Castle Hill Village

Reserves Management Plan

selwyn.govt.nz

Selwyn DISTRICT COUNCIL

Contents

1.0 Introduction

1.1 Overview

The Castle Hill Village Reserves Management Plan (RMP) is a high-level policy document for the active management of reserves within Castle Hill Village. This plan responds to the unique needs of the Castle Hill Community and aims to provide certainty about the function, future management, and development of reserves within the village.

This plan places importance on the preservation of the natural scenic setting that is synonymous with the village. Many factors contribute to the village's distinct character, including the area's history, the original vision for the village, the surrounding rural alpine setting and limestone formations, the views and scenic qualities, the local climate, community input, and the basin's renowned recreational activities. This plan, therefore, gives emphasis to each of these contributing factors and acknowledges the broader context of surrounding public and private land and associated values.

This approach is fundamental to achieving the following adopted vision for the reserves:

> *"The character and amenity of the Village is preserved, valued and enjoyed by residents and visitors for its exceptional natural scenic setting and features, leisure and recreation experience, which are distinctive and unique."*

The first reserves management plan for Castle Hill Village was approved in 2011. Subsequently, the Castle Hill Community Association (CHCA) and Council resolved to undertake a review of the 2011 RMP to address increasing tree management issues and in response to recent expansion of the village, including new reserve areas. To guide this review, Council has worked with the CHCA to engage with the wider village community through a series of preference surveys and opportunities for feedback on key issues. Once adopted, this plan will replace the operative 2011 version.

As part of this review, a series of planting concept plans have been prepared (see section 7.0) to provide greater guidance as to the allocation of proposed planting versus open space within reserve areas, and to demonstrate how the objectives and methods contained within this plan are to be implemented.

1.2 Purpose

The purpose of this management plan is to provide for the management of the Castle Hill Village Reserves in accordance with the Reserves Act 1977 and other relevant legislation. Accordingly, this plan will serve the following dual purposes:

- To provide Council with a framework to guide day to day management and longer-term decision making for the reserves; and,
- To inform the public of the objectives and methods by which the reserve areas within Castle Hill Village will be managed.

The vision, strategic goals, and objectives are consistent with Selwyn's community outcomes and open space management approach and align with Council's strategic planning framework.

1.3 Scope

For management purposes, the Castle Hill Reserve Management Plan covers those reserves situated within the urban boundary of Castle Hill Village. It considers solely the reserves owned or administered by the Selwyn District Council, and not those of the Department of Conservation in the village vicinity.

This plan also includes information on additional open space areas where Council has decision-making authority, but which are not classified reserves, in order to provide a consistent approach to the management of public land throughout the village. These areas are used principally for public access or recreation purposes and/or are managed as part of the general reserves maintenance contract. It is Council's intention that the objectives and methods in this RMP will also guide the use and development of these areas.

1.3.1 Requirement

The Reserves Act 1977 requires a council to prepare a RMP for all lands classified as 'Recreation Reserves' under its management or control. This sets out its intentions for management, use and development of each reserve.

The Reserves Act 1977 (Section 41) states;

> *"The Management Plan shall provide for and ensure the use, enjoyment, maintenance, protection and preservation, as the case may require, and, to the extent that the administering body's resources permit, the development, as appropriate, of the Reserve for the purpose for which it is classified…"*

This RMP therefore outlines the Council's intentions, and sets parameters for, the purposes, usage, maintenance, protection, preservation and development of the Castle Hill Reserves, through a series of objectives and methods set out herein.

1.4 Development of the Plan

The Reserves Act 1977 defines the procedure for preparing RMP's. Once adopted, the RMP can be reviewed at any time to adapt to changing circumstances. The Council will undertake a desktop review of the RMP at 10 yearly intervals, to ensure that the Plan remains current. This review process is provided for within the Reserves Act.

The Reserves Act requires the following process be used in preparing a reserve management plan:

Figure 1: Reserve Management Plan procedure

1.5 Plan structure

This management plan is structured as follows:

Section 1.0	Introduces the document, its purpose and scope, outlines the overall goal and objectives of the plan, sets out the legal context of local authorities in managing reserve land, and assists with interpretation.
Section 2.0	Describes the resource and it use, providing background information of relevance to the management of the Village reserves, including the history/heritage of the Castle Hill basin, and origins of the Village and reserve network.
Section 3.0	Summarises the consultation undertaken to date in reviewing this Plan.
Section 4.0	Defines the values that are important to the Village and reserve network, as well as key challenges and issues of relevance to the reserves.
Section 5.0	Outlines the plan vision and strategic goals.
Section 6.0	Addresses the proposed management approach (objectives) and how this will be implemented (methods).
Section 7.0	Provides key supporting information, including spatial concept plans, to enable the Plans implementation.
Section 8.0	Further supporting information as appendices.

1.6 Legal context

1.6.1 Legal designation

The Castle Hill Village reserves comprise a number of land parcels, subject to the Reserves Act and classified as either 'Recreation Reserve' or 'Local Purpose Reserve'.

Section 17 of the Reserves Act states that **Recreation Reserves are** …

> *"... for the purpose of providing areas for recreation and sporting activities and the physical welfare and enjoyment of the public, and for the protection of the natural environment and beauty of the countryside, with emphasis on the retention of open spaces and on outdoor recreational activities…"*

In addition,

> *"the public shall have freedom of entry and access to the reserve".*

Section 23 of the Reserves Act states that **Local Purpose Reserves are**

> *"... for the purpose of providing and retaining areas for such local purpose or purposes as are specified in any classification of the Reserve".*

The reserves at Castle Hill village are further described in Table 1 below (also see Appendix 7). Layout of the village and reserve locations are shown in Fig. 2 below.

Legal Description	Purpose	Reserve Category	Area (ha)
Lots 1002 - 1003 DP45980 (2 lots)	Recreation Reserve	Neighbourhood Reserve	2.9180
Lot 1004 DP45980	Recreation Reserve	Accessways / Linkages	0.0373
Lot 1005 DP45980	Local Purpose (Utility) Reserve	Accessways / Linkages	0.0823
Lot 501 DP441790	Recreation Reserve	Neighbourhood Reserve	1.6845
Lot 1043 DP383208	Recreation Reserve	Accessways / Linkages	0.0552
Lot 500 DP383620	Recreation Reserve	Accessways / Linkages	0.0584
Lots 1006 – 1025 DP45980 (20 lots)	Local Purpose (Utility) Reserve	Link Strip Reserves	0.0024
Lots 1026 – 1031 & 1040 DP45983 (7 lots)	Local Purpose (Utility) Reserve	Link Strip Reserves	0.0007
Lots 1032 – 1038 DP45981 (7 lots)	Local Purpose (Utility) Reserve	Link Strip Reserves	0.0007
Lots 1046 – 1053 & 1057 DP383208 (9 lots)	Local Purpose (Utility) Reserve	Link Strip Reserves	0.0037
Lots 1060 – 1062 & 1064 – 1069 DP383620 (9 lots)	Local Purpose (Utility) Reserve	Link Strip Reserves	0.0035
Lot 511 DP559213	Recreation Reserve	Neighbourhood Reserve	0.1127
Lot 500 & 510 DP551837 (2 lots)	Local Purpose (Stormwater) Reserves	Stormwater / Drainage	0.7713

Table 1: Castle Hill Reserves Schedule

1.6.2 Reserve classification and description

The Castle Hill Village reserves consist of the following classification:

Recreation Reserves

These comprise the main bulk of the village's reserve land and in Stages 1 – 6 are a distinguishing feature, threading throughout the residential area. In Stage 7, they comprise two connected reserve areas (adjoining a large stormwater reserve).

The recreation reserves serve a variety of functions, incorporating community facilities such as the hall, tennis court and children's playground, providing public open space for informal uses and the recreational trails throughout the Village (as distinct from roadside footpaths), and areas for the trees that provide shelter and landscape character throughout the village. They also provide access to the top of the Thomas River embankment from Trelissick Loop at two locations.

Local Purpose (Utility) Reserve (Southern Margin)

These include an 823m^2 strip, two to three metres wide, separating the 13 sections on the Village southern margin from the Thomas River embankment. It was established for reasons of land stability, to maintain separation of the houses and the embankment top. It is not easily defined on the ground, and in some cases is not able to be differentiated from private lots.

Local Purpose (Utility) Reserves (Link Strips)

These thin strips of reserve, less than one metre in width, are located between the legal road reserves and adjacent private sections (although, generally, they are not visible on the ground). They were established to maintain an alpine village atmosphere by removing vehicle clutter from the streets and fronts of houses, and channelling it to the sides and rear of each lot where gaps exist in the Link Strips, leading to designated rights-of-way.

Local Purpose (Access) Reserves

It is noted that while Lots 1005 and 1043 are classified as 'recreation reserve', they would be better defined as 'accessways', providing non-vehicular access to the Thomas River. Lot 500 within stage 7 is a singular local purpose (access) reserve providing non-vehicular access from the village through to Enys Drive.

Local Purpose (Stormwater Utility) Reserves

Comprises two stormwater reserves within Stage 7. Their primary function is to convey and treat stormwater derived from development, as well as to manage natural ephemeral water courses or springs existing on the site. Alongside their primary function, they will also provide valuable greenspace for pedestrian access and recreation, as well as areas for tree plantings to provide shelter and landscape character throughout the village.

Open Space Areas not formally reserved

On the ground, the boundaries between existing reserves and other land areas of the village are not always obvious. Some localities assumed to be 'reserve' thus do not in fact fall within the definitions of this Management Plan, including in particular the village main entrance area (Castle Hill Drive), road reserves within the village and private undeveloped sections abutting reserves, which can appear to be reserve. It also includes the state highway margins beyond the boundary fence. All of these contribute to the open space character of the village but are not subject to this Management Plan.

Road margins within the village are areas of significant tree, grass and environmental content, often visually continuous with recreation and other reserves, and are often the first-seen parts of the Village. Road margins contribute significantly towards the overall purpose of maintaining a distinctive village character. While this Management Plan cannot provide formally for management of the road reserves, the need for coordination is noted.

1.6.3 Planning context

Castle Hill Village' is defined as the area of urban zoning (L1A and B1A), comprising developed residential sections, roads, reserves and vacant residential and commercial zoned land. This is one of few areas of freehold residential land in the Waimakariri Basin.

The District Plan classifies the rural land south and west of the village as 'Outstanding Landscape' and that to the north and east, including the old Enys site, as 'High Country, Forestry Exclusion' zone. The difference is that the latter can comprise developed pastureland, but not forestry land, while the former may comprise only undeveloped grazing land.

There are no recorded heritage buildings, protected trees or scheduled sites within Castle Hill Village, nor any Statutory Acknowledgement or Wāhi Taonga Management Sites. There are no Archaeological sites registered within the Village on the New Zealand Archaeological Assessment Site Record File.

Figure 2: Reserves of Castle Hill Village.

1.6.4 Administration

The reserves of Castle Hill Village are administered and managed by Council, within the powers conferred by the Reserves Act (for reserves held under the Act). At a practical level the Council administers contracts for reserve maintenance (including maintenance of turf, gardens and trees, as well as built assets such as play equipment and park furniture) and servicing of the public toilets, within the village.

The Selwyn District Council's Annual Plan 2020/21 sets a District wide Targeted Rate of $130.00 per property for recreation reserves. This rate is set for the purpose of providing and maintaining the various recreation reserves and facilities throughout the District. Due to the integration of road verges and reserves particular to Castle Hill, reserves maintenance is primarily funded from the Township Budget, via general rates, which provides for maintenance of reserves, footpaths, playgrounds, trees, landscape & beautification in the village generally.

With a change to District-wide rating for recreation reserves, there is no longer a targeted rate levied specifically on the properties within the village for the upkeep and development of the village reserves.

Input is sought from the CHCA on matters pertaining to new reserve development initiatives and projects to be put forward for inclusion in the Council's Long Term Plan.

1.6.5 History of reserve administration

In 1996 Selwyn District Council delegated some of its functions in the day-to-day management of the Castle Hill Village reserves to the CHCA. From 1996 until 2018 the CHCA maintained a separate subcommittee called the "Reserves Committee" to oversee matters specific to the village reserves, including the management of trees.

This subcommittee was abolished in 2018 and its functions were then carried out by the main CHCA Committee until September 2021 when the CHCA were formally discharged from being recognised as a Committee of Council, removing any direct responsibility associated with the management of the reserve areas within the village. However, the CHCA remains an entity with a strong interest in community matters including the village reserves and are consulted with by Council on reserve development initiatives or strategic planning matters such as the Long Term Plan and any future review of this management plan.

1.6.6 Legislative and policy framework

This RMP will provide the direction for the ongoing day-to-day development and management of the reserves. At the same time activities and the development of Reserve land remain subject to other legislation, Council policy and bylaws.

The key legislation and documents, and their relationship to management outcomes for the Castle Hill Village Reserves, are outlined below and shown in more detail in Figure 3.

Key legislation	Planning documents, strategies and policies
· Reserves Act 1977	· Mahaanui Iwi Management Plan 2013
· Resource Management Act 1991	· Canterbury Regional Policy Statement 2013
· Local Government Act 2002	· Canterbury Land and Water Regional Plan
· Ngāi Tahu Claims Settlement Act 1998	· Canterbury Regional Pest Management Plan 2018 - 2038
· Conservation Act 1987	· Selwyn District Plan
· Heritage New Zealand Pouhere Taonga Act 2014	· Selwyn District Council Open Spaces Strategy 2015.
· Biosecurity Act 1993	
Operational plans and bylaws	
· Parks and Reserves Bylaw 2009	
· Public Places Bylaw 2018	

In addition, this RMP has been developed with consideration to the Selwyn District Long Term Plan (LTP), which sets out Councils priorities, planning and financial programming for the next 10 years.

Action Plans arising from a RMP may feed into LTP Activity Plans if they are significant in value. LTP Activity Plans describe the activity, what it involves, its goals, and actions required to achieve the goals.

The diagram below details the statutory context for the RMP:

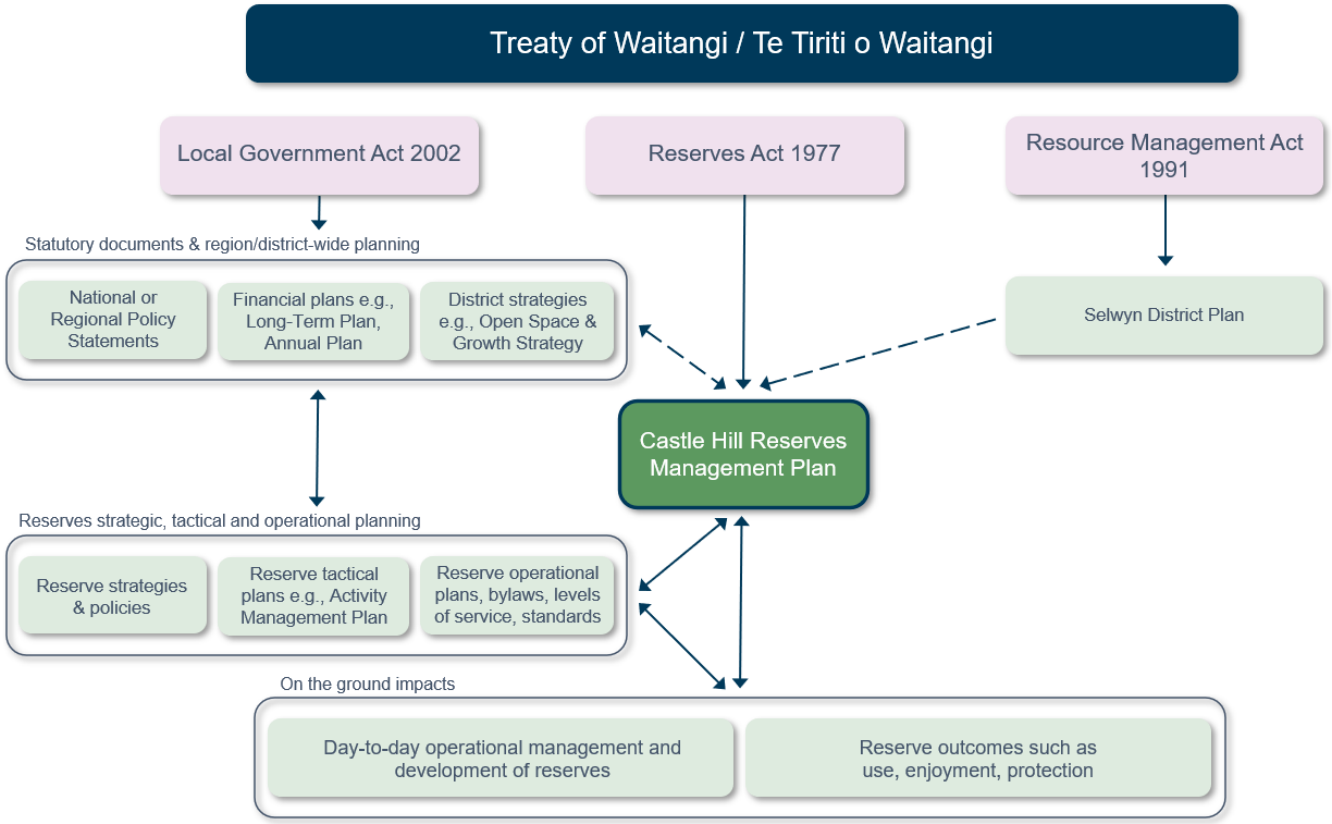


Figure 3: Legislative and Policy Framework

2.0 The reserves, their setting and use

2.1 Location

Castle Hill Village is located in the Upper Waimakariri Basin of Canterbury, 100km west of Christchurch on State Highway 73 and 60km east of Arthurs Pass. The 'village' boundaries lie between Enys Drive in the north, State Highway 73 in the east, the Thomas River embankment in the south, and the Thomas Bush in the west (see Figure 4). Its elevation is 726 metres above sea level, measured at the village climate station.

2.2 Surroundings

To the west, the Castle Hill Basin is bounded by the Craigieburn Range, with summits up to 2,100m, to the south-east by the Torlesse Range (1,950m) and to the north-east by Flock Hill (998m), with Broken Hill (1,500m) behind. The village occupies an area of gently sloping outwash terrace surrounded by the Porter and Thomas Rivers, Hogsback Creek and Cave Stream, all of which flow into Broken River north of the village.

To the south, east and north Castle Hill village is bordered by Castle Hill Station, and to the west by the Thomas Forest, an outlier of the Craigieburn Forest Park (See Figure 4 below). There are four ski fields on the Craigieburn Range, Porter Heights to the south and Broken River, Cheeseman and Craigieburn to the north.

2.3 Natural setting

2.3.1 Geological features, landforms and landscapes

The character of Castle Hill is generally alpine or more strictly, inter-montane, derived from the basin setting, surrounding mountains, forests, grasslands and the Main Divide climate. This is enriched by the area's limestone features, notably the spectacular rocks of the Castle Hill/Te Kura Tawhiti Reserves, the cave and sinkholes around Cave Stream, the limestone strata of Prebble and Gorge Hills, and the jumble of rocks in the aptly named Broken River.

The three landscape areas surrounding Castle Hill village – the Torlesse Range, the Waimakariri Basin and Kura Tawhiti/Castle Hill – are each identified in the Canterbury Regional Landscape Study Review (2010) as Regionally Outstanding Natural Landscapes (Environment Canterbury, 2010). The reasons vary slightly but comprise.

- Waimakariri Basin: (very high) Natural Science, Legibility, Aesthetic, Tangata Whenua and 'Shared and Recognised' values and 'high' Historic values
- Torlesse Range: (high) Aesthetic, Historic and Tangata Whenua values;
- Kura Tawhiti / Castle Hill: (very high) Legibility, Aesthetic, 'Shared and Recognised' and Tangata Whenua values and 'high' Natural Science values.

The entire Upper Waimakariri Basin, within which Castle Hill Village is located, is classified as an 'Outstanding Natural Landscape Area' under the Proposed Selwyn District Plan. Hayward & Boffa's (1972) following description of the Waimakariri Basin is an apt statement of the context surrounding Castle Hill Village:

> *"It is a region of steep mountains, sprawling fans, smooth terraces and wide riverbeds. It is an area of contrasts: of rain forests and impoverished grasslands, of spectacular erosion and green paddocks, of pleasant hillside streams and raging mountain torrents."*

In the Village area specifically, the landforms consist of two main glacial outwash terraces that were later cut by the eroding action of the Thomas River on the south and west of the Village.

In the Village area specifically, the landforms consist of two main glacial outwash terraces that were later cut by the eroding action of the Thomas River on the south and west of the Village.

The soils of the Village consist of early Tertiary sediments including siltstone, sandstone, conglomerate, and high country yellow brown earths, overlain in places by deposits of glacial outwash. The two soil types covering the area of the Village are the "Cass" and "Craigieburn" types (Hayward and Boffa, 1972). These soils would have originally covered the Village at depths of between 300 mm – 600 mm over gravels, and were friable, porous, low in clay and sandy in texture. These characteristics have been modified by construction of the Village since the early 1980s but continue to comprise the basic ground surface of the village reserves.

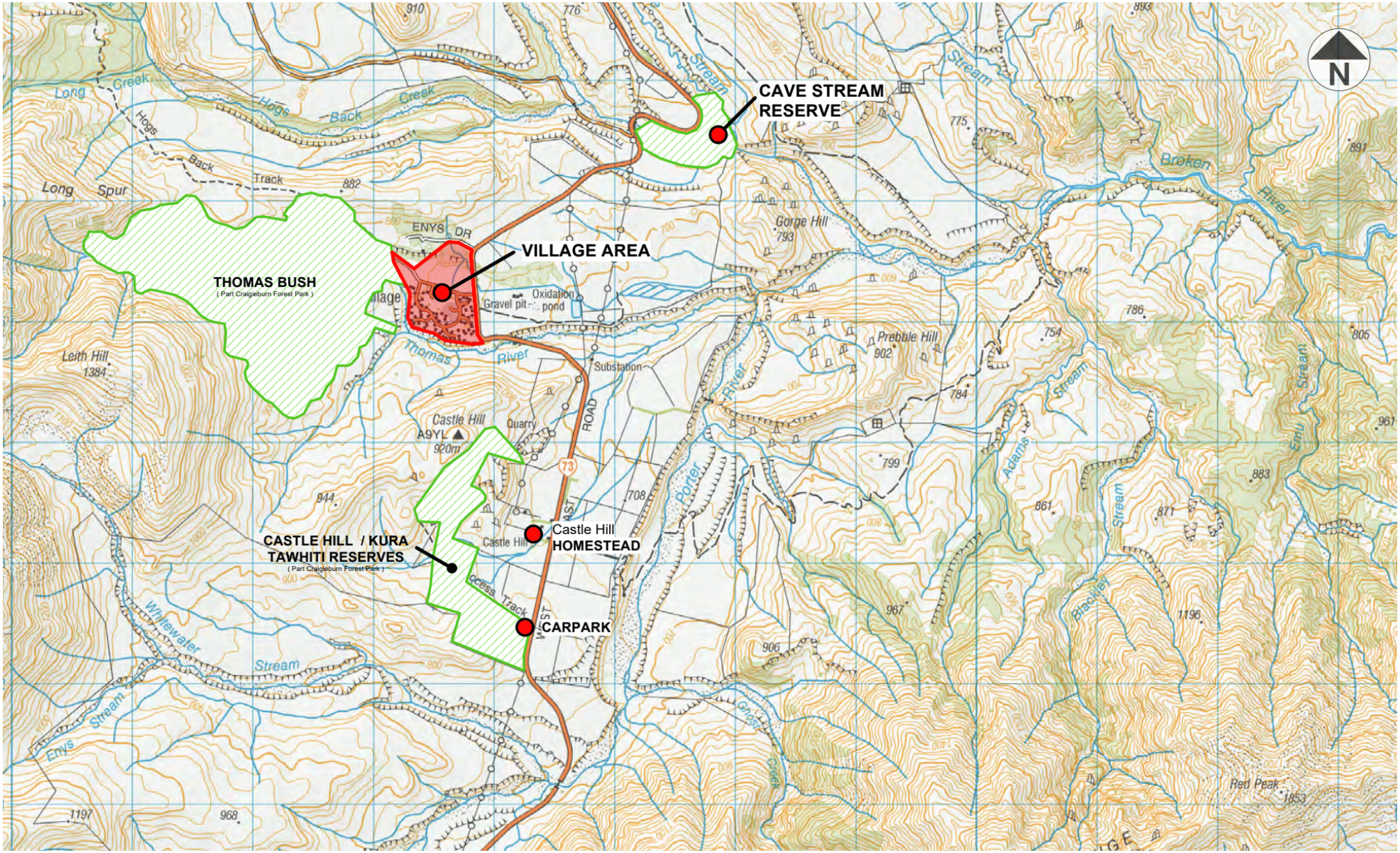


Figure 4: Castle Hill Village location and surrounds.

2.3.2 Terrestrial species, habitats and ecosystems

The vegetation of lower slopes in the Upper Waimakariri Basin is stated, in areas of less than 1,000mm rainfall, to comprise largely mountain beech forest. Before human occupation, all but the alpine summits, open riverbeds and small areas of valley floor supported beech forest. It is also considered that mountain totara and mixed hardwood forest were probably also minor elements (Molloy, 1977).

Following human occupation, beginning about 1300AD, the forests were progressively burned, to be replaced in part with grasslands. Beginning in 1858 the site was grazed as part of the Castle Hill Run, then Station, so that by the 1980's, when development of the Village began, the site had long been covered with modified short tussock and open grassland amidst surrounds of exotic conifer and larch originating from the original Enys Homestead site. The tussock is now gone but is represented today by various matagouri remnants within the village and reserves. Extensive native beech stands still exist to the west along the Thomas River and in the Thomas Bush.

The Castle Hill Basin is botanically important as the home for a number of rare plants, particularly in the limestone areas surrounding the Village. The area also is the 'type locality' for several indigenous plant species, meaning that these species were first described at Castle Hill and that other plants with the same name from anywhere in New Zealand must be able to be referred to a specific plant specimen from this area. None of these are however in the village or its reserves. See Appendix 4 for a list of rare plants found in the basin.

The Castle Hill area is an important habitat for a wide number of bird species. Features of the village are the loud "dawn chorus", and the frequency with which birdsong is heard generally throughout the day. The Reserves of the Village and the trees generally play a large part in attracting and maintaining birds in the Village. Birds recorded on the Castle Hill Station (LINZ, 2001) are shown in Appendix 4.

2.3.3 Climate

The Castle Hill climate is characteristic of an inter-montane basin, with warm summers and cool winters. Winds are predominantly from the northwest, but colder southerly winds also occur. These can on occasions be strong, gusty and damaging. Burrows and Wilson (2008) characterise it as:

> *"The mountain weather is very changeable, alternating between strong westerly cyclonic airflow, with rainfall along the Main Divide and some distance eastward, and cold southerly airflow bringing precipitation to the eastern foothills."*

Anticyclonic calm or easterly winds can bring warm days in summer and cold nights with frost in winter.

Average annual sunshine is around 1700 hours (Linz 2001).

A Climatological Summary for the village has been published on the village website every year since 2006. Over the 13 years 2006 – 2018, these show patterns and extremes that are relevant to tree growth in the reserves.

Temperature

February usually records the highest maximum temperature. The highest recorded temperature was 33.6C.

July usually records the lowest minimum temperature. The lowest recorded was -11.0C.

On average, frosts in the Village occur on more than 100 days annually with severe frosts down to minus 12^{o} C recorded.

Precipitation

On average, the annual precipitation is from 750 – 920mm. Dry months most usually occur in February or March (minimum monthly rainfall recorded 9.3mm) but can be in any month. On yearly average, rain falls on 16 or 17 days a month. Drought episodes are unpredictable and a significant constraint on the survival of young plantings.

Wet months can occur at any time of the year but are most common in spring (October - November).

Snowfalls are common in the winter, clothing the upper mountains all season but rarely lying more than a few days in the village. Snow is not separately recorded but falls in the village on an estimated 15 – 20 days a year. Two or three times a year this can amount to 10 – 15 cms, and once every 5 – 7 years amounts to a heavy fall of 80 – 100cms.

Wind

The highest wind speed recorded between 2006 – 2018 is 107.8 km/hr, in September 2013. 80 or 90 km/h is recorded once or twice in most years. A feature of the winds are their gustiness, which can be damaging to exposed or soft trees.

Significance of weather records

The trees of the Village play an important part in sheltering houses and recreation areas from winds and frosts, in providing summer shade, and making a more liveable village. The trees have to be hardy to extreme winds, very hard frosts, snow load, drought and out-of-season events such as late spring frosts.

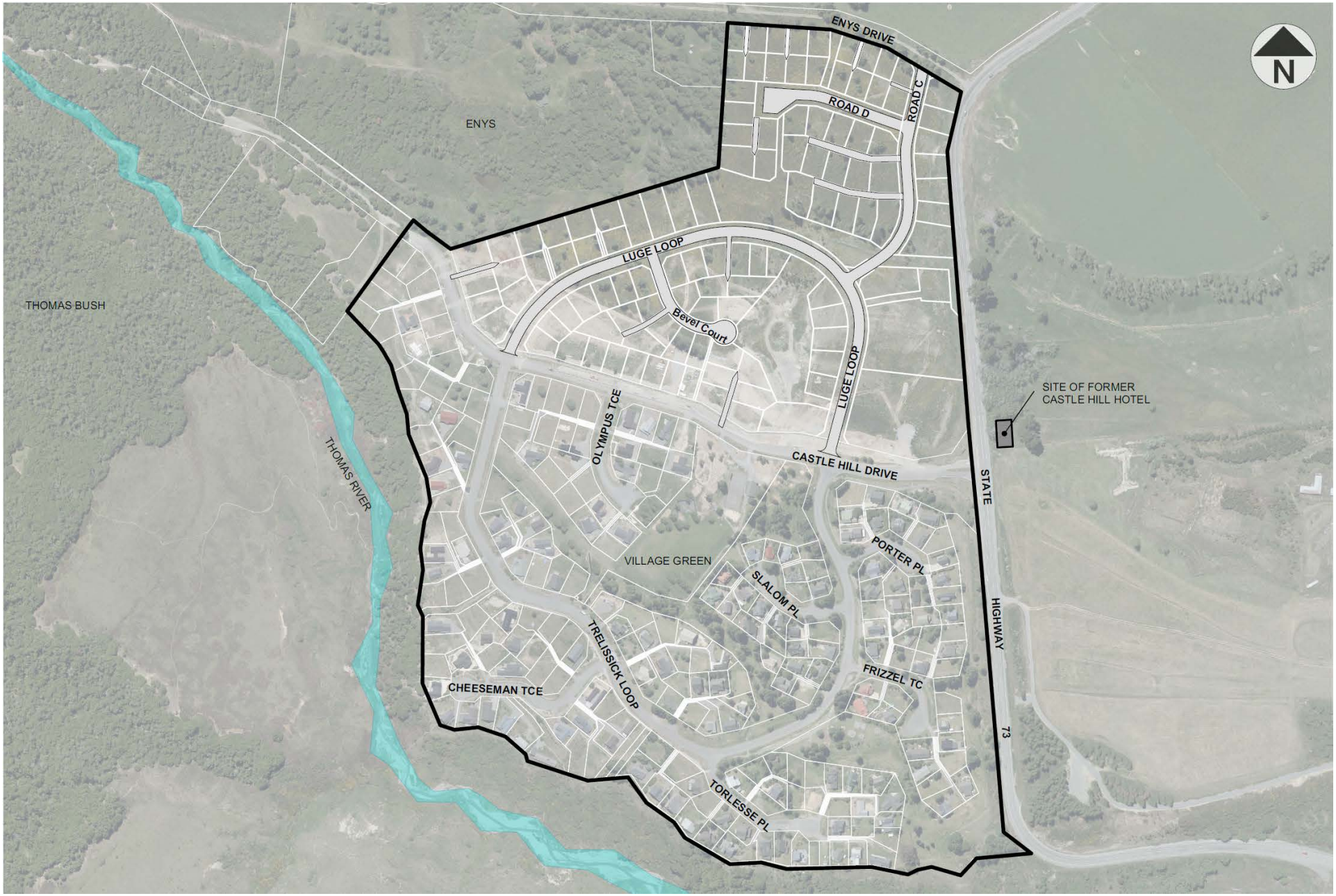


Figure 5: Castle Hill Village

2.4 Village description

Castle Hill Village began as a development in the early 1980's when the then owner of Castle Hill Station, John Reid, conceived a plan to create an alpine village as a centre for recreational activities in the area (see section 2.6.3 for further description of early village development). Since its inception the village has grown increasingly, with subdivision development occurring in stages.

Stages 1 – 6 of the village comprise 237 residential lots and stage 7 comprises 107 residential and 7 commercial lots. In total therefore the village as defined has 354 residential and 7 commercial lots. Up until 2006, the developed village comprised only Stages 1 & 2 only. Since then, there has been rapid development, with Stages 3 – 6 being completed, and with the development of Stage 7 currently in progress (See Figure 6 below).

Today, approximately 10% of houses are permanently occupied and the balance are holiday homes. There are also a number of vacant lots that are awaiting house construction or simply being held.

The original Village development was based on a philosophy of small residential sections, generally about 350 to 450 m2, set within generous provision of reserve land to form a continuous belt of open space throughout the village, comprising its structural, environmental and recreational 'backbone'. A sense of rural spaciousness was intended to be maintained mostly by the trees and spaces of the reserves, minimising the need for owners to maintain large areas of their land on weekend and holiday visits. The reserves therefore are generally of sufficient size to safely allow for tree plantings of a size and stature that provides for the treed skyline necessary to support the village's natural landscape setting.

The continuous belt of open space generally allows access from all localities and a connectivity of unbuilt land in which the village environment (trees) can establish. Most houses thus have close access to public reserve land. Additionally, in several places the reserves widen to form recreation hubs, including around the village hall and green, the playground, the south-west reserve and the larger stormwater reserves in Stage 7 (see Figure 2 above for description of reserve locations).

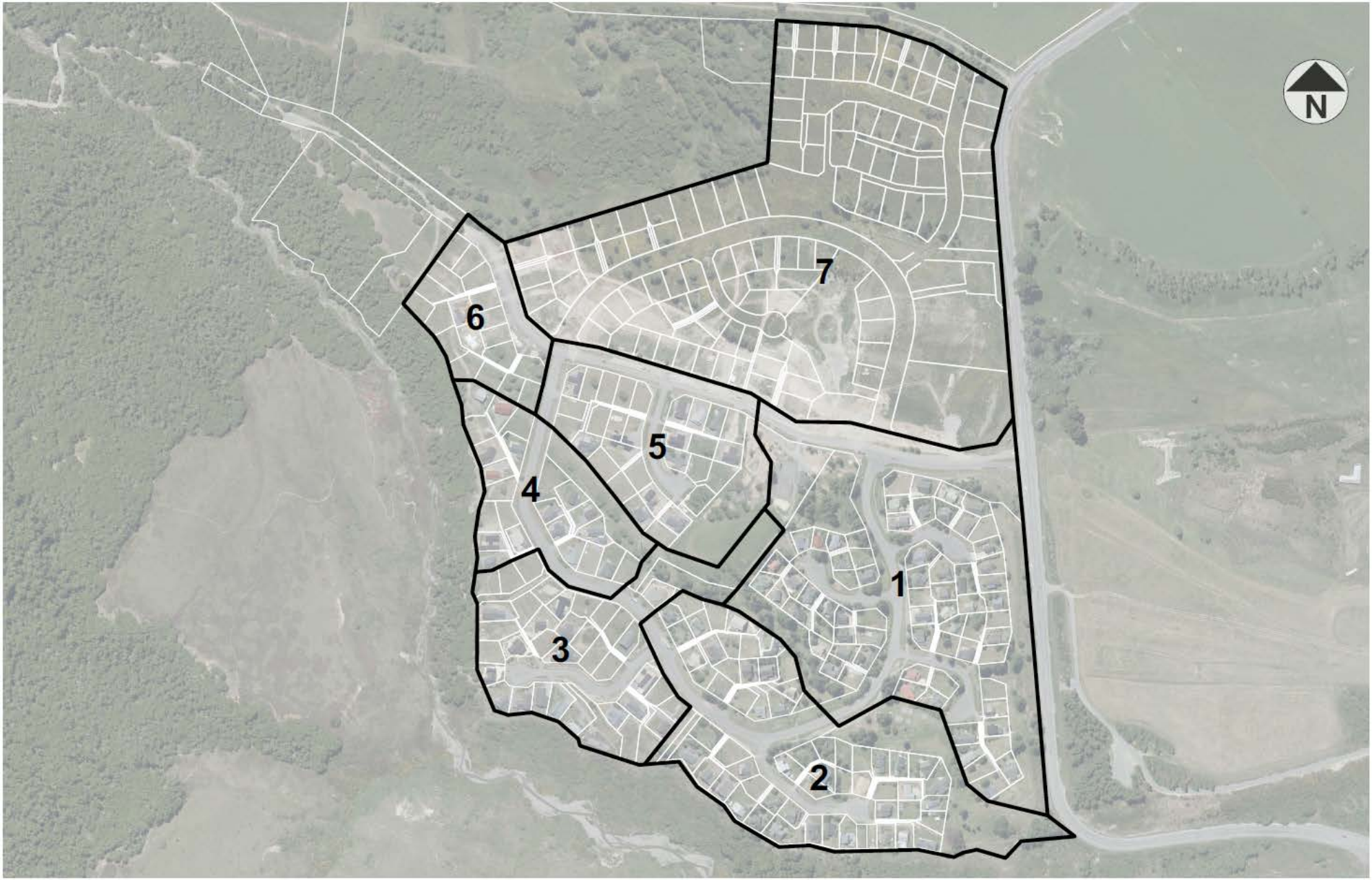


Figure 6: Castle Hill Village subdivision stages.

2.5 Village reserves assets

Village hall: A modern timber structure, constructed in alpine style and finished in dark, natural colours. Internally it comprises a main hall, small mezzanine, kitchen and toilets. Externally, on its west side is a deck and veranda facing the tennis court. As well as community activities, the hall is also important for civil defence operations.

Public toilet: Consisting of a standalone, three-unit toilet block constructed in 2019, situated near the Village Hall. These are signposted from the main road and frequently used by travellers.

Basketball half court: Built in 2019 over the site of the ice skating rink, which had not been used in recent years due to warmer winters.

Tennis & petanque courts: A single hard-surfaced tennis court with surrounding high mesh fence is located immediately west of the Village Hall and a gravelled petanque area south of the court. These, along with the Hall and basketball half court, are the focus of Village social life.

Carparking and formed footpaths: The Hall is approached by gravelled footpaths from the village and from a gravelled car park from Castle Hill Drive. The car park acts as part of the public face of the village, being used as a picnic and toilet stop by visitors. Footpaths are provided within the road corridor. Because they are often used at night, street lighting is provided. There is also a 'village walkway' that consists of both formed and unformed (signposted) pedestrian routes, although formed footpaths within the reserves are currently limited to the eastern side of the village green, linking to Slalom Pl. It is planned to extend formed (crushed local aggregate) footpaths within reserves to provide better connectivity and enable a circuit of the village.

Emergency response centre: A small building at the south-west corner of the tennis court and contains equipment required for an emergency. Although perhaps a community asset, it is noted here as a reserves asset through being sited on reserve land.

Playground equipment: The playground area has recently been redeveloped with new play equipment, including a refresh of the surrounds with new seating and landscaping.

Slide and toboggan area: In addition to the above there is a plastic embankment slide in the Central Spine Reserve. Near the west end of the Central Spine is another area of embankment which is to remain open and maintained in grass so it can be used for tobogganing in winter.

Memorial reserve area: Reserve area overlooking the Thomas River designated for items of remembrance, including a 'reflection garden and seating area'. The proposal for this area was worked on by the community and submitted to the Council for implementation.

Signs & visitor information: Signage within the village is generally confined to the village entrance, Hall area and street margins, with small direction signs at a few points on the reserve footpaths. Exceptions are various Council service signs. Visitor information signage and a map also has been erected on Castle Hill Drive near the hall.

Fences & gates: In keeping with the open character of the village concept, there are no fences or gates on the reserves, other than those around the village main entrance and tennis court.

Drainage system: Open swales have been formed throughout the village to conduct runoff as a 'natural drainage' system. Some of these are within reserve

areas, notably the Central Belt and Playground Reserves, and their presence is noted as an asset which maintains natural character, which should be maintained over time.

2.6 Historical & cultural heritage:

The Castle Hill locality has historical and cultural significance from its Maori and European past, and is a popular recreation and tourist area, with landscapes offering year-round activities, such as walking, tramping, rock climbing, mountain biking, skiing, fishing and scenic appreciation.

2.6.1 Kōrero Manawhenua/Māori history

The Village is close to the group of scenic, cultural and scientific reserves containing limestone features, a conservation area and the Statutory Acknowledgement Area of Castle Hill/Kura Tawhiti. Archaeological, traditional and published records indicate the area was important from the Waitaha to the Ngai Tahu periods of Maori history.

A memorial in Cathedral Square, Christchurch states that Canterbury was occupied from about 850AD until 1505 by the *Hawea/Rapuwai/Waitaha* confederation, then from 1505-1675 by *Ngāti Mamoe* and from 1675-1837 by *Ngai Tahu*. These dates are likely to also apply to the Castle Hill area, with small variations.

Waitaha**:** Histories (Brailsford, 1994) indicate that Waitaha called the Castle Hill area *'te Kohanga'* or 'birthplace of the Gods'. At this time the area of the limestone rocks was of prominence as an astronomical observatory for predicting the coming seasons, which was crucial for kumara cultivation. In summer a considerable population migrated from the coast and supported this role, living in marae within and adjacent to the rocks. In spring, kumara were brought in pots from the lowlands.

The limestone geology was sacred to Waitaha due to the eons of creatures whose remains had built up the rock since the beginnings of time, seen as ancestors in the chain of life. Prominent leaders were buried in this vicinity, including *Rakaihautu* who first explored and occupied the South Island about 850AD.

Ngai Tahu: The Ngai Tahu name *Kura Tāwhiti* means "treasure from a distant land". Kura Tāwhiti was one of the mountains claimed by the ancestor, *Tane Tiki*, for his daughter *Hine Mihi*. He wanted feathers from the kākāpō taken from this area to make a cloak for her (Arthurs Pass NZ, 2022).

The Castle Hill area was used by Ngāi Tahu for *mahinga kai*. They collected *kiore* (Polynesian rat), *tuna* (eel), *kākāpo, weka, kiwi, kākā* and kererū. Kura Tāwhiti was within a network of trails and temporary campsites used for seasonal journeys in gathering such *kai*. Knowledge of these trails is held by whānau and hapū and is regarded as taonga.

Ancient rock art remnants on the outcrops of *Kura Tāwhiti* are particular *taonga*. The outcrops provided shelter and temporary camping places and aspects of the occupants' lives and beliefs are recorded here. These outcrops and their rock art have *tapu* status for *Ngāi Tahu.*

Statutory Acknowledgement Area: In 1998 an area of the Castle Hill reserves was designated as *Topuni* under the Ngai Tahu Claims Settlement Act, to ensure that the values Ngai Tahu place on this area are recognised, acknowledged and respected. These are 3 kms from the Village, and while central to the character of Castle Hill, have no specific implications for the reserves that are the subject of this Management Plan.

2.6.2 Early European history

The first European to visit the Upper Waimakariri Basin, with Maori guides, was Joseph Pearson, in 1857. Grazing runs were occupied soon after at Castle Hill and Craigieburn (now Flock Hill), and the first bridle track over Porter's Pass was made in 1858-59. In the Castle Hill vicinity this followed the east side of the Porter River and did not directly pass today's Village site.

Castle Hill and Craigieburn stations remained isolated until 1865, when a coach road was constructed from Christchurch to the West Coast via Arthurs Pass. This road, known as 'the Bealey Road', was intended to access the West Coast goldfields, and established the route still followed by State Highway 73 today, passing the eastern boundary of today's Village. In 1866 the first Cobb & Co stage coaches connected Christchurch with Hokitika.

Castle Hill Station: was farmed by the Porter brothers from 1858 to 1864, their accommodation being on the Porter River. John and Charles Enys took over the run in 1864 and in 1865 built a homestead called '*Trelissick'* on a site immediately north-west of today's Village (between the residential zone and Enys Drive on Map 3). Trelissick was the name of the Enys family property in Cornwall. The site today is owned by the Brittan family although the house no longer exists.

In 1871 an accommodation house called the Castle Hill Hotel**,** servicing the coaches, was built on the Bealey Road (SH73) immediately opposite the entrance to today's village (see Figure 5):

In 1917 The Upper Waimakariri runs were reorganized. Castle Hill remained unchanged but the 'Trelissick' house was shifted to Flock Hill, and the Castle Hill homestead re-established at its present location on SH73 (Abrahamson, 2017).

2.6.3 Early Village development

Origins

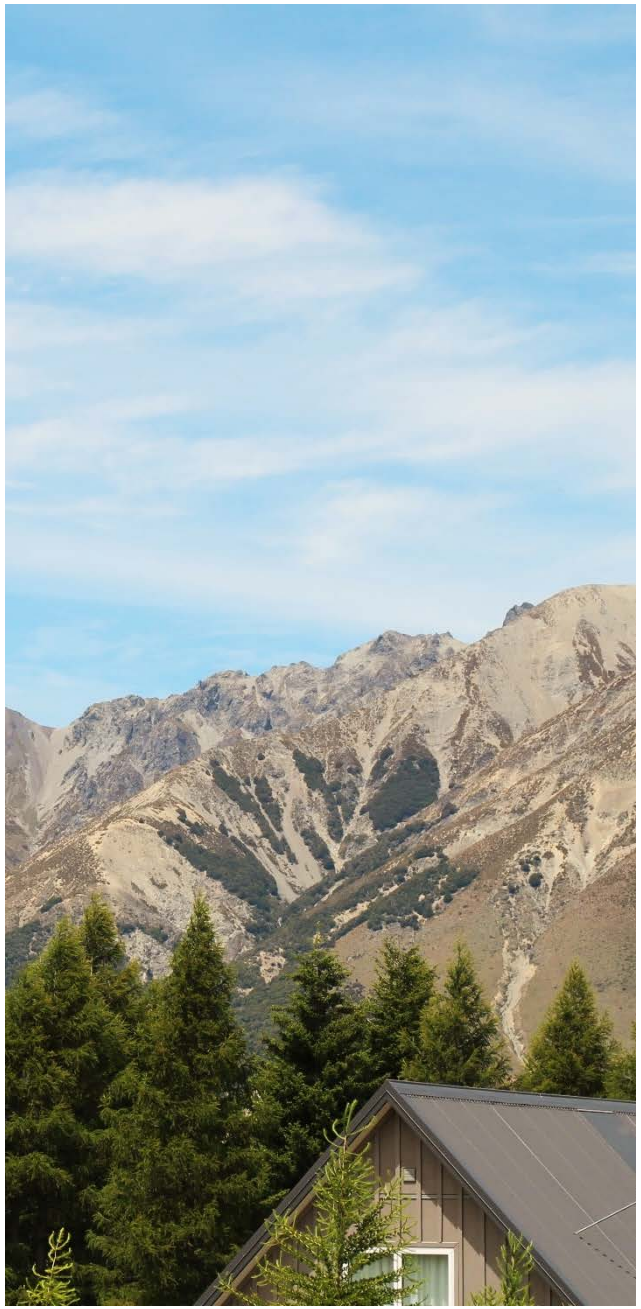
The land now comprising the Village remained lightly-developed grazing land from the 1860's until the 1970's. A concept for a village was developed by John Reid/Castle Hill Run Ltd in 1971, to be located among the rocks now comprising the Te Kura Tawhiti Reserve. Following hearings, the application for that village was declined, and the Tussock Grasslands and Mountain Lands Institute then prepared a report identifying the current site as suitable for a village (Hayward & Boffa, 1972).

Based on this site, new hearings were held in 1979, and approval for today's village granted in 1980. Stages 1 and 2 of the Village, containing 130 sections, were completed in 1984 and the first houses occupied in 1985.

'Alpine village' models in New Zealand were derived from park and recreation lands in the mountain regions of North America and adapted to New Zealand's national parks in the 1950's, notably at Arthurs Pass village. It involves housing made from natural materials, such as stone and timber, naturally coloured, and steeper roof pitches, to maintain an 'alpine' style. These elements are also incorporated in the District Plan Rules.

The Council's 1979 Hearing Records contain evidence presented on the planning and landscape intentions for the Village and its reserves, upon which approvals were based. Important among these, as background to this RMP, are:

- *Final approval for the Village provided for an area of 6.46 ha of "public space" out of the total area of 36 ha;*
- *The overall landscape design concept will be based on identifiable clusters of housing set*



- *amongst open space defined principally by trees, drifts of shrubs and grassland";*
- *It was recognised that individual sections would be small, but this would be balanced by generous space provisions in the large reserve areas;*
- *"Tree planting throughout the residential area will have a larch/ pine/ beech theme and it is envisaged that a dense forest-like intermix of the three species will be planted throughout the accommodation and reserve area. Houses, roads and access ways will be cut out of the base plantings as and when required" (Jackman, 1979).*

The original design for the village sought to capitalise on the landscape assets through a series of design techniques and provisions that would maintain the character naturally inherent in the Upper Waimakariri Basin and to avoid standard suburban practises that would lessen that character. The intention was to maximise the Village as a place of difference from the city, maximising its value as a place of recourse, relaxation and 'healing' for city dwellers.

Village layout

The following are examples of some of the design techniques and provisions utilised within the original design for the village, which sought to maintain Castle Hill Village as a place of distinctive character, adapted to the broader rural alpine setting:

- The road system at Castle Hill village, comprising simple circular roads that feed local neighbourhood roads, seeks to minimise vehicular influences and promote neighbourhood identity and interaction. The village streets thus do double duty as traffic areas and as open spaces, with tree plantings, which help to maintain the sense of openness and integration of the village surrounds.
- Link strip reserves were created along residential street frontages, requiring vehicle access to houses to be at set places, largely from rear lanes, keeping vehicles in the background of village activities. Thereby the village streets, residential frontages and the public character of the village is less cluttered by driveways and vehicles.
- The original concept for the village reserves was for generous provision of open space, being unique in forming a continuous spine throughout the residential area. The sense of rural alpine character and spaciousness upon which the village concept was based, was intended to be maintained mostly by the trees and spaces of the reserves.
- A system of naturalised drainage throughout the streets and reserves was implemented to, as far as possible, avoid hard surfacing, roadside kerbs and channels, and visible engineering infrastructure, while managing runoff through a combined system of naturally-shaped open swales in such ways that further reinforce the low-key management of the land.
- Property owners were actively discouraged from erecting fencing or planting hedges, to avoid or minimise obvious property demarcations or the sense of exclusive land parcels and lots. The resulting continuous flow, permeating openness and low-key management of the land gives a sense of freedom of a village environment.
- Other features of the original village layout are the avoidance of rear sections, with housing remaining relatively open to the streets, thereby avoiding community isolation.

Planned Village planting

Tree plantings throughout the residential area, streets and reserves were envisaged as integral to the alpine character of Castle Hill Village, as vegetation of alpine origin reinforces the sense of alpine character.

Planning consent for the village, granted by the Malvern County Council in 1979, contained the following conditions relating to landscaping and planting:

> *"7. That all landscaping be in close accord with the Landscape Concept Plan included in the application."*
>
> *"16. No tree shall be topped, in any circumstances, and no tree otherwise damaged or removed unless absolutely essential, and where it is essential to remove a tree it shall be replaced by another one or more trees in the approximate locality. The authorisation of the County Engineer shall be obtained before any tree over 1.5m in height is removed" (Malvern County Council, 1979).*

Initial plantings

After the granting of consent, Castle Hill Run Ltd duly provided the required Landscape Concept Plan and Planting Schedule (see Table 2 below and further description in Appendix 3: Original village planting concept).

In 1987 the Council engaged the Ministry of Forestry (MoF) to report on the "amenity plantings". MoF reported that there were only approximately 770 living trees out of the original 6070 trees specified. It is noted that the schedule from Table 2 below provided for a total of 2,418 trees.

Many of the plantings required as a condition of consent were either not planted or did not survive; for example, no alder or Japanese larch are known to exist in the reserves. It should be noted that the original planting lists included species that are now classified under the Canterbury Regional Pest Management Plan (CRPMP) as either wilding, pest, or pest agent species. This is likely to have included Ponderosa Pine, Douglas Fir, and European Larch, though determining the origins of present-day trees, whether part of the original plantings or self-established, is difficult.

Botanical name	Common name	Number	% of Total
Alnus rubra	Red Alder	223	9.2
Betula pendula	Silver Birch	331	13.7
Chamaecyparis lawsoniana	Lawsons Cypress	148	6.1
Larix decidua	European Larch	176	7.3
Larix leptolepsis (=kaempferii)	Japanese Larch	373	15.4
Nothofagus solandri var cliffortioides	Mountain Beech	329	13.6
Pinus ponderosa	Ponderosa Pine	263	10.9
Pinus sylvestris	Scots Pine	111	4.6
Pseudotsuga menziesii	Douglas Fir	278	11.5
Sequoia sempervirens	Redwood	186	7.7

Table 2: Planting Schedule from 1979 Map, With Percentages Added

2.6.4 Recent reserve management

After 35 years of development, the village has established and generally maintained a character that draws on its surrounding environment and is distinctly different from urban character. As successive expansions have brought new house, curtilage and subdivision designs, it has proven a challenge to fully uphold many of those intended characteristics. Despite this, the original vision for an alpine village has proven sound.

The 2010 Reserves Management Plan took the first steps towards formal management of the tree asset that had developed.

However by 2010, the village reserves and undeveloped land to the west had heavy stands of wilding larch, douglas fir and pines, notably Pinus contorta (since removed), largely self-seeded from trees on private land to the north-west of the village.

The following is a summary of the main tree species found in 2010:

- Lodgepole Pine *(Pinus contorta);*
- Western Yellow Pine *(Pinus ponderosa);*
- Eastern White Pine, Weymouth Pine *(Pinus strobus);*
- European Larch (Larix decidua);
- Douglas Fir *(Pseudotsuga menziesii);*

- Redwood, Wellingtonia *(Sequoiadendron giganteum);*
- Mountain Beech *(Nothofagus solandri var cliffortioides);*
- Silver Birch *(Betula pendula);*
- Eucalypts: Small numbers of cold-tolerant mountain eucalypts, including some rare species: *Eucalyptus perriniana, E. gunnii, E. dalrympleana and E. delegatensis.*

Other trees noted in 2010 from the original planting schedule, found in lesser numbers, were:

- Lawsons Cypress *(Chamaecyparis lawsoniana)*;
- Scots Pine *(Pinus sylvestris),* (Note: also has wilding tendencies).

The range of tree species that was originally planned for the village did not eventuate, with the existing species range being primarily derived from the following components:

- Surviving plantings from the 1979 Landscape Concept Plan and Planting Schedule approved by the Council, particularly Ponderosa, Douglas Fir, and European Larch.
- Self-introduced wilding trees, which grew in ad hoc fashion and are now either mature trees or have since been removed due to inappropriate location, safety concerns, or wilding potential.
- Trees remaining following unauthorised removal, trimming or planting on public land, particularly in the vicinity of resident's properties.
- More recent plantings, particularly Mountain Beech.

Besides the trees, native shrub remnants in the village, notably *matagouri*, and plantings, notably *Hebe* and *Pittosporum*, have proven resilient, although in lesser numbers. *Matagouri* struggle through competition with weeds, particularly broom, and shrub areas generally are not consistently located to best advantage.

CHCA-organised working bees have, with Council consent, steadily planted beech and non-wilding conifers in the north-east and north-west Central Reserve area, on either side of the hall. These were areas that had been largely cleared of wilding conifers, mainly *Pinus contorta*. The survival rate of the new plantings has been over 95% thanks to the irrigation and to volunteer weed removals, notably broom.

2.7 Population and visitation

The numbers of dwellings within the village are increasing. As a result, the largely itinerant population is growing. Consequently reserve use is expected to increase.

The numbers of people present in the Village at any one time has a distinctly episodic pattern, with peak usage during weekends, school holidays and statutory holiday weekends. This continues through both summer and winter, with different activities such as mountain biking and skiing available according to the season.

A proportion of owners rent their homes for overnight or longer stays. The Village also attracts day visitors and travellers passing through on SH 73.

The social atmosphere at Castle Hill may be described as being a friendly and collective cooperation and is evidenced by the many formal and informal village events and working bees that are held on an annual basis.

2.8 Recreation and public access

While the reserves will continue to provide for recreation and circulation, they also will continue to provide for the alpine village character sought by the original development.

2.8.1 Recreational use

The main outdoor recreational facilities offered by reserves within the Village currently are shown in Table 3 below. In several cases the main 'facility' is the reserves environment itself, and not any structure.

The main focus for organised activities within the village are events that bring the community together. Regular events are the AGM and sports weekend (fun games, tennis, golf, petanque), the mid-winter dinner, Labour Weekend planting and BBQ, New Year's Eve celebration, Easter Arts Weekend (a bi-annual function bringing together local artists to feature and sell their works), mountain biking and race events. The surrounding area brings multi-day and sports events that can involve hundreds of competitors. The village green and hall are also sought for weddings and family get-togethers.

Type of Activity	Where Carried Out
Walking/running	*Throughout reserves generally and designated routes in the surrounding area*
Mountain biking	*Central reserve pump track, reserve areas generally, or on purpose-built tracks in the surrounding area*
Tennis	*Court adjacent Community Centre*
Petanque	*Court adjacent Community Centre*
Children's play	*Informally throughout the reserves, particularly at (a) designated playground area with dedicated play equipment and (b) the slide/toboggan area;*
Basketball	*Half court and hoop*
Informal ball / frisbee games	*Open areas*
Slide	*Bank in reserve adjacent Trelissick Loop & lot 130*
Skiing	*On all recreation reserve areas following snowfalls*
Tobogganing	*On steeper banks & sloping areas in recreation reserves, after snowfalls*
Dog Walking	*Throughout reserves generally*
Other community-organised / spontaneous activities	*Generally based at or near the community hall/village green vicinity*

Table 3: Main Outdoor Recreation Activities Currently Occurring in the Castle Hill Village Reserves

2.8.2 Public access

Generally, all village reserves are open and free for informal usage at all times but specific facilities and areas, notably the Village Hall, can be booked or hired for individual groups or events, by prior agreement with Council.

The reserves provide a range of undifferentiated walking and cycling routes within the Village, and because the main reserve forms a continuous spine throughout the residential area, most houses thus have close access to public reserve land. In addition to these routes, an all-weather walking and family cycling circuit exists enabling people to move freely and safely throughout the village providing access to all reserve areas.

There are numerous walking and mountain bike tracks beyond the village and access or connections to these is provided for.

3.0 Community engagement

Selwyn District Council has worked closely with the CHCA and the wider village community in undertaking a review of this Plan. This has included conducting several surveys of property owners within the Village to update our understanding of perceived issues and opportunities, and the changing usage and demands on the village reserves.

The various consultations have sought to present the Council with the best possible input to its review of the RMP, but in no way to pre-empt the Council's overall public responsibilities under the Act.

An initial survey was undertaken in 2016 in preparation for undertaking a review of the RMP, helping to confirm whether the Plan was still considered fit for purpose. Follow-up community surveys were then undertaken in 2018 and again in 2020 to further inform the Plan review.

Each of the surveys investigated a different subject or theme of relevance to the plan review and has been incorporated into the final review of the RMP. A further summary of the feedback received for each survey is provided in Appendix 5: Community Consultation.

The surveys' "big picture" findings revealed that there is some polarisation amongst the Castle Hill Village community regarding expectations for the management of the village reserves, with different viewpoints on a number of important themes, including:

- Varying degrees of preference for "something different" to how the original village development was envisaged, although generally the desire for change is not drastic.
- The desire to maintain a treed environment versus something more open with unrestricted alpine vistas.
- The need for climatic amelioration and shelter from winds, versus issues with tree shading.
- The preference for native tree species versus a varied (exotic/native) tree environment.
- Immediate versus a staged removal of wilding conifer species.

Feedback on Draft Concept Planting Plans for reserve areas (December 2020)

A part of undertaking the review of the RMP has been to include the development of concept planting plans for each reserve area.
These plans form an integral part of the RMP (see section 7.0) in guiding the future landscape development of reserve areas within the village.

Concept plans were presented in draft form at an open day in the village on 26th October 2020 and was followed by an opportunity to give feedback via an online form. The feedback form also asked supporting questions around reserve landscape values and tree concerns.

Formal Public Consultation

Council formally notified the draft Castle Hill Village RMP in January 2023, inviting public submissions, in accordance with s.41(6) of the Act. A Reserves Hearing Panel was appointed to consider all submissions received and to make recommendations for changes to the draft RMP.

The final RMP was then presented to Council for adoption on the 11 September 2024.

4.0 Concept, values and management issues

4.1 Village concept

The original concept for the village was for an alpine village with special character. A village character that is inseparable from that of the Castle Hill Basin – a distinctive, unique, memorable and natural high country landscape that the village originates and benefits from. The original village concept was based on the following key principles and are considered to be important, should this special character be maintained as the village develops:

Alpine Character: Distinguished by the combinations of materials, colours, structures and built characteristics, plus spaces, places and trees that relate to the landforms, weather, atmosphere, vegetation, environment, views, lifestyles and outdoor activities of the high-country basin and mountains. There is a sense of adaptation to, and living with, the natural forces and aesthetics. The natural character is thereby accentuated rather than lessened, and its distinctiveness from Canterbury's lowland character maintained.

Rural Character: Distinguished by spaciousness, low development densities (buildings, roads, fences, structures), dominance of natural landforms and vegetation, all of which characterise the countryside, and distinguish it from towns and cities. 'Rural' and 'natural' exist on a continuum from pristine conservation areas, through lightly modified extensive high country grazing lands, traditional lowland farmlands, to the most-modified intensive horticultural or rural/residential areas near the cities. Castle Hill Village falls within the area of high country extensive character and is therefore relatively high on the continuum.

Village Character: Villages generally are characterised by smallness of size and scale, informality of activities, closeness of personal contacts and simplicity of surroundings. Development is not intense, and the townscape not unduly divided up by fences or barriers. Vehicular traffic is low in volume and slow in speed, comprising a background to village activities and not dominating them. Roads are lightly developed, with a lack of kerbing and concrete gutters and a greater degree of multiple use.

Castle Hill Village is unique. As are its reserves that are integral to maintaining its character and that set it apart from other reserves managed by Council.

4.2 Values

The natural, historical and cultural heritage, and recreational values associated with the Castle Hill Basin comprise:

- The encircling hard-rock mountains and their variable weather, snow, cloud and light patterns. The bracing air quality and dramatic weather patterns of hot, and cold, wind and calm, skies clear, calm or enlivened by cloud patterns, mists, rain, frosts and snow.
- The vivid bright night skies, star patterns and moon.
- The landform patterns of descending spurs (e.g. Long, Hogsback Spurs), separated by mountain rivers (Thomas and Porter Rivers, Hogsback Creek).
- The limestone geology, strata, landforms, caves, and associated rare vegetation.
- The vegetation history generally, including short tussock and modified grasslands and remnant beech forests.
- The associated bird, animal and insect life.
- The Tangata Whenua histories of the rocks, rivers, cave, mahinga kai and trails.
- The European history of SH73, high country grazing runs and present-day high country farming.
- The modern recreation context of skiing, walking, mountain biking and outdoor activities, readily accessible from Christchurch.

Collectively, these elements together create an exhilarating place that arouses strong aesthetic and emotional responses in all seasons and weathers, all within a highly natural setting and within an hour's drive from the city. The planned and unplanned growth of trees and shrubs in the village since 1984 has had both positive and negative effects on the surrounding environment. The following are the identified positive attributes of trees that should be promoted in the future through this Reserves Management Plan:

- The mix of cold tolerant exotic and indigenous alpine trees is one of the unique features of the Village.
- Create natural character and an alpine aesthetic, when combined with the built character arising from the District Plan Rules.
- Soften and partially screen buildings, thereby lessening their prominence. The collective bulk of trees also counter that of buildings.
- Contribute significantly to the creation of a setting distinctively different from urban and lowland Canterbury.
- Add character to winter scenes when covered with snow or frost or looming in fog or low cloud.

- Help to retain snow and frosted areas in the village, creating a winter playground that adds to the alpine experience e.g. for tobogganing, learning to ski or building snow structures.
- Add vivid seasonal colours in the cold climate (deciduous species).
- Provide wind shelter and summer shade.
- Provide important habitat for wildlife, particularly the presence of native birds and associated bird song.
- Provide opportunities for safe, unsupervised outdoor play for children.

It is emphasised that the village reserves, and their plantings are critical to maintaining a village environment that in its character is reflective of the wider rural alpine setting. The management of reserve trees therefore forms a significant portion of the discussion in later sections of this Plan.

4.3 Key management issues

In this section the key challenges or issues affecting reserve management are identified and listed. The ways these are managed are addressed in *Section 7.0 Implementation* of the management plan. Here objectives describing desired outcomes are followed by the methods needed to achieve them. An explanation is then provided outlining the reasons for the objective and methods used.
The challenges described below have been identified and derived from the following sources:

- Community surveys and individual commentary
- Castle Hill Community Association (CHCA)
- Environment Canterbury (ECAN)
- Neighbouring property owners

These challenges are summarised as follows.

Pest plant control

The issue:

- Plants considered pests are primarily those that spread prolifically thereby supplanting desirable vegetation. Pest plants will also include those contributing to fire hazard.
- Key weed/pest species applicable to Castle Hill Village are wilding conifers, gorse and broom.
- A significant proportion of the villages established tree stock are wilding conifer species.
- Although the range of weed/pest species present is small, the low stature of the surrounding natural vegetation and the relatively infertile soils means the potential for spread remains high.
- There is a recognised need to manage the seed source of wilding exotic trees and arrest their establishment and spread both within the Village and beyond.
- The potential adverse effects on amenity of removing wilding conifers from within village reserves, either immediately or within a timeframe that does not allow for adequate replacement of tree stock.
- The 2020 Survey indicated a preference for 33% of all targeted conifer trees in Village reserves to be retained. This would require an exemption from the CRPMP (administered by ECAN).

Management response:

- Acknowledge the community's preference for a strategic approach in transitioning from pest to benign or more appropriate species.

- Development of an integrated 'Pest Vegetation Removal Plan' that will guide the management and ultimate removal of recognised wilding and pest trees within the village reserves.
- Liaise with agencies responsible for pest plant control – MPI, ECAN, DOC, Landcare Research, Property owners
- Education of all affected parties as to the necessity of managing pest plants.

Pest animal control

The issue:

- Identification of animal pests such as rabbits, hares, feral cats, opossums, mustelids, rodents, hedgehogs, and wasps, and how they are to be managed through trapping, poisoning and biological control.
- Browsing animals, pose a threat to new plantings.
- Monitoring of effectiveness.

Management response:

- Develop and implement an integrated 'Faunal Pest Removal Plan'.
- Partner with various stakeholders – DOC, ECAN, SDC and village volunteers, to implement the 'Faunal Pest Removal Plan'.

Fire

The issue:

- Fire is a major concern to Castle Hill because it has the potential to cause loss of life and to decimate property and surrounding native habitat.
- It is particularly topical, following recent fires within a similar context in the Upper Waimakariri Basin, Lake Ohau Village and Lake Pukaki.
- More recent exotic tree removals in the village have been motivated by perceived fire risks and to maintain proper vegetation setbacks.

Management response:

- Avoiding conditions that are conducive to fire by ensuring routine maintenance is undertaken, such as cutting long/dry grass, reducing undergrowth beneath trees and ensuring low hanging branches are limbed to prevent "fire ladder" burning. The accumulation of litter or plant debris is avoided also.
- Avoiding vegetation that is flammable by nature, group or confine plantings into isolated 'islands' with mowable clear space between, and adhere to appropriate vegetation setbacks from dwellings, as specified by FENZ.
- Collaborate with FENZ to manage potential sources of fire appropriately and ensure fire protection measures are in place, including facilitating an evacuation plan that is made public to all residents and visitors.

Safety

The issue:

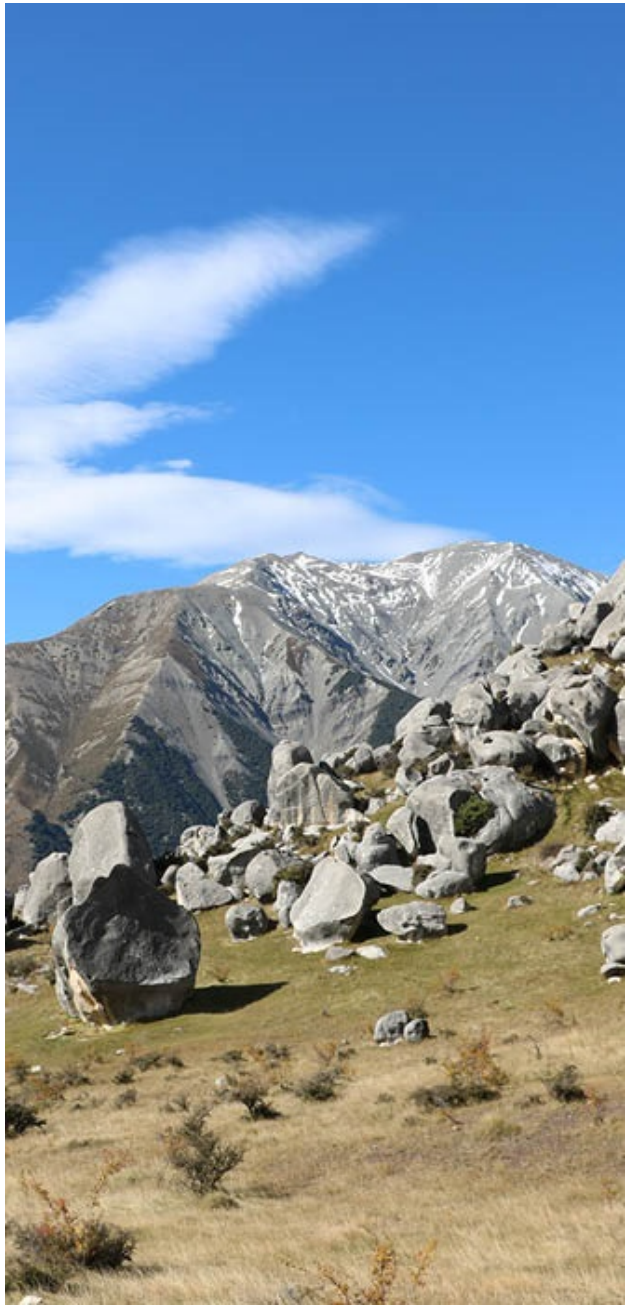
- Potential hazards may include falling and fallen tree litter, fire, uneven and slippery surfaces, rubbish, uncontrolled dogs and vehicles
- Potential exists for trees to topple or large branches to break and fall on people or property in high winds.

Management response:

- Ensure reserves are kept free from hazards that may impinge on peoples' safety and enjoyment of them.

Security

The issue:



.

- Certain conditions may facilitate malevolent behaviour such as: poor lighting, poor visibility or lack of transparency and facilities not being sufficiently robust.
- Lighting in reserves will need to comply with 'Dark Sky' requirements to minimise light pollution.

Management response:

- Adopt a best practice approach to reserve management that complies with Council standards and policies, where applicable, including 'Dark Sky' and Crime Prevention through Environmental Design (CPTED) principles.

Amenity

The issue:

Amenity is what makes the reserves pleasant. However, reserve management also has the potential to affect village character generally and the amenity of nearby properties, for example:

- The proximity of larger reserve trees to neighbouring houses has the potential to cause undue shading. In general, residents seek reasonable winter sun on their houses.
- The obstruction of views or vistas from within the village by trees, together with surrounding houses. This presents a complex issue affected by peoples differing preferences for or against trees, and it is not possible to maintain both a treed environment and unobstructed or panoramic views.
- These issues are caused in part by former ad-hoc placement, establishment and growth of trees. As a result, these effects will increase as trees grow taller and more houses are built.
- Wind shelter and summer shade provided by trees can counter views and sunlight access. Consequently there is inherent tension between these desired outcomes. From the village surveys this appears to be a significant issue.
- To maintain desired amenity values and reflect the rural alpine setting, the original village concept maintained a high provision of open space throughout. However, subsequent stages of village expansion have eroded this provision.

Management response:

- Recognise that the reserves contribute significantly to village amenity. It is evident from surveys and feedback there is a desire to provide a high proportion of vegetated open space to built form and in so doing maintain overall village amenity.
- Balance the positive and negative aspects of trees, taking into consideration their role in reducing the dominance of built form, while providing amenity and character.
- A requirement to balance larger tree plantings against other desired amenity outcomes such as the avoidance of shading or the preservation of viewsheds.

Identity

The issue:

- Identity is based on the question of what distinguishes or makes Castle Hill Village unique.
- Original intent was to create a North American or European flavour, which some residents still support, while others prefer a more indigenous NZ character.
- Whether or not the emergence of distinct village precincts that coincide with building development cohorts should be acknowledged and reflected in reserve design.

Management response:

- Acknowledge that New Zealand vegetation is increasingly supported in favour of developing a distinctly indigenous sub-alpine landscape.
- Recognise that the alpine setting that informs village character is derived from the surrounding high country or mountainous setting, and that vegetation of alpine origin further reinforces this.
- Promote the value of design cues that enhance and preserve existing village amenity and character, such as providing adequate open space and maintaining an overall informal character within reserves, rather than formal, resulting in a more natural appearance. Avoiding hedging and fences within the village helps greatly in this regard as this enables the infiltration of vegetated open space throughout.

Management/Maintenance

The issue:

- Issues relating to the management of vegetation, specifically with regard to its removal and replacement, including the species, size, location, extent, and fire resistance.
- Some concern has been expressed regarding time frames for maintenance and enhancement. For example, the period over which pest trees should be removed and replaced with more desirable species, either immediate or incremental. According to village surveys, incremental removal and replacement is preferred.
- The ability of new planting to withstand prevailing conditions may be influenced by immediate removal of existing pest tree stock (wilding pines).
- There is a need for a short and long term implementation programme and prioritisation of actions, ranging from regular maintenance through to the achievement of long term outcomes.
- A recognised need for reserve improvements, over and above that provided by maintenance. This could include:
  - Additional facilities such as outdoor furniture, BBQ's, signage, play equipment and footpaths.
  - Additional recreational activities.
  - Pest tree removal.
  - Replacement tree planting.

Management response:

- Through this RMP, to recognise the need for greater direction and consistency in the day-to-day management and maintenance of reserve areas.
- Ensure any new plantings and their maintenance are sustainable, that is, input efficient regarding the need for watering, weeding and general maintenance.
- Plants are selected on their ability to withstand prevailing conditions with minimal intervention.

Administration

The issue:

- Ability to make decisions based on consensus views rather than the majority and whether more weight should be given to expert advice.
- A question of how much weight is given to the various opinions of residents and other stakeholders, which may conflict with a statutory authority or legislation, particularly with regard to the Reserves Act, NZ Wilding

Conifer Management Strategy and Canterbury Regional Pest Management Plan.

- An identified need to keep adjoining residents and the wider community engaged in the enhancement of particular reserves, including through regular 'working bees' or 'plant out' days.

Management response:

- Ensure that all activity on reserves is aligned with or achieves the objectives outlined in this RMP.
- Ensure that the community is kept informed and involved in decision-making and/or reserve implementation projects, via the RMP and other means as needed.

Conservation

The issue:

- Appropriate integration with neighbouring conservation estate
- Preventing the establishment and spread of existing and potential plant and animal pest species within and beyond the village environs.
- Providing environmental conditions favourable to the flourishing of native fauna.

4.4 Other considerations

Statutory requirements

- The reserves are statutorily managed subject to the requirements of the Reserves Act.
- The management of reserves must be in accordance with:
  - The requirements (where applicable) of other Acts, such as the RMA and LGA, including RMA requirements for reserves resulting from further subdivision and development.
  - Council Policies and Bylaws.
  - NZ Wilding Conifer Management Strategy (MPI) and Canterbury Regional Pest Management Plan (ECAN).

Future variables

It is noted there may be changes in the future, triggering adjustments to how Village reserves are managed. Hence the need to include in the Management Plan provision for periodic review in what otherwise might be regarded as a 'living document'. Such changes might include, for example:

- Changes in environmental law, such as the RMA.
- Changes in administration leading to re-apportionment of those responsible for implementation of RMP.
- Climate change may necessitate the substitution of certain plant species for others that are better adapted to the new climatic conditions, such as increased heat and dryness.
- Further village expansion and vesting of new reserves.
- Attitudinal societal changes where peoples' values alter over time leading to adjustments to how reserves are managed.
- Central government directives, such as those relating to hazard management, carbon credits, and biodiversity.

5.0 Plan vision and strategic goals

The Plan is guided by the following vision, developed in partnership with the Castle Hill Community Association (CHCA) and in consultation with the village community:

> *"The character and amenity of the Village is preserved, valued and enjoyed by residents and visitors for its exceptional natural scenic setting and features, leisure and recreation experience, which are distinctive and unique."*

This vision identifies what is important about the village and its reserve areas, and is embodied in the text, objectives and methods throughout the Plan.

The following strategic goals guide this management plan and help to describe how the plan vision is to be achieved.

All objectives and implementation methods in this plan are underpinned by the vision and aim to support the achievement of the identified strategic goals.

GOAL 1

The unique character, visual structure, and environmental and landscape values of the village reserves are conserved and enhanced.

GOAL 2

Vegetation within the reserves is appropriately managed.

GOAL 3

Safe and accessible areas are provided for informal and community recreation, which are compatible with the environmental values of the reserves and residential neighbours.

GOAL 4

The reserves are managed collaboratively with the Castle Hill community and other stakeholders.

6.0 Objectives & implementation methods

The objectives and implementation methods in this section of the plan are intended to support the achievement of the overarching vision and provide strong guidance for decision making by the Council and key stakeholders.

6.1 Reserves landscape character

6.1.1 Objective: The distinctive character of the village's natural scenic setting is reflected, maintained and enhanced in its reserves.

Methods:

6.1.1.A To maintain and enhance the special character of Castle Hill Village.

6.1.1.B To maintain and enhance amenity of the reserves and Castle Hill Village.

6.1.1.C To extend the amount of reserve created during village expansion, as provided for in the original village concept and approvals.

6.1.1.D To create, maintain and enhance the establishment of vegetation, and in particular trees, open areas, and facilities in reserves that reflect the rural alpine setting and preserve its character, as envisaged by the village founders, while also meeting today's needs by:

i. Maintaining tree numbers sufficient to form and maintain the bulk of the tree mass for the village.

ii. Ensuring tree and shrub species reflect New Zealand's natural alpine conditions.

6.1.1.E To preserve existing village amenity and character throughout the village by coordinating reserve management with that of adjacent streets and open areas by:

i. Laying out and maintaining the reserves in informal patterns and with vegetation in natural forms and groupings.

ii. Avoiding fences and significant barriers.

iii. Maintaining and enhancing the openness and naturalness of the reserve margins, access routes and internal layout.

iv. To uphold and publicise the system of Link Strip Reserves in the village.

Explanation:

Reserves continue to play an important role in reflecting the distinctive rural alpine character of the Castle Hill Village setting. The elements of 'rural alpine character' originally established at Castle Hill Village should be maintained in future reserves and tree management, and co-ordinated with other open spaces throughout the village, such as road verges, local purpose reserves and link strips. Integration with private development should also be encouraged through, for example, the provision of landscape guidelines.

Any future designs for or development of reserves managed under this Plan will, as far as possible, maintain the sense of openness, distinctiveness, naturalness, and informality, thereby delivering village character and amenity. To achieve this, geometric formality will be avoided. Fences and plantings will therefore be informal in layout and character as will the shape of open space such as lawn areas. This includes road, link strip, and local purpose and recreation reserve boundaries and as far as possible, the boundaries between reserves and private sections. There needs however to be a balance in this matter, and where some vegetative barrier may be desirable, it should be established as informal 'drifts' or varied shrubs and smaller trees. As has occurred in several places throughout the village, it is anticipated that these in time will assume the character of natural places, as befits the surrounding environment.

It is observed that different areas of the village (subdivision stages) have a slightly different character, and it is envisioned that each should be able to continue to maintain this character type.

6.1.2 Objective: An overall balance of treed and open areas within the village reserves is maintained.

Methods:

6.1.2.A To develop and maintain treed and open areas in the reserves with consideration to function, site conditions, amenity and landscape character, including:

i. Providing summer shade and wind shelter for reserve users.

ii. Maintaining defined open areas and view corridors as linkages and recreation spaces.

iii. Maintenance and enhancement of wildlife habitat and biodiversity.

6.1.2.B Balance the amount of tree area within reserves against the need to provide a significant proportion of useable open space.

6.1.2.C Trees surrounding open areas will be of suitable size and character to provide reasonable wind shelter and summer shade, capable of withstanding wind and snow loads, and generally be maintained in a tidy state with lower branches 'limbed up' to maintain visual openness and wind filtering.

6.1.2.D Open areas will comprise mainly exotic rural grasses, and be maintained as such, by being periodically mown and cleared of wildings and weeds such as broom or gorse.

6.1.2.E Open areas may contain small amounts of amenity shrubs and small to medium trees around their margins to provide shelter, privacy and visual amenity. These will be in the form of minor 'drifts', laid out and maintained as befits a natural area.

Explanation:

In balance with the 'tree areas', significant portions of the reserves will be maintained as grassed 'open areas' that help to preserve rural character, allow views and sunlight access, accommodate recreation use and social activity, while also providing de facto firebreaks.

The general outline of 'treed' and 'open space' areas to be maintained within each reserve are shown in greater detail in the Reserve Planting Concept Plans (see section 7.0) of this document. The plans guide the use of tree mass (the extent, location and type of proposed tree planting), while taking into account other desired values and any reserve-specific requirements.

Locations identified as suitable for larger 'Signature Trees' are shown in the Reserve Planting Concept Plans.

6.1.3 Objective: The protection, maintenance and enhancement of natural and cultural values of the reserves for users, neighbours and village residents is appropriately managed.

Methods:

6.1.3.A To maintain reasonable access to winter sun and light to houses by implementing a system of defined recession planes for those trees located on public lands that are liable to shade residential dwellings in winter, by:

- Maintaining reserve trees at defined distances and heights from the north side of dwellings according to their height and type, by establishing a Recession Plane system; and,
- Maintaining a 'wedge and corridor' system of tree layout, allied with view corridors, whereby reserve trees to the north of houses are maintained (e.g. thinned, limbed) or planted in wedge patterns, separated by corridors of lower planting or lawn, which allow light to dwellings.

Explanation:

Ultimately, the Council seeks to maintain an overall treed environment for the village, while managing unreasonable shading of residential dwellings as a result of trees growing on public lands within their northern arc. Shade can be desirable for some people, particularly for summer shade, but many do not want their winter sun blocked.

Blocking of low angle winter sun can be mitigated to some extent by thinning and pruning of trees, the mixing of deciduous trees in reserve plantings, and the planting of smaller trees or shrubs near houses.

Council will give appropriate effect to a policy of defined recession planes, tree categories and recommended setbacks (as outlined in Section 7.0 - Implementation), and as shown spatially within the Reserve Planting Concept Plans (Section/Plans 7.4 – 7.11), when considering existing reserve trees that are liable to shade dwellings in winter and any future reserve plantings, so as to provide reasonable access to winter sun and avoid undue shading.

The proposed methods do not guarantee all day winter sun to all residential dwellings within the Village. If a system of recession planes and setbacks were rigidly applied, many reserves would contain only small trees and it would be difficult to maintain the intended treed skyline. Therefore a hybrid recession system is proposed, whereby large trees are kept back from locations that overshadow houses, while the 'wedge and corridor' system identifies light corridors.

By this means, all houses will receive sun in winter for at least some of the day but may experience some shading on their north sides (midday sun), and their east and west sides (morning and afternoon sun).

Methods:

6.1.3.B As far as possible, but without guarantee, to provide and maintain reasonable views from within and beyond the village by planting and maintaining trees in general accordance with the methods shown in the Reserve Planting Concept Plans (Section 7.0 – Implementation).

Explanation:

This Management Plan seeks to establish a balance between openness and enclosure, whilst avoiding adverse effects on overall village amenity. While it is acknowledged that views to the encircling ranges are an essential part of reflecting the wider alpine setting and informing village character, it is not feasible within the treed environment of the village that all views will be panoramic. However, views from the village to surrounding mountains will be maintained where reasonably possible by a policy of 'planted wedges' and 'view corridors' (as defined through the Reserve Planting Concept Plans). Views can thus be maintained by managing the shapes and edges of planted areas, with identified open corridors providing views or outlooks. In some cases it may be appropriate to maintain views through pruning the lower branches of trees ('limbing up'). This would enable views underneath the tree canopy rather than removing the tree, but it may reduce wind shelter at ground level.

Where possible by these methods, all houses shall have a reasonable view corridor or outlook in at least one direction. However, views cannot be guaranteed from all locations, particularly those internal to the village, due to the multiplicity of outlooks, and due to plantings and buildings on private sections, which cannot be controlled under this Plan. It should also be noted the opening up of views will allow more wind penetration and there may be a need to balance competing interests during the assessment of tree removals in some situations.

6.1.4 Objective: Fauna and flora across the village reserves thrives and has a positive impact on the environment, climate change resilience, and residents and visitors to the District.

Methods:

6.1.4.A To enhance the numbers and range of indigenous flora and fauna in the reserves by:

i. Increasing the proportion of indigenous plants planted in reserves and street berms.

ii. Increasing the numbers of trees that provide food sources for birds in the village.

iii. retaining large trees that provide nesting sites and habitat.

iv. Investigating, and if appropriate establishing, an area to increase the numbers of locally rare plants listed in Appendix 4.

v. Encourage property owners/residents to plant indigenous vegetation within private allotments.

6.1.4.B For the benefit of property owners, to maintain on the village website a more-extensive illustrated list of plants suitable for the village, including cultural information.

Explanation:

While it is envisaged that there will be an overall transition to a greater proportion of native trees and shrubs within new plantings, this shall still be in combination with appropriate numbers of existing and new exotic trees. A 'natives-only' policy is not adopted by Council, based on the following:

i. The need to retain good existing exotic trees for shelter and amenity.

ii. People have bought into the village based partly on its exotic tree character, and a majority wish to retain at least some of that character (as per village preferences surveys).

iii. Village character would be significantly different without the exotic trees, and village residents have generally not requested such a change.

iv. There would be a narrower range of trees available, particularly larger trees.

v. The village reserves are cultural purpose areas and not primarily conservation areas.

A policy of increasing the proportion of native species is however adopted by Council, based on village preferences surveys. This is particularly achievable in the 'Smaller Tree' category involving the establishment of native Mountain Beech. Additionally, the 'Alpine (High) Shrubland Mix' and 'Alpine (Low) Grassland Mix' categories (See Section/Plan 7.1 – Key Notes) incorporate a large range of appropriate native plant species.

All future reserves tree and shrub planting shall be according to the recommended Replacement planting list (s.7.2).

In addition to the plant lists provided in this plan, it is recommended that a 'Castle Hill plant species list' be maintained, providing more in-depth information to village residents wanting to seek guidance on appropriate species for planting within private allotments.

6.2 Tree management

6.2.1 Objective: The Village's rural alpine setting is reflected in its character, which is retained and reinforced through appropriate tree planting within the reserves.

Methods:

6.2.1.A Maintaining overall tree numbers within the village so as to provide a predominantly natural setting for village buildings and infrastructure.

6.2.1.B Establishing and maintaining a small range of species within any treed area, set out in tree groupings of informal layout, shapes and edges, as befits village character and its rural alpine setting.

6.2.1.C Including mainly tree species typical to rural and sub-alpine areas, with limited use of feature or focal-point specimen trees.

6.2.1.D Establishing native trees appropriate to this sub-alpine area while maintaining a balance between native and exotic trees. This refers particularly to mountain beech, but also other native species identified in the recommended plant lists.

6.2.1.E Maintaining a balance between conifer and broadleaf trees and between evergreen and deciduous trees.

Explanation:

Tree plantings throughout the residential area, streets and reserves were integral to the original concept of an alpine village. Early plantings were made up of species from alpine or sub-alpine origin, set out in groupings of informal layout, and capable of reaching a size and stature that provided for a natural landscape appearance and treed skyline.

Recent village surveys identified that any desire for change from the original village concept is not drastic, with the majority expressing this in terms of identifying and retaining exotic signature tree clusters, with increasing indigenous plantings elsewhere, whilst giving effect to other values such as maintaining access to sunlight and reasonable views from dwellings.

The public reserves of Castle Hill Village will be where much of the tree volume of the village is maintained and enhanced, and the methods outlined above seek to support community preferences and the continuation of a natural landscape setting through appropriate tree planting.

Section 7.0 – Implementation contains a list of tree and shrub species for all new and replacement village reserve plantings that provide for the values and issues identified in this Management Plan.

6.2.2 Objective: A strategy for the development and maintenance of trees in the reserves.

Methods:

6.2.2.A To develop and maintain the enduring presence of trees in the reserves by:

i. Ensuring succession whereby new trees are planted with a view to eventually replacing individual trees as they become problematic, diseased, or too large.

ii. Replacing any trees that are dead, diseased or unsafe with the same (if suitable) or similar tree type.

iii. Tending to the health of trees.

iv. Shaping trees so as to maintain sunlight access, views and safety.

Note: The above methods are to be implemented in association with Council arborists, who will undertake regular inspections and maintenance of village trees.

6.2.2.B To maintain the 'Tree Removal Request' system in accordance with Council's Tree and Vegetation Management Policy, (T201), as a means of managing trees at the interface of reserve/streetscape and private lots.

6.2.2.C To ensure timely succession planting and replacement of removed trees within reserves, in general accordance with the locations and types indicated on the Reserve Planting Concept Plans for that area.

6.2.2.D To plant and maintain trees, shrubs, and open areas within reserves as necessary to manage and reduce the risk of fire, as further outlined in Objective 6.2.4.

6.2.2.E Provide funding for periodic tree assessments to industry standards that provides for:

i. Regular annual assessment of reserves trees by Council arborists, including those requested for removal through the requests system.

ii. The establishment of a programme of tree maintenance, including the removal of deadwood, broken limbs, remedial pruning and shaping of reserve trees.

iii. The co-operation with Environment Canterbury, DOC and neighbouring landowners on management and removal of wilding and pest tree species.

6.2.2.F Provide funding for timely tree replacement to balance the wilding and pest tree removal programme, in general accordance with Section 7.0 – Implementation.

Explanation:

A large part of current reserve management involves responding to issues arising from existing tree plantings. Therefore a large component of this Plan is dedicated to ensuring there are appropriate mechanisms in place to establish a balanced and orderly system of long-term tree management in the village, regarding wilding conifer management and issues of tree species, size, location, condition and shading.

To regularise the removal of unsuitable trees from Council reserves and streetscapes, requests for removals are managed directly by Council and in accordance with Council's Tree and Vegetation Management Policy (T201). Section/Plan 7.1 – Key Notes outlines the current procedure for considering applications for tree removals on Council reserves (including road reserve).

Tree areas in any section of reserve will be suitable for the intention, reserve purpose and their character as envisaged in section 2.6.3 - Early Village development above, and described in Section 4.0 generally. Reserve Planting Concept Plans are included in Section/Plans 7.4 – 7.11), which in accordance with objectives and methods in this document, will be the basis on which all plantings, tree removals and maintenance within any reserve area will be undertaken.

To maintain a sufficient vegetation bulk throughout the village, a policy of succession planting shall be introduced whereby any tree felled is 'replaced' through the implementation of the Reserve Planting Concept Plans (see Section 7.0 – Implementation).

As a general rule, trees should only be planted in situations where they can grow to maturity without the need for substantial pruning.

All new or replacement plantings shall be approved indigenous or exotic species as listed in the recommended planting list (see Section 7.0 – Implementation). This list has been extensively reviewed to ensure it contains only those species appropriate to the Castle Hill area, and that are ecologically and/or historically appropriate to the reserves.

6.2.3 Objective: A strategy for the management of and ultimate removal of recognised wilding and pest trees within the village reserves.

Methods:

6.2.3.A To transition to non wilding tree species through a staged replacement programme, whilst ensuring sufficient tree mass is sustained to preserve tree shelter, character and amenity, in accordance with Objectives 6.1.1 and 6.2.1.

6.2.3.B Develop and implement an integrated 'Pest Removal Plan', in accordance with Environment Canterbury plans and policies, including the Canterbury Regional Pest Management Plan (CRPMP) 2018-2038, that specifies time frames for the staged removal of wilding and pest trees, as well as methods for controlling other plant and animal pests.

6.2.3.C Future plantings in village reserves and streetscapes will avoid known wilding-prone species, using only those species as listed in the recommended Plant Lists (see Section 7.0 – Implementation).

Explanation:

Environment Canterbury (Ecan) is the lead pest management agency in terms of pests that justify a regional response. The Canterbury Regional Pest Management Plan (CRPMP) is relevant to the village reserves because significant numbers of the village's prominent trees (namely Larch) are classified as pest species under the CRPMP.

As well as the CRPMP, the above methods are guided by public opinion (through feedback on the village preferences surveys).

The CRPMP declares the following as 'pests', as applicable to Castle Hill Village:

- Contorta Pine (Pinus contorta);
- European Larch (Larix decidua); and,
- Wilding conifers (any introduced conifer tree established by natural means).

Because these trees are located within an area which has previously had publicly funded control operations carried out, the CRPMP requires occupiers to destroy all wilding conifers (including as listed above) present on land they occupy prior to cone bearing under Plan Rule 6.3.1.

The CRPMP also identifies Douglas Fir and Ponderosa (amongst other conifers) as 'pest agents', effectively requiring their removal upon receipt of written direction under Rule 6.3.4.

Council accepts the need to manage the risk of wilding conifer spread, as per the CRPMP, within and beyond the village, while maintaining a sustainable tree environment throughout the village long-term. Over the past five years, Council has taken reasonable steps to carry out a wilding conifer removal programme, removing from village reserves the majority of European Larch and Douglas Fir as well as all known *Pinus contorta*. Ecan have also recently removed wilding conifers from the Thomas River embankment (north side) and assisted with the removal of pest trees on private lots, where this offer has been accepted by lot owners.

However, the current mix of exotic and indigenous trees is one of the unique features of the Village, providing an important range of amenity values for the Village, which many residents and visitors have come to identify with and appreciate. The immediate removal of all trees listed under the CRPMP as either pest species, wilding conifers or pest agents will fundamentally change village amenity and the 'rural alpine treed' character on which the village was based. This, combined with the current diversity of views within the community regarding trees mean that it is essential that any process for tree removals is managed in a strategic manner.

As a result, the intent of this Plan is to carefully manage the transition of trees within the village where wilding, pest and pest agent conifers are eventually replaced by trees which are more suitable, as required under the CRPMP.

In order to achieve CRPMP compliance within the Castle Hill Village reserves, Council shall, in consultation with ECan, develop an integrated "Pest Removal Plan" that provides more guidance for how Council will implement the replacement strategy under Objective 6.2.3. This Plan will provide a programme with specific time frames for the staged removal of wilding and pest trees, as well as to ensure the timely rehabilitation and replacement planting with suitable species. The "Pest Removal Plan" shall be an integrated plan that also provides guidance on the implementation of other objectives such as 6.4.3 to implement and maintain a programme to control plant and animal pests within village reserves and streetscapes.

Retention of Larch, Douglas Fir or Ponderosa longer term will need to be 'by agreement' with Ecan or will require an exemption to the CRPMP rules under section 78 of the Biosecurity Act 1993. An exemption process allows for specific details to be considered, with appropriate measures put in place to ensure that the overall goal of the wilding conifer programme is still met. Any agreement or exemption will be time-limited, with all wilding, pest, or pest agent conifers replaced with suitable species within that time frame.

It should be noted that reference is made to the exemption process provided for under the CRPMP only. Any grounds for seeking an agreement or exemption pursuant to the CRPMP is a separate process to this Plan.

See Appendix 1 for a list of 'pest' species relevant to the Village and Appendix 2 for a definition of 'wilding conifers' and 'pest agents', as defined under the CRPMP.

6.2.4 Objective: Public safety is safeguarded by maintaining reserve trees in a condition where risks are minimised.

Methods:

6.2.4.A All tree monitoring and maintenance will be formalised and co-ordinated by the Council through its reserves maintenance contract.

6.2.4.B The condition of all reserve trees will be assessed by Council Arborists on at least a three yearly basis and where necessary, works actioned to trim, shape, or remove and replaced, and other necessary maintenance carried out.

6.2.4.C The tree monitoring and maintenance programme shall note the establishment of any new plant pests or wilding conifers (as defined in

6.2.3 above and Appendix 1) within the village reserves and streetscapes and arrange for their removal.

6.2.4.D Avoid tree species prone to windfall, breakage from wind or snow, the aggravation of pollen allergies, have thorns or poisonous properties.

6.2.4.E When possible, select plant species with a lower flammability rating to reduce fire risk, particularly in the immediate vicinity of property, while also adhering to appropriate vegetation setbacks from dwellings, as specified by FENZ.

6.2.4.F Group or confine trees and associated underplanting into isolated 'islands' with mowable, clear, open space between that will, as far as possible, contain or reduce the spread of fire by providing a firebreak and separating more flammable landscapes.

6.2.4.G Avoid conditions that are conducive to fire by keeping open areas free of long grass, reducing undergrowth beneath trees and ensuring low hanging branches, known as 'fuel ladders', are limbed to prevent surface fires from spreading into tree canopies.

6.2.4.H Collaborate with FENZ to effectively manage potential fire sources, as well as to maintain fire awareness and preparedness among property owners and visitors.

Explanation:

Strong winds and heavy snow are frequent, which can result in trees falling or sustaining damage. Risk assessments should be based on expert technical inspections and periodic stability assessments undertaken by the Council arborist, and where appropriate, the removal of unstable reserves trees or their branches shall be undertaken. Residents are encouraged to contact the Council if they have any concerns regarding the safety of trees on public land.

The planting of species prone to wind-throw and damage is to be avoided. The recommended plant species list (Section 7) generally excludes species that are easily prone to wind or snow damage, or that are known to cause health issues such as pollen allergies.

Fire hazards are significant at any time of the year anywhere in the village, its reserves, village surrounds and state highway corridor. Likely fire sources mostly arise from human activity such as the disposal of ashes, vehicles, rubbish, cigarettes, and malicious intent. Fires can also start naturally by lightning strike.

All reserves, including treed areas, will be maintained to minimise the spread of any fire as part of the reserves maintenance contract. Cutting of long grass, clearing of undergrowth and dead branches, and ensuring low hanging branches are limbed to prevent ladder burning can significantly reduce the spread of fire by minimising fuel.

The allowance of mown open space and view shafts between grouped tree plantings also provide de facto firebreaks, which may help to contain or lessen the spread of fire, but cannot eliminate the risk.

Planting highly flammable species, notably eucalypt, conifer, and fine-leaved trees such as manuka, should be avoided in certain situations, particularly in the immediate vicinity of buildings, where 'green breaks' consisting of low flammability species and appropriate vegetation setbacks (as specified by FENZ) are required to provide a defensible space.

6.3 Reserve development and use

6.3.1 Objective: Informal recreation and leisure activities within the reserves are enabled through the provision of appropriate facilities, structures and services.

Methods:

6.3.1.A To maintain, enhance and develop facilities to support a range of informal and organised recreation opportunities within the reserves, in accordance with the provisions of this RMP generally.

6.3.1.B To ensure levels of service for existing recreational facilities are maintained.

6.3.1.C Facilities, structures and services are compatible with:

i. Village amenity.

ii. The purpose of the reserve and the reserves values.

iii. Relevant legislation, District Plan requirements, bylaws, and other Council plans, policies and procedures.

iv. Other objectives and methods in this Plan.

Explanation:

Informal activities continue to form the bulk of activities occurring within the reserves. The reserves are not intended for regular formal team sports, outdoor events and happenings, or for hire, except as they may fit in with the activities and atmosphere described in this Plan and do not result in damage to the reserves or nuisance to neighbours and other reserve users.

Recreational activities within the reserves are to an extent dependent on preserving and maintaining the quality of the park's natural environment.

There may be scope for further development of the village reserves to provide enhanced facilities that will improve the functioning of a reserve and increase the enjoyment for reserve users, provided that any development is in keeping with the purpose of the reserve and has no impact on adjoining neighbours or the reserve itself.

6.3.2 Objective: Developments planned for the reserves incorporate village recreation and leisure needs, in addition to those of the wider district and region.

Methods:

6.3.2.A To provide reserve developments that are appropriate for village patterns and needs while ensuring district and regional needs are also provided for.

Explanation:
The Village reserves provide residents and visitors additional space to come together, be active and to explore and connect with nature.

Any proposed development of a reserve shall also consider the recreation and leisure needs of the wider population, for example short stay day trippers or users of the numerous walking and mountain bike trails beyond the village, while ensuring development and associated use of the reserves remains appropriate to the reserves purpose and without significant adverse effects on other reserve users, the reserve environment, or its neighbours.

6.3.3 Objective: Appropriate scale, design, siting and maintenance of reserves services, structures and facilities are provided for village activities.

Methods:

6.3.3.A Council shall consider all development proposals and monitor all activities to ensure they are appropriate to neighbours, the reserves objectives, and maintaining a natural setting.

6.3.3.B In evaluating any proposal for the development of any part of a reserve, Council will have regard to:

i. Any cultural, historical, archaeological or spiritual features of the reserve area.

ii. The scale of the proposed facilities in terms of the reserve use, foreseeable future use, or the foreseeable demand for the particular activity.

iii. The materials, siting, design and colour of the proposed structure.

iv. The protection of existing recreation and reserve values.

6.3.3.C Where required within the reserves, all built structures and facilities will conform to approved designs informed by those originally intended for the Village.

6.3.3.D Where structures and facilities may be required to conform to statutory or other standards, their appearance will be adapted so they also conform to a design commensurate with the Village environment.

6.3.3.E Structures and facilities are to be robustly designed and constructed so as to withstand the harsh environmental conditions experienced at Castle Hill Village.

6.3.3.F Maintain and develop signage according to the style developed for the village.

6.3.3.G Except where it already exists, there will be no additional permanent lighting within the reserves, although temporary lighting may be used for temporary activities, subject to Council approval.

6.3.3.H No fences shall be erected in the reserves except as necessary for safety.

6.3.3.I Memorials shall be located in the proposed Memorial Reserve, or on seating in other areas, with the approval of the CHCA and Council.

6.3.3.J Where feasible, encourage the use of natural infrastructure as opposed to visible engineering infrastructure, to manage stormwater runoff and drainage within the Village.

6.3.3.K Where structures and facilities approach the end of their lifespan or otherwise require replacing, they will be replaced by new items of similar design.

Explanation:

The scale, design, siting and maintenance of reserve services, structures and facilities are informed by that originally envisaged for the Village. These mostly comprise natural materials and finishes that reflect the predominantly natural character of the Castle Hill Village setting. Such an approach ensures the special character and amenity of the Village is maintained.

All new or replaced reserve signage shall generally be in accordance with the existing signage style developed for the village. It is accepted that regulatory requirements for signage also must be met but should be done so within the particular environmental standards adopted in the village.

Lighting is discouraged within reserves to preserve the vividness of the night sky. The lighting of the village reserves is unlikely to improve safety, and at night, pedestrian access around the village is encouraged via the street network, which is more easily accessible and well lit, providing a safer alternative. Any existing reserve lighting should be maintained to ensure that luminaires comply with the District Plan and 'Dark Sky' lighting standards to reduce light pollution, including shielding and directing light downward to reduce skyward glare or spill.

In keeping with the open character of the village concept, the construction of fences or planting of hedges within or bordering the village reserves shall be discouraged. An exception, for example, would be the fence around the tennis court, or fences which are necessary for stock control or highway safety. Where barriers may be required for privacy or the channelling of circulation, these should be established as informal drifts of shrubs and neither unduly linear or extensive. Where vehicle bollards may be required, these shall be in keeping with the village design style and be unobtrusively located.

Memorials are generally not to be established within reserves, unless there is an area specifically designated for that purpose by Council, in accordance with Council Policy R305 – 'Memorial Seats in Reserves and Public Spaces'. Council may consider utility objects such as benches elsewhere, on a case-by-case basis. These must conform to the styles and standards required in the reserves.

A system of naturalised drainage has been established throughout the streets and reserves of the village. As far as possible, this avoids hard surfacing, roadside kerbs and channels, and visible engineering infrastructure, while managing runoff through a combined system of naturally-shaped open swales in such ways that the open rural character is maintained. These natural systems should be maintained and where appropriate extended in future Village development.

6.3.4 Objective: Reserves are accessible and enjoyable for all users.

Methods:

6.3.4.A To ensure reserves are accessible to all users including the disabled.

6.3.4.B That improvements are undertaken to enhance accessibility for all.

6.3.4.C To provide for and maintain an appropriate and safe network of formed pathways within reserves, to enhance access to reserve areas, provide recreational opportunities and greater connectivity across the Village.

6.3.4.D Provide for and maintain linkages to walking and mountain bike trails that are located beyond the village.

6.3.4.E Ensure all reserve access is safe and free from hazards for all users.

6.3.4.F Where appropriate, to provide directional signage to aid orientation throughout and beyond the Village.

6.3.4.G Regularly undertake an audit of all accessways ensuring they are sufficient and well maintained.

Explanation:

Appropriate and safe pedestrian access and circulation are critical to the successful use and management of the reserves, as well as village connectivity. The reserves will continue to provide a range of undifferentiated walking and cycling routes within the Village, including an all-weather walking and family cycling circuit enabling people to move freely and safely between all reserves and throughout the village generally. Accessways will be safe and well maintained in accordance with their function and status. Generally pathways will not be lit, except where it is necessary for safety at, for example, road crossings and in the vicinity of public facilities such as the Village Hall.

Due to their natural character, the reserves are unlikely to provide fully for special access needs such as wheelchairs. However, it is intended that such users be provided for through all reasonable means and as provided for under the Human Rights Act 1993, the Building Act 1991, and New Zealand Standard NZS 4121:2001 Design for Access and Mobility.

There are numerous walking and mountain bike tracks beyond the village, notably those leading to the Thomas Stream, Thomas Bush, Long Spur and the Hogs Back Track. These provide for a range of recreational opportunities for the Village and appropriate access and connections to these shall be provided for.

6.3.5 Objective: Permit the installation of public art within village reserves, where appropriate.

Methods:

6.3.5.A Public art may only be installed within a reserve with the formal approval of the Council and in accordance with the Council Policy Manual (C214 – Art in Public Places Policy), the Selwyn District Parks Management Plan – General Policy, the District Plan, Procurement Policy and the Council's Engineering Code of Practice.

Explanation:

Public art is one of the more visible and accessible forms of art, and some forms of public art, such as permanent installations like paintings, sculptures or carving, are often best appreciated when located within a reserve. However, public art can be controversial, and if placed in the wrong location, it can conflict with the reserve's primary purpose. Council will consider the suitability of the proposed artwork, whether it is consistent with the scale and values of the reserve, and any potential to increase the cost of reserve maintenance and operational activities or detract from reserve use when making its decision.

6.3.6 Objective: Play equipment catering for a range of ages is provided.

Methods:

6.3.6.A All existing and new playground equipment shall comply with NZS 5828:2015, and ongoing inspections will be undertaken by Council to ensure any required maintenance is completed to achieve ongoing compliance.

6.3.6.B Where appropriate, add to and enhance play equipment. Play equipment will be robust so as to withstand the harsh conditions experienced at Castle Hill Village, such as heavy snow and high winds.

6.3.6.C Maintain plantings around playground areas to retain openness and clear visibility while also providing shade and shelter.

6.3.6.D Play equipment will be kept free of hazards such as tree litter and rubbish generally.

Explanation:

While the Council will provide and maintain play equipment it is obligated to ensure that it is accessible, safe and useable. To achieve this, all play equipment will be developed and maintained in accordance with the Councils Policy Manual, P204, Play Policy and New Zealand's playground standards (currently NZS5828: 2015). Additionally, CPTED principles will also apply.

The village reserves in general provide important open space areas for children, teenagers and families to play, whether that is through using natural features, or through the provision of formal play equipment and bike circuits. The provision of play equipment will be subject to other Council plans and strategies such as the Play, Active Recreation and Sport Strategy.

6.3.7 Objective: Crime Prevention through Environmental Design (CPTED) principles are applied within the reserves.

Methods:

6.3.7.A Council shall continue monitoring all usage, maintenance and developments for CPTED compliance.

6.3.7.B All future reserve development shall comply with CPTED principles.

Explanation:

The Selwyn District Council has endorsed the principles and guidelines of CPTED (Crime Prevention through Environmental Design). The Castle Hill reserves are generally, but not entirely, open and 'owned' by the community, and have a high feeling of security for users. Nevertheless, the potential for crime exists and it is a requirement that CPTED principles and Council Policy (C602 – 'Crime Prevention through Environmental Design') are adhered to for safety of reserve users.

6.4 Management and partnerships

6.4.1 Objective: Efficient and appropriate management and administration of Castle Hill Village reserves for the health and well-being of all residents of the village and users of the reserves, as a primary consideration.

Methods:

6.4.1.A Village reserves shall continue to be managed by the Council under the provisions of the Reserves Act, for the public benefits described in that Act and throughout this document.

6.4.1.B Capital and development works and associated expenditure programmes identified in this Plan shall be incorporated into Council Activity Management Plans where appropriate and submitted for consideration as part of the Annual Plan and Long-Term Plan (LTP) processes.

Explanation:

Council is responsible for managing and maintaining the village reserves in a cost-effective, socially responsible and environmentally sound manner, according to their classifications under the Reserves Act 1977. The management of the reserves must take into account the objectives and policies of this Plan and agreed levels of service.

Objective 6.4.1 above is written so as to also acknowledge the health and well-being of village residents, as well as reserve users, who may be impacted by management actions relating to a reserve with which their property adjoins, for example through management decisions relating to reserve trees and the effects of shading or maintaining vegetation setbacks.

The primary mechanism by which the provisions of this management plan will be implemented is through the Council's Long Term Plan and more specifically the Community Facilities Activity Management Plan. This specifies the levels of service, works and actions which will be undertaken in each financial year.

6.4.2 Objective: Council, Castle Hill Village Community Association and wider community collaboration.

Methods:

6.4.2.A Engage with the CHCA and, where necessary, undertake community consultation processes, to ensure that community views are well supported and planned expenditure will meet the needs of the community while achieving Plan goals.

6.4.2.B Work collaboratively with Environment Canterbury, The Department of Conservation, Ngāi Tahu and other key stakeholders (see Appendix 4 for a list of potential stakeholders).

6.4.2.C Provide opportunities for people to be engaged in and connected with the village reserves through volunteer involvement.

Explanation:

This plan recognises that maintaining positive relationships is essential to continuing to successfully manage and improve the village reserves.

This includes the implementation of the Reserve Planting Concept Plans, from which detailed planting plans will be developed for any new plantings within reserves. Council will ensure adequate consultation with nearby residents who are likely to be impacted or have a legitimate interest in the planting, in accordance with Council Policy T201 - Vegetation and Tree Management Policy.

Council will coordinate and facilitate opportunities for community volunteers to assist with the care and enhancement of the village reserves, such as helping with new planting and weeding, mulching, and watering, as well as pest animal monitoring and control. The Council understands that this is only possible to the extent that volunteer resources allow.

6.4.3 Objective: Reserves are appropriately maintained.

Methods:

6.4.3.A All reserves and access to them is to be maintained by the Council and will involve:

i. Vegetation management including lawn mowing.

ii. Management of weed infestation, particularly wilding conifers and broom.

iii. The repair and upkeep of facilities and structures.

iv. The upkeep of access.

v. Minimisation of hazards and provision of safety.

vi. Rubbish removal.

vii. Control of animal pests such as rabbits and wasps.

6.4.3.B The Council will monitor the need for maintenance, but also welcomes notice from the CHCA and residents of matters requiring attention.

6.4.3.C The Council will implement improvements as needed to increase the efficiency of reserve maintenance going forwards.

Explanation:

Excluding private land and the state highway, the Council generally maintains village open space areas via an external Contractor under its Reserves Maintenance Contract, irrespective of formal reserve status. The public are however, encouraged to bring to the Council's attention the need for additional or urgent maintenance, which will be attended to accordingly. Residents are also encouraged to maintain their own properties as they also contribute to the special character of the Village and its high amenity.

There will be occasions where it is necessary to improve or enhance the reserves, their facilities and structures. Both maintenance and enhancement will ensure that enjoyment of the Reserves is enduring while acknowledging the natural scenic character of the Village and its rural alpine setting.

Methods:

6.4.3.D In consultation with Environment Canterbury plans and policies, including the Canterbury Regional Pest Management Plan (CRPMP) 2018-2038, to implement and maintain a programme to control plant and animal pests within village reserves and streets, including:

i. Immediately removing all Pinus contorta trees from reserves and streets within the village.

ii. Monitoring and removing regrowth of any wilding conifer seedlings (as defined under the CRPMP) within village reserves and streets.

iii. Maintaining contact with landowners neighbouring the village, to monitor spread of wilding conifer seedlings and to cooperate with that owner in their removal.

iv. Identifying and removing broom and gorse from village reserves and streets.

v. Supporting local pest management actions that may not be required by the CRPMP but are important for protecting local values, including the provision and servicing of bait stations and trapping for mammalian and insect pests, such as rabbits, possums, mustelids and wasps.

Explanation:

Further direction as to the implementation of the CRPMP Rules specifically relating to wilding pines within the village reserves is given above under s.6.2 - Tree management. See also Method 6.2.3.B and recommendation for the development and implementation of an integrated "Pest Removal Plan".

A list of pest species relevant to Castle Hill Village, as defined under the CRPMP, is provided in Appendix 1.

Gorse and broom spread within the village reserves and streetscapes is actively managed via Councils Reserves Maintenance Contract.

6.4.4 Objective: Manage the use of village reserves for organised events so that it is consistent with the reserve's values and existing use.

Methods:

6.4.4.A To encourage and permit organised, short term village events on reserves such as temporary carnivals and sports days subject to CHCA and Council discretion, where:

i. Activities are conducted within the spirit of this Management Plan, according to a formal use agreement for the event, including provisions for ablutions, health and safety, traffic management, car parking, noise, refuse and reinstatement of damage.

ii. The adverse effects on other reserve users, the reserve and reserve neighbours of such activities can be avoided, mitigated or remedied.

iii. There is full compliance with all use agreement conditions, and Statutory and policy obligations, i.e. Reserves Act 1977, Resource Management Act 1991 and its instruments (including the District Plan and obtaining a resource consent if required), the Building Act 2004 and any other relevant statutory instruments.

Explanation:

One-Off Community Events organised or sponsored by the CHCA, such as Sports Day, Mid-Winter Dinner, Art Exhibits, working bee, and other future as yet unforeseen community events, are intended as on-going uses within the reserves, and will be carried out within the provisions of this Plan. It is expected the Village Hall may be used for private indoor activities from time to time, subject to the same requirements.

Methods:

6.4.4.B Temporary or one-off private events organised by village residents or others, such as outdoor weddings or reunions, shall be by prior formal agreement of the CHCA and Council.

6.4.4.C Organised events on village reserves will be managed in accordance with the Commercial Activities and Events in Public Places Policy.

6.4.4.D The Council has the right to close a reserve for events or to decline event applications for use, where conditions warrant. Where part or all of a reserve is to be closed to the public for event use, notification of this will be made prior to the activity causing the closure.

6.4.4.E Reserves are required to be left in the condition on which it was found prior to the event to the satisfaction of the Council.

6.4.4.F The Council reserves the right to charge rental fees and a bond at its discretion, in accordance with Council's Reserves Charging Policy.

Explanation:

Council enables parks and reserves to be booked for a range of activities. Events and bookings can increase reserve utilisation, enhance enjoyment and contribute to the diversity and vibrancy of the community. However, events and bookings with large numbers of people and activities can also adversely affect the reserve and its neighbours. The Council therefore needs to retain full discretion over the number, nature and organisation of any organised event on Council's reserves or facilities.

Use of reserves for an organised event such as, weddings and food festivals require prior approval of the Council and should be in accordance with the provisions and principles of this Management Plan, the Commercial Activities and Events in Public Places Policy, Reserves Charging Policy and Public Places Bylaw.

6.4.5 Objective: Prevent impact on reserve users, as well as to prevent damage to reserve amenity, biodiversity, historic and cultural heritage, by restricting some activities within reserves.

Methods:

6.4.5.A All reserve activities will be managed in a manner which respects other reserve users, neighbours and the public, public and private property, trees, the environment and the natural scenic character of the village.

6.4.5.B Manage restricted activities within village reserves, in accordance with Section 94 of the Reserves Act and through Council Bylaws.

6.4.5.C The exercising of dogs shall be permitted, in accordance with the Dog Control Bylaw 2012, and the particular conditions of Castle Hill Village.

6.4.5.D Prohibit fires within village reserves unless prior approval from Council has been given, in accordance with the Parks and Reserves Bylaw and Fire and Emergency New Zealand (FENZ) restrictions and guidelines.

Explanation:

Some activities are not permitted on village reserves due to their impact on the amenity of the reserve, biodiversity, historic and cultural heritage or other reserve users. These activities are restricted through either the Reserves Act Section 94 or Council Bylaws. Some activities that are not permitted can be approved if they follow the relevant guidelines to seek approval as outlined in the relevant Council Bylaws. Examples include the removal or replanting of vegetation on reserves without the approval of Council.

While the management of dogs in the unfenced village surroundings poses issues, and despite occasional problems, the reserves generally offer a happy environment for informal activities of residents including their dogs. This is provided so long as they are attended by their owner (as defined in the bylaw), and are not a nuisance to other reserves users or neighbours. Problems can arise from dogs brought by weekend visitors who may be unprepared for, or uncooperative with, the open conditions of the Castle Hill Village reserves. It is expected that owners who rent or loan their houses will clearly identify these dog protocols to tenants when making accommodation arrangements.

Methods:

6.4.5.E Motorised vehicles including motor bikes, quad bikes, motorised snow vehicles and electric vehicles shall be excluded from the reserves except for bona fide service and emergency vehicles.

6.4.5.F Motorised toys and remotely operated craft such as drones are permitted in reserves so long as they are operated according to all laws, including aviation laws, and without nuisance or damage to reserves users or neighbours. The operation of drones on Council Reserves is controlled under the Parks and Reserves Bylaw.

Explanation:

Motor vehicles, motorbikes, motorised conveyances and vehicles such as go-carts or quad bikes are in general not permitted within the reserves except for bona fide service vehicles authorised by Council. One-off deliveries of heavy loads or building materials may be granted permission by Council, so long as these do not result in any form of damage to the reserve.

6.4.6 Objective: Manage any exclusive occupation of facilities or areas in village reserves for approved uses by the granting of occupation agreements.

Methods:

6.4.6.A Ensure that all future occupation agreements meet the requirements of the Reserves Act (1977), and are in accordance with this Plan and Council's Leasing and Licencing policies.

6.4.6.B Occupation agreements will include conditions to ensure the recreational, cultural and aesthetic values of the reserves, their character, and the provisions of this Plan, are recognised, protected and maintained.

Explanation:

While there is currently no foreseeable occupation or use of a reserve at Castle Hill that is permanent, exclusive or commercial in nature, in future, should it be necessary to recognise any such use of a reserve, including reserve buildings, then this will be subject to the granting of the appropriate occupation agreement. All such agreements shall be in accordance with the Reserves Act (1977) and Council's leasing and licencing policies.

6.4.7 Objective: The status and boundaries of reserves are recognised.

Methods:

6.4.7.A Ensure the status of reserve land is appropriate for its intended purpose and appropriately achieves the objectives and methods of this management plan.

6.4.7.B Ensure that land-use activities and development within the reserves are appropriate for its reserve status.

6.4.7.C Work with adjacent property owners to ensure the location of reserve boundaries are known.

Explanation:

The reserves within Castle Hill Village consist of the following classifications:

- Recreation Reserves.
- Local Purpose (Access) Reserves.
- Local Purpose (Stormwater) Reserves.
- Local Purpose (Utility) Reserves (Link Strips).

Although not subject to this Management Plan, areas that are not part of the formal reserves but continuous with them, are also of importance to the character, public amenities, recreation and management of the village.

Road reserve areas are of particular importance in contributing to the natural character of Castle Hill Village in that they contain significantly large and continuous areas of land formed with naturalised verges, uninterrupted open space, trees significant to village character, swale drainage systems, underground reticulation, signage and lighting.

It is proposed these non-reserve areas be maintained in accord with the precepts of village character stated in this Management Plan, and that this be achieved by departmental liaison within the Council.

Because the boundaries between reserves and other land areas of the village are not always obvious (as property owners have been actively discouraged from erecting fencing or planting hedges along boundaries), this can lead to other issues such as the unintentional encroachment of private assets onto a reserve

(see also Objective 6.4.9 – Encroachments, below), unless the location of property boundaries are made known.

6.4.8 Objective: Actively encourage adjoining landowners to be responsive to reserve issues.

Methods:

6.4.8.A Liaise with neighbouring landowners with a view to co-operating on matters of mutual interest or benefit including:

i. the control of animal and plant pests.

ii. public access.

iii. maintenance of amenity values, landscape and vistas.

iv. security issues/fences

6.4.8.B Manage the effects of reserve management decisions and reserve use to ensure that the amenity of adjoining land owners is reasonably protected.

Explanation:

Council will work actively with owners of land adjoining reserve land to ensure the efficient and effective management of the reserves.

6.4.9 Objective: To keep reserves free from new encroachments and progressively seek to remove encroachments where they occur.

Methods:

6.4.9.A Prohibit encroachment of reserve land.

6.4.9.B Require encroachments to be removed by the encroaching property owner including reinstatement of the reserve to the satisfaction of the Council.

Explanation:

An encroachment is the use or development of a reserve or part of a reserve for private purposes that has not been authorised by the Council in writing. This includes, but is not limited to, fences, structures, earthworks, gardens, plantings, access ways, retaining walls, dumping of fill for reclamation, and other usage that gives the appearance of private ownership or restricts public access.

In most cases encroachment is unintentional – when a property owner is either unaware of or has wrong information about legal boundaries (see also 6.4.7.C above regarding ensuring the location of reserve boundaries are known).

Where the encroached land is reserve land, the Council is unable to lease or otherwise formalise the occupation unless the occupation is consistent with the purposes of the Reserves Act 1977. Council must therefore enforce the removal of encroachments.

6.4.10 Objectives:

To keep this Plan under continuous review in accordance with the Reserves Act 1977; and,

To review this Management Plan regularly in order to conserve, maintain and enhance the values and character of the village reserves.

Methods:

6.4.10.A Review this Plan every ten years. In the interim, Council may determine to review part of, or the entire plan, in response to:

i. information from monitoring which indicates the need for a review or change.

ii. the identification of new management issues or problems for which policy is required.

iii. changes in national policy including new or amended laws, regulations or other actions.

iv. changes to council policy.

6.4.10.B Publicly notify any review or change to this management plan as detailed in Sections 41(5)(a) 41(6)(a) and 119(1)(c) of the Reserves Act 1977.

Explanation:

All parts of this Reserve Management Plan will be kept under a continuous review to be able to adapt to changing circumstances or to adapt in accordance with increased knowledge. Notwithstanding this, a full review will be undertaken ten years from the final date of approval by Council of this Plan.

7.0 Implementation

DELIVERING THE PLAN VISION:

The following concept plans establish a planting strategy for the future maintenance, enhancement and development of reserve areas within Castle Hill Village. In addition to the objectives and implementation methods outlined in the Plan, they illustrate spatially how the overall vision for the reserves is to be achieved and maintained.

The development of the Planting Concept Plans has been guided by the wishes of the local community, as expressed through preference surveys, while generally maintaining the intentions of the original village concept where appropriate.

PLAN OBJECTIVES AND DESIGN PRINCIPLES:

The Planting Concept Plans presented herein are intended to provide greater certainty for future management and development of reserve areas by guiding the use of tree mass (extent, location and type of proposed tree planting), while balancing other desired values, such as recreation access, vistas and sunlight. The following design principles reflect the Plan's objectives (as outlined in Chapter 6) and underpin the Planting Concept Plans:

- To retain the village's original vision and unique character, with housing clusters interspersed with open space that is naturally defined by trees, shrub drifts, and grasslands.
- To implement design parameters that take into account requirements for recreation access, vistas, wind shelter, shading, fire prevention and weed/pest control.
- To maintain and enhance the village's distinct aesthetic by incorporating a greater proportion of native trees and shrubs with appropriate numbers of existing and new exotic trees.
- To ensure appropriate tree and shrub species selection, following the principle of 'right location, right tree, right function.

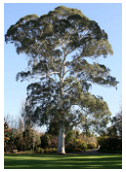
NOTES:

1. All plans to be read in conjunction with the Castle Hill Village Reserves Management Plan.
2. These are planting concept plans only - all planting to be confirmed via detailed planting plans, prior to each 'stage' of planting.
3. All final plant/tree locations to be confirmed on site.
4. The implementation of this plan will occur progressively, considering priorities, support, resourcing & and funding.

MAIN TREE SPECIES WITHIN THE VILLAGE (EXISTING):

***Larix sp.* European Larch** *Wilding sp*

Medium to large, deciduous, distinctive, upright conifer with bright-green needles which change to bronze/yellow in autumn. Very cold hardy, native to mountains of central Europe. High spreading vigour.



***Eucalyptus sp.* Gum Tree**

Evergreen. The two areas of existing reserve Eucalyptus plantings (south east reserve near the Thomas river) are a very rare (for NZ) alpine variety from Tasmania, and because of this will only be removed when age appropriate.

***Pseudotsuga sp.* Douglas Fir** *Wilding sp*

Large, hardy, evergreen conifer species in the pine family, Pinaceae. Also known as Oregon pine and Columbian pine. Widely planted for shelter and timber production. Native to western North America, preferring cool, dry climates. Extreme spreading vigour.

***Sequoia sp.* Redwood / Giant Wellingtonia**

Very large, evergreen, narrow conifer suitable for ornamental or timber production. Hardy, prefering cool, dry climates. Large size considered unsuitable for future reserve plantings and existing specimens will be removed when age appropriate.

Wilding sp

***Pinus sp.* Pinus Ponderosa**

Large, evergreen conifer species. Commonly known as the ponderosa pine or western yellow-pine. Native to mountainous regions of western North America and tolerate of a variety of harsh conditions including dry, stony soils. High/Medium spreading vigour.

***Betula sp.* Silver Birch**

Medium-sized, deciduous tree, with bright yellow foliage in autumn. Hardy with pendulous growth form. Native to Europe and Asia. To be removed from reserve plantings when age approporate due to weed and allergenic tendencies.

***Fuscospora sp.* Mountain Beech**

Medium-sized, native, evergreen tree. Pioneer species, that tolerates hard, infertile, poorly-drained sites in alpine areas. Recommended as the predominant tree species within the village, as the only taller, native species, naturally occuring in the area.

RECOMMENDED TREE SPECIES:

SIGNATURE TREES (20 - 30m)

Taller, slow growing heritage trees, potentially reaching 20 - 30 m in height, creating scale above the village skyline in selected areas where they will not cause nuisance. Additioinally, they signify important locales contributing to the special character of the village. The recommended tree list includes predominantly conifer species that are well suited, along with suggestions for suitable deciduous species for seasonal colour and variety.

It should be noted that harsh environmental factors at Castle Hill (e.g., climate exposure and soil fertility) can affect tree growth rates, which means that in some situations, trees will grow slowly or may not reach their specified maximum height.

English beech	*Fagus sylvatica*
Himalayan cedar	*Cedrus deodara*
Lobel Elm	*Ulmus Lobel*
Serbian spruce	*Picea omorika*
Spanish fir	*Abies pinsapo*
Weymouth pine	*Pinus strobus*
White spruce	*Picea glauca*

SMALL TO MEDIUM TREES (5 - 15m)

Trees of 5 - 15 m tall, contributing human scale in the reserves and walkways while providing visual variety and helping to soften built form. Smaller trees will be used to achieve a system of recession plains where nessecary (as shown in the typical cross sections) and to define view corridors or 'wedge' arrangement of plantings.

Mountain beech*	*Fuscospora cliffortioides* (15m)
Manuka	*Leptospermum scoparium*
Weeping mapou	*Myrsine divaricate*
Mountain toatoa	*Phyllocladus asplenifolius var alpinus*
Lancewood	*Pseudopanax crassifolius*
Fierce lancewood	*Pseudopanax ferox*
Japanese umbrella pine	*Sciadopitys verticicillata*
Kowhai	*Sophora microphylla*

** Indicates predominant species to be used throughout village plantings.*

ALPINE (LOW) GRASSLAND MIX 0 - 1.5m:

Grasses and shrubs below 1.5 m high creating low barriers while maintaining general visual openness particularly defining public & private spaces.

Austroderia richardii	Toetoe
Astelia nervosa	Mountain astelia
Carmichaelia kirkii	Climbing / Kirk's broom
Chionochloa conspicua	Snow grass
Chionochloa flavescens	Broad-leaved snow tussock
Chionochloa macra	Slim snow tussock
Chionochloa rubra	Red tussock
Festuca novae-zelandiae	Hard Tussock
Hebe sub alpina	Hebe
Hebe salicifolia	
Hebe traversii	
Hebe odora	
Hebe cupressoides	
Hebe pimeleoides	
Melicytus alpinus	Porcupine shrub
Muehlenbeckia axillaris	Creeping pohuehue
Muehlenbeckia complexa	Small leaf pohuehue
Phormium cookianum	Mountain flax
Poa colensi	Blue tussock
Acaena glabra	Biddibiddi
Celmisia semicordata	Mountain daisy
Ourisia caespitosa	Creeping mountain foxglove
Podocarpus nivalis	Snow Totara

ALPINE (HIGH) SHRUBLAND MIX 1.5 - 2.5m:

Shrubs & small trees 1.5 - 2.5 m tall at edges of tree areas & where visual screening, visual amenity or low height shelter is required.

Aristotelia fruiticosa	Mountain wineberry
Brachyglottis cassinioides	
Carmichaelia australis	Native broom
Coprosma ciliata	Coprosma
Coprosma crassifolia	Thick leaved coprosma
Coprosma intertexta	Tangled coprosma
Coprosma parviflora	Small flowered coprosma
Coprosma propinqua	Mingimingi
Coprosma rhamnoides	Mingimingi
Coprosma rotundifolia	Round-Leaved coprosma
Coprosma rugosa	Mountain coprosma
Corokia cotoneaster	Wire netting bush
Discaria toumatou	Matagouri
Halocarpus bidwillii	Mountain pine
Olearia avicenniifolia	Mountain akeake
Olearia arborescens	Tree Daisy
Olearia ilicifolia	Hakeke
Olearia nummulariifolia	Coin-leaved Tree Daisy
Ozothamnus leptophyllus	Tauhinu
Pittosporum divaricatum	
Pseudopanax colensoi	Mountain five finger
Sophora prostrata	Dwarf kowhai

REQUESTS FOR TREE AND VEGETATION PLANTING, MAINTENANCE OR REMOVAL

Requests for the planting, maintenance or removal of trees and vegetation on Council land is managed via Council's Tree and Vegetation Management Policy (T201). The policy provides a consistent and equitable framework to guide the ongoing protection and management of trees and vegetation on land owned and/or administered by Council.

If a tree within a reserve or street is causing problems for a neighbour, the current procedure for requesting its removal is as follows:

1. A person wanting trees removed from Council land submits a request to the Council in writing.
2. The Council considers the request by undertaking assessment via qualified personnel, including an arborist and landscape assessment in accordance with Council Policy, as well as to undertake consultation with affected parties.
3. Council undertakes the removal of approved trees.
4. Generally, any felled wood, if not required to offset elling costs by Council, is then initially offered as firewood for the village hall.
5. Council will administer a suitable replacement programme for any removed trees, in accordance with this Plan.

Historically within the village, tree removal requests have mostly concerned shading of private property and as described above, the general approach of this Plan is to promote smaller clumps or wedges' of trees with view corridors between, rather than the clear cutting of whole stands. In some cases, responses have been to prune side or lower branches. Topping of trees is not accepted.

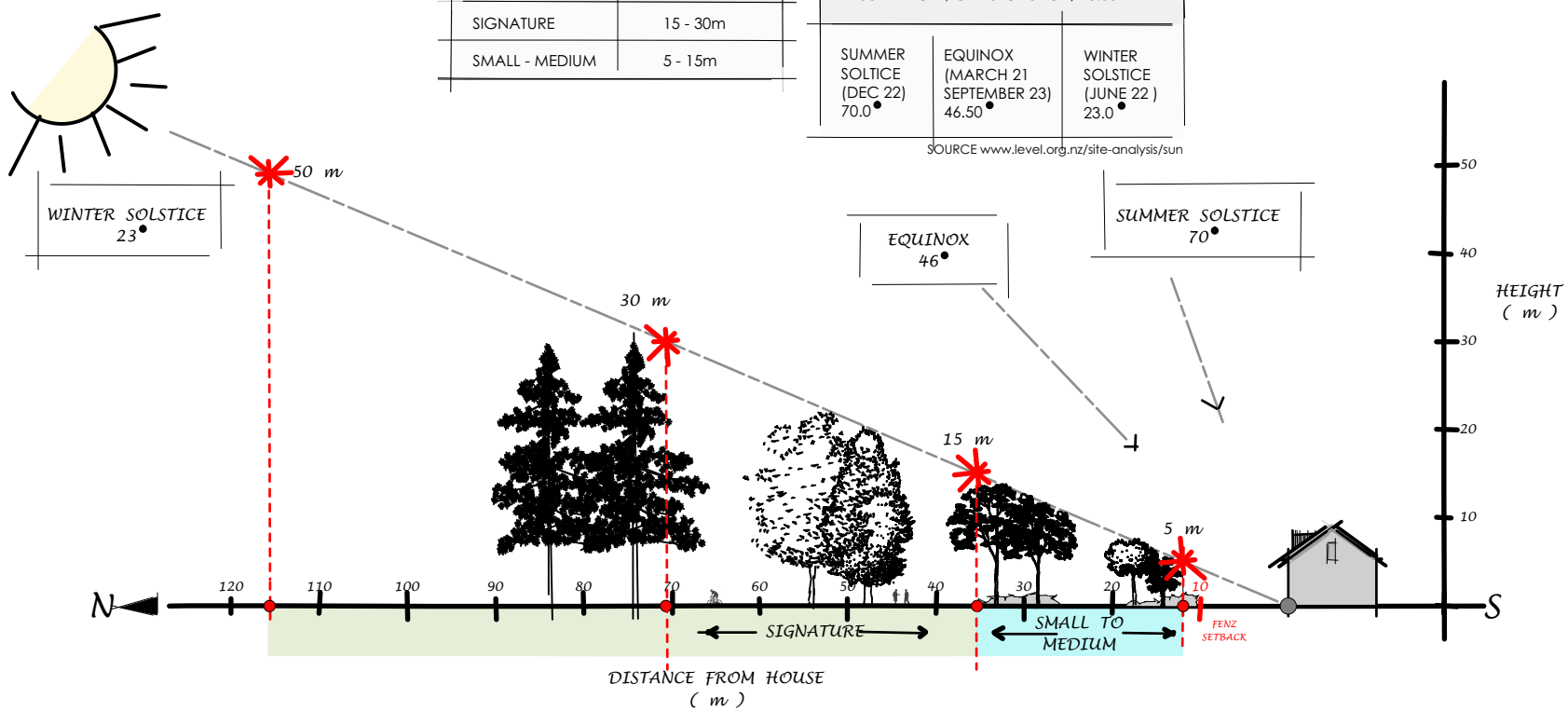
Council will respond to incidences of unauthorised or wilful damage to trees and vegetation located on Council land, and will take appropriate action to deter future offences, including to seek reparation where this is warranted. Any unauthorised work may be considered to constitute wilful damage.

New plantings are not permitted on Council owned and/or administered land without prior approval.

TREE HEIGHTS	
SIGNATURE	15 - 30m
SMALL - MEDIUM	5 - 15m

SUN ANGLE, CHRISTCHURCH, 43.35 172E		
SUMMER SOLTICE (DEC 22) 70.0°	EQUINOX (MARCH 21 SEPTEMBER 23) 46.50°	WINTER SOLSTICE (JUNE 22) 23.0°

SOURCE www.level.org.nz/site-analysis/sun



TREE SETBACK SECTION
NOT TO SCALE

PROPOSED SYSTEM OF DEFINED TREE RECESSION PLANES:

The schematics above are to be used as a guide only for proposed tree setbacks. This plan proposes a system of recession planes and tree categories (as described above) to maintain reasonable winter sun to all dwellings.

Single or small groups of trees may be closer to a dwelling if open ground exists on either side to admit light, while also taking into consideration a minimum recommended (FENZ) planting setback of 10 meters from dwellings, for fire prevention.

Similarly, deciduous trees may be closer in cases where summer shade may be beneficial, but not in large stands.

Reserve trees can cast undesirable shade on neighboring houses when growing in their northern arc. Shading is a function of:

- tree type
- tree height
- tree number & and arrangement
- distance of trees from built form
- direction of trees relative to a house
- slope
- seasons

A system of defined recession planes takes the northern ground level wall of a house as its origin point. It does not guarantee sun to the surrounding land and that shade will not fall on a house for some periods of the day. However, it does seek to rule out blanket, all-day shade on a house.

The plane is measured by tree height due north of a house.

For houses with reserve land on their east or west sides, a more generalised recession plan is established to ensure some morning or afternoon light, but not necessarily sun light at those lower sun angles.

As noted, harsh environmental factors at Castle Hill can influence tree growth rates, which means that in some situations, trees will grow slowly or may not reach their specified maximum height.

PROPOSED WEDGE AND CORRIDOR SYSTEM

This schematic is to be used as a guide only, for proposed tree layout and arrangement.

This plan proposes a system of an open 'wedge and corridor' system whereby, throughout the day, sunlight will be able to travel through a series of 'openings' in between grouped plantings. These 'windows' or gaps between plantings will also allow for long & and short vistas, where appropriate, as well as providing firebreaks to reduce the speed and spread of wildfire.

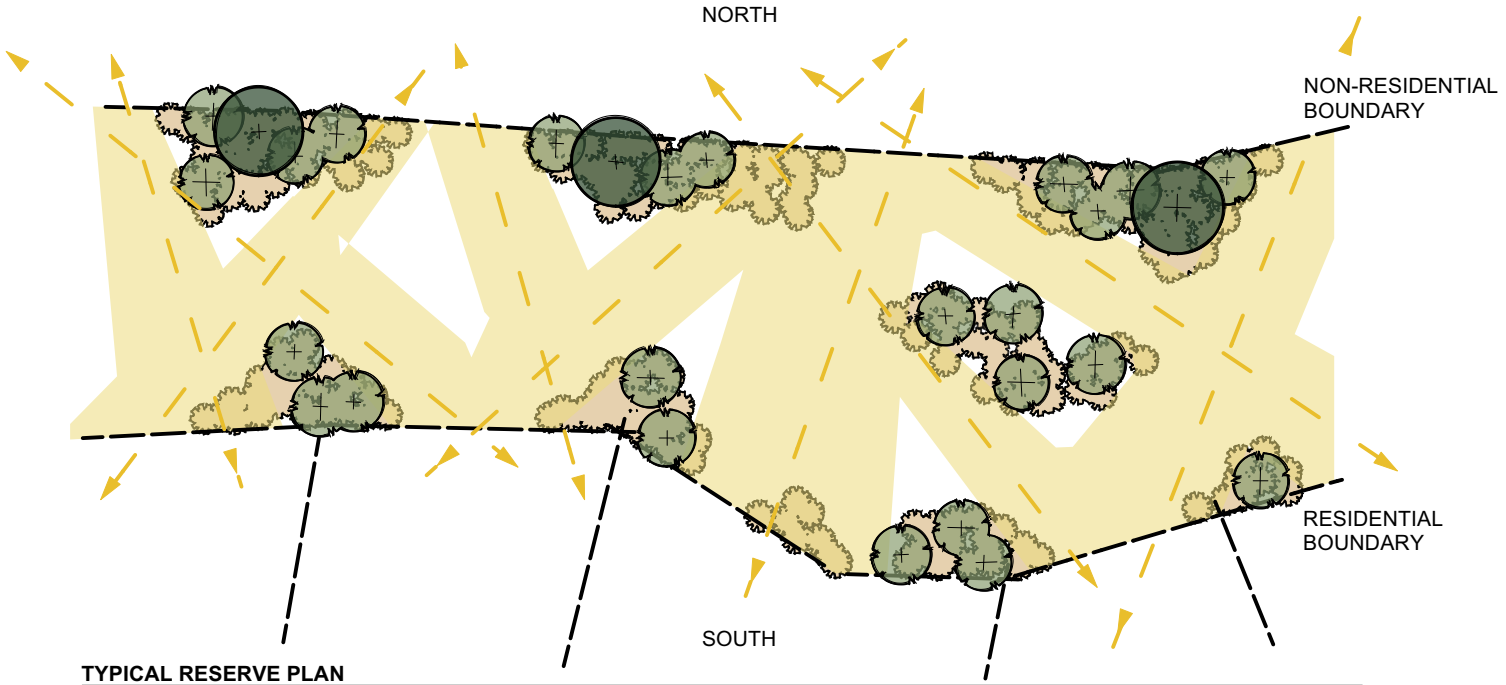
The system does not guarantee that the surrounding land will receive continuous sunlight, and that shade will not fall on a house for some periods during certain times of the day. However, it does seek to rule out blanket, all-day shade on a house, balancing the need to maintain amenity values throughout the reserves.

The clusters of tree and shrub planting are also used to naturally define public and and private space whilest maintaining a level of 'openness' through the reserve corridors. Trees shall be sufficient in bulk to maintain an overall treed environment, mitigating the built form and enhancing the amenity and character of Castle Hill.

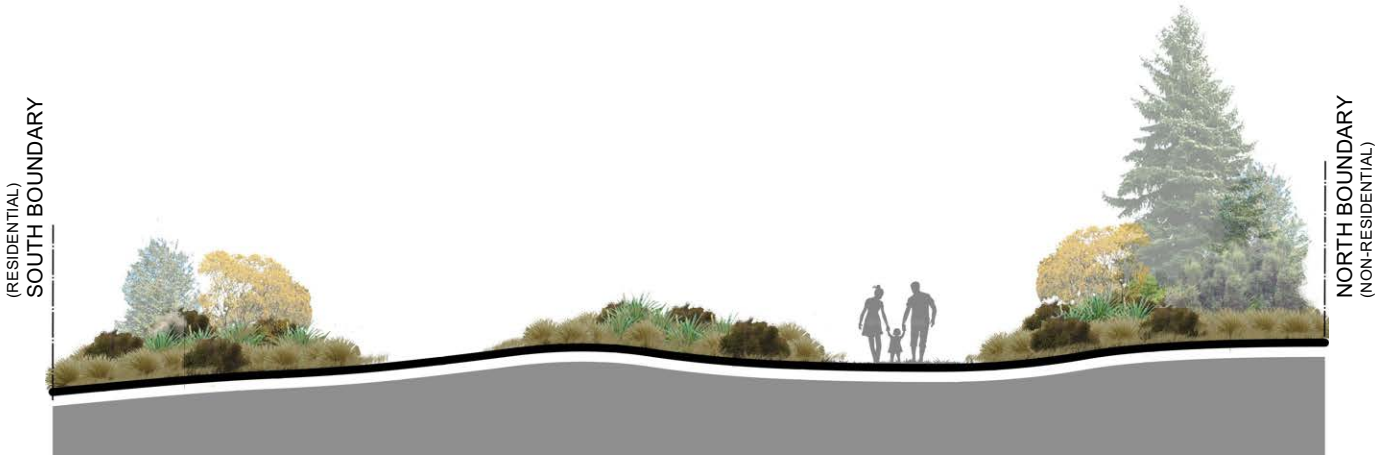
Tree clusters will be arranged primarily using trees from the 'Small Tree' category, with the careful use and placement of larger 'Signature Trees' where appropriate.

Plantings shall aim to form 'naturalised copses' of arranged tree species, balancing a mix of forms and textures, as well as deciduous and evergreen.

Proposed 'Grassland' and 'Shrubland' plantings may be used to increase amenity and naturally define private and public boundaries, where tree canopy is unsuitable.



TYPICAL RESERVE PLAN
NOT TO SCALE



TYPICAL RESERVE SECTION
NOT TO SCALE

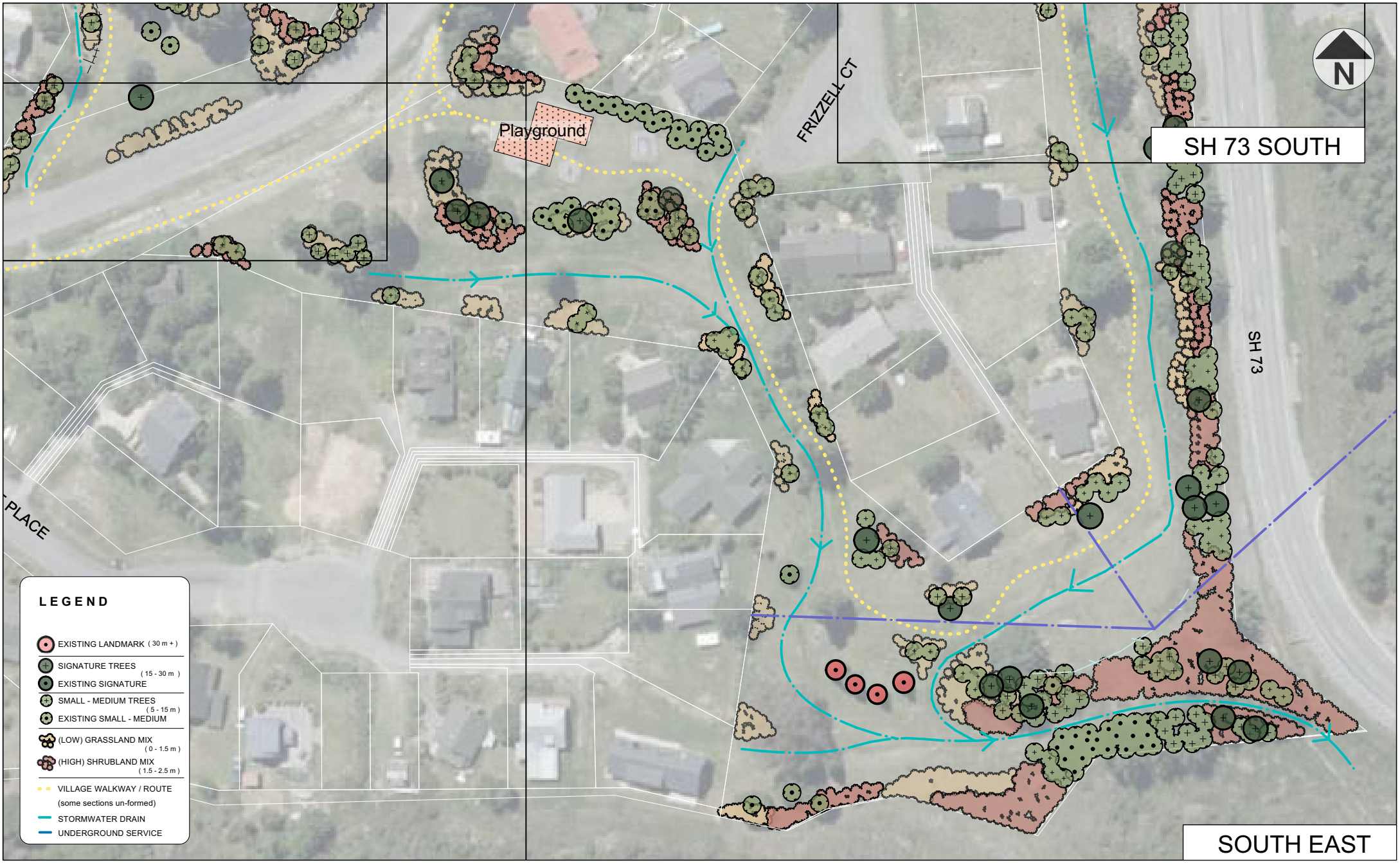
7.3 | DETAILS - 'THE WEDGE EFFECT'

Selwyn DISTRICT COUNCIL

not to scale @ A4 | Date:July 2024 | Drawn: NKLA

7.4 | RESERVE PLANTING CONCEPT - MASTERPLAN

Scale : 1:3,500 @ A4 | July 2024 | Drawn: NKLA

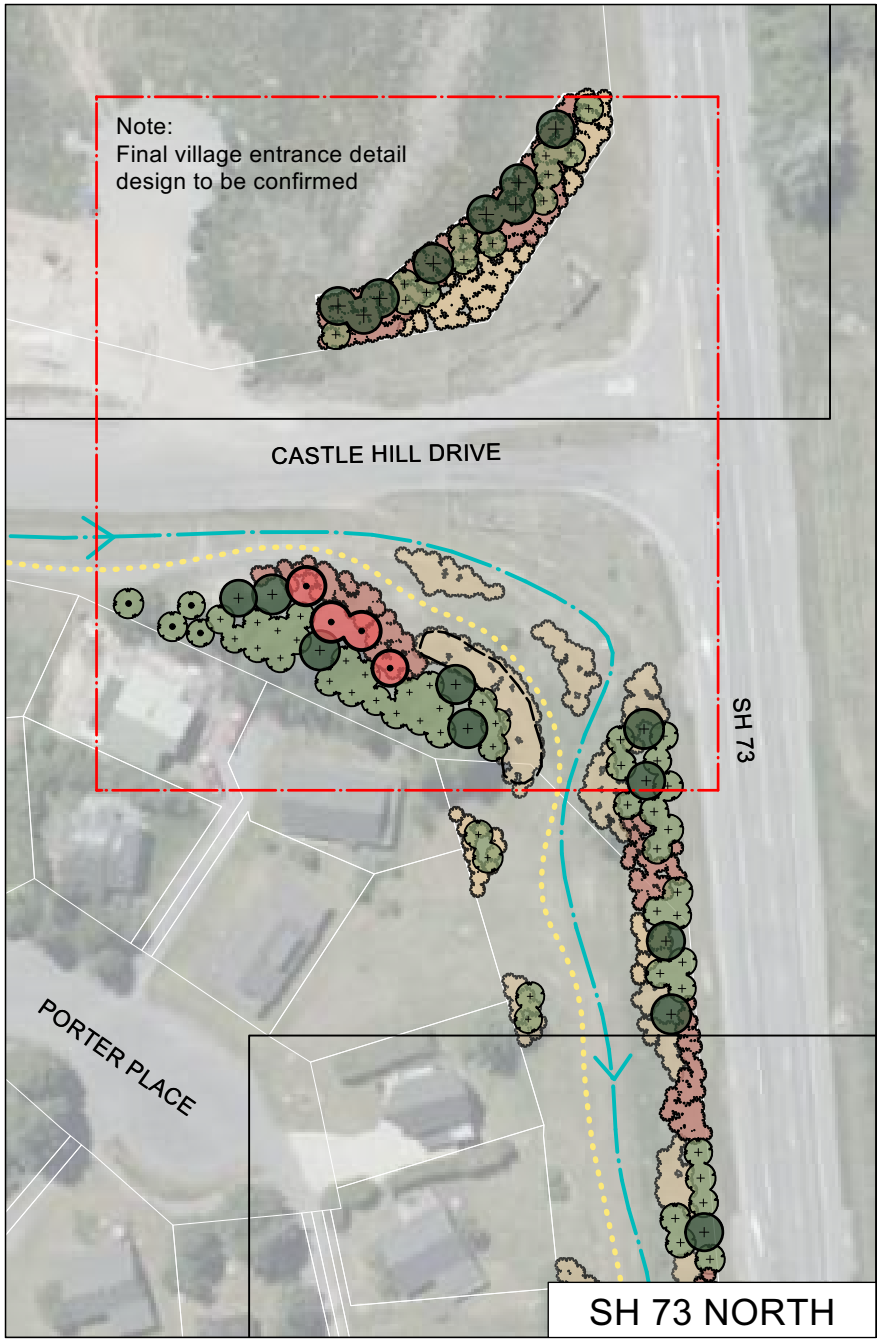


7.5 | RESERVE PLANTING CONCEPT - SOUTH EAST

0 10 20 30 40 m

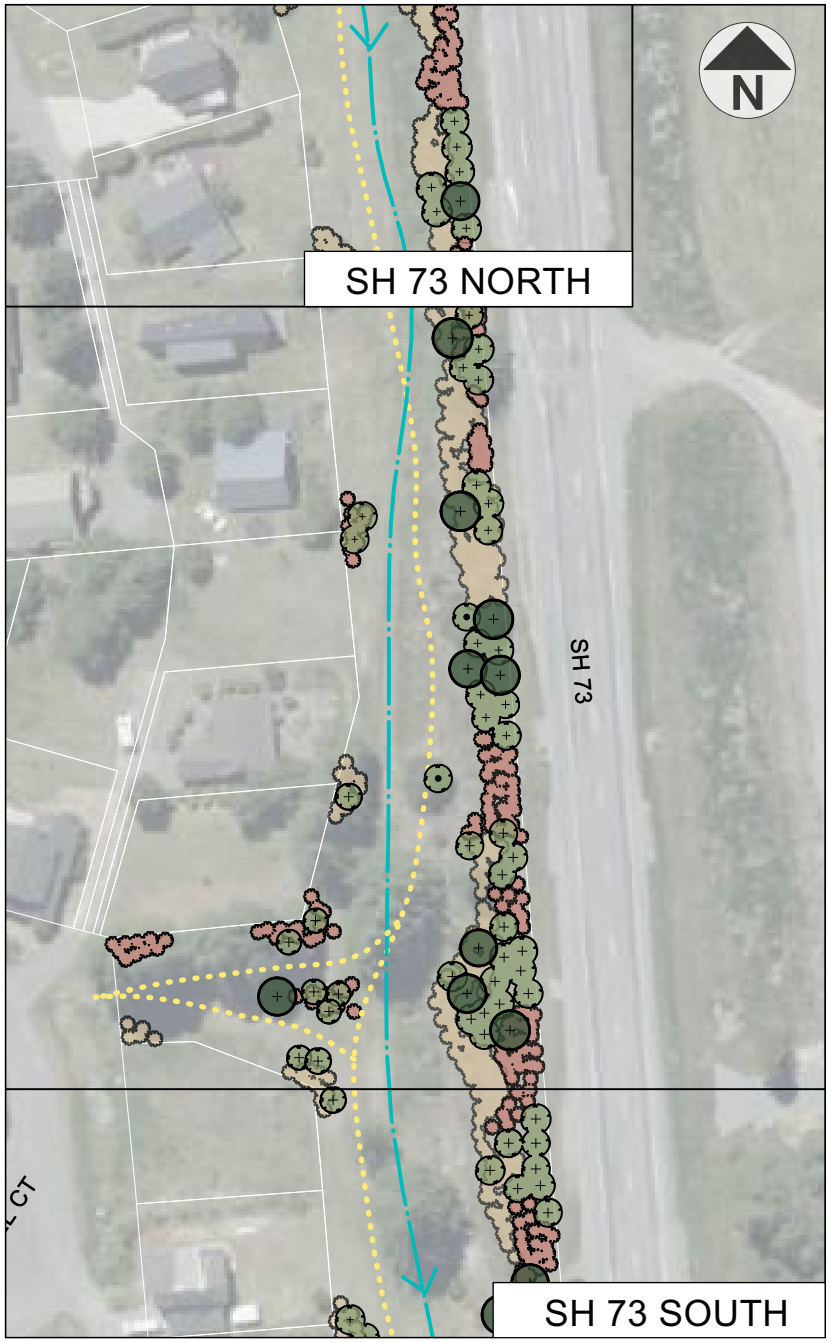
Selwyn DISTRICT COUNCIL

Scale : 1:1,000 @ A4 | July 2024 | Drawn: NKLA



LEGEND

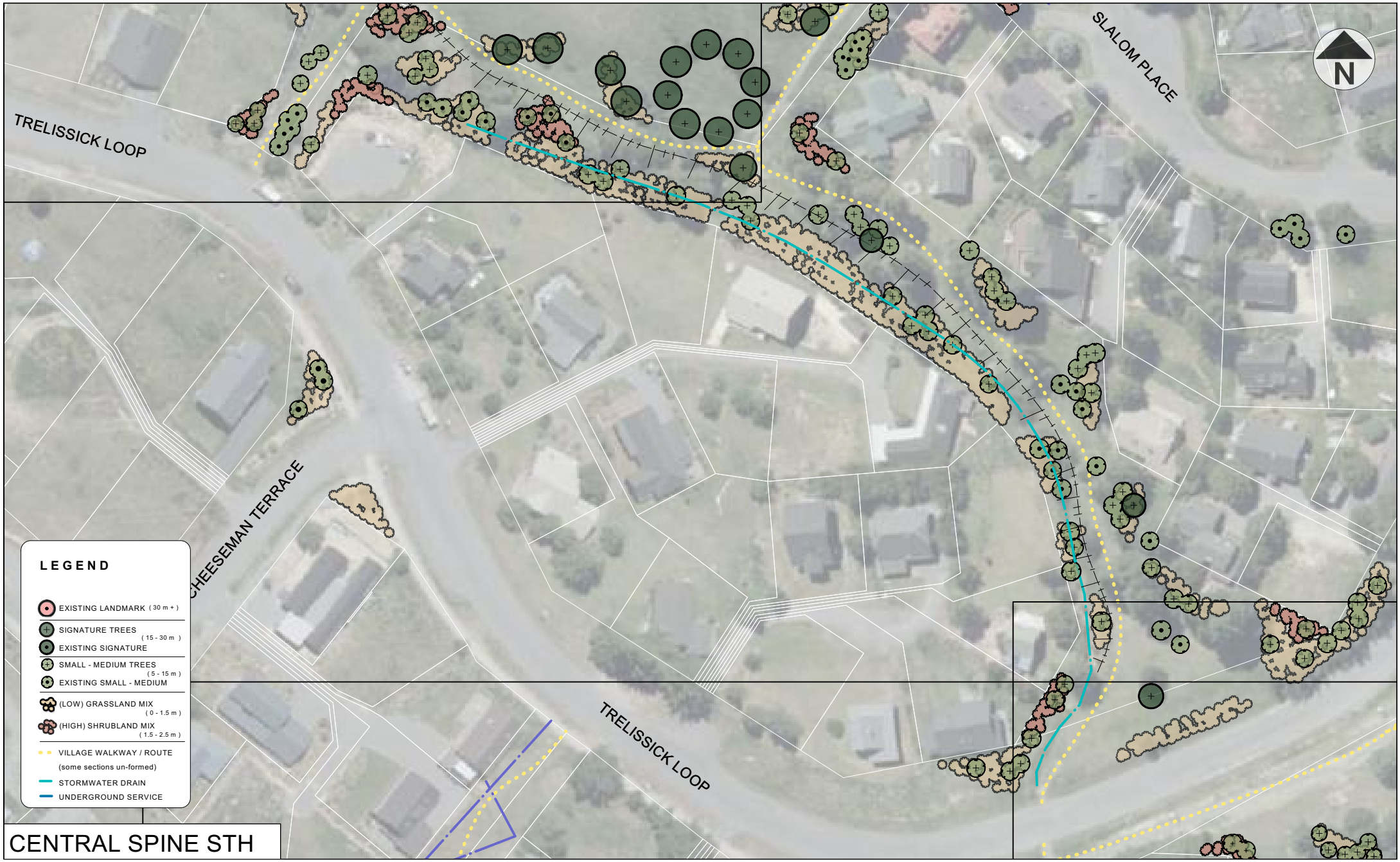
- EXISTING LANDMARK (30 m +)
- SIGNATURE TREES (15 - 30 m)
- EXISTING SIGNATURE
- SMALL - MEDIUM TREES (5 - 15 m)
- EXISTING SMALL - MEDIUM
- (LOW) GRASSLAND MIX (0 - 1.5 m)
- (HIGH) SHRUBLAND MIX (1.5 - 2.5 m)
- VILLAGE WALKWAY / ROUTE (some sections un-formed)
- STORMWATER DRAIN
- UNDERGROUND SERVICE



0 10 20 30 40 m

7.6 | RESERVE PLANTING CONCEPT - SH 73

Scale : 1:1,000 @ A4 | July 2024 | Drawn: NKLA



7.7 | RESERVE PLANTING CONCEPT - CENTRAL SPINE SOUTH

0 10 20 30 40 m

Selwyn DISTRICT COUNCIL

Scale : 1:1,000 @ A4 | July 2024 | Drawn: NKLA

7.8 | RESERVE PLANTING CONCEPT - CENTRAL SPINE NORTH

0 10 20 30 40 m

Selwyn DISTRICT COUNCIL

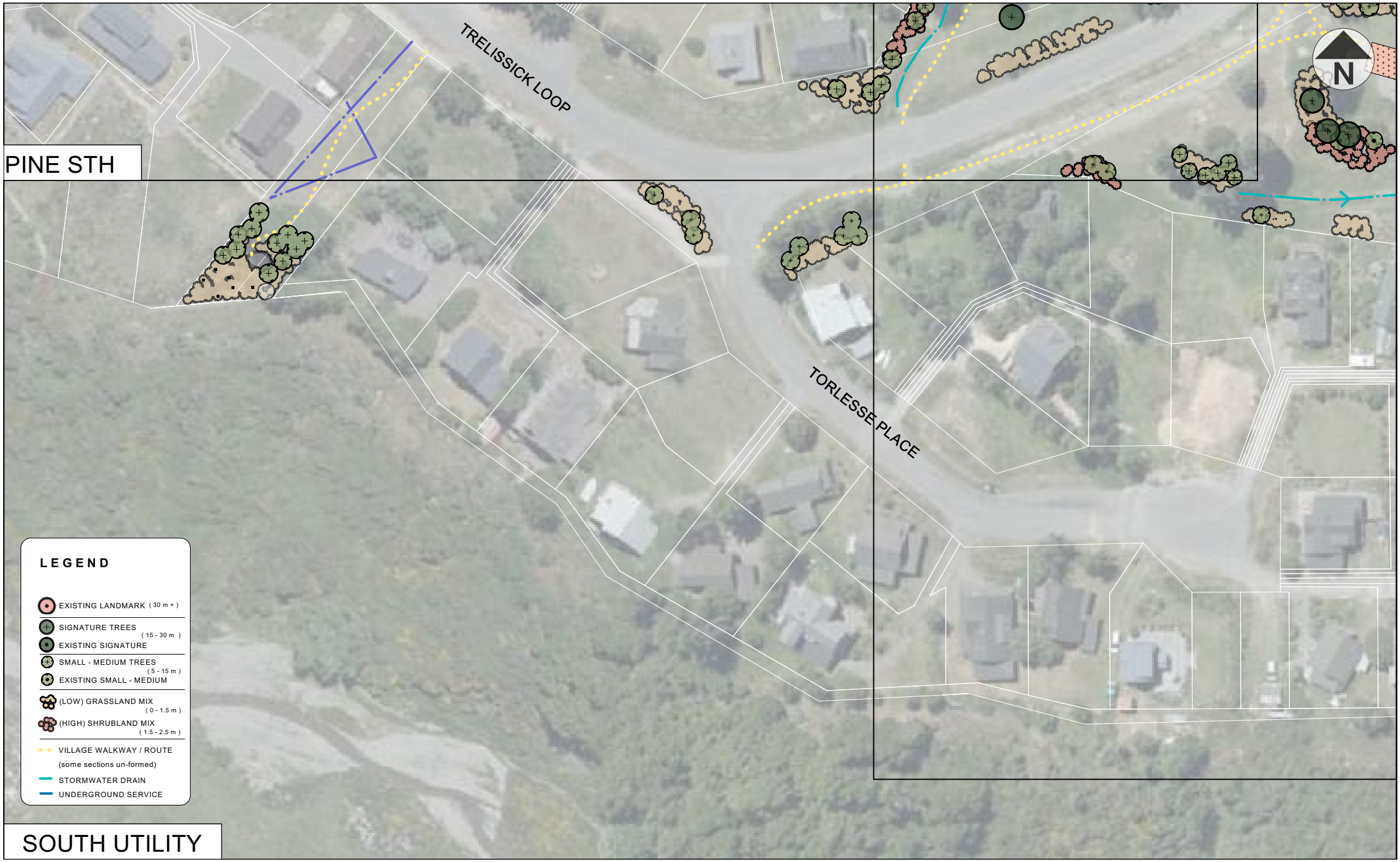
Scale : 1:1,000 @ A4 | July 2024 | Drawn: NKLA

7.9 | RESERVE PLANTING CONCEPT - VILLAGE GREEN

0 10 20 30 40 m

Selwyn DISTRICT COUNCIL

Scale : 1:1,000 @ A4 | July 2024 | Drawn: NKLA



7.10 I RESERVE PLANTING CONCEPT - SOUTH UTILITY

0 10 20 30 40 m

Selwyn DISTRICT COUNCIL

Scale : 1:1,000 @ A4 | July2024 | Drawn: NKLA

7.11 | RESERVE PLANTING CONCEPT - STAGE 7

Selwyn DISTRICT COUNCIL

Scale : 1:2,500 @ A4 | July 2024 | Drawn: NKLA

8.0 Appendices

Appendix 1: Plant and animal pest species

Plant pest species relevant to Castle Hill Village, as identified under the Canterbury Regional Pest Management Plan (CRPMP):

- Corsican Pine *(Pinus nigra)*
- Lodgepole Pine *(Pinus contorta)*
- Mountain Pine *(Pinus mugo)*
- Dwarf mountain Pine *(Pinus uncinata)*
- Scots Pine *(Pinus sylvestris)*
- Larch (excl. sterile hybrids) *(Larix decidua)*
- Wilding conifers* *(inc. Pinus muricata, P. pinaster, P. ponderosa, P. radiata and Pseudotsuga menziesii)*
- Broom (*Cytisus scoparius, C. multiflorus, Teline monspessulana*)
- Gorse *(Ulex europaeus)*
- Wild Russell Lupin *(Lupinus polyphyllus)*
- Darwin's barberry *(Berberis darwinii)*

* Any introduced conifer tree established by natural means (refer to Appendix 2 for CRPMP definition of 'Wilding Conifers').

Animal pest species relevant to Castle Hill Village, as identified under the CRPMP:

- Feral Rabbit (*Oryctolagus cuniculus*)

'Organisms of Interest'** relevant to Castle Hill Village, as identified under the CRPMP:

- European hedgehog *(Erinaceus europaeus)*
- Feral cat *(Felis catus)*
- Magpie *(Gymnorhina tibicen)*
- Mustelids: ferret, stoat & weasel *(Mustela furo, M. ermine, M. nivalis)*
- Rats: Norway, ship *(Rattus norvegicus, Rattus rattus)*
- Silver birch *(Betula pendula)*
- Wasp: German and European *(Vespula germanica, Vespula vulgaris)*

** 'Organisms of Interest' are not accorded pest status but pose a sufficient future risk to warrant being watch-listed for ongoing surveillance or future control opportunities. Section 70(2)(d) of the Biosecurity Act 1993 also provides for the specification of 'any other organisms intended to be controlled' but not accorded pest status.

Appendix 2: Canterbury Regional Pest Management Plan (CRPMP)

CRPMP 2018 - 2038 - Relevant rules for Wilding Conifers

Plan Rule 6.3.1:
Within the Wilding Conifer Containment Area shown on Map 1 in Appendix 4, occupiers shall destroy all wilding conifers, contorta, Corsican, Scots, mountain and dwarf mountain pines and/or larch present on land they occupy prior to cone bearing, if –

(a) The wilding conifers, contorta, Corsican, Scots, mountain and dwarf mountain pines and/or larch are located within an area which has had control operations carried out to destroy wilding conifers, contorta, Corsican, Scots, mountain and dwarf mountain pines, larch and/or other planted conifer species; and

(b) The control operations were publicly funded (either in full or in part).

Explanation of rule:
Over the duration of the Plan, to ensure that new infestations of wilding conifers are prevented at sites where wilding conifers contorta, Corsican, Scots, mountain and dwarf mountain pines, larch and/or any other planted conifer species have previously been destroyed through publicly funded control operations.

Wilding conifers are any introduced conifer tree, including (but not limited to) any of the species listed in Table 4, established by natural means, unless it is located within a forest plantation, and does not create any greater risk of wilding conifer spread to adjacent or nearby land, other than the forest plantation that it is a part of.

A breach of this rule creates an offence under section 154N (19) of the Act.

Plan Rule 6.3.2:
Within the Wilding Conifer Containment Area shown on Map 1 in Appendix 4, occupiers shall, on receipt of written direction from an Authorised Person, destroy all wilding conifers, contorta, corsican, scots, mountain and dwarf mountain pines and larch present on land they occupy within 200 metres of an adjoining property boundary prior to cone bearing, if wilding conifers, contorta, corsican, scots, mountain or dwarf mountain pines and/or larch have previously been destroyed through control operations on the adjoining property, within 200 metres of the boundary, since 1 July 2016.

A breach of this rule creates an offence undersection 154N (19) of the Act.

Explanation of rule:
Over the duration of the Plan, to ensure that the spread of wilding conifers does not cause unreasonable costs to the occupiers of adjoining properties, where wilding conifers,
contorta, Corsican, Scots, mountain and dwarf mountain pines and/or larch have previously been destroyed through control operations on the adjoining property.

Plan Rule 6.3.3 **(**Note: This is designated as a Good Neighbour Rule)***:***
Within the Wilding Conifer Containment Area shown on Map 1 in Appendix 4, occupiers shall, on receipt of written direction from an Authorised Person, destroy all wilding conifers, contorta, corsican, scots, mountain and dwarf mountain pines and larch present on land they occupy within 200 metres of an adjoining property boundary prior to cone bearing where they have previously been cleared through control operations and that occupier is taking reasonable steps to manage wilding conifers on their land, within 200 metres of the boundary, since 1 July 2016.

A breach of this rule creates an offence undersection 154N (19) of the Act.

Explanation of rule:
Over the duration of the Plan, to ensure that the spread of wilding conifers does not cause unreasonable costs to the occupiers of adjoining properties, where wilding conifers, contorta, corsican, scots, mountain and dwarf mountain pines and/or larch have previously been destroyed through control operations on the adjoining property and the adjoining occupier is undertaking active wilding conifer management.

The rule is required in addition to Plan Rule 6.3.2 as the National Policy Direction requires that before a rule can be identified as a good neighbour rule, the Council must be satisfied that the adjacent occupier is taking reasonable measures to manage the pest or its impacts.

Plan Rule 6.3.4 (Note: This is a pest agent rule)***:***
Within the Wilding Conifer Containment Area shown on Map 1 in Appendix 4, occupiers shall, on receipt of written direction from an Authorised Person, destroy any Pest Agent Conifer that is present on land they occupy within 200 metres of an adjoining property boundary, if:

(a) wilding conifers, contorta, Corsican, Scots, mountain or dwarf mountain pines, larch and/or other planted conifer species have been destroyed through control operations on the adjoining property, within 200 metres of the boundary since July 2016; and

(b) the control operations were publicly funded (either in full or in part).

A breach of this rule creates an offence under section 154N (19) of the Act.

Explanation of rule:
Introduced conifer trees that are capable of helping the spread of wilding conifers present a risk for wilding conifer management.

This rule is to ensure that over the duration of the Plan, new infestations, or re-infestation of wilding conifers are prevented at sites where wilding conifers, contorta, corsican, scots, mountain and dwarf mountain pines, larch and or other planted conifer species have previously been destroyed through publicly funded control operations.

Advice Note:
Sections 52 and 53 of the Biosecurity Act 1993, which prevent the communication, release, spread, sale and propagation of pests, must be complied with. These sections should be referred to in full in the Act.

A person may make an application to Environment Canterbury for an exemption from the rules under section 78 of the Biosecurity Act 1993. This section should be referred to in full in the Act. In addition to listed 'pest' species, the following terms are used within the CRPMP that are of relevance to this Plan and the management of wilding conifers:

CRPMP 2018 - 2038 - Wilding Conifer Definitions

Wilding conifers: A term used as a catch-all under the CRPMP and includes other species occurring within the village that are not specifically identified as 'pest', including Pinus muricata, P. pinaster, P. ponderosa, P. radiata and Pseudotsuga menziesii (Douglas Fir). Wilding conifers are defined under the CRPMP as:

- *"Any introduced conifer tree, including (but not limited to) any of the 'pest' species listed, established by natural means, unless it is located within a forest plantation, and does not create any greater risk of wilding conifer spread to adjacent or nearby land, other than the forest plantation that it is a part of."*

***Pest agent conifer*:** A separate list of species not themselves on the pest list, but capable of helping the spread or interfering with the management of pest species. 'Pest agent conifer are defined under the CRPMP as:

- *"Any introduced conifer species capable of helping the spread of wilding conifers and not otherwise listed as a pest in the CRPMP and not located within a plantation forest."*

Plantation forest: Defined under the CRPMP as:

- *"A forest deliberately established for commercial purposes, being at least 1 hectare of continuous forest cover of forest species that has been planted and has or will be harvested or replanted."*

Forest species: Defined under the CRPMP as:

- *"A tree species capable of reaching at least 5 metres in height at maturity where it is located."*

Appendix 3: Original village planting concept

The original design for the village sought to capitalise on the landscape character naturally inherent in the Upper Waimakariri Basin and to avoid standard suburban practises that would lessen that character.

Tree plantings throughout the residential area, streets and reserves were envisaged as integral to the alpine character of Castle Hill Village, as vegetation of alpine origin reinforces the sense of alpine character.

The proposed tree planting was detailed as follows:

"It is proposed that tree planting be initiated early on in the development. The plantings will be based on forestry techniques and generally spacings will be at 2 metre centres. The overall distribution and density of species will be related to land use, and in addition to the species density will be an identity feature in the development. The following species list is proposed as the basic framework for the site planting:"

'Group One'

- *Betula* species (Birch)
- *Larix* species (Common larch)
- *Larix leptolepis* (Japanese larch)

"These deciduous trees will form the principal theme species and they will make up approximately 50% of the total planting. Many self-seeded larch define the northern escarpment of the site. It is anticipated that once planting gets under way and stock are excluded from the site further seedlings within the proposed planting areas will occur".

'Group Two'

- *Chamaecyparis lawsoniana* (Lawsons cypress)
- *Pinus ponderosa* (Ponderosa pine)
- *Pinus sylvestris* (Scotch pine)
- *Sequoia sempervirens* (Redwood)
- *Tsuga Canadensis* (Hemlock spruce)

"These conifer species would make up approximately 20% of the overall planting. Once the framework planting is established other accent species including deciduous species would be utilised."

- *Pseudotsuga* menziesii (Douglas Fir)

"This species would represent approximately 10% of the total planting, thus bringing the total density of coniferous species to 30%"

'Group Three'

- *Nothofagus* solandrii var Cliffortioides (now *Fuscospora cliffortioides,* 2019*)* (NZ Mountain beech)

"This native species is found growing along the Thomas River escarpment and in the remnant forests of the basin. It would be used extensively and would eventually make up a significant portion of the planting, however, this planting would not be carried out until sufficient shelter has been provided by the other tree species."

'Group Four'

"In addition to the above species it is envisaged that accent plantings of other species would be introduced as the framework planting was thinned / or as a suitable microclimate was established. Shrub species would be utilised as barriers, boundary definition or as a general understorey planting. About the village area, public parking areas, the lake and hotel facilities more detailed planting proposals would be developed" (Source: Jackman, 1979).

Appendix 4: Species lists

Bird species recorded in 2001 Linz Field Study of Castle Hill Station

Species	Abundance	Location
Australian harrier	Common	Open country
Bellbird	Common	Forest, scrub
Black-backed gull	Uncommon	Open country
Blackbird	Common	Forest, scrub
Chaffinch	Abundant	Forest, scrub
Grey warbler	Common	Forest, scrub
Karearea (NZ Falcon)	Uncommon	Open country
Kea	Uncommon	Open country
Magpie	Common	Open country
Paradise shelduck	Common	Open country, riverbeds
Pipit	Common	Open country
Redpoll	Common	Forest
Rifleman	Common	Forest
Silvereye	Common	Forest, scrub
Skylark	Common	Open country
Song thrush	Common	Forest, scrub
South Island pied oyster catcher	Common	Riverbeds
Spur-winged plover	Uncommon	Open country
Yellow hammer	Uncommon	Open country

Rare plants of importance to the Kura Tawhiti/ Castle Hill Reserves

Source: various.

Species	Significance 1 = Found only at Castle Hill 2. = Found elsewhere in NZ, but a very restricted distribution	Common Name
Ranunculus crithmifolius sub-species *paucifolius*	1	Castle Hill buttercup
Myosotis colensoi	1	Castle Hill forget-me-not
Cardamine magnifica	1	Castle Hill Bittercress
Myosotis traversii, var *cinerascens*	1 (potentially now extinct)	
Gingidium enysii var. enysii	1	Enys angelica
Veronica cupressoides	2	Cypress whipcord hebe
Veronica armstrongii	2	Armstrong's whipcord hebe

Appendix 5: Community engagement

Each of the surveys has investigated a different topic or theme of relevance to the plan review. The purpose of each survey and a summary of findings is given below.

Village Survey (2016)

As initial preparation for undertaking a review of the RMP, the CHCA, with assistance from Council, surveyed village property owners' on the current RMP as to whether it was still considered to be fit for purpose. It is noted that this survey was conducted prior to the 2018 review of the Canterbury Regional Pest Management Plan, which subsequently highlighted current issues with wilding pine species at a regional level.

The survey elicited 10 responses, including a number with multiple signatories.

Main themes that emerged from the responses to the survey generally related to 'tree matters'. The survey highlighted that there were often polarising views as to which reserve amenity values should be given precedence over others. Main themes included:

- Village character – maintaining a treed environment versus open unrestricted alpine vistas.
- The need for climatic amelioration and shelter from winds, versus issues with tree shading.
- Native tree species versus a varied (exotic/native) tree environment.
- Wilding pines - immediate versus progressive removal.

Survey responses also indicated that current issues are more associated with the process or how the Plan is being implemented, indicating that changes to the RMP are needed to remain current with the changing needs and growth of the community, and to address new challenges within the village, particularly in relation to the growing height of trees. Changes to current tree removal assessment criteria and the need to adopt some form of recession plane rule for trees was specifically identified.

Village Survey (2018)

Further surveys sought feedback from village property owners on their preferences for how the reserves should look in 10-20 years' time, covering key aspects such as 'village character' and the ongoing management of wilding pine species within the village. The survey elicited 104 responses.

Key findings can be summarised as follows:

- In terms of 'village character, 57% of respondents indicated that they preferred 'something different' from how the original village development was envisaged. Although the desire for change is not drastic, 40% wished to maintain the current mix/balance of natives and exotics and the majority expressed this in terms of identifying and retaining exotic landmark and signature trees/tree clusters, managed for containment of wildings, with increasing indigenous plantings elsewhere.
- Only 3% preferred immediate removal of all exotic trees in the Village reserve, and replacement with only indigenous trees and shrubs.
- 45% of respondents indicated they would like to see the existing Larch (wilding species) trees remain (38% preferred a reduction);
- There was less preference for Douglas Fir to be retained (32% retain, 26% remove, 42% reduce);
- 66% of those surveyed expressed willingness to take part in wilding control activities outside the Village boundary if Larch and/or Douglas Fir were to be retained in reserves.

Village Survey (February 2020)

This survey sought specific guidance on community preferences for village tree species and timeframes for any tree removals. Village property owners were asked to rank each of four scenarios in order of preference. The four scenarios were:

(A) Removal of ALL targeted Conifer trees within 3 years.

(B) Progressive removal of ALL targeted Conifer trees over 10 years.

(C) Reduce and retain 33% of Larch in the Village reserves.

(D) Reduce and retain 33% of ALL targeted Conifer trees in the Village reserves.

A total of 95 village property owners completed and returned the survey.

The ‘big picture’ findings from the survey data showed that village property owners are clearly divided on future expectations for management of conifers within the Village reserves. Option A (as above) was the most preferred scenario of 26% of respondents but was also the least preferred by 59%. Conversely, Option D was the most preferred scenario of 45% of respondents but was the least preferred by 39%.

Despite the polarity, the survey showed that there was a clear majority who wish to retain some of the existing Larch, Douglas Fir and Ponderosa, at least until any replacements have achieved an appropriate level of amenity

value. This was over those who want to see the complete and immediate (within 3 years)
removal of all larch, Douglas Fir and ponderosa from Village reserves.

Feedback on Draft Landscape Planting Concept Plans for reserve areas (December 2020)

A part of undertaking the review of the RMP has been to include the development of a landscape concept plan for each reserve area. These plans were presented in draft form at an open day in the village on 26th October 2020, and was followed by an opportunity to give feedback via an online form. The Reserve Planting Concept Plans form an integral part of the RMP (see section 7) in guiding the future management and landscape development of reserve areas within the village. The feedback form also asked supporting questions around reserve landscape values and tree concerns.

There were 103 visits to the website during the consultation period, where copies of the draft Reserve Planting Concept Plans were available for download, along with other supporting information. A total of 23 responses were returned.

The feedback form asked respondents to rank various landscape values in order of importance, relative to the reserve areas surrounding their property:

- 59% of all respondents ranked 'aesthetics' as being the landscape value that is most important;
- ‘Privacy/screening’, ‘wind protection’ and ‘summer shade’ were fairly evenly ranked,
- being the second, third or fourth value of choice for the majority of respondents.

Respondents were also asked to rank their biggest concerns with regards to trees surrounding their property:

- 32% of all respondents ranked 'shading/blocking of sunlight' as the tree issue that was of most concern to their property, closely followed by the 'obstruction of views' (30%).

Respondents were gauged as to their willingness to participate in a reserve ‘care group’ system (if established by Council). 71% of respondents indicated that they would be willing to support this initiative.

Feedback received on the preliminary Reserve Planting Concept Plans and associated feedback on landscape values has been incorporated into the final review of the RMP.

Appendix 6: Identified stakeholders

- Castle Hill Community Association (incl. Craigieburn Trails)
- Ngāi Tahu
- Environment Canterbury
- Department of Conservation
- Ministry for the Environment
- Waka Kotahi / NZ Transport Agency
- Waimakariri Ecological and Landscape Restoration Alliance (WELRA)
- Waimakariri Ecological and Recreation Committee
- Flock Hill Station
- Castle Hill Station
- Local Ski Field operators
- St Andrew’s College

Appendix 7: Land status

CT Reference	Legal Description	Purpose / Reserves Act 1977 Classification	Area (ha)
39C/12	Lots 1002 - 1003 DP45980 (2 lots)	Classified Recreation Reserve	2.9180
39C/12	Lot 1004 DP45980	Classified Recreation Reserve	0.0373
39C/13	Lot 1005 DP45980	Classified Local Purpose (Utility) Reserve	0.0823
550551	Lot 501 DP441790	Classified Recreation Reserve	1.6845
332222	Lot 1043 DP383208	Classified Recreation Reserve	0.0552
333732	Lot 500 DP383620	Classified Recreation Reserve	0.0584
39C/14	Lots 1006 – 1025 DP45980 (20 lots)	Classified Local Purpose (Utility) Reserve	0.0024
39C/56	Lots 1026 – 1031 & 1040 DP45983 (7 lots)	Classified Local Purpose (Utility) Reserve	0.0007
39C/15	Lots 1032 – 1038 DP45981 (7 lots)	Classified Local Purpose (Utility) Reserve	0.0007
332225	Lots 1046 – 1053 & 1057 DP383208 (9 lots)	Classified Local Purpose (Utility) Reserve	0.0037
333732	Lots 1060 – 1062 & 1064 – 1069 DP383620 (9 lots)	Classified Local Purpose (Utility) Reserve	0.0035
984604	Lot 511 DP559213	Unclassified Reserve - proposed to be Recreation Reserve	0.1127
954660	Lot 500 DP551837	Unclassified Reserve - proposed to be Local Purpose (Stormwater) Reserves	0.7264
954662	Lot 510 DP551837	Unclassified Reserve - proposed to be Local Purpose (Stormwater) Reserves	0.0449

Proposed future reserves to be vested upon subdivision			
	Lot 503	In process of vesting - proposed to be Recreation Reserve	0.2298
	Lot 505	In process of vesting - proposed to be Recreation Reserve	0.2753
	Lot 506	In process of vesting - proposed to be Local Purpose (Access) Reserve	0.0177

References

Abrahamson, Jenny, (2017), *John and Charles Enys, Castle Hill Runholders 1864 – 1891*, p209.

Arthurs Pass NZ website, (2022), retrieved from: https://www.arthurspass.com/index.php?page=181

Brailsford, Barry, (1994), *'Song of Waitaha the Histories of a Nation'*. Ngatapuwai Trust, ChCh.

Burrows CJ, Wilson HD, (2008). Vegetation of the mountains. In: Winterbourn M, Knox G, Burrows CJ, Marsden I (eds.) The natural history of Canterbury. 3rd edn. Christchurch, University of Canterbury Press. p. 287.

Department of Conservation, (2022), www.doc.govt.nz/Community/005~Conservation-and-Maori/Topuni/060~Kura-Tawhiti.asp

Environment Canterbury, (2010), *Canterbury Regional Landscape Study Review*, pp. 124 – 129.

Hayward, John A.; Boffa, Frank D., (1972), *Recreation in the Waimakariri Basin; an introductory study with special reference to the Broken River region*, p. 67.

Jackman. A E, (1979), *Landscape architectural evidence at the planning consent hearings.*

LINZ (2001) *Crown Pastoral Lease Tenure Review: Castle Hill Pastoral Lease: Conservation Resources Report*, p24.

Malvern County Council, (1979), *Extracts from the 6 page Resolution of the Council relating to the approval of the "Resort Village"*.