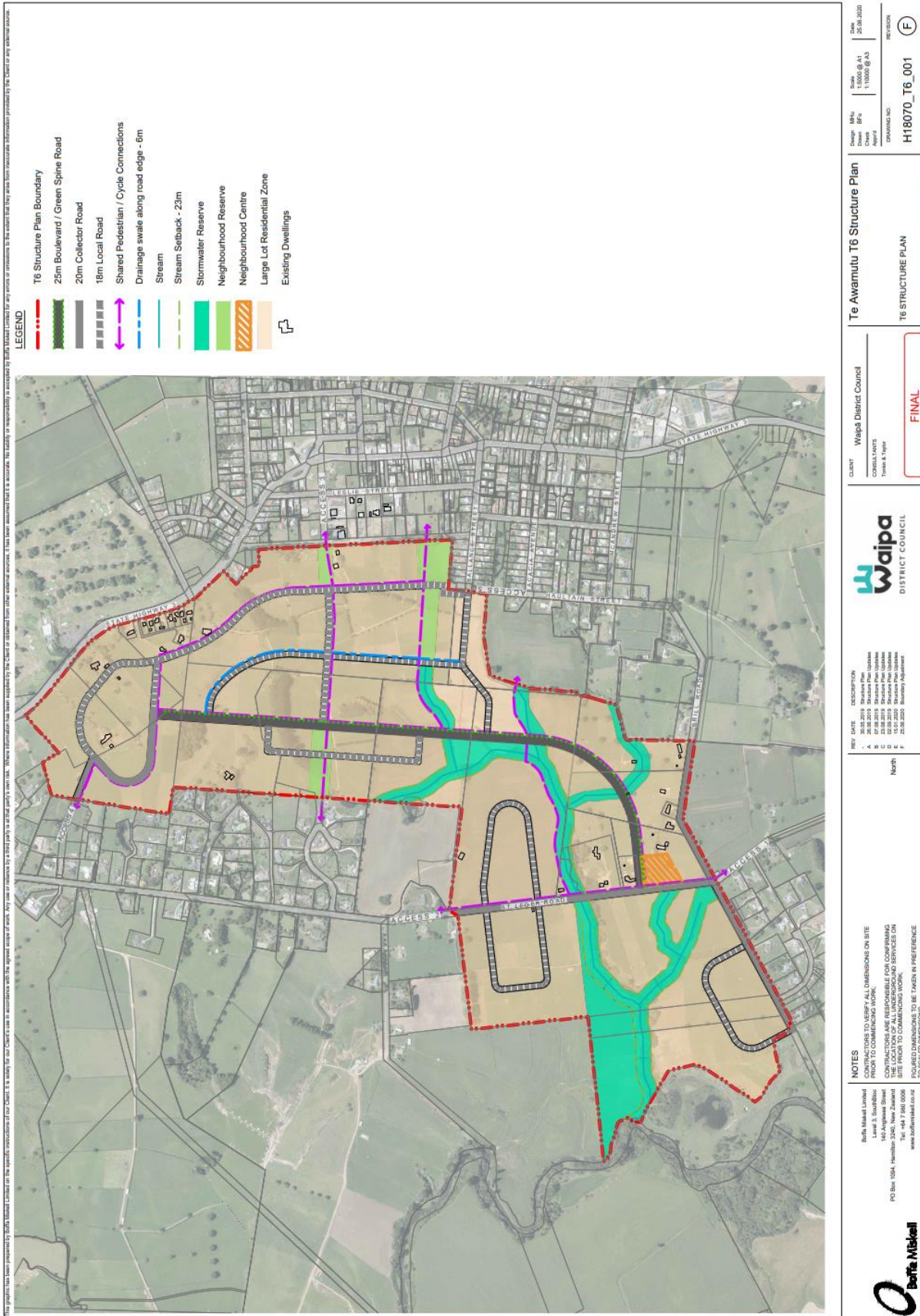


# Appendix S24 – Te Awamutu T6 Growth Cell Structure Plan

## S24.1 Te Awamutu T6 Growth Cell Structure Plan



## **S24.2 Background**

- S24.2.1 The T6 growth cell is a 168ha area of land located to the west of State Highway 3 between Te Awamutu and Kihikihi. The T6 growth cell is predominantly characterised by rolling pasture and farmland, some clumps of large exotic trees as well as some bushy largely exotic riparian vegetation along the gully and streams draining the site. There are a few existing houses on large lots in the south of site off Brill Road as well as in the north adjacent State Highway 3. There is a large natural gully system which runs through the centre of the site and drains the surrounding farmland to the Puniu River to the south.
- S24.2.2 This area has been identified in the Waipā District Plan as suitable for Large Lot Residential development which reflects the semi-rural character of the area, lower density housing and a more rural feel than the Residential Zone. People living in this zone are generally seeking to live in a semi-rural environment, while remaining within commuting distance to urban centres.
- S24.2.3 The Structure Plan for the T6 growth cell is anticipated to provide for approximately 470 allotments within the 168ha total area (4 lots per hectare). This is a provisional estimate based on net developable area and takes into account the loss of land for roads and open space, in particular the gully system.

## **S24.3 Key design principles**

- S24.3.1 The following general design principles have underpinned the development of the T6 Structure Plan.

### *Respect for existing character*

- S24.3.2 All subdivision layout and development design should reflect an appreciation of location and surrounding context. Natural riparian vegetation along the gully and stream banks through the site need to be protected and enhanced to provide amenity and ecological enhancement.

### *Cultural identity*

- S24.3.3 Maori names and design elements will be incorporated where appropriate and in consultation with local iwi.

### *Social value*

- S24.3.4 People are the key consideration in all aspects of the design. Public safety, recreation and social values are paramount.

### *Connectivity*

- S24.3.5 A network of roads, pedestrian paths and cycleways through the development connects the residents to the existing town, open spaces, and playgrounds.

### *Appropriate scale*

- S24.3.6 The scale and hierarchy of roads, cycleways and walking tracks developed during subdivision design provide a mix of transport options as well as access to public transport.

### *Quality public realm*

- S24.3.7 The quality of materials and construction methods used for all development within the structure plan area should ensure an attractive residential area develops around both its private and public spaces.

### *Well-designed built environment*

- S24.3.8 The built form guidelines should help ensure that development contributes to the amenity, safety, and context of the overall development. The guidelines are intended to encourage creative design outcomes rather than limit design.

## **S24.4 Open Space Framework**

- S24.4.1 The proposed open space framework design for the T6 Structure Plan reflects the existing landscape and surrounding land uses. The framework is connected and permeable, with a focus on pedestrian walkways, cycleways, reserves and green corridors.

- S24.4.2 Where appropriate, existing trees have been incorporated into the open space framework.

- S24.4.3 The open space framework is made up of:

- (a) Reserves
- (b) Green Streets
- (c) Open Spaces
- (d) Playgrounds
- (e) Gully system
- (f) Vegetated Swales

- S24.4.4 The combination of these spaces allows for a green network to be created through the structure plan, ensuring that residents have ready access to open space, and natural environment.

- S24.4.5 The structure plan provides the opportunity for an extensive green corridor within the existing gully system in the southern portion of the site to be extended northwards along a proposed central green boulevard.

## **S24.5 Stormwater Management**

- S24.5.1 The proposed reserves and open spaces within the T6 structure plan will provide for people's recreational interests, and the protection of landscapes, amenity, ecosystems, cultural and historical values. They also fulfil an important stormwater management function.

- S24.5.2 Stormwater is proposed to be managed through a planted gully system, vegetated swales, the St Leger Road culvert and new crossings. Wherever possible retention, reuse and onsite soakage for stormwater will be provided for and managed on individual residential lots and through the existing natural drainage of the site. The proposed use of vegetated swales will be a low impact way of managing stormwater and provide an important open space amenity feature of the area.

- S24.5.3 Stormwater within the structure plan area will also be managed through the following measures:

- (a) On-site water efficiency measures such as detention tanks may be necessary to reduce off-site stormwater runoff. Rainwater tanks will reduce run-off and provide the main source of water supply to individual households. The area will only have access to a restricted trickle-feed Council water supply. The combination of vegetated swales and on-site water efficiency measures provides a resilient design approach to water use and post-development stormwater management. A 23m riparian planting margin shown on the Structure Plan is to ensure that future development complies with the set back from water bodies. This also ensures compliance with the Waikato Regional Plan provisions relating to accelerated erosion and earthworks within high risk erosion areas.
- (b) Due to the position of the growth cell within the wider Puniu River catchment, peak flow control of the 2 year ARI and higher magnitude events is not recommended to avoid coincidence with the larger Puniu River flood peak.
- (c) The St Leger Road culvert should be upgraded and new crossings appropriately designed to enable pass forwarding of post-development flood flows. Crossings and discharge points to the channel should be designed to mitigate scour and erosion within the incised gully.
- (d) Onsite soakage will need to be tested and designed on a lot by lot basis especially as low soakage could be an issue in the upper areas of the growth cell.
- (e) If on-site soakage investigations show that the post-developed water quality rainfall volume cannot be achieved through water tanks and soakage, then bio-retention devices or a suitable wetland will need to be designed.
- (f) Vegetated swales are recommended to convey overland flow.
- (g) Avoiding modification to existing channel corridors and an ecological survey is recommended.

## **S24.6 Connectivity**

- S24.6.1 The road connections through the T6 structure plan area will allow for the movement of cars, pedestrians and cyclists, as well as provide space for stormwater management, and vegetated open space.
- S24.6.2 Streets with tree lined berms, grassed swales, and footpaths / cycleways are proposed to provide a safe and attractive area for both vehicular and pedestrian movement.
- S24.6.3 The Structure Plan proposes a 25m green boulevard / tree framed collector road through the sites to be the main spine route for vehicles, pedestrians, and cyclists. The proposed 18m local access roads should accommodate pedestrian paths on one side and the option for vegetated stormwater swale on the other side.
- S24.6.4 A network of proposed shared paths and footpaths connects residents to the gully system, reserves, playgrounds, commercial zone, and the neighbourhood centre.
- S24.6.5 Shared paths should be a minimum of 3m wide while footpaths should be a minimum of 1.5m wide.
- S24.6.6 An integrated pedestrian and cycle network provides for the wellbeing of the residents through exercise, contact with the natural environment, and social interaction.
- S24.6.7 The activation of the public realm from people moving through these spaces makes them safer and more attractive to a range of users.

18m Local Road



25m Collector Road / Green Spine Road



Example image: Typical 18m street with separated 3m shared cycle path or 1.5m footpath (refer structure plan) and vegetated drainage swale

## **S24.7 Built Form**

- S24.7.1 Use of the Design Guidelines in combination with the District Plan zone provisions will ensure the height and bulk of built form is appropriate to the location and character of the site.
- S24.7.2 The layout and design of buildings must consider their settings and any nearby buildings and spaces.
- S24.7.3 Well-designed buildings will be compatible with the surrounding environment and respect privacy of neighbouring residents. They take into account the character of the area and are designed to enhance this character. The built form should also take into account site circumstances and local micro-climatic conditions, such as solar access, topography, and prevailing wind. Trees and landscaping are to be used for privacy and screening and to soften the built form.
- S24.7.4 Maximum height and site coverage controls will ensure houses relate well to the size of the lots, without being overly dominant visually. Considerate building placement ensures good relationships between neighbouring properties, roads and reserves. The Design Guidelines provide a framework which will lead to positive outcomes for the landowners and the wider community. This encourages original design which considers the unique opportunities of the site and development areas.

## **S24.8 Neighbourhood Centre**

- S24.8.1 A well-designed neighbourhood centre will create the opportunity for residents to meet and interact.
- S24.8.2 The proposed Neighbourhood Centre is intended to meet the convenience needs of the local residents and could comprise neighbourhood level community services and limited convenience level retail activities. The Neighbourhood Centre design should incorporate shared spaces to help activate the area.
- S24.8.3 The Neighbourhood Centre is not intended to compete with the commercial offerings within the Kihikihi township, and only commercial activities that service the local neighbourhood are encouraged.
- S24.8.4 Landscaping will play an important role in creating an attractive public space for residents to meet, linger and interact with each other. The Neighbourhood Centre's landscaping should incorporate:
- (a) High-amenity open space and quality planting;
  - (b) Strong connectivity for pedestrians and cyclists;
  - (c) Appropriate use of materials to create a relaxed character with flexible spaces; and
  - (d) Landscaping should be low maintenance and incorporate predominantly native trees, shrubs and groundcover species.

## **S24.9 Supporting Documents**

S24.9.1 This Structure Plan should be read in conjunction with the following technical reports which are available from Council on request:

- (a) Te Awamutu T6 Structure Plan Context Report, prepared by Boffa Miskell, dated 25 June 2020 (*Council document number 10410947*);
- (b) Te Awamutu T6 Growth Cell Design Guidelines, prepared by Boffa Miskell, dated June 2020, (*Council document number 10411015*);
- (c) T6 and T11 Growth Cell Structure Plan Liquefaction Desktop Study, prepared by Tonkin + Taylor, dated August 2019 (*Council document number 10373335*);
- (d) Te Awamutu T6 and T11 Structure Plans Three Waters Assessment, prepared by Tonkin + Taylor, dated August 2019 (*Council document number 10373339*); and
- (e) Te Awamutu T6 and T11 Structure Plans Transportation Assessment, prepared by Tonkin + Taylor, dated August 2019 (*Council document number 10373344*).