

This entire chapter has been notified using the RMA Part One, Schedule 1 process (P1 Sch1).

Tūāhanga

Infrastructure

INF	Infrastructure
-----	----------------

Introduction

Infrastructure plays a critical role in the successful functioning of Wellington City and the lives of Wellingtonians. Whether it is the provision or disposal of water through the three waters network, facilitating the movement of people and goods through the transport network, or in the provision of infrastructure by network utility operators, infrastructure is central to our daily lives.

This chapter of the District Plan seeks to provide for the operation, maintenance and development of infrastructure within the City. The definition of Infrastructure in the RMA includes “structures for transport on land by cycleways, rail, roads, walkways, or any other means”. Given this, the Infrastructure Chapter includes provisions for the transport network matters concerning the operation, maintenance, repair and renewal, upgrading and development of the transport network and connections to the transport network.

Infrastructure is critical for the economic, social, cultural and environmental wellbeing of people and communities, and to provide for their health and safety at a national, regional and local scale, including through:

1. The effective, safe, secure and efficient transmission or distribution of electricity, gas, fuel or energy;
2. An integrated, efficient and safe transport network for the movement of people and goods by land, air or water, including public transport, walking, cycling, private vehicles;
3. Effective, reliable and future-proofed communications networks and services; and
4. Effective, resilient, efficient and safe water, wastewater and stormwater, networks and services.

However, infrastructure can also give rise to adverse effects on surrounding land uses and the environment which require consideration. Likewise, surrounding land uses can give rise to reverse sensitivity effects on infrastructure. This chapter sets out provisions addressing these effects.

The provisions within this chapter apply on a City-wide basis. As such the rules in the zone chapters and earthworks chapter do not apply to infrastructure unless specifically stated within an infrastructure rule or standard. Likewise, the rules in the overlay chapters do not apply to infrastructure. Instead, infrastructure sub-chapters address the requirements particular to the overlays as follows:

- INF-CE (Coastal Environment and Natural Character);
- INF-ECO (Significant Natural Areas);
- INF-NFL (Outstanding Natural Landscapes, Outstanding Natural Features, Special Amenity Landscapes, Ridgelines and Hilltops);
- INF-NH (Natural Hazards); and
- INF-OL (Other Overlays).

The provisions of the overlay sub-chapters apply in addition to the provisions of this chapter. In the case of conflict with any provisions of this chapter and a sub-chapter, the provisions of the sub-chapter will prevail.

Further, the Resource Management Act, and therefore the District Plan, share the same broad definition of ‘infrastructure’, which includes airport and port facilities, and renewable electricity generation. Notwithstanding that, ~~this the rules within the~~ Infrastructure Chapter (including the infrastructure sub chapters) ~~does~~ not apply to activities that fall under the definition of airport activity purposes or airport related activities (and are located within which are dealt with in the Airport Zone chapter), ~~or~~ the definition of port or operational port activities (and are located within which are dealt with in the Port Zone chapter), or the definition of Renewable Electricity Generation Activity (which are dealt with in the Renewable Electricity Generation chapter). Any infrastructure in the airport or port zones areas that is inconsistent with those definitions is managed by the provisions in this Infrastructure Chapter.

Lastly, the Act and therefore District Plan definition of ‘infrastructure’ includes three waters infrastructure. The Three Waters chapter applies in terms of land development effects on three waters infrastructure, however this chapter applies to the construction, operation and maintenance of the infrastructure itself.

Infrastructure which is proposed to be located within legal road is subject to the provisions of this chapter. All roads have an underlying zoning, and as such the zone based provisions in this chapter apply.

Additional regulatory requirements, separate to the District Plan, are also relevant to infrastructure, including:

1. The National Policy Statement on Electricity Transmission;
2. The Resource Management (National Environmental Standards for Electricity Transmission Activities) Regulations 2009 (NESETA);
3. The Resource Management (National Environmental Standards for Telecommunication Facilities) Regulations 2016(NESTF);
4. The National Code of Practice for Utility Operators’ Access to Transport Corridors;
5. The New Zealand Electrical Code of Practice for Electrical Safe Distances (NZECP 34:2001); and
6. Electricity (Hazards from Trees) Regulations 2003.

In the case of conflict with any provision of this plan and any national environmental standard (including the NESETA or the NESTF), under Section 43B of the Act the provisions of the national environmental standards will prevail.

Other relevant District Plan provisions	
<p>It is important to note that in addition to the provisions in this chapter, the following Part 2: District-Wide chapters may also be of relevance, including:</p> <ul style="list-style-type: none"> • Subdivision - The Subdivision Chapter contains provisions which manage subdivision of land. • Light and glare - The Light Chapter contains specific provisions relating to light spill and the management of effects on residential areas. • Noise - The Noise Chapter contains specific controls in relation to noise, including effects standards NOISE-S1 (maximum noise levels). • Signs - The Signs Chapter contains specific controls in relation to signage, including official signs, the effects of signs on road safety, and third party signage. • Contaminated land - The Contaminated Land Chapter manages the use and development of Contaminated Land or potentially Contaminated Land. • Hazardous substances - The Hazardous Substances Chapter contains provisions to manage Hazardous Substances. • Trees — The Notable Tree chapter contains specific provisions relating to the management of Notable Trees. • Designations <p>Resource consent may therefore be required under rules in this chapter as well as other chapters. Unless specifically stated in a rule or in this chapter, resource consent is required under each relevant rule. The steps to determine the status of an activity are set out in the General Approach chapter.</p>	
Objectives	
INF-01	<p>The benefits of infrastructure</p> <p>The national, regional and local benefits of infrastructure are recognised and provided for.</p>

<p>INF-O2</p>	<p>Adverse effects of infrastructure</p> <p>The adverse effects of infrastructure on the environment are managed, while recognising:</p> <ol style="list-style-type: none"> 1. The functional and operational need of infrastructure; and 2. That positive effects of infrastructure may be realised locally, regionally or nationally.
<p>INF-O3</p>	<p>Adverse effects on infrastructure</p> <p>Protect regionally significant infrastructure from incompatible subdivision, use and development, that may compromise its efficient and safe operation.</p> <p>Manage the adverse effects, including reverse sensitivity effects or of subdivision use and development on the function and operation of other infrastructure.</p>
<p>INF-O4</p>	<p>Infrastructure availability</p> <p>Safe, effective and resilient infrastructure is available for, and integrated with, existing and planned subdivision, use and development.</p>
<p>INF-O5</p>	<p>Transport network</p> <p>The transport network:</p> <ol style="list-style-type: none"> 1. Improves connectivity, enabling people of all ages and abilities, and goods to move safely and effectively regardless of transport mode; 2. Supports well-functioning urban environments; 3. Supports the health and well-being of people; and 4. Supports development infrastructure, additional infrastructure and green infrastructure.
<p>INF-O6</p>	<p>Amateur radio configurations</p> <p>The adverse effects of amateur radio configurations on the environment are managed.</p>
<p>Policies</p>	
<p>INF-P1</p>	<p>Recognising and providing for infrastructure</p> <p>Recognise the benefits of infrastructure by:</p> <ol style="list-style-type: none"> 1. Enabling the safe, resilient, effective and efficient operation, maintenance, repair, minor upgrade or removal of existing infrastructure; 2. Enabling investigation, monitoring and navigation activities associated with infrastructure operations; 3. Providing for significant upgrades to, and the development of new infrastructure; and 4. Providing for the functions and responsibilities of infrastructure as lifeline utilities during an emergency.
<p>INF-P2</p>	<p>Coordinating infrastructure with land use, subdivision, development and urban growth</p> <p>Enable the efficient coordination, integration and alignment of infrastructure planning and delivery with land use, subdivision, development and urban growth so that existing and future land use and infrastructure is integrated, efficient and aligned.</p>
<p>INF-P3</p>	<p>Technological advances</p> <p>Provide flexibility to adopt new technologies for infrastructure that:</p> <ol style="list-style-type: none"> 1. Allow for the re-use of redundant services and structures; 2. Increase resilience, safety or reliability of networks and services; 3. Result in environmental benefits or enhancements; or 4. Promote environmentally sustainable outcomes.
<p>INF-P4</p>	<p>Undergrounding of infrastructure</p> <p>Encourage the undergrounding of new infrastructure in urban areas where it is practicable and technically feasible.</p>
<p>INF-P5</p>	<p>Adverse effects of infrastructure</p> <p>Manage the adverse effects of upgrades to, or the development of new infrastructure, including effects on:</p> <ol style="list-style-type: none"> 1. Natural and physical resources; 2. Amenity values; 3. Sensitive activities; 4. The identified values of Overlays; 5. The safe and efficient operation of other infrastructure; and 6. The health, well-being and safety of people and communities.
<p>INF-P6</p>	<p>Consideration of the adverse effects of infrastructure</p> <p>When considering the adverse effects of infrastructure on the environment recognise that there may be situations where all adverse effects, including construction effects, cannot be avoided, and as such must be remedied or mitigated through having regard to the following:</p>

	<ol style="list-style-type: none"> 1. The extent to which adverse effects can be avoided, remedied or mitigated may be constrained by the functional or operational need of the infrastructure; 2. The time, duration, or frequency of adverse effects; 3. The necessity of the infrastructure including: <ol style="list-style-type: none"> a. The need to quickly repair and restore disrupted services; and b. The impact of not operating, repairing, maintaining, upgrading, removing or developing infrastructure; 4. Existing infrastructure including: <ol style="list-style-type: none"> a. The complexity and connectedness of networks and services; and b. The potential for co-location and shared use of infrastructure corridors; 5. Anticipated outcomes for the receiving environment and the degree to which past modifications have compromised the achievement of those outcomes; 6. The benefits derived from the infrastructure at a local, regional and national scale; and 7. The extent to which the infrastructure is integrated with, and necessary to support, planned urban development.
<p>INF-P7</p>	<p><u>Incompatible Subdivision, Use and Development Reverse sensitivity</u></p> <p><u>Avoid or where appropriate, manage activities that may compromise the efficient operation, maintenance, repair, replacement, upgrading, renewal or development of regionally significant infrastructure.</u></p> <p>Manage the establishment or alteration of sensitive activities near existing lawfully established infrastructure, including by:</p> <ol style="list-style-type: none"> 1. Requiring subdivision of sites containing the National Grid to: <ol style="list-style-type: none"> a. Retain the ability for the network utility operator to access, operate, maintain, repair and upgrade National Grid; and b. Ensure that future buildings, earthworks and construction activities maintain safe electrical clearance distances under all building and National Grid operating conditions; 2. Managing land disturbance and activities sensitive to gas transmission to avoid or mitigate potential adverse effects of, and on, gas transmission pipelines; 3. Requiring subdivision of sites containing a gas transmission pipeline network to retain the ability for the network utility operator to access, operate, maintain, repair and upgrade the gas transmission pipeline; and 4. Managing the activities of others through methods such as set-backs and design controls where it is necessary to achieve appropriate protection of infrastructure.
<p>INF-P8</p>	<p>Amateur radio configurations</p> <p>Design, construct and locate amateur radio configurations to minimise adverse effects on the existing and anticipated amenity of adjoining properties and the surrounding area.</p>
<p>INF-P9</p>	<p>Upgrading and development of the transport network</p> <p>Enable the upgrading and development of the transport network where, as far as practicable, it:</p> <ol style="list-style-type: none"> 1. Integrates with the existing transport network and any other planned network upgrades or development; 2. Does not compromise the safe and effective functioning of the transport network; 3. Responds to site and topographical constraints including opportunities to reduce the effects of earthworks on landscape and ecological values; 4. Provides for high levels of connectivity within and between transport modes; 5. Provides for pedestrian, cycling and micromobility safety and connectivity including access to and usability of public open spaces and access to public transport services; and 6. Provides transport corridors which: <ol style="list-style-type: none"> a. Allocate adequate space in the corridor for walking, cycling, micromobility, public transport (including stops), loading and parking, vehicles, infrastructure and street trees; and b. Include street trees that are suitable for their specific locations in the road reserve, where these: <ol style="list-style-type: none"> i. Are a species appropriate to the site's growing conditions including soil, slope, aspect, wind, drought and salt tolerance; ii. Contribute to high quality public amenity through species diversity, habitat and food source value and appearance (mature height, stem girth and form); iii. Have low maintenance requirements and high tolerance to pruning; iv. Are selected and sited to minimise safety risks for pedestrians, especially at night; v. Are sited to avoid compromising traffic safety sightlines in respect of traffic lights, signs, intersections, bus stops, pedestrian crossings and vehicle crossings; and vi. Are sited and planted to avoid compromising buildings, structures or infrastructure.
<p>INF-P10</p>	<p>Classification of roads</p> <p>Classify roads according to the Waka Kotahi New Zealand Transport Agency's One Network Framework.</p>
<p>INF-P11</p>	<p>Connections to roads</p> <p>Enable safe and effective connections between sites and the transport network by requiring connections to roads to address:</p> <ol style="list-style-type: none"> 1. The One Network Framework classification, characteristics and operating speed of the road and the number and types of vehicles accessing the site; 2. Opportunities to share and minimise the number of connections; 3. Public health and safety including the safe functioning of the transport network and the safety of pedestrians, cyclists and micromobility device users; and 4. Site or topography constraints including reduced visibility.
<p>INF-P112</p>	<p>Infrastructure within roads</p>

	Encourage the use of roads for other infrastructure, including where it is accordance with the National Code of Practice for Utility Operators' Access to Transport Corridors 2019.
INF-P1243	<p>Infrastructure within riparian margins</p> <p>Provide for infrastructure within riparian margins where:</p> <ol style="list-style-type: none"> 1. Natural character is maintained; and 2. The infrastructure activity is designed to minimise the adverse effects on the natural character.
Rules for Infrastructure - General	
INF-R1	Operation, maintenance and repair, or removal of existing above and underground infrastructure and ancillary vehicle access tracks
All Zones	<ol style="list-style-type: none"> 1. Activity status: Permitted <p>Where:</p> <ol style="list-style-type: none"> a. All above ground structures that are no longer required for the operation of the infrastructure are removed within twelve months of being replaced or becoming redundant; b. Compliance is achieved with INF-S1; and c. Compliance is achieved with the following standards: <ol style="list-style-type: none"> i. In relation to existing underground infrastructure, INF-S2; ii. INF-S3; and iii. INF-S12.
All Zones	<ol style="list-style-type: none"> 2. Activity status: Restricted Discretionary <p>Where:</p> <ol style="list-style-type: none"> a. Compliance with INF-R1.1.a and INF-R1.1.c cannot be achieved. <p>Matters of discretion are:</p> <ol style="list-style-type: none"> 1. The matters set out in INF-P1, INF-P3, INF-P5 and INF-P6.
All Zones	<ol style="list-style-type: none"> 3. Activity status: Non-Complying <p>Where:</p> <ol style="list-style-type: none"> a. Compliance with INF-R1.1.b cannot be achieved.
INF-R2	New underground infrastructure (including customer connections), and upgrading of existing underground infrastructure
All Zones	<ol style="list-style-type: none"> 1. Activity status: Permitted <p>Where:</p> <ol style="list-style-type: none"> a. Compliance is achieved with INF-S1; and b. Compliance is achieved with the following standards: <ol style="list-style-type: none"> i. INF-S2; ii. INF-S3; iii. INF-S7; and iv. INF-S12 <p>Note: Aboveground ancillary structures are provided for in INF-R7.</p>
All Zones	<ol style="list-style-type: none"> 2. Activity status: Restricted Discretionary <p>Where:</p> <ol style="list-style-type: none"> a. Compliance with INF-R2.1.b cannot be achieved. <p>Matters of discretion are:</p> <ol style="list-style-type: none"> 1. The matters set out in INF-P1, INF-P3, INF-P4, INF-P5 and INF-P1243, and, specific to activities directly associated to the National Grid, INF-NG-P58, INF-NG-P61 and INF-NG-P62.
All Zones	<ol style="list-style-type: none"> 3. Activity status: Non-Complying <p>Where:</p> <ol style="list-style-type: none"> a. Compliance with INF-R2.1.a cannot be achieved.
INF-R3	Upgrading of existing aboveground infrastructure
All Zones	<ol style="list-style-type: none"> 1. Activity status: Permitted

	<p>Where:</p> <ul style="list-style-type: none"> a. Compliance is achieved with INF-S1; and b. Compliance with the following standards is achieved: <ul style="list-style-type: none"> i. INF-S3; ii. INF-S4; and iii. INF-S12.
All Zones	<p>2. Activity status: Restricted Discretionary</p> <p>Where:</p> <ul style="list-style-type: none"> a. Compliance with the requirements of INF-R3.1.b cannot be achieved. <p>Matters of discretion are:</p> <ul style="list-style-type: none"> 1. The matters set out in INF-P1, INF-P2, INF-P3, INF-P5 and INF-P6.
All Zones	<p>3. Activity status: Non-Complying</p> <p>Where:</p> <ul style="list-style-type: none"> a. Compliance with INF-R3.1.a cannot be achieved.
INF-R4	New vehicle access tracks for infrastructure
All Zones	<p>1. Activity status: Permitted</p> <p>Where:</p> <ul style="list-style-type: none"> a. Compliance is achieved with INF-S3 and INF-S7.
All Zones	<p>2. Activity status: Restricted Discretionary</p> <p>Where:</p> <ul style="list-style-type: none"> a. Compliance with any of the requirements of INF-R4.1 cannot be achieved. <p>Matters of discretion are:</p> <ul style="list-style-type: none"> 1. The matters set out in INF-P1, INF-P2, INF-P5, INF-P6 and INF-P1243., and, specific to activities directly associated to the National Grid, INF-NG-P58 and INF-NG-P62.
INF-R5	New aboveground customer connection line
All Zones	<p>1. Activity status: Permitted</p> <p>Where:</p> <ul style="list-style-type: none"> a. Compliance is achieved with INF-S5.
All Zones	<p>2. Activity status: Restricted Discretionary</p> <p>Where:</p> <ul style="list-style-type: none"> a. Compliance with any of the requirements of INF-R5.1 cannot be achieved. <p>Matters of discretion are:</p> <ul style="list-style-type: none"> 1. The matters set out in INF-P1, INF-P5 and INF-P6.
INF-R6	Temporary infrastructure
All Zones	<p>1. Activity status: Permitted</p> <p>Where:</p> <ul style="list-style-type: none"> a. All temporary infrastructure structures cease operating and are removed from the site within 12 months of the work commencing; b. Compliance is achieved with INF-S1; and c. Compliance is achieved with the following standards: <ul style="list-style-type: none"> i. INF-S3; ii. INF-S6; iii. INF-S7; iv. INF-S8; v. INF-S9; vi. INF-S10; vii. INF-S12; and viii. INF-S1415.

All Zones	<p>2. Activity status: Restricted Discretionary</p> <p>Where:</p> <p>a. Compliance with the requirements of INF-R6.1.a or INF-R6.1.c cannot be achieved.</p> <p>Matters of discretion are:</p> <ol style="list-style-type: none"> 1. The extent and effect of non-compliance with any relevant standard not met as specified in the associated assessment criteria for the infringed standard; and 2. The matters set out in INF-P1, INF-P3, INF-P5, INF-P6 and INF-P1243
All Zones	<p>3. Activity status: Non-Complying</p> <p>Where:</p> <p>a. Compliance with the requirements of INF-R6.1.b cannot be achieved.</p>
INF-R7	<p>Structures associated with infrastructure including:</p> <ol style="list-style-type: none"> 1. Substations (including switching stations); 2. Transformers; 3. Gas transmission and distribution structures; 4. Energy storage batteries not enclosed by a building; and 5. Communications kiosks; and 6. Bus Shelters; and 7. Electric Vehicle Charging Stations.
All Zones	<p>1. Activity status: Permitted</p> <p>Where:</p> <ol style="list-style-type: none"> a. In the General Rural Production, Rural Lifestyle or General Industrial Zones, the maximum building and structure height standard for that Zone is complied with. In all other zones INF-S6 must be complied with; b. Any substation, gas regulation valve and/or takeoff station or energy storage batteries are set back at least 2m from a residential site side or rear boundary (but not a road boundary); c. Compliance is achieved with INF-S7, and INF-S1445 and INF-S16; and d. Compliance is achieved with INF-S1.
All Zones	<p>2. Activity Status: Restricted Discretionary</p> <p>Where:</p> <p>a. Compliance with the requirements of INF-R7.1.a, INF-R7.1.b or INF-R7.1.c cannot be achieved.</p> <p>Matters of discretion are:</p> <ol style="list-style-type: none"> 1. The extent and effect of non-compliance with any relevant standard not met as specified in the associated assessment criteria for the infringed standard; and 2. The matters set out in INF-P1, INF-P2, INF-P3, INF-P5 INF-P6 and INF-P1243, and, specific to activities directly associated to the National Grid, INF-NG-P58 and INF-NG-P62.
All Zones	<p>3. Activity status: Non-Complying</p> <p>Where:</p> <p>a. Compliance with the requirements of INF-R7.1.d cannot be achieved.</p>
INF-R8	<p>New infrastructure contained within existing buildings</p>
All Zones	<p>1. Activity status: Permitted</p> <p>Where:</p> <p>a. Compliance is achieved with INF-S1.</p>
All Zones	<p>2. Activity status: Non-Complying</p> <p>Where:</p> <p>a. Compliance with the requirements of INF-R8.1.a cannot be achieved.</p>
INF-R9	<p>Navigational aids, sensing and environmental monitoring equipment (including air quality and meteorological)</p>

All Zones	<p>1. Activity status: Permitted</p> <p>Where:</p> <p>a. Compliance is achieved with the following standards:</p> <ul style="list-style-type: none"> i. INF-S3; ii. INF-S6; iii. INF-S7; iv. INF-S8; and v. INF-S12.
All Zones	<p>2. Activity status: Restricted Discretionary</p> <p>Where:</p> <p>a. Compliance with the requirements of INF-R9.1.a cannot be achieved.</p> <p>Matters of discretion are:</p> <p>1. The matters set out in INF-P1, INF-P2, INF-P3, INF-P5, INF-P6 and INF-P1243.</p>
INF-R10	<p>New overhead lines and associated support structures that convey <u>telecommunications or</u> electricity below 110kV</p>
<p>General Rural Zone</p> <p>Large Lot Residential Zone</p> <p>General Industrial Zone</p> <p>Light Industrial Zone</p> <p>Airport Zone</p> <p>Hospital Zone</p> <p>Port Zone</p> <p>Stadium Zone</p> <p>Tertiary Education Zone</p>	<p>1. Activity status: Permitted</p> <p>Where:</p> <p>a. Compliance is achieved with the following standards:</p> <ul style="list-style-type: none"> i. INF-S3; ii. INF-S6; iii. INF-S7; iv. INF-S8; and v. INF-S12.
<p>General Rural Zone</p> <p>Large Lot Residential Zone</p> <p>General Industrial Zone</p> <p>Light Industrial Zone</p> <p>Airport Zone</p> <p>Hospital Zone</p> <p>Port Zone</p> <p>Stadium Zone</p> <p>Tertiary Education Zone</p>	<p>2. Activity status: Restricted Discretionary</p> <p>Where:</p> <p>a. Compliance with any of the requirements of INF-R10.1 cannot be achieved.</p> <p>Matters of discretion are:</p> <p>1. The matters set out in INF-P1, INF-P2, INF-P5, INF-P6 and INF-P1243, <u>and, specific to activities directly associated to the National Grid, INF-NG-P58 and INF-NG-P62.</u></p>
All other Zones	<p>3. Activity status: Discretionary</p>
INF-R11	<p>Telecommunications or radiocommunication activities (not otherwise provided for by another rule in this table and not regulated by the NESTF)</p>
All Zones	<p>1. Activity status: Permitted</p> <p>Where:</p>

	<p>a. Compliance is achieved with the following standards:</p> <ul style="list-style-type: none"> i. INF-S6; ii. INF-S7; iii. INF-S8; iv. INF-S9; v. INF-S10; and vi. INF-S12; and vii. INF-S15. <p>b. Compliance is achieved with INF-S1.</p>
All Zones	<p>2. Activity status: Restricted Discretionary</p> <p>Where:</p> <p>a. Compliance with the requirements of INF-R11.1 cannot be achieved.</p> <p>Matters of discretion are:</p> <ul style="list-style-type: none"> 1. The extent and effect of non-compliance with any relevant standard not met as specified in the associated assessment criteria for the infringed standard; and 2. The matters set out in INF-P1, INF-P2, INF-P5, INF-P7 and INF-P1213.
All Zones	<p>3. Activity status: Non-Complying</p> <p>Where:</p> <p>a. Compliance with the requirements of INF-R11.1.b cannot be achieved.</p>
INF-R12	New telecommunications poles and new antennas (regulated by the NESTF that do not meet the permitted activity standards in those Regulations)
All Zones	<p>1. Activity status: Controlled</p> <p>Where:</p> <ul style="list-style-type: none"> a. The width of any panel antenna does not exceed 0.8m; b. The diameter of any dish antenna located in the road reserve does not exceed: <ul style="list-style-type: none"> i. 0.6m in a residential zone; or ii. 0.9m in all other zones; c. The diameter of any dish antenna not located in the road reserve does not exceed: <ul style="list-style-type: none"> i. 0.6m in a residential zone; or ii. 2.0m in all other zones; d. Compliance is achieved with INF-S8; and e. Compliance is achieved with INF-S1. <p>Matters of control are:</p> <ul style="list-style-type: none"> 1. The functional and operational needs of, and benefits from, the infrastructure, including the potential impact on the levels of service or health and safety if the work is not undertaken; and 2. The amenity values of the relevant zone and the extent to which any adverse visual amenity effects can be managed.
All Zones	<p>2. Activity status: Restricted Discretionary</p> <p>Where:</p> <p>a. Compliance with any of the requirements of INF-R12.1.a, INF-R12.1.b, INF-R12.1.c and INF-R12.1.d cannot be achieved.</p> <p>Matters of discretion are:</p> <ul style="list-style-type: none"> 1. The matters set out in INF-P1, INF-P2, INF-P3, INF-P5, INF-P6 and INF-P1213.
All Zones	<p>3. Activity status: Non-Complying</p> <p>Where:</p> <p>a. Compliance with the requirements of INF-R12.1.e cannot be achieved.</p>
INF-R13	New antenna attached to a building (regulated by the NESTF that do not meet the permitted standards in the NESTF)
All Zones	<p>1. Activity status: Controlled</p> <p>Where:</p> <ul style="list-style-type: none"> a. A new panel antenna does not exceed a maximum face area of 2m²; and b. The antenna does not exceed a height of 5m above the point of attachment to the building; c. In any residential zone, the lowest point at which the antenna is attached to the building is at least 15m above the ground; and d. INF-S1 is complied with.

	<p>Matters of control are:</p> <ol style="list-style-type: none"> 1. The functional and operational needs of, and benefits from, the infrastructure, including the potential impact on the levels of service or health and safety if the work is not undertaken; and 2. The amenity values of the relevant zone and the extent to which any adverse visual amenity effects can be managed.
All Zones	<p>2. Activity status: Restricted Discretionary</p> <p>Where:</p> <ol style="list-style-type: none"> a. Compliance with any of the requirements of INF-R13.1.a, INF-R13.1.b or INF-R13.1.c cannot be achieved. <p>Matters of discretion are:</p> <ol style="list-style-type: none"> 1. The matters set out in INF-P1, INF-P2, INF-P3, INF-P5 and INF-P6.
All Zones	<p>3. Activity status: Non-Complying</p> <p>Where:</p> <ol style="list-style-type: none"> a. Compliance with the requirements of INF-R13.1.d cannot be achieved.
INF-R14	New telecommunications cabinets (regulated by the NESTF that do not meet the permitted standards of the NESTF)
All Zones	<p>1. Activity status: Controlled</p> <p>Where:</p> <ol style="list-style-type: none"> a. A single, standalone telecommunications cabinet does not exceed a footprint of 2.5m² or a height of 2m; b. A group of telecommunications cabinets do not exceed a footprint of 3m²; and c. Compliance is achieved with INF-S7 and INF-S1415. <p>Matters of control are:</p> <ol style="list-style-type: none"> 1. The functional and operational needs of, and benefits from, the infrastructure, including the potential impact on the levels of service or health and safety if the work is not undertaken; and 2. The amenity values of the relevant zone and the extent to which any adverse visual amenity effects can be managed.
All Zones	<p>2. Activity status: Restricted Discretionary</p> <p>Where:</p> <ol style="list-style-type: none"> a. Compliance with any of the requirements of INF-R14.1 cannot be achieved. <p>Matters of discretion are:</p> <ol style="list-style-type: none"> 1. The extent and effect of non-compliance with any relevant standard not met as specified in the associated assessment criteria for the infringed standard; and 2. The matters set out in INF-P1, INF-P2, INF-P3, INF-P5, INF-P6 and INF-P1243.
INF-R15	Infrastructure buildings and structures not provided for by any other rule in this table
All Zones	<p>1. Activity status: Permitted</p> <p>Where:</p> <ol style="list-style-type: none"> a. Compliance is achieved with all bulk and location standards for the zone in which the building or structure is located; b. Compliance is achieved with INF-S7 and INF-S1415; and c. Compliance is achieved with INF-S1.
All Zones	<p>2. Activity status: Restricted Discretionary</p> <p>Where:</p> <ol style="list-style-type: none"> a. Compliance with the requirements of INF-R15.1.a or INF-R15.1.b cannot be achieved. <p>Matters of discretion are:</p> <ol style="list-style-type: none"> 1. The extent and effect of non-compliance with any relevant standard not met as specified in the associated assessment criteria for the infringed standard; and 2. The matters set out in INF-P1, INF-P2, INF-P3, INF-P5, INF-P6 and INF-P1243, and, specific to activities directly associated to the National Grid, INF-NG-P58, INF-NG-P61 and INF-NG-P62.
All Zones	<p>3. Activity status: Non-Complying</p> <p>Where:</p> <ol style="list-style-type: none"> a. Compliance with the requirements of INF-R15.1.c cannot be achieved.

INF-R16	New electricity lines and associated support structures (including poles and towers) that convey electricity of 110kV or above
All Zones	<p>1. Activity status: Restricted Discretionary</p> <p>Matters of discretion are:</p> <p>1. The matters set out in INF-P1, INF-P2, INF-P3, INF-P5, INF-P6 and INF-P1243, <u>and, specific to activities directly associated to the National Grid, INF-NG-P58, INF-NG-P61 and INF-NG-P62.</u></p>
INF-R17	New aboveground pipelines
All Zones	1. Activity status: Discretionary
INF-R18	New water, wastewater and stormwater pump stations
All Zones	<p>1. Activity status: Permitted</p> <p>Where:</p> <p>a. Compliance is achieved with the following standards:</p> <ul style="list-style-type: none"> i. INF-S2; ii. INF-S3; iii. INF-S6; iv. INF-S7; v. INF-S12; and vi. INF-S1415.
All Zones	<p>2. Activity status: Restricted Discretionary</p> <p>Where:</p> <p>a. Compliance with any of the requirements of INF-R18.1 cannot be achieved.</p> <p>Matters of discretion are:</p> <ul style="list-style-type: none"> 1. The extent and effect of non-compliance with any relevant standard not met as specified in the associated assessment criteria for the infringed standard; and 2. The matters set out in INF-P1, INF-P3, INF-P5, INF-P6 and INF-P1243.
INF-R19	New water treatment plants
<p>General Rural Zone</p> <p>Large Lot Residential Zone</p> <p>General Industrial Zone</p> <p>Light Industrial Zone</p> <p>Airport Zone</p> <p>Hospital Zone</p> <p>Port Zone</p> <p>Stadium Zone</p> <p>Tertiary Education Zone</p>	<p>1. Activity status: Permitted</p> <p>Where:</p> <p>a. Relevant zone bulk and location standards are complied with; and</p> <p>b. Compliance is achieved with the following standards:</p> <ul style="list-style-type: none"> i. INF-S2; ii. INF-S3; iii. INF-S7; iv. INF-S12;and v. INF-S1415.
<p>General Rural Zone</p> <p>Large Lot Residential Zone</p> <p>General Industrial Zone</p> <p>Light Industrial Zone</p> <p>Airport Zone</p> <p>Hospital Zone</p>	<p>2. Activity status: Restricted Discretionary</p> <p>Where:</p> <p>a. Compliance with any of the requirements of INF-R19.1 cannot be achieved.</p> <p>Matters of discretion are:</p> <ul style="list-style-type: none"> 1. The extent and effect of non-compliance with any relevant standard not met as specified in the associated assessment criteria for the infringed standard; and 2. The matters set out in INF-P1, INF-P2, INF-P3, INF-P5, INF-P6 and INF-P1243.

Port Zone Stadium Zone Tertiary Education Zone	
All other Zones	3. Activity status: Discretionary
INF-R20	New wastewater treatment plants
General Rural Zone Large Lot Residential Zone General Industrial Zone Light Industrial Zone Airport Zone Hospital Zone Port Zone Stadium Zone Tertiary Education Zone	1. Activity status: Restricted Discretionary Matters of discretion are: 1. The matters set out in INF-P1, INF-P2, INF-P3, INF-P5, INF-P6 and INF-P 1243 .
All other Zones	2. Activity status: Discretionary
INF-R21	Amateur radio configuration
All Zones	1. Activity status: Permitted Where: a. Compliance is achieved with INF-S7 and INF-S11; and b. Compliance is achieved with INF-S1.
All Zones	2. Activity status: Restricted Discretionary Where: a. Compliance with any of the requirements of INF-R21.1.a cannot be achieved. Matters of discretion are: 1. The matters set out in INF-P8 and INF-P 1243 .
All Zones	3. Activity status: Non-Complying Where: a. Compliance with the requirements of INF-R21.1.b cannot be achieved.
INF-R22	Buildings, structures and activities in the National Grid Yard
All Zones	1. Activity status: Permitted Where: a. The activity is not a sensitive activity; b. The building or structure is not used for the handling or storage of hazardous substances (Hazardous Substances (Hazard Classification) Notice 2020) with explosive or flammable intrinsic properties (except this does not apply to the accessory use and storage of hazardous substances in domestic-scale quantities); and c. The structure is a fence not exceeding 2.5m in height; d. The building is an uninhabited farm or horticultural structure or building (but not commercial greenhouses, protective canopies, wintering barns, produce packing facilities, or milking/dairy sheds (excluding ancillary stockyards and platforms)); e. Alterations and additions to an existing building or structure for a sensitive activity, which does not involve an increase in the building height or building footprint; or f. An accessory building associated with an existing residential activity that is less than 10m² in footprint and 2.5m in height;

	<p>g. Infrastructure undertaken by a network utility operator as defined in the Resource Management Act 1991 or any part of electricity infrastructure that connects to the National Grid; and</p> <p>h. Compliance is achieved with INF-S12.</p>
All Zones	<p>2. Activity status: Non-complying</p> <p>Where:</p> <p>a. Compliance with INF-R22.1 cannot be achieved.</p> <p>Notification status:- An application for resource consent made in respect of rule INF-R22.2 is precluded from being publicly notified.</p> <p>Notice of any application for resource consent under this rule must be served on Transpower New Zealand Limited in accordance with Clause 10(2)(i) of the Resource Management (Forms, Fees, and Procedures) Regulations 2003.</p>
INF-R223	Sensitive activities, including the erection of buildings for sensitive activities, within the Gas Transmission Pipeline Corridor Network
All Zones	<p>1. Activity status: Restricted Discretionary</p> <p>Matters of discretion are:</p> <ol style="list-style-type: none"> The extent to which the proposed activities are likely to compromise the stability and integrity of the gas transmission pipeline network and the operation, maintenance and upgrading of the pipeline; The risk of hazards affecting public or individual safety, and the risk of property damage; Measures proposed to avoid or mitigate potential adverse effects on the gas transmission pipeline network ; The outcome of any consultation with the owner and operator of the gas transmission pipeline; and Whether the sensitive activity could be located a greater distance from the gas transmission pipeline. <p>Notification status:</p> <p>An application for resource consent made in respect of rule INF-R23 is precluded from being publicly notified.</p> <p>Notice of any application for resource consent under this rule must be served on the owner and operator of the Gas Transmission Pipeline Network in accordance with Clause 10(2)(i) of the Resource Management (Forms, Fees, and Procedures) Regulations 2003.</p> <p>Note:</p> <ol style="list-style-type: none"> This rule also applies to the establishment of a sensitive activity in an existing building, or any change of land use to a sensitive activity. If a resource consent application is made under this rule, the owner and operator of the Gas Transmission Pipeline will be considered an affected person in accordance with section 95E of the Act and notified of the application, where written approval is not provided.
INF-R24	Connections to roads
All Zones	<p>1. Activity status: Permitted</p> <p>Where:</p> <p>a. The connection provides site access for sites with no driveway, on-site parking or loading; and</p> <p>b. Compliance is achieved with INF-S16;</p> <p>or</p> <p>c. The connection provides site access to an Urban Road (except a Transit Corridor) or a Rural Road (except National Highway) as identified in mapped in the road classification overlay; and</p> <p>d. Compliance is achieved with INF-S17.</p>
All Zones	<p>2. Activity status: Restricted Discretionary</p> <p>Where:</p> <p>a. Compliance with the requirements of INF-R24.1 cannot be achieved.</p> <p>Matters of discretion are:-</p> <p>1. The matters in INF-P13.</p>
INF-R2325	New roads
All Zones	<p>1. Activity status: Restricted Discretionary</p> <p>Where:</p> <p>a. Compliance is achieved with the following standards:</p> <ol style="list-style-type: none"> INF-S3;

	<p>ii. INF-S1618; and</p> <p>iii. Compliance with the requirements of New Zealand Standard NZS6806:2010 Acoustics — Road Traffic Noise — New and Altered Roads. Clause iii shall apply only to new roads predicted to carry at least 2,000 annual average daily traffic (AADT) at the design year. In circumstances where NZS6806:2010 Acoustics — Road Traffic Noise — New and Altered Roads does not apply, as listed in paragraph 1.3.1 of NZS6806:2010 Acoustics — Road Traffic Noise — New and Altered Roads.</p> <p>Matters of discretion are:</p> <ol style="list-style-type: none"> 1. The classification of the proposed road and how the proposed aligns with INF-S1213; and 2. Design of the road. <p>Section 88 information requirements for applications:</p> <ol style="list-style-type: none"> 1. Applications under this rule must provide, in addition to the standard information requirements: <ol style="list-style-type: none"> a. A detailed design road safety audit in accordance with the NZTA Road Safety Audit Procedures for Projects — Guidelines, Transfund New Zealand Manual No. TFM9 2013; and b. A classification assessment of the proposed road(s) against the Waka Kotahi New Zealand Transport Agency One Network Framework 2021.
All Zones	<p>2. Activity status: Discretionary</p> <p>Where:</p> <ol style="list-style-type: none"> a. Compliance with the requirements of INF-R25.1 cannot be achieved. <p>Section 88 information requirements for applications:</p> <ol style="list-style-type: none"> 1. Applications under this rule must provide, in addition to the standard information requirements: <ol style="list-style-type: none"> a. A detailed design road safety audit in accordance with the NZTA Road Safety Audit Procedures for Projects — Guidelines, Transfund New Zealand Manual No. TFM9 2013; and b. A classification assessment of the proposed road(s) against the Waka Kotahi New Zealand Transport Agency One Network Framework 2021
INF-R2426	Structures and vegetation near railway level crossings
All Zones	<p>1. Activity status: Permitted</p> <p>Where:</p> <ol style="list-style-type: none"> a. Compliance is achieved with INF-S1544.
All Zones	2. Activity status: Discretionary
Standards	
INF-S1	Health and safety
All Zones	<ol style="list-style-type: none"> 1. The maximum exposure levels must not exceed the levels specified in NZS 2772:1999 'Radiofrequency Fields — Maximum exposure levels — 3kHz to 300 GHz.'; and 2. Infrastructure that emits electric and magnetic fields must comply with the International Commission on Non-ionising Radiation Protection Guidelines for limiting exposure to time-varying electric and magnetic fields (1 Hz — 100 Hz), Health Physics 99(6):818-836; 2010, and the recommendations from the World Health Organisation monograph Environmental Health Criteria (No 238, 2007).
INF-S2	Underground infrastructure
All Zones	<ol style="list-style-type: none"> 1. The utility structures must be located underground and must not be on or within a natural waterbody, except where it is: <ol style="list-style-type: none"> a. Attached to and/or incorporated within an existing bridge structure; b. Within an existing attached conduit or duct; or c. Installed beneath a waterbody (without disturbance of the bed). 2. For the installation or upgrading of pipelines, a gauge pressure of 2000 kilopascals must not be exceeded.
INF-S3	Earthworks
All Zones	<ol style="list-style-type: none"> 1. Earthworks must not create a dust nuisance; 2. As soon as practical, but not later than three months after the completion of earthworks or stages of earthworks, the earthworks area must be stabilised with vegetation or

	<p>sealed, paved, metalled or built over;</p> <ol style="list-style-type: none"> Trenching must be progressively closed and stabilised such that no more than 120m of continuous trench is exposed to erosion at any one time; Land disturbed for the operation, repair, renewal, upgrading or maintenance of utilities must be stabilised by re-vegetation, grassing or other suitable means as soon as practicable after completion of the works to avoid erosion and scouring; and Works must not result in any instability of land or structures at or beyond the boundary of the property where the land disturbance occurs. 	
INF-S4	Upgrading of aboveground infrastructure	
All Zones	<ol style="list-style-type: none"> The realignment, relocation or replacement of a line, pipe (excluding a liquid petroleum or gas transmission pipeline), telecommunication pole, pole, tower, conductor, switch, transformer or ancillary structure must be located within 5m of the existing structure; A pole must not be replaced with a tower; A replacement pole, tower or telecommunication pole must not exceed the height of the replaced pole or tower or telecommunication pole, or the maximum structure height provided for in INF-S8, whichever is higher; The diameter or width of a replacement pole or telecommunications pole: <ol style="list-style-type: none"> Must not exceed twice that of the replaced pole at its widest point; or Where a single pole is replaced with a pi pole, the width of the pi pole structure must not exceed 4.2m; A replacement tower's footprint must not exceed the width of the tower by more than 25%; The upgrade must not include additional towers; A maximum of two additional poles may be provided where it is necessary to achieve the conductor clearances required by NZECP 34:2001; and The realignment, relocation or replacement of any other structure or building: <ol style="list-style-type: none"> Must be within 5m of the alignment or location of the original structure or building; Must not increase the footprint of the structure or building by greater than 30%. 	
INF-S5	New aboveground customer connections	
All Zones	<ol style="list-style-type: none"> The connection must not exceed three additional poles; and The diameter of conductors, lines, pipes or cables must not exceed 30mm<u>43mm</u>. 	
INF-S6	Structures	
All Zones	<ol style="list-style-type: none"> The height of new buildings and structures must not exceed a maximum height of 3.5 metres; or The maximum area of new buildings and structures is: <ol style="list-style-type: none"> 20m² in Residential Zones; or 30m² in all other Zones. 	
INF-S7	Riparian setbacks	
All Zones	<ol style="list-style-type: none"> No infrastructure shall be located on or in land within 10 metres of the bed of any river. This setback does not apply to infrastructure that is located within formed legal road or crosses a river along a bridge. 	
INF-S8	Height of electricity and telecommunication poles and associated antennas, lines and single pole support structures and meteorological masts	
All Zones	<ol style="list-style-type: none"> Telecommunication poles, associated antennas, lines and single pole support structures, must not exceed a maximum height of the permitted height for the relevant zone, plus 5 metres; A further 5 metres in height is afforded where two or more infrastructure providers are co-located on the same structure; Meteorological masts must not exceed a maximum height of the permitted height for the relevant zone, plus 25 metres, except for a Residential Zone where the maximum 	

	<p>height is the zone height; and</p> <p>4. Where a telecommunication pole and associated antennas, lines and single pole support structure and meteorological masts are located on a site that is not road reserve and adjoins a Residential Zone boundary, the relevant building recession plane standard for that boundary must be complied with.</p>	
INF-S9	Antenna size	
All Zones	<p>1. A panel antenna:</p> <ul style="list-style-type: none"> a. must not exceed a width of 0.7m; and b. when in a road reserve, must fit within an envelope of 3.5m in length and 0.7m in width; <p>2. A dish antenna must not exceed a diameter of 1.2m;</p> <p>3. Omni directional 'whip' or dipole antenna must not exceed:</p> <ul style="list-style-type: none"> a. 1.6m in vertical length; b. 60mm in diameter; and c. 1.5m in horizontal length; <p>4. A headframe must not exceed:</p> <ul style="list-style-type: none"> a. 2.5m in diameter in Residential Zones (except when located in a road); or b. 6m in diameter in all other zones. 	
INF-S10	Height of antenna attached to buildings	
All Zones	<p>1. If the antenna is attached to a vertical surface, the top of the antenna must not extend more than 5m above the top of that surface, directly above the point at which the antenna is attached to the building; or</p> <p>2. In all other cases, the top of the antenna must not be more than 5m above the point at which the antenna is attached to the building; and</p> <p>3. If the building is in a Residential Zone, the lowest point at which the antenna is attached to the building must be at least 15m above the ground.</p>	
INF-S11	Amateur radio configurations	
All Zones	<p>1. Supporting structures and poles must comply with the following:</p> <ul style="list-style-type: none"> a. Must not exceed 102mm in diameter; or b. A maximum of one support structure greater than 102mm where the maximum height of the supporting structure must not exceed the relevant zone building height, the horizontal diameter of the pole or supporting structure must not exceed 800mm, the structure must be set back 1.5m from any boundary, and any guy wires used to support the pole must not exceed 10mm in diameter; <p>2. Dish antennas located less than 5m above ground must not exceed a maximum horizontal diameter of 4m and must have a minimum boundary setback of 1m. Dish antennas situated more than 5m above ground have a maximum diameter of 1.2m; and</p> <p>3. The maximum height of antennas mounted on buildings using a supporting structure less than 102mm diameter shall be 18m in the Residential Zones and 18m or the relevant permitted or actual Building Height plus 5m (whichever is greatest) in all other Zones.</p>	
INF-S12	Buildings, structures and activities in the National Grid Yard	
All Zones	<p>1. The building or structure must have a minimum vertical clearance of 10m below the lowest point of a conductor under all transmission line and building operating conditions; or</p> <p>2. Must meet the safe electrical clearance distances required by New Zealand Electrical Code of Practice for Safe Electrical Distances (NZECP 34:2001) ISSN 01140663 under all transmission line and building operating conditions.</p> <p>3. The building or structure must be located at least 12m from the outer visible edge of a foundation of a National Grid transmission line tower or pole, except where it:</p> <ul style="list-style-type: none"> a. Is a fence not exceeding 2.5m in height that is located at least: <ul style="list-style-type: none"> i. 6m from the outer visible edge of a foundation of a National Grid transmission line tower; or 	-

	<p>ii. 5m from the outer visible edge of a foundation of a National Grid transmission line pole.</p> <p>b. Is an artificial crop protection structure or crop support structure not exceeding 2.5m in height and located at least 8m from a National Grid transmission line pole that:</p> <p>i. Is removable or temporary to allow a clear working space of 12m from the pole for maintenance; and</p> <p>ii. Allows all weather access to the pole and a sufficient area for maintenance equipment, including a crane; or</p> <p>iii. Meets the requirements of clause 2.4.1 of New Zealand Electrical Code of Practice for Safe Electrical Distances (NZECP 34:2001) ISSN 01140663.</p>	
<p>INF-S1213</p>	<p>Design of roads</p>	
	<ol style="list-style-type: none"> 1. Roads must provide for traffic in accordance with Table 1 — INF: Design of Roads — One Network Framework; 2. Roads must be designed to achieve design speeds in accordance with Table 1 — INF: Design of Roads — One Network Framework; 3. Roads must have at least the minimum widths in accordance with Table 1 — INF: Design of Roads — One Network Framework: <ol style="list-style-type: none"> a. Minimum total, legal width; and b. Minimum width to provide for: <ol style="list-style-type: none"> i. Pedestrians; ii. Cycling; iii. Micromobility; iv. Stationary vehicles including car parking, bus stops, loading areas as well as build outs for traffic calming or additional infrastructure; v. Vehicles; vi. Infrastructure; and vii. Street trees. 4. The maximum gradient of roads must be in accordance with Table 1 — INF: Design of Roads — One Network Framework; 5. Curves in roads must meet the following minimum values: <ol style="list-style-type: none"> a. K Values for crest vertical curves and sag vertical curves must be in accordance with Table 4 — INF: Road Vertical Curves and Horizontal Curves; and b. R Values for horizontal curves must be in accordance with Table 4 — INF: Road Vertical Curves and Horizontal Curves. 6. Street trees must be provided in accordance with: <ol style="list-style-type: none"> a. Table 1 — INF: Design of Roads — One Network Framework; b. Street trees must not be planted in the Infrastructure Berm; c. When street trees are required in accordance with Table 1 — INF: Design of Roads — One Network Framework, they must be provided in accordance with the number of trees per Size Class at Maturity set out in Table 2 — INF: Street Trees and species in accordance with Table 3 — INF: Street Tree Species List; d. Street tree planting must meet the requirements set out in Table 2 — INF: Street Trees for the following: <ol style="list-style-type: none"> i. Horizontal Setback Distances from Underground Infrastructure; ii. Horizontal Setback Distances from Structures; iii. Minimum Berm Width; iv. Minimum Topsoil Depth; and v. Minimum Soil Volume. 7. Each street tree must be provided with a root barrier to a depth of 600mm below the surface; and 8. Streetlighting must be provided in accordance with the following: <ol style="list-style-type: none"> a. Streetlighting must be designed in accordance with NZ Transport Agency document M30 Specification and Guidelines for Road Lighting Design (2014); b. Streetlighting lamps must be on the NZ Transport 	

	Agency List of M30 Approved Luminaires (2021); c. Streetlighting columns must be in accordance with the NZ Transport Agency M26:2012 and M26A:2017 Specification for Lighting Columns; and d. Streetlighting columns in Local Street, Activity Street, Main Street, Urban Corridor or Rural Road must be a minimum of 8m in height.	
--	---	--

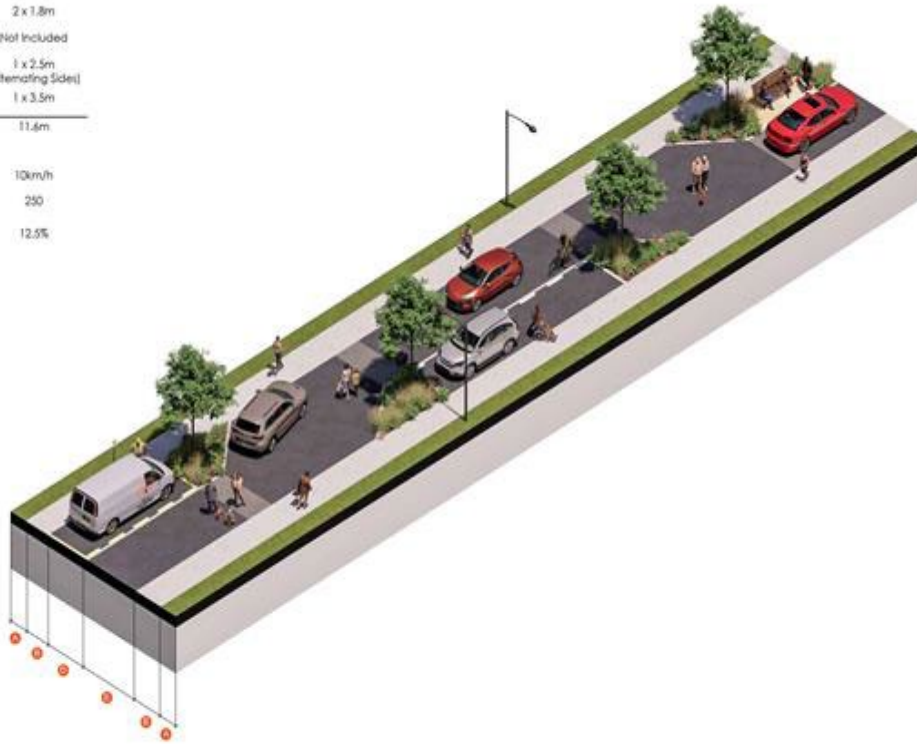
Table 1 — INF: Design of Roads — One Network Framework

One Network Framework Classification	Expected maximum vehicle volume (vehicles per day)	Target speed (km/h)	Maximum gradient	Minimum width (m)						Number of street trees
				Footpath	Cycles	Traffic (must provide unhindered vehicle access including firetruck access)	<ul style="list-style-type: none"> • Stationary vehicles (parking/bus stop/loading) and • Build outs for cycle and micromobility parking, street trees • Passing bays 	Infrastructure berm	Street tree berm	
Urban										

Local Street M5 P3 No Vehicle Access at Frontage	250	40	12.5%	2 x 1.8	0	1 x 3.5	1 x 2.5 (alternating sides of road)	2 x 1.0	0	11.6	As per Table 2 – INF: Street Trees
--	-----	----	-------	---------	---	---------	--	---------	---	------	--

Typical Plan and Cross Section

ELEMENT	MINIMUM WIDTH
Infrastructure Berm	2 x 1.0m
Footpath	2 x 1.8m
Street Tree Berm	Not Included
Stationary Vehicles and Build Out	1 x 2.5m (Alternating Sides)
Shared Movement	1 x 3.5m
Total Width (Legal Width)	11.6m
Target Speed	10km/h
Expected Maximum Vehicles Per Day	250
Maximum Gradient	12.5%



LOCAL STREET M5 P3 - NO VEHICLE ACCESS AT FRONTAGE

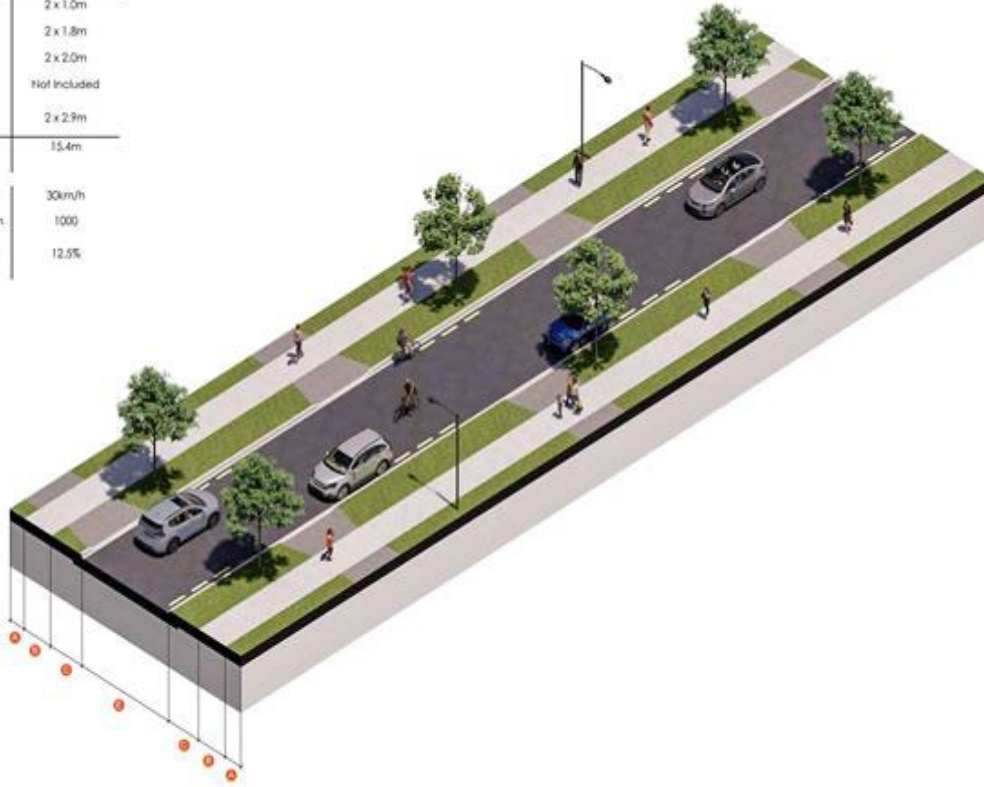
NOTE - WCC TRANSPORT PROVISIONS

11

Local Street M5 P3	1000	30	12.5%	2 x 1.8	0	2 x 2.9	0	2 x 1.0	2 x 2.0	15.4	As per Table 2 – INF: Street Trees
-----------------------	------	----	-------	---------	---	---------	---	---------	---------	------	--

Typical Plan and Cross Section

ELEMENT	MINIMUM WIDTH
Infrastructure Berm	2 x 1.0m
Footpath	2 x 1.8m
Street Tree Berm	2 x 2.0m
Stationary Vehicles and Build Out	Not Included
Traffic	2 x 2.9m
Total Width (Legal Width)	15.4m
Target Speed	30km/h
Expected Maximum Vehicles Per Day	1000
Maximum Gradient	12.5%



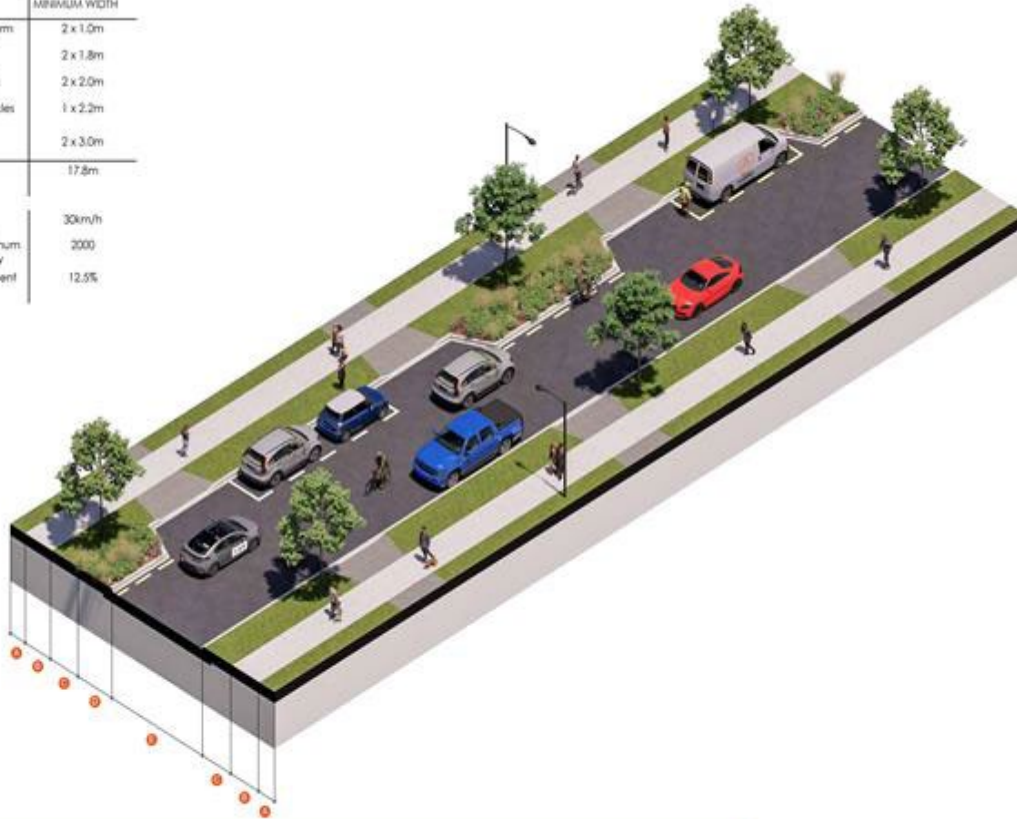
LOCAL STREET M5 P3
NOTE - WCC TRANSPORT PROVISIONS

11

Local Street M5 P4 [e.g. Bickerton Rise, Churton Park]	2000	30	12.5%	2 x 1.8	0	2 x 3.0	1 x 2.2	2 x 1.0	2 x 2.0	17.8	As per Table 2 – INF: Street Trees
--	------	----	-------	---------	---	---------	---------	---------	---------	------	--

Typical Plan and Cross Section

ELEMENT	MINIMUM WIDTH
Infrastructure Berm	2 x 1.0m
Footpath	2 x 1.8m
Street Tree Berm	2 x 2.0m
Stationary Vehicles and Build Out	1 x 2.2m
Traffic	2 x 3.0m
Total Width (Legal Width)	17.8m
Target Speed	30km/h
Expected Maximum Vehicles Per Day	2000
Maximum Gradient	12.5%



LOCAL STREET M5 P4
NOTE - WCC TRANSPORT PROVISIONS

Local Street M4 [e.g. Washington Avenue, Brooklyn]	3000	50	12.5%	2 x 1.8	2 x 1.8 (cycle lane)	2 x 3.0	2 x 2.6	2 x 1.0	2 x 2.0	24.4	As per Table 2 – INF: Street Trees
---	------	----	-------	---------	----------------------	---------	---------	---------	---------	------	------------------------------------

Typical Plan and Cross Section

ELEMENT	MINIMUM WIDTH
Infrastructure Berm	2 x 1.0m
Footpath	2 x 1.8m
Street Tree Berm	2 x 2.0m
Stationary Vehicles and Build Out	2 x 2.6m
Traffic	2 x 3.0m
Cycles	2 x 1.8m
Total Width (Legal Width)	24.4m
Target Speed	50km/h
Expected Maximum Vehicles Per Day	3000
Maximum Gradient	12.5%



LOCAL STREET M4
NOTE - WCC TRANSPORT PROVISIONS

Civic Space [e.g. Cuba Mall, Civic Square]		Discretionary resource consent required
---	--	---

Activity Street [e.g. Ottawa Rd, Ngaio]	8000	30-50	5%	2 x 2.4	2 x 1.8 (cycle lane)	2 x 3.2	2 x 2.6	2 x 1.0	2 x 2.0	26.0	As per Table 2 – INF: Street Trees
--	------	-------	----	---------	-------------------------	---------	---------	---------	---------	------	------------------------------------

Typical Plan and Cross Section

ELEMENT	MINIMUM WIDTH
Infrastructure Berm	2 x 1.0m
Footpath	2 x 2.4m
Street Tree Berm	2 x 2.0m
Stationary Vehicles and Build Out	2 x 2.6m
Traffic	2 x 3.2m
Cycles	2 x 1.8m
Total Width (Legal Width)	26.0m
Target Speed	30-50km/h
Expected Maximum Vehicles Per Day	8000
Maximum Gradient	5%



ACTIVITY STREET
HCRC - WCC TRANSPORT PROVISIONS

11

Main Street [e.g. Johnsonville Rd, Johnsonville]	8000	30	5%	2 x 3.0	2 x 2.0	2 x 3.2	2 x 2.6	2 x 1.0	2 x 2.0	27.6	As per Table 2 – INF: Street Trees
---	------	----	----	---------	---------	---------	---------	---------	---------	------	------------------------------------

Typical Plan and Cross Section

ELEMENT	MINIMUM WIDTH
Infrastructure Berm	2 x 1.0m
Footpath	2 x 3.0m
Street Tree Berm	2 x 2.0m
Stationary Vehicles and Build Out	2 x 2.6m
Traffic	2 x 3.2m
Cycles	2 x 2.0m
Total Width (Legal Width)	27.6m
Target Speed	30km/h
Expected Maximum Vehicles Per Day	8000
Maximum Gradient	5%



MAIN STREET
HCRC - WCC TRANSPORT PROVISIONS

City Hub [e.g. Lambton Quay]	Discretionary resource consent required
---------------------------------	---

Urban Connector [e.g. Burma Rd, Middleton Rd]	8000	50	12.5%	2 x 1.8	2 x 2.0	2 x 3.2	2 x 2.6	2 x 1.0	2 x 2.0	25.2	As per Table 2 – INF: Street Trees
--	------	----	-------	---------	---------	---------	---------	---------	---------	------	------------------------------------

Typical Plan and Cross Section

ELEMENT	MINIMUM WIDTH
Infrastructure Berm	2 x 1.0m
Footpath	2 x 1.8m
Street Tree Berm	2 x 2.0m
Stationary Vehicles and Build Out	2 x 2.6m
Traffic	2 x 3.2m
Cycles	2 x 2.0m
Total Width (Legal Width)	25.2m
Target Speed	50km/h
Expected Maximum Vehicles Per Day	8000
Maximum Gradient	12.5%



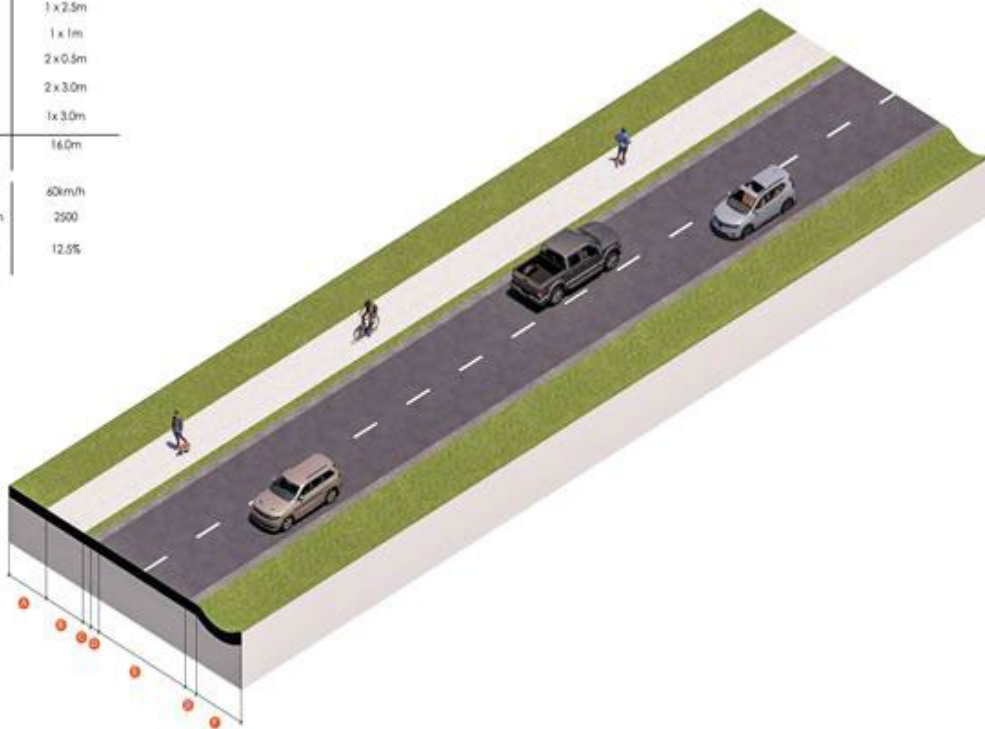
URBAN CONNECTOR
RICE - WCC TRANSPORT PROVISIONS

Transit Corridor [e.g. Hutt Rd, Wellington]		Discretionary resource consent required
Rural		
Rural Stopping Place		Discretionary resource consent required

Rural Road [e.g. Takarau Gorge Rd]	2500	60	12.5%	1 x 2.5 (shared, separated path)	0	2 x 3.0	2 x 0.5 (sealed shoulder)	1 x 2.5 (between property boundary and path) 1 x 1.0 (between path and road shoulder) 1 x 3.0 (side without path)	NA	16.0	NA
---------------------------------------	------	----	-------	-------------------------------------	---	---------	------------------------------	--	----	------	----

Typical Plan and Cross Section

ELEMENT	MINIMUM WIDTH
Infrastructure Berm	1 x 2.5m
Shared Path	1 x 2.5m
Infrastructure Berm	1 x 1m
Sealed Shoulder	2 x 0.5m
Traffic	2 x 3.0m
Infrastructure Berm	1 x 3.0m
Total Width (Legal Width)	16.0m
Target Speed	60km/h
Expected Maximum Vehicles Per Day	2500
Maximum Gradient	12.5%



RURAL ROAD
FIGURE - WCC TRANSPORT PROVISIONS

Peri-urban Road		Discretionary resource consent required
Rural Connector		Discretionary resource consent required
National Highway		Discretionary resource consent required

Table 2 — INF: Street Trees

Size class at maturity (Stem diameter at 1.5m)	Height at maturity	Minimum number of trees per 100m of road	Horizontal setback distances from underground infrastructure (m)		Horizontal setback distances from structures (m)			Minimum berm Width (m)	Minimum topsoil depth (m)	Minimum soil volume (m ³)
			• Manholes, drainage catchments, surface	• Transmission gas pipelines; and	• Hard surfaces (footpaths etc)	• Pavers; • Lightly loaded	• Street lights			

above ground)			<ul style="list-style-type: none"> • openings for underground infrastructure; • Trunk water mains; • Stormwater pipes >300mm diameter; • Sewer pipes >300mm diameter; • Distribution gas pipelines; and • Distribution or customer connection electricity lines 	<ul style="list-style-type: none"> • Transmission electricity lines 	<ul style="list-style-type: none"> • Road kerbs; • Vehicle crossings; and • Masonry walls 	<ul style="list-style-type: none"> • structures (bus shelters, garages etc); and • Heavily loaded structures (houses etc) 					
<300mm Tree species must be selected from the list in Table 3 — INF: Street Tree Species List	3-8	4	0.50	4.0	0.6	0.7	5.0	1.5	0.5	10.0	
300 - 600mm Tree species must be selected from the list in Table 3 — INF: Street Tree Species List	5-10	4	1.5	4.0	1.0	1.5	5.0	2.0	0.6	12.0	

Table 3 — INF: Street Tree Species List

Botanical name	Common name	Size class	Height (m)
<i>Acer campestre</i>	Field Maple	<300mm	8
<i>Alnus Cordata</i>	Italian Alder	<300mm	8
<i>Arbutus unedo</i>	Strawberry Tree	<300mm	8
<i>Banksia integrifolia</i>	Coast Banksia	<300mm	8
<i>Dodonaea viscosa</i>	Ake Ake	<300mm	3
<i>Fraxinus griffithii</i>	Evergreen Ash	<300mm	5
<i>Leptospermum nitidum</i>	Tea Tree	<300mm	5
<i>Liriodendron Tulipifera Fastigiatum</i>	Upright Tulip Tree	<300mm	8
<i>Melia Azedarach</i>	Persian Lilac	300mm	8
<i>Olea europaea</i>	European Olive	<300mm	5
<i>Parrotia persica</i>	Persian Ironwood	<300mm	5
<i>Sophora microphylla</i>	Kowhai	<300mm	8
<i>Sophora tetraptera</i>	Large-leaved Kowhai	<300mm	8
<i>Sorbus aucuparia</i>	Mountain Ash	<300mm	5
<i>Acer negundo</i>	Box Maple	300 - 600mm	10
<i>Cordyline australis</i>	Cabbage Tree	300 - 600mm	8

Eucalyptus ficifolia	Red Flowering Gum	300 - 600mm	8
Fraxinus oxycarpa	Claret Ash	300 - 600mm	10
Ginkgo biloba	Maidenhair Tree	300 - 600mm	10
Ginkgo biloba "Fastigiata"	Upright Maidenhair Tree	300 - 600mm	10
Knightia excelsa	Rewarewa	300 - 600mm	10
Liquidambar styraciflua	American Sweetgum	300 - 600mm	10
Liriodendron Tulipifera	Tulip Tree	300 - 600mm	10
Platanus Acerifolia	London Plane	300 - 600mm	10
Platanus Orientalis	Oriental Plane	300 - 600mm	10
Taxodium Distichum	Swamp Cypress	300 - 600mm	10
Ulmus carpinifolia	Smooth Leaved Lime	300 - 600mm	10
Ulmus Hollandica	Upright Elm	300 - 600mm	10
Zelkova serrata	Zelkova	300 - 600mm	10

Table 4 — INF: Road Vertical Curves and Horizontal Curves

Operating speed (km/h)	Minimum K value for Crest Vertical Curves	Minimum K value for Sag Vertical Curves	Minimum R value for Horizontal Curves
≤20	15	3	20
21-30	17	3	30
31-40	20	3	40
41-50	33	4	50
51-60	50	6	Specific design
61-70	71	8	Specific design
71-80	100	10	Specific design
INF-S1344	Sight Triangles for Railway Level Crossings		
	Buildings, <u>structures</u> , <u>plantings</u> or other visual obstructions must not be located within the restart sightline areas of railway level crossings as shown in the shaded areas of Figure 1 — INF: Restart Sightlines <u>and Figure 2 – INF: Approach Sightlines</u> below.	Assessment criteria where the standard is infringed: 1. Effects on the safety and efficiency of rail and road transport.	

Figure 1 — INF: Restart Sightlines

Figure 1 – INF: Restart Sightlines

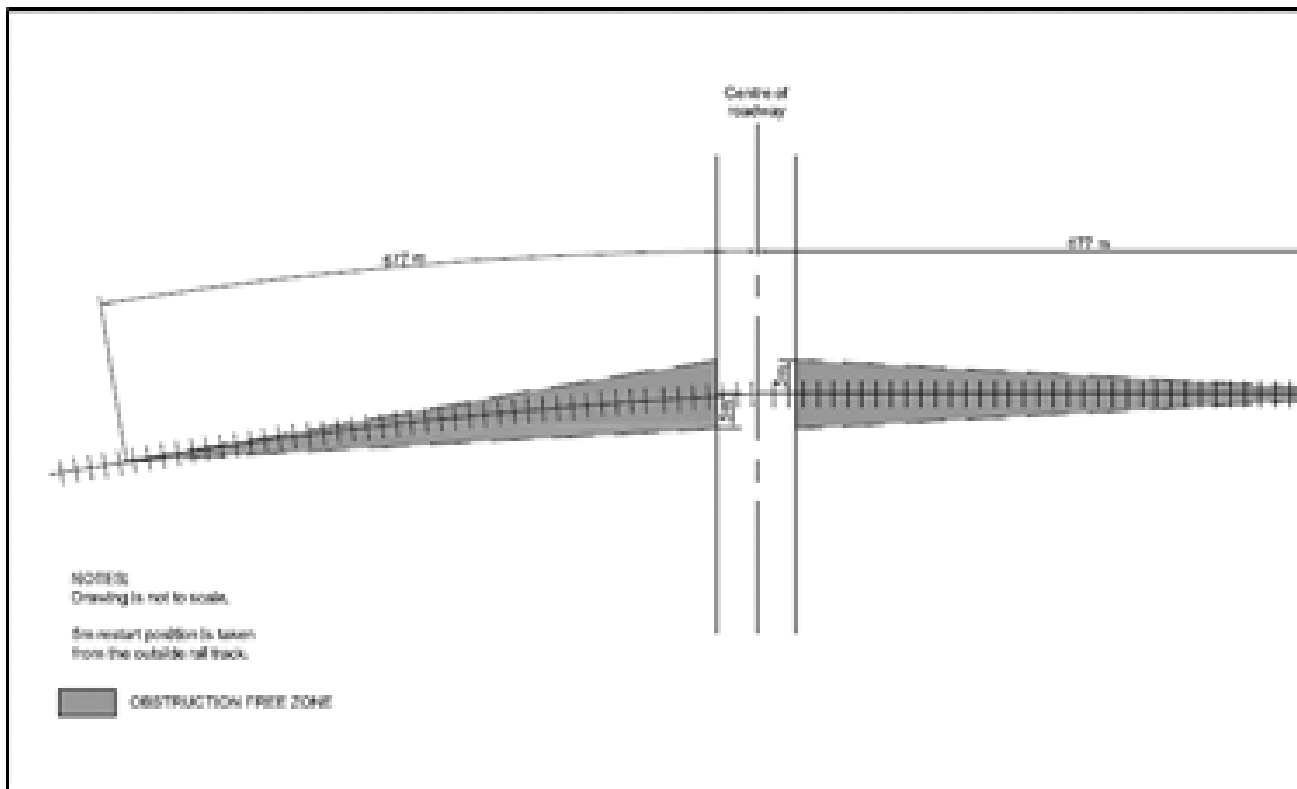
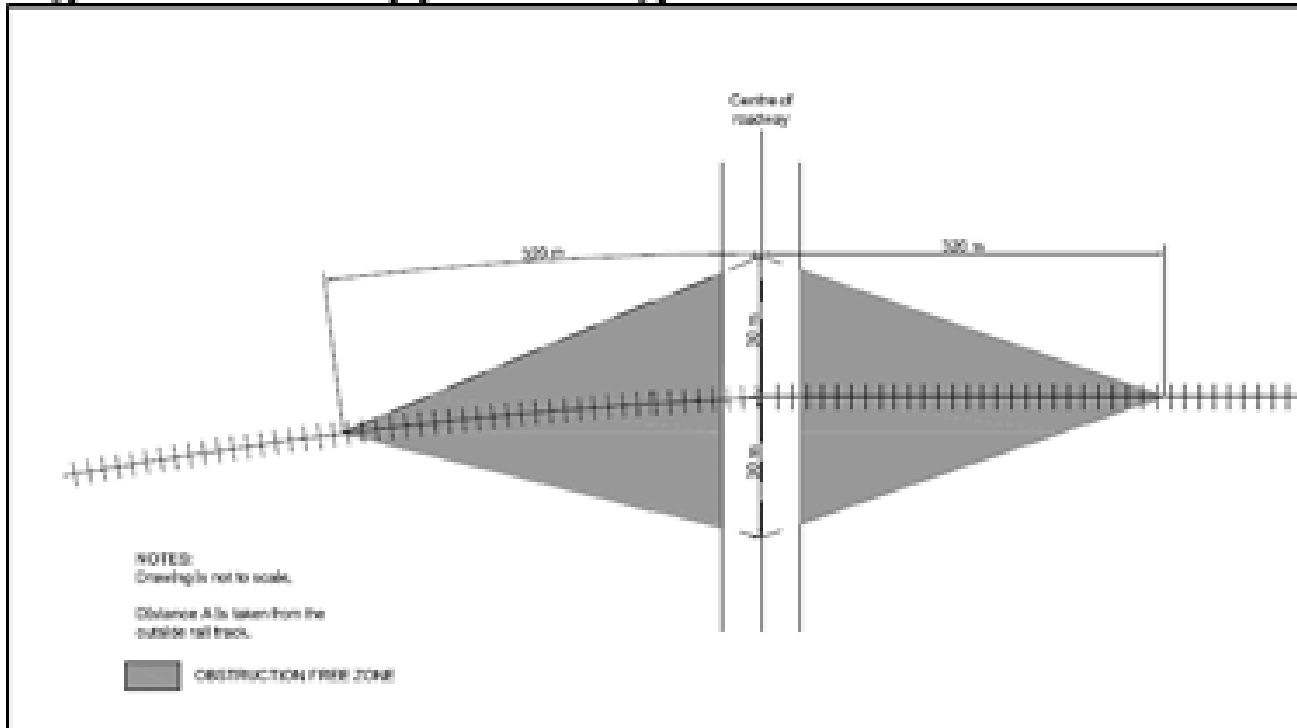


Figure 2 – INF: Approach Sightlines



INF-S1415	Connection to roads - sites with pedestrian, cycling and micromobility site access only	
	1. For sites with frontage to a road:	

	<p>a. The direct legal road frontage must have a width of at least 1.8m.</p> <p>2. For sites with no frontage to a road:</p> <p>a. Access must be provided to a road via an access easement with a width of at least 1.8m.</p>	
INF-S16	Connection to roads – driveways	
-	<p>1. The number of vehicle crossings per site must not exceed one;</p> <p>2. The minimum design vehicle for a vehicle crossing is a 5.20m x 1.94m vehicle (99th percentile vehicle);</p> <p>3. For Urban Roads, the length of a vehicle crossing parallel to the road must be no more than:</p> <p>a. 3m for Driveways Level 1; or</p> <p>b. 6m for Driveways Level 2 and 3.</p> <p>4. For Rural Roads:</p> <p>a. The vehicle crossing must be sealed between the road carriageway and the property boundary; and</p> <p>b. The entry and exit turn radius of the vehicle crossing must each be at least 9.0m;</p> <p>5. Where the vehicle crossing incorporates a pedestrian, cycling or micromobility path, the crossfall of the path must meet not exceed 2.5%;</p> <p>6. The vehicle crossing for a site with frontage to two or more roads must connect to the road with the lower number of vehicle movements per day;</p> <p>Vehicle crossings must not be located within 10m of an intersection tangent point as shown as the heavy line between Points A and B in Figure 2 — INF: Vehicle Crossings in Relation to Intersections. In addition, vehicle crossings for Driveways Level 2 and 3 must not be located at the top of a T-intersection as shown as the heavy line between Points C and D in Figure 2 — INF: Vehicle Crossings in Relation to Intersections;</p> <p>7. The distance from vehicle crossings to railway crossings must be at least 30m, measured from the nearest edge of the vehicle crossing to the nearest railway track;</p> <p>8. Connections to the road reserve must provide clear visibility splays for pedestrian safety from 1.0m above ground level as shown in Figure 3 — INF: Driveway Visibility Splays and Sight Distances. Driveways Levels 2 and 3 must provide the visibility splay on the left hand exit side only. For Driveways Level 1 where the driveway is within 2.0m of the adjoining property boundary, the visibility splay is not required if a 75mm high speed hump is installed 1.0m from the road boundary;</p> <p>9. Sight distances from vehicle crossings as shown in Figure 3 — INF: Driveway Visibility Splays and Sight Distances; and</p> <p>10. Must comply with Table 5 — INF: Minimum Sight Distances at Vehicle Crossings.</p> <p>Note: Limited Access Roads may have additional or different requirements under the Government Roading Powers Act 1989.</p>	-

Figure 2 — INF: Vehicle Crossings in Relation to Intersections

Figure 3 — INF: Driveway Visibility Splays and Sight Distances

Table 5 — INF: Minimum Sight Distances at Vehicle Crossings

Frontage speed limit (km/h)	Driveway level 1 Minimum sight distance (m) (see Figure 3 — INF: Driveway Visibility Splays and Sight Distances)	Driveways levels 2 & 3 Minimum sight distance (m) (see Figure 3 — INF: Driveway Visibility Splays and Sight Distances)
30	25	25
40	30	35
50	40	45

60	55	65
70	70	85
80	96	105
INF—S17	Intersections	
-	<ol style="list-style-type: none"> 1. Intersections must be designed to ensure safe connectivity of roads for all road users and must take into account the expected traffic flows once development is complete; 2. Intersections must be formed at 90°; and 3. Minimum sight distances at intersections as shown in Figure 4 — INF: Sight Distances at Intersections must comply with Table 6 — INF: Minimum Sight Distances at New Intersections. 	-

Figure 4 — INF: Sight Distances at Intersections

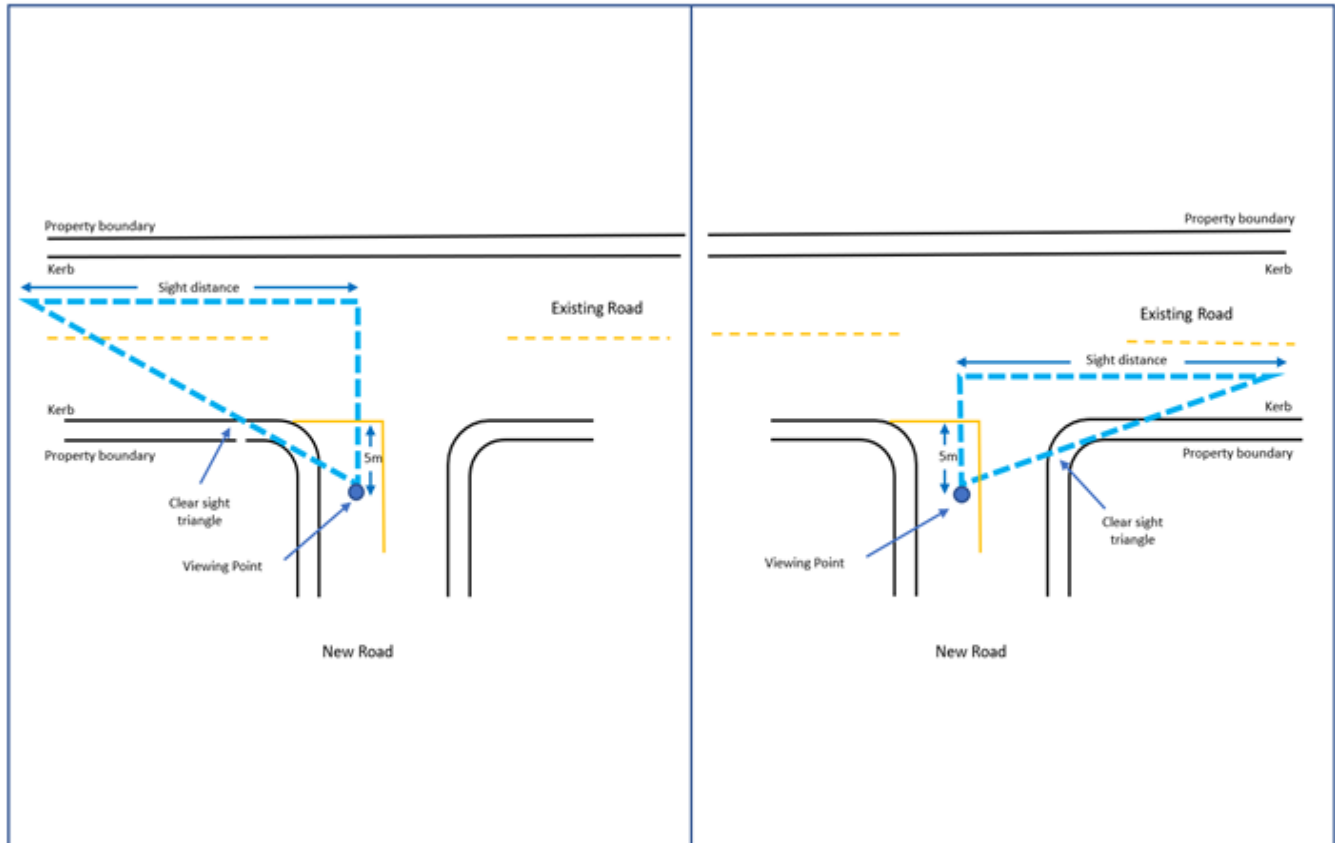


Table 6 — INF: Minimum Sight Distances at New Intersections

Operating speed (km/h) of Existing Road	Minimum sight distance (m) (see Figure 4 — INF: Sight Distances at Intersections)
<30	50
≤31-40	75
41-50	100
51-60	125
61-70	150
71-80	180
INF-S16+8	Cabinets, electric vehicle charging stations, temporary infrastructure and temporary electricity generators and self-contained power units to supply existing infrastructure, bus shelters and any other infrastructure structure or infrastructure building not otherwise provided for that are located within the road reserve or rail corridor

	<p>1. The structure must not exceed:</p> <ul style="list-style-type: none"> a. Maximum height above ground level of 2.5m; and b. Maximum footprint of 6m². 	<p>Assessment criteria where the standard is infringed:</p> <ul style="list-style-type: none"> 1. Local, regional and national benefits of the infrastructure or community facilities; 2. Any adverse effects on the streetscape and the amenity values of the area; 3. The amenity of adjoining sites; 4. Traffic and pedestrian safety including sightlines and visibility of traffic signage; 5. Design and siting of the infrastructure or community facilities; 6. Any operational or functional needs of the infrastructure or community facilities; and 7. Any topographical and other site constraints that make compliance with the permitted standard impracticable.
--	---	---