



Design Principle 3: Support A Healthy Environment & Ecology

Where people are connected to nature and the development improves ecological outcomes in the long-term

The existing environment of Te Pūtahi Ladies Mile is valued for its open space characteristics, however the rural landscape is not representative of original indigenous ecologies and does not support sustainable water management.

The landscape of the Masterplan seeks to support the regeneration of native species alongside the retention of existing trees and complementary exotic planting. The stormwater strategy is aligned with the landscape strategy, providing planted wetlands and swales that ensure future resilience and promote the health of waterways and people.

Key Moves

- Establish a strong holistic landscape framework.
- Water is managed in a way that gives effect to Te Mana o te Wai.
- Maintain ecological value of the Lake Hayes wetland edge, and improve connections between the lake and river.
- Support kaitiakitanga of the environment and connections to nature.



Landscape Concept

The overall landscape strategy for Ladies Mile seeks to create a strong vegetation framework that supports the regeneration of native ecologies; provides for habitat connections between Lake Hayes, Slope Hill, and the Shotover river; and reflects the rural, agricultural, and open space qualities of the wider Wakatipu Basin.

SH6

SH6 is a major gateway to Queenstown and the landscape approach is to retain and enhance the existing qualities of this arrival experience – namely a tree lined and landscaped corridor with open views to the Remarkables and the establishment of key view corridors to Slope Hill. The existing chestnut trees on the Southern side of SH6 should be retained and additional tree planting to both sides should be large scale exotic species to create a consistent and distinctive arrival experience.

Native Corridor:

A habitat corridor is proposed to the base of Slope Hill to connect Lake Hayes with the Shotover river. Planting will reflect the original woodland, scrub-land, and tussock grassland ecology of the area. Whilst outside of the study area the plan promotes the re-vegetation of the lower Slope Hill gullies to contribute to stormwater management, water quality, biodiversity, and habitat creation.

The focus of planting along, and to the north of the primary spine road should be native including stormwater reserves and swales, walkways, amenity reserves and private gardens. Exotic species for heritage and amenity values can be incorporated. The swale systems on primary link roads to SH6 extend the native planting to meet SH6 and provide a distinctive character for Ladies Mile.

Primary entrance roads:

Street tree planting for the 3 main entrance roads should be large scale to reflect the agrarian landscape and language of shelter-belts and strong lines. Form and placement should be considered so as to maintain and accentuate views to Slope Hill.

Existing trees:

Existing mature trees have been identified for retention, notably the Oak lined driveway and trees associated with the homestead. These trees provide a maturity and landmarks for the development that are not easily replaced.

Internal Streets:

Street tree and under-planting to internal streets should be a blend of native and exotic species selected to compliment the overall planting framework whilst responding to site specific view shafts, solar gain, provision of shade, and scale. It is also anticipated that the tree planting within private lots will contribute to the overall streetscape, and again species should be selected to contribute to overall biodiversity, bird habitat, and the overall ambition for a network of connected green neighbourhoods.



Native Ecologies

To support and restore native ecologies.



Exotic local character

Exotic, deciduous trees reflecting local character and providing seasonal variation.






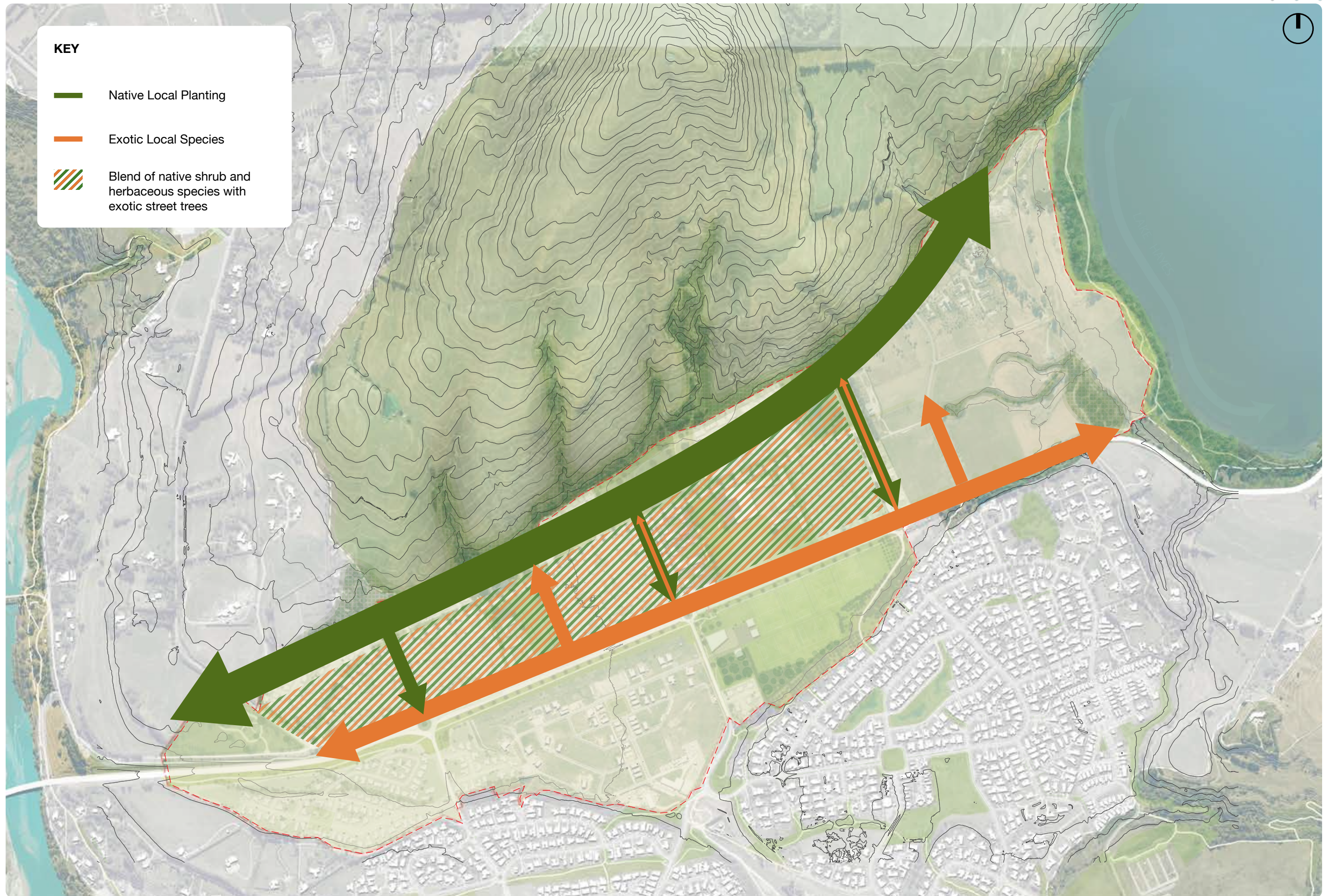
Native and Exotic blend

Blending native shrub and herbaceous species with exotic trees to celebrate both characters and extend native habitats.



KEY

-  Native Local Planting
-  Exotic Local Species
-  Blend of native shrub and herbaceous species with exotic street trees



Planting Palette

							
			Sweet Chestnut <i>Castanea sativa</i>	English Beech <i>Fagus sylvatica</i>	Flowering Cherry <i>Prunus 'Shirofugen'</i>	Mountain Ash <i>Eucalyptus regnans</i>	
							
			Flowering Ash <i>Fraxinus ornus 'fastigiata pyramidalis'</i>	Dutch Elm <i>Ulmus hollandica 'Lobel'</i>	Oak <i>Quercus petraea</i>	Oak <i>Quercus palustris</i>	Tulip Tree <i>Liriodendron tulipifera</i>
							
Sweetgum <i>Liquidambar styraciflua</i>	Black gum <i>Nyssa sylvatica</i>	Upright Oak <i>Quercus robur 'Fastigiata'</i>	Sedge <i>Carex buechananii</i>	Sedge <i>Carex secta</i>	Red Tussock <i>Chinochloa rubra</i>	Olearia <i>Olearia bullata</i>	
							
	Kowhai <i>phylla</i>	Sedge <i>Carex buechananii</i>	Sedge <i>Carex secta</i>	Red Tussock <i>Chinochloa rubra</i>	Olearia <i>Olearia bullata Sophora micro-</i>	Flax <i>Phormium tenax</i>	
							
Cabbage Tree <i>Cordyline australis</i>	Kowhai <i>Sophora microphylla</i>	Toi toi <i>Austroderia richardii</i>	Red Tussock <i>Chinochloa rubra</i>	Corokia <i>Corokia cotoneaster</i>	Coprosma <i>Coprosma rugosa</i>	Hebe <i>Hebe ordora</i>	Flax <i>Phormium tenax</i>
							
Kowhai <i>Sophora microphylla</i>	Beech <i>Fuscospora cliffortiodes</i>	Tussock <i>Chinochloa rigida</i>	Wineberry <i>Aristotelia serrata</i>	Manuka <i>Leptospermum scoparium</i>	Tree Daisy <i>Olearia bullata</i>	Tree Daisy <i>Discaria toumatou</i>	Flax <i>Phormium tenax</i>

1 Retained trees

2 SH6
Large scale deciduous species to compliment existing SH6 character

3 Internal streets
A blend of native and exotic species. Low lying native species to provide habitat and native character. Exotic street trees to compliment local character and provide passive solar benefits.

- Swale/water sensitive planting
- Exotic deciduous trees

4 Collector Road
The green link across the development with natural stormwater treatment, cycle and walk ways integrated within the native vegetation.

- Swale/water sensitive planting
- Habitat friendly (flowers + berries)

5 Reserves
Native planting palette for stormwater and recreation reserves to reflect the indigenous woodland species of the ecological region and support habitat for native species.

- Kowhai trees for shade
- Water sensitive plants
- Amenity planting

6 Slope Hill Gullies
Support the re-vegetation of slope hill gullies to provide habitat and improve stormwater management.

- Plants that handle dampness
- Plants that attract insects and birds (typically berries & flowers)
- Planting palette to reflect original vegetation of Slope Hill area

Note: The illustrative school locations and layouts are indicative only and are subject to confirmation by Ministry of Education



Stormwater Strategy

Stormwater Strategy Key Features

- Utilise stormwater management solutions that mimic the natural water cycle and enhance the water quality.
- Employ an integrated stormwater management approach that supports connectivity to the natural environment and gives effect to Te Mana o te Wai and the community wellbeing.
- Manage flooding and surface water flow to safeguard the community and infrastructure in a sustainable manner.
- Implement stormwater management solutions that deliver lifecycle operational and economic resilience.
- Alignment between 'blue' stormwater strategy and the wider 'green' landscape and open space strategies.

PRECEDENT IMAGES

- ① Stormwater wetland with native planting and walking paths.
- ② Stormwater swales with native planting and pathways winding across and around.
- ③ Stormwater retention pond with native planting and walking paths.
- ④ Stormwater retention pond with native planting and walking paths.



Hooten Reserve & Lucas Creek, Albany, Auckland. Project by Bradbury McKegg (BMLA). Source: <https://architecturenow.co.nz/articles/hooten-reserve-lucas-creek/>

KEY

-  Slope Hill Stormwater Area - runoff to be captured and conveyed to the Stormwater Management Areas or swales.
-  Vegetated Swales - to convey stormwater runoff from Slope Hill to the Stormwater Management Areas and existing stormwater network.
-  Stormwater Management Wet Area - to provide water quality treatment and stormwater disposal through soakage.
-  Park and Open Space - to provide active recreation and act as emergency storage during large rainfall events.
-  Existing Stormwater Network

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