ATTACHMENT 2 :

Scale of Activity Response

Attachment 2: Scale of Activity Response

Please advise what the future capacity would be if 100% occupancy was applied (including maximum 500 person production)?

Below is a substantive response to your question, as well as some more relevant information and context around historical scale of activity and actual anticipated scale.

Historical Context – Activity on the Site

The University Of Canterbury (UC) merged with the College of Education in 2007. Prior to 2007, the College of Education was a separate institution from UC. Please refer to Table 1 below for headcount information. Note that the headcount is all enrolled students, and includes part-time and full-time students.

The increase from 2006 to 2007 is the headcount that we absorbed from Dovedale (i.e. we went from 790 to 4261 students in the education faculty). Ara took quite a few headcounts too at the time of the merger, and so the student population on the Dovedale campus prior to 2007 was **over** 3471.

The university's own education department held 790 heads **prior** to the merger, many of them also would have done at least some lectures on Dovedale post-2007. This points to many or most of the education heads in 2007 being on Dovedale, meaning that overall about a 4000 headcount.

A key point to note is that the 4,000 does not include staff located on that site, so the physical numbers on site would have been higher than 4,000. If we assumed a 1:5 ratio of staff to students, then there could have been up to 800 staff on the site.

Table 1: University of Canterbury Faculty Headcounts

Head Count	Column Labels															
Row Labels	2021	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006
											167					1
Faculty of Arts	6378	5656	5585	5138	4839	4613	4364	4288	4352	4761	5121	6386	6307	5951	5912	6020
Faculty of Education	4955	3476	3208	2980	2789	2748	2669	2861	3112	3460	3553	4109	3995	3875	4261	790
Faculty of Engineering	7677	7360	7216	6564	6021	5687	5272	5022	4716	4564	4742	5389	5453	4957	5011	5052
Faculty of Law	2003	1846	1752	1689	1623	1453	1299	1155	1164	1158	1152	1330	1394	1347	1349	1287
Faculty of Science	6691	5887	5751	5317	4886	4949	4706	4716	4708	4934	5014	5565	5255	4757	4658	4533
Service Units	446	534	549	515	429	483	474	482	533	615	744	932	1359	1213	1162	2261
UC Business School	4528	4341	4439	4143	3820	3436	3175	2988	3085	3440	3684	4065	4123	3879	3758	3749
Grand Total	**20919**	**18771**	**18364**	**17299**	**16253**	**15564**	**14830**	**14725**	**14872**	**15798**	**16444**	**18783**	**18557**	**17614**	**17989**	**13929**

Methodology Used in the Resource Consent.

The historical data shows that the Dovedale campus had anywhere from 3,471 – 4,000 student headcount, and there could have up to 800 staff.

In the resource consent, the methodology for understanding a baseline for 'normal' day-to-day activity on the site with the proposed digital screen campus is based on occupancy numbers for the existing buildings on the site and their use (i.e. teaching, offices, and technical space). It is noted that a 3,750m^2 building was removed from the site after the earthquake in 2012, and that is not factored into the analysis below, but is worth mentioning that it historically contributed to historical activity numbers on the site.

For the new commercial production studio site, the scale of activity proxy is based on assumed pre and post production and full production activity levels.

RFI Question:

Please advise what the future capacity would be if 100% occupancy was applied (including maximum 500 person production)?

Table 2 and 3 below looks at the 100% scenario, but the following is noted:

1. Non-student people component is static, and is already based on the maximum we can fit into that space (100%).
2. Teaching space (student space) assumes there could be occupancy of that space at a certain percentage.

Table 2: Current Campus Occupancy Capacity Scenarios – Based on Existing Built Environment

Scenario	Existing Built Environment				
	Non- Teaching Space (Staff) (total in a day and any given hour) - Static	Teaching Space (Students occupying campus) (per hour)	Total	% Of Space Occupied by People	
				Staff	Students
1*	1099	907	2006	100%	40%
2	1099	2268	3367	100%	100%

* Lodged Consent Baseline Scenario

Applying a 100% occupancy scenario to student spaces results in an additional 1,361 people on the site. As such the peak person capacity for the site in this scenario is 3,367 persons in any given hour.

Table 3: Digital Screen Campus Occupancy Capacity Scenarios + Film Production Site (mixed-use)

Scenario	Mixed Campus Built Environment					
	Non- Teaching Space (Staff) (day total and hour)	Teaching Space (Students) (per hour)	Assumed Peak Production Activity (500)	Total Per Hours on-site	% Of Space Occupied by People	
					Staff	Students
3*	1195	782	500	2477	100%	40%
4	1195	1897	500	3,592	100%	100%

*Lodged Consent Baseline Scenario

Applying a 100% occupancy scenario to student spaces as part of the Digital Screen Campus and including the anticipated peak numbers for the Film Production site results in a total of 3,592 persons on site in any given hour.

The figures that underpin the analysis are available on request.

Discussion on Scenario Analysis:

- The difference between Scenario 2 and 4 is an additional 225 persons per hour. This represents a 6.7% change in total persons that could be on the site compared to a permitted baseline activity that could happen on site under the existing zoning and use in a peak scenario
- Additional 225 persons is considered relatively minor when looking at the total numbers that could be on site under a permitted baseline peak scenario i.e. 3367 persons

- 100% occupancy of student teaching spaces across the campus back-to-back during the day is considered a highly unlikely scenario, and as such was not used by UC to model activity numbers. UC has many years of survey evidence on the utilisation and occupancy of our teaching spaces, which fluctuates between 18-50% over a number of years. More recent data from a camera trial in Semester 2 of 2021 showed average occupancy of 24% for lecture theatres, 36% for labs, and 30% for classrooms. This information is available upon request.
- An important consideration of the permitted baseline activity analysis is site coverage. UC RFI response details that the existing site coverage calculation for the site is 33%, not 43% as calculated in the lodged consent application. This means that existing built environment could increase by 12% under permitted standards. This represents an additional 15,944m^2 permissible footprint on site, and buildings could be up to 5 stories high. This would allow for a significant number of additional persons on campus than that currently calculated in the scenarios above. We expect to elaborate on this in hearing evidence.

Scenario Modelling to Establish Baseline Activity versus Predicted Actual Activity

While the modelling exercise is indicative of what number of people could be onsite and for understanding permitted baseline activity scale, it does not reflect what is likely to actually happen on site. The application briefly mentions the actual equivalent full-time predicted numbers for the campus, but missed the opportunity to model these and compare to the permitted baseline.

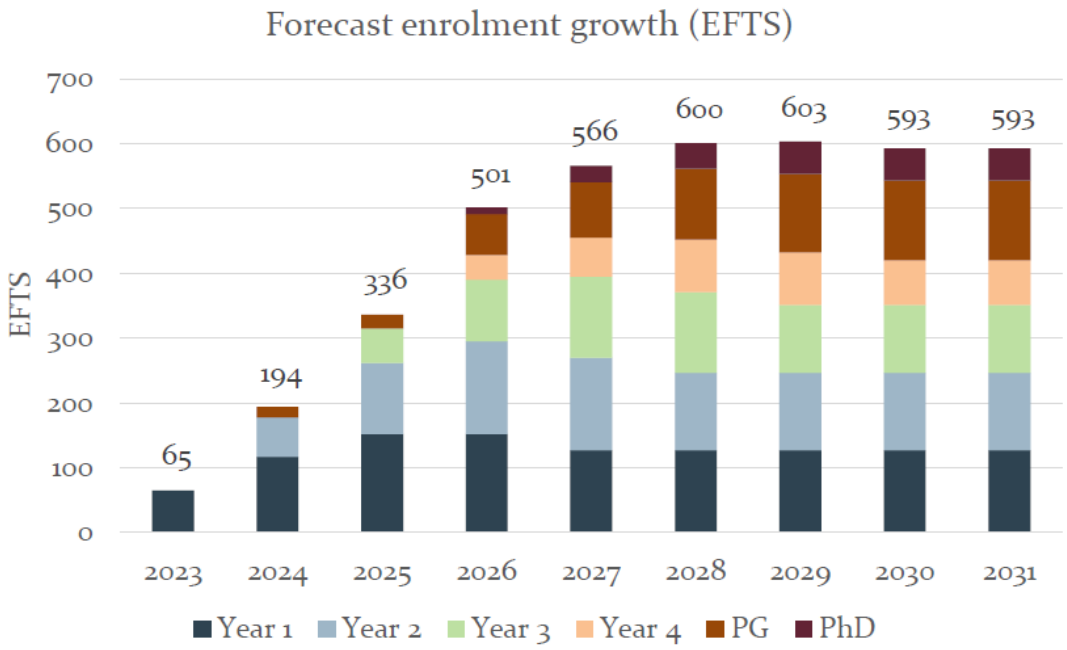
The actual 'education' component will be much lower than the scenarios above, particularly within the next 8 years. The actual number anticipated in Equivalent Full Time Students per annum from 2023 to 2031 is anticipated to be 603 (see attached extract from the Project Creative Economy Detailed Business Case dated 21 October 2021) and 34 associated teaching staff. A more likely scenario by year 8, if you apply these numbers to 'student-teaching' space, means that activity on site will lower, even with production activity, than the existing baseline numbers given in Scenarios 1 and 2 above by 3% - 31% respectively (See Table 4 below). The analysis in this table also generously assumes that all non-teaching space will be 100% occupied by staff.

Table 4: Predicted Actual Teaching Numbers Modelled from 2023 to 2031

Scenario	Mixed Campus Built Environment					
	Non- Teaching Space (Staff) (day total and hour)	Teaching Space (Students) (per hour)	Assumed Peak Production Activity (500)	Total Per Hours on-site	% Of Space Occupied by People	
					Staff	Students
5	1195	241	500	1,936	100%	40%
6	1195	603	500	2,298	100%	100%

Attachment 1: Business Case Extract

Figure 7: Enrolment growth forecasts along with the revenue associated with that growth. These forecasts rest on UC establishing and maintaining competitive advantages over other universities in New Zealand.



4.2.3 The Costs of Generating Student and Research Revenue

The result of the economic assumptions made are that the proposed expansion of digital screen teaching and research will require total of 28 new FTE academic staff by 2029.

However, the facilities require expert staff such as technicians, and there are forecast a further 6 FTE staff to run the facilities. The cost of these staff will be offset by the commercial revenue generated by the facilities that they run. For example, when the sound recording facilities are hired out, usually a sound engineer is required to run the facility and this technician would be the same person who supports student use of the facility.

Table 7: PCE Project Benefits.

By domain: Benefit/disbenefit name & description	**Indicator & description**	**Measure(s) and evidence base (data source)**	**Estimated value**
An increase in enrolments for screen and digital arts courses	Enrolments	EFTS (from the Data warehouse)	+ 593 EFTS pa from 2023 to 2031

ATTACHMENT 3 :

Revised Site Plans

RESOURCE CONSENT

HERRIOT MELHUISH O'NEILL ARCHITECTS

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PO BOX 6570 WGTN 6140
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TEL (04) 385 0038

A	24 FEB 2022	Issue for Resource Consent
B	08 JUL 2022	Issue for Resource Consent RFI

N

1 : 2000 · A1 Half Scale · A3

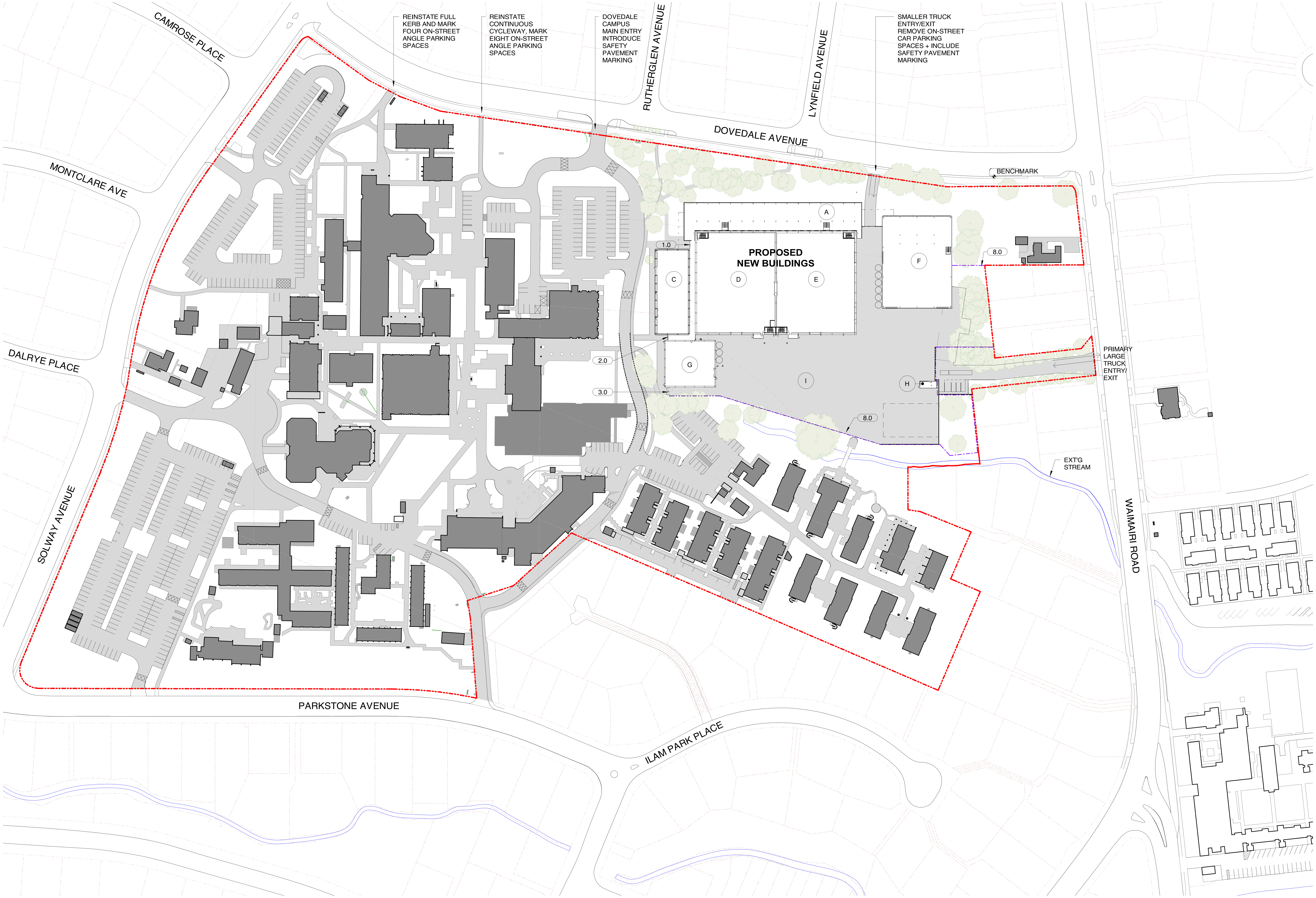
UOC - Digital Campus

Location Plan

2130 REV

RCA-002 **B**

8/07/2022 12:55:59 pm



Proposed Site Plan
1 : 1000 at A1 · Half Scale at A3

KEY	
	NEW FOOTPATH
	BACKLOT
	EXISTING BUILDINGS

AREAS	
132872.251 M^2	EXISTING CAMPUS AREA
63304.9 M^2	UPDATED IMPERVIOUS AREA
48%	PERCENTAGE OF IMPERVIOUS AREA TO CAMPUS

BUILDING/SPACE NOTES

TAG	BUILDING/AREA NAME
A	PRODUCTION OFFICES GROUND FLOOR
B	COSTUMES/WARDROBE/MAKEUP
C	PREMIX, FILM MIX, FOLEY, PREP ROOM, COLOUR GRADING
D	SOUND STAGE 1
E	SOUND STAGE 2
F	MILL/CONSTRUCTION
G	GREEN SCREEN VIRTUAL PRODUCTION
H	GATEHOUSE
I	BACK LOT

GENERAL NOTES

TAG	DESCRIPTION
1.0	MAIN ENTRY PRODUCTION OFFICES
2.0	ENTRY GREEN SCREEN, PREMIX FILM, FOLEY, PREP ROOM, COLOUR GRADING
3.0	GATED SECONDARY ENTRY/EXIT
4.0	MEZZANINE OVER
5.0	UNDERGROUND STORMWATER STORAGE TANK 575 M3
6.0	VISITOR PARKING (3X CARPARKS, 1X ACCESSIBLE)
7.0	PLANT ABOVE
8.0	PERIMETER FENCE
9.0	ENTRY/EXIT GATE
10.0	CANOPY OVER
11.0	EXISTING HARDSCAPE AREA UNDER TREES
12.0	STORMWATER DETENTION TANKS
13.0	BIKE PARKS

NOTE: KEY EXISTING TREES SHOWN , FOR PROPOSED NEW LANDSCAPE ELEMENTS REFER TO LANDSCAPE PLAN

RESOURCE CONSENT

HERRIOT MELHUISH O'NEILL ARCHITECTS

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A	24 FEB 2022	Issue for Resource Consent
B	08 JUL 2022	Issue for Resource Consent RFI

N

As indicated · A1   Half Scale · A3

UOC - Digital Campus

Proposed Site Plan

2130

REV

RCA-200 **B**

8/07/2022 12:58:28 pm

Key:

=	UC Property	132872 m²
=	UC Building	19685 m²
=	UC Foot Path	NA
=	UC Site Access	1671 m²
=	UC Road	22390 m²
Impervious Surface Total		43746 m²
Site Coverage Total		33 %

Solway Avenue
Dovedale Avenue
Ring Road
Waimairi Road
Oak Drive
Parkstone Avenue
Ilam Stream
FGW Gowns
UC Photography
Lecture Theatres
Otakaro Annex
Otakaro
Waimairi
Orakipaoa
Other Accommodation
Wharenui
Technical
FM
Green Houses
Ako Aotearoa
Boat Store
Primary Data Centre
Kotuku
Henry Field
Student Association
Gym
Jack Mann
Tunnel Entrance
Wheki
Student Accommodation
Christchurch College of English Language
Wairarapa
Garage
UCSA Early Learning Centre

UNIVERSITY OF CANTERBURY CHIRSTCHURCH

UC-U06-004 - SITE PLAN - DOVEDALE CAMPUS SITE COVERAGE

1:1500 @ A3 1/07/2022

UC UNIVERSITY OF CANTERBURY
Te Whare Wānanga o Waitaha
CHRISTCHURCH NEW ZEALAND

ATTACHMENT 4 :

Revised Landscape Plan with Tree Heights

LEGEND

- Landscape Design Boundary
- Proposed Building
- Water Tanks
- Overhead Canopy
- 7m Setback from Stream Edge
- 1.8m Fence
- Potential 1.8m Fence Location
- Gravel Path
- New Asphalt
- Existing Hard Surfacing
- Lawn To Be Retained
- Hedge - Carpinus betulus, European Hornbeam
- Riparian and Stream Side Shrub and Tree Planting
- Driveway Access Amenity Planting
- Frontage Amenity Planting
- Existing Stream Side Shrub and Tree Planting
- Existing Trees to be Retained, Heights Shown as R.L. in Relation to Existing Open Space at R.L. of 17.0m (from HG 'Site Survey Tree Elevations' 15.02.2022)
- Existing Trees To Be Removed
- Specific Proposed Screening Trees, Planted at 2.5m Height - Mature Height 9.0m above Ground (26.0m R.L.)
- Covered and Secure Bike Parking

REV	DATE	NOTES
A	24/02/2022	For Resource Consent
B	25/03/2022	For Resource Consent RFI

Landscape statement

Overall the landscape design takes precedence from and provides an extension to the existing Dovedale campus landscape treatment.

The landscape strategy aims to integrate the Digital campus with the existing campus, provide safe and enjoyable connections, provide a common, useable landscape between residences and the campus and then link this to the wider university and city while recognizing the security needs of proposed Digital campus environment.

To achieve this the landscape design response looks to provide the following:

– Integration and connectivity through additions to the existing open space and path network to provide a well-connected campus, both ecologically and for those living and learning there.

– Legibility and Identity to create cultural landmarks and focal points to complement and build on the existing legibility and character of the campus. This work is at an early stage and will be expanded on as the project develops.

– Ecological Responsiveness retain and enhance existing waterways, landform and significant vegetation.

The planting species used on the site will be selected from the appropriate species outlined in the Canterbury and Garden city plant mixes from the University of Canterbury Landscape Masterplan May 2017, and the Approved & Restricted List of Plants in the University of Canterbury 14. Landscaping Design Guidelines September 2019 : Issue 4.

NORTH

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ROUGH MILNE MITCHELL
LANDSCAPE ARCHITECTS

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University of Canterbury Digital Campus Landscape Plan
UOC Dovedale Campus,
Waimairi Road, Ilam, Christchurch

JOB No.	21194
SCALE	1:1000 @ A3
DATE	25/03/2022
DESIGNED	SH
DRAWN	SH
CHECKED	ML
STATUS	For Resource Consent
DRAWING No.	REVISION
1.0	B
SERIES	
1 of 1	