41-42 of the NESTE, that comply with all of the following conditions standards: (i) Do not exceed 20m in height measured from the natural ground level immediately below the structure,; and

		 (ii) Are located within the <u>GRUZ – General</u> Rural Zone; or (iii) Are located within road or unformed road located adjacent to the <u>GRUZ – General</u> Rural Zone.
PI5	Lightning rods	14.10.1.13
		 (a) Lightning rods that comply with all of the following conditions standards: (i) Do not exceed I.8m in height; (ii) Do not connect to an area, façade or item specifically listed in Schedule 30.1.

14.10.2 Controlled Activities

(a) The activities listed below are controlled activities.

Activi	ty	Matters of Control	
СІ	Ancillary equipment that do not comply with the -conditions standards of Rule 14.10.1.1	(a) Control is reserved over: (i) The size, colour and design of the proposed	
C2	Cabinets that do not comply with one or more of the -conditions standards of Rule 14.10.1.2	facility, equipment or structure;	
C3	 (a) Cabinets not meeting the NESTF regulations 19, 20, and 21 that are located within: (i) COMZ - Commercial Business Zone (ii) Business TCZ - Town Centre Zone (iii) LCZ - Local centre zone 	(ii) The location of the proposed facility, equipment or structure; (iii) The ability to provide screening or	
	 (iv) <u>BTZ - Business Tamahere Zone Tamahere</u> (v) <u>TKAZ - Te Kowhai Airpark Zone</u> (vi) <u>GIZ - General</u> Industrial Zone (vii) <u>HIZ - Heavy</u> Industrial Zone <u>Heavy</u> (viii) <u>MSRZ - Motorsport and Recreation Zone</u> (ix) <u>GRUZ - General</u> Rural Zone (x) <u>RLZ - Rural Lifestyle</u> Country Living Zone (xi) <u>Reserves</u> <u>OSZ - Open Space</u> Zone 	landscaping; and (iv) Effects on the values, qualities and characteristics of the site <u>and/or items in</u> Schedule 30.1.	
C4	Antennas attached to an existing pole in the road reserve that do not comply with Regulations 26 and 27 of the NESTF and antennas attached to an existing pole in unformed road		
C5	 (i) Antennas attached to a building that do not comply with the conditions standards of Rule 14.10.1.4 and are located within: (ii) COMZ - Commercial Business Zone; (iii) Business TCZ - Town Centre Zone (iv) LCZ - Local centre zone (v) BTZ - Business Tamahere Zone Tamahere (vi) TKAZ - Te Kowhai Airpark Zone (vii) GIZ - General Industrial Zone (viii) HIZ - Heavy Industrial Zone Heavy (ix) MSRZ - Motorsport and Recreation Zone (x) GRUZ - General Rural Zone (xi) RLZ - Rural Lifestyle Country Living Zone (xii) Reserves OSZ - Open Space Zone 		
C5	 (i) Dish antennas not complying with regulations 26-35 of the NESTF that are located within: (ii) COMZ - Commercial Business Zone 		

 (iii) Business TCZ - Town Centre Zone (iv) LCZ - Local centre zone (v) BTZ - Business Tamahere Zone Tamahere (vi) TKAZ - Te Kowhai Airpark Zone (vii) GIZ - General Industrial Zone
(v) <u>BTZ -</u> Business <u>Tamahere</u> Zone Tamahere (vi) <u>TKAZ -</u> Te Kowhai Airpark Zone
(vi) <u>TKAZ -</u> Te Kowhai Airpark Zone
(vi) <u>TKAZ -</u> Te Kowhai Airpark Zone
(vii) GIZ – General Industrial Zone
()
(viii) <u>HIZ – Heavy</u> Industrial Zone Heavy
(ix) MSRZ - Motor Sport and Recreation Zone
(x) GRUZ – General Rural Zone
(xi) RLZ - Rural Lifestyle Country Living Zone
(xii) Reserve OSZ - Open Space Zone
(a) Antennas located within an Identified Area that comply with
the following:
(i) GPS antennas that do not exceed the following
dimensions:
A. 300mm high: and
B. 130mm in diameter.
(ii) Omni-directional 'whip' or di-pole type antennas that do
not exceed the following dimensions:
A. I.6m high;
B. I.5m horizontal length whip or rod; or
C. Cross section element no more than 60mm in
diameter.
Small cell units located in an Identified Area exceeding the
maximum volumetric dimension <u>volume</u> of 0.11m ²³ regulated in
the NESTF, up to a maximum volume of $0.25m^{\frac{23}{2}}$.

C8	Poles, antennas and headframes located within	Control is reserved over:
С9	an Identified Area that comply with Rule 14.10.1.7 (a) Externally-mounted telecommunication satellite dishes and ancillary components that: (i) Do not exceed I.0m in diameter; (ii) Are attached to existing buildings; and (iii) Are not located within an Identified Area.	 (a) The size, colour and design of the proposed facility, equipment or structure; (b) The location of the proposed facility, equipment or structure; (c) The ability to provide screening or landscaping; and (d) Effects on the values, qualities and characteristics of the site.
C10	Telecommunication kiosks, located within road or unformed road adjacent to an Identified Area, that complies with the -conditions standards for a new infrastructure activity and associated structures under Rule 14.2.1.1.	

14.10.3 Restricted Discretionary Activities

- (1) The activities listed below are restricted discretionary activities.
 (2) Discretion to grant or decline consent and impose conditions is restricted to the matters of discretion set out in the following table.

Activi	ty	Matters of Discretion
RDI	 (a) Cabinets not meeting the NESTF regulations 19, 20, and 21 that are located within: (i) GRZ – General Residential Zone (ii) MRZ - Medium Density Residential Zone (iii) RPZ - Rangitahi Peninsula Zone (iv) LLRZ – Large lot residential zone (v) SETZ – Settlement zone Village Zone (vi) Road and unformed road 	Discretion is restricted to: (a) The functional and operational needs of, and benefits derived from, the infrastructure; (b) The bulk, form, scale,
RD2	(a) Antennas attached to a building and/or structure that comply with all of the following -conditions standards: (i) Are located within: A. GRZ - General Residential Zone B. MRZ - Medium Density Residential Zone C. RPZ - Rangitahi Peninsula Zone D. LLRZ - Large lot residential zone E. SETZ - Settlement zone Village Zone F. Road and unformed road (ii) The face of the antenna does not exceed 1.5m² or 1.2m in diameter for dish antennas.	(b) The bulk, form, scale, location of the structure; (c) Visual, landscape, streetscape and amenity effects; (d) Where located within a road, the operation and function of road network activities and (e) Effects on the values,
RD3	 (a) Dish antennas not complying with regulations 26-35 of the NESTF that are located within: GRZ – General Residential Zone MRZ - Medium Density Residential Zone RPZ - Rangitahi Peninsula Zone LLRZ – Large lot residential zone SETZ – Settlement zone Village Zone Road and unformed road. Poles, antennas and headframes not complying with regulations 26- 	qualities and characteristics of the site, heritage item or area.
	35 of the NESTF or Rule 14.10.1.7	

RD5	(a) Aerial telecommunication lines and associated support structures, including those not complying with regulations 41-42 of the NESTF, that:	
	(i) Do not comply with one or more <u>conditions</u> <u>standards</u> of Rule 14.10.1.12; and (ii) Are not located within an Identified Area.	
RD6	Telecommunication kiosks that do not comply with one or more	
	conditions standards of Rules 14.10.1.9 or 14.10.2(C10)	
RD7	Self-contained power units that do not comply with the -conditions	
	standards for a new infrastructure activity and associated structures	
	under Rule 14.2.1.1	
RD8	Poles, antennas and headframes located within an Identified Area	
	that comply with Rule 14.10.1.7	
RD9	(a) Externally-mounted telecommunication satellite dishes and	
	ancillary components that:	
	(i) Are located within an Identified Area.	

14.10.4 Discretionary Activities

(a) The activities listed below are discretionary activities.

DI	Cabinets not meeting the NESTF regulations 19, 20, and 21 that are located within an Identified Area
D2	Antennas attached to a building and/or structure that do not comply with one or more conditions
	standards of Rule 14.10.3(RD2)
D3	Antennas attached to a building and/or structure located within an Identified Area
D4	Dish antennas not complying with regulations 26-35 of the NESTF that are located within an Identified Area
D5	Poles, antennas and headframes located within an Identified Area not complying with regulations 26-35 of the NESTF or Rule 14.10.1.7
D6	Telephone exchanges located within an Identified Area or do not comply with one or more conditions standards of Rule 14.10.1.10
D7	Self-contained power units located within an Identified Area
D8	Aerial telecommunication lines and associated support structures located within an Identified Area

14.11 Water, wastewater and stormwater

14.11.1 Permitted Activities

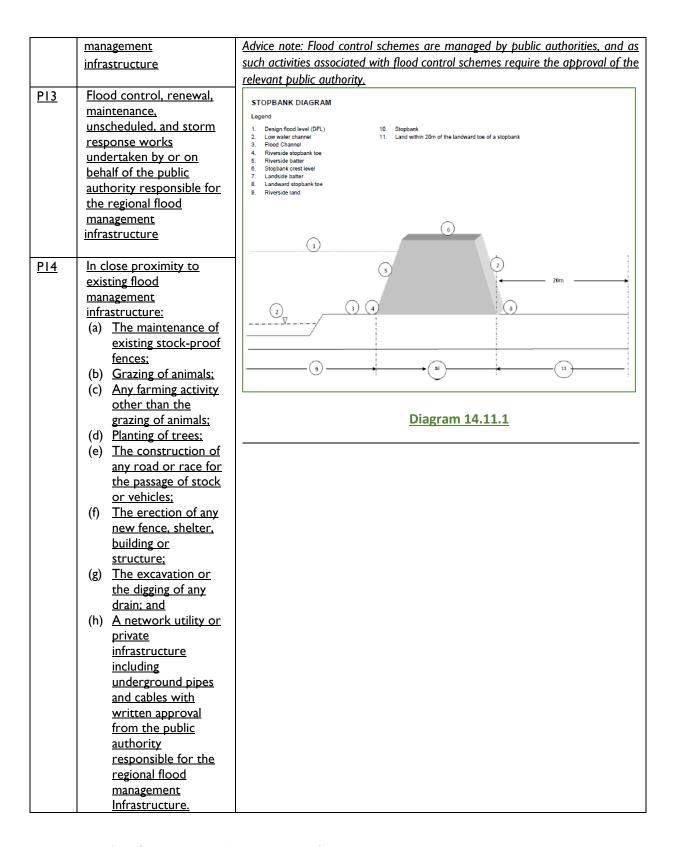
- (I) The following activities are permitted activities if they meet the activity specific conditions standards set out in this table. These rules apply throughout the District.
- (2) Rule 14.2.1.1 will apply to the activities set out in this table unless there is a specific area, height location and noise condition standard listed below.

Activity		Activity specific -conditions-standards
PI	Stormwater systems for new development or subdivision	Activity specific -conditions-standards 14.11.1.1 (a) New development or subdivision must have a stormwater system that complies with all of the following -conditions standards: (i) Operates by gravity; (ii) Manages stormwater through a Stormwater Management Plan in the following manner: A. Primary systems detain or retain runoff from all impervious surfaces during a 10% Annual Exceedance Probability storm event to ensure that the rate of any stormwater discharge
		off-site is at or below pre-development rates; and B. Secondary overflows are conveyed to a system or drainage path designed to collect concentrated stormwater during events up to and including a 1% Annual Exceedance Probability; or C. A controlled discharge to a network or receiving environment that will have equivalent capacity (as in (i) and (ii) above) once the catchment is fully developed. (iii) Stormwater management measures must be in place and operational upon the completion of subdivision and/or
		development; (iv) Systems must be designed using rainfall data specific to the area in which the property is located and be adjusted for a climate change temperature increase of 2.1°C; (v) Stormwater management measures, including low impact design measures, must be implemented as appropriate in accordance with the following drainage hierarchy: A. Retention of rainwater/stormwater for reuse; B. Soakage techniques; C. Infiltration rate of a minimum of 7mm/hour; D. Treatment, detention and gradual release to a watercourse; E. Treatment, detention and gradual release to a piped stormwater system. F. Stormwater treatment shall address water quality; downstream erosion and scour effects; and cumulative
		volume effects. (vi) Where land is subject to instability, stormwater discharges directly to ground occurs only where the ground conditions have been identified as being suitable to absorb such discharges without causing, accelerating or contributing to land instability and downstream effects either on the site or on neighbouring properties; (vii) Connection of new development to any existing stormwater drainage system must not result in the minimum level of service not being met or the minimum level of capacity being exceeded. Alteration of the existing receiving stormwater network drainage system to achieve minimum level of service or additional onsite detention volume to ensure existing capacity will be required. Notes:

말	The establishment of impervious surfaces associated with new development or subdivision	(iii) (i) Acceptable means of compliance for the provision, design and construction of stormwater infrastructure, including low impact design features, are contained within the Regional Infrastructure Technical Specifications (RITS). Refer also to Waikato Stormwater Management Guideline and Waikato Stormwater Run-off Modelling Guideline. (iii) A stormwater discharge consent may also be required from the Waikato Regional Council. 14.11.1.2 (a) The establishment of impervious surfaces associated with new development or subdivision that complies with the following condition: (i) The maximum impervious surface of a site within the Residential Zone, Rangitahi Peninsula Zone, Village Zone or Country Living Zone is 70%.
P3	Wastewater servicing for new development or subdivision	 14.11.1.3 (a) New development or subdivision must have a wastewater system that complies with the following -conditions standards: (i) Is connected to public, reticulated wastewater network; or (ii) Is connected to a community-scale wastewater system; or (iii) Is provided with a site-contained, alternative method of wastewater disposal that complies with AS/NZS 1547:2012.
P4	Below ground pipelines for the conveyance of water, wastewater and stormwater	 14.11.1.4 (a) Below-ground Pipelines for the conveyance of water, wastewater and stormwater that comply with all of the following: (i) Any aboveground section of a pipeline must comply with the following: A. Not exceed 25m in length, and B. Not exceed 300mm in diameter. (ii) Is not located within an Identified Area and . (b) The maximum dimensions in Rule 14.11.14(a)(i) do not apply to any above-ground section of pipeline which is attached to or contained within the superstructure of a bridge.
P5	Below ground pipelines for the conveyance of water, wastewater and stormwater located within an Identified Area	 (a) Below ground pipelines for the conveyance of water, wastewater and stormwater located within an Identified Area that comply with all of the following: (i) There are no aboveground sections of pipeline within an Identified Area; and (ii) Are not within a site or area in Schedule 30.1 or 30.3 or 30.4.
P6	Pump stations for the conveyance of water, wastewater and stormwater	 (a) Pump stations for the conveyance of water, wastewater and stormwater that complies with the following -condition standards: (i) Is not located within an Identified Area. (ii) Not exceed 10m² in area above-ground; and (iii) Not exceed 3m in height measured from the natural ground level immediately below the structure

P7	Stormwater treatment, detention and retention facilities or devices	(a) Stormwater treatment, detention and retention facilities or devices, excluding stormwater wetlands or ponds. That comply with the following: (i) is not a startward and a start device and the startward and the startwar
		(i) is not a stormwater wetland or pond.

P8	Stormwater ponds or wetlands	 (a) Stormwater ponds or wetlands that comply with the following: (i) The area of the pond or wetland does not exceed the equivalent site building coverage -conditions standards applicable to the zone.
P9	Ventilation facilities, drop shafts and manholes	(a) Ventilation facilities, drop shafts and manholes that comply with the following:(i) Are not located within an Identified Area.
PIO	Below ground reservoirs	 (a) Below ground reservoirs that comply with all of the following: (i) Are not located within an Identified Area; or (ii) Are not located within road or unformed road.
PII	Water supply servicing for new development or subdivision	14.11.11 (I) New development or subdivision must have a water supply system that complies with the following standards: (a) For the GRUZ – General Rural Zone, RLZ – Rural Lifestyle Zone, LLRZ – Large lot residential zone and SETZ – Settlement Zone, potable water supply must be provided: (b) For all other zones: (i) Be connected to any available public, reticulated water supply system nearby; and (ii) In addition to connection to reticulated supply for potable water, may also use rainwater harvesting (installation of rain storage tanks for water conservation) to supplement water supply, but not for potable uses.
PI2	The construction of new regional flood management infrastructure in close proximity to existing flood management infrastructure, undertaken by or on behalf of the public authority responsible for the regional flood	 (1) All activities must comply with the following standards: (a) Activities are carried out: (i) Within 20m of the landward toe of a stopbank (See diagram 14.11.1 below); (ii) On a stopbank; (iii) Within the flood channel (between a stopbank and river bank); and (iv) Within a 20m radius of a pump station or floodgate.



14.11.2 Restricted Discretionary Activities

- (a) The activities listed below are restricted discretionary activities.
- (b) Discretion to grant or decline consent and impose conditions is restricted to the matters of discretion set out in the following table.

Activity	Matters of Discretion

RDI	Stormwater systems for new development or subdivision that does not comply with one or more of the -conditions standards of Rule 14.11.1.1 The establishment of impervious surfaces	Discretion is restricted to: (a) The likely effectiveness of the system to avoid flooding, nuisance or damage to other buildings and sites; (b) The capacity of the system and suitability to manage stormwater; (c) The potential for adverse effects to the environment in terms of stormwater quantity and stormwater quality effects; and (d) Extent to which low impact design principles and approaches are used. Discretion is restricted to:
	associated with new development or subdivision that do not comply with one or more of the conditions of Rule 14.11.1.2	(a) Site design, layout and amenity; (b) The risk of flooding, nuisance or damage to the site or other buildings and sites.
RD3	Wastewater servicing for new development or subdivision that do not comply with one or more of the conditions standards of Rule 14.11.1.3	Discretion is restricted to: (a) Health and safety of the occupants; (b) Capacity of the system; (c) Infiltration capacity of the soil; (d) Location, including proximity to waterways and effects on habitats; and (e) Contamination of downstream properties by wastewater.
RD4	Below ground pipelines that do not comply with one or more of the -conditions standards of Rules 14.11.1.4 and 14.11.1.5	Discretion is restricted to: (a) The functional need and operational need of, and benefits derived from, the infrastructure;
RD5	Pump stations for the conveyance of water, wastewater and stormwater located within an Identified Area, or larger than the area/height limits of Rule 14.11.1.6	 (b) Visual, streetscape and amenity effects; (c) Road network safety and efficiency; (d) The risk of hazards to public or individual safety, and risk of property damage; and (e) Effects on the specific values, qualities and
RD6	Stormwater ponds or wetlands, that serve more than one site, located within: (i) GRZ – General Residential Zone MRZ – Medium Density Residential zone (ii) RPZ – Rangitahi Peninsula Zone (iii) Village Zone SETZ – Settlement zone LLRZ – Large lot residential zone (iv) RLZ – Rural Lifestyle Country Living Zone (ix) (y) Road and unformed road and (x) (vi) Identified Area.	characteristics of any Identified Area.
RD7	Outfall structures located within an Identified Area	
RD8	Ventilation facilities, drop shafts and manholes that do not comply with one or more of the -conditions standards of Rule 14.11.1.9	
RD9	Below ground reservoirs located within an Identified Area or road or unformed road	
<u>RD10</u>	Water supply that does not comply with Rule 14.11.1(PI).	Discretion is restricted to: (a) Health and safety of the occupants; and (b) Sufficiency of supply for fire-fighting.

RDII	New capital works relating to regional	Discretion is restricted to:
	flood management infrastructure, including but not limited to flood control dams, flood gates, stopbanks, channels, and culverting of waterways.	(a) The extent to which adverse effects are avoided, remedied or mitigated.
RD12	Any other activity that is not permitted under Rule 14.11.1 P12, P13 or P14 but complies with activity specific standard 14.11.1.12 shall be a restricted discretionary activity.	Discretion is restricted to: (a) The extent to which the activity will affect the integrity of the flood control asset; (b) The extent to which the activity will impede maintenance access; (c) Methods to avoid, remedy, or mitigate adverse effects on the integrity of the flood control assets; and (d) Methods to avoid, remedy, or mitigate adverse effects on maintenance access. Non-notification Applications utilising RD12 that do not simultaneously trigger other consent requirements shall not be publicly notified and shall not be served on any party other than Council and the public authority responsible for the regional flood management infrastructure.

14.11.3 Discretionary Activities

(a) The activities listed below are discretionary activities.

DI	Water treatment plants not located within road and or unformed road. Or an Identified Area
D2	Wastewater treatment plants located within the following:
	(iv) (i) GIZ – General Industrial Zone
	(ii) <u>HIZ – Heavy</u> Industrial Zone Heavy
	(vi) (iii) MSRZ – Motor Sport and Recreation Zone
	(iv) GRUZ – General Rural Zone
	(v) RLZ – Rural Lifestyle Country Living Zone
	(ix) (vi) Reserves OSZ – Open Space Zone
D3	Above ground reservoirs. Not located within an Identified Area

14.11.4 Non-Complying Activities

(a) The activities listed below are non-complying activities.

NCI	Water treatment plants located within the following:
	(i) Road and <u>or</u> unformed road ; or
	(ii) Identified Area
NC2	Wastewater treatment plants located within the following:
	(xix)(i) GRZ – General Residential Zone
	MRZ – Medium density residential zone
	(xx)(ii) RPZ – Rangitahi Peninsula Zone
	(xxi)(iii) Village Zone LLRZ – Large lot residential zone
	SETZ – Settlement zone
	(xxii)(iv) COMZ – Commercial Business Zone
	(xxiii)(v) Business TCZ – Town Centre Zone
	(vi) LCZ – Local centre zone;
	(xxiv)(vi) BTZ – Business Tamahere Business Zone
	(xxv) Te Kowhai Airpark Zone
	(xxvi)(vii) Road and unformed road
	(xxvii)(viii) Identified Area
NC3	Above ground reservoirs located within an Identified Area

14.12 Transportation

14.12.1 Permitted Activities

(a) The following activities are permitted activities if they meet the activity specific conditions standards set out in this table. These rules apply throughout the District.

Activity		Activity specific conditions standards
Activity PI	Vehicle access for all activities	Activity specific conditions standards 14.12.1.1 (1) All activities must comply with the following vehicle access conditions standards: (a) The site has a vehicle legal physical access to a formed road that is maintained by a road controlling authority; (b) The site has a vehicle access that is constructed to comply with the relevant requirements of Table 14.12.5.1, Figure 14.12.52, Table 14.12.5.3 and Figure 14.12.5, Table 14.12.5.14 and Table 14.12.5.15 except:
		 i. Rule 14.12.1.1(1)(b) does not apply where the separation distance requirements of Table 14.12.5.1 and Figure 14.12.5.2 cannot be achieved on a site's road frontage due to existing vehicle accesses on adjacent sites; (c) No new vehicle access shall be created from Newell Road
		 (south of Birchwood Lane); (d) No access, access leg or right-of-way shall run parallel to any road within 30m of the road, except: i. Rule 14.12.1.1(1)(d) does not apply to farm races, or unsealed internal rural accesses in sites within the Rangitahi Peninsula Structure Plan Area and Opotoru Road;
		(e) On a site with legal access to two roads, the activity only accesses the road with the lower classification in the road hierarchy in Tables 14.12.5.5 and 14.12.5.6 (where the roads have the same classification, access is only to the road with the lower average daily traffic movements) except in the Kimihia Lakes Zone where this rule does not apply;
		(f) New vehicle accesses/entrances are not to be constructed to any site from the following roads: i. Main Street, Huntly; ii. Jesmond Street, Ngaruawahia; iii. Bow Street, Raglan (James Street to Cliff Street); iv. George Street, Tuakau (Gibson Road to Liverpool Street); v. Great South Road, Pokeno (Selby Street to Market Street); and vi. Main Street, Te Kauwhata (Saleyard Road to Baird Avenue); and
		 (g) No new vehicle access shall be created within 30 metres of a railway level crossing; (h) All existing and new accesses and roads that cross an operational rail network via a level crossing must be maintained in accordance with the sight line triangles provided in Table 14.12.5.22; and

		(i) New vehicle access shall not be located within an Identified
		Area, with the exception of a Significant Natural Area which
		is addressed in the ECO chapter.
		•
		Note: Any new vehicle access (or additional land use utilising an
		existing vehicle entrance) on a limited access road or state highway
		will require the approval of the NZTA, as the road controlling
		authority, and on a limited access road will require the approval of the
		road controlling authority.
P2	On-site parking and	14.12.1.2
. –		
	loading	(I) All activities must comply with the following on-site parking and
		loading conditions <u>standards</u> :
		(a) The parking loading space requirements, manoeuvring and
		parking space dimensions in Table 14.12.5.7 and 14.12.5.11,
		noting: i. When calculating the requirements for parking and
		loading on the basis of the prescribed floor area, the
		area for parking, loading and manoeuvring shall be
		excluded;
		ii. If the calculation results in a fraction, then that figure
		shall be rounded to the nearest whole number; iii. 90 percentile car dimensions in Figure 14.12.5.8
		iii. 90 percentile car dimensions in Figure 14.12.5.8 apply;
		iv. The requirements of Table 14.12.5.7 do not apply to
		residential and rural activities;
		v. <u>Accessible Parking spaces must comply with the New</u>
		Zealand Building Code D1/AS1 New Zealand
		Standard for Design for Access and Mobility –
		Buildings and Associated Facilities (NZS: 4121-2001) and:
		vi. The number of accessible car park spaces required in
		Table 14.12.5.9 can be included in the number of car
		parking spaces required in Table 14.12.5.7.
		(b) On-site bicycle space requirements in Table 14.12.5.10,
		except:
		 i. The requirements of Table 14.12.5.10 do not apply to residential and rural activities;
		(c) Where parking is provided Any on-site car parking spaces for
		non-residential activities within the GRZ – General and MRZ
		– Medium density Residential Zones must be set back at least
		3m from the road boundary of the site and screened by
		planting or fencing from being viewed from the road;
		(d) On-site car parking spaces (where provided) and loading bays
		are to be provided in accordance comply with the requirements of Table 14.12.5.7, Figure 14.12.5.8 and Table
		14.12.5.11 and be located on the same site as the activity for
		which they are required;
		(e) On-site car parking spaces and loading bays are formed to be
		sealed if five or more parking spaces are provided;
		(f) On-site car parking spaces and loading bays are to be
		permanently marked if five or more parking spaces are
		required; (g) On-site car parking spaces and loading have are not to be
		(g) On-site car parking spaces and loading bays are not to be located on any shared access or residential living court;
		(h) Vehicles occupying any on-site car parking or loading spaces
		must have ready access to the road (or relevant access or

right of way) at all times, without needing to move any other vehicle occupying other on-site can parking or loading spaces; (i) On-site can parking spaces and loading bays are not required on sites with sole frontages to the following: i. Main Street, Huntly; ii. Jesmond Street, Nagaruawahia; iii. Bow Street, Ragan (James Street to Cliff Street); iv. George Street, Tuakau (Glibson Road to Liverpool Street); v. Great South Road, Pokeno (Selby Street to Market Street); v. Great South Road, Pokeno (Selby Street to Market Street); v. Main Street, Te Kauwhata (Saleyard Road to Baird Avenue). (j) New on-site parking and loading bays shall not be located within an Identified Area, with the exception of a Significant Natural Area which is addressed in the ECO chapter P3 On-site manoeuvring and queuing emidentified Area, with the exception of a Significant Natural Area which is addressed in the ECO chapter 14.12.1.3 (j) All activities must comply with the following on-site manoeuvring and queuing emidentified Standards: (a) On-site manoeuvring anoeuvring space shall be provided to ensure that no vehicle is required to reverse emise from or to a road except; i. Rule 14.12.13(1/8) does not apply to Local Roads within the GRZ — General residential, MRZ — Medium density Residential, LLRZ — Large lot residential and SETZ — Settlement Wilege Zones with a posted speed limit of less than 60 kph kmilt); (b) A 90th percentile car, as defined in Figure 14.12.5.8, can enter and exit all parking spaces without making more than one reverse movement, excluding spaces required for a dwelling; (c) On-site annoeuvring spaces required for a dwelling; (d) On-site of the site has frontage truske to be used)-as-see-ou-sin the guideline RTS-18 — New Zesland-on-road-tracking curves for heavy more rechiects for any heavy belice shall comply with the tracking curve (relevant for the type of activities to be carried out on the site and the largest combination standard configuration heavy vehicle permitted on the road(s) to which the	vehicle occupying other on-site car parking or loading spaces; (i) On-site or parking spaces and loading bays are not required on sites with sole frontages to the following: i. Main Street, Hundy; iii. Bow Street, Raglan (James Street to Cliff Street); iv. George Street, Tukaku (Gibson Road to Liverpool Street); v. Great South Road, Pokeno (Selby Street to Market Street); vi. Main Street, Te Kauwhata (Saleyard Road to Baird Avenue). (j) New on-site parking and loading bays shall not be located within an Identified Area, with the exception of a Significant Natural Area which is addressed in the ECO chapter. P3 On-site manoeuvring and queuing eachieues standards: (a) On-site manoeuvring space shall be provided to ensure that no vehicle is required to reverse emes from or to a road except; i. Rule 14.12.13(1)(a) does not apply to Local Roads within the GRZ – General residential, MRZ – Medium density Residential, LLRZ – Large lot residential and SETZ – Settlement, Wilege Zones with a posted speed limit of less than 60 kph km/b; (b) A 90° percentile car, as defined in Figure 14.12.58, can enter and exit all parking spaces without making more than one reverse movement, excluding spaces required for a dwelling; (c) On-site manoeuvring space for any heavy vehicle shall comply with the tracking curve (relevant for the type of activities to be carried out on the site and for large erules to be used)-as see even in the guideline RTS-18 – New Zealand on road tracking curves for heavy more vehicles (2007); (d) On-site queuing space shall be provided in accordance with Table 14.12.5.12 for vehicles centering and exiting any on-site car parking, loading or manoeuvring space, where: i. Length is measured from the road boundary where vehicles first enter the site; and ii. On-site queuing space shall be formed; (e) On-site manoeuvring apace shall be formed; (f) On-site manoeuvring and queuing spaces are not required on sites with vehicle accesses/entrances to the following: ii. Main Street, Hundy; iii. Jesmon			
On-site manoeuvring and queuing 14.12.1.3 (1) All activities must comply with the following on-site manoeuvring and queuing eend-tienes standards: (a) On-site manoeuvring space shall be provided to ensure that no vehicle is required to reverse enter from or to a road except; i. Rule 14.12.13(1)(a) does not apply to Local Roads within the GRZ — General residential, MRZ — Medium density Residential, LIRZ — Large lot residential and SETZ — Settlement, Village Zones with a posted speed limit of less than 60 kph km/h; (b) A 90th percentile car, as defined in Figure 14.12.58, can enter and exit all parking spaces without making more than one reverse movement, excluding spaces required for a dwelling; (c) On-site manoeuvring space for any heavy vehicle shall comply with the tracking curve (relevant for the type of activities to be carried out on the site and the largest combination standard configuration heavy vehicle permitted on the road(s) to which the site has frontage trucks to be used); as set out in the guideline RTS 18 — New Zealand on road tracking curves for heavy motor vehicles (2007); (d) On-site manoeuvring space shall be formed; (e) On-site queuing space shall be formed; (e) On-site manoeuvring space, where: i. Length is measured from the road boundary where vehicles first enter the site; and ii. On-site queuing above must not encroach into the required on-site manoeuvring area; (f) On-site manoeuvring and queuing spaces are not required on sites with vehicle accesses/entrances to the following: i. Main Street, Huntly; ii. Jesmond Street, Rygaruawahia; iii. Bow Street, Rygaruawahia; iii. Jesmond Street, Rygaruawahia; iii. Jesmond Street, Ngaruawahia; iii. Jesmond Street, Tuakau (Gibson Road to Liverpool Street); v. Great South Road, Pokeno (Selby Street to Market Street); vi. Main Street, Te Kauwhata (Saleyard Road to Baird Avenue); and	On-site manoeuvring and queuing (1) All activities must comply with the following on-site manoeuvring and queuing eenditions standards: (a) On-site manoeuvring space shall be provided to ensure that no vehicle is required to reverse enter from or to a road except; i. Rule 14.12.13(1)(a) does not apply to Local Roads within the GRZ — General residential, MRZ — Medium density, Residential, LRZ — Large lot residential and SETZ — Settlement Village Zones with a posted speed limit of less than 60 kph km/h; (b) A 90th percentile car, as defined in Figure 14.12.58, can enter and exit all parking spaces without making more than one reverse movement, excluding spaces required for a dwelling; (c) On-site manoeuvring space for any heavy vehicle shall comply with the tracking curve (relevant for the type of activities to be carried out on the site and the largest combination standard configuration heavy vehicle permitted on the road(s) to which the site has frontage trucks to be used); as-set-out-in the guideline RTS 18 — New Zealand on road tracking curves for heavy motor-whicles (2007); (d) On-site manoeuvring space shall be formed; (e) On-site queuing spaces shall be provided in accordance with Table 14.12.5, 12 for whicles entering and exiting any on-site car parking, loading or manoeuvring space, where: i. Length is measured from the road boundary where vehicles first enter the site; and ii. On-site queuing above must not encroach into the required on-site manoeuvring area; (f) On-site manoeuvring and queuing spaces are not required on sites with vehicle accesses/entrances to the following: i. Main Street, Huntly; ii. Jesmond Street, Raglan (James Street to Cliff Street); iv. George Street, Tuakau (Gibson Road to Liverpool Street); v. Great South Road, Pokeno (Selby Street to Market Street); vi. Main Street, Te Kauwhata (Saleyard Road to Baird Avenue); and (g) New on-site manoeuvring shall not be located within an Identified Area, with the exception of a Significant Natural Area which is			 (i) On-site car parking spaces and loading bays are not required on sites with sole frontages to the following: Main Street, Huntly; Jesmond Street, Ngaruawahia; Bow Street, Raglan (James Street to Cliff Street); George Street, Tuakau (Gibson Road to Liverpool Street); Great South Road, Pokeno (Selby Street to Market Street); Main Street, Te Kauwhata (Saleyard Road to Baird Avenue). (j) New on-site parking and loading bays shall not be located within an Identified Area, with the exception of a Significant Natural Area which
(I) All activities must comply with the following on-site manoeuvring and queuing eenditiens standards: (a) On-site manoeuvring space shall be provided to ensure that no vehicle is required to reverse onto from or to a road except: i. Rule 14.12.1.3(1)(a) does not apply to Local Roads within the GRZ — General residential. MRZ — Medium density. Residential. LLRZ — Large lot residential and SETZ — Settlement. Village Zones with a posted speed limit of less than 60 kph km/h; (b) A 90th percentile car, as defined in Figure 14.12.5.8, can enter and exit all parking spaces without making more than one reverse movement, excluding spaces required for a dwelling; (c) On-site manoeuvring space for any heavy vehicle shall comply with the tracking curve (relevant for the type of activities to be carried out on the site and the largest combination standard configuration heavy vehicle permitted on the road(s) to which the site has frontage trueks to be used), as set out in the guideline RTS 18 — New Zealand on road tracking curves for heavy motor-vehicles (2007); (d) On-site manoeuvring space shall be formed; (e) On-site queuing space shall be provided in accordance with Table 14.12.5.12 for vehicles entering and exiting any on-site car parking, loading or manoeuvring space, where: i. Length is measured from the road boundary where vehicles first enter the site; and ii. On-site queuing above must not encroach into the required on-site manoeuvring and equing spaces are not required on sites with vehicle accesses/entrances to the following: i. Main Street, Ngaruawahia; iii. Bow Street, Raglan (James Street to Cliff Street); iv. George Street, Tuakau (Gibson Road to Liverpool Street); v. Great South Road, Pokeno (Selby Street to Market Street); vi. Great South Road, Pokeno (Selby Street to Market Street); vi. Main Street, Te Kauwhata (Saleyard Road to Baird Avenue); and	(I) All activities must comply with the following on-site manoeuvring and queuing eenditions standards: (a) On-site manoeuvring space shall be provided to ensure that no vehicle is required to reverse onto from or to a road except; i. Rule I4.12.1.3(I)(a) does not apply to Local Roads within the GRZ — General residential, MRZ — Medium density, Residential, LLRZ — Large lot residential and SETZ — Settlement, Village Zones with a posted speed limit of less than 60 kph km/h; (b) A 90th percentile car, as defined in Figure I4.12.58, can enter and exit all parking spaces without making more than one reverse movement, excluding spaces required for a dwelling; (c) On-site manoeuvring space for any heavy vehicle shall comply with the tracking curve (relevant for the type of activities to be carried out on the site and the largest combination standard configuration heavy vehicle permitted on the road(s) to which the site has frontage trueks to be used)—as set out in the guideline RT5-18 — New Zealand on road tracking curves for-heavy motor-vehicles (2007); (d) On-site manoeuvring space shall be formed; (e) On-site queuing space shall be provided in accordance with Table I4.12.5.12 for vehicles entering and exiting any on-site car parking, loading or manoeuvring space, where: i. Length is measured from the road boundary where vehicles first enter the site; and ii. On-site queuing above must not encroach into the required on-site manoeuvring and equiung spaces are not required on sites with vehicle accesses/entrances to the following: i. Main Street, Huntly; ii. Jesmond Street, Ngaruawahia; iii. Bow Street, Raglan (James Street to Cliff Street); iv. George Street, Tuakau (Gibson Road to Liverpool Street); v. Great South Road, Pokeno (Selby Street to Market Street); vi. Main Street, Te Kauwhata (Saleyard Road to Baird Avenue); and (g) New on-site manoeuvring shall not be located within an Identified Area, with the exception of a Significant Natural Area which is	P3	On site managements and	
<u>addressed in the ECO chapter.</u>	addressed in the ECO chapter.	P3		(1) All activities must comply with the following on-site manoeuvring and queuing conditions standards: (a) On-site manoeuvring space shall be provided to ensure that no vehicle is required to reverse onto from or to a road except; i. Rule 14.12.1.3(1)(a) does not apply to Local Roads within the GRZ – General residential, MRZ – Medium density, Residential, LLRZ – Large lot residential and SETZ – Settlement Village Zones with a posted speed limit of less than 60 kph km/h; (b) A 90th percentile car, as defined in Figure 14.12.5.8, can enter and exit all parking spaces without making more than one reverse movement, excluding spaces required for a dwelling; (c) On-site manoeuvring space for any heavy vehicle shall comply with the tracking curve (relevant for the type of activities to be carried out on the site and the largest combination standard configuration heavy vehicle permitted on the road(s) to which the site has frontage trucks to be used), as set out in the guideline RTS 18 — New Zealand on road tracking curves for heavy motor vehicles (2007); (d) On-site manoeuvring space shall be formed; (e) On-site queuing space shall be provided in accordance with Table 14.12.5.12 for vehicles entering and exiting any on-site car parking, loading or manoeuvring space, where: i. Length is measured from the road boundary where vehicles first enter the site; and ii. On-site queuing above must not encroach into the required on-site manoeuvring area; (f) On-site manoeuvring and queuing spaces are not required on sites with vehicle accesses/entrances to the following: i. Main Street, Huntly; ii. Jesmond Street, Ngaruawahia; iii. Bow Street, Raglan (James Street to Cliff Street); iv. George Street, Tuakau (Gibson Road to Liverpool Street); v. Great South Road, Pokeno (Selby Street to Market Street); vi. Main Street, Te Kauwhata (Saleyard Road to Baird Avenue); and (g) New on-site manoeuvring shall not be located within an Identified Area, with the exception of a Significant Natural Area which is

P4	Troffic generation	14.12.1.4
' -	Traffic generation	(I) Where any site gains access from an arterial or regional arterial
		(including state highway) road, there is a maximum of 50
		Equivalent Car Movements (ECM) per day.
		Note: ECM — I car movement is equivalent to I car movement / I
		truck movement is equivalent to 3 car movements / I truck and trailer
		movement is equivalent to 5 car movements.
		Any activity Any other Each site must comply with the following
		traffic generation conditions standards:
		(a) Within the <u>GRZ – General residential</u> , <u>MRZ – Medium</u>
		<u>density</u> Residential, Village or <u>RLZ – Rural Lifestyle</u> Country
		Living Zones there is a maximum of 100 vehicle movements
		per site per day, and no more than 15% of these vehicle
		movements are heavy vehicle movements; or
		(b) Within the <u>RPZ – Rangitahi Peninsula Zone there is a</u>
		maximum of 200 vehicle movements per site per day, and no
		more than 5% of these vehicle movements are heavy vehicle
		movements; or (c) Within the RTZ Rusiness Tamahere Zone Tamahere
		(c) Within the <u>BTZ –</u> Business <u>Tamahere</u> Zone Tamahere , <u>COMZ – Commercial Business Zone or Business <u>TCZ –</u></u>
		Town Centre Zone there is a maximum of 300 vehicle
		movements per site per day, and no more than 15% of these
		vehicle movements are heavy vehicle movements; or
		(d) Within the <u>GRUZ – General</u> Rural Zone:
		i. There is maximum 200 vehicle movements per site
		per day and no more than 15% of these vehicle
		movements are <mark>heavy vehicle</mark> movements; or
		ii. For activities directly associated with horticulture
		harvesting, a maximum of 300 vehicle movements
		per site per day for up to a month, once in a 12-
		month period and no more than 33% of these vehicle
		movements are heavy vehicle movements; or
		iii. Within the Agricultural Research Centres identified on the planning maps as a Specific Area there is
		maximum 3000 vehicle movements per site per day;
		or
		(e) Within the <u>GIZ – General</u> Industrial and <u>HIZ –</u> Heavy
		Industrial Zone (excluding the Huntly Power Station and
		Huntly Quarry site):
		i. Maximum 250 vehicle movements per site per day
		and no more than 15% of these vehicle movements
		are heavy vehicle movements; or
		(f) From the Huntly Power Station site as shown as the HIZ –
		Heavy Industrial Zone Heavy on the planning maps:
		i. All traffic vehicle movements generated from all
		activities on the site combined (including those
		movements which were lawfully established prior to 5 December 2012), there is a maximum 750 vehicle
		movements per site per day; and
		ii. Maximum 300 of these vehicle movements are heavy
		vehicle movements; or
		(g) From the Huntly Quarry site:
		i. All traffic vehicle movements generated from all
		activities on the site combined (excluding those
		movements which were lawfully established prior to
		5 December 2012), there is maximum 350 vehicle
		movements <u>per site</u> per day; and
		ii. No more than 150 of these vehicle movements are
		heavy vehicle movements, increasing to 200 once the

	T	
		Huntly Bypass section of the Waikato Expressway is open for public use. <u>Or</u>
		(h) Within Precincts A and B of the <u>TKAZ – Te Kowhai Airpark</u> Zone there is a maximum 250 vehicle movements <u>per site</u> per day and no more than 15% of these vehicle movements
		are heavy vehicle movements; or (i) Within Precincts C and D of the TKAZ – Te Kowhai Airpark
		Zone there is a maximum of 30 vehicle movements per site per day and no more than 4 of these vehicle movements are heavy vehicle movements except:
		Movement restrictions do not apply if the activity is an event or promotion (including temporary events) in Precinct C or a community facility in Precinct C; or
		i. (i) From the Heratiu Industrial Park does not exceed 15.4
		(j) From the Horotiu Industrial Park does not exceed 15.4
		trips/ha gross land area/peak hour.
		(k) Within the Kimihia Lakes Zone there is a maximum of 850
		vehicle movements per hour and no more than 15% of
		these vehicle movements are heavy vehicle movements.
		Note: Where the likely traffic generation vehicle movement rates or the actual generation rates of the actual activity are unknown, Table 14.12.5.13 provides indicative traffic generation rates for various
DE		activities.
P5	Operation, maintenance and minor upgrading of existing public roads, State Highways and associated road network activities	 (1) Operation, maintenance and minor upgrading of existing public roads, State Highways, rail corridors and associated rail network and road network activities must comply with the following conditions standards: (a) The works occur within the road reserve or unformed road or railway corridor; (b) Works within the road or railway corridor must be for the purpose of:
		 i. (i) Maintaining or improving effectiveness or efficiency consistent with the Incidental to, and serve a supportive function of for, the existing public road or railway corridor; or ii. (ii) Maintaining or improving safety for road users or adjacent properties; and Required for the safety of road
		users; or 360. Required for the safety of adjacent landowners or occupiers;
		Lighting shall be designed and located to comply with the
		Australia New Zealand Roading Lighting Standard 1158, (series)
		 Lighting for Roads and Public Spaces: 2005; and
		(c) Any earthworks must comply with Rule 14.3.1.3.
P6	New public roads, including where the road has been identified on the planning maps as an	14.12.1.6 (1) New public roads, including where the road has been identified on the planning maps as an Indicative road, and associated road network activities must comply with the following conditions standards:
	Indicative road, and	

		(a) T b.	
	associated road network		e public road is located within road or unformed road as
	<mark>activities</mark>		own on the planning maps;
			e public road is not located within an Identified Area; e design requirements of Table 14.12.5.14 or 14.12.5.15,
			sed on their function within the Road Hierarchy as set out
			Table 14.12.5.5, except:
		-	i. Any National routes or Regional arterial roads would
			shall be subject to Rule 14.12.2 (RD6);
		i	ii. The specified minimum Road/right of way reserve
		'	widths in Table 14.12.5.14 or 14.12.5.15 do not
			include any additional width required for a turning
			head;
		ii	ii. Any private access, right of way or access allotment
			over 70m in length must be constructed to be in
			accordance with the highest dimensions required for
			an access allotment in Table 14.12.5.14 or 14.12.5.15;
			and
		i	v. The requirements of Table 14.12.5.14 or 14.12.5.15
			shall not apply to taxiways within the <u>TKAZ –</u> Te
			Kowhai Airpark Zone;
			thin road or unformed road located within the Tamahere
		RL	Z - Rural Lifestyle Country Living Zone, all roads must:
			 i. Comply with the The minimum widths specified in Figure 14.12.5.17; and
		i	ii. Have swale drains on both sides of the carriageway
			capable of collecting all road runoff and overland
			flow towards the road or right of way from a 20%
			Annual Exceedance Period Probability event; and
		ii	ii. In areas of poorly-drained soils, either the
			stormwater is to be directed to areas with higher
			infiltration, or infiltration systems are to be
		())) (constructed.
		• •	thin road or unformed road located within the RPZ –
			ngitahi Peninsula Zone, the relevant access and road
			quirements of the Rangitahi Structure Plan take priority
			er the conditions <u>standards</u> in Table 14.12.5.14 or 12.5.15 in the event of any conflict;
			ithin road or unformed road located within the The road
		` '	nnection between Wayside Road and Travers Road
			mprising the extension of Bragato Way. Te Kauwhata
			ucture Plan area:
			i. All roads and vehicle accesses shall be constructed in
			accordance with Table 14.12.5.14 and Figures
			14.12.5.18, 14.12.5.19 and 14.12.5.20; and
		i	ii. Stormwater collection must be through grassed
			swales prior to reaching reticulated systems; and
		(g) An	y <mark>earthworks</mark> must comply with Rule 14.3.1.3.
			ere the conditions <u>standards</u> of Table 14.12.5.14 or
			do not specify a specific dimension and instead state this bject to a specific design; this aspect of the road is
			to be exempt when determining a permitted activity under
		Rule 14.12.1	.6(1). The design of that specific aspect of the road is
		therefore su	ubject to a separate certification process by the relevant
D7	Access and Name Day day	road contro	llling authority.
P7	Access and New Roads –		
	TKAZ – Te Kowhai		roads which are to be vested in Council must comply
	Airpark Zone	with the	e following conditions <u>standards</u> :
L	1		

		 (a) The design requirements of Table 14.12.5.14 or 14.12.5.15, based on their function within the Road Hierarchy as set out in Table 14.12.5.5, except: i. The requirements of Table 14.12.5.14 or 14.12.5.15 shall not apply to taxiways within Te Kowhai airpark. (2) Road alignment and the taxiway network within the TKAZ – Te Kowhai Airpark Zone shall be in general accordance with Appendix 9 – The Te Kowhai Airpark Zone Framework Plan. (3) The western boundary of the TKAZ – Te Kowhai Airpark Zone shall provide for future connectivity options (vehicular and / or pedestrian) in general accordance with the location identified in Appendix 9 – The Te Kowhai Airpark Zone Framework Plan.
P8	Off-road pedestrian walkways and cycleways facilities, being sections of the public walkway and cycleway network that are not located within the road network	(4) Any earthworks must comply with Rule 14.3.1.3. 14.12.1.8 (a) Off-road pedestrian walkways and/or cycleways eycling facilities, that comply with all of the following conditions standards: i. Have a minimum 2.0m width or 2.5m where alongside an arterial road or forming a shared path; ii. Are formed; (b) Comply with the relevant setback standards for the applicable zone; and (c) Any earthworks must comply with Rule 14.3.1.3; and iv. Are not located within an Identified Area.
P9	Stock underpasses located within: (a) Road and unformed road (b) GRUZ – General Rural Zone	 14.12.1.9 (1) Stock underpasses in the <u>GRUZ – General</u> Rural Zone located in the road and unformed road that comply with all of the following conditions standards: (a) Any earthworks must comply with Rule 14.3.1.3; and (b) Are not located within an Identified Area.
PIO	Esplanade reserves and strips where a road is stopped	 Where land comprising a stopped road or any part of a stopped road adjoins: (a) the mark of mean high water springs of the sea; or (b) the bank of any river with an average width of 3 metres or more; or (c) the margin of any lake with an area of 8 hectares or more: Section 345(3) of the Local Government Act 1974 and section 118 of the Public Works Act 1981 will apply only where the land comprising the stopped road or part of the stopped road is identified: (a) in Appendix 5 (Esplanade Priority Areas); or on the planning maps as requiring an esplanade reserve, esplanade strip or access strip to be set aside.

14.12.2 Restricted Discretionary Activities

- (a) The activities listed below are restricted discretionary activities.
- (b) Discretion to grant or decline consent and impose conditions is restricted to the matters of discretion set out in the following table.

Activity	1	Matters of Discretion
RDI	Vehicle access that does not comply with one or more of the conditions standards of Rule 14.12.1.1	Discretion is restricted to: (a) Traffic generation by the activities to be served by the access; (b) Location, design, construction and materials of the vehicle access; (c) Safety for vehicles and pedestrians all users of the access and/or intersecting road including but not limited to vehicle occupants or riders and pedestrians; (d) Road network safety and efficiency; and (e) Mitigation to address safety and/or efficiency, including access clearance requirements for firefighting purposes; (f) The foreseeable needs for access by emergency services and their vehicles; (g) The extent to which the safety and efficiency of rail and road operations will be adversely affected, including: (h) The outcome of any consultation with KiwiRail; NZTA; Waikato District Council, as the rail or road controlling authority; and ii. Any characteristics of the proposed use that will make compliance unnecessary; and (i) Management of effects on the values of the Identified Area.
RD2	On-site parking and loading that does not comply with one or more of the -conditions standards of Rule 14.12.1.2	Discretion is restricted to: (a) The number, area, type, location and marking of parking spaces; (b) The area, design, gradient, stormwater management, construction and materials of parking and loading spaces, (c) Accessibility of parking areas from on-site activities; (d) Safety for vehicles and pedestrians all users of the access and/or intersecting road including but not limited to vehicle occupants, vehicle riders and pedestrians; (e) Mitigation to address amenity and connectivity. (f) The foreseeable needs for access by emergency services and their vehicles; and (g) Management of effects on the values of the Identified Area.
RD3	On-site manoeuvring and queuing that does not comply with one or more of the conditions standards of Rule 14.12.1.3	Discretion is restricted to: (a) Location, area, design, construction and materials of the manoeuvring and queuing space; (b) Type and frequency of use; (c) Safety design for vehicles and pedestrians The design of features intended to ensure safety for all users of the access site, and/or intersecting road including but not limited to vehicle occupants, vehicle riders and pedestrians; (d) Road network safety and efficiency; and

		(e) Management of effects on the values of the Identified Area.
RD4	Traffic generation that does not comply with one or more of the conditions standards of Rule 14.12.1.4	Discretion is restricted to: (a) The trip characteristics of associated with the proposed activity on the site; (b) Safety design for vehicles and pedestrians The design of features intended to ensure safety for all users of the access site, and/or intersecting road including but not limited to vehicle occupants, vehicle riders and pedestrians; (c) Road Land transport network safety and efficiency, particularly at peak traffic times (of both the activity and road network); and (d) Mitigation to address adverse effects, such as: • Travel planning; • Providing alternatives to private vehicle trips; including accessibility to public transport; • Staging development; and • Contributing to improvements to the road network.
RD5	Operation, maintenance and minor upgrading of existing public roads, State Highways and associated road network activities that do not comply with one or more of the -conditions standards of Rule 14.12.1.5	Discretion is restricted to: (a) Adverse effects on amenity values, including construction effects such as vibration and noise; (b) Adverse operational effects, particularly on residential or other sensitive land uses, including effects of vibration, noise, glare and vehicle emissions; (c) Severance and changes to drainage patterns; (d) The benefits provided by the activity, including safety and efficiency of the road network;
RD6	New public roads, including where the road has been identified on the planning maps as an Indicative road, and associated road network activities that: (i) Are not located within an Identified Area; and (ii) Do not comply with one or more of the conditions standards of Rule 14.12.1.6.	 (e) Management of sediment and dust, including the staging of works; (f) The volume, extent and depth of the earthworks activities; and (g) The location of the earthworks activities, taking into account any effects on the values, qualities and characteristics of the site.

RD7	Access and New Roads – TKAZ	Discretion is restricted to:
RD7	Access and New Roads – TKAZ – Te Kowhai Airpark Zone that do not comply with one or more of the -conditions standards of Rule 14.12.1.7	Discretion is restricted to: (a) The extent to which the Te Kowhai Airpark Zone Framework Plan is not complied with; (b) The extent to which connectivity can safely and practically be achieved between Te Kowhai aerodrome and Te Kowhai village; (c) Adverse effects on amenity values, including construction effects such as vibration and noise; (d) Adverse operational effects, particularly on residential or other sensitive land uses, including effects of
		vibration, noise, glare and vehicle emissions;
		(e) Severance and changes to drainage patterns;
		 (f) The benefits provided by the activity, including safety and efficiency of the road network;

RD8	Off-road pedestrian and cycle facilities that do not comply with one or more of the -conditions standards of Rule 14.12.1.8	 (g) Management of sediment and dust, including the staging of works; (h) The volume, extent and depth of the earthworks activities; (i) The location of the earthworks activities, taking into account any effects on the values, qualities and characteristics of the site or area; and (j) adverse effects on the safety and efficiency of the land transport network. Discretion is restricted to: (a) Design, construction and materials; (b) Safety for cyclists and pedestrians; (c) Connectivity with other off-road pedestrian and cycle facilities and the road network; and (d) Visual and amenity effects; and © The location of the earthworks activities, taking into account any effects on the values, qualities and characteristics of the site or area.
RD9	Buildings and structures within a road/rail level crossing sight triangle	Discretion is restricted to: (a) The extent to which the safety and efficiency of rail and road operations will be adversely affected; (b) The outcome of any consultation with KiwiRail; and (c) Any characteristics of the proposed use that will make compliance unnecessary.

14.12.3 Discretionary Activities

(a) The activities listed below are discretionary activities.

DI	Stock underpasses not provided for under Rule 14.12.1.9
D2	New public roads, including where the road has been identified on the planning maps as an Indicative road, and associated road network activities that are located within an Identified Area
D3	Esplanade reserves where a road is stopped that does not comply with Rule (14.12.1.10)

14.12.5 Transportation tables and figures

Table 14.12.5.1 – Separation distances

		Separ	ration distance of an a	ccess onto a road fro	om an intersection or l	between accesses			
Posted Speed Environment	<u>Design Speed</u>	esign Speed Distance (m)							
			P K M		N				
		National Regional Arterial and Arterial	Collector Road and Local Road	National Regional Arterial and Arterial	Collector Road and Local Road	National Regional Arterial and Arterial	Collector Road and Local Road	National Regional Arterial and Arterial	Collector Road and Local Road
100 km/h	110 km/h	800	500	200 - <u>500</u>	100			200	100
80 km/h	100 km/h	550	200 <u>305</u>	120 - <u>305</u>	80	60		100	80
70 km/h	80 km/h	220	200	100-220			45	40	30
<u>60 km/h</u>	70 km/h	<u>160</u>	<u>160</u>	<u>160</u>	30	20		20	
50 km/h or less	60 km/h	125	100	30 <u>125</u>					15

Note: The references P, K, M and N are illustrated in Figure 14.12.5.2

Figure 14.12.5.2 – Separation distances

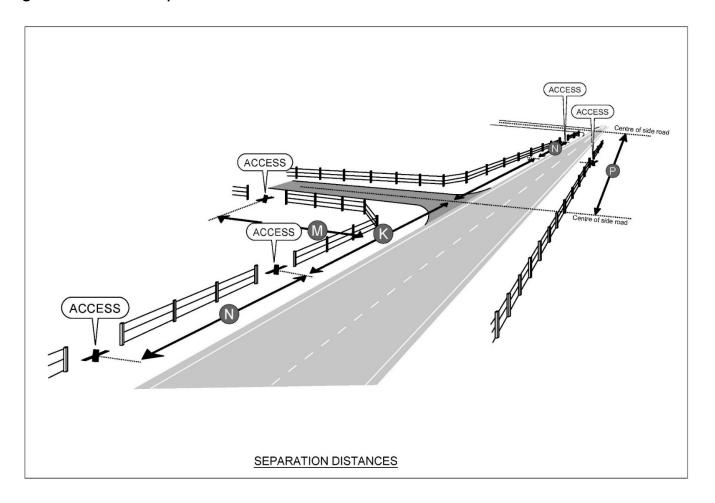


Table 14.12.5.3 – Minimum sight distances

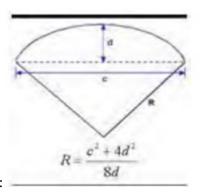
Design Speed From a vehicle entrance Environment generating up to		From a vehicle entrance generating more than 40 vehicle movements per day	
(km/h)	and including 40 vehicle movements per day	Rural Areas	Urban Areas
40	4 0m <u>65m</u>	70m - <u>75m</u>	60m - <u>65m</u>
50	60m - <u>90m</u>	90m - <u>100m</u>	80m - <u>90m</u>
60	80m - <u>I15m</u>	115m - <u>125m</u>	105m - <u>115m</u>
70	100m - <u>140m</u>	140m - <u>150m</u>	130m - <u>140m</u>
80	130m - <u>180m</u>	175m - <u>180m</u>	165m - <u>170m</u>
90	160m - <u>215m</u>	210m - <u>215m</u>	
100	200m - <u>250m</u>	250m	
110	240m - <u>290m</u>	290m	
120		330m	

Note: Sight distances are measured as illustrated in Figure 14.12.5.4

Note: Urban areas being those with a posted speed limit of 70 km/h or below.

Road Centreline Radius	Approx. Design Speed
<u>0 – 45m</u>	50 km/h
45 – 60m	60 km/h
<u>60 – 80m</u>	65 km/h

<u>80 – 100m</u>	70 km/h
<u>100 – 120m</u>	75 km/h
<u>120 – 150m</u>	80 km/h
<u>150 – 200m</u>	85 km/h
<u>200 – 300m</u>	95 km/h
<u>300 – 400m</u>	100 km/h
<u>>400m</u>	110km/h



Curve radius can be determined using the following formula:

Figure 14.12.5.4 – Minimum sight distances

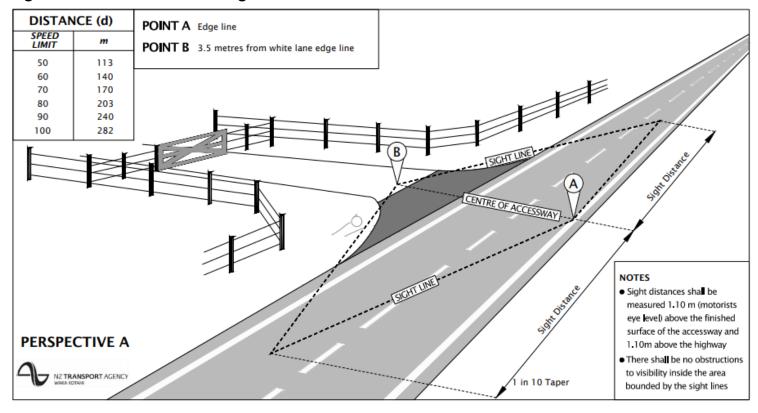


Table 14.12.5.5 – Functions of roads within the Road Hierarchy

Category	Function
National routes	 Motorways, expressways and state highways that: form a strategic network of national importance provide for the collection and distribution of goods significant to the national economy the through traffic function predominates.
Regional arterial roads: state highways not included in National Routes category roads giving access to important tourist areas or centres of large populations roads linking different transport modes roads providing significant intra-urban links.	 State highways and roads that: form a strategic network of regional importance provide for the collection and distribution of goods significant to the regional economy rural roads that typically provide for more than 6,000 vehicle movements per day (vmpd) include rest areas
Arterial roads:	 the through-traffic function predominates. Roads that: form a strategic network of district importance provide for the collection and distribution of goods significant to the district's economy rural roads that typically provide for less than 6,000 vehicle movements per day (vmpd) the through traffic function needs to be balanced against the property access function.
Collector roads: • provide links between local roads and arterials.	Roads that: • provide locally-preferred routes between or within areas of population or activities • provide alternative routes to arterials • are sealed and are of road geometry aligned with operational safety standards required for the traffic volumes on each section • the through traffic function needs to be balanced against the property access function.
Local roads	Roads whose primary function is property access.
Cul-de-sacs and no-exit roads	Roads that do not provide a vehicular thoroughfare between roads, and whose primary function is property access.

Note: Corridor widths, road standards and the location of structures and services will vary for each road category, in accordance with Tables 14.12.5.14 and 14.12.5.15.

Table 14.12.5.6 - Road Hierarchy list

National Routes		
Road Name	Start	Finish
State Highway I	North district boundary	Hamilton City boundary
State Highway I	Hamilton City boundary	South district boundary
State Highway 2	State Highway I	East district boundary
State Highway 26	Hamilton City boundary	East district boundary

Regional Arterial		
Road Name	Start	Finish
State Highway IB (Gordonton Road)	State Highway I	Taylor Road
State Highway 1B (Taylor Road)	Gordonton Road	Puketaha Road
State Highway IB (Puketaha Road)	Taylor Road	Telephone Road
State Highway IB (Telephone Rd)	Puketaha Road	Holland Road
State Highway IB (Marshmeadow Road)	Holland Road	State Highway 26
State Highway IB (Hoeka Road)	State Highway 26	Tauwhare Road
State Highway 1B (Marychurch Road)	Tauwhare Road	Southeast district boundary
Gordonton Road	Taylor Road	Hamilton City boundary
State Highway 23	Hamilton City boundary	Manukau Road, Raglan
State Highway 21 (Airport Road)	Tamahere interchange	West district boundary
State Highway 39 (Koura Drive)	State Highway I	State Highway 39 (Limmer Road)
State Highway 39 (Te Kowhai Road)	State Highway 39 (Koura Drive)	State Highway 39 (Limmer Road)
State Highway 39 (Limmer Road)	State Highway 39 (Limmer Road)	State Highway 39 (Horotiu Road)
State Highway 39 (Horotiu Road)	State Highway 39 (Limmer Road)	State Highway 39 (Whatawhata Road)

Regional Arterial		
Road Name	Start	Finish
State Highway 39 (Kakaramea Road)	State Highway 23	South district boundary
Great South Road	Gordonton Road	State Highway I (Waikato Expressway)

Arterial			
Road Name	Start	Finish	
Buckland Road	Tuakau Road	George Street	
George Street (Tuakau)	Buckland Road	Whangarata Road	
Glen Murray Road	Te Ohaki Road	Marshall Road	
Gordonton Road	Borman Road/Hamilton City boundary	State Highway IB/Taylor Road	
Great South Road	Gordonton Road	State Highway I (Waikato Expressway)	
Hetherington Road	Te Ohaki Road	State Highway 22	
Holland Road	Ruakura Road	Waverley Road	
Horotiu Bridge Road	River Road	Great South Road	
Horotiu Road	Ngaruawahia Road	State Highway 39	
Ngaruawahia Road	Havelock Road	Horotiu Road	
Okaeria Road	Cozen Road	State Highway 2	
Piako Road	State Highway IB	Valintine Road	
Puketaha Road	Gordonton Road	Piako Road	
River Road (Ngaruawahia)	Kay Road	Great South Road	
River Road (Tuakau)	Whangarata Road	Tuakau Bridge	
Ruakura Road	State Highway 26	District boundary	
Tahuna Road	Ohinewai South Road	District boundary	
Tauwhare Road	State Highway 21	State Highway 26	
Te Kauwhata Road	State Highway I	Mahi Road	
Victoria Road	Tauwhare Road	Bellevue Road	
Waerenga Road	Wira Street	Cozen Road	
Waverley Road	Holland Road	Piako Road	
Whatawhata Avenue	Ellery Street	Havelock Road	
Whitikahu Road	State Highway IB	Orini Road	

Collector		
Road Name	Start	Finish
Aka Aka Road	Waiuku Road	Otaua Road
Bankier Road	Horsham Downs Road	State Highway IB/Gordonton Road
Dean Road	Great South Road	State Highway I
George Street (Tuakau)	Dominion Road	Buckland Road
Great South Road (Huntly)	State Highway I	Rayner Road
Great South Road (Pokeno)	State Highway I	State Highway I
Hakanoa Street	Onslow Street	Fletcher Street
Harris Street	Rotowaro Road	Te Ohaki Road
Harrisville Road	Mill Road	Dominion Road
State Highway 22	Tuakau Bridge	Hetherington Road
Horace Russell Road	Riverbank Road	State Highway I
Kaiaua Road	Mangatangi Road	District boundary
Lake Road	River Road	State Highway IB
Lyons Road	Mangatawhiri Road	Paparimu Road
Mangatangi Road	Mangatawhiri Road	Kaiaua Road
Mangatawhiri Road	State Highway 2	Mangatangi Road
Matangi Road	District boundary	Tauwhare Road
Mercer Ferry Road	Riverbank Road	Murray Road
Mile Bush Road	State Highway 22	Murray Road
Newell Road	State Highway I	Devine Road
Onewhero-Tuakau Bridge Road	State Highway 22	Speed restriction
Onslow Street	Cul-de-sac west end	William Street
Otaua Road	Aka Aka Road	Waiuku-Otaua Road
Paparimu Road	Lyons Road	District boundary
Platt Road	State Highway 26	Tauwhare Road
Pokeno Road	Great South Road	Ridge Road
Rawiri Road	Mangatangi Road	State Highway 2
Rayner Road	Main Street	William Street
Rotowaro Road	Harris Street	Waingaro Road
State Highway 22	Tuakau Bridge	Hetherington Road

Collector		
Road Name	Start	Finish
Tainui Bridge Road	State Highway I	Harris Street
Te Mata Road	State Highway 23	Ruapuke Road
Te Pahu Road	State Highway 23	District boundary
Tuakau Bridge-Port Waikato Road	State Highway 22	Maunsell Road
Waingaro Road	Great South Road	Ohautira Road
Wainui Road	Bow Street	Whaanga Road
Wainui Road/Bankart Street	Wainui Road (north)	Wainui Road (north)
Waiuku-Otaua Road	Otaua Road	Misa Road
Wallis Street	Bow Street	End of kerb and channel
Whangarata Road	River Road	Ridge Road
William Street	Rayner Road	Onslow Street

Table 14.12.5.7 – Required parking spaces and loading bays

Activity	Minimum Required Parking Spaces	Minimum Required Loading Bays
Bulk retail and car yards	I car space per 150m² <mark>gross floor area (GFA)</mark>	I heavy goods vehicle (HGV)
Child care Early Childhood Education and day care facility	. I car space per every full time staff equivalent plus I car space per 5 children that the facility is designed to accommodate:	Nil
Clubrooms at sports facilities	I car space per 35m² <mark>GFA</mark>	I HGV <u>heavy goods vehicle</u>
Community facilities, conference facilities and place of assembly	I car space per 15m² GFA, or I per 5 persons that the facility is designed to accommodate, whichever is greater	I HGV <u>heavy goods vehicle</u>
Marae complex	I car space per 15m² <mark>GFA</mark>	I HGV <u>heavy goods vehicle</u>
Papakaainga building	I car space per 30m² <mark>GFA</mark>	Nil
Dairies, takeaway food, bottle stores	I car space per 30m² <mark>GFA,</mark> except—that in the Rangitahi Residential—Zone I car space per 50m² <mark>GFA</mark> is required	I HGV, except that in the RPZ Rangitahi Residential Peninsula Zone I HGV heavy goods vehicle per 1000m² of GFA of Rangitahi commercial activity is required

Activity	Minimum Required Parking Spaces	Minimum Required Loading Bays
Minor dwelling <u>residential</u> unit	I car space per <mark>dwelling</mark>	Nil
Dwelling Residential unit	360 <u>car space is required for a dwelling on</u> <u>a site less than 300m² in area or for</u> <u>studio or 1-bedroom residential units:</u> +	Nil
	2 car spaces are required for <u>all other</u> dwellings with 2 or more bedrooms and one car space is required for studio or 1-bedroom residential units.	
Retirement village	I car space per dwelling or unit	Nil
Te Kauwhata Lakeside Retirement Village Retirement villages located within the Lakeside Te Kauwhata Precinct		<u>Nil</u>
Multi-unit development	I car space per <mark>dwelling</mark> or unit	Nil
Boarding houses / boarding establishments		Nil
Emergency service facilities	I car space per on- duty staff person, plus sufficient space for all the emergency vehicles that use the site	Nil
Garden centres	I car space per 100m² <mark>site</mark> area	I HGV heavy goods vehicle
Health facility, veterinary and pers onal services	3 car spaces per professional <u>full-time staff</u> equivalent	Nil
Home occupations businesses	In addition to residential requirements, I car space per employee plus I where the activity attracts clients to the site	Nil
Hospitality services (e.g. cafés, taverns)	I car space per 10m ² net public floor area, except that in the Rangitahi Residential Zone I car pace per 15m ² net public floor area is required	I HGV heavy goods vehicle, except that in the Rangitahi Residential Zone I HGV heavy goods vehicle per 1000m² GFA of Rangitahi commercial activity is required.
Housing for the elderly/ residential care	I car space per 4 occupants	Nil

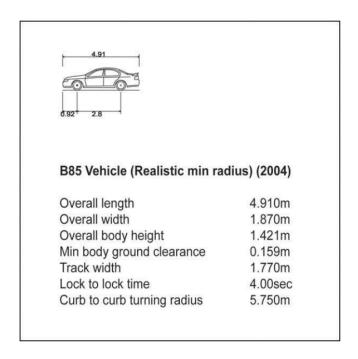
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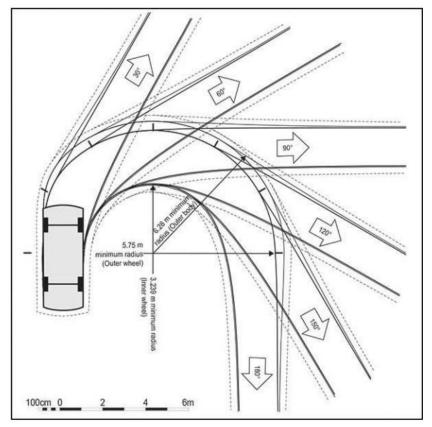
¹ 386.15 Pokeno Village Holdings Limited; 697.73 Waikato District Council; 749.77 HNZC

Activity	Activity Minimum Required Parking Spaces		
Indoor sports facilities	4 car spaces per sports court or 1 car space per 4 persons provided for in the design	Nil	
Industrial activity	I car space per 100m² <mark>GFA</mark>	I HGV <u>heavy goods</u> vehicle	
Infrastructure sites and activities	360 car space per on-duty staff person No parking space requirement shall apply to unstaffed facilities and sites	Nil	
Office Office	I car space per 35m² <mark>GFA</mark>	Nil	
Outdoor sports field	15 car spaces per hectare of sports field	Nil	
Hospital or care facilities associated with retirement village	2 car spaces per 3 patients accommodated plus 1 per 2 full- time staff equivalents	I HGV <u>heavy goods vehicle</u>	
Retail activity	360 car space per 30 m ² GFA, including	Nil	
School	Primary — I car space for every full- time staff equivalent plus 2 for every 50 students accommodated. Secondary — I car space for every full- time staff equivalent plus I per I0 students accommodated in Years II to I3	I bus space per 200 students where school bus services are provided	
Service stations	I car space per 45m ² GFA excluding car washes and canopies over petrol pumps, plus 3 queuing per car wash, plus 4 per repair bay	Nil	
Supermarket activity	I car space per 25m² <mark>GFA</mark>	2 HGV Under 2500m² GFA – I heavy goods vehicle Over 2500m² GFA – 2 heavy goods vehicles	
Tertiary education facilities	I car space per every full- time staff equivalent plus I per every 3 full-time equivalent students provided for by the institution	I HGV heavy goods vehicle	
Travellers' <u>Visitors</u> accommodation	Icar space per 4 persons to be accommoda ted (or in the Rangitahi Peninsula Zone I car space per accommodation unit), plus 2 for manager residences with more than I bedroom, plus I for every 2 full time staff equivalents (whichever is greater), plus	I HGV <u>heavy goods vehicle</u>	

Activity	Minimum Required Parking Spaces	Minimum Required Loading Bays	
	I coach park per 30 hotel or back-packers' beds		

Figure 14.12.5.8 – 90th Percentile car tracking curve minimum radius





Note 1

The dotted line about the vehicle depicts a 300mm clearance about the vehicle.

Table 14.12.5.9 – Required accessible parking spaces

Total number of car park spaces being provided	Minimum number of accessible car park spaces		
1-20	+		
21-50	2		
For every additional 50 car parks above 50 car park spaces	l additional		

Parking spaces are to be provided for people with disabilities and accessible routes from the parking spaces to the associated activity or road as required by the New Zealand Building Code DI/ASI. The dimensions and accessible route requirements are detailed in the New Zealand Building Code DI/ASI New Zealand Standard for Design for Access and Mobility – Buildings and Associated Facilities (NZS: 4121-2001).

Table 14.12.5.10 – Required bicycle spaces

Activity	Number of bicycle spaces		
All activities	Bicycle parking spaces are provided at a ratio of 1 bicycle space for every 10 car park spaces required.		

<u>Activity</u>	Required number of bicycle spaces			
Bulk retail and car yards	GFA less than or equal to 1,500 m ² = No bicycle space required; For GFA greater than 1,500 m ² = 1 bicycle space for every 1,500m ² GFA or part thereof			
Early Childhood Education and day care facility	Less than or equal to 4 classroom equivalents = No bicycle space required: Greater than 4 classroom equivalents = I bicycle space for every 4 classroom equivalents or part thereof			
Clubrooms and sports facilities	GFA less than or equal to 3,500 m ² = No bicycle space required; For GFA greater than 3,500 m ² = 1 bicycle space for every 3,500 m ² GFA or part thereof			
Community facilities, conference facilities and place of assembly	GFA less than or equal to 1,500 m ² = No bicycle space required; For GFA greater than 1,500 m ² = 1 bicycle space for every 1,500m ² GFA or part thereof			
Marae complex	GFA less than or equal to 1,500 m ² = No bicycle space required; For GFA greater than 1,500 m ² = 1 bicycle space for every 1,500m ² GFA or part thereof			
Papakaainga building	GFA less than or equal to 3,000 m ² = No bicycle space required; For GFA greater than 3,000 m ² = 1 bicycle space for every 3,000 m ² GFA or part thereof			

<u>Activity</u>	Required number of bicycle spaces			
Dairies, takeaway food, bottle stores	GFA less than or equal to 3,000 m ² = No bicycle space required; For GFA greater than 3,000 m ² = I bicycle space for every 3,000 m ² GFA or part thereof			
	Except that in the RPZ – Rangitahi Peninsula zone the following applies: GFA less than or equal to 5,000 m ² = No bicycle space required; For GFA greater than 5,000 m ² = I bicycle space for every 5,000 m ² GFA or part thereof			
Minor residential unit	Less than or equal to 10 minor residential units = No bicycle space required; For greater than 10 minor residential units = 1 bicycle space for every 10 minor residential units or part thereof			
Residential unit	Less than or equal to 10 residential units = No bicycle space required; For greater than 10 residential units = 1 bicycle space for every 10 residential units or part thereof			
Retirement village	Less than or equal to 10 residential units = No bicycle space required; For greater than 10 residential units = 1 bicycle space for every 10 residential units or part thereof			
Multi-unit development	Less than or equal to 10 residential units = No bicycle space required; For greater than 10 residential units = 1 bicycle space for every 10 residential units or part thereof			
Boarding houses / boarding establishments	Less than or equal to 30 units = No bicycle space required; For greater than 30 units = 1 bicycle space for every 30 units or part thereof			
Emergency service facilities	Less than or equal to 10 on-duty staff = No bicycle space required: For greater than 10 on-duty staff = 1 bicycle space for every 10 on-duty staff or part thereof			
Garden centres	GFA less than or equal to 1,000 m ² = No bicycle space required; For GFA greater than 1,000 m ² = 1 bicycle space for every 1,000m ² GFA or part thereof			
Health facility, veterinary and personal services	Less than or equal to 4 on-duty staff = No bicycle space required; For greater than 4 on-duty staff = I bicycle space for every 4 on-duty staff or part thereof			
Home occupations	In addition to residential requirements: Less than or equal to 10 employees = No bicycle space required; For greater than 10 employees = 1 bicycle space for every 10 employees or part thereof			
Hospitality services (e.g. cafés, taverns)	Net public floor area less than or equal to 100 m ² = No bicycle space required; Net public floor area greater than 100 m ² = 1 bicycle space for every 100m ² net public floor area or part thereof			
	Except that in the RPZ – Rangitahi Peninsula zone the following applies: Net public floor area less than or equal to 150 m² = No bicycle space required; Net public floor area greater than 150 m² = 1 bicycle space for every 150m² net public floor area or part thereof			

Activity	Required number of bicycle spaces			
Housing for the elderly / residential care	Less than or equal to 40 occupants = No bicycle space required; For greater than 40 occupants = 1 bicycle space for every 40 occupants or part thereof			
Indoor sports facilities	Less than or equal to 40 persons provided for in the design = No bicycle space required:			
	For greater than 40 persons provided for in the design = 1 bicycle space for every 40 persons provided for in the design or part thereof			
Industrial activity	GFA less than or equal to $1.000 \text{ m}^2 = \text{No bicycle space required}$;			
	For GFA greater than 1,000 m ² = 1 bicycle space for every 1,000m ² GFA or part thereof			
Infrastructure sites and	Less than or equal to 10 on-duty staff = No bicycle space required;			
<u>activities</u>	For greater than 10 on-duty staff = 1 bicycle space for every 10 on-duty staff or part thereof			
<u>Office</u>	GFA less than or equal to 350 m ² = No bicycle space required;			
	For GFA greater than 350 m ² = 1 bicycle space for every 350m ² GFA or part thereof			
Outdoor sports field	Less than or equal to 6,600 m ² of sports field = No bicycle space required;			
	Greater than 6.600 m ² of sports field = 1 bicycle space for every 6.600 m ² of sports field or part thereof			
Hospital or care facilities	Less than or equal to 20 full-time staff equivalents = No bicycle space required:			
associated with retirement village	For greater than 20 full-time staff equivalents = 1 bicycle space for every 20 full-time staff equivalents or part thereof			
Retail activity	GFA (including indoor and outdoor retail area) less than or equal to 300 m ² = No bicycle space required:			
	For GFA (including indoor and outdoor retail area) greater than $300 \text{ m}^2 = 1 \text{ bicycle}$ space for every $300 \text{ m}^2 \text{ GFA}$ (including indoor and outdoor retail area) or part thereof			
School	Less than or equal to 10 full-time staff equivalents = No bicycle space required:			
	For greater than 10 full-time staff equivalents = 1 bicycle space for every 10 full-time staff equivalents or part thereof			
Service stations	GFA (excluding car washes and canopies over petrol pumps) less than or equal to 450 m^2 = No bicycle space required;			
	For GFA (excluding car washes and canopies over petrol pumps) greater than 450 m^2 = 1 bicycle space for every 450 m^2 GFA (excluding car washes and canopies over petrol pumps) or part thereof			
Supermarket activity	GFA less than or equal to 250 m ² = No bicycle space required;			
	For GFA greater than $> 250 \text{ m}^2 = 1 \text{ bicycle space for every } 250 \text{m}^2 \text{ or part thereof}$			
Tertiary education	Less than or equal to 10 full-time staff equivalents = No bicycle space required;			
<u>facilities</u>	For greater than 10 full-time staff equivalents = 1 bicycle space for every 10 full-time staff equivalents or part thereof			
Visitor accommodation	Less than or equal to 40 persons to be accommodated = No bicycle space required;			
	For greater than 40 persons to be accommodated = 1 bicycle space for every 40			
	persons to be accommodated or part thereof			

Table 14.12.5.11 – Car manoeuvring and parking space dimensions

Type of Parking		Stall Width (a)	Stall Depth		Aisle Width (d)	Total Depth ©	
Parking	Туре		From Wall (b)	From Kerb ©		One Row	Two Rows
Angle		ALL MEASUREMENTS ARE IN METRES					
0°	Parallel	2.5	See Note I		3.5	5.9	8.3
30°	Nose in	2.5	4.2	4.0	3.5	7.7	11.9
45°	Nose in	2.5	4.9	4.5	3.5	8.4	13.3
60°	Nose in	2.5	5.4	4.9	4.1	9.5	14.9
		2.6			3.5	8.9	14.3
		2.7			3.5	8.9	14.3
75°	Nose in	2.5	5.4	4.9	6.3	11.7	17.1
		2.6			5.2	10.6	16.0
		2.7			4.6	10.0	15.4
90°	Nose in	2.5	5.1	4.6	7.7	12.8	17.9
		2.6			7.0	12.1	17.2
		2.7			6.8	11.9	17.0
	1						

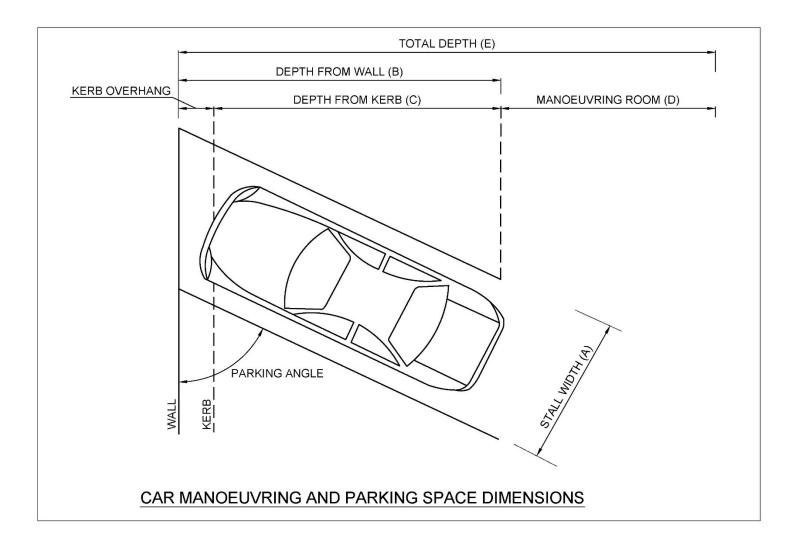


Table 14.12.5.12 – Queuing space

Number of parking spaces	Minimum queuing length at each vehicle entrance
Less than 3	
Residential activities	No queuing space required.
3 – 20	5.5m
21 – 50	10.5m
51 – 100	15.5m
101 – 150	20.5m
I5I or over	25.5m
Drive-through facilities with access from an arterial road	50m

Table 14.12.5.13 – Traffic generation Vehicle movement rates

Activity	Indicative daily vehicle movements*					
Bulk retail and car yards	45 per 100m² gross floor area (GFA)					
Childcare – Early childhood education and day care facility	4 per child the facility is designed to accommodate					
Dairies, takeaway food, bottle stores	100 per 100m² GFA					
Takeaway food	360 per 100m² GFA					
Dwellings Residential units	10 per dwelling <u>residential unit</u>					
Garden centres	100+50 per 100m² GFA					
Health facility veterinary, and personal services	79.4 per professional the facility is designed to accommodate					
Hospitality services (e.g. cafés, bars)	90 per 100m² GFA					
Housing for the elderly/residential care	2 per resident the facility is designed to accommodate					
Industrial activities	Manufacturing 30 per 100m ² GFA					
	Warehouse 2.4 per 100m ² GFA					
Offices	25 per 100m² GFA					
Hospital	15 per patient bed the facility is designed to accommodate					
Retail activity	I30 per I00m² GFA					
School	2 per student the primary school is designed to accommodate, or 1 per student the secondary school is designed to accommodate					
Service stations	700 per 100m² GFA					
Supermarket activity	130 per 100m² GFA					
Tertiary education facilities	2 per student the facility is designed to accommodate					
Travellers' <u>Visitor</u> accommodation	3 per bed the facility is designed to accommodate					

^{*} Based on Trips and parking related to land use - NZ Transport Agency research report 453, November 2011

Table 14.12.5.14 – Access and road conditions standards (GRZ – General Residential, MRZ – Medium Density Residential, LLRZ – Large lot residential, SETZ - Settlement Village, COMZ – Commercial Business, Business TCZ - Town Centre, and GIZ – General Industrial, HIZ – Heavy Industrial, Te Kowhai Airpark, RPZ - Rangitahi Peninsula and MSRZ - Motorsport and Recreation Zones)

		Ge	neral			Seal V	Vidth		Berms		General	
Road Type	Number of Allotments or Activities	Design Speed (km/h)	Design Vehicle (RTS 18 Vehicle)	*Minimum Road/ROW Reserve Width (m)	Minimum Trafficable Carriageway (m)	Minimum Median Provision (m)	Parking Provision	Minimum Total Seal Width (m) Does not include concrete kerb width	Minimum Services (m)	Minimum Footpath / Shared path (m)	Kerb and Channel / Water-table	Turning Area for no exit roads (RTS 18 Vehicle)
Access and road conditions s	standards (GRZ –	General Resider	ntial, MRZ – Med		ential, <u>LLRZ – Large</u> strial and <u>HIZ – Hea</u>			Village, COMZ –	Commercial Busi	ness, Business TC	<u>Z -</u> Town Centre,	GIZ – General
Access leg to an allotment	I	N/A	8m Rigid	4	N/A							1
(Residential, Village) (GRZ – General residential, MRZ – Medium density residential, LLRZ – Large lot residential, SETZ – Settlement)												
Access leg to an allotment (COMZ – Commercial, TCZ – Town centre, GIZ – General industrial and HIZ – Heavy industrial Business and Industrial)	I	N/A		6	N/A							
Private access, including ROWs and access allotments (Residential, Village) (GRZ - General residential, MRZ - Medium density residential, LLRZ - Large lot residential, SETZ - Settlement)	2 to 4	N/A		8	5	N/A	N/A	4	Unsealed 1.2m on at least one side		Nib on one side, mountable on other	Subject to specific design that has been certified
Private access, including ROWs and 2 access allotments (COMZ - Commercial, TCZ - Town centre, GIZ - General industrial and HIZ - Heavy industrial Business and Industrial)	2 to 8	N/A		10	6		N/A	6			Mountable	Subject to specific design that has been certified
Access allotment ((Residential, Village) (GRZ – General residential, MRZ – Medium density residential, LLRZ – Large lot residential, SETZ – Settlement)	5 to 8	N/A		8	5		Optional	5			Mountable	Yes

	L	T		T-	Ι.		T	T. T		T		
Service Lane	N/A	N/A	Subject to specific	8	6		No parking	6	Subject to specific	Optional	Non-mountable	Subject to specific
(COMZ – Commercial, TCZ –			design that has						design that has			design that has been
Town centre, GIZ – General			been certified						been certified			certified
industrial and HIZ - Heavy												
industrial Business and Industrial)												
Local Road	>8	50	8m Rigid	20	6	None	Im on each side	8		1.8m on each side		8m Rigid
(Residential, Village)												
(GRZ – General residential, MRZ –												
Medium density residential, LLRZ -	=											
<u>Large lot residential, SETZ –</u>												
<u>Settlement)</u>												
			10 0 .									10 0 .
Local Road			19m Semi		9		Optional	9				19m Semi
(COMZ – Commercial, TCZ –												
Town centre, GIZ – General												
industrial and HIZ – Heavy												
industrial Business and Industrial)												
Collector Road	>100	50	8m Rigid	22		Subject to specific	2.5m on each side			1.8m on each side		8m Rigid
Collector Road	>100	50	8m Kigid	22	6		2.5m on each side	11		1.8m on each side		8m Rigid
(Residential, Village)						design that has						
(Kesideridai, Village)						been certified						
(GRZ – General residential, MRZ -	_											
Medium density residential, LLRZ -												
Large lot residential, SETZ –	-											
Settlement)												
<u>sectiement</u>												
Collector Road		ı	19m Semi	1	7		I	12		I		19m Semi
(COMZ – Commercial, TCZ –												
Town centre, GIZ – General												
industrial and HIZ – Heavy												
industrial Business and Industrial)												
Arterial Road	N/A	60	19m Semi	30	10	3	Recessed 2.5m on	13		1.8m on each side		N/A
							each side					
(Residential, Village)												
(GRZ - General residential, MRZ -												
Medium density residential, LLRZ -	=											
<u>Large lot residential, SETZ –</u>												
<u>Settlement)</u>												
Arterial Road												
(COMZ – Commercial, TCZ –												
Town centre, GIZ – General												
<u>industrial and HIZ – Heavy</u>												
industrial Business and Industrial)												
				I	T.	1		Tr. T	- · · · · · · · · · · · · · · · · · · ·		0.11	
Local roads in Lorenzen Bay	>8	50-80 (max)	N/A	17	6		2.5 metres on	11	Subject to specific		Subject to specific	Yes
Structure Plan Area				(Cana 150)			alternative sides		design that has	side of the road	design that has been	
				(Complies					been certified		certified	
				with Figure								
				14.1.5.18)								
Roads in Te Kauwhata Structure	51	50-80 (max)	N/A	20	Refer to Figures 14.1.	19 14 1 5 21 /arass	coctions)					
	F 1	Jo-ou (max)	IN/A	20	relei to rigures 14.1.	(CFOSS	5-3ecu0118)					
	i e	i e		1	1							
Plan area												

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Notes:

- The Regional Integrated Infrastructure Technical Specifications May 2018 contains further details on road width/design requirements.
- Figure 14.1.4.16 illustrates the various parts of the road (seal width, berm etc.) defined in Tables 14.12.4.14 and 14.12.4.15
- *Accesses shall have a minimum height clearance of 4.0m and a maximum gradient of 1 in 5 (with minimum 4.0m transition ramps of 1 in 8) except where the access terminates less than 135m from the nearest road that has reticulated water supply (included hydrants).

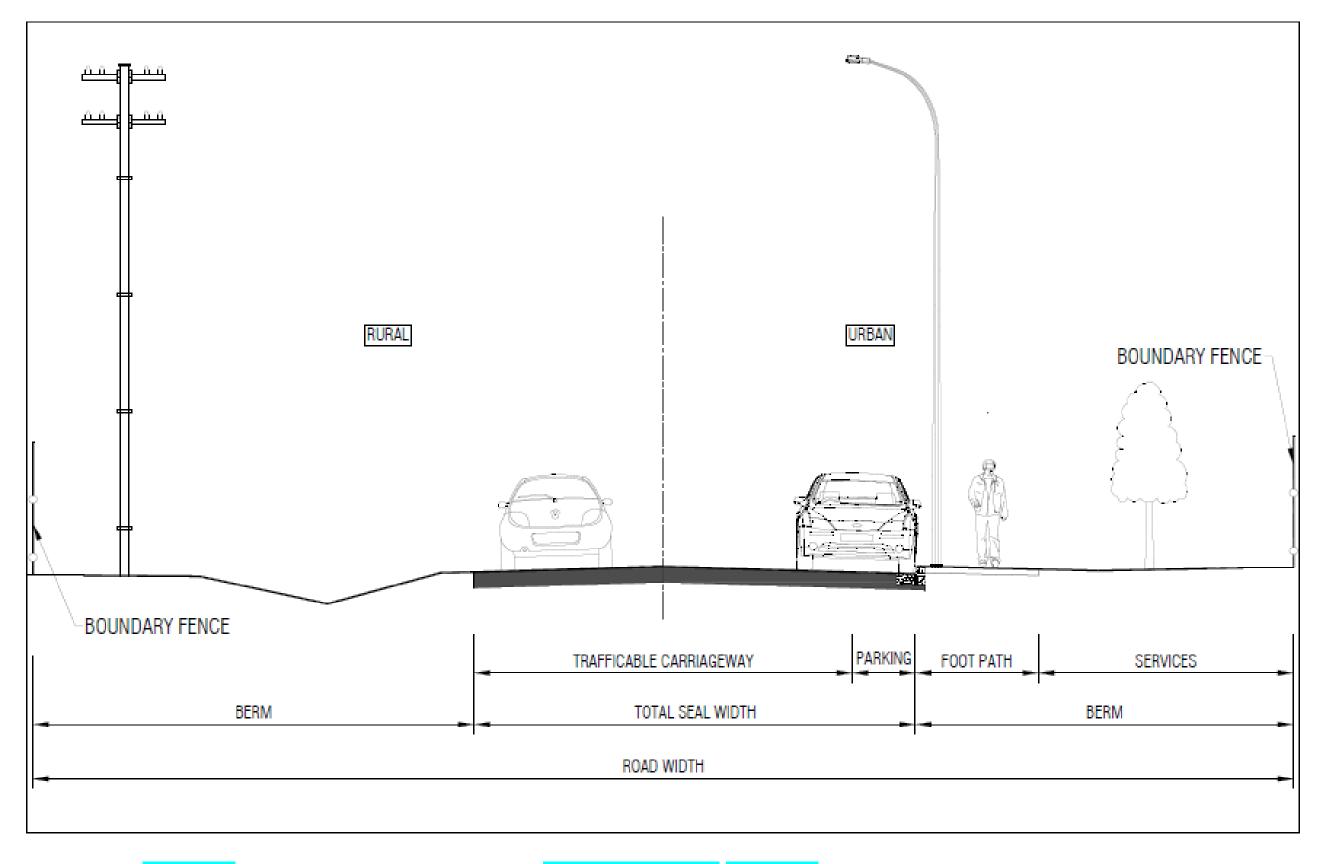
Table 14.12.5.15 – Access and road conditions standards (GRUZ – General Rural and RLZ – Rural lifestyle Country Living Zones)

	General				Seal Width				Berms		General	
Road Type	Number of Allotments or Activities	Design Speed (km/h)	Design Vehicle (RTS 18 Vehicle)	*Minimum Road/ROW Reserve Width (m)	Minimum Trafficable Carriageway (m)	Minimum Median Provision (m)	Parking Provision	Minimum Total Seal Width (m) Does not include concrete kerb width	(m)	Minimum Footpath / Shared path (m)	Kerb and Channel / Water-table	Turning area for no exit roads (RTS 18 Vehicle)
				GRUZ	- General Rural an	d RLZ – Rural lifes	tyle Country Livin	g Zones				
Access leg to an allotment	1	N/A	8m Rigid	6	N/A							
Private access, including ROWs and access allotments		N/A		6	3	N/A	N/A	3	Subject to specific design that has been certified		Optional	Subject to specific design that has been certified
Access allotment	4 to 8	N/A	1	10	5			5				Yes
Local	>8	Subject to specific design	Subject to specific design that has been certified		6	No		6		Subject to specific design that has been certified	RLZ - Rural Lifestyle Country Living - nibs along	8m Rigid
Collector < 1000 adt	>100		19m Semi	20	7	Subject to specific		8.5			seal edge.	
Collector >1000 adt or Arterial	N/A	110		20	7	design that has been certified		10			All others to specific design that has been certified.	N/A

Notes:

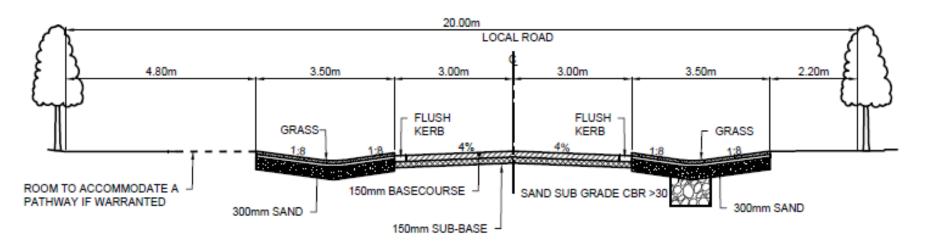
*Accesses shall have a minimum height clearance of 4.0m and a maximum gradient of 1 in 5 (with minimum 4.0m transition ramps of 1 in 8)

Figure 14.12.5.16 – Attachment to Tables 14.12.5.14 and 14.12.5.15

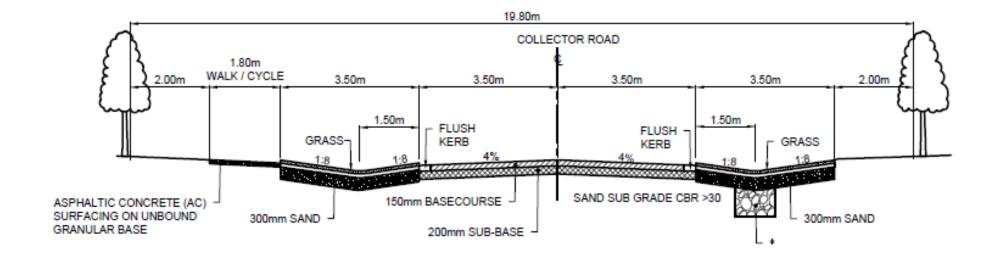


Note: The purpose of Figure 14.12.5.16 is to define the various aspects of the road as set out in Tables 14.12.5.14 and 14.12.5.15. Figure 14.12.5.16 is not intended to prescribe a preferred road layout.

Figure 14.12.5.17 – Tamahere Country Living RLZ – Rural Lifestyle Zone - Road cross sections



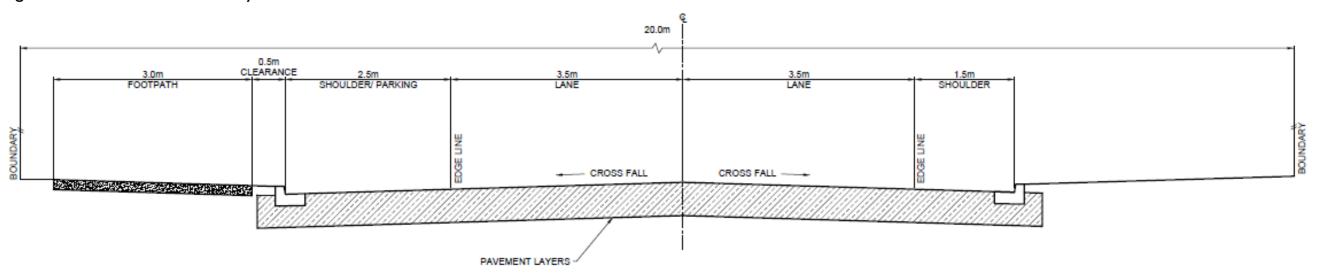
CROSS SECTION OF LOCAL ROAD - TAMAHERE COUNTRY LIVING ZONE SCALE: 1:50



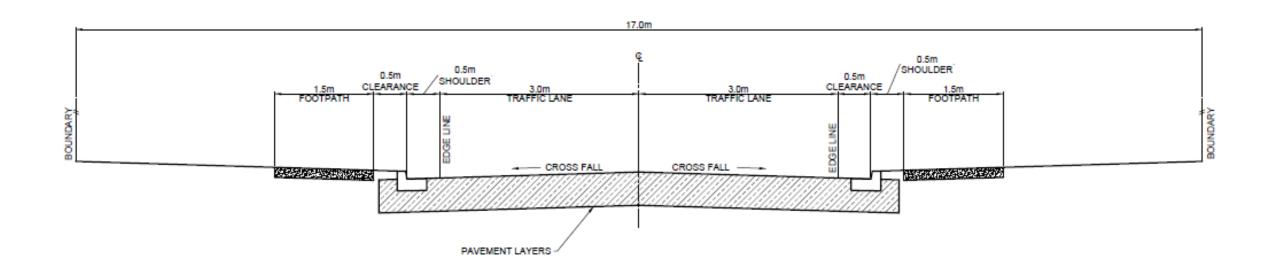
CROSS SECTION OF COLLECTOR ROAD - TAMAHERE COUNTRY LIVING ZONE SCALE: 1:50



Figure 14.12.5.18 - Lorenzen Bay Structure Plan - Road cross sections



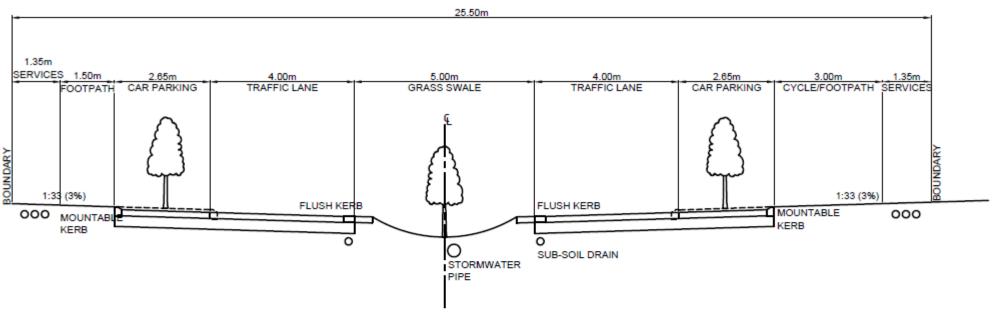
CROSS SECTION THROUGH COLLECTOR ROAD - LORENZEN BAY



CROSS SECTION THROUGH MINOR ROAD - LORENZEN BAY
SCALE: 1:25



Figure 14.12.5.19 – Te Kauwhata Structure Plan – Road cross sections – Collector Roads



NOTE:

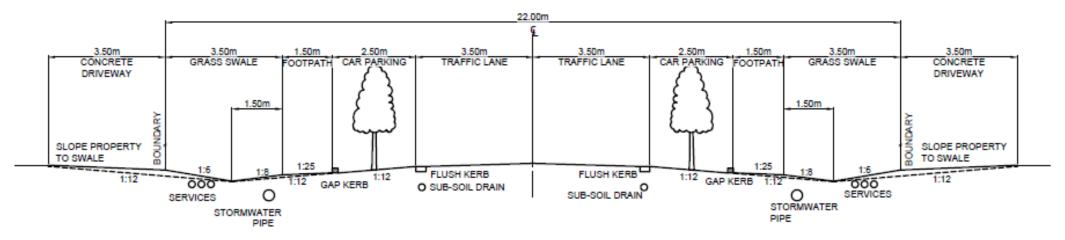
SWALE DESIGN TO INCLUDE ANTI-SCOUR
 MECHANISMS WHERE REQUIRED.

CROSS SECTION THROUGH COLLECTOR ROAD 25.5m (vpd>1500)

TE KAUWHATA STRUCTURE PLAN



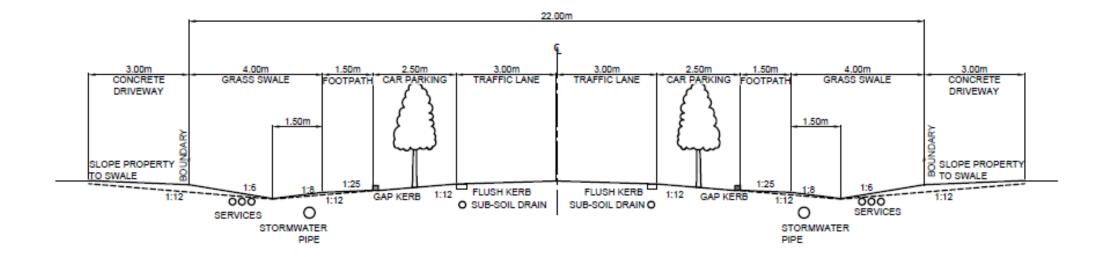
Figure 14.12.5.20 - Te Kauwhata Structure Plan - Road cross sections - Local Roads



CROSS SECTION THROUGH LOCAL ROAD A (500</br> SCALE: 1:50 TE KAUWHATA STRUCTURE PLAN

NOTE:

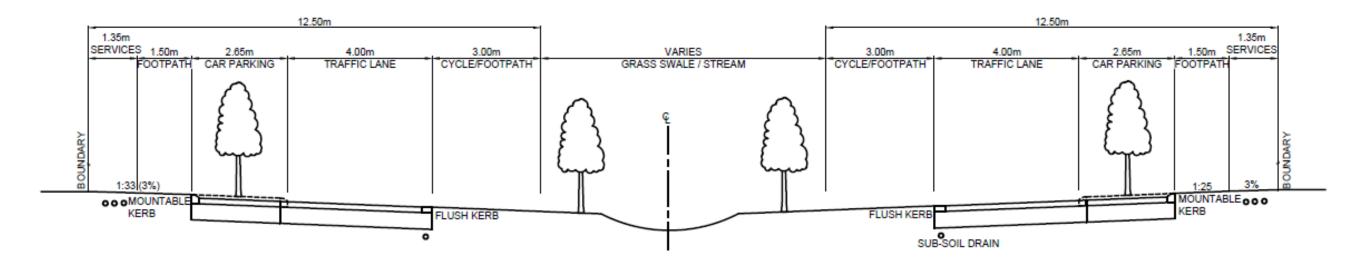
SWALE DESIGN TO INCLUDE ANTI-SCOUR
 MECHANISMS WHERE REQUIRED.



CROSS SECTION THROUGH LOCAL ROAD B (vpd<500) SCALE: 1:50 TE KAUWHATA STRUCTURE PLAN

1 0 1 2n

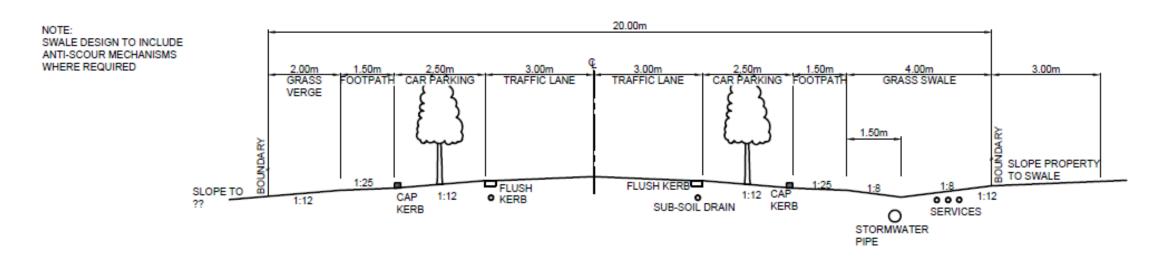
Figure 14.12.5.21 – Te Kauwhata Structure Plan – Road cross sections – Greenway Corridor and Whangamarino Margin Roads



CROSS SECTION THROUGH GREENWAY CORRIDOR 25m

SCALE: 1:50

TE KAUWHATA STRUCTURE PLAN



CROSS SECTION THROUGH WHANGAMARINO MARGIN (vpd<500)

SCALE: 1:50

TE KAUWHATA STRUCTURE PLAN



14.12.5.22 Railway Level Crossing Sight Triangles and Explanations

Level Crossing Sight Triangles and Explanations

The following tracked change text has no legal status. Its sole purpose is to help submitters understand the Hearing Panel's changes to the notified provisions. Our formal decision, which is in the National Planning Standard format, can be found on the Waikato District Council website.

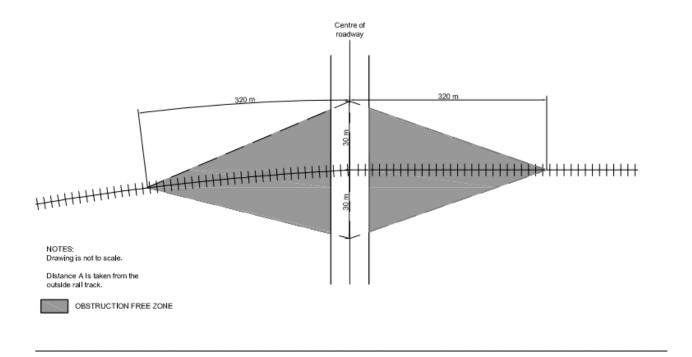
Developments near Existing Level Crossings

It is important to maintain clear visibility around level crossings to reduce the risk of collisions. All the conditions set out in this standard apply during both the construction and operation stages of any development.

Approach sight triangles at level crossings with Give Way signs

On sites adjacent to rail level crossings controlled by Give Way signs, no building, structure or planting shall be located within the shaded areas shown in 14.12.5.22 Figure 1. These are defined by a sight triangle taken 30 metres from the outside rail and 320 metres along the railway track.

APPROACH SIGHT TRIANGLES AT RAILWAY LEVEL CROSSINGS



14.12.5.22 Figure 1: Approach Sight triangles for level crossings with "Give Way" Signs

Advice Note: The approach sight triangles ensure that clear visibility is achieved around rail level crossings with Give Way signs so that a driver approaching a rail level can either:

- See a train and stop before the crossing: or
- Continue at the approach speed and cross the level crossing safely.

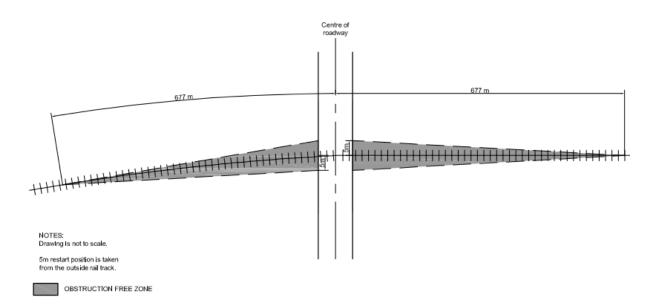
Of particular concern are developments that include shelter belts, tree planting, or series of building extensions. These standards apply irrespective of whether any visual obstructions already exist.

No approach sight triangles apply for level crossings fitted with alarms and/or barrier arms. However, care should be taken to avoid developments that have the potential to obscure visibility of these alarm masts. This is particularly important where there is a curve in the road on the approach to the level crossing, or where the property boundary is close to the edge of the road surface and there is the potential for vegetation growth.

Restart sight triangles at level crossings

On sites adjacent to all rail level crossings, no building, structure or planting shall be located within the shaded areas shown in 14.12.5.22 Figure 2. These are defined by a sight triangle taken 5 metres from the outside rail and distance A along the railway track. Distance A depends on the type of control (14.12.5.22 Table 1).

RESTART SIGHT TRIANGLES AT RAILWAY LEVEL CROSSINGS



14.12.5.22 Figure 2: Restart Sight Triangles for all Level Crossings (except those fitted with train activities barriers)

14.12.5.22 Table 1: Required Restart Sight Distances for Figure 2

Required approach visibility along tracks A (m)							
Signs only	Alarms only	Alarms and barriers					
<u>677 m</u>	<u>677 m</u>	<u>60m</u>					

Advice Note: The restart sight line triangles ensure that a road vehicle driver stopped at a level crossing can see far enough along the railway to be able to start off, cross and clear the level crossing safely before the arrival of any previously unseen train. Of particular concern are developments that include shelter belts, tree planting or series of building extensions. These standards apply irrespective of whether any visual obstructions already exist.

Notes:

- 1. 14.12.5.22 Figures 1 and 2 show a single set of rail tracks only. For each additional set of tracks add 25 m to the along—track distance in Figure 1, and 50 m to the along—track distance in Figure 2.
- 2. All figures are based on the sighting distance formula used in NZTA Traffic Control Devices Manual 2008, Part 9 Level Crossings. The formulae in this document are performance based; however, the rule contains fixed parameters to enable easy application of the standard. Approach and restart distances are derived from a:
- train speed of 110 km/h
- vehicle approach speed of 20 km/h
- fall of 8 % on the approach to the level crossing and a rise of 8 % at the level crossing
- 25 m design truck length

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• 90° angle between road and rail