

unitec campus landscape strategy



A strategy based on a distillation of findings arising from a process, during 2014 and 2015, of consultation
This proposal is presented as a starting point for further discussion

December 2015
Department of Landscape Architecture

i Unitec Whakapapa

Ko Ōwairaka te maunga
Ko Te Whau te awa
Ko Te Waitematā, ko Manukau ngā moana
Ko Te Noho Kotahitanga te marae
Ko Ngākau Māhaki te wharenuī
Ko Manaaki te wharekai
Ko Puukenga te whare manaaki
Ko Wairaka, ko Raukatura ngā tūpuna
Ko Ngāti Whātua te ahi kaa roa

Ōwairaka is the mountain
The Whau is the river
Waitematā and Manukau are the harbours
Te Noho Kotahitanga is the marae
Ngākau Māhaki is the meeting house
Manaaki is the dining room
Puukenga is the support centre
Wairaka and Rakatura are the ancestors
Ngāti Whātua are the guardians of the land¹

¹ Unitec. (n.d.). Whakapapa. Retrieved from <http://www.unitec.ac.nz/maori/who-we-are/our-whakapapa>

² Māori Dictionary. (n.d.). Retrieved from <http://maoridictionary.co.nz>

ii Glossary²

Kaitiakitanga - guardianship, stewardship, trusteeship
Pā Harakeke - flax plantation
Manaaki - Unitec's wharekai (dining room), to support, take care of, give hospitality to, protect, look out for - show respect, generosity and care for others
Mana Whenua - territorial rights, power from the land, authority over land or territory, jurisdiction over land or territory - power associated with possession and occupation of tribal land
Marae Atea - courtyard, public forum - open area in front of the wharenuī where formal welcomes to visitors takes place and issues are debated
Mātauranga Māori - Māori knowledge - the body of knowledge originating from Māori ancestors, including the Māori world view and perspectives, Māori creativity and cultural practices
Ngākau Mahaki - Unitec's wharenuī (meeting house), pleasant person, mild mannered
Ngāti Whātua - mana whenua in Tamaki Makaurau
Ōwairaka – Mt Albert, maunga
Piringa – Department of Landscape Architecture whānau room
Poutama - the stepped pattern of tukutuku panels and woven mats, symbolising genealogies and also the various levels of learning and intellectual achievement. Some say they represent the steps, which Tāne-o-te-wānanga ascended to the topmost realm in his quest for superior knowledge and religion
Puukenga - Unitec's Maia Māori Centre
Rohe – to set boundaries, set apart
Te Ao Māori - the Māori world, the Māori world view
Te Auaunga - Oakley Creek
Te Hononga - Unitec's Māori architecture studio
Te Noho Kotahitanga - Unitec's marae, the partnership document, which acknowledges mana whenua and expresses Unitec's commitment to the Treaty of Waitangi
Te Rangimarie - Unitec's Pā harakeke (flax plantation)
Te Waitematā - Auckland harbour, moana (sea)
Te Wai Unuroa o Wairaka - Unitec's spring/stream
Te Whau - The Whau, awa (river)
Te Whare Wānanga o Wairaka - Unitec Institute of Technology
Waharoa - entrance to a pā, gateway, main entranceway

iii Te Aranga Design Principles

The key objective of the principles is to enhance the protection, reinstatement, development and articulation of mana whenua cultural landscapes enabling all of us (mana whenua, mataawaka, tauiwi and manuhiri) to connect to and deepen our ‘sense of place’.

Mana - The status of iwi and hapū as mana whenua is recognised and respected

Whakapapa - Māori names are celebrated

Taiao - The natural environment is protected, restored and/or enhanced

Mauri Tu - Environmental health is protected, maintained and/or enhanced

Mahi Toi - Iwi/hapū narratives are captured and expressed creatively and appropriately

Tohu - Mana whenua significant sites and cultural landmarks are acknowledged

Ahi Kā - Iwi/hapū have a living and enduring presence and are secure and valued within their rohe³

³ Auckland Council. (n.d.). Auckland Design Manual. Te Aranga Principles. Retrieved from http://www.aucklanddesignmanual.co.nz/design-thinking/maori-design/te_aranga_principles#/design-thinking/maori-design/te_aranga_principles/guidance/tohu_wider_cultural_landscape

iv The Design Strategy

The proposed scheme is a response to the unique qualities of both Unitec the institution and the culturally shared landscape context.

Two defining elements have been identified and harnessed in order to meet educational, business and residential demands and provide amenity, interest and permeability.

Culture

Te Ao Māori provides an overarching and enriching dimension at Unitec.

Te Noho Kotahitanga,⁴ the partnership document, acknowledges manu whenua and expresses Unitec’s commitment to the Treaty of Waitangi; the Poutama⁵ embeds mātauranga Māori in the living curriculum; Te Aranga Design Principles guide Unitec’s design strategy and help to ensure the development of high quality and durable relationships with iwi and hapū; the sacred spring Te Wai Unuroa o Wairaka is a galvanising and magnetic entity. Pukenga, Te Wharekai Manaaki and Te Noho Kotahitanga Marae are physical manifestations of this commitment and the importance of New Zealand’s unique cultural dimension to Unitec. Collectively these entities form the campuses cultural heart.

Nature

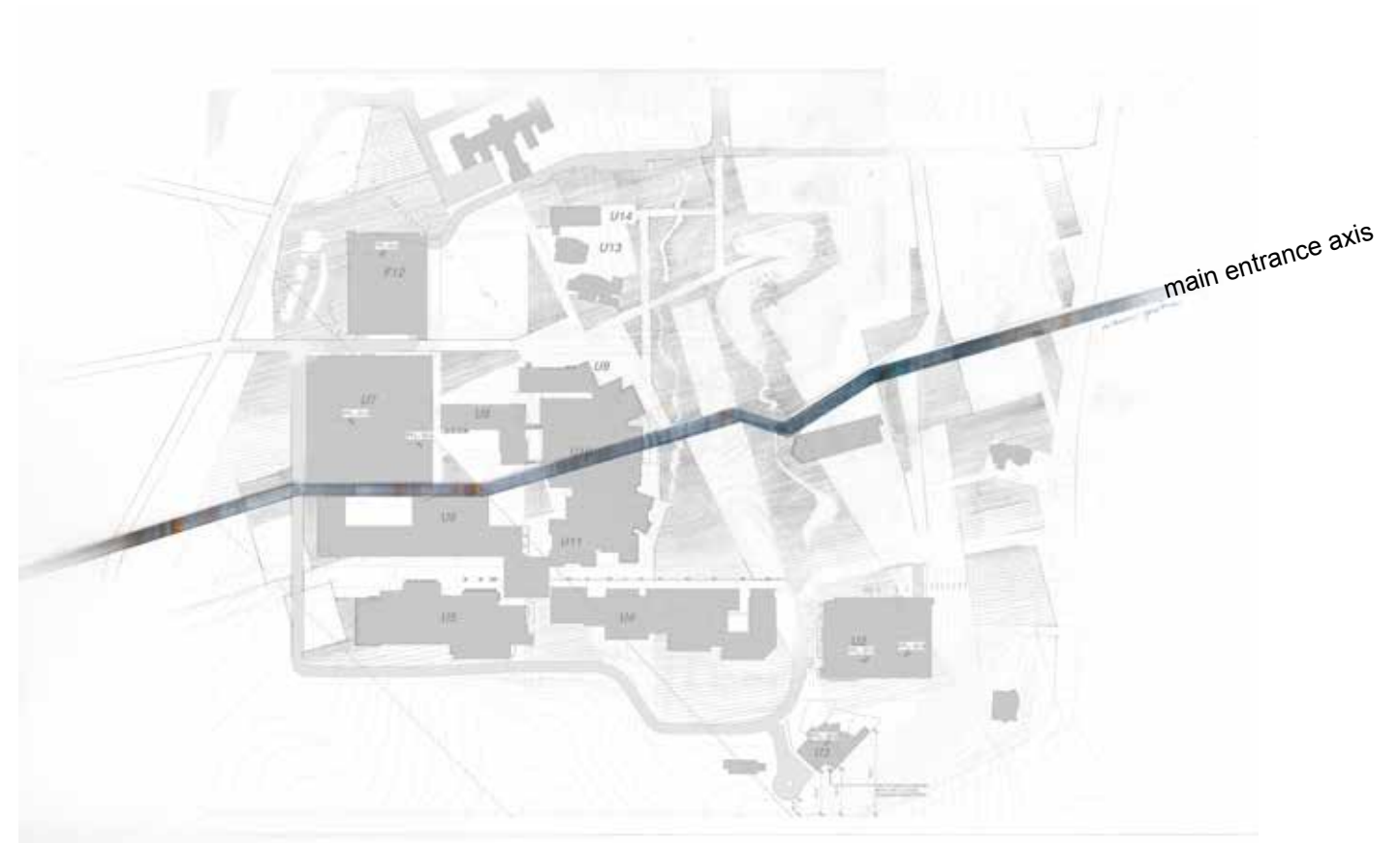
The Mt Albert site is renowned for its landscape. Vegetation and water are defining qualities. The arboretum includes 200 different exotic and native species of plants and trees; the Mahi Whenua ‘Hortecology’ Sanctuary houses the community garden and food forest; a large wet-land dominates the central campus; riparian planting accompanies Wairaka Stream on its travels from spring to the sea. This verdant and watery character is amplified by spectacular views of the Waitakere Ranges, the upper harbour and the close proximity to Oakley Creek Te Auaunga (whirlpool or swirling waters) on the western edge.

With the impending consolidation and intensification, retaining and strengthening the power of this landscape becomes all the more important.

⁴ Unitec. (2001). Te Noho Kotahitanga. Retrieved from <http://www.unitec.ac.nz/maori/who-we-are/our-partnership>

⁵ Unitec. (n.d.). Poutama. Retrieved from <http://www.unitec.ac.nz/ahimura/publications/Poutama%20for%20Distribution%20and%20Publication.pdf>

V The Concept



In light of this potent and unique intersection of culture and nature at the Mt Albert campus a promenade adjacent to Wairaka Stream is proposed to form a central organising spine. This spine, in keeping with the Te Aranga principles of Tohu, Taiao, Mauri Tu and Ahi Kā emphasises the cultural and ecological significance of the stream and serves to connect the Cultural Precinct to both the Learning Core and the sacred spring. Bisecting this element is the main entrance axis, which links the suburb of Mt Albert to the campus and in turn the suburb of Waterview beyond.

A Carrington Road: vehicles, pedestrians and cyclists

B Business Partnership zone

C Bus drop-off and arrival points

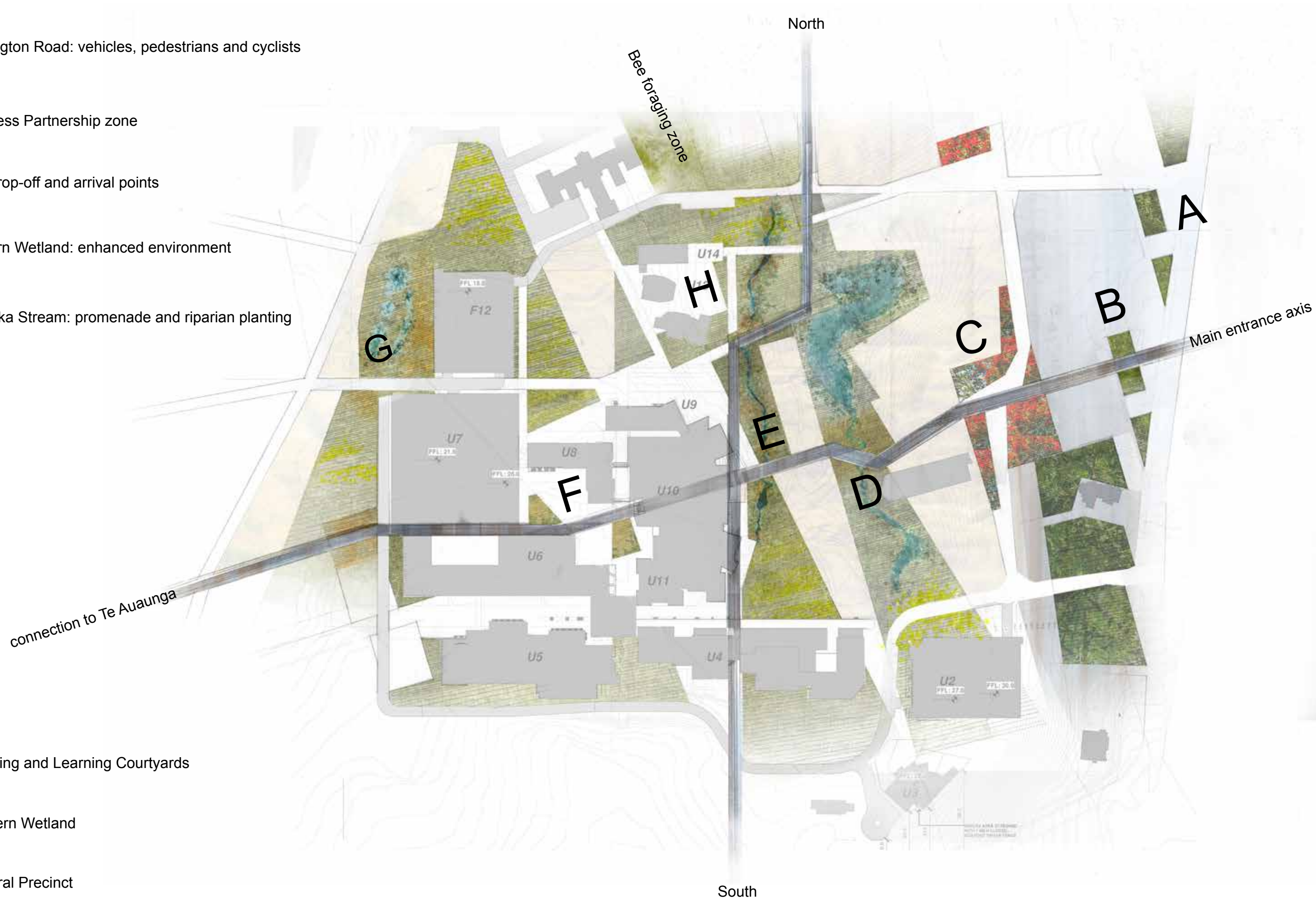
D Eastern Wetland: enhanced environment

E Wairaka Stream: promenade and riparian planting

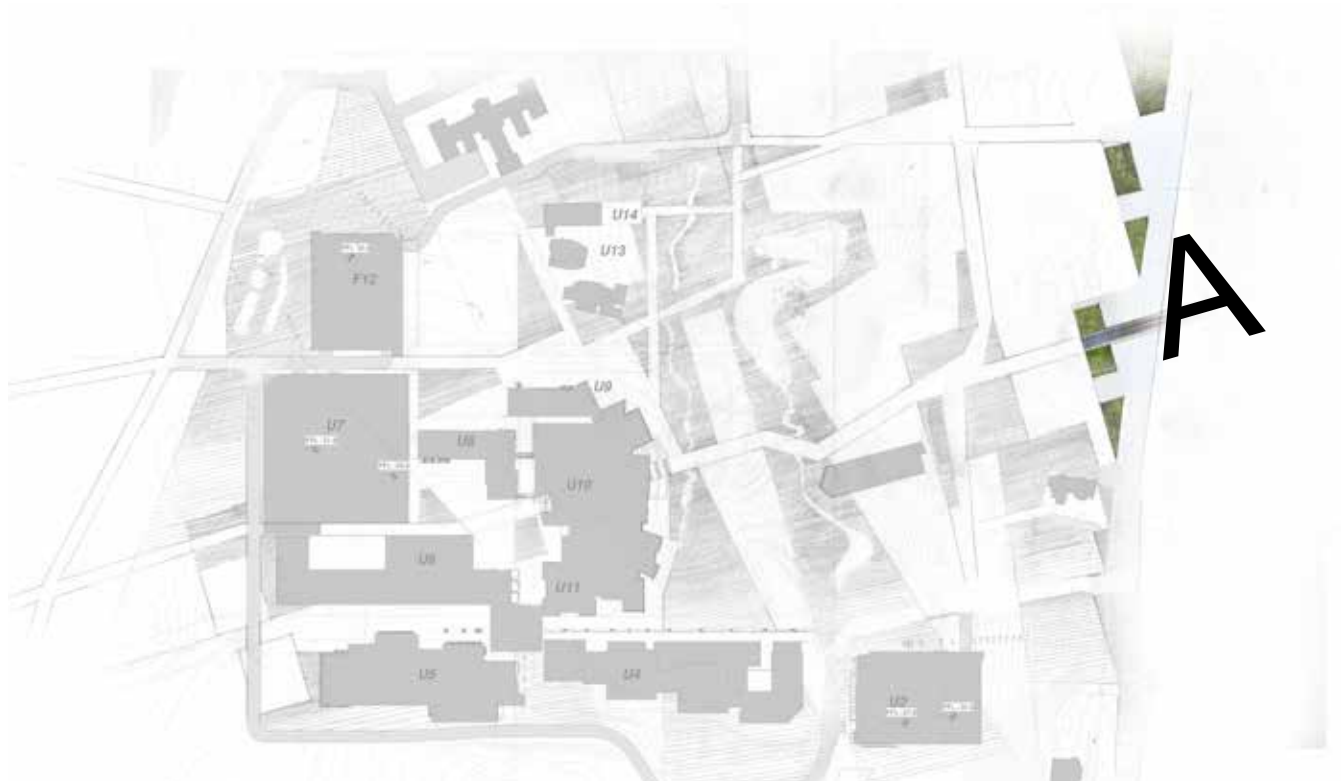
F Teaching and Learning Courtyards

G Western Wetland

H Cultural Precinct



A pedestrians and cyclists

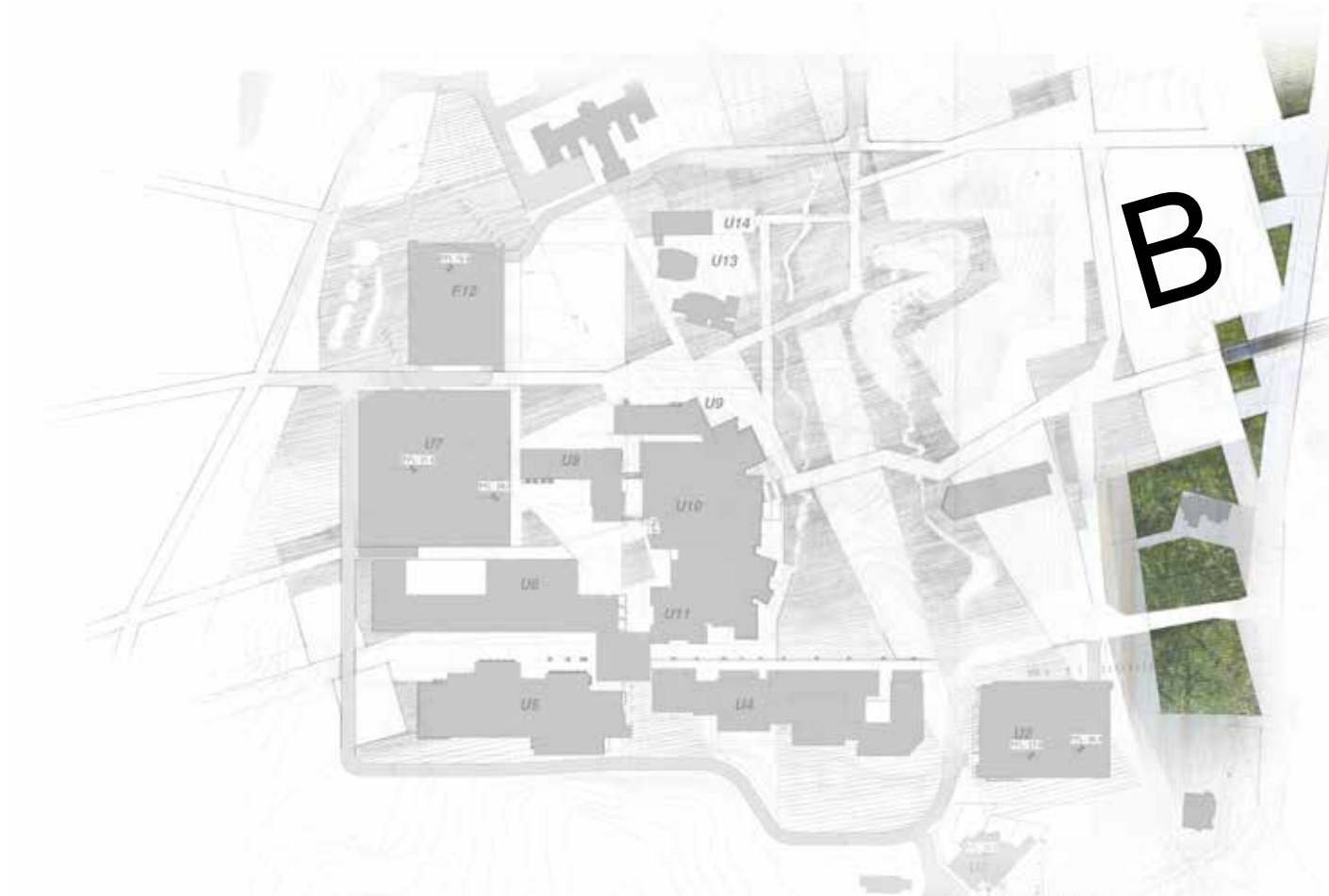


Visitors to the campus proceed through a series of zones. At the Carrington Road frontage, land gifted to Auckland Transport by Unitec, will allow for road widening that will lessen congestion, improve safety and provide amenity. Elements of the vegetated edge will extend into the carriageway to create innovative, attractive and user friendly corridors that separate cyclists and foot traffic from public and private vehicles.





B kauri - permeable frontage

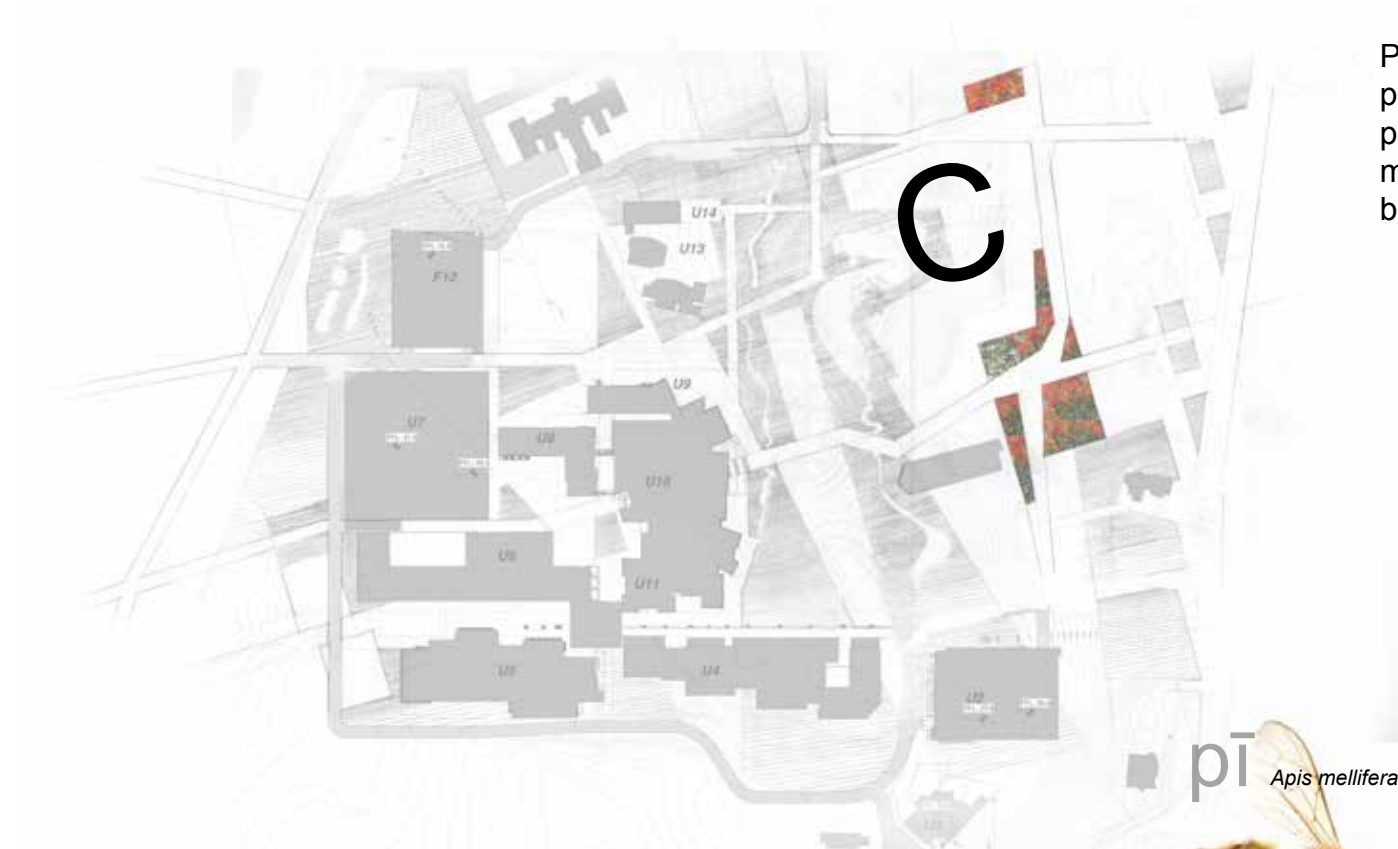


A serrated and punctured edge ensures permeability, facilitating views and access into the precinct for pedestrians and vehicles alike. Repeated, large stands of native kauri trees lend the entrance grandeur, interest and a sense of arrival. The mass planting of this iconic tree, in keeping with the Te Aranga principles of Taiao and Mauri tu, has a sound environmental rationale - as kauri dieback⁶ ravishes the species in its natural habitat, it is a form of survival insurance.

⁶ Keep Kauri Standing. (n.d.). Kauri Dieback. Retrieved from <http://www.kauridieback.co.nz/kauri-dieback>



C pōhutukawa - public drop-off



Passing through the Business Partnership zone visitors enter an arrival node with provision for drop-off by public and private vehicles. Pōhutukawa trees en-mass (the existing grouping expanded and intensified) provides a spectacular summer display, enhancing the amenity for which Unitec is renowned. A matching, but more intimate grove of pōhutukawa to the north greets visitors as they disembark at the formal marae entrance bus layby.



pī *Apis mellifera*, honey bee



D kahikatea - eastern wetland



The main entrance axis at this point traverses the slope and directs pedestrians towards the Learning Core. En route visitors pass through a large stand of majestic kahikatea that signifies the commencement of the Wetland zone. To either side drifts of harakeke, kōwhai and other water-tolerant plants contribute positively to environmental health, providing additional habitat and food for native fauna as well as amenity. Protecting and enhancing natural habitats and wildlife are important outcomes and reflect the principles, goals and targets of Unitec's One Planet Strategic Action Plan, He Whetu ao, orange kotahi.⁷

koukou, ruru

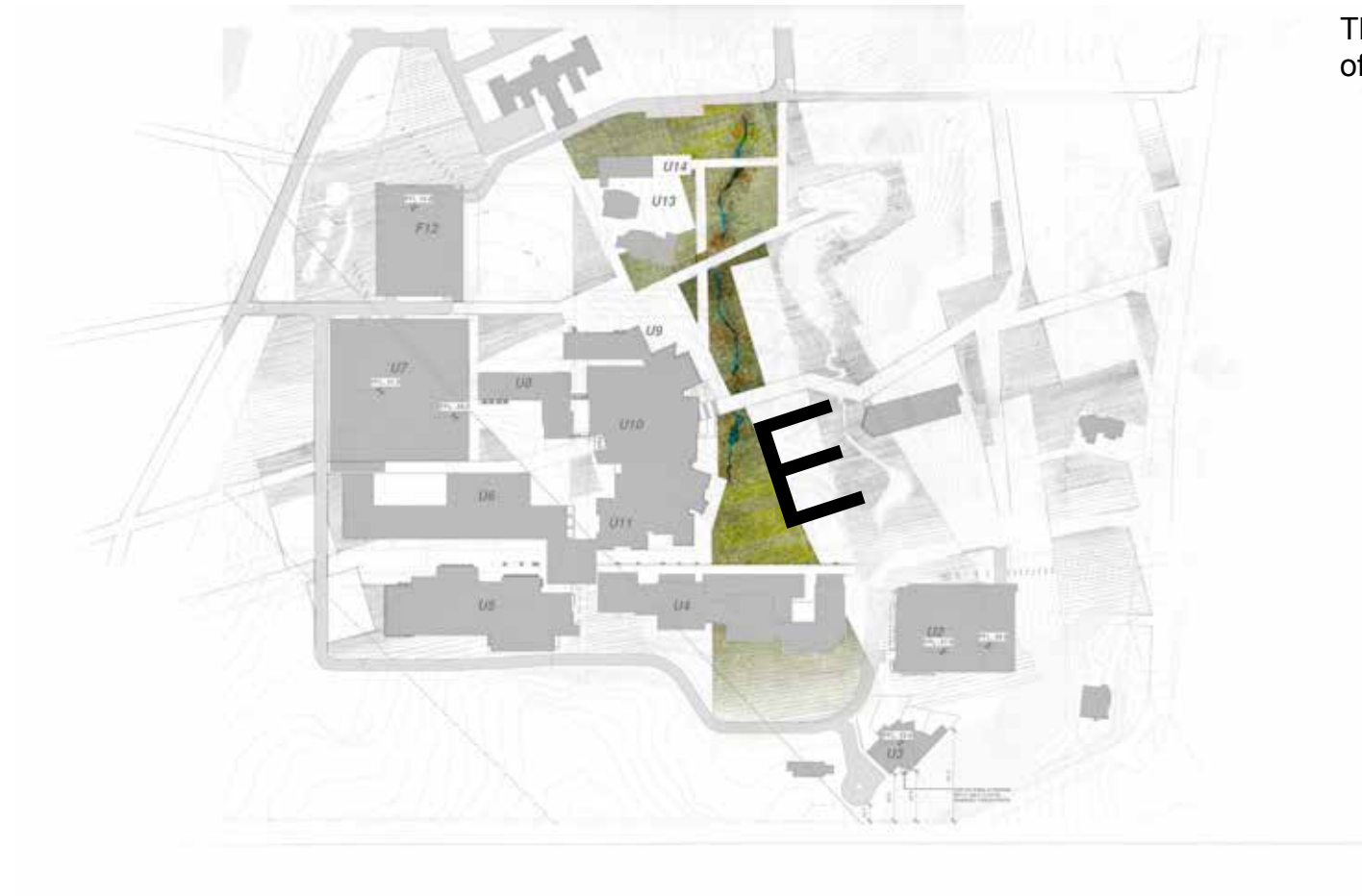
Ninox novaeseelandiae,
morepork



⁷ Unitec. (2015). Unitec One Planet Strategic Action Plan, He Whetu ao, orange kotahi. Auckland, New Zealand: Unitec. passim.



E purei, kahikatea - Wairaka Stream and promenade

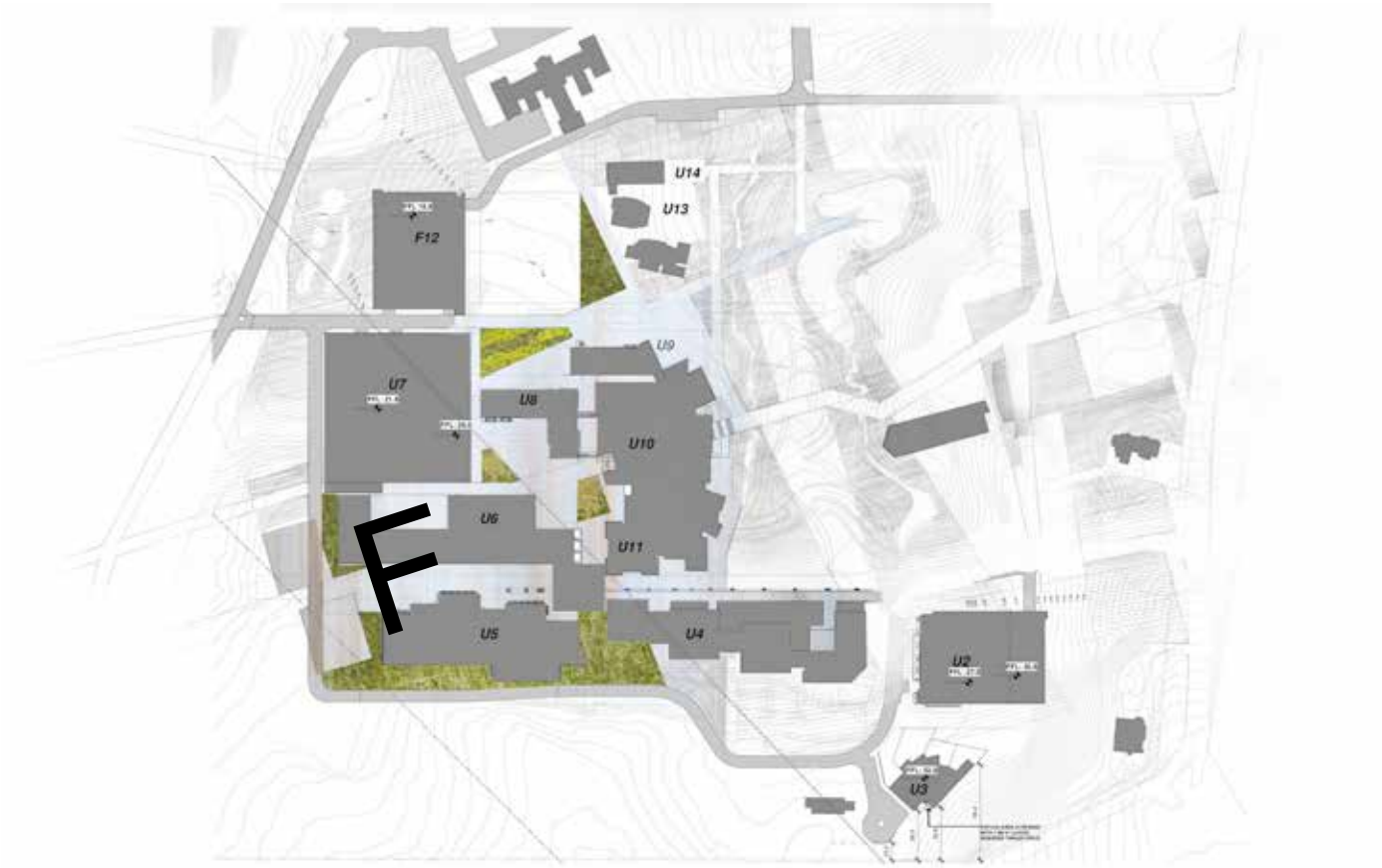


The crossing of the Riparian zone, Wairaka Stream and the accompanying promenade, provides a moment of drama and a contemplative pause point before visitors reach the Learning Core.





F kōwhai, tītoki - teaching and learning courtyards



Visitors pass by and through a series of outdoor learning spaces all of which also offer meeting and social opportunities for students, staff, residents and the wider community. A mixture of fixed and moveable furniture allows for multiple configurations, whilst the provision of shelter provides protection from the elements enabling year round individual and group learning. A restrained palette of small native specimen trees, including tītoki and kōwhai, provide shade and a food source for native birds.

tauhou

Zosterops lateralis, white-eye, wax-eye





G kahikatea - western wetland



Emerging from the Learning Core on the western side pedestrian's encounter another wetland, providing the signature attributes of amenity and habitat, which performs an added ecological function. In keeping with the spirit of kaitiakitanga, Unitec's Sustainability Strategy⁸ and the Te Aranga principle of Mauri Tu, the wetland receives and cleans water from the roofs of the CET building and the new car park building before releasing it into the existing storm water system. Large stands of kahikatea and kōwhai accompanied by a restrained selection of wetland plants provide spectacle, ecological function and serve to screen the car park building. From this point a number of entrances and accompanying bridges ensure the permeability of the western boundary, providing access to and over picturesque Oakley Creek Te Auaunga en route to the suburb of Waterview.

matuku-moana

Ardea cinerea, grey heron

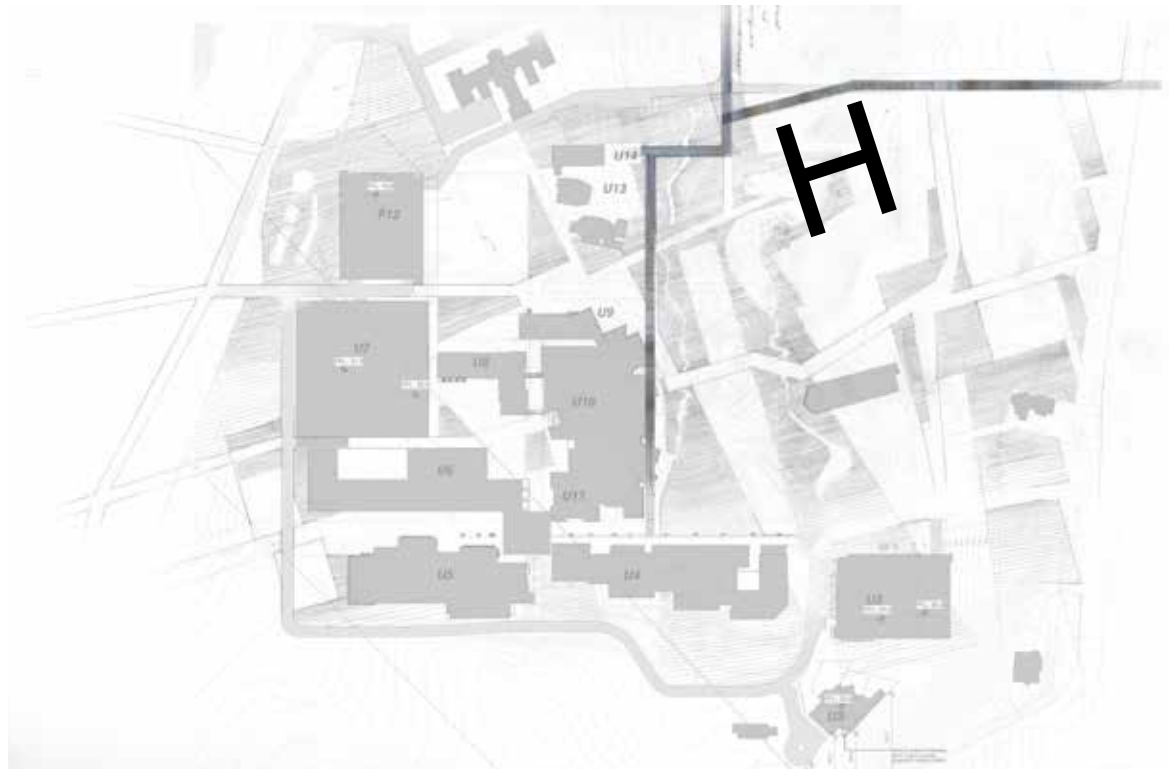


⁸ Unitec. (n.d.). Unitec's Sustainability Strategy. Retrieved from <http://www.ebookonline.co.nz/unitec/unitecsustainabilitystrategyebook/>



Image courtesy of Matthew Bradbury and Kevin Zhu - Planting Plan attached (xii)

H harakeke, pōhuehue - Te Noho Kotahitanga Marae to Te Wai Unuroa o Wairaka



At the northern end of the Wairaka promenade a substantial, vegetative screen restricts casual access from the road to Te Noho Kotahitanga Marae. As an alternative a formal entrance is proposed that commences to the east at Unitec Gate 3. A bus layby with an accompanying toilet block, adjacent to the playing field, caters for large groups. Visitors, after the customary welcome, proceed down the slope, pass through a waharoa and across the Wairaka Stream to the marae atea.

Along with this enhancement, the adjacent sacred Pā Harakeke could be enlarged to cover a wider riparian area, as proposed in the Wairaka Stream Restoration Plan Discussion Document.⁹ This could also include other plants of cultural significance, for example kōwhitiwhiti watakirihi (watercress, *Nasturium officinale*).

Heading to the south the promenade passes Te Wharekai Manaaki and then Pukenga before encountering a restricted entry, which controls access in and out of the cultural heart of Unitec.

Pedestrians then arrive at one of the many proposed outdoor learning and social spaces adjacent to the Learning Core. Moving on, bisecting stands of kahikatea and assorted riparian plants, the promenade intersects with the main entrance axis, before reaching Te Wai Unuroa o Wairaka and then terminating at the upper courtyard in front of building U4. Along the western edge of this spine various native climbers such as pōhuehue (*Muehlenbeckia complexa*) and Three Kings vine (*Tecomanthe speciosa*) add interest and soften the façade of the Learning Core building.

Stream access points along the promenade allow for educational and cultural activities.

tui
Prosthemadera novaeseelandiae,
parson bird





vi The Naming of Places

In keeping with the Te Aranga principle Whakapapa, a consultation process with iwi will identify appropriate names for the various streets, promenades, courtyards, wetlands and other zones outlined in this proposal.

vii The Flora and Fauna

The Flora

Agathis australis, kauri
Alectryon excelsus, tītoki
Beilschmiedia tarairi, taraire
Cordyline australis, cabbage tree
Leptospermum scoparium, manuka
Metrosideros excelsa, pōhutukawa
Muehlenbeckia complexa, pohuehue
Phormium tenax, harakeke, flax
Podocarpus dacrydioides, kahikatea
Sophora microphylla, kōwhai
Tecomanthe speciosa, Three Kings vine
(a full schedule of plants is attached)

Vegetation has been selected on the basis of identity, amenity, Te Aranga principles of Taiao and Mauri and the aforementioned Unitec One Planet Strategic Action Plan. With regard to the natural environment and environmental health the proposed vegetation and landscape strategy fosters the following (selected) species:

The Fauna¹⁰

Aenetus virescens, puriri moth
Apis mellifera, honey bee
Anguilla dieffenbachia, ōrea, New Zealand longfin eel
Ardea cinerea, matuku-moana, grey heron
Galaxias fasciatus, banded kokopu, native whitebait
Hemiphaga novaeseelandiae, kereru, New Zealand pigeon
Lasioglossum sordidum, native bee
Ninox novaeseelandiae, kōkōu, morepork
Porphyrio porphyria, pūkeko, purple swamphen
Prosthemadera novaeseelandiae, tui
Rhipidura fuliginosa, tīrairaka pango, New Zealand fantail
Zosterops lateralis, white-eye, wax-eye

A bee foraging zone densely planted with manuka (*Leptospermum scoparium*) and koromiko (*Hebe stricta*) is proposed adjacent to Building 48.

¹⁰ Landcare Research. (n.d.). Flower visitors in NZ. Retrieved from <http://www.landcareresearch.co.nz/science/plants-animals-fungi/plants/pollination/community-pollination-project/flower-visitors-in-nz>
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Alectryon excelsus, tītiki



Hemiphaga novaeseelandiae,
kereru, New Zealand pigeon



Anguilla dieffenbachia, ōrea,
New Zealand longfin eel



Cordyline australis, cabbage
tree



Phormium tenax, harakeke,
flax



Muehlenbeckia complexa,
pohuehue



Beilschmiedia tarairi, taraire



Aenetus virescens, puriri
moth



Agathis australis, kauri



Metrosideros excelsa,
pōhutukawa



Podocarpus dacrydioides,
kahikatea



Sophora microphylla, kōwhai

Viii The Plant Schedule¹¹

Wetland

<i>Carex secta</i>	Purei, makura
<i>Bolboschoenus fluviatilis</i>	Marsh club-rush, stream club-rush
<i>Baumea articulata</i>	Jointed twig-rush
<i>Eleocharis sphacelata</i>	Tall spike rush
<i>Typha orientalis</i>	Raupō, bullrush

<i>Cordyline australis</i>	Cabbage tree
<i>Dacrycarpus dacrydioides</i>	Kahikatea
<i>Sophora microphylla</i>	Kōwhai

Stream edge

<i>Carex dissita</i>	Flat leaved sedge
<i>Carex lessoniana</i>	Rautahi
<i>Carex secta</i>	Purei
<i>Carex virgata</i>	Small swamp sedge
<i>Cortaderia splendens</i>	Toetoe
<i>Cyperus ustulatus</i>	Giant umbrella sedge

<i>Carpodetus serratus</i>	Putaputaweta
<i>Cordyline australis</i>	Cabbage tree
<i>Dacrycarpus dacrydioides</i>	Kahikatea

Forest

<i>Alectryon excelsus</i>	Tītoki
<i>Coprosma robusta</i>	Karamu
<i>Freycinetia banksii</i>	Kiekie
<i>Hebe stricta</i> var. <i>stricta</i>	Koromiko
<i>Leptospermum scoparium</i>	Mānuka
<i>Melicytus ramiflorus</i>	Māhoe
<i>Myrsine australis</i>	Māpou
<i>Metrosideros excelsa</i>	Pōhutakawa
<i>Olearia furfuracea</i>	Akepiro

<i>Coprosma macrocarpa</i>	Large-seeded karamu
<i>Cornynocarpus laevigatus</i>	Karaka
<i>Dysosylum spectabile</i>	Kohekohe
<i>Listsea calicaris</i>	Mangeao
<i>Vitex lucens</i>	Pūriri

Plants for basalt rocks and soils

<i>Agathis australis</i>	Kauri
<i>Alectryon excelsus</i>	Tītoki
<i>Beilschmiedia taraire</i>	Taraire
<i>Metrosideros excelsa</i>	Pōhutakawa
<i>Pouteria costata</i>	Tawāpou
<i>Vitex lucens</i>	Pūriri

Additional plants to attract birds and insects¹²

<i>Alectryon excelsus</i>	Tītoki
<i>Aristotelia serrata</i>	Makomako/wineberry
<i>Beilschmiedia taraire</i>	Taraire
<i>Dacrydium cupressinum</i>	Rimu
<i>Hebe stricta</i>	Koromiko
<i>Hoheria populnea</i>	Houhere/lacebark
<i>Knightia excelsa</i>	Rewarewa
<i>Leptospermum scoparium</i>	Manuka
<i>Muehlenbeckia complexa</i>	Pōhuehue
<i>Phormium tenax</i>	Harakeke/flax
<i>Podocarpus totara</i>	Tōtara
<i>Pseudopanax crassifolius</i>	Horoeka/lancewood
<i>Rhopalostylis sapida</i>	Nīkau
<i>Sophora microphylla</i>	Kōwhai
<i>Vitex lucens</i>	Pūriri

¹¹ Auckland Council. (n.d.). TP148 Riparian Planting Guide. Retrieved from <http://www.masterspec.co.nz/filescont/TP148%20Riparian%20zone%20management%20strategy%20guideline%20planting%20guide%20Planting%20guide%20-%20%202001.pdf>
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¹² Forest and Bird. (n.d.). Native Plants to Attract Birds. Retrieved from <http://www.forestandbird.org.nz/what-we-do/branches/central-auckland/native-plants-attract-birds>

ix Unitec One Planet Strategic Action Plan

Natural Habitats and Wildlife

Goal

Regenerate degraded environments and reverse biodiversity loss:
Protect or regenerate existing environments and the habitats they provide to fauna and flora; create new habitats

Targets

Increase tree numbers and habitat; Wairaka Puna Macroinvertebrate Community Index \geq 90; improve Wairaka Puna and Oakley Creek water quality¹³

X Acknowledgements

Campus Design Strategy

C. Pete Griffiths and Dr. Hamish Foote

Western Wetland Design

Matthew Bradbury

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Department of Landscape Architecture staff

Department of Landscape Architecture students:

Joe Fan

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Kevin Zhu

Xi Image References

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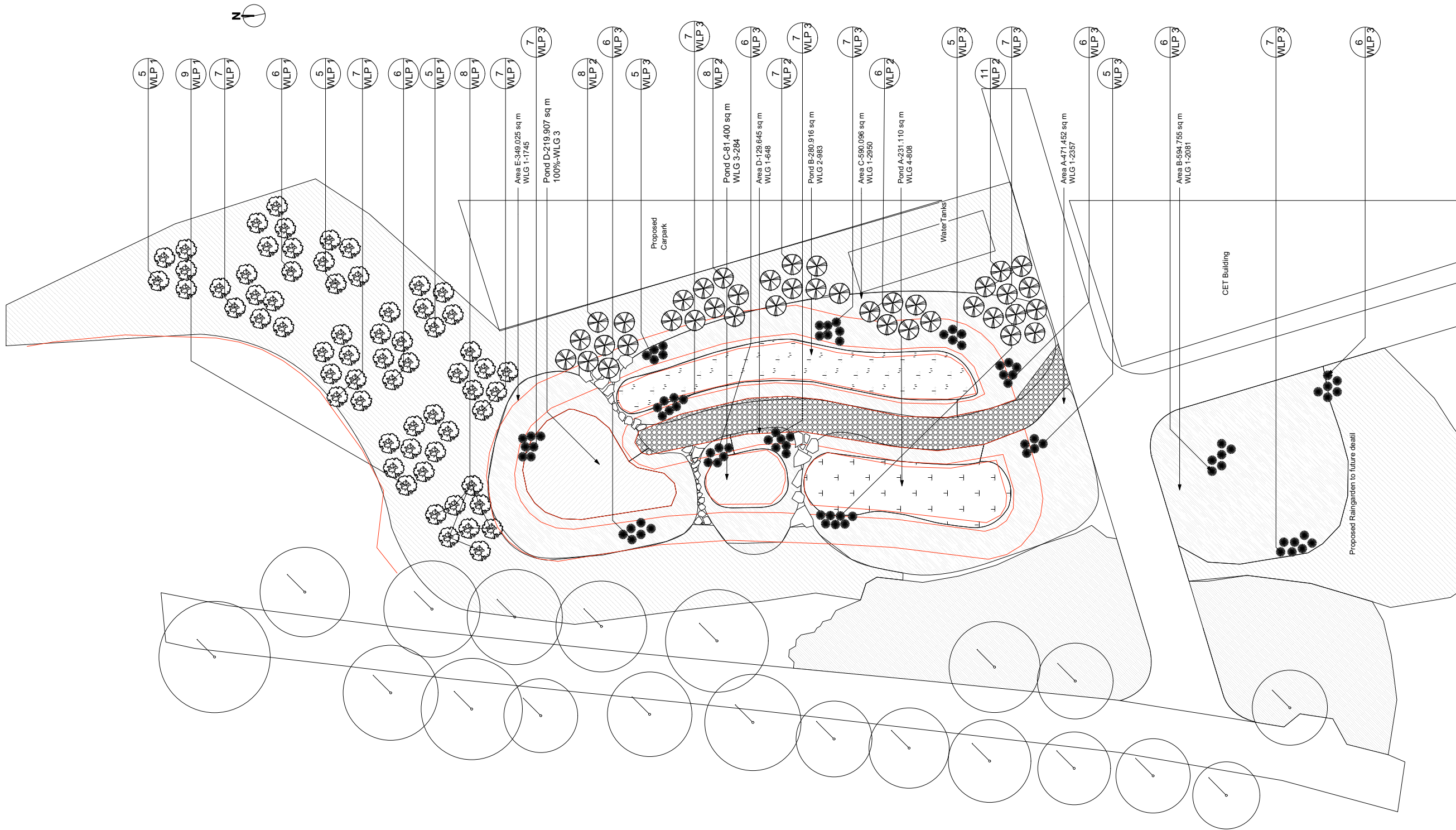
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XiiWestern Wetland Planting Plan



Plant List - Simple					
ID	Qty	Latin Name	Common Name	Scheduled Size	Remarks
WLG 1	9781	Carex secta	Purei, makura	PB 18	
WLG 2	983	Eleocharis sphacelata	Tali Spike-rush	PB 3	
WLG 3	1053	Bolboschoenus fluviatilis	Marsh Club-rush, Stream Club-rush	PB 3	
WLG 4	808	Baumea articulata	Jointed Twig-rush	PB 5	
WLP 1	80	Sophora microphylla	Kowhai	PB 95	
WLP 2	51	Dacrycarpus dacrydoides	Kahikatea	PB 95	
WLP 3	90	Cordyline australis	Cabbage Tree	PB 95	

Key

- Escarpment
- Basal pile from CET Excavation
- Existing Trees
- Carex Secta
- Spike rush
- Crushed Basalt
- Stepping stones
- Jointed Twig-rush
- Marsh Club-rush
- Cabbage Trees
- Kowhai
- Kahikatea

Project	Unitec Wetland		
	DRAFT	DATE# 13/11/15	DWG# 1
	Planting Plan	Scale @ A1 1:250	
		Scale @ A3 1:500	
Unitec Landscape Architecture Department		Matthew Bradbury Ph: 849 4180	