# appendix 14 residential subdivision design & information requirements

# AP14 introduction

AP14.i Appendix 14 sets out the information requirements that must accompany restricted discretionary subdivision activities under Rule REr.107. It also lists a number of indicators that can be used to assess how a design responds to the district wide Urban Design Objectives and Polices contained in Chapter 5 DO13A and the appropriate Zone Objectives and Policies in the NRMP.

AP14.ii It is intended that Appendix 14 will apply, and can be adapted to, a range of development types and scenarios including small scale infill, comprehensive housing and large scale greenfield subdivision.

# AP14.1 general

AP14.1.i Appendix 14 and the restricted discretionary activity subdivision provisions under Rule REr.107 are provided because the Council recognises that in pursuing better urban design it is difficult to achieve such a goal by imposing prescriptive rules and minimum standards. This will be particularly relevant for hillside greenfield subdivision and intensification within the existing residential area.

In recognition of this barrier, the restricted discretionary category provides an avenue for those designs that may not comply in full with the minimum standards set out in the NCC Land Development Manual 2010. Such developments may in fact still represent quality urban design for the particular site and therefore warrant a restricted discretionary activity status and non-notified consent process.

- AP14.1.ii In order for the Council to provide the level of certainty associated and expected of a restricted discretionary activity, high quality information must be provided with applications. Applications need to illustrate clearly why particular design approaches are proposed, and how the whole design contributes towards the goal of better urban design within the context of the sites local environment.
- AP14.1.iii Chapter 5 DO13A Objectives and Policies set the framework for the type of subdivision and development that is sought and the type of design process to be pursued. Appendix 14 does not describe in detail what quality urban design is considered to be for Nelson. Quality design outcomes rely on the subdivision designer and/or design team possessing a good knowledge of urban design approaches and techniques. In other words, this section does not tell applicants what to do, but rather what to show to demonstrate how the design meets the desired outcomes sought for residential neighbourhoods and the community as a whole. This process recognises that there may be many different solutions that are acceptable beyond what can be simply prescribed for with minimum standards.
- AP14.1.iv It is expected that the Appendix 14 requirements will result in better quality urban design outcomes, better informed decision making, and more certainty for everyone. They should:
- a) make applicants think carefully about the quality of the resource consent application (this should improve the general quality of applications).
- b) give applicants the opportunity to explain and justify their proposal to Council officers, decision makers and the people they consult with.
- c) ensure that the urban design objectives and policies in the Plan are considered at the outset of the design process to guide the development of site responsive solutions.
- d) help with pre-application consultation and the understanding and negotiation of changes to designs, as they can set out ideas for discussion.
- e) provide consistent application standards for restricted discretionary subdivision activities that will enable consistent and efficient consent processing.
- f) control the way subdivision and development is constructed, and the way public spaces are used and managed.

# **AP14.2** information requirements

AP14.2.i For an application to be considered in compliance with Appendix 14 the following information is required:

### a) site and context analysis:

- Context analysis
  - Conditions in the surrounding neighbourhood and landscape, beyond the legal boundaries of the site.
- Site analysis
  - Conditions within the legal boundaries of the site and at the boundary.
  - Identification of opportunities and constraints.

### b) design description:

- Subdivision and development plan
  - Description of the intentions for the site, including street and open space networks, and lot boundaries.
- Design statement
  - Rationale for the design decisions
  - How this relates to the policies, objectives and assessment criteria
- Preliminary infrastructure plans
  - May be required for works not included in the design and construction requirements of the Land Development Manual 2010. Refer to section 2.3.1 of the NCC Land Development Manual 2010.
- AP14.2.ii This information must be provided at the time of application for subdivision or land use consent. All resource consents (subdivision, earthworks, discharge etc) required to give effect to the development must be sought at the same time. The amount of detail required is relative to the nature and scale of the proposed development.
- AP14.2.iii Depending upon the nature and scale of the development proposed, the application may need to be accompanied by each of the following requirements illustrated on separate plans, before being combined into one overall summary analysis plan. For small scale developments it may be possible to illustrate all relevant information requirements on the one plan. However, because the 'context analysis' plan may extend considerably beyond the boundaries of the site, it will usually be at a different scale from the 'site analysis', and 'subdivision and development' plans.
- AP14.2.iv Applicants are encouraged to engage in a process of pre-application consultation with the Major Projects Team or delegated Officers. The Major Projects Team is a group of Council Officers representing different departments within Council available for pre-application consultation on subdivision and development projects. The aim of pre-application consultation before finalising the required site and context analysis and design description is to ensure that the acceptability of non minimum standard designs are afforded an efficient assessment process, and so that any construction, ownership, maintenance and monitoring issues are considered at the outset.

### AP14.2.1 Context and Site Analysis

AP14.2.1.i In preparing the site and context analysis designers shall have regard to, but not be limited by, the following matters. No two sites are the same, and as a result every site and context analysis will differ.

# context analysis

reference objectives DO13A.1: Recognising the local context D05.1.2: Linkages and Corridors

AP14.2.1.ii A thorough appreciation of the overall site context is the starting point for quality urban design. Context is the character and setting of the area within which a subdivision and development will need to fit. It includes natural as well as human/built features and history, the people living within and nearby, and the routes that pass through or connect to the site. The context analysis is a means of assessing the value of existing development patterns in the area and determining the appropriate degree to which they should be incorporated into subdivision design.

AP14.2.1.iii This means consideration of the conditions in the surrounding neighbourhood and landscape beyond the legal boundaries of the site. Context analysis should typically extend a distance of up to 1km from all boundaries of the site. The scope of context analysis required depends on development size and local conditions, and it may be reduced depending on these variables.

The context analysis plan(s) must show:

- a) the surrounding road, cycle and pedestrian networks. This includes all possible vehicle access points and any indicative future roading, cycle and pedestrian connections adjoining the site, including that of consented but undeveloped subdivisions on adjoining sites.
- b) the surrounding infrastructure network (water, wastewater, stormwater) and capacity information.
- c) adjoining activities/land uses.
- d) location and footprint of significant existing neighbouring buildings.
- e) location of all local commercial, services and recreational facilities up to 1km of the site.
- f) existing biodiversity corridors in the area and identification of the areas they connect to.
- g) rivers, streams, ephemeral water courses, overland flow paths and stormwater catchments beyond and through the site.
- h) existing major landscape features including view shafts and points, ridgelines, vegetation, and cultural features.
- i) the location of any site of significant indigenous vegetation or significant habitats for indigenous fauna.

# site analysis

reference objectives DO13A.1: Recognising the local context

DO5.1.2 Linkages and Corridors

AP14.2.1.iv The site analysis plan(s) describes and analyses the conditions within the legal boundaries of the site. Overall, this analysis will bring together the character and features of the site and its setting, and identify opportunities and constraints for the subdivision or development.

AP14.2.1.v The site analysis plan(s) will include:

- a) contours including identification of prominent ridgelines and valleys.
- b) soils/geotechnical constraints/contamination, fault hazard lines.
- c) rivers, streams, ephemeral water courses, overland flow paths and stormwater catchments.
- d) existing vegetation and biodiversity corridors.
- e) identification of:
  - i) landscape assets to preserve (significant features).
  - ii) landscape features to re use or enhance (less significant features which can be used to achieve multiple goals as part of a subdivision such as restoration of ephemeral gullies and wetlands which can incorporate low impact stormwater approaches and adjoining walkway/cycleway networks).
- f) existing services: wastewater, water, and stormwater networks including capacity information, and transmission lines.
- g) any overlays as shown in the NRMP Planning Maps (Landscape, Hazard, Land Management, Riparian, Heritage Trees etc). These are available digitally from Council.
- h) existing buildings and structures.
- i) natural, cultural or archaeological features identified from consultation with NZ Historic Places Trust, Archaeological File Keeper at Department of Conservation or local iwi.
- j) summary of opportunities and constraints areas identified as suitable for development, areas requiring preservation and enhancement, and areas suitable for incorporation in movement networks, low impact stormwater servicing, and open space networks. Depending upon the scale of the development, the summary of opportunities and constraints may need to be provided on a separate overlay.

AP14.2.1.vi Based on the above information, a summary of the opportunities and constraints present should be prepared. This should identify areas suitable for development, areas requiring preservation and enhancement, and areas suitable for incorporation in movement networks, low impact stormwater servicing, and open space networks. Depending upon the scale of the development, the summary of opportunities and constraints may need to be provided on a separate overlay.

### AP14.2.2 Design Description: Subdivision and Development Plan

AP14.2.2.i The subdivision and development plan must describe the following elements:

### movement network

reference objectives

D013A.2 Improving connections
D013A.6 Sustainable places and communities
D010.1 Land transport system
D014.1 City layout and design
D014.3 Services

### AP14.2.2.ii The movement network includes:

- a) existing and proposed pedestrian and cycle links and their network connections.
- b) future roads and connections to adjoining land with development potential.
- c) the street types (functions and volumes) that are proposed.
- d) the location of car parking spaces.
- e) in addition:
  - i) traffic assessment of speed environment designs will be required to accompany the application.
  - ii) preliminary infrastructure design for areas departing from the minimum standard in the NCC Land Development Manual 2010. Cross sections may be necessary to illustrate site specific design responses.
  - iii) large scale and greenfield subdivision must show public transport connections and future route extensions, including provision for bus stops. Applicants should consult with Council's Transport Officers to ascertain requirements.
  - iv) a 'ped-shed' walkability analysis may also be necessary for large scale subdivisions with mixed densities and zoning.

### open space network

reference objectives

DO13A.1 Recognising the local context
DO13A.2 Improving connections
DO5.1.2 Linkages and Corridors
RE3 Streetscape, landscape and natural features

### AP14.2.2.iii The open space network includes:

- a) the location and type of open space including local parks and reserves, wetlands and riparian areas, greenways, biodiversity corridors, stormwater ponds or other devices intended to be located in reserves.
- b) connections between proposed open space networks and reserves within the development with those in the adjoining area.

# streetscape and open space design

reference objectives DO13A.3 Creating quality public spaces

DO13A.5 Inspiring places

RE3 Streetscape, landscape and natural features

AP14.2.2.iv The streetscape and open space design includes:

- a) the design of carriageways, berms, footpaths, car parking areas and low impact stormwater and access designs and locations for the different types and functions of streets. This may require the provision of cross sections.
- b) street and open space lighting types, sizes and locations.
- c) proposed signage locations.
- d) design description for proposed reserves.
- e) planting densities and types for areas of revegetation, riparian areas, reserves and streets.

# stormwater management

reference objectives DO13A.6 Sustainable places and communities

DO14.3 Services

DO19.1 Highest practicable water quality

AP14.2.2.v Stormwater management includes:

- a) the proposed stormwater reticulation system and how it integrates downstream and upstream of the development site.
- b) specific design details of any low impact devices, including preliminary engineering design.
- c) the extent of land use in a Q15 event where devices are located in reserves.

### allotment layout

reference objectives DO13A.4 Providing for diversity
DO13A.6 Sustainable places for communities
RE2 Residential character

DO14 Subdivision and development

DO10.1 Land transport system

AP14.2.2.vi Allotment layout includes:

- show all lot sizes and dimensions including the location of comprehensive housing sites and their dimensions.
- b) lots within the Landscape Overlay must show proposed building sites.
- c) illustrate how the lot layout will enable positive relationships between private development and public spaces, including the ability to maintain passives surveillance of streets and reserves and related principles of Crime Prevention through Environmental Design (CPTED).

# reticulated services

reference objectives DO13A.7 Urban design process DO14.3 Services

AP14.2.2.vii The preliminary infrastructure plan(s) must show existing and proposed reticulated wastewater, water and stormwater networks to service the development, as well as existing and proposed power and telecommunications networks. Proposed easements will also need to be shown.

### AP14.2.3 design statement

AP14.2.3.i A design statement shall be included with all applications made under the REr.107 restricted discretionary subdivision activity and as a requirement of Appendix 14. The length and level of detail of the design statement needs to be relative to the nature and scale of the subdivision and development being proposed.

AP14.2.3.ii Applications under Appendix 14 need to be able to demonstrate how they have taken into account the need for quality urban design and the outcomes sought by the relevant objectives and policies referenced in the subdivision and development proposal. Applicants should refer to the parameters of good subdivision design identified in this appendix, which indicate means of response to the objectives and policies. The provision of design statements with applications under Appendix 14 will help to ensure urban design is considered at the early design stages of a project and assist with explanation of the approach taken.

### content requirements

AP14.2.3.iii Design statements should:

- explain the design principles and concepts that have informed the subdivision or development design, and
- explain how the relevant urban design and sustainability objectives have been achieved.

AP14.2.3.iv Statements should explain the design direction and justify the design thinking behind the subdivision and development plan. Sometimes photos, maps and drawings may be needed to illustrate the points made, and notes on drawings may be useful to help explain design intentions and rationale. It is important that statements are written specifically for the application they accompany. They need not be very long, and the amount of detail they contain should reflect the complexity of the application.

# **AP14.3** Indicators of Quality Design

- AP14.3.i The following section of the Appendix provides information that will assist applicants and the Council in consideration of subdivision and development applications under REr.107.
- AP14.3.ii A thorough context and site analysis will identify opportunities and constraints of the site and the context, and assist preparation of a well-designed subdivision. A thorough illustration or 'story' of the design process and considerations will assist the understanding of the design by others, particularly in regard to any non-compliance with controlled activity minimum standards.
- AP14.3.iii The information and requirements discussed under AP14.3 are not to be treated as a checklist for design with every 'box requiring ticking'. In fact, in some situations some indicators of quality design may contradict others, and others will not be relevant. Any design should be assessed holistically against the body of ideas or urban design goals, and the design should respond accordingly. Where a concept contradicts the individual indicators of quality design then the applicant should outline the reasons for doing so and demonstrate how the Plan's urban design objectives are satisfied by alternative means.
- AP14.3.iv The extent to which the following indicators of quality subdivision design apply will vary from site to site. These indicators help to explain the assessment criteria accompanying the rule REr.107 of the Plan, and are related to the urban design objectives and policies.

### AP14.3.1 movement network

AP14.3.i Section 4 of the NCC Land Development Manual 2010 provides advice on the road standards relative to function and speed environments, use of and standards for cul de sacs, residential lanes and rights of way. Council's Transport Officers can provide advice regarding existing traffic movements, intended connections and any upgrading plans or requirements.

### AP14.3.ii Quality subdivision will:

- 1. Connect to its wider context both physically and visually.
  - a. Provide connections and convenient access to services and facilities in the surrounding neighbourhood.
  - b. Connect to existing roading networks at several points to provide convenient access and choice of routes.
  - c. Anticipate and provide for connections to existing and possible future development on adjoining sites.
- 2. Provide an interconnected network of streets that provides convenient access for all road users including pedestrians and cyclists.
  - a. Provide multiple choice of routes to any destination.
  - b. Where the topography requires long cul-de-sacs and precludes street interconnection, provide for regular interconnection with safe, attractive walkways.
- 3. Create a street structure which is clear and legible.
- 4. Minimise earthworks on steep sites with roads that follow original land contours

# AP14.3.2 open space network

AP14.3.2.i The NCC Land Development Manual 2010 contains a chapter on reserves and landscaping which details the different types of Council owned reserves and their design requirements. Council staff can provide advice in respect of the need or not of particular reserves in particular locations, and should be consulted prior to proposing the selection of any site for an intended public reserve. Where significant landscapes and ecological and natural features exist on site they should be assessed for their suitability for incorporation into the subdivision design. Subdivision design has the potential to incrementally enhance biodiversity corridors in Nelson and is an important component of quality urban design and the suitability of wildlife.

### AP14.3.2.ii Quality subdivision will:

- 1. Identify and maintain any recognised view connections across the site.
- 2. Celebrate views from streets and other public spaces to landmarks and other important features that are beyond the site boundaries.
- 3. Extend broader neighbourhood patterns of open space with landscape features that strengthen the identity and structure of the landscape such as street trees, landscape links with adjoining neighbourhoods, and open space and reserve networks.
  - a. Enhance and incrementally extend existing biodiversity corridors.
  - b. Retain native vegetation, mature trees and significant ecological features and use these as features within public open space.
- 4. Locate local parks where they:
  - a. Are of most benefit to the local community.
  - b. Will be overlooked from the street and dwelling frontages to ensure informal surveillance.
  - c. Are not more than 400 metres walking distance from most dwellings.

# AP14.3.3 landscape

### AP14.3.3.i Quality subdivision will:

- 1. Maintain important landscape patterns
  - a. Preserve significant landscape and landform features.
  - b. Restore and extend riparian restoration treatments and biodiversity corridors
- 2. Use landscape features to enhance the amenity, character and recreational potential of the development.
- 3. Retain areas of native vegetation, mature trees or significant ecological features, and locate these in public areas where possible.
- 4. Provide both visual and physical access to the main landscape elements and features.

# AP14.3.4 streetscape and open space design

AP14.3.4.i Streetscape applies to more than just the legal road, it stretches from one building on one side of the road to the front of the building on the opposite side.

### AP14.3.4.ii Quality subdivision will:

- 1. Consider the visual amenity, safety and comfort of the users of public space.
  - a. Include safe and comfortable facilities for pedestrians and access for cyclists.
  - b. Ensure there are good sightlines along any connecting lanes or walkways.
  - c. Include street landscaping that creates a high level of visual amenity while maintaining openness at eye level.
- 2. Achieve visual coherence in design, with individual spaces and elements relating to a wider neighbourhood framework and patterns and, where appropriate, developing local identity.
- 3. Integrate local parks that provide a flat, grassed area open area suitable for informal kick-about and trees.
- 4. Include streets that gain identity and amenity from intensive street tree planting.
- 5. Integrate multiple functions including recreation, access, biodiversity and stormwater control into streets and other open spaces.

### AP14.3.5 stormwater management

AP14.3.5.i Stormwater management and low impact design should be considered early in the site planning process as these will usually influence the design of the subdivision and roads. The NCC Land Development Manual 2010 provides design objectives and standards for reticulated and low impact stormwater management in the stormwater section, and the reserves section provides guidance on when a stormwater device is acceptable within a public reserve, and the level of reserves contribution offset provided. Given Nelson's hilly topography and soils it will be difficult for a design to rely solely on low impact approaches and these will likely need to be combined with a reticulated system.

# AP14.3.5.ii Quality subdivision will:

- 1. Maintain streams and watercourses and enhance their natural character by minimising any changes to the hydrological factors by affecting flows.
- 2. Utilise low-impact stormwater management devices wherever possible for flood mitigation, maintenance of base flows in natural watercourses, irrigation and to create visual amenity.

- 3. Provide stormwater capacity to allow for upstream flows from land with development potential as well as the ability for the downstream network to accommodate off site flows.
- 4. Locate low impact stormwater management devices within public roads and reserves.

## AP14.3.6 allotment layout

AP14.3.6.i Lots are encouraged to be laid out in such a manner that future dwellings will be orientated to the adjoining public space, be it road or reserve.

# AP14.3.6.ii Quality subdivision will:

- 1. Provide for local facilities and services at, or accessible from, the centre of the development.
- 2. Provide a range of lot sizes and types which will allow for diversity of living options.
- 3. Cluster smaller lots to:
  - a. maximise proximity to facilities.
  - b. avoid subdivision over outstanding natural features and to provide high quality public open spaces and reserves.
- 4. Ensure lots are shaped and dimensioned to allow a sunny outdoor living space and provide a useable private back yard.
- 5. Locate lots so that they overlook and front road and open spaces and back onto other lots.
- 6. Intensify development on sunny, north sloping lots, and reduce intensity on south facing lots.
- 7. Complement and not compromise both existing and likely future uses on adjacent sites.

# AP14.3.7 reticulated services

AP14.3.7.i The NCC Land Development Manual 2010 provides minimum standards and information requirements necessary to accompany an application, including requirements for street lighting.

## AP14.3.7.ii Quality subdivision will:

- 1. Take an integrated multi-disciplinary approach to the provision and siting of services to achieve servicing efficiency at the same time as maximising amenity benefits.
- 2. Locate underground services where they are properly accessible for servicing and also allow for street tree planting.