

# HCCD STAGE 1A

## SSD RESPONSE

eje architecture



SYDNEY  
Level 3, 27 Albert Avenue  
Chatswood NSW 2067

NEWCASTLE  
412 King Street  
Newcastle NSW 2300

GOLD COAST  
PO Box 783  
Paradise Point QLD 4026

CONTACT US  
02 4929 2353  
mail@eje.com.au  
www.eje.com.au

ABN 82 644 649 849  
ACN 002 912 843

DIRECTORS  
Douglas White  
Bernard Collins  
Kathy Gresham  
Michael Rodgers  
John Streefer  
Glen Spicer  
Anthony Furniss  
Jason Condon

PRINCIPALS  
Shane Smede  
Bede Campbell

ASSOCIATES  
Michael Craig  
Grant Shultz  
Holly Nyquist  
Brock Hall  
Trevor Hefren  
Richard Waterson  
Dominic Warland



## HCCD STAGE 1A

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The Design has been presented to the Design Excellence Panel over three sessions. The Concept was presented at Session 1 (Sep 2018), whilst a preliminary Schematic design was presented during Session 2 (Nov 2018) with a more developed Schematic design presented during Session 3 (8th May 2019). The panel provided a largely supportive appraisal consistent with the design intent for Better Places over the first two sessions however sought revision to several areas, particularly with respect to the ground plain and its response to context and the University Masterplan.

As a result of Session 3 a number of changes have been made to the design. The panel summarised their feedback into three base principles and recommended the revised design seek to:

*Resolve the public domain design and demonstrate:*

- *A single coherent space framed by buildings 1A, 1B and 2, which also takes account of the university spine and servicing route;*
- *Inclusivity (both in terms of DDA access from key approaches, and how the building embraces its civic role, the 'stage in the city').*

*Further iterate the ground floor interfaces, particularly:*

- *The southern façade;*
- *Opportunities for interstitial and outdoor learning spaces; and*
- *The relationship and connections to building 1B.*

*Demonstrate resolution of the sustainability strategy, and, in particular the roof plane.*

The three principals were elaborated by the panel in more detail to which we have developed design responses and commentary around.

In light of the above, the design has been developed to respond to the social, historical and cultural nuances of its context, as well as the vision for the future precinct.

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The developed design seeks to further identify Stage 1A as an active gateway to the precinct. The internal program of the building has been adjusted with an emphasis upon increasing activity and access along the southern boundary, supported by external landscaping and increased outdoor learning amenity. This revised southern interface, together with future envelopes of Stage 1b and Stage 2 inform a new 'Gateway Square', providing the starting point for a future pedestrian spine from Worth Place.

The ground floor and landscaping design of Stage 1A promotes visual connection and inclusive access at key interfaces between the site and public domain. Entrances are defined by treatments in materiality and the articulation of stairs that break the perimeter podium tiering, which itself provides extensive seating opportunities and clear sightlines both from and towards the building. A proposed gradual ramping of the public domain to the south will enable an integrated and inclusive transition to the site, together with accessible access at key pedestrian approaches from the Honeysuckle Foreshore.

The ground floor layout and façade treatment has been further resolved to promote flexible interfaces with outdoor learning space and the adjoining Stage 1B. Operable walls to the North enable an external extension of the flexible event space, with shade and AV functionality provided by the awning above. A revised location of the makerspace and machine room presents a visible display of activity to Honeysuckle Drive, and contributes to the creation of a North facing outdoor square, which can be further expanded upon completion of the future Stage 1B. The strategic integration of Stage 1A faculty within a future combined 1A and 1B facility has been proposed, to enable a generous thoroughfare between adjoining sites, and inform a cohesive civic contribution to the future precinct.

The following design responds to the current, accommodates the future, and will adapt positively as the campus and public domain evolve.

## STAGE IN THE CITY

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*The panel feels that the approach taken to Stage 1A has continued to drift from its vision of the site as a gateway to the city / stage within the city.*

*While the panel understands that the evolution of the Black Box Theatre, a mock-up television studio, is no longer a suitable use for the ground floor, the visible presence and social impact of the ground floor still needs demonstration in some form. This is best demonstrated in the fast lab / maker space in the NE corner, which can spill out into the foyer, public space and potentially the square to the east – however this is located furthest from the gateways of the NW, SE and S.*

*Conversely if the Innovation Hub is a managed space (with a concierge) to protect the ideas being incubated and screen private conversations, then locating this on the south-east corner, the most visible and closest point to light rail and the city, exacerbates the tension between these needs and an accessible civic building welcoming to the public.*

*The position of the main entrance on the west, mid-block, and the 'back of house' south façade is problematic if this is the main approach from the light rail and city, and the university spine. The interstitial spaces, such as the corridor connecting 1A and 1B at ground, are narrow and functional, and do not facilitate the informal interaction that these spaces should typically afford in a university.*

*As noted previously, the passive engagement (projection), both in extent and position on the façade, is unlikely to achieve the stated aims of 'exhibiting' to the north and 'connecting' to the south. Analysis of the projection façade from key view axes, during both daytime and night, would help in understanding this further.*

### RESPONSE:

The ground floor program has been shaped around a central vertical circulation core located on the central southern grid bay, providing for uninhibited future proofed emergency egress, and negating legacy issues for the adjacent Site 1B via rights of way or similar.

The residual ground floor space wraps around the core and affords all facades with physical access and exposure via doors and operable glazed walls. In addition, it provides for a flexible use of the space beyond the current brief, including future access points and the ability for the ground floor to address the future development of the HCCD including public domain and adjoining and adjacent buildings as it evolves.

Furthermore, the bike-hub, waste-store, and machine room have been envisioned as temporary structures, which effectively accommodate the program of Stage 1A throughout their life span, but can be incorporated into the adjacent Stage 1B upon development of the precinct. Similarly, the pump room is to be strategically re-located within the servicing of a combined 1A / 1B facility.

These future-proofing measures, combined with the strategic consolidation of ground floor amenities and vertical circulation mean Stage 1A will continue to demonstrate the themes of permeability and transparency within an evolving precinct. The resultant East-West circulation and Southern access opportunities are demonstrated within images 1 - 6.

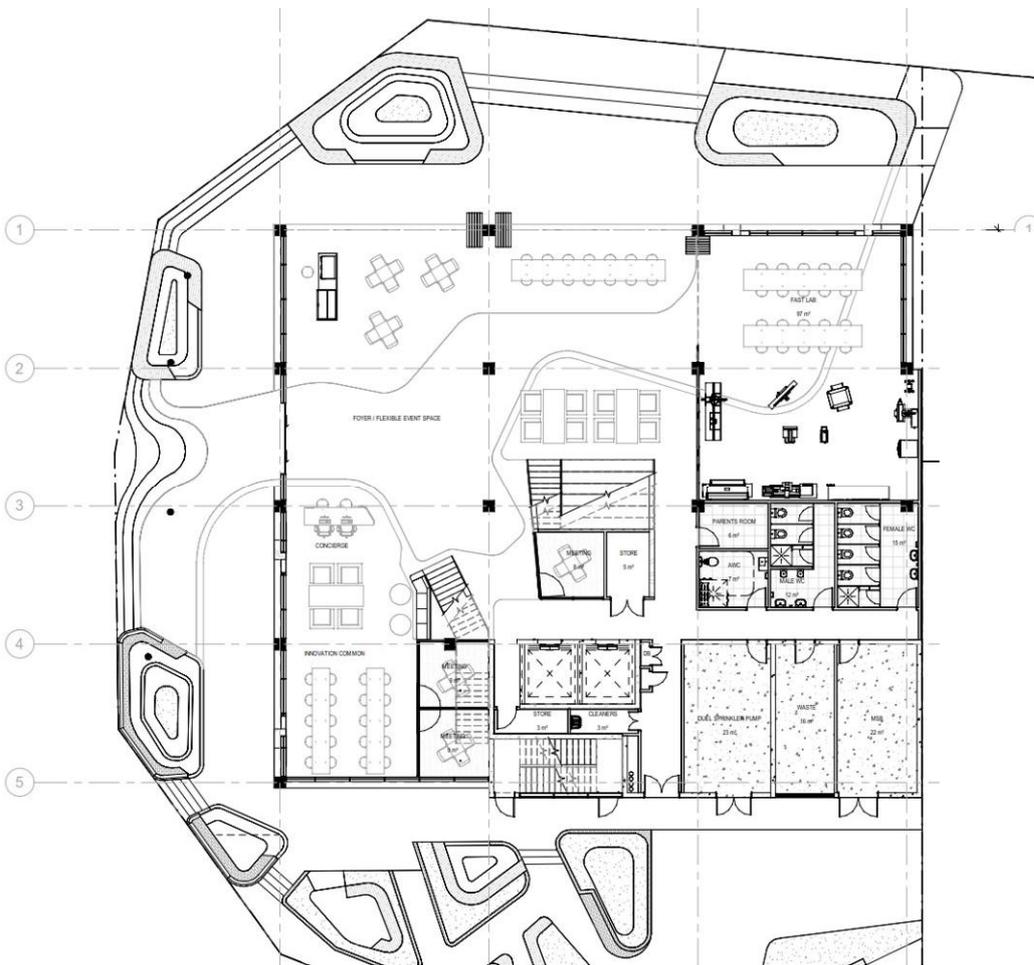


Image 1. Schematic Design Ground Floor Plan (May 2019)

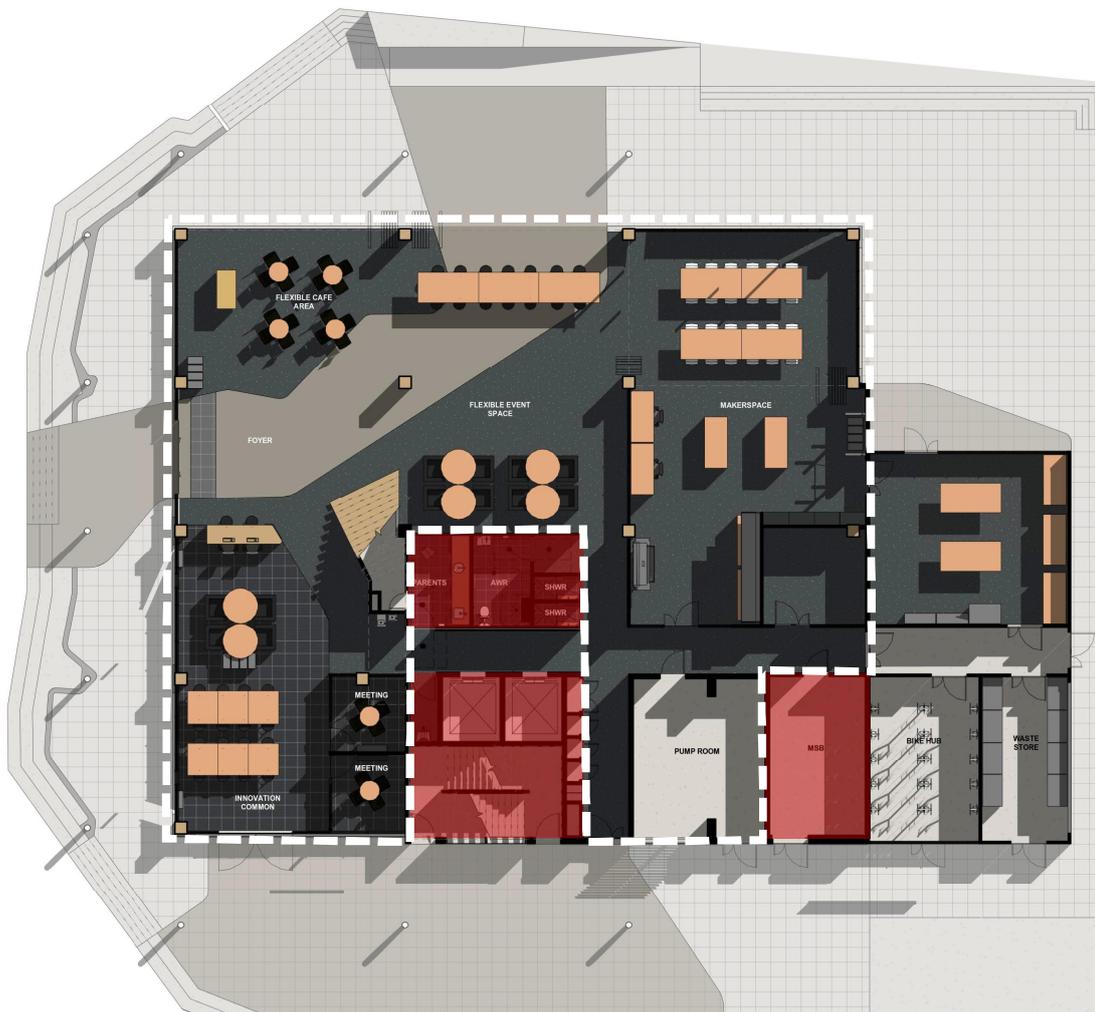


Image 2. Revised Stage 1A Ground Floor Plan, with circulation / re-programmable zones (shown dashed) wrapping around elements of the core (shaded red.)

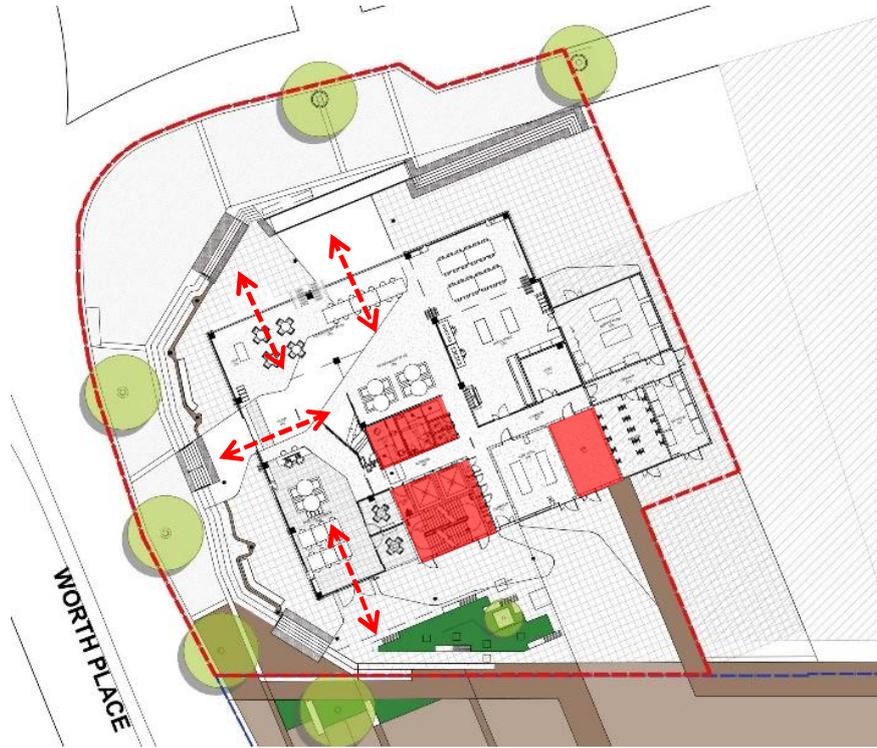


Image 3. Primary internal / external connections of the Stage 1A Ground Floor

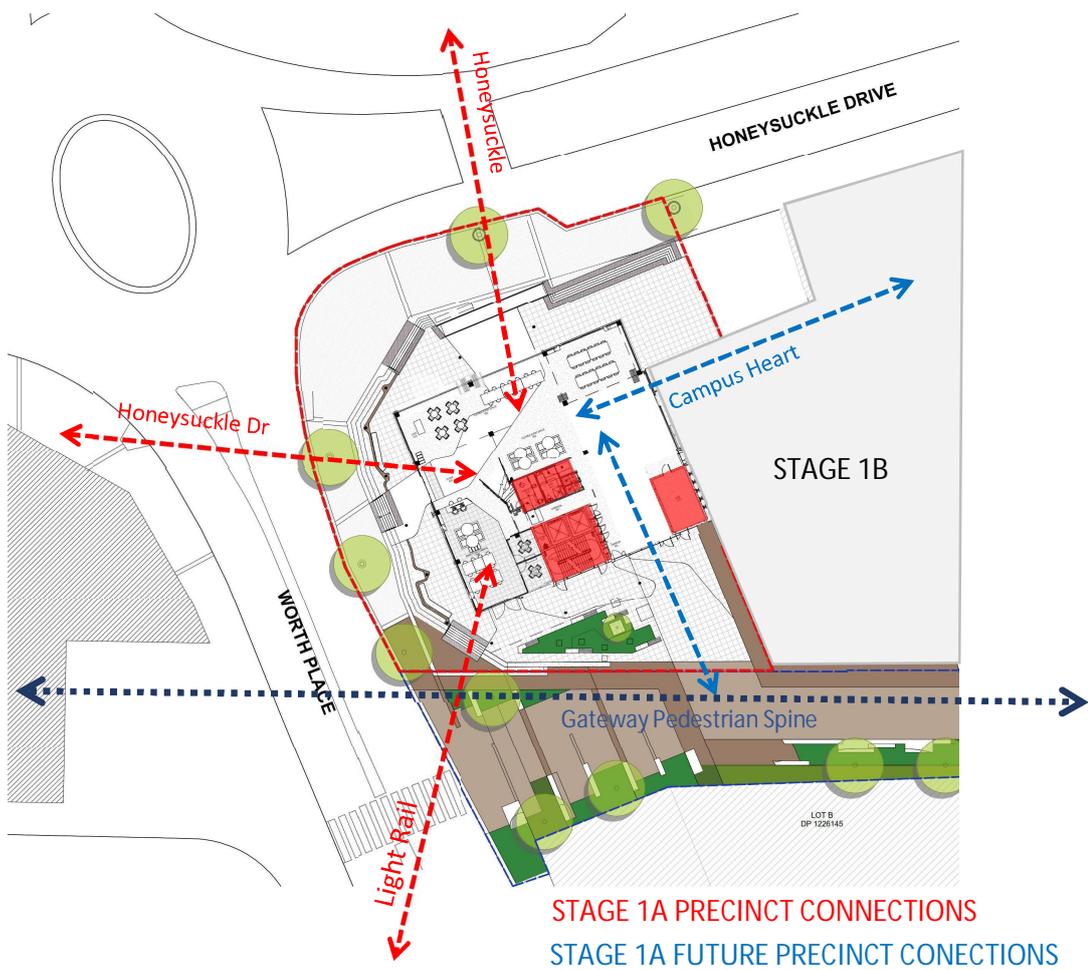


Image 4. Stage 1A precinct connections

## INTERFACE WITH THE PUBLIC REALM

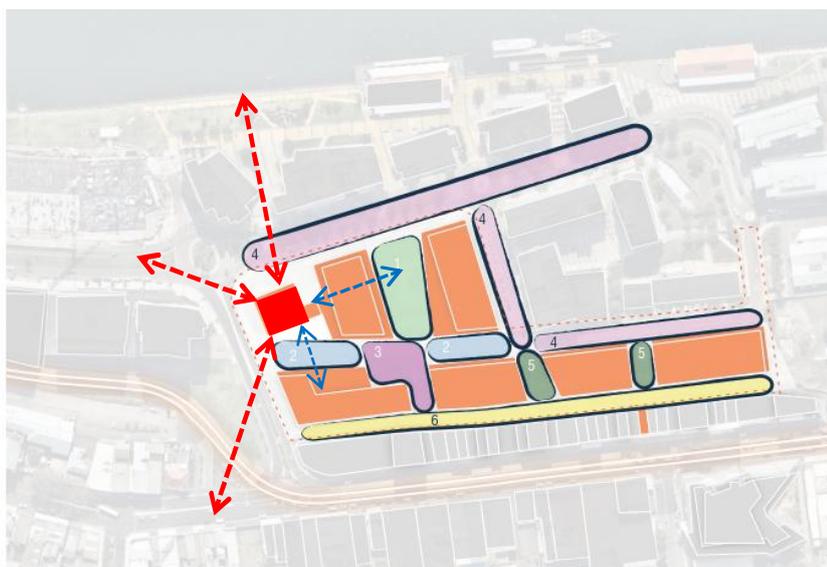
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- *This building is the first contact point (and first parcel to be developed) in the new university campus, and yet the scheme is confined to its red line boundary. The public interface needs to be better resolved. The panel recommends that the project team:*
  - *Retain and strengthen the building's relationship to the re-entrant square on the north-east corner of the site. As previously advised, strengthening and activating this square should be prioritised over the south-facing 'square'. To the extent that the south square has been retained, it needs further resolution. In the presentation, the 'sculpture garden' was noted to be away from the 'maker space' in the NE that fed it, and that this use may in fact shift to the NE square, further weakening the public domain on the SE.*
  - *Develop the public domain plan for the site including adjacent spaces, in collaboration with a landscape architect, with links to the campus heart, spaces framed by built form, street addresses (and gateways / axes) all considered. The public domain should be resolved at least for land in UoN ownership, and would be improved by considering the framed spaces, streets and vistas around the site.*
  - *Resolve the inclusivity of the ground plane from key approaches;*
  - *Consider whether the building and its entrances could be better sited to be inviting and civic in presence rather than recessive.*
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### RESPONSE:

The public domain has been developed by the UoN and considered in the redesign of the landscape as well as DDA pathways and access to the building. The awning has been reshaped to address multiple approaches to the building. In addition, the awning has been extended to now include the north, west and southern facades of the building and improve the amenity and use of adjacent external space.

As noted, the ground floor footprint and façade treatments have been developed to provide for agility in its program and adapt to the future development of the campus. The design of the façade provides for future access to the east, north, west and south providing for activation of adjacent public domain as it evolves including the campus heart via future connections through the adjoining site 1B.



#### UNIVERSITY SPACES

	Site Boundary		University Plaza
	Light Rail		Honeyuckle drive, Settlement Lane, Wrights Lane
	Proposed University Buildings		Turntable
	University Green		Civic Lane
	Wright's Walk		University Links

Image 5. Stage 1A site precinct connections

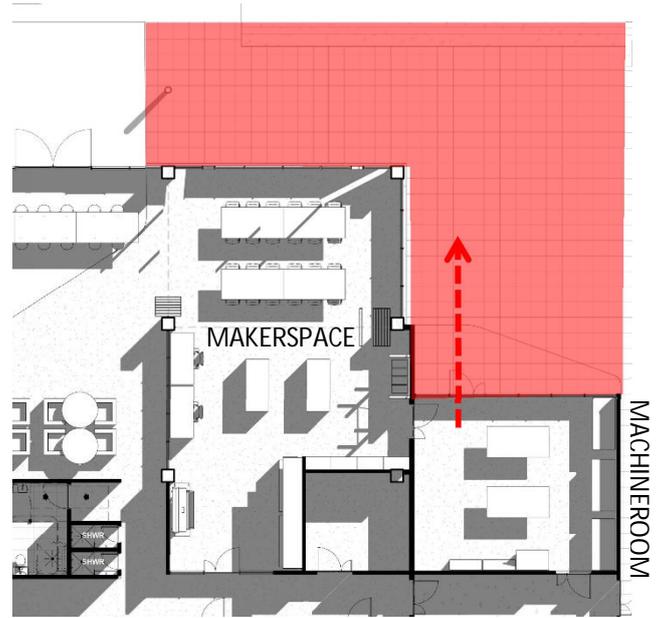


Image 6. The location of the makerspace and machine room presents a visible display of activity to HoneySuckle Drive. The creation of a flexible adjacent outdoor square provides an outdoor extension of these activities, and can be expanded upon completion of the future Stage 1B.



Image 7. North West perspective, highlighting perimeter tiered seating and generous awning coverage to outdoor breakout space



Image 8. Articulation of stairs, seating plinths and awning to accentuate Southern entry / access



Image 9. Articulation of stairs, seating plinths and awning to accentuate Western entry / access

*Resolve the inclusivity of the ground plane from key approaches;*

- *Consider whether the building and its entrances could be better sited to be inviting and civic in presence rather than recessive.*

RESPONSE:

The primary western entrance is defined by its floor finish and the adjacent stairs that break the perimeter podium tiering as evidenced in Image 10. Similarly, the southern entry is defined by an adjacent stair set that break the perimeter podium tiering as evidenced in Image 10.

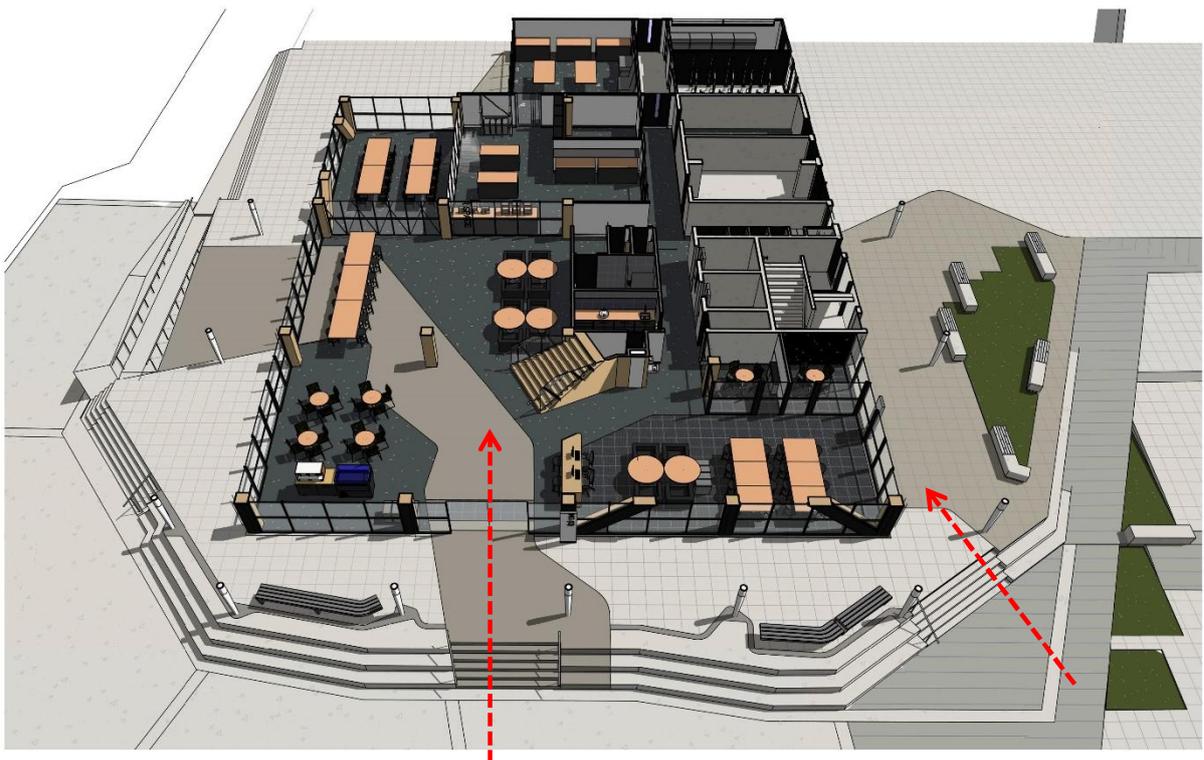


Image 10. Articulation of stairs to define access into the building

- *Consider whether the building in its current form reflects contemporary pedagogy, particularly flexible teaching and informal interaction. The panel notes that the CLT framed structure and floorplates are 'flexible' in the larger sense of being adaptable over time, but traditional in their current layout.*

RESPONSE:

The current layout reflects the project brief however the structural grid provides for future adaptability and reconfiguration.

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- *Further review the internal circulation particularly the interstitial spaces such as staircases and corridors with a view to facilitating informal interaction, and making this movement through the building more poetic;*

RESPONSE:

The design of the vertical circulation seeks to maximise invitation at ground level utilising a highly visible open stair. However, in order to maximise usable floor space on the upper levels within a highly constrained building footprint, the open stair connects with the glazed fire stair at level 1 to provide access to level 2.

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- *The façade itself needs further resolution, both in terms of the detail section and its environmental performance, and the visibility of the university activities within. The panel notes that there may be a tension in the façade design principles, using heat-sensitive material to change the amount of visible light transmission. The design should be tested to ensure that light levels inside, as well as projection to the outside, both remain fit for purpose through the expected temperature range.*

RESPONSE:

The glazed curtain wall façade includes the used electro-chromatic tinting system that is connected to the building's BMS to maximise solar protection when required and maximise transparency when solar protection is not warranted throughout the day. The active tinting system controls the thermal load on the building to minimise the use of conditioned internal air.

The active tinting can also be switched on after dark to allow for external projections curated by the School of Creative Industries. Note that these are already occurring within the University's City precinct.

The black out studios and been constructed as an enclosed box within a glazed box. The interstitial spaces on the outer façade line have been designed to showcase student work after dark through large internal projections on the white internal walls, and visible through the transparent untinted faced.

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- *The relationship of the building to the Stage 1B and 2 developments should be shown and the assumptions underpinning this scheme validated with the concept plan (or the concept plan updated). At present, the treatments set up the expectation that the exposed west façade of 1B would be used for loading at ground level, which would be to the detriment, rather than benefit, of revealing this façade.*

RESPONSE:

A new approach has been undertaken in conjunction with the University in relation to servicing of the Stage 1A building to minimise vehicular movements within Wright Lane.

The relocation of the Honeysuckle Drive access ramp in concert with the existing loading zone (noted in green) provide an opportunity for deliveries to the building, including student works or receipting and returning equipment.

A temporary waste enclosure has been located on Site 1B (to be absorbed into the future development of Site 1B, along with the secure bike store). Waste bins have been sized to be wheeled to Honeysuckle Drive kerbside for pick up. It is intended that the servicing strategy of 1A be absorbed into adopted by future 1B

The above initiatives seek to minimise vehicular movements within the new Gateway Square to emergency services or maintenance vehicles only.



Image 11. Service and delivery

## ABORIGINAL AND EUROPEAN HERITAGE

While the panel notes both engagement with UoN's Wollotuka Institute and use of an internal indigenous architect, the proposal has not advanced beyond the polished concrete floor with shell aggregate and ochre screed. The panel reiterates that this should be tested with the community.

The interpretation of the former shoreline in the ground floor surface treatment is commended, although on review after the meeting this appears to be in a different location to the shoreline presented in the concept master plan presentations. Please clarify what this line represents next time – is it the low water mark, or an interpretation of the ephemeral sand banks, or a graphic of a shoreline (not necessarily actual /mapped)? The panel notes the European heritage of the railway yards was not discussed – previously it was suggested this may return in another form (ie brick paving) – it would be good to clarify if any railway interpretation is proposed.

### RESPONSE:

The use of polished concrete and shell aggregate has been tested within the local indigenous community via a presentation to the local elders. The line of the feature flooring is an abstract of the original shoreline to inform visitors that the original shoreline has changed and the land is filled and was originally part of the Hunter River. The site is located in the former mud flats (indicated by the red dot), which is represented in the colourisation of the concrete.



The European Heritage of the former Railway Workshops is represented in the use of exposed internal steel beams that support the external awning as well as internal operable walls. The beams are visible elements of the ground floor foyer and represent the fabrication of large steel members that occurred in the Per Way Bridge Shop (c.1895 – Building 32) which was the principal railway bridge builder for the Great Northern Railway.

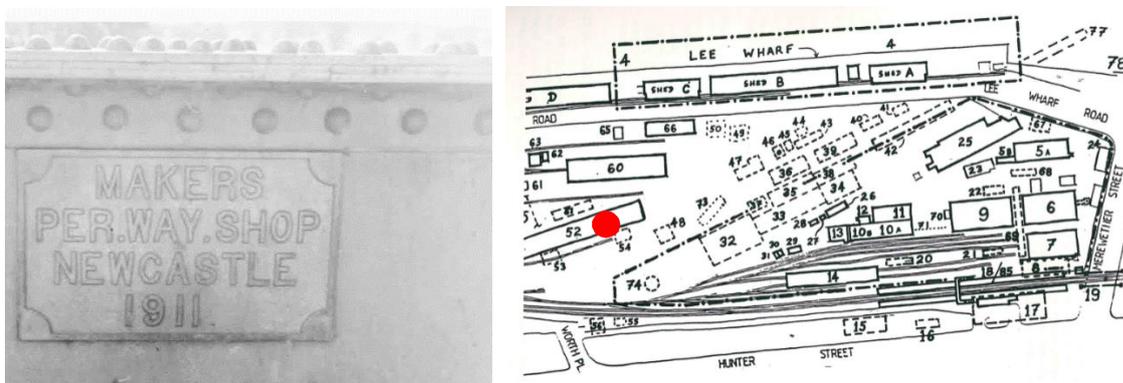




Image 12. Internal Foyer incorporating large steel beams supporting operable walls

# SUSTAINABILITY

*The use of CLT is still supported by the panel.*

*It is not clear whether photovoltaics remain in the proposal – the written material presents this as an opportunity only, although the presentation touched on energy generation and offset. This should be made explicit in the final proposal.*

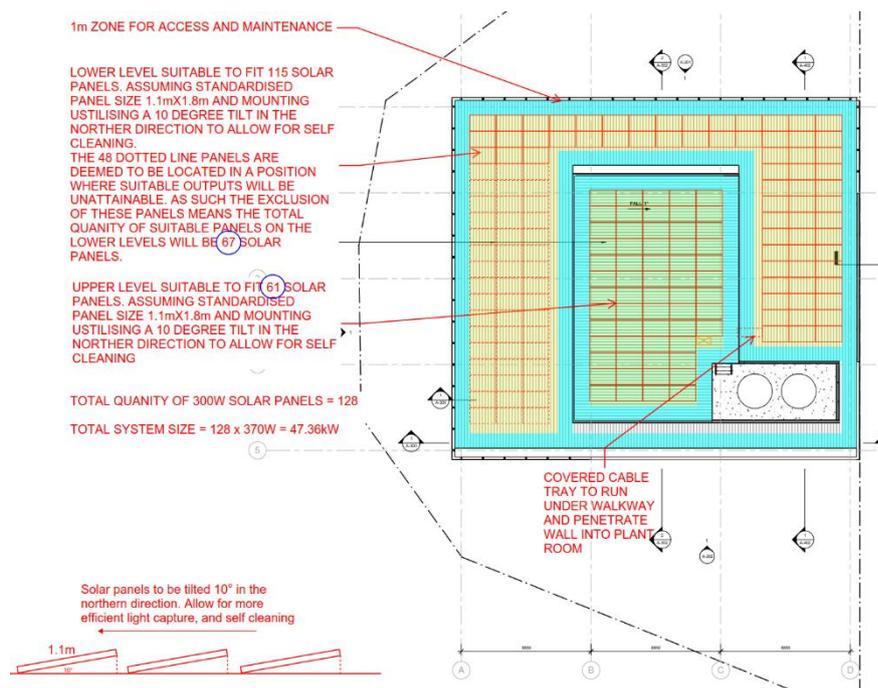
*The panel welcomes the inclusion of a level of passive ventilation (direct air pass-through in the HVAC system), although the opportunities for external and naturally ventilated teaching spaces could be taken further.*

*A greater sense of the landscape strategy around the building is still required.*

## RESPONSE:

The project has been designed to 5-star Greenstar, and includes a number of environmental design initiatives, from low embodied energy building products through to energy saving operational initiatives.

The project includes a significant roof top solar array. The energy generated is equal if not greater than the energy required to power the economy cycle of the HVAC system (the circulation of unconditioned air through the building on temperate days).



The façade is intentionally sealed to avoid air leakage, however as noted above the HVAC system incorporates an economy cycle which is activated when outside temperatures allow. However, the ground floor façade is operable allowing natural ventilation and connection with the external environment. The open stair is closed off at the mezzanine to avoid air leakage during these events.

The landscape design has been further developed in conjunction with the university's public domain strategy for the Campus, and in concert with the extended awning provides amenity for residing in the building's surrounds. Additional detail is reflected in the revised Landscape drawings.



Image 13. View from the south west of the external curtilage of the building

## FAÇADE ARTICULATION

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*It is not clear, following this second presentation, how a simple glass and CLT cubic form is a contextually appropriate response to the richness of story, environment and character defining this site, nor how integration with the development on site 1B will support such a form. Significant tensions remain between this form and the programme – for example programmatic elements require block-out curtains and tinted facades to the exterior, and projection onto the façade remains conceptual, with a risk that it will, over time, result in commercialisation of the façade.*

### RESPONSE:

The design of the building is intentionally simple to highlight the work within at every opportunity whether it is the activity of making or the exhibition of the creation. The building's simplicity also affords the creator a digital canvas whether it's the building façade which can be tinted off for the future opportunity for external projection as well as the white ground floor awning soffit to capture the attention of the city. Tensions between black box studios and the transparent façade are taken as opportunities for use as internal showcase boxes formed by the interstitial spaces between the internal solid wall and curtain wall. The design builds on the work already undertaken and curated by the school elsewhere and supercharges opportunity for its exhibition.

The simplicity of the form also showcases the University's commitment to Innovation allowing the initiatives to be clearly communicated, including the active tinting and CLT structure. The electro-chromatic tinting will allow the building's façade to change appearance throughout the day and season, whilst minimising energy consumption of the HVAC systems and maximising the visibility of the timber structure when not required.

The ground floor plan and siting promote the visibility of Site 1B to the gateway and allows for the formation of framed public domain squares, whether on the north east or south.

The materiality of the CLT and Steel are emblematic of the foreshore structures of the past whilst the landscape forms and awning are shaped around the former mud flats before European occupation. Whilst simple in form the building communicates the story of the past whilst reflecting the endeavours of the future.

## FINAL STATEMENT

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*While a potentially elegant design response in the round (capable of having a 'Better Look and Feel' than a standard building), other design qualities, particularly fit, performance and working, remain problematic. Therefore, the panel does not feel that the design demonstrates design excellence in its current form.*

### RESPONSE:

The design is fit for purpose, not only current but future through its simplistic floor plate design, high floor to floor levels and homogenous façade treatment. The ground floor in particular including the façade openings enable the building to adapt as the campus, its future buildings and public domain evolve.