SELWYN DISTRICT COUNCIL
RESIDENTIAL DEVELOPMENT

DESIGN GUIDE SUMMARY

JULY 2024

Selwyn
DISTRICT COUNCIL

CONTENTS

HOW TO READ THIS GUIDE

The following pages are a summary of the Selwyn District Council Residential Development Design Guide. The document identifies design principles, outcomes, and key considerations for each of the urban scales.

DESIGN PRINCIPLES FOR SELWYN'S URBAN AREAS

Irrespective of development type and context, there are a number of design principles that are considered 'best practice'. These principles relate to qualities and particular characteristics displayed in a successful thriving urban environment and what this means within the Selwyn context.

When applied correctly, best practice design can add substantial economic, social, cultural and environmental value to any development.

Development in Selwyn will be:

1. WELL-RESEARCHED

Development identifies and acknowledges the cultural background of a place in order to understand its character, feel and heritage, where a communal sense of place can be established, and where open space and visual amenity qualities are well-respected.

2. WELL-INTEGRATED

New development becomes part of the established community and considers the existing surrounds, including the built and natural environment and historic and natural features. Development is designed in context to protect and reflect local topography, climate, vegetation, European history and Ngāi Tahu culture.

3. WELL-CONNECTED, ACCESSIBLE AND INCLUSIVE

Development follows a clear roading hierarchy, uses universal design aspects and access requirements, includes all modes of transport, supports direct linkages between destinations, and creates a safe and legible pedestrian and cycling network for all community members.

4. WELL-SERVICED

Higher density is concentrated along identified trunk service where reticulation is available and/or upgrade of existing services is economically achievable. Access is provided to fibre and other key telecommunication services.

5. WELL-BALANCED

Development allows for choice and diversity both in built form and section size to reflect demand and needs. Landuse mix, site sizes and building types are flexible and adaptable to change.

6. WELL-DESIGNED

Built form is characterised by variety, modulation, and articulation, to create attractive, interesting, and appropriate communities, sites, and housing typologies that follow the lifemark philosophy.

7. WELL-COLLABORATED

Development promotes a collaborative approach including shared access ways, amalgamation of lots, services and other measures to get a resource efficient and effective outcome.

DESIGN OUTCOMES FOR SELWYN'S URBAN AREAS

In Selwyn, the past is acknowledged, future development and growth is encouraged.

As part of the design process, Te Taumutu Rūnanga and Ngāi Tūāhuriri Rūnanga values need to be respected. The heritage that is of importance to the district as a whole and aspects that make Selwyn a popular destination needs to be retained, while acknowledging change is inevitable.

This guide has been informed by the Mahaanui Iwi Management Plan and guidance contained in other relevant documents including the Te Aranga Strategy 2008.

The urbanisation process, and shift from rural villages to more urbanised townships, is a challenging balancing act that is best achieved gradually.

Changing densities need to be considered alongside changing expectations and values.

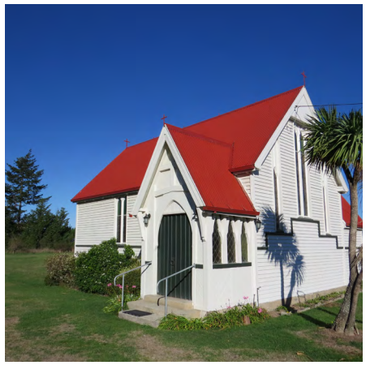
The design outcomes sought by the application of this guide are structured around cultural, historical, social, natural and physical outcomes that tie in with District Plan provisions.

Key outcomes form the basis of what is expected.

Image: *Selwyn's growth from village to town*

1. Ngāi Tahu culture and traditions relating to land, water, wahi tapu and wahi taonga are recognised and protected.
2. Density and development are focused on ensuring natural systems and processes are integrated.
3. Landuse and transport are planned in synergy. Transport choice is provided within roading networks and identified transport corridors.
4. Infrastructure provisions are efficient and cost effective and they tie in with Council's asset planning.
5. Public green space is easily accessible, distinct and provides amenity and outlook to residents and the wider public. Private Green Space along the public/private interface positively contributes to the amenity and open character of the area.
6. New development consciously expresses 'Selwyn', and therefore has an identity and character that is unique to the District.
7. Local and cultural heritage and community characteristics that reinforce a sense of place and identity are celebrated and part of acknowledging tohu.

DESIGN OUTCOMES FOR EACH OF THE SIX THEMES

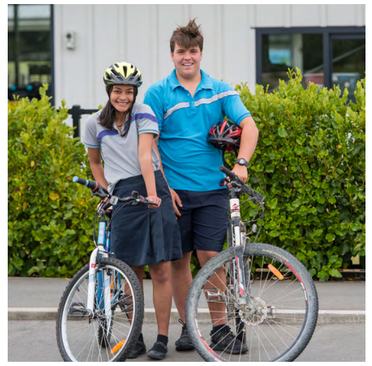


A. HISTORICAL AND CULTURAL

1. Development integrates and respects Ngāi Tahu values and protects sites of wahi taonga and wāhi tapu.
2. Development acknowledges the interdependencies between the natural world and the function of natural processes.
3. Iwi/hapu narratives, local art, and cultural aspects are identified and expressed creatively and appropriately.
4. Local art or cultural references are acknowledged and celebrated, and incorporated or used as design cues.
5. Natural and historic features, such as water races or mature trees, are retained, accessible and enhanced.

B. NATURAL ENVIRONMENT

1. The natural character of wetlands and indigenous plants and places, including riparian margins, are respected, maintained and protected.
2. The ecological value of the Waikirikiri/Selwyn River and lowland waterways are acknowledged and taken care of.
3. Indigenous vegetation and habitats are retained and incorporated as design elements.
4. Acknowledgement of ki uta ki tai (ecological connectivity across catchments, from the sea to the mountains) in particularly in respect to Te Waihora.
5. Choose eco-sourced plantings.
6. New development includes tree plantings within the public realm to increase tree canopy for amenity and climate benefits.

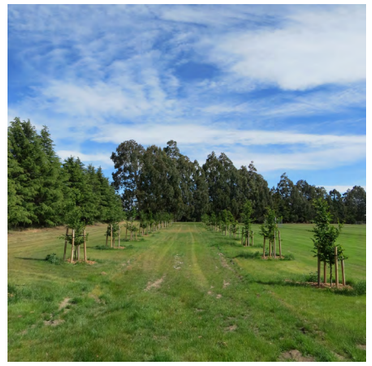


C. MOVEMENT, ACCESS, MOBILITY

1. Streets meet the needs of the activity. Development follows the street hierarchy and subsequent functions, such as supporting public transport services, including effective access to bus stops.
2. Streets are future proofed for change and/or intensification.
3. Accessible, inclusive, transport provisions cater for all ages and capabilities, laying the foundation for the ability to age in place.
4. Parking is incorporated within street corridors.
5. Walking and cycling routes connect within development and to the wider network.

D. INFRASTRUCTURE AND SERVICING

1. As part of a development, stormwater treatment aims to improve the water quality of surface water and groundwater.
2. Stormwater detention and management is incorporated within the green network. The local topography and landform is used to its advantage for stormwater collection and management.
3. Incorporate ecological values into stormwater functions, actioning the principal of taiao.
4. Areas for stormwater runoff and management are determined early in the process and integrated into overall concept.
5. Sites where reticulation is readily available or planned for are preferred for development.
6. Low impact and resource efficient solutions (water sensitive urban design) are promoted.



E. BLUE AND GREEN NETWORKS

1. A purposed built, accessible open-space network that provides opportunities for passive and active recreation.
2. Different types of green spaces are interlinked via cycling and pedestrian networks to achieve a walkable/cycle friendly neighbourhood, fostering accidental social connections.
3. The location of public green space is deliberately chosen to be clearly visible from the main street and where it can provide amenity to higher density developments.
4. The size and dimensions of public green space is fit for intended purpose, while considering long-term maintenance costs.
5. Private gardens adjacent to the street are free of tall structures, enabling gardens to become part of the overall street scene.

F. BUILT FORM

1. The visual distinction between urban townships and rural surrounds is maintained.
2. Development is located within urban boundaries and contributes to a compact townscape.
3. Larger greenfields areas are designed with variety, flexibility and amenity for residents in mind. View shafts to Port Hills and Southern Alps are retained.
4. New subdivisions are designed as integrated neighbourhoods, with their own identity, while fitting in with the character of the respective township.
5. Development displays Selwyn characteristics, including a more spacious outlook than that expected in metropolitan areas.
6. Locally sourced building materials are preferred for sustainability and character reasons.

KEY CONSIDERATIONS NEIGHBOURHOOD

Incorporate Crime Prevention Through Environmental Design (CPTED) principles at all urban scales.

NATURAL ENVIRONMENT

1. Consult with Heritage New Zealand to preserve historical, natural or archaeological on-site features.
2. Respect and follow the natural landform.
3. Work with the elements to create shelter from sun and wind.
4. Safeguard sensitive ecological areas, such as riparian margins.
5. Restore waterways within the site.
6. Choose informal grid alignment to minimise flood risk. Leave space for water. Protect overland flow paths, natural ponding areas and areas at risk of flooding. Co-locate stormwater management areas with parks and reserves. Manage hydraulic neutrality at all scales.
7. Ensure that the principle of Mauri Tū is followed by considering climate change implications and protecting, maintaining and enhancing environmental health.

MOVEMENT, ACCESS, MOBILITY

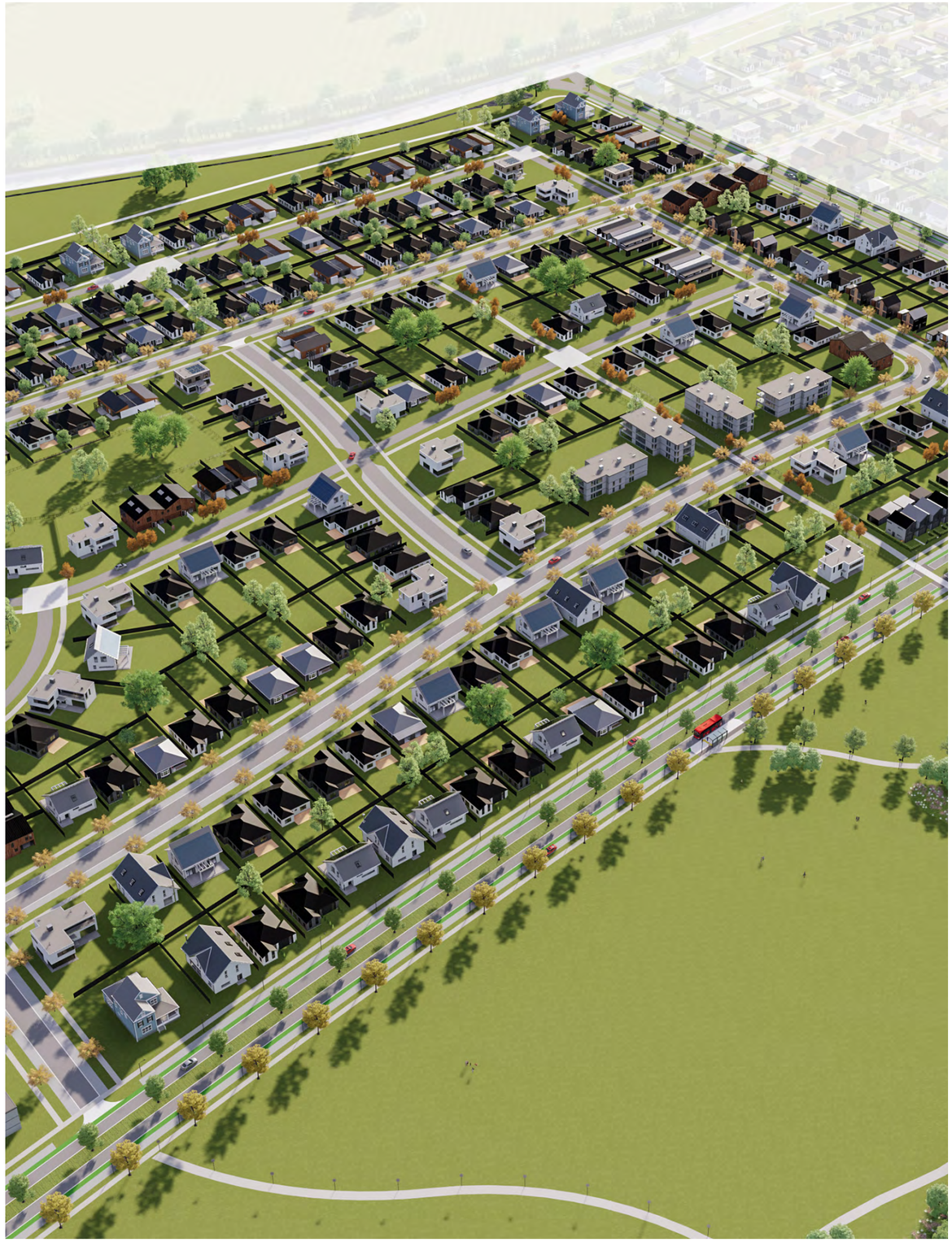
8. Design a grid of local streets linked with the wider roading/ cycling/walking network.
9. Achieve a well connected, on and off road pedestrian and cycling network.
10. Aim for an integrated public transport system.
11. Cohesive landuse/transport approach across all modes.
12. Design a legible grid of local streets and crescents that link with the wider movement network on a multi modal basis making allowances for longer term growth.
13. Be simple and logical in terms of street designs and layout, avoid a proliferation of culs-de-sac in preference to crescents and streets.

INFRASTRUCTURE AND SERVICING

14. Coordinate planned utilities with Council's wider network provisions and strategies.
15. Familiarise yourself with the One Water Strategy and the Wastewater Activity Management Plan that applies to your development.
16. Design utilities that meet Council's standards for vesting (ECoP). Refer to Part 6 and Part 7 of the ECoP for detailed design guidance.
17. Choose efficient, long-term solutions for all services, including reticulation as the preferred option for any development.

BLUE AND GREEN NETWORK

18. Confirm reserve land classification with Council.
19. Develop an open space network, which links new spaces with established ones.
20. Consider the surrounding green space network (both existing and planned) to confirm demand and avoid duplication.
21. Choose location for public green space for maximum benefits.
22. Use indigenous, eco-sourced plant species within public links and spaces.
23. Locate open spaces and green links to ensure they contribute to and compliment wider transport networks by providing alternative routes.
24. Establish useful, larger sites (2000m^2) with the correct shape (minimum dimension 50m) for active recreation purposes. Utilise smaller pockets of green space ('pocket parks') for passive recreation space and aesthetic value.
25. Use the ECoP to provide consistent design framework parameters for the different street hierarchy and One Network Framework (ONF) classifications.



KEY CONSIDERATIONS BLOCK

NATURAL ENVIRONMENT

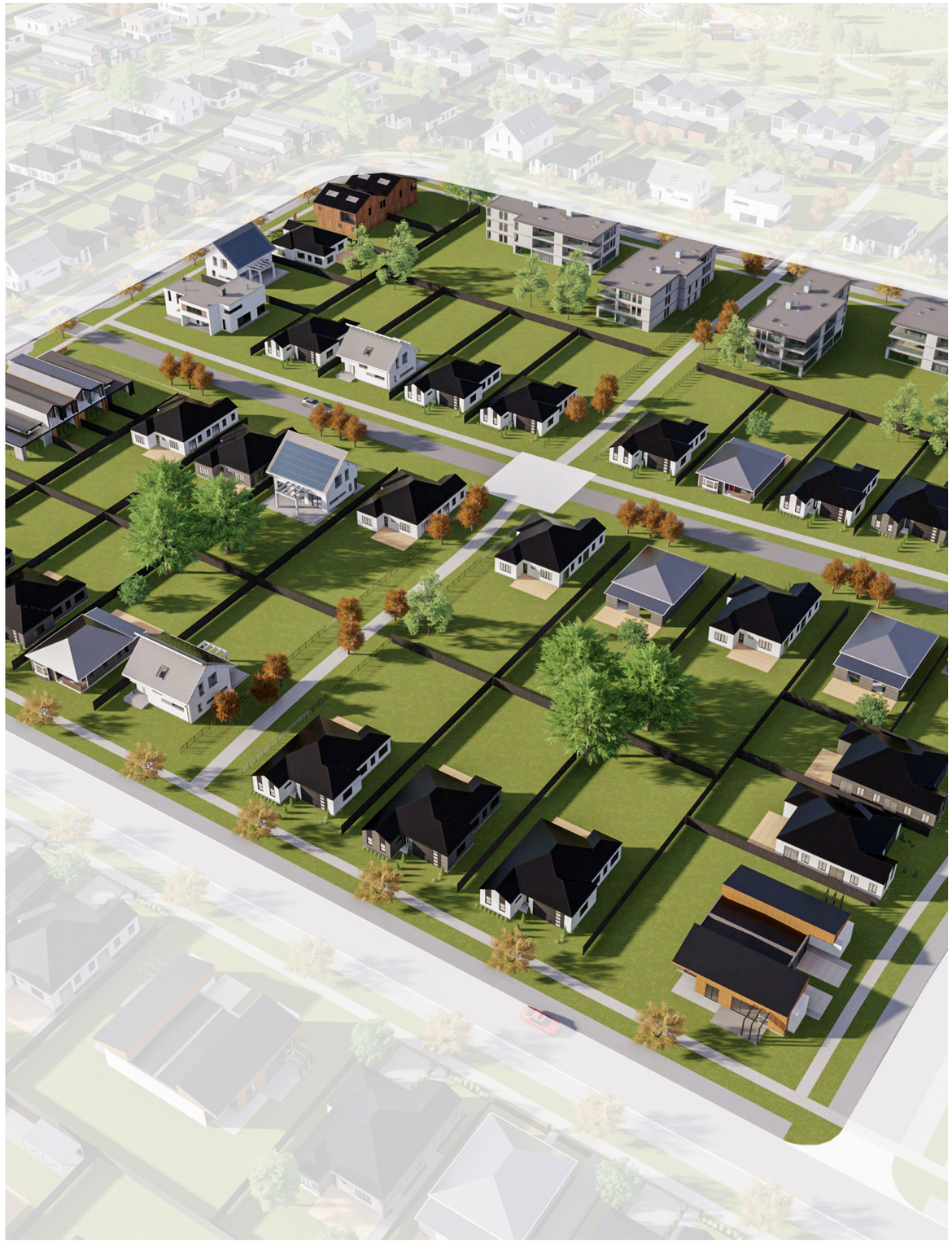
1. Use landform, orientation, aspect and prospect for holistic block design.
2. Safeguard native vegetation.
3. Incorporate existing landscape features into a scheme.
4. Choose informal grid alignment to minimise flood risk (see Neighbourhood). Incorporate indigenous biodiversity and ecological values into the stormwater management system.
5. Incorporate the principle of taiao to help achieve sustainability, resilience, natural character, and the goal of increasing the use of natives within public spaces.
6. Retain and revive historic features in public spaces.
7. Reinforce local character by identifying local patterns of land use, and design of open space and streetscapes.
8. Determine the future built typology to assist with block design.
9. Encourage clusters of same sized sites instead of linear site distribution.

MOVEMENT, ACCESS, MOBILITY

10. Choose a compact, inclusive, walkable and accessible block layout.
11. Design walkable blocks with a perimeter of 600-800 metres to ensure there is connectivity and choice of routes through to local shops, community facilities and public transport.
12. Follow a road hierarchy and road classification. Design for roads in the urban context.
13. Ensure the functionality and cohesion of all design elements, avoid dual street frontages.
14. Build an informal grid, which has predominantly north-south orientation, avoiding need for south facing sections.
15. Prefer crescents over culs-de sac, as crescents contribute to a walkable network. When culs-de sac are used, design them short (<60m) and straight, to have end-to-end visibility.
16. Consider a layout that is accessible for all users (contact and consult with BarrierFree).
17. Create the ability for access to a bus route within a 400-500m (5min walk) radius.
18. Avoid rear sites and long right of ways, to form a legible, safe network without the need for back-tracking.

INFRASTRUCTURE AND SERVICING

19. Combine function and amenity.
20. Favour Low Impact Development (LID) techniques, including water sensitive design that supports Te Mana o te Wai (see also Auckland Design Manual, Christchurch Waterways, Wetlands and Drainage Guide).
21. Use a multi-tiered approach to stormwater management that combines the natural ability of Papatūānuku to filter and cleanse stormwater with the use of advanced treatment systems.
22. Assess the risk around climate change and higher intensity rainfalls that require different ways to manage stormwater treatment and disposal.
23. Familiarise yourself with Transpower's advice on safe separation distances and access requirements.



KEY CONSIDERATIONS BLOCK

BLUE AND GREEN NETWORK

24. Consider the needs of the community for passive and active recreation.

25. Locate and distribute green space in accordance with proposed density. The higher the density the more reliance there is on reserves and streetscapes to balance the built environment.

26. Consider larger, shared communal, yet private, open space for higher density development.

27. Use the formula of 1.2ha reserve per 1,000 population, which has worked in the past and which is based on national guidelines.

28. Design open spaces according to purpose. Dimensions and placement need to work for the intended use.

29. Use 50m minimum width for use as public recreation reserve and a size of 1,000-2,000m^2 to ensure functionality of space.

30. Develop green pedestrian/ cycling links that are between 6-12m.

31. Use body corporate structures for communal open space areas that provides a setting for shared facilities.

32. Place green public spaces along main routes for visibility, legibility, accessibility, and safety.

33. Consider the distribution of green public spaces to enable easy walking distance for residents (500-600 metres).

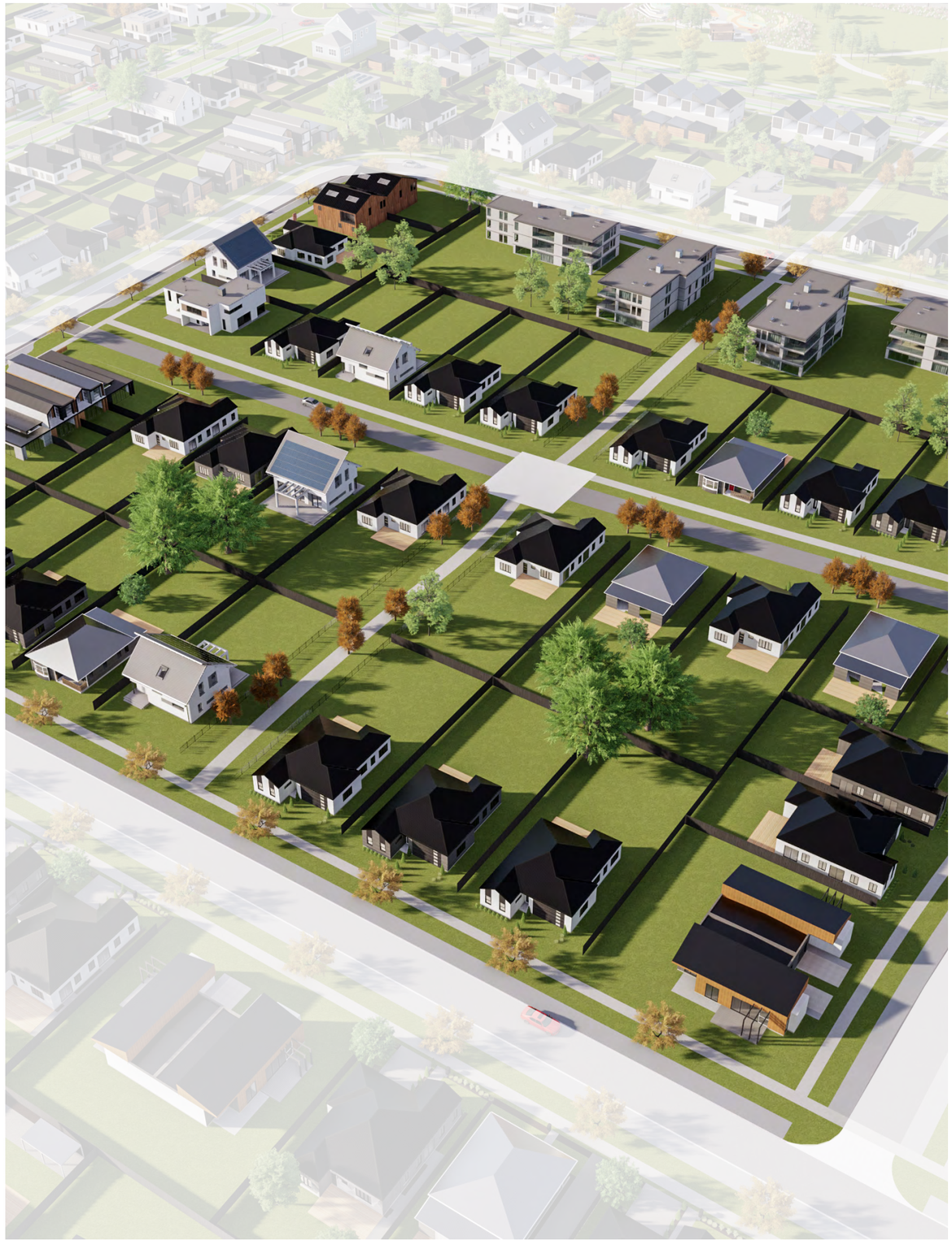
34. Provide opportunity for passive surveillance from adjoining land uses.

35. Ensure sufficient space is provided near waterway and wetland areas to enable habitat protection and retain ease of access.

36. Use native species within public open space plantings. Choose vegetation that is drought-tolerant or requires little irrigation.

37. Contact Council's Open Space Team for a copy of Councils adopted set of criteria to determine the suitability of land to be acquired by Council as reserve.

38. Follow the principle of taioa by using the reserve network to act as corridors and patches for indigenous wildlife.



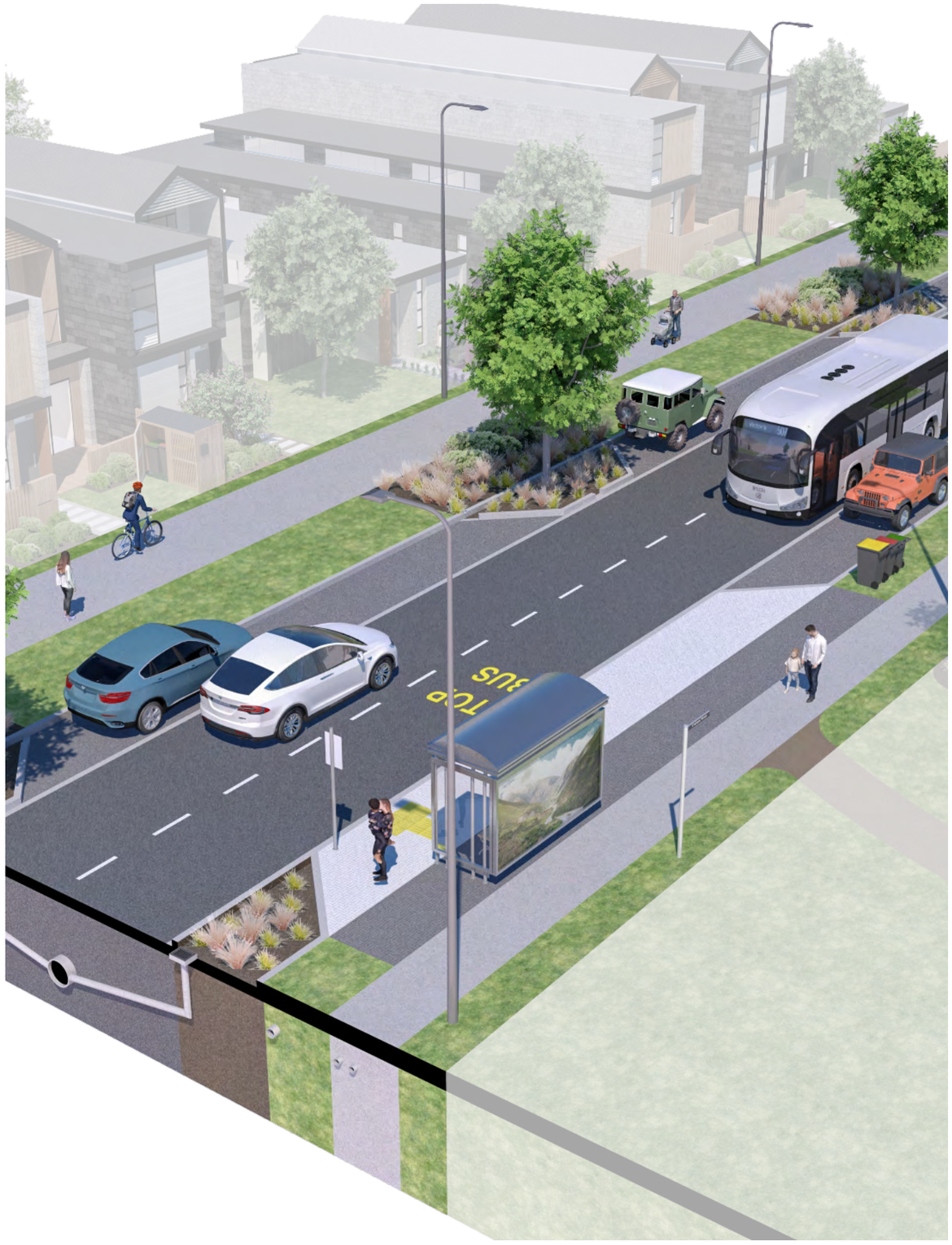
KEY CONSIDERATIONS STREET

NATURAL ENVIRONMENT

1. Provide sufficient space for landscape plantings (notably street trees) and Low Impact Development (LID) solutions.
2. Retain viewshafts between features along streets.
3. Retain, enhance and incorporate waterways into overall design.
4. Choose street and curb design that educates and deters discharges into drains.

MOVEMENT, ACCESS, MOBILITY

5. Understand and apply the correct balance between movement, access, and place function (mode-specific design).
6. Use international best practice concepts of 'Complete Streets' as guidance (see Chapter 5.6 Best Practice Complete Street Elements).
7. Design flexible layouts and adapt speed to context and roading types.
8. Consider landuse specific requirements (e.g. parking).
9. Utilise the principles provided within the Aotearoa Urban Street Planning and Design Guide.
10. Use ECoP for engineering details.
11. Apply CPTED principles for security (e.g. have roads along parks).
12. The default street type should be an adaptable street where all modes of transport can be incorporated.
13. Continue with the existing design elements between existing and new development. Align pedestrian routes alongside streets for visibility and safety.
14. Incorporate space for public transport (bus stop, Park and Ride).
15. Have footpaths and/or shared use paths on both sides of the carriageway.
16. Incorporate car parking by alternating spaces with street trees. Separate footpath and parked cars using different surfacing.
17. Keep street corridors wider to offset narrower street frontages and smaller on-site spaces in higher density areas and in the Medium Density Residential Zone.



KEY CONSIDERATIONS STREET

INFRASTRUCTURE AND SERVICING

18. Ensure street design considers sufficient space for all services.

19. Ensure berms are wide enough for refuse collection without affecting pedestrian flow.

20. Incorporate space and location for amenity features, such as street trees and utility areas, as part of the design.

21. Ensure street lighting complies with Council's street lighting requirements. Use LED lights, which reduce light bleed and overall create better and more efficient outcomes.

22. Street signs should be customised to suit the area and should match other street furniture.

23. For technical details, such as street and footpath widths, street lighting, kerbing etc., follow the District Plan and Council's ECoP.

24. Ensure that the street layout works for refuse collection, maintenance and emergency services. Familiarise yourself with the appropriate refuse collection method for the particular development, Council's Waste Management Policy, and the Waste Minimisation and Management Bylaw 2019.

BLUE AND GREEN NETWORK

25. Incorporate street trees to increase street canopy as part of an overall green network.

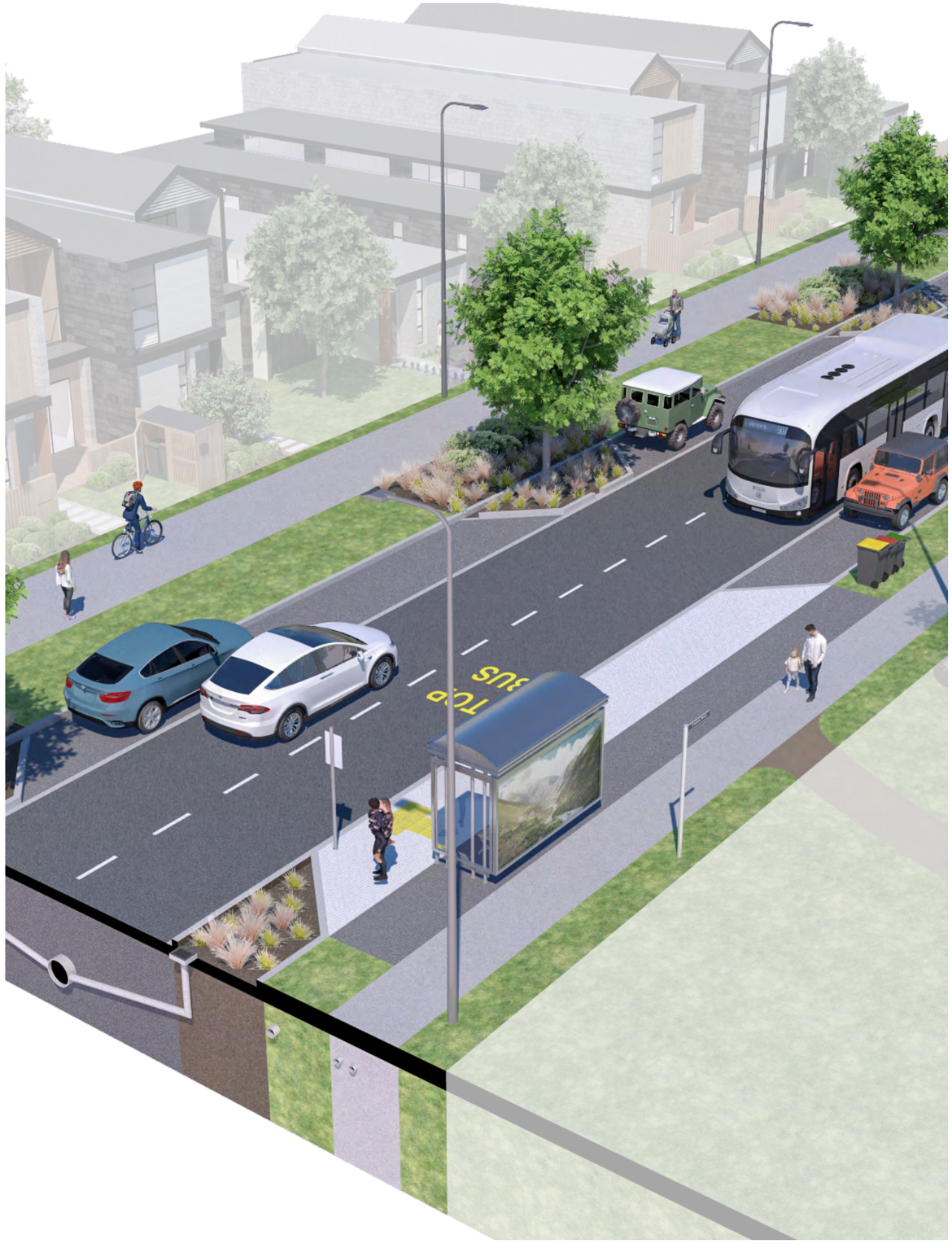
26. Consider landscape elements (including street trees) early in the design process for their overall benefits to the street environment.

27. 2m is a minimum space required within a berm to successfully grow trees. Avoid trees with shallow root systems in close proximity to hardscape and utilise root guard systems.

28. Consider a provision for roadside stormwater treatment and disposal (e.g. rain gardens).

29. Use green cycle/walking links as part of transport corridors.

30. Incorporate water races and natural watercourses. Consult with the Council's Infrastructure Team for all matters pertaining to water races, including operational matters, such as flow and cleaning regimes. Water races as natural features can form an attractive, distinctive element.



KEY CONSIDERATIONS SITE

ON-SITE AMENITY AND SITE CONFIGURATION

1. Place built form and access in accordance to solar orientation to achieve privacy and higher amenity outcomes overall.
2. Living rooms and private outdoor living space should ideally face north or north-west.
3. Allocate service space so it is not visible from public space.
4. Create privacy behind or to the side of built form.

PUBLIC PRIVATE INTERFACE

5. Design sites to have a clear front and back. Ensure the front door is visible and accessible from public space.
6. Incorporate street activating elements, such as vehicular access, front door, and glass openings facing public space to enable passive surveillance and meet CPTED principles.

ACCESS AND PARKING

7. Place driveways strategically, using the shady side of the site.
8. For traffic flow and safety issues, avoid placing multiple driveways next to each other.
9. Keep fencing and planting below driver's eye level (maximum of 1m) to optimise visibility when exiting/ accessing driveways.

BLUE AND GREEN NETWORK

10. Create well maintained front yards with landscaping that is suited to the local conditions.
11. Choose the right demarcation (fencing, planting) for the site that is in keeping with an open street scene.

SERVICE SPACE

12. Allocate space for service and storage areas on site, in areas close to where kerbside collection is happening, but out of the public eye, to retain a high amenity neighbourhood.
13. Provide service space in a separate location to outdoor living space.

PRIVATE OUTDOOR LIVING SPACE (POLS)

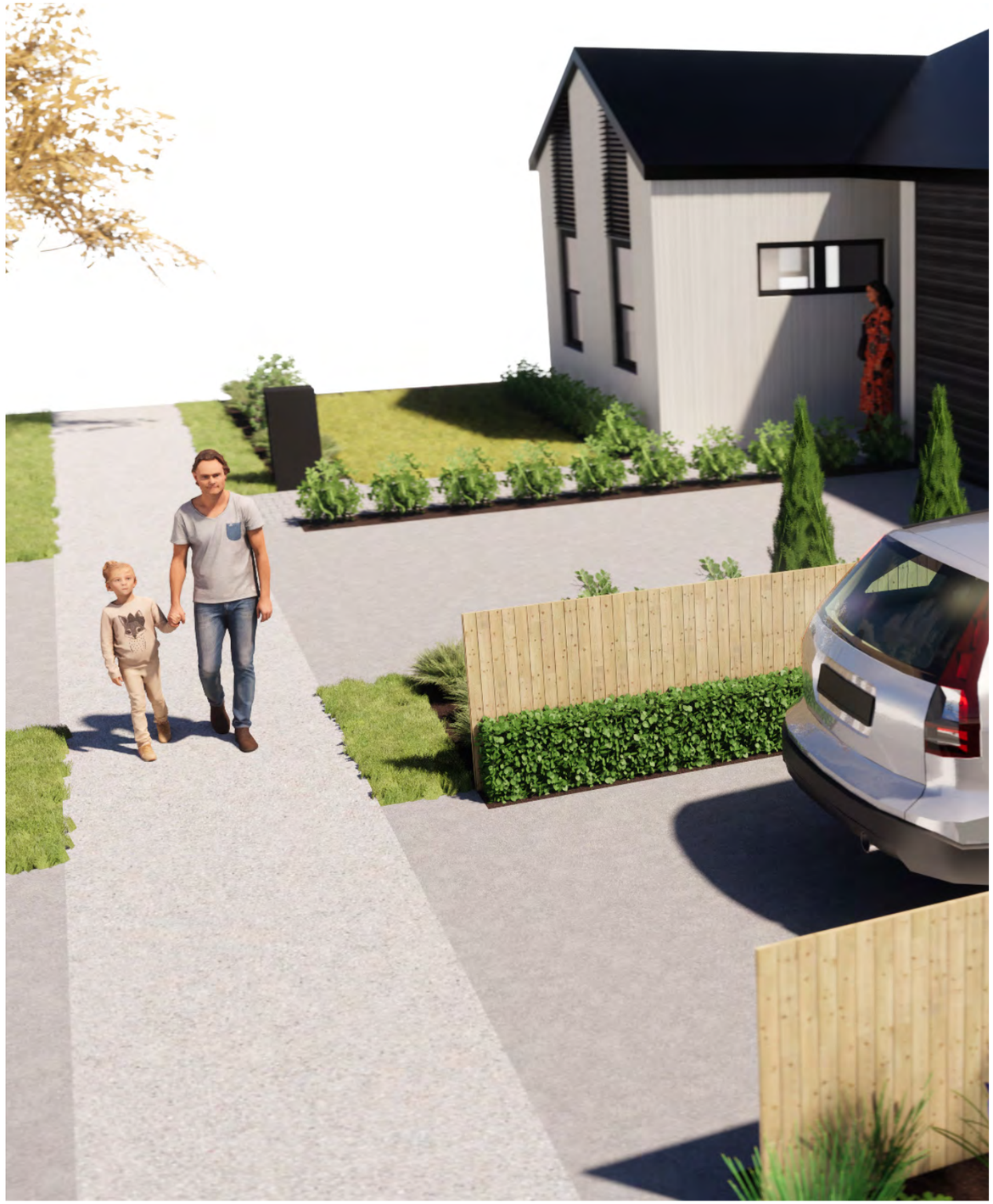
14. Consider orientation, point of access, site shape, size and prevailing wind direction for the placement of POLS.
15. Provide a minimum of 50m^2 exclusive POLS, with a minimum dimension of 4 metres. In the context of medium density sites, 20m^2 can be sufficient.
16. Design for POLS that is sheltered from the prevailing easterly wind.
17. On corner sites with a north facing orientation, POLS may be created in front of the façade, but a balance, for example by using complementary landscaping and fencing measures, needs to be achieved between privacy and passive surveillance.

FENCING

18. Fencing in front of the front façade of a building should be no more than 1 metre in height, to allow for passive surveillance between the building and public space.
19. Consider low level, maintained, hedging as an alternative solution for demarcation.
20. Reduce and visually break up long fence lines with cluster plantings and segmentation within your fencing style.
21. Ensure trees are limbed up to 2m to maintain sightlines.

HARDSCAPE/ SOFTSCAPE

22. Minimise impervious paved area to reduce storm water run-off.
23. Use eco-source plants for landscaping to add visual amenity to the streetscene. Using local nurseries helps to grow plants used to the local conditions.
24. Retain existing mature trees where possible. Plant at least one specimen tree on site to increase the tree canopy within the District.



KEY CONSIDERATIONS BUILT FORM

ARCHITECTURE/STYLE

1. Choose an architectural style that uses a Selwyn vernacular and fits with the local character.
2. Use varied housing types and sizes that respond to diverse housing needs and demands of the Selwyn community, which will enable people to age in place.
3. Ensure built form is of a scale complementary to Selwyn.
4. Design stand-alone units that demonstrate individual characteristics. Attached typologies should show synergy, while ensuring each unit retains a level of individuality.
5. Ensure the façade of a unit has the appropriate amount of glazing to provide passive surveillance to and from public space.
6. Units that use a vernacular for roof shapes, material palette, colour that speaks 'Selwyn' will blend into the neighbourhood, making a distinct and positive contribution. Preference is given to locally sourced, sustainable materials.
7. Choose design mechanisms to visually blend, reduce bulk or height and overall respond to the immediate environment.

SAFETY/PRIVACY

8. Follow national CPTED principles to design for passive surveillance.
9. Use the front of the unit to communicate with public space. Design building frontages for interest, safety, and making an attractive contribution to the street scene.
10. Ensure entrances are legible and safe and letterboxes are placed at the street boundary. Views to and from the unit need to be unobstructed (e.g. by parked cars, fencing). Increase legibility and safety by having a direct path from the street to a front door, which is clearly visible.
11. Design higher density with acoustic and visual privacy in mind to avoid conflicts between neighbours.

GARAGING

12. Integrate garaging within the overall building design, wherever possible.
13. Design garaging to suit development typology. Explore alternative options, if conventional does not work for the circumstances (e.g. tandem).
14. Place garaging or accessory buildings behind the front façade of the corresponding unit.
15. Ensure garages don't take up more than 50% of the ground floor façade. Some narrower units might not have any garaging.

SUSTAINABILITY/EQUITY

16. Consider Homestar to measure the performance of units and the contribution to a future proof built form.
17. Encourage ownership, custodianship, and 'house proudness' within each unit.

TYPOLOGIES

18. Choose typologies that have been identified as most suitable on the corresponding parent lot. The built form needs to respond to any restrictions given by the site. This includes street frontage width, access, shape, and location.
19. Design higher density typologies in clusters rather than rows. This allows a better integration with the overall development.
20. Place higher density typologies in the centre of developments and/or close to open space and services. Centralising the higher density development allows for blending different typologies (and heights) and mitigates potential reverse effects. Use low density as a soft transition to less urbanised areas and roads where hard boundaries are required (see also Chapter 8 Density in Selwyn).